

**PERSONAL ACCOUNTS OF  
ACUTE NON-SPECIFIC LOW BACK PAIN  
EXPERIENCES**

**CAROL ANNE MCCRUM**

**DPT            2011**

Copyright © and Moral Rights for this thesis are retained by the author and/or other copyright owners. A copy can be downloaded for personal non-commercial research or study, without prior permission or charge. This thesis cannot be reproduced or quoted extensively from without first obtaining permission in writing from the copyright holder/s. The content must not be changed in any way or sold commercially in any format or medium without the formal permission of the copyright holders.

When referring to this work, full bibliographic details including the author, title, awarding institution, date of the thesis must be given and access date.

McCrum, C.A. (2011) Personal Accounts of Acute Low Back Pain Experiences. University of Brighton, School of Health Professions, Thesis submitted in fulfilment of Doctorate in Physiotherapy. <http://ethos.bl.uk/OrderDetails.do?did=1&uin=uk.bl.ethos.543203>

## **ABSTRACT**

The purpose of this study was to explore personal accounts of acute non-specific low back pain experiences to gain insights and extend knowledge for physiotherapy practice and research. At present, knowledge of acute low back pain and understandings of the transition from acute to chronic low back problems largely derives from experimental research and population-generated findings developed from self-report questionnaires. Despite extensive research, there remains a limited ability to prevent the transition from acute low back pain problems to chronic pain and long term disability in many individuals.

A qualitative study of personal accounts of acute low back pain experiences was undertaken using a theoretical perspective drawn from narrative research and discourse analysis. The approach incorporated narrative theory and perspectives from social constructionism, post-structuralism and theory of language. Nineteen participants with acute non-specific low back pain problems (< 6 weeks) were followed through to recovery or to three months with persisting problems, considered as the transition to 'chronicity'. Data was generated through repeated interviews and written personal accounts involving a reflective timeline and a seven day open-format diary. Data analysis applied a narrative-discursive approach, and in particular a combined micro-interactional and macro-social approach drawn from discursive psychology.

The nature of personal accounts of acute low back pain experiences has been shown to be significantly more complex than previously described within physiotherapy or low back pain literature. As personal circumstances were characterised so as to be appreciated as a significant problem, the accounts were constructed with qualities to support the credibility of the information. The accounts were also shaped to manage impressions of personal character, moral integrity, and personal accountability. In addition, considerations provided by the broader and situated social context, social relations and the unfolding interaction influenced the nature of the accounts. Finally, time was also an integral feature to the nature of the accounts, as a changing social context, an entity of personal and social significance and for its use as a resource for conveying meanings.

This complexity has important implications for the interpretation of accounts and for the kind of knowledge assumed possible. Understanding the complexity also supports a more informed approach to the generation, interpretation and use of personal accounts as a form of information within practice and research contexts. The value of the methodology used in this study and the incorporation of theory and understandings from other disciplines for extending knowledge for physiotherapy practice is also discussed.

## TABLE OF CONTENTS

<b>ABSTRACT.....</b>	<b>3</b>
<b>ACKNOWLEDGEMENTS.....</b>	<b>9</b>
<b>DECLARATION.....</b>	<b>11</b>
<b>ABBREVIATIONS &amp; GLOSSARY.....</b>	<b>12</b>
<b>1 CHAPTER ONE: INTRODUCTION .....</b>	<b>13</b>
<b>1.1 Introduction.....</b>	<b>13</b>
<b>1.2 Background context to the study .....</b>	<b>14</b>
1.2.1 Locating the present study.....	14
1.2.2 Situating the issue of acute non-specific low back pain problems.....	16
1.2.3 An outline of the structure of the thesis .....	19
<b>2 CHAPTER TWO: SCOPING THE RESEARCH INTEREST.....</b>	<b>22</b>
<b>2.1 Introduction.....</b>	<b>22</b>
<b>2.2 Current professional understandings of acute low back pain.....</b>	<b>22</b>
2.2.1 Physiological factors as predictors for persistent problems .....	22
2.2.2 Psycho-social factors as predictors for poor outcome.....	25
2.2.3 Challenges to the evidence for psycho-social risks factors.....	25
2.2.4 Intervening with psycho-social risk factors in acute low back pain.....	28
2.2.5 The effectiveness of physiotherapy interventions for acute low back pain.....	29
2.2.6 Sub-classification systems in the management of acute low back pain .....	30
<b>2.3 Research perspectives providing current knowledge of acute low back pain .....</b>	<b>30</b>
<b>2.4 The value of a different perspective.....</b>	<b>33</b>
2.4.1 A significant gap: alternative forms of knowledge on acute low back pain .....	39
2.4.2 Taking a different perspective on the study of acute low back pain .....	41
<b>2.5 Summary.....</b>	<b>42</b>
<b>3 CHAPTER THREE: THEORETICAL PERSPECTIVE &amp; CHOICE OF METHODS.....</b>	<b>44</b>
<b>3.1 Introduction.....</b>	<b>44</b>
<b>3.2 Experience-centred narrative research.....</b>	<b>46</b>
3.2.1 Narrative accounts as data.....	46
3.2.2 The relationship between ‘experience’ and ‘narrative’ .....	48
<b>3.3 A narrative-discursive approach .....</b>	<b>49</b>
3.3.1 Perspectives from discursive psychology.....	51
3.3.2 Language as constructed and constructive .....	53
3.3.3 Language as action-orientated.....	54
3.3.4 Language as contextually situated.....	54
3.3.5 Language as a social and ideological force .....	55
3.3.6 Language and post-structuralist perspectives.....	56
3.3.7 Language as ‘positioning’ .....	57
3.3.8 Summary .....	58
<b>3.4 A theoretically refined research question .....</b>	<b>58</b>
<b>3.5 Choice and rationales of methods for generating narrative data .....</b>	<b>58</b>
3.5.1 Minimally structured in-depth interviews as a source of data.....	59
3.5.2 Written accounts as a source of data: ‘My Back Pain Experience’ .....	60

3.5.3	Part 1: A contextual timeline of personal circumstances .....	61
3.5.4	Part 2: Seven-day narrative diary strategy .....	62
3.5.5	Summary .....	63
<b>3.6</b>	<b>Researcher positioning.....</b>	<b>64</b>
3.6.1	Researcher context .....	65
3.6.2	Ethical positioning .....	66
3.6.3	Epistemological positioning.....	67
3.6.4	Demonstrating rigour and quality .....	68
<b>3.7</b>	<b>Summary.....</b>	<b>69</b>
<b>4</b>	<b>CHAPTER FOUR: PROCEDURES AND IMPLEMENTATION OF THE STUDY.....</b>	<b>70</b>
<b>4.1</b>	<b>Introduction.....</b>	<b>70</b>
<b>4.2</b>	<b>Research design.....</b>	<b>70</b>
<b>4.3</b>	<b>Data generation process.....</b>	<b>70</b>
4.3.1	Ethics approval.....	70
4.3.2	Purposeful selection criteria for participation .....	72
4.3.3	Participant recruitment .....	73
4.3.4	Consenting process and interview settings.....	75
4.3.5	Characteristics of the participants .....	76
4.3.6	Implementation of methods of data generation.....	76
4.3.7	Generating interview accounts of personal acute low back pain experiences.....	77
4.3.8	Generating written personal accounts of “My Back Pain Experience” .....	80
4.3.9	Follow-up interviews .....	82
<b>4.4</b>	<b>Contextual information on the narrative data .....</b>	<b>82</b>
4.4.1	The characteristics of the data generated .....	82
<b>4.5</b>	<b>Data analysis.....</b>	<b>83</b>
4.5.1	Contextual background .....	83
4.5.2	Transcription of the data .....	86
4.5.3	Perspective on interview transcription .....	87
4.5.4	Phases within the analysis of the data .....	88
4.5.5	Research journaling and maintaining critical reflexivity .....	100
<b>4.6</b>	<b>Ethical considerations.....</b>	<b>101</b>
<b>4.7</b>	<b>Summary.....</b>	<b>103</b>
<b>5</b>	<b>CHAPTER FIVE: ‘WORD DOING DEEDS’: PERSONAL ACCOUNTS OF ACUTE LOW BACK PAIN EXPERIENCES .....</b>	<b>104</b>
<b>5.1</b>	<b>Introduction.....</b>	<b>104</b>
5.1.1	The participants in the study .....	105
5.1.2	Presentation of the data .....	108
5.1.3	Use of terms and presentation of excerpts.....	109
<b>5.2</b>	<b>Characterising circumstances and conveying significance.....</b>	<b>110</b>
5.2.1	Introduction .....	110
5.2.2	Characterising problems as ‘unusual’, ‘out of the ordinary’ or ‘unexplained’ .....	111
5.2.3	Characterising problems through emotion and mental states.....	115
5.2.4	Characterising problems through impacts on activities .....	119
5.2.5	Characterising problems through a change in ‘self’ .....	122
5.2.6	Summary .....	125

<b>5.3</b>	<b>Managing information credibility.....</b>	<b>126</b>
5.3.1	Introduction .....	126
5.3.2	Credibility as a topic and a concern .....	127
5.3.3	Enhancing credibility through ‘facts’, ‘logic’ and ‘objectivity’ .....	128
5.3.4	Constructing ‘narrative’ facts using tense and evaluation.....	129
5.3.5	Using emotion and mental state description to index information credibility .....	130
5.3.6	Enhancing persuasion by providing detailed contextual information .....	131
5.3.7	Enhancing persuasion by incorporating authoritative and independent sources.....	132
5.3.8	Enhancing persuasion by conveying personal reliability .....	134
5.3.9	Enhancing persuasion through aesthetic and emotional appeals.....	137
5.3.10	Summary .....	143
<b>5.4</b>	<b>Conveying personal character and moral integrity .....</b>	<b>145</b>
5.4.1	Introduction .....	145
5.4.2	Conveying personal characteristics .....	146
5.4.3	Conveying moral integrity within discrediting information.....	148
5.4.4	Conveying, accepting and resisting characteristics .....	151
5.4.5	Summary .....	154
<b>5.5</b>	<b>Orientating to socio-cultural knowledge and social considerations.....</b>	<b>155</b>
5.5.1	Introduction .....	155
5.5.2	Orientating to ‘authoritative knowledge’ and the shaping of experiences .....	156
5.5.3	Orientating to ‘authoritative knowledge’ as an accountability resource .....	161
5.5.4	Orientating to multiple accountabilities .....	163
5.5.5	Orientating to situated accountabilities and producing ‘inconsistency’ .....	167
5.5.6	Accountability differences in positive circumstances .....	169
5.5.7	Summary .....	172
<b>5.6</b>	<b>Adapting for situated contexts and managing social relations.....</b>	<b>173</b>
5.6.1	Introduction .....	173
5.6.2	Adapting for interaction purposes and roles.....	174
5.6.3	Adapting information to manage social relations.....	179
5.6.4	Adapting wording to manage social relations .....	182
5.6.5	Adapting to influences from co-interaction.....	185
5.6.6	Summary .....	189
<b>5.7</b>	<b>Time and incorporating temporality .....</b>	<b>190</b>
5.7.1	Incorporating ‘time’ within information .....	191
5.7.2	‘Time’ as a valued and meaningful entity .....	191
5.7.3	‘Time’ as a future situation and envisaged consequences.....	193
5.7.4	Time passing: changing significance with changing contexts .....	196
5.7.5	Time passing: changing social considerations and changing rationales .....	198
5.7.6	Summary .....	201
<b>6</b>	<b>CHAPTER SIX: OVERALL DISCUSSION &amp; CONCLUSIONS .....</b>	<b>202</b>
<b>6.1</b>	<b>Introduction.....</b>	<b>202</b>
<b>6.2</b>	<b>Key findings &amp; conclusions .....</b>	<b>202</b>
<b>6.3</b>	<b>Contribution to knowledge.....</b>	<b>203</b>
<b>6.4</b>	<b>Implications and recommendations.....</b>	<b>206</b>
6.4.1	Implications and recommendations for practice .....	206

6.4.2	Implications for the management of acute low back pain.....	208
6.4.3	Implications for policy and guidelines.....	211
6.4.4	Implications for professional education.....	212
6.4.5	Implications for patients.....	214
<b>6.5</b>	<b>Directions for further research.....</b>	<b>215</b>
<b>6.6</b>	<b>Limitations and transferability of the research.....</b>	<b>218</b>
<b>6.7</b>	<b>Reflections on the research process.....</b>	<b>221</b>
<b>6.8</b>	<b>Reflections on changes in my practice.....</b>	<b>225</b>
<b>6.9</b>	<b>Conclusion.....</b>	<b>227</b>
<b>7</b>	<b>REFERENCES.....</b>	<b>229</b>
<b>8</b>	<b>APPENDICES.....</b>	<b>277</b>

## LIST OF FIGURES

Figure 1:	Overview of the research approach adopted in the study	1
Figure 2:	An outline of the changing theoretical perspective on the nature of the narrative data	50
Figure 3:	An illustration of the structure and processes within the research study	1
Figure 4:	Implementation of the methods of data generation across the acute low back pain experiences	76
Figure 5:	Interview guide and areas of interest identified at the outset of the data generation stage	78
Figure 6:	'My Back Pain Experience' notebook- Part 1: Timeline. Introductory prompts for the contextual timeline	81
Figure 7:	'My Back Pain Experience' notebook - Part 2: Introductory prompts for the narrative diary	81
Figure 8:	A pictorial illustration of the number and timing of initial interviews, written accounts and follow-up interviews provided during the acute low back pain experiences	83
Figure 9:	An illustration of the process of analysis in the development of the findings	1
Figure 10:	Examples of the nature of the questions applied to the data during analysis	92
Figure 11:	An example of analytic comments made against lines of an interview transcript	93
Figure 12:	An illustration of multiple analytic themes identified within a single utterance	96
Figure 13:	An example of meaning and function variations in the theme - 'Personal Characteristics'	96
Figure 14:	Functions and influences shaping personal accounts of acute low back pain experiences	105
Figure 15:	Constructing and characterising circumstances and significance	110
Figure 16:	Managing information credibility	126
Figure 17:	Conveying personal character and moral integrity	145
Figure 18:	Orientating to socio-cultural knowledge and social considerations	155
Figure 19:	Adapting to situated contexts and managing social relations	173
Figure 20:	Time and incorporating temporality	190

## **LIST OF APPENDICES**

- Appendix 1: Notebook for written accounts: ‘My Back Pain Experience’. Contextual timeline (3 pages) and seven day narrative diary (20 pages)
- Appendix 2: The identification of contextual factors understood to contribute to my positioning (Adapted from Maxwell 2005)
- Appendix 3: Notification of Ethics approval
- Appendix 4: Letter of Invitation to support recruitment process
- Appendix 5: Letter of Invitation to participate in the research study
- Appendix 6: Participant Information Sheet
- Appendix 7: Participant Consent Form
- Appendix 8: Practitioner Information Sheet
- Appendix 9: Email advertisement for participant recruitment
- Appendix 10: Letter accompanying copies of transcripts for participant checking
- Appendix 11: Transcription notations
- Appendix 12: An excerpt from a contextual timeline entry
- Appendix 13: An excerpt from a narrative diary transcript
- Appendix 14: Different styles of transcription and data representation
- Appendix 15: An example of a transcript with analytic comments
- Appendix 16: A scanned example of continuing levels of analytical refinement of initial explorations and features within the data
- Appendix 17: Conceptual mapping of analytic themes
- Appendix 18: A section of analysis illustrating the gradual process of developing and refining themes, meaning and discursive features
- Appendix 19: General incidence of analytical themes across all participants’ accounts
- Appendix 20: Brief extract of comparison of themes across a participant’s successive accounts
- Appendix 21: An example of a theme file of excerpts: ‘Right & Wrong’, colour-coded to participants and hyperlinked to transcripts & digital recording
- Appendix 22: Incidence of themes across participants
- Appendix 23: Conference platform and poster presentations given during the research study
- Appendix 24: Research evaluation of doing harm and good to study participants undertaken prior to and following completion of the research project (Adapted from Gomm 2004 p.304)

## ACKNOWLEDGEMENTS

I have been very fortunate to have received the support, wisdom, friendship and encouragement of many people while undertaking my Professional Doctorate. I would like to express my deep appreciation to these people and in particular to the following individuals who have made the research possible and my experience much richer.

Firstly, I would like to express my sincere appreciation to my supervisors Professor Ann Moore and Professor Valerie Hall. Their academic and personal wisdom, generosity of time and spirit, and great humour throughout the research project has provided invaluable insights, support and guidance.

I would like to express my thanks to Professor Graham Stew, Dr Huguette Comerasamy and the academic staff at the University of Brighton who have provided intellectual stimulus, challenged my thinking and encouraged my progress throughout the professional doctorate. In particular, I would like to thank Dr Nikki Petty who prompted this incredible opportunity, both for learning and making special friendships that have enriched both the research process and my personal life. This includes the '2004 Cohort'; Debbie McGreevy, Anne Viccars, Bernadette Henderson, Mary Sexton, Jo Gladwin, Julia Graham, Alison Blake, Sue Bush, Margaret Hewitt, Ann Price, Catherine Plowright and Josh Cameron and the others who have since taken different paths. I also wish to thank the administration staff at the CRC, University of Brighton, Jayne Ingles, Marilia Vasquet-Whittome and Tracey Harrison for their invaluable assistance and professional skill.

My sincere appreciation is also extended to a special group of people: Dr Philippa Lyon, Dr Liz Bryant, Dr Roma Chakrabarti, Mark Cage, Dr Joan Williams, Dr Anne Cole, Prof. Paul Stenner, Prof. Julie Scholes and Dr Peter Watt. I have also been very fortunate to have the friendship and support of Caroline and Richard Hollands, Caroline Power, Guy and Anne Canby, Jill McCrum, Dr Janet McGowan and Janet Tucknott who I thank for their unending encouragement, wise advice, friendship and fun across this research process.

The research started during a special time at Central Middlesex Hospital. I wish to thank my manager Usha Vellayappan, and NWLH Trust for providing the support to embark on the doctoral programme. In particular, special thanks go to my colleagues at CMH who were part of the initial stages of this research project and who have continued to provide support, encouragement and special friendships that are greatly appreciated, including Dr Ben Wand, David and Clare O'Hanlon, Peter Heine, Neil O'Connell, Cheryl Daniels, Chris Wheat, Colleen Cooper, Rachel Horn and Nicole Roberts.

I wish to thank Dr Robert Jones for his encouragement and support during the research process and in my clinical role, and to East Sussex Hospitals Trust for continuing to provide financial support and time to undertake and disseminate the research. My sincere thanks is also extended to Jonathan Law and my physiotherapy colleagues at the DGH who have provided invaluable support during of my doctoral studies, assisted with recruitment, advanced my thinking and who are part of a special working and learning environment that is greatly appreciated.

The Manipulative Association of Chartered Physiotherapists and Elsevier Publishing Company have also provided financial support towards undertaking my doctoral studies and presenting my research. This support has been greatly appreciated and made opportunities for dissemination possible.

There have been many other people who have provided invaluable help, encouragement and insights which have enhanced this research project and supported its completion. Some of these people include Corinne and Sean Jones, Prof. Walter James and Joyce James, Mandie Thomas and Lesley Mill, Sue Fry and Liz Lumbar, Karen Kenyon, Jean and George Gatland, Deborah Meech, Mandy Harris and Marion Power.

I wish to thank my very special family for their love, encouragement and unending support over the time of my doctoral studies, and which has continued for all the time I can remember. I am very lucky and wish to express my heartfelt appreciation.

Finally, I wish to thank the participants for their involvement in the study, their generosity of time and willingness to provide accounts of their personal acute low back pain problems and at times when the experiences and their lives were often challenging and difficult.

---§---

## **DECLARATION**

I declare that the research contained in this thesis, unless otherwise formally indicated within the text, is the original work of the author. The thesis has not been previously submitted to this or any other university for a degree, and does not incorporate any material already submitted for a degree.

Name Carol McCrum

Signature

Date

## ABBREVIATIONS AND GLOSSARY

ADL	Activities of daily living
CSP	Chartered Society of Physiotherapy
DoH	Department of Health, England, UK
GP	General Practitioner (medical)
fMRI	functional Magnetic Resonance Imaging
Likert scale	Commonly used method of ascribing quantitative value to qualitative data to make it amenable to statistical analysis. Likert scales usually have five potential choices, or 'points', (strongly agree, agree, neutral, disagree, strongly disagree) or numerical options often from 0 to 5, or sometimes 0 to 10, and would be referred to in research literature as a '6-point Likert scale' (Sieben et al. 2005). Named after its inventor, psychologist Dr. Rensis Likert (1903-81)
NICE	National Institute for Clinical Excellence
PT	Physiotherapist
OT	Occupational Therapist
Red Flags	Factors screened in patients presenting with low back pain to exclude serious or sinister pathology
Yellow Flags	Psychological and social factors within a an individual's understandings, behaviour and social circumstances considered to be a risk for the persistence of low back pain problems and the development of chronic pain and long term disability
RCGP	Royal College of General Practitioners
RCT	Randomised Controlled Trial

# 1 Chapter One: Introduction

## 1.1 Introduction

*'That's what I would like to become, the person without back pain any more.'*

*(Jayne 1B113)*

The purpose of this study was to gain further understanding of acute low back pain to extend knowledge for physiotherapy practice and research. The study developed from unanswered questions within my physiotherapy practice concerning acute low back pain problems and issues surrounding a person's recovery or the development of persistent pain and disability. Acute low back pain is a common problem. It is one of the most frequent reasons for seeking health care in the UK, including visits to physiotherapy (Foster et al. 1999; MacFarlane et al. 2006). Although back pain can cause significant personal difficulty at the time, for most people the back problem usually settles. However, up to 10% of people develop chronic and disabling problems with significant individual and socio-economic consequences (Croft et al. 1998; Waddell et al. 1996).

Prevention of the long term consequences of low back pain has proved a significant challenge and is a major focus of research efforts, intervention strategies and practice guidelines internationally (Koes et al. 2001, 2010; Burton et al. 2006; Chou et al. 2007; Rossignol et al. 2009; Savigny et al. 2009). Despite these efforts, there remains a lack of success in preventing the transition from an episode of acute low back pain to chronic pain and disability. There also remains a lack of understanding and continued debate regarding the processes involved in the development of chronic problems. Furthermore, the knowledge that does exist has been largely provided by experimental cross-sectional research, aggregated scores from professionally developed self-report questionnaires and systematic reviews of population-level findings. This thesis describes a study which aimed to develop new insights and extend knowledge for practice by exploring accounts of personal experiences of acute low back pain across the process of recovery or persistent problems.

This chapter introduces the background context to the study, including myself as the researcher and the issues in practice that prompted the research interest and direction of the study. The importance of further research into acute low back pain is highlighted in relation to the significant impacts for those experiencing the problems and at a wider societal level of health care and

economic concerns. The chapter moves on to provide a brief overview of the theoretical perspective which became applied during the study. An outline of the structure of the thesis concludes the chapter.

## **1.2 Background context to the study**

### **1.2.1 Locating the present study**

My professional practice has specialised in the treatment of musculoskeletal problems with post-graduate qualifications in this field and involvement in teaching on post-graduate clinical education programmes. The research interest for this study developed from several issues arising from an earlier experience as an 'expert' clinician providing treatments in a randomised controlled trial on physiotherapy care for acute low back pain (Wand et al. 2004). The clinical research trial was being undertaken in response to national guidelines which had been published on the management of acute low back pain by the Clinical Standards Advisory Group (CSAG 1994). The clinical trial involved testing two different intervention approaches for acute low back pain. Patients were assessed and then randomly assigned to have physiotherapy treatment immediately, or were provided with reassurance, advice, and treatment was delayed for six weeks (Wand et al. 2004). The delayed treatment reflected the 'advice, wait and see' approach recommended by the UK national guidelines at that time (CSAG 1994; Waddell et al. 1996). Three issues emerged from my involvement in the clinical research trial, of which one was professional, one was personal and one was an unexpected finding of the research trial.

The first issue involved a professional defensiveness against the recommendations of UK national Low Back Pain guidelines. The CSAG guidelines (1994) had placed little value on early physiotherapy as a means to help recovery that seemed evident in daily clinical practice. Despite my professional opinion borne from clinical experience, there was little empirical evidence at the time for the effectiveness of physiotherapy interventions in the management of acute low back pain (Bekkering et al. 2003; Grimmer et al. 2003).

The second issue was a personal angst felt as a clinician in the research trial when required to walk back into the treatment room after opening the randomisation envelope. On each occasion, imposing the six week delay in treatment produced the disturbing feeling that withholding care was allowing these patients to continue to suffer. Making patients wait for treatment challenged

my own perceptions of the value of early physiotherapy treatment for hastening recovery from an acute low back pain problem.

The third issue emerged from my interest in an unexpected finding from the randomised controlled trial. Confirming my clinical perceptions, the group receiving immediate treatment reported significantly earlier improvements in pain and physical function (Wand et al. 2004). The finding seemed to justify my feelings of angst as a clinician when required to withhold treatment from the patients randomised into the delayed treatment group. In the longer term, there was no significant difference in pain and physical function outcomes between the two treatment groups. However, unexpectedly, the ‘psycho-social’ scores for anxiety, depressive mood, and health-related quality of life and wellbeing had not improved in the group where treatment had been delayed for six weeks, despite significantly improved reports of pain and physical function. A more holistic concept suggested possible disadvantages to a delay in treatment.

A search for a better understanding of these issues prompted this present study into acute low back pain. An interest in exploring the professional intuition, or ‘experiential knowledge’, of the benefit of early physiotherapy underlying my feeling of professional defensiveness against the national guidelines and my personal angst with delaying care was to be put aside. My interest turned to pursue the seemingly unrelated research interest in trying to understand the relationship between the acute phase of low back pain problems, the six week delay in treatment, and the poor ‘psycho-social’ scores despite improved pain and physical function. Amongst many possible explanations, there was an indication that providing ‘reassurance and advice’ was inadequate and waiting six weeks before offering treatment may be ‘too late’ to achieve the ‘psycho-social’ benefits provided by early physiotherapy intervention (Wand et al. 2004). There seemed a more complex relationship than previously assumed between self-reported scores for pain, physical functioning and psycho-social factors. At the time, there wasn’t a qualitative component to the clinical trial and so no way to explore the relationship further.

As a consequence of my experience with the clinical research trial, I had developed a curiosity in what may have been happening within an experience of acute low back pain which resulted in recovery or the development of persistent problems. This curiosity launched a critical examination of the literature on acute low back pain and influences on recovery or persistence of problems. The gaps in knowledge were strongly evident and the need to increase understandings of acute low back pain and its effective management seemed an important research endeavour.

The following section discusses the significance of acute low back pain as a problem including the associated individual and wider socio-economic impacts.

### **1.2.2 Situating the issue of acute non-specific low back pain problems**

Most back pain problems come under the diagnosis of ‘non-specific low back pain’. This is the professional terminology used for ‘simple’ low back pain not due to any serious cause, nerve involvement or sinister pathology (Waddell 2004). This descriptive diagnosis has arisen because of the difficulty of identifying pathological or physiological causes. It is mostly associated with pain, spasm or stiffness of varying intensity around the lower back region. The term of ‘acute’ relates to an onset of less than six weeks (< 6 weeks), ‘sub-acute’ (6 weeks - 12 weeks) and ‘chronic’ (> 12 weeks) (Waddell 2004). There are also references in the literature which refer to ‘acute’ as less than 3 months and ‘chronic’ as greater than 3 months duration (Carey et al. 1996; Gatchel et al. 2003). Non-specific low back pain problems are recognised as being recurrent in nature which adds complexity to the study of low back pain (Von Korff 2004; Henschke et al. 2009). Within the thesis, references to ‘low back pain’ or ‘back pain’ concern this ‘non-specific low back pain’ category and the abbreviation of LBP (low back pain) is also in common use across current literature. In addition, the terms ‘acute’, ‘sub-acute’ or ‘chronic’ are specifically used within the thesis when a distinction in duration is relevant.

Preventing the long term consequences of an episode of acute low back pain remains a major focus of efforts to improve management strategies internationally (Koes et al. 2001; AAMPG 2003; Burton et al. 2006; Airaksinen et al. 2006; Savigny et al. 2009). Low back pain is a common problem which causes significant individual and wider socio-economic impacts. It is estimated that up to a third of the population in developed and non-developed countries are affected by back pain at any one time and 80% of people are likely to experience back pain at some point in their life (Walsh et al. 1992; Papageorgiou et al. 1995; Volinn et al. 1997; Walker 2000). Recent research has found that as many as 30% of people with an episode of acute low back pain have not recovered within a year (Henschke et al. 2009). Low back pain is one of the most frequent reasons for seeking health care and for causing work absence (Waddell et al. 2002; MacFarlane et al. 2006). It is also one of the most common conditions treated by physiotherapists (Battie et al. 1994; Jette et al. 1994).

The consequences of low back pain are a major socio-economic concern. A major driver for continuing research has been the escalating health costs. In the UK, estimates of £400 million per annum (Klaber Moffett et al. 1995) had increased to £1632 million five years later (Mandiakis and Gray 2000). Adding to the concern, indirect costs due to lost production were estimated to be £3,440 - £9,090 million (Mandiakis and Gray 2000). Internationally, the economic impacts of low back pain are substantial (Luo et al. 2004; Airkisenen et al. 2006; Katz 2006; Dagenais et al. 2008; Johannes et al. 2010). Furthermore, the prevalence of back problems has been shown to have increased despite significant investments in research, prevention and intervention (von Korff et al. 2007; Freburger et al. 2009). Extensive research across many disciplines has been undertaken to identify causes, risk factors and more effective approaches to management (Halderman and Dagenais 2008). However, preventing the long term consequences of low back pain for the individual and society has proved challenging.

The pain and incapacity from an episode of acute low back pain is usually short-lived. Most people return to normal activities regardless of any treatment or advice received and significant recovery usually occurs within 4-6 weeks (Abbott and Mercer 2002; Pengel et al. 2003). However, some people experience persistent problems and the longer a problem lasts the greater the chance of developing chronic pain and disability. After six weeks, a person is more likely to experience ongoing problems (Dionne et al. 1997; Schiottz-Christensen et al. 1999; Enthoven et al. 2003; Wand et al. 2009). For people still experiencing a problem after one year, chronic pain and long term incapacity is much more likely and a return to work becomes unlikely (Waddell et al. 2002). Once a worker has been off work for 4-12 weeks, there is a 10-40% risk of still being off work at one year and after 1-2 years off work then a return to work becomes highly unlikely (Andersson 1997; Waddell and Burton 2001). It is this group of people which account for the majority of health care and socio-economic costs related to low back pain (Savigny et al. 2009).

In addition to the epidemiological literature, the need for further research on low back pain is powerfully evidenced by the growing body of qualitative research illustrating the personal consequences of persistent low back pain problems. The suffering and incapacity from chronic low back pain problems has been shown to cause impacts at the most fundamental level of people's lives (Osborne 1995; Sparkes 1996; Seers and Friedli 1996; Osborn and Smith 1998; Walker et al. 1999, 2006; Holloway et al. 2000, 2007; May et al. 2000; Glenton 2003; Lilrank 2003; Ong et al. 2004; Smith and Osborne 2007; Campbell and Cramb 2008; Vroman et al. 2009;

Crowe et al. 2010). There is also extensive literature voicing the impacts and challenges of chronic pain and illness which also encompasses personal struggles with chronic low back pain (Charmaz 1991; Jackson 1992; Werner et al. 2004; Richardson et al. 2006; Osborn and Rodham 2010; Newton et al. 2010). This body of literature creates a compelling collective appeal for the significance of the consequences when low back problems do not resolve. Osborn and Rodham (2010) remarked that:

‘the experience of living with pain was coloured by the process of seeking help to manage their pain. There was a strong sense of hopelessness and distress from those living with pain and the health professionals providing support.’ (p.5)

The prevention of persisting problems from an episode of low back pain remains an important endeavour from individual, health professional and societal perspectives.

Despite continued research efforts and the widespread development of evidence-based practice guidelines, preventing the transition of acute low back pain to chronic pain and disability remains a significant challenge (van Tulder et al. 2006a). An extensive body of literature from experimental research, randomised controlled trials, systematic reviews, and national and international guidelines informs current knowledge and practice concerning acute low back pain and its management (Kendall et al. 1997; van Tulder et al. 2006b; Chou et al. 2007). There seems to be reasonable ability to predict those who may not recover from an episode of acute low back pain (Boersma and Linton 2005a; Kent and Keating 2008; Hill et al. 2008). However, for the individuals that are identified as ‘at risk’, the ability to prevent the development of long term problems has been significantly less successful (Jellema et al. 2005a; Linton et al. 2005). There has been ongoing research into the improvement of screening tools, sub-classification systems and interventions targeting individuals ‘at risk’ of chronicity. Yet these strategies have not achieved the beneficial outcomes expected. In an extensive review of evidence for the effective management of low back pain, Haldeman and Dagenais (2008) concluded that few advances had been made since initial acute low back pain guidelines published in 1994, commenting that:

‘it is somewhat disappointing to note that 14 years after dozens of highly promoted new interventions, thousands of studies, millions of lost work days, and billions of dollars spent on care, so little had changed in the evidence’ (p.277)

The ‘how’ and ‘why’ in the development and prevention of chronic pain and disability appear complex, multi-factorial and remain poorly understood despite extensive research (Koes et al. 2006). There is strong recognition that further research to increase the understanding and effective management of acute low back pain problems is paramount (Burton et al. 2006; MacFarlane et al. 2006). The significance of persisting low back pain problems as an individual, health professional and societal concern underpinned the rationale for this study as part of the ongoing research efforts to improve ways to prevent the development and consequences of chronic pain and disability.

This thesis charts the research process and offers the subsequent findings and their implications for physiotherapy practice, research, policy and professional education. The perspective taken in this study contrasts with the experimental approaches which have been used to understand the mechanisms involved and provide evidence for managing acute low back pain. This study has drawn on an interpretative research perspective to explore acute low back pain and the experience of recovery or persistent problems. Before moving onto a critical review of the literature relevant to the study, a brief overview of the structure of the thesis is provided.

### **1.2.3 An outline of the structure of the thesis**

This chapter has introduced the issue in my physiotherapy practice which prompted this study that has been developed with the aim to extend knowledge of acute low back pain problems and gain insights to help improve approaches to management. Background context has been provided to highlight the significance of acute low back pain as a problem in need of further research and to contribute to the rationale for undertaking the study.

Chapter two expands on the background context offered in the introduction and discusses the empirical and theoretical framework for the study. The chapter provides a critical review of the literature underpinning current knowledge of acute low back pain. The significant gaps in understanding of the management of acute low back pain and the prevention of chronic pain and disability are highlighted. The critical review also shows how current understanding of acute low back pain and the evidence for its management are largely derived from experimental research and systematic reviews. ‘Scientific method’ dominates approaches to back pain research and has largely produced the knowledge which currently informs its management in practice contexts and policies concerning the provision of services. The discussion highlights the value of undertaking an exploration at the level of the individual experiencing a problem to complement the body of

population-aggregated knowledge which is given privilege within acute low back pain research at present. The chapter concludes by highlighting how qualitative research on chronic low back pain and within other contexts has provided important knowledge for practice and research. Few studies have explored the acute phase of low back pain using qualitative methodologies. From this scoping of the literature, evidence is provided for the need for further research and the value of an individual focused approach exploring accounts of personal experiences of acute low back pain problems.

Chapter three moves on to provide an understanding of the shift to a narrative-discursive approach which came to be adopted during the research project. A continued engagement with literature during the study provided an exposure to theory and research from disciplines beyond the 'scientific' sources that I had traditionally drawn on as a physiotherapist, and which have largely informed current practice knowledge. The chapter describes a shift in perspective with the development of a broader understanding of the different theoretical positions from which a problem can be viewed and explored, and of the form of knowledge that a chosen perspective produces and privileges. The chapter outlines the particular theory and research within the broad fields and diverse disciplinary applications of narrative inquiry and discourse analysis that have been drawn on in this study.

The narrative-discursive approach used for exploring this physiotherapy research interest is a synthesis of theory and perspectives from within other disciplines, particularly from Sociology, Social and Discursive Psychology, Communication Studies and Socio-linguistics. The approach supports an analytic sensitivity to meaning, time and context while including an interactional perspective on the nature of the data generated and its analysis. With the integral role played by communication and interaction within physiotherapy practice, and especially in the management of acute low back pain problems, the approach was seen to hold particular relevance as a lens to explore the accounts of the personal experiences offered across recovery or persistent problems. The chapter also discusses the choice of methods used to generate the data for the study. The rationale is outlined for use of repeated in-depth interviews and two written strategies involving a retrospective contextual timeline, and a seven day narrative diary undertaken between interviews. There is discussion of the theoretical perspective taken towards the methods used and to the nature of the data generated. The chapter concludes with a discussion of my positioning as a researcher in relation to the implications for the study and the research account provided

Chapter four describes and discusses the implementation of the study including ethical considerations. An outline of the design of the study and the processes leading to the generation of the data is provided. The chapter provides a description of the recruitment process and the practical implementation of the methods which generated the data. Some contextual information is provided on the nature of the data generated. The chapter moves on to describe the processes involved in the analysis of the data and charts the gradual development of the findings offered in the next chapter. The chapter concludes with a discussion of ethical issues in relation to the conduct of the study and reflections on how these issues were addressed.

Chapter five comprises of six sections which build on each other to present the findings. Six key functions and influences found to be shaping the accounts of acute low back pain experiences are illustrated and discussed. Each section incorporates discussion which gives consideration to the findings in relation to existing theory, other research and aspects of relevance within current practice. The complex nature of accounts of acute low back pain experiences is illustrated. A new conceptual framework for understanding accounts of personal acute low back pain is provided. The chapter concludes with a summary of the findings and draws together the relevance for understanding issues in research and practice that have remained a challenge to explain.

The final chapter offers the conclusions of the study and includes discussion of the contribution to knowledge in relation to understanding accounts of acute low back pain and to physiotherapy practice more generally. The study contributes to understandings for practice and research which are very different from what had been anticipated at its outset. The implications for physiotherapy practice, professional education and policy are discussed. Directions for further research are outlined and consideration is given to limitations of the study. The chapter moves on to offer reflections on undertaking the research and describe changes which have occurred in my own professional practice. Some final thoughts in relation to the study conclude the thesis.

In summary, this chapter has introduced the research interest, discussed its significance and provided an overview the structure of thesis. The next chapter provides a critical review of current knowledge on acute low back pain. The discussion highlights the gaps in understandings concerning the development of chronicity and identifies the challenges which remain in achieving effective intervention. The empirical context is provided for the current study and the rationale underlying the research approach taken.

## **2 Chapter Two: Scoping the research interest**

*Not everything that can be counted counts, and not everything that counts can be counted.*

*Albert Einstein*

### **2.1 Introduction**

This chapter provides the empirical and theoretical rationale for undertaking this study and the perspective from which it has been undertaken. The discussion includes a critical review of current knowledge of acute low back pain, its management and the nature of research undertaken to prevent the development of chronic low back pain and long term incapacity. Experimental research approaches and evidence drawn from population studies currently dominate acute low back pain research, understanding and management. The limitations of current evidence and approaches to researching acute low back pain problems are highlighted. The discussion outlines an ongoing debate concerning influences on the transition from acute to chronic back pain problems and difficulties in translating current knowledge into effective intervention. In contrast to the ‘scientific methodologies’ drawn on to develop knowledge on acute low back pain, the discussion points to the value of an interpretative research perspective which gives attention to the individual perspective, particularity and context to gain insight into acute low back pain problems and extend knowledge to support more effective approaches to management.

### **2.2 Current professional understandings of acute low back pain**

The epidemiological information on prevalence and the substantial socio-economic costs of low back pain provided in the introduction are important reasons for further research into acute low back pain and the prevention of chronic pain and disability. Not surprisingly, concerns with health care and wider socio-economic impacts feature across the introductory comments of most low back pain literature. A discussion of the state of knowledge on acute low back pain and on current approaches to intervention in the prevention of chronic pain and long term incapacity follows.

#### **2.2.1 Physiological factors as predictors for persistent problems**

An important area of low back pain research has been aimed at determining causes and predictors of poor outcome to improve the prevention of chronic pain and disability. The identification of

risk factors for chronic pain and disability has been a priority for low back pain research for many years and continues to be a major focus of current research programmes (Waddell and Main 1984; Bigos et al. 1994; van Tulder et al. 1997; Waddell 2002; van Tulder et al. 2006a; van Tulder and Koes 2010). This focus is underpinned by the idea that by identifying barriers to recovery, it might be possible to prevent the development of chronic low back pain problems and the associated suffering and costs (Main et al. 2008).

Although physiological factors would seem an obvious factor causing persistent back problems, there has been little association found between pathological or structural findings and back pain symptoms (Waddell 2004; Carragee et al. 2006). There is increasing acceptance that the search for patho-physiological causes to explain the development of chronic problems has been unsuccessful and even counter-productive in a patient's care (Djais et al. 2005; Deyo et al. 2009). Abnormalities on X-ray and MRI imaging are just as prevalent in people without back problems and many people with back pain symptoms show no abnormalities on imaging (Jensen et al. 1994; van Tulder et al. 1997; Jarvik et al. 2001). Physical assessments in acute low back pain do not predict whether back problems will persist (Carragee et al. 2004; Horng et al. 2005; Modic et al. 2005). Instead, 'physical' test findings have been suggested to be more indicative of underlying psychological factors relating to a person's distress and willingness to move (Rose et al. 1995). Coste et al. (2004) found that quality of life prior to acute low back pain was more associated with outcome than physical factors.

Consistent with poor evidence for physiological factors, initial levels of pain and disability are not particularly predictive of whether acute low back pain will develop into a chronic problem (Klenerman et al. 1995; Enthoven et al. 2003; Young Casey et al. 2008). A previous history of low back pain or the co-existence of other pain problems has been found to be one of the strongest predictors of developing chronic low back pain (Smith et al. 2007). Problems in other body areas, such as the upper body or 'widespread pain', has been found to predict the onset (Thomas et al. 1999) and a poor outcome from an episode of acute/sub-acute low back pain (Smith et al. 2007; Grotle et al. 2010). The type of pain also appears to make a difference, where moderate constant pain appears more disabling than intermittent severe pain (Burton et al. 1995) and the longer an episode lasts the more likely it will become a chronic problem (Carey et al. 2000; Enthoven et al. 2003). The levels of pain and disability from an acute episode of low back pain reported at 4-6 weeks follow-up are much more predictive of whether a back problem will

become chronic (Heneweer et al. 2007; Wand et al. 2009). Consequently, this worsening prognosis as problems persist has made the improvement of early intervention a research priority.

There is a growing area of research exploring neurophysiological mechanisms and changes in the brain and spinal cord during back pain (Gracely et al. 2002; Borsook and Becerra 2003; Cook et al. 2004; Apkarian et al. 2009). Biomarkers in the brain, nociceptive dysfunction and cortical reorganisation have been linked with clinical findings in chronic pain (Flor et al. 1997; Grachev et al. 2000; Baliki et al. 2006; Gatchel et al. 2007; Apkarian et al. 2009; Gustin et al. 2010). Such research has opened up other interesting possibilities for understanding pain management interventions. Using functional Magnetic Resonance Imaging (fMRI) technology, a single case design found positive changes in cortical activity during a movement task after an education session on pain physiology was provided to a chronic low back pain patient (Moseley 2005). The reduction in cortical activity, including centres in the brain associated with pain, suggested a possible reduction in the threat value of the task produced by the pain education session. There are many methodological issues yet to be resolved and the complexity in neurophysiological processes involved in the experience of pain and in the transition from acute to chronic low back pain problems is evident. In addition, there is debate on 'cause' or 'consequence' and the predictive or preventative possibilities arising from this direction of research (Nair 2005; Savoy 2005; Wand and O'Connell 2008; Mallinson et al. 2009; Rodriguez-Raecke et al. 2009; Wood 2010). Despite many issues still to be resolved, this area of research offers important possibilities for a better understanding of low back pain and its management.

In parallel, there has been increasing biological research into the relationship between cellular mechanisms, genetics and back pain. An imbalance of neurotransmitters, neuromodulators and their various types of receptors has been shown to contribute to the development and maintenance of chronic pain states (Gatchel et al. 2007). A specific genetic contribution to back pain problems has been found in twins (Sambrook et al. 1999). There has also been genetic links found with lumbar disc degeneration and chronic back pain (Annunen et al. 1999; Paasilta et al. 2001; Solovieva et al. 2004), and genes relating to pain processing more generally (Mogil et al. 2003). At present, the neurophysiological, biological and genetic mechanisms remain unclear although offer promising contributions to understanding the transition from acute to chronic pain and disability.

## **2.2.2 Psycho-social factors as predictors for poor outcome**

Research drawing on cognitive and behavioural psychology perspectives has provided evidence that ‘psycho-social’ factors are one of the most important influences on poor outcome from acute low back pain (Linton 2000; Pincus et al. 2002, 2006). The most accepted explanatory models for the development of chronicity suggest that psychological and social factors play a role as ‘obstacles to recovery’ (Waddell 1987; Gatchel et al. 1995, 2007; Asmundson et al. 2004; Truchon et al. 2008; Bruns and Desorbio 2009). The models propose that chronic pain and disability result from a cycle of fear of pain or re-injury, unhelpful beliefs, catastrophic thinking, hypervigilance to possible harm and reinforcement by significant others. These psychological and social factors lead to avoidance behaviours, reduced activity, distress and depressive mood which perpetuate a problem (Gatchel et al. 1998; Asmundson et al. 2004). Vlaeyen and Linton (2000) undertook a review on the state of knowledge at the time and concluded that psycho-social factors, such as pain-related fear and avoidance behaviours, appear to be an essential feature in the development of a chronic problem:

‘Indeed, this line of research may unlock the mysterious transition from acute to chronic pain. This in turn promises to provide a new foundation for the early identification of risk patients, prevention, assessment and treatment.’ (Vlaeyen and Linton 2000, p.329)

Of significance in current physiotherapy practice, it is this cognitive-behavioural perspective that has become central to our understanding of acute low back pain problems, the development of chronicity and approaches to intervention (Harding and Williams 1995; Main and Watson 1999; Gifford 2000; Klaber Moffett et al. 2006; O’Sullivan and Beales 2007).

## **2.2.3 Challenges to the evidence for psycho-social risks factors**

The consistent evidence that prognosis worsens the longer a back problem persists has made the early identification of risk factors and individuals ‘at risk’ of developing long term problems an important and continuing research endeavour. There has been extensive research into the identification of psycho-social risk factors to prevent acute low back pain becoming a chronic and disabling problem. Despite the high profile, there is little empirical evidence for many of the psycho-social risk factors which feature in literature on low back pain (Pincus et al. 2002, 2006; Blyth et al. 2007; Lakke et al. 2009; Foster et al. 2010a). The risk factors of ‘fear avoidance’, ‘catastrophising’, ‘passive coping strategies’ and ‘locus of control’ commonly feature in the

literature but their distinctiveness as ‘psychological constructs’ and influence on recovery is poorly evidenced (Pincus et al. 2002, 2006; Sieben et al. 2005; Grotle et al. 2005; Foster et al. 2010a; Ramond et al. 2011). The risk factor of ‘pain-related fear’ appears to be context-specific and reductions in reported fear after experiencing a problem disputes its universal influence (Goubert et al. 2004; Leeuw et al. 2007). Furthermore, evidence offered for many of the high profile psycho-social factors is based on isolated measurement or single self-report questions (Pincus et al. 2002; Ramond et al. 2011). This methodology masks the complexity and conceptual overlap evident across factors when multiple factors are investigated (Pincus et al. 2002; Quartana et al. 2009). When multiple factors are measured together, most psycho-social risk factors show no association with the development of chronic back pain and disability (Hilfilker et al. 2007; Foster et al. 2010a).

There is stronger evidence for the association of the ‘psychological’ factors of “distress”, “depressive mood” and “somatic anxiety” with the transition of acute problems to chronic low back pain and disability, although the mechanisms remain unclear (Pincus et al. 2002, 2006; Grotle et al. 2006a; Truchon et al. 2008; Young Casey et al. 2008). The term “distress” is poorly defined in the low back pain literature but is used loosely to encompass psychological/emotional distress, depressive symptoms and depressive mood (Pincus et al. 2002). ‘Somatic anxiety’ is an increased vigilance and anxious reaction to sensations such as pain and other symptoms (Asmundson and Norton 1995). Pre-existing clinical depression appears to have a role in developing chronic problems due to the tendency for negative thoughts, reduced motivation, fatigue and reduced general activity causing deconditioning (Polatin et al. 1993; Carroll et al. 2004). Different factors predicted chronic pain compared to physical disability. Depressive symptoms and past traumatic life events predicted the development of chronic pain, whereas depressive symptoms and beliefs that ‘the pain may be permanent’ predicted physical disability (Young Casey et al. 2008). A history of traumatic events did not influence acute pain or disability levels but it was suggested that mood and beliefs perpetuate problems through altered neurophysiological or cognitive-affect processes (Young Casey et al. 2008).

To account for the lack of evidence for ‘fear-related’ beliefs, Pincus et al. (2006) offered a refined model to explain the development of chronicity by adding ‘social beliefs’ as a factor, commenting:

‘the macro-system of health beliefs and health culture, combined with the micro-system of personal health beliefs, is sufficient to account for avoidance behaviour without fear.’ (p.4008)

A greater complexity in the process of acute low back pain problems becoming chronic beyond factors 'within' an individual has gained stronger recognition in the literature, although the mechanisms remain poorly explained (Main et al. 2008).

A critical examination of the literature indicates that a comprehensive understanding of psycho-social factors is lacking. Methodological issues within research on psycho-social factors suggest caution in interpretation and conclusions about their influence on acute low back pain problems (Pincus et al. 2002, 2006; Kent and Keating 2008; Lundberg et al. 2009). Few studies have examined psycho-social factors before and after the onset of acute low back pain to help evidence directions of influence. Prospective studies have suggested that negative attitudes and beliefs are a predictor of poor outcome (Gatchel et al. 2008; MacFarlane 2008). However, research following a community sample across time showed that an experience of acute low back pain may dispel negative beliefs that are argued to be 'risk factors' to chronicity (Goubert et al. 2004).

Other evidence questions current theories of psycho-social risk factors as causes of chronicity. The levels of functional disability and 'pain-related fear' indicated on self-report outcome measures are not always consistent with objective measures of physical activity (Verbunt et al. 2001; Spenkeliink et al. 2002; Bousema et al. 2007; van den Berg-Emons et al. 2007). There have also been discrepancies found between self-report scores of disability and a person's actual participation and functional performance (Swinkels-Meewisse et al. 2006a; Reneman et al. 2007) and therapist perceptions (Calley et al. 2010). Self-report tools measuring 'cognitions' are assumed to be reflected in a person's behaviour but discrepancies are common (Pincus et al. 2008). Current models also do not account for low back pain patients found to be 'over-active' or who persevere in activities despite reporting high levels of pain or fear (Vlaeyen and Morley 2004). The role of 'psychological' factors in the experience and response to acute low back pain appears complex, and as yet remain indistinct, poorly defined and under debate.

Despite the uncertainty and inconsistency in evidence, psycho-social factors are largely concluded to be part of the causal pathway in the transition from acute pain to chronic problems (van Tulder and Koes 2010). In addition, the role of psycho-social factors as a causal factor for chronic low back pain has become strongly incorporated into physiotherapy practice knowledge, current approaches to management and as a target for further research (Gifford 2002, 2006; Foster 2007; George 2008). However, an examination of this body of research suggests that a better

understanding of acute low back pain and the relationship of psycho-social factors to the transition of acute to chronic low back pain is strongly indicated.

#### **2.2.4 Intervening with psycho-social risk factors in acute low back pain**

With the emphasis on psycho-social factors as a risk for chronicity, there has been a growing body of research into the development of screening tools in an effort to improve the identification of individuals ‘at risk’ (Linton and Hallden 1998; Childs et al. 2004; Dionne et al. 2005; Hicks et al. 2005; Truchon and Côté 2005; Duijts et al. 2006; Neubauer et al. 2006; Denison et al. 2007; Hill et al. 2008; George et al. 2009; Gabel et al. 2010). Attempts to improve outcomes in acute and sub-acute low back pain have investigated interventions specifically targeting ‘psycho-social’ factors (Fritz et al. 2003; George et al. 2004; Boersma and Linton 2005a; Hay et al. 2005; Jellema et al. 2005a; Linton et al. 2005; Wright et al. 2005; Brennan et al. 2006; Klaber Moffett et al. 2006; Linton & Nordin 2006; Swinkels-Meewisse et al. 2006b; Shaw et al. 2007).

Despite these research efforts, there is little evidence for the effectiveness of ‘psycho-social’ interventions for acute low back pain (Fritz et al. 2003; George et al. 2004; Boersma and Linton 2005b; Hay et al. 2005; Jellema et al. 2005b; Linton et al. 2005; Wright et al. 2005; Brennan et al. 2006; Klaber Moffett et al. 2006; Linton & Nordin 2006; Swinkels-Meewisse et al. 2006b; Shaw et al. 2007). Of interest, Jellema et al. (2005b) found that even when participants showed an understanding of the psycho-social interventions, there was no change in the participants’ psycho-social scores. There is some evidence that ‘psycho-social’ interventions are more effective once back problems become more chronic (George et al. 2008; Van der Windt et al. 2008; Savigny et al. 2009; Hill et al. 2009). Overall, research findings suggest there is reasonable ability to predict which individuals are likely to develop chronic problems but little success in preventing their poor outcomes that are predicted with the current approaches to intervention.

A recent international workshop on low back pain acknowledged that current identification and intervention strategies lack effectiveness in preventing chronicity (van der Windt et al. 2008). A refocused research agenda prioritised investigation into the improvement of screening tools, interventions for modifiable prognostic factors, and the skills and competencies of health care providers. The early identification of psycho-social risk factors and improving interventions to prevent chronicity continues to be a major direction advocated for future research (Foster et al. 2010a; Nicholas 2010; van Tulder and Koes 2010). There seems to be consensus within low back pain research and physiotherapy practice literature of psycho-social risk factors as phenomena

influencing the persistence of low back pain problems and disability. However, this acceptance appears to have occurred in advance of any clear knowledge of the nature and mechanisms involved in psycho-social risks factors, or evidence for effective interventions to prevent the transition of acute low back pain problems to chronic pain and disability.

### **2.2.5 The effectiveness of physiotherapy interventions for acute low back pain**

With an emphasis on evidence-based practice and the recent development of physiotherapy-specific low back pain guidelines, there is consensus on the lack of evidence for most physiotherapy interventions for acute low back pain (Bekkering et al. 2003; Mercer et al. 2006; van Tulder et al. 2006b). There is evidence for short term benefits of the application of heat and some evidence, although inconsistent, for spinal manipulation and advice to remain active (Koes et al. 2006; Langworthy et al. 2007; Juni et al. 2009; Kamper et al. 2010). There is little evidence for any specific forms of exercise or many other physiotherapy interventions commonly used in the management of acute low back pain (Koes et al. 2006). When a problem becomes ‘sub-acute’ (4-12 wks) or chronic (> 12 wks) there is some evidence for the benefit of supervised exercise, psycho-social approaches and physiotherapy as part of multidisciplinary intervention (Savigny et al. 2009; Lamb et al. 2010; Heitz et al. 2009; Sullivan et al. 2010).

The lack of evidence for physiotherapy has been argued to relate to methodological factors rather than a lack of efficacy of the interventions. It is argued that testing single modes of intervention does not reflect the multimodal approach typical of physiotherapy practice (Grimmer et al. 2003; Hannes et al. 2009). Research using ‘pragmatic’ treatment protocols which allow clinically reasoned and individually adapted treatment approaches show more support for the benefits of physiotherapy, although treatment effects remain small (Fritz et al. 2003; George et al. 2004; Hay et al. 2004; Wand et al. 2004; UK Beam 2004). It is also argued that research trials and the outcome measures used fail to capture the reality of the clinical setting, the effectiveness achieved in a practical context and outcomes important to patients (Wand and O’Connell 2008; Côté et al. 2009; Hush et al. 2009; Mullis et al. 2009; Ostello et al. 2010). Explanations for the lack of evidence also include factors concerning sample selection (Ott 1999; Freeman and Rossignol 2000; Delitto 2005; Pincus et al. 2008), treatment dose (Jull and Moore 2002), and intervention choices and application (Rosner 2003; Moore and Jull 2006; Leeuw et al. 2007). Furthermore, Stanton et al. (2008) found that after full recovery from an episode of acute low back pain one in four individuals had a reoccurrence of back problems within the next twelve months. Therefore,

conceptualisations of ‘recovery’ and measuring the degree to which it is achieved and sustained are important issues highlighted as influences on ‘effectiveness’ (Delitto 1994; Beattie 2001; Hush et al. 2009; Wasiak et al. 2009). The debate suggests current research strategies investigating physiotherapy interventions in acute low back pain may be inadequate or possibly incapable of showing the effectiveness and mechanisms underlying effective treatments.

### **2.2.6 Sub-classification systems in the management of acute low back pain**

In efforts to improve the effectiveness and evidence for physiotherapy management of low back pain, there has been increasing research into sub-classification systems. Ongoing research programmes are working to improve the ability to identify which patients may benefit most from which physiotherapy treatments (Flynn et al. 2002; Petersen et al. 2003; Brennan et al. 2006; Browder et al. 2007; Fritz et al. 2007; O’Sullivan and Beales 2007; Kent et al. 2009; Kumar et al. 2009; Paatelma et al. 2009). This research is underpinned by the belief that current approaches to treatment are effective if applied with sufficient expertise and to the right selection of patients (Wand and O’Connell 2008). An alternative explanation is that existing treatments are ineffective and new approaches need to be developed (MacFarlane 2008). Although findings are inconsistent and treatment effects remain small, there is some evidence that patients with acute/sub-acute low back pain may have better outcomes with matched treatments (Childs et al. 2004; McCarthy et al. 2004; Brennan et al. 2006; Kumar et al. 2009; Foster 2011). Overall, there remains little evidence that current sub-classification systems improve the ability to prevent chronic back pain and disability (Billis et al. 2007; Kent et al. 2009).

## **2.3 Research perspectives providing current knowledge of acute low back pain**

Of particular importance in current research on acute low back pain and the prevention of chronicity is that a statistical finding of ‘association’ is not evidence of ‘causation’. An equally valid interpretation of most research is that psycho-social risk factors are a response to rather than a cause of persisting problems (Eide and Røysamb 2002; MacFarlane 2008). Although discussed as a cause, Jones et al. (2006a p.340) acknowledged that ‘passive coping’ cannot be ‘dismissed’ as a consequence. The position from other research perspectives suggests that ‘psycho-social factors’ identified through verbal interaction or self-report questionnaires, such as personal ‘attitudes’, ‘beliefs’ and ‘cognitions’, may be an unmodifiable or unsuitable target for intervention (Edwards 1997a; Edwards and Potter 2005). The issue of cause or consequence

concerning psycho-social factors in the persistence of low back pain problems is an ongoing source of debate (Simmonds et al. 1996; MacFarlane 2008; Pincus and Morley 2002; Wand and O'Connell 2008). In a critical review of current research, Blyth et al. (2007) suggested that:

‘disappointing findings shared across studies may be fuzzy thinking about psycho-social factors and few psycho-social interventions have addressed the “social” (or environmental) domains.’ (p.8)

Strongly apparent from current literature is that a cognitive-behavioural psychology perspective provides the dominant organising idea for describing and understanding acute low back pain and chronicity. This perspective also uses the language of experimental research in the description of research findings and framing of conclusions. A sense of causality is implied through terms such as ‘risk factor’, ‘predictor’, ‘explained x% of the variance’ and the concepts of ‘dependent’ and ‘independent’ variables. Causal inference has become a natural interpretation and is implied despite most research designs only having the capacity to determine probabilistic accounts of correlation between variables (Winship and Sobel 2004; Goldthorpe 2007).

The causal imagery used in describing research findings reflects natural science approaches, where establishing causes has important practical implications for ‘manipulating’ the cause and effect in beneficial ways (Bryman and Cramer 1990 p.7). Winship and Sobel (2004 p.494) challenge the ‘interpretative extrapolation’ often seen between statistical results and their representation as research findings. It is argued that in mathematical regression modelling examining one of multiple variables and ‘holding all other variables constant’, the many threats to validity make causal inferences about a single variable ‘nearly always unreasonable’ (Winship and Sobels 2004 p.494). It is the report rhetoric as much as the nature of the findings which constructs the evidence for many claims about influences on the development of chronicity.

The contention surrounding research claims and the role that language plays in giving epistemological credibility to causal interpretations of the research evidence can be seen in a published exchange of the critique and defence of the claims of a recent study of low back pain (Foster et al. 2008, 2010a). The study tested twenty of the most common psycho-social factors in the literature using self-report questionnaires against outcomes measured at six months. Patients with acute low back pain problems formed approximately 38 % of the sample, and 34% of patients had ‘radiating leg pain’ which has been strongly associated with poor outcome in previous research (Waddell 2004). Using statistical modelling, Foster et al. (2010a) found that

only three of the twenty commonly measured ‘psycho-social risk factors’ were associated with poor outcome. The study concluded that a poor outcome was more likely in:

‘patients who expect their problem to last a long time, who perceive serious consequences, and who hold weak beliefs and confidence in their own ability to control their back problem.’ (Foster et al. 2010a p.402)

The research report concluded that ‘illness perceptions’ and beliefs about ‘self-efficacy’ were ‘highly associated’ with outcome (Foster et al. 2010a p.402). Yet contrary to this generalising conclusion, the study had found that the acute low back pain patients (38% of the sample) showed no association between outcomes and measures of ‘self-efficacy’ (i.e. low confidence in ability to control their back problem). Furthermore, it would seem unsurprising and realistic rather than ‘predictive of poor outcome’ that the rest of the sample of patients, already with chronic low back pain, would offer perceptions that their problem would last a long time and be difficult to control. Foster et al. (2010a) concluded:

‘a small number of psychological factors are strongly predictive of outcome in primary care low back pain patients’ (p.402).

These ‘predictive’ claims came under strong criticism as ‘misleading’ (Roelofs et al. 2010 p.208). The three psychological factors had collectively explained less than 4 % (0.7 %, 2.1% and 0.5%) of the total ‘58 % of variance in outcome’, yet were represented in a cumulative format as 49.9%, 51.8% and 50.3% (Roelofs et al. 2010 p.208). Criticism was levelled at the association implied and lack of evidence for the influence inferred by the wording. Foster et al. (2010b) responded:

‘we acknowledge we cannot imply causality with our data (we do not intend to do so)’.(p.209)

Then in contradiction, the authors claimed grounds to speculate about causality since the study had ‘provided evidence of a temporal relationship’. However, the time relationship still only indicates association as opposed to a cause. Foster et al. (2010b) also responded to criticism that their conclusions had represented the patients’ illness perceptions as ‘incorrect’:

‘We fully agree that patients’ perceptions cannot be labelled ‘incorrect’, given that their perception of their back problem may well be routed in their real, lived experience of their problem. Our article never implies these perceptions to be ‘incorrect.’ (p.209)

Yet, the study had stated that the ‘implications’ were ‘the need to assess and address patients’ cognitions about their back problems’ and help target ‘these key psychological obstacles to

recovery' (Foster et al. 2010b p.209). Although not directly implied as 'incorrect', using the metaphor adopted across most low back pain literature, the study referred to the patients' beliefs obtained through self report measures as 'obstacles to recovery'. Reporting on the same findings, a previous article had also suggested:

'the need to elicit and address patients' unhelpful perceptions of their back problems'  
(Foster et al. 2008 p.184).

The dominant way of referring to psycho-social factors across low back pain literature draws on causal imagery such as 'risk', 'unhelpful', 'mal-adaptive', 'barriers to recovery' and 'obstacles to recovery' (Linton 2005a; Main et al. 2008; Nicholas 2010). As MacFarlane (2008) comments, the influence between psycho-social factors and persistent problems may equally be occurring in the opposite direction. The patient may be able to 'predict' their outcome accurately and realistically by the day-to-day experiences of how a problem is interfering with their functioning (MacFarlane 2008). The experience of persisting symptoms may produce, unsurprisingly, personal 'illness perceptions' and expressions of poor 'personal control' or 'treatment control' (Macfarlane 2008; Roelofs 2010; O'Connell 2010). The 'prediction' and 'influence' in relation to the transition to chronicity, such as those highlighted, apply to many experimental research reports using rhetoric which implies a 'causal' influence from psycho-social factors. Of particular significance, this inference of causality underpins current knowledge in physiotherapy practice. This is illustrated in a recommendation in physiotherapy literature to incorporate the Illness Perceptions Questionnaire based on the conclusion of Foster et al. (2010a) (Hill 2010).

In summary, it is evident that there are associations between psycho-social factors and chronicity, yet the mechanisms and directions of influence are unclear. The 'how' and 'why' in recovery or the transition from acute to chronic back pain and disability remains poorly understood. The mechanisms involved in the development of persisting problems from an episode of acute low back pain are complex, multi-factorial and seem inexplicable through the current approaches adopted in its study.

## **2.4 The value of a different perspective**

Moving beyond the gaps evident, the nature of the knowledge informing current understandings of acute low back pain is also an important consideration. At present, knowledge of acute low back pain largely derives from experimental methodologies controlling for external factors,

measuring professionally defined variables and aggregating data across individuals. The knowledge from experimental research and systematic reviews is privileged as evidence because of the 'robust scientific' processes underlying its production (Burton et al. 2006 p.6). The methodologies are undertaken from a position assuming there is a single reality that can be measured and understood with reliability and objectivity. From this position, explanatory laws can be developed which will move with increasing accuracy towards the truth (Smith 1998). Experimental research takes a view that there is a world of facts to be discovered which exist independently of the researchers undertaking the exploration (Yates 2004). This perspective on knowledge development provides the current understanding of the causes of persistence of acute low back pain problems.

The 'robust scientific' knowledge of experimental research and systematic reviews is not seen as something accomplished through the every day social activities and interpretative acts of researchers, systematic reviewers and guideline developers, where variables become determined, particular outcomes given precedence, and consensus decides 'methodological quality' and what counts as evidence (Gilbert and Mulkey 1984; Dunbar 1995; Harstall et al. 2010). Little attention has been given to how controlled research environments and results reaching 'p values' of significance become infused with factual status, and as a way of knowing that is independent of the methods and probability calculations represented (Smith 1998). Furthermore, most of what is considered known of acute low back pain and the development of chronicity has been gained through self-report questionnaire measures. Pincus and Morley (2002) have questioned assumptions that the 'content' of a person's cognitions, attitudes and beliefs are available to consciousness and self-report. The kind of knowledge on which current understandings of acute low back pain and chronicity are based remains largely considered as unproblematic when used to inform guidelines and evidence for practice. However, the type of knowledge gained through such research positions and meta-analysis of population studies using self-report methods is proving unable to prevent the development of chronic problems in many individuals who experience acute low back pain problems. It seems increasingly evident that the scientific 'facts' on recovery or preventing chronicity have proved difficult to discover.

With efforts to improve inferences from accumulating low back pain research, the benefits of a research agenda directing future research strategies and dictating methods, samples, outcome measures and follow-up periods can be appreciated (Bouter et al. 1998; de Vet Henrica et al.

2002; Dionne et al. 2008; Pincus et al. 2008). This position is underpinned by the assumption that high quality population studies provide suitable and reliable knowledge to be applied to individuals with acute low back pain (Sackett et al. 1996; Burton et al. 2006; van Tulder et al. 2006b). Systematic reviews and guidelines currently make an epistemological distinction between patient perspectives and expert perspectives. Lay perspectives are considered subjective and biased opinion whereas expert perspectives are seen as a product of objective research and scientific knowledge (Ogden 1997). This perspective on sources of knowledge underpins current ideas on how back problems should be managed in practice and researched in the future. What counts as suitable and reliable knowledge in evidence-based intervention for acute low back pain does not include knowledge gained from those experiencing the problem or what is meaningful from their perspective. This issue is illustrated in the current European Guidelines on Non-specific Low Back Pain:

‘The main objectives.... were developing European guidelines for the prevention, diagnosis and treatment of non-specific LBP, ensuring an evidence-based approach through the use of systematic reviews and existing clinical guidelines, enabling a multi-disciplinary approach... Representatives from 13 countries participated in this project that was conducted between 1999 and 2004.’ (van Tulder et al. 2006b p.15)

The guidelines make clear those considered to hold the knowledge on the problem of low back pain, identified as the following ‘experts’:

‘The experts represented all relevant health professionals in the field of LBP: anatomy, anaesthesiology, chiropractic, epidemiology, ergonomics, general practice, occupational care, orthopaedic surgery, pathology, physiology, physiotherapy, psychology, public health, rehabilitation, and rheumatology.’ (van Tulder et al. 2006b p.15)

The comprehensive list raises certain questions: Who has defined the problem? Where is the patient’s knowledge located in this process? And, importantly, who does the solution benefit?

Criteria for ‘gold standard’ evidence have started to acknowledge the importance of not just whether an intervention works, but if it can be implemented and fulfils the needs of its consumers (Evans 2003). Owens (1998 p.1073) argued that health outcomes valued by patients with low back pain need to be considered and that ‘preference-based’ guidelines should be developed. Evidence for interventions based only on the criteria of ‘effectiveness’ determined by researchers

may support approaches not considered beneficial by the individuals experiencing the problem (Peat 2006). Recent UK guidelines on low back pain included two patient representatives on the guideline development group and the recommendations encourage the consideration of 'patient preference' at the point of implementation (Savigny et al. 2009 p.2). However, the evidence included in the guidelines only derives from experimental methodologies, population studies and expert consensus. Where gaps were identified in the evidence, the guidelines called for further research programmes using high quality randomised controlled trials (Savigny et al. 2009). More recently, guideline development has been made more transparent. The interpretative nature of the decisions which come to form the 'scientific' evidence has been recognised and used as a model for improving guideline development (Rossignol et al. 2007).

Views from alternative research positions have given increasing attention to the limitations of perspectives from experimental methodologies as a way to organise ideas about low back pain and its management (Borkan et al. 2001; Harland 2003; Ong and Coady 2006; May et al. 2006). Although considered a simplistic view within contemporary debates (Walt 1997), Lakatos (1970 p.132) brought attention to the consequences of 'research programmes' in the production of knowledge and of research agendas which remain undertaken from the same perspective, such as is evident with acute low back pain research. Lakatos (1970 p.132) argued that research programmes are characterised by expectations of growth in what will become known, continuing on a line of theory despite disconfirming evidence, as long as the product of the research is considered 'progressive'. This pattern can be seen in the way that theory on chronicity is continually being slightly remodelled through the ongoing research agenda focussed on the identification of psycho-social risk factors using experimental methodologies and regression modelling. A more political viewpoint suggests that with such 'progressions', the research communities involved in such programmes are provided with a relatively secure context in which to operate and with continuing directions for their work (Blaikie 2007 p.187).

In a paradoxical effect, research agendas and the accompanying directives for methodological conformity have been argued to constrain the development of knowledge as much as produce advances. Parker (2004 p.1) argues that many of the most informative studies have 'broken the rules' of accepted scientific inquiry and used alternative methodologies to the ones encouraged by research agendas and disciplinary conventions. In calling for the inclusion of qualitative

approaches in primary care research, Borkan (2004) highlighted opportunities that are created for unexpected insights:

‘the nature of data collection tools in experimental research allow the researcher to infer only that which he or she is examining (you “see” only what you are looking at), where as qualitative methods can expand the gaze to key elements that were never elucidated or even previously considered.’ (p.4)

In a study of patients undergoing hip replacement, Borkan et al. (1991) found that the narrative accounts provided by patients were more predictive of outcome than standardised outcome measures. The value and importance of considering different ways of learning and knowing about low back pain problems and its management is strongly illustrated in studies of individuals who have already developed chronic low back pain problems. At the outset of the current study, little research had yet studied or been encouraged to study the perspectives of individuals experiencing acute low back pain and what might be personally meaningful in relation to the prevention of and intervention with persisting problems.

It is increasingly acknowledged that existing knowledge of acute low back pain and the effectiveness of approaches to prevent the development of chronic problems remain inadequate. The European guidelines on acute low back pain suggested that ‘innovative studies were required to better understand the mechanisms and delivery of prevention in LBP.’ (Burton et al. 2006 p.2). Single case study and replicated single case experimental designs have been used to explore the application of theory offered from population research (Vlaeyen et al. 2001; George et al. 2004). Such research is starting to bridge the gap between knowledge from population studies on acute low back pain and its application to individuals in practice contexts. These studies point to the value of alternative research positions from which to improve understanding of acute low back pain and the transition to chronicity not being met by an experimental research position drawing on population studies.

Since undertaking this study, the suggestion of different approaches to researching low back pain problems has appeared across recent literature in recognition of the limitation in current knowledge. Young and Chapman (2006 p.230) called for a ‘more nuanced perspective’. Main et al. (2008 p.396) acknowledged that there may be a limit in what can be learnt about the development of chronicity from groups of patients. It was concluded that there is a need for ‘more powerful and

imaginative research' to get a clearer understanding of the process of change that is evident in population experimental research:

'Failure to grasp the challenge such as individual differences may result in failure to advance beyond the present models in increasing our success rate in prevention and in leaving individuals to well-intentioned but misdirected initiatives.'(Main et al. 2008 p.396)

The importance of considering the patient's view was highlighted and that 'phenomenological and constructionist perspectives' may provide valuable insights into experiences of pain problems (Main et al. 2008 p.395). Blyth et al. (2007 p.349) also remarked on the lack of translation of the extensive knowledge on low back pain into improvements in patient outcomes:

'we need a wide-ranging conceptual and methodological tool kit to move forward our understanding of the role of psycho-social factors in the development of chronic pain.' (p.349)

More recently, a published overview of the 9<sup>th</sup> International Forum for Primary Care Research on Low Back Pain commented:

'Many forum participants have been surprised by the limited improvements in the prevention and treatment of low back pain in primary care given the increase in the quality, quantity, and sophistication of research over the last two decades. Questions have arisen as to why the field may be "stuck" and some have suggested that our whole paradigm or approach may be flawed. The familiar conclusions of so many systematic reviews of trials in this field, namely, that "conflicting or limited evidence makes it difficult to give recommendations", has added to the sense of frustration.' (Cherkin et al. 2009 p.304)

A 'key point' concluded that 'there was a continuing debate around the need to rethink our whole paradigm or approach to the problem of back pain, if real progress is to be made' (Cherkin et al. 2009 p.307). More recently, after undertaking a systematic review of psycho-social risk factors for chronic low back pain, Ramond et al. (2011 p.12) suggested that 'qualitative research might be of value to explore the field of LBP and to define new management strategies.' As such, there appears a strong consensus on the need for different approaches to improve understandings of acute low back pain and its management.

### **2.4.1 A significant gap: alternative forms of knowledge on acute low back pain**

One of the most significant gaps evident in the literature is research into the experiences and perspectives of individuals experiencing acute low back pain. As much as ‘scientific method’ is seen to increase the reliability of knowledge and improve its worth, Yates (2004) argues it also loses ‘external validity’ in its application to fluid, complex social worlds and the individuals experiencing acute low back pain problems within them. The classification of individuals with acute low back pain into sub-groups and measuring responses divided into professionally determined variables seems to be proving of limited value in providing knowledge on the prevention of persistent back pain problems (Pincus et al. 2004; Spiro 2009).

It seems that the ‘gold standard’ of knowledge derived from high quality experimental population studies may be as limited in its transferability to the individual as individual-derived knowledge of acute low back pain is suggested to be for application to populations (Scott 2007; Britton 2010). As Borkan et al. (2001 p.128) argue, the systematic pooling of evidence reduces patients’ problems and their suffering to ‘the smallest common systematically reviewable denominator, leaving us trying to cure the whole person through attention only to one or more of the parts’. Accomplishing homogeneity in diagnosis, sample characteristics or through sub-classification systems has proved challenging. There is increasing evidence that such efforts as a way to improve intervention may be misdirected with the variability introduced by individuality in people, problems and contexts.

The simplistic model of ‘patient problem → intervention/comparative intervention → outcome’ underpinning RCT intervention/prognostic research is being replaced by an increasing recognition of the complexity within each of the ‘objects’ comprising this research model (Miettinen 2003 p.126). As Harland (2003) highlights, it seems obvious yet essential to recognise that individuals and their contexts differ. Individual reactions are likely to differ to what may be considered the ‘same’ clinical diagnosis, the ‘same’ intervention and in the particular outcomes desired. It seems valuable, if not essential, to explore acute low back pain and the development of chronicity from the perspective of individuals experiencing the problem.

In contrast to research undertaken from a position adopting ‘scientific’ methodologies, an interpretivist position considers learning about the social world through the social actors which inhabit it and give meaning to experiences within it (Yates 2004). As a compliment to the extensive body of population studies and statistical findings, a perspective from the ‘inside’ may

add understandings not 'filtered through some "outside" expert's theory' (Blaikie 2007 p.180). It is well recognised that the experience of pain, its distress and disability is mediated by its meaning to the sufferer (Osborne and Smith 1998). As argued by Crossley (2000), what is considered a problem is defined by the way things have significance for a person. From this view of problems and their possible consequences, the study of the perspectives of individuals experiencing acute low back pain problems would seem important for providing beneficial and effective intervention.

There is a valuable and increasing body of knowledge on the experience of chronic low back pain and its management from the perspective of people experiencing or having recovered from a problem. Various interpretative and narrative methodologies have been applied in the study of experiences of chronic low back pain and its management (Tarasuk and Eakin 1994; Borkan et al. 1995; Sparkes 1996; Skelton et al. 1996; Osborn and Smith 1998; Walker et al. 1999; Holloway et al. 2000; May et al. 2000; Lilrank 2003; Ong et al. 2004, 2006b; Verbeek et al. 2004; Raak and Wahren 2006; Walker et al. 2006; Corbett et al. 2007; Holloway et al. 2007; Liddle et al. 2007; Slade et al. 2009; Vroman et al. 2009; Crowe et al. 2010). These studies have added powerful new dimensions to understanding the personal difficulties and suffering, social impacts, barriers encountered and positive aspects which can arise during experiences of chronic low back pain. This research has produced important insights and sensitivities to issues not possible to illuminate through RCT's and offers a humanizing counter for the provision of care and the development of policy in relation to improving the management of chronic low back pain (Todres et al. 2009).

In contrast to chronic low back pain, there is very little published research exploring acute low back pain problems from the individual's perspective. In a physiotherapy based study, Miller et al. (1999) used a semi-structured seven day diary approach asking patients to report in the morning 'if any normal activities wouldn't be possible because of their back' and in the evening 'how they had coped with their back ache'. Most participants only responded to the evening question. Miller et al. (1999) concluded that the data reinforced the relevance to patients of all three dimensions of the biopsychosocial paradigm. Accounts of varying combinations of pain, disability, social pressures and emotional reactions to acute low back pain were given. Particular methodological issues were highlighted, including the importance of language in the wording of questions and that the experiences reported were clearly cued by the questions asked (Miller et al. 1999). The informative value of the data produced from only two questions was encouraging

for what may be learned from seeking individuals' perspectives on the experience of acute low back pain.

Grimmer et al. (1999) used a semi-structured questionnaire to explore stakeholder expectations of physiotherapy in acute low back pain intervention, as well as physiotherapist and patient perspectives on the decision to re-attend. Symptom relief and the patient-therapist relationship appeared paramount from patient and health professional perspectives. The study concluded that the optimal care package for acute low back pain has never been clearly determined, and expectations vary between stakeholders. The study recommended further in-depth study of patients' attitudes, knowledge and expectations to explore factors underpinning treatment success and that interviews may provide greater insight not achievable through questionnaires.

Research using semi-structured interviews explored a sample of acute and chronic low back pain patients' attitudes to and satisfaction with their physiotherapy care (May 2001). Patient expectations and satisfaction have been linked with recovery in low back pain patients (Mondloch et al. 2001; Goossens et al. 2005). Findings emphasised the multi-dimensional nature of 'satisfaction with physiotherapy' and the wide range of issues about which patients make judgments in relation to physiotherapy encounters (May 2001). Although no distinction was made between acute and chronic low back pain patients' perspectives, the study provided insights for practice of the importance and value of seeking perspectives on what is meaningful to patients in relation to their care and the management of their problems.

The few studies using qualitative approaches to explore aspects of acute low back pain and the larger body of research providing insights into chronic low back pain and chronic pain more generally, suggest that undertaking an alternative approach to the study of acute low back pain may provide an important avenue for extending current knowledge.

#### **2.4.2 Taking a different perspective on the study of acute low back pain**

In contrast to the experimental and cross-sectional approaches discussed above, this study was developed with the aim to learn more about acute low back pain by exploring individuals' personal experiences across the trajectory of a problem. The research question started as an interest in why some people experience recovery while others develop persistent, sometimes debilitating problems. An exploration of acute low back pain from the perspectives of individuals experiencing the problem seemed a potentially valuable source of knowledge to contribute to

current understandings. The study was designed to explore what individuals experiencing a problem felt was occurring through an episode of acute low back pain and perceptions of influences on recovery or persisting problems from a personal viewpoint. It seemed that the individuals' perspective on the problem might provide important insights and help extend existing understandings of the transition to chronic pain and disability so far only largely informed by randomised controlled trials.

Although the study started with my interest in drawing on personal experiences to extend knowledge of acute low back pain, the thesis reflects a gradual shift in theoretical perspective on the study of experiences. From an initial consideration of phenomenology as a possible methodology, a continued exploration of the literature resulted in the adoption of a theoretical perspective informed by 'experience-centred' narrative research. A narrative perspective seemed appropriate for studying an issue where time and meaning-making were integral to the study of experiences and in a study designed to explore accounts provided across the experience of a personal acute low back pain problem.

As the study progressed, a social interactional perspective on narrative accounts was adopted. There was a reconsideration of what might be possible to know about a 'personal experience' from an account provided of it. A change also occurred in my research interest, to one that seemed much more valuable to explore. Consequently, the focus of the study moved beyond the experiences of acute low back pain to an interest in the nature of the accounts provided. There was an interest in the potential insights for practice and research if a lens drawing on theory within narrative inquiry and discourse analysis were applied to the analysis of the accounts of acute low back pain experiences.

## **2.5 Summary**

This chapter has provided a discussion of current understandings of acute low back pain and highlighted the way in which this is largely underpinned by knowledge developed from experimental designs, population studies and systematic reviews. The limitation of this knowledge in efforts to prevent the development of chronic pain and disability following an episode of acute low back pain has been highlighted. The rationale has been outlined for undertaking a study exploring the personal accounts of individuals undergoing an episode of acute low back pain and their perspectives on the process of recovery or persistent problems. The next chapter takes this position on the study of personal accounts further by providing a

discussion on the study of 'experiences' through narrative accounts and the narrative-discursive approach which has informed the study and the approach to analysis.

### **3 Chapter Three: Theoretical perspective & choice of methods**

*A man will be imprisoned in a room with a door that's unlocked and opens inwards; as long as it does not occur to him to pull rather than push.*

*Ludwig Wittgenstein (1953)*

#### **3.1 Introduction**

This chapter describes the narrative-discursive research approach adopted in this study for the study of narrative accounts of personal acute low back pain experiences. The approach is a synthesis of perspectives adopted which reflect an evolving understanding during the study of the nature of narrative data, the practice of narrative research and the kind of knowledge possible from the perspectives adopted. An overview of the theoretical and methodological framework is provided in Figure 1. As suggested by Clandinin et al. (2007 p.21), narrative inquiry is not about 'just telling stories' and when given adequate consideration, narrative inquiry is a complex research approach. Narrative research methodologies are diverse between and within disciplines, and can differ significantly on the view taken on narrative and in the interests explored in analysis. This diversity means that narratives and narrative research are conceptualised in many different ways, often with some overlap but there can also be strongly opposing views on the nature of narrative data, approaches to analysis and the knowledge claims possible or appropriate.

The chapter describes the 'narrative/experience-centred' framework and narrative theory informing the research design and initial implementation and then outlines the perspectives adopted from discourse analysis on the nature of the narrative data. These perspective draw on theory of language, social interaction and broader socio-cultural influences. The synthesis of perspectives provides an encompassing lens that gives consideration to issues of meaning, time, language, context and the social nature of narrative accounts. The narrative-discursive approach and the different set of assumptions applied to the study of personal accounts of acute low back pain were seen as an opportunity to develop knowledge of value to physiotherapy practice from an alternative viewpoint than traditionally used. The choice of data generation methods and considerations with the evolution in perspective is discussed. To conclude, there is discussion of my researcher position concerning various dimensions of the research project and researcher context which have implications for the study.

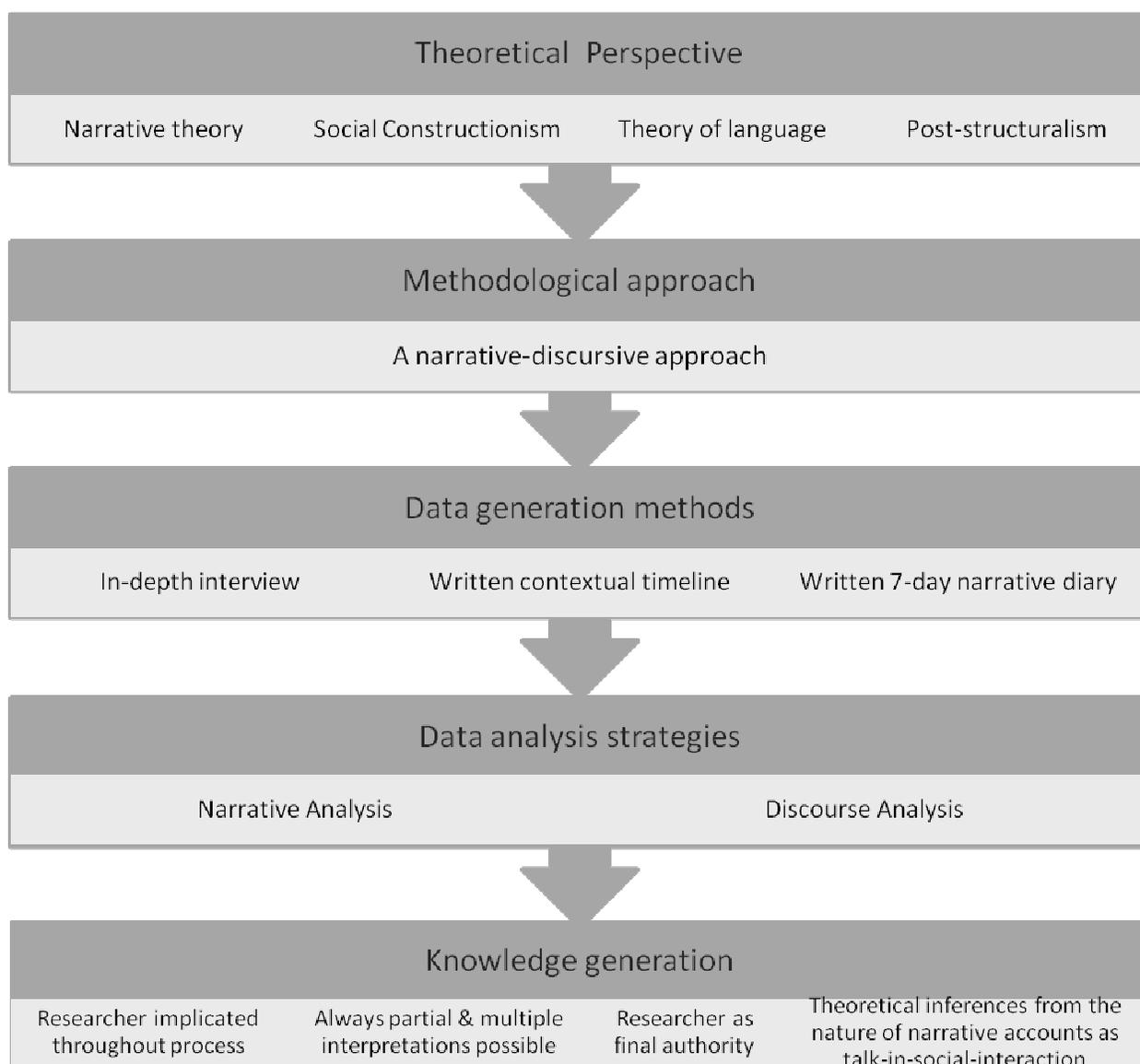


Figure 1: Overview of the research approach adopted in the study

The term ‘narrative’ has several senses; narrative as a meaning-making process, the act of providing a narrative, and narrative as the product (Polkinghorne 1988). Furthermore, ‘narrative’, ‘narrative account’, ‘account’, and ‘story’ are sometimes used interchangeably in narrative literature, although their specific meanings are also the subject of debate (Chase 2005). In this thesis, ‘narrative account’ has been chosen to refer to the product of talk or text on personal experiences (Riessman 1990; Mishler 1991; De Fina 2009). It is used from this point to help

clarity within the theoretical discussions and this choice is discussed further in the preface to the findings in section 5.1.2.

### **3.2 Experience-centred narrative research**

Narrative accounts provided across personal acute low back pain experiences were seen as an opportunity unexplored in previous research to gain insights and extend current knowledge for physiotherapy practice. As a form of data, the way a ‘narrative account’ is conceptualised makes a significant difference in relation to data generation, analysis and the kind of knowledge claims appropriate to make (Riessman 1993). It was taken for granted at the outset of the study that acute low back pain problems are something ‘experienced’ and that a narrative approach to exploring personal accounts was a way to gain a greater understanding of those experiences and an ‘insider’ view of the process of recovery or persistent problems from an episode of acute low back pain.

Personal narratives have been used extensively as a source of knowledge to develop a greater understanding of experiences of chronic low back pain (Borkan et al. 1995; Sparkes 1996; Walker et al. 1999; Glenton 2003; Lilrank 2003; Ong et al. 2004). The use of personal narratives also features widely across other research contexts as a source to extend knowledge on health and illness experiences (Bell 1988; Kleinman 1988; Charmaz 1991; Mattingly 1998; Crossley 2000; Ezzy 2000; Riessman 2003). This body of research supported the choice to use narrative data as an opportunity to develop knowledge of acute low back pain experiences.

Although considered a natural feature of human life, an ‘experience’ and its relation to narrative, as well as the relations between narrative accounts, language, reality, and knowledge were much more complex than had been initially appreciated. The link between what is said or written in a narrative account and the knowledge possible from its interpretation becomes much less straightforward with an appreciation of theory on the nature of narrative data. The following discussion provides an overview of aspects of this theory in relation to the perspectives taken on narratives and language, and the approach to analysis as a consequence.

#### **3.2.1 Narrative accounts as data**

The value of narratives as a focus for research is underpinned by the perspective that the act of narrative is a sense-making process through which experiences are constructed and given

meaning (Bruner 1990; Mishler 1999). Narrative theorists have proposed narrative as more than a 'genre' of story-telling, but a fundamental mode of thought and a form of interpretative thinking that constructs, makes sense of and shapes personal experiences (Gergen and Gergen 1986; Sarbin 1986). It is through a narrative way of thinking and telling that people's lives are experienced and given meaning. As research data, narrative accounts are considered to offer a window into the meanings and understandings of personal experiences.

A common approach to narratives as research data has been as a teller-produced account, examined for the personal meaning-making and configuring of experiences. Within socio-linguistics, Labov and Waletzky (1967) defined structural components seen to characterise a 'personal experience' narrative, described as an 'abstract'; 'orientation'; 'complicating action'; 'evaluation'; 'resolution'; and a 'coda' (returning to the talk to the present) (Labov and Waletzky 1967; Labov 1972). This seminal 'structural' view was valuable for understanding what is distinctive about a narrative compared to other talk or texts. Narrative 'units' and the various structural components could be identified within talk and then subjected to analysis (Riesman 1993). However, this perspective provided a view of narrative accounts as a bounded storyline, with a beginning, middle and end, told by the speaker to the audience as a transfer of information.

In addition, a traditional perspective on narrative in research has often privileged, and sought as data, a minimally interrupted stretch of talk, as seen in life-history and biographical research (Wengraf 2001; Bamberg 2006). This perspective encourages an interview method which elicits monologues and 'narrative' data is sifted from 'non-narrative' data for analysis (Hollway and Jefferson 2004; Wengraf 2004). Ochs and Capps (2001) encouraged a more encompassing view:

'Understanding narratives compels going beyond these exemplars to probe less polished, less coherent narratives that pervade ordinary social encounters and are a hallmark of the human condition'. (p.57)

Alternative perspectives have debated and extended ideas on what constitutes a narrative and approaches to analysis (Gee 1990; Bamberg 1997; Lieblich et al. 1998; Mishler 1999; Brockmeier and Carbaugh 2001; Richardson 2003; Schiffrin 2003; Taylor 2003; Stokoe and Edwards 2006; De Fina and Georgakopoulou 2008; Patterson 2008). These perspectives have evolved from quite differing disciplinary interests and the use of naturally occurring sources of data rather than interviews (Georgakopoulou 2010). As highlighted by Chase (2005), there are

multiple ways of conceiving of narrative accounts and approaches to analysis. Importantly, this multiplicity requires clarity in the perspective taken since the choice is consequential for the way narrative data is sought and perspectives taken within analysis.

### **3.2.2 The relationship between ‘experience’ and ‘narrative’**

Drawing from phenomenological and hermeneutic philosophy, Ricoeur (1984) argues that there is a human drive to gain understanding and make sense of personal lives and what happens in them. His perspective argues that understandings are formed through the interpretive act of narrative, which creates a ‘logical character’ to what happens (Ricoeur 1984 p.38). The act of narrative constitutes experiences. It acts as a kind of epistemological process through which events and happenings come to be understood. As such, narrative serves an explanatory function and the meanings reached become the experience perceived. Importantly, this understands experiences not as pre-existing, but formed through the act of narrative.

Another important feature in Ricoeur’s (1984) ideas on narrative and human ‘meaning-making’ is the dimension of time and how it figures in narrative processes. The physical passing of time, ‘chronological’ time, is experienced as a linear process. However, Ricoeur (1991) discusses how humans experience the flow of time in relational terms of past, present and future, which he termed ‘phenomenological’ time (Ricoeur 1984 p.99). This ‘lived’ experience of time is configured through narrative thinking, which creates past and present experiences, histories and future expectations. Narrative is seen as the human way of understanding that links the passing of time, events and actions which happen and the way they come to be perceived and ‘preserved’ as experiences (Villela-Petit 2003).

As the narrative process configures an experience, it creates sequence and ‘temporality’ between the elements of a situation (Ricoeur 1984). This ‘configuring’ process produces a sense of causal relationship and ‘consequence’. The sequencing is integral to how a situation comes to be understood. Since a ‘cause’ must precede an ‘effect’, temporal relations are significant for producing meaning and understandings of causality (Mellor 2005). Narrative processes continually confirm or reconfigure the nature of experiences as time passes. Consequently, time plays an integral role in the significance and meaningfulness given to situations. Meaning is made by working back from a conclusion:

‘the end is read into the beginning and the beginning into the end’ (Ricoeur 1980 p.183).

The past, present and future are given meaning and understood in the light of a person's knowledge and understandings in the present (Hacking 1994). Ricoeur 1981 (p.170) suggests meanings develop retrospectively: 'looking back from the conclusion to the episodes leading up to it, we have to say that this ending requires these sorts of events and this chain of actions'. From this perspective, 'experiences' and meanings are never fixed and may be re-interpreted and variable across different times and different tellings.

This perspective requires a shift from the idea of narrative accounts as 'representing' underlying experiences, to experiences being 'configured' in the telling. Experiences stop being seen as something 'real' and 'true' behind a narrative account. Rather, this perspective sees narrative accounts as reflections of how people understand and organise ideas of what happened at that particular time and in that context (Jones and Candlin 2003). The research interest becomes one of how personal experience and meanings become constructed and 'configured' through narrative and across time. As suggested by Riessman (2008 p.5), a fundamental interest in narratives lies in the meaningful, consequential linking that 'narrative shaping' imposes on situations and ideas. This contingency between 'meaning' and 'consequence' constructed through narrative was the starting point taken in this study for exploring the accounts of personal acute low back pain experiences.

Of further importance, variation in the meanings given to situations and the way experiences are understood becomes appreciated as a natural feature of narrative accounts. Variability is not seen as a problem of the accounts distorting 'reality' and the 'truth' about what happened, or to be eliminated in data generation techniques to make way for consistency and accuracy. In this study exploring accounts across time, variability and temporality become 'tools for understanding' and a matter of interest (Wood and Kroger 2000 p.10).

### **3.3 A narrative-discursive approach**

Ricoeur (1973 p.91) also argued that narratives need to be understood as 'discourse'. Drawing on theory of language, narratives are considered to be a social action, like apologies or arguments. To see narratives as only having static qualities of sequence, consequence and temporality portrays a timeless, self-contained object with no relation to anything else for understanding what it is, like a book or a chair. However, narratives are not 'free-floating' in a social vacuum (Atkinson 1997 p.339). The teller is not an isolated provider of the narrative, its content and its

meaning (Schiffrin 1990). Narratives are meaning-making dialogue between people, undertaken through the use of language at a particular time and in a particular place. Narratives are always designed for an audience, either actual or perceived, for others or oneself, and orientated to a particular occasion of telling (Riessman 2002). The audience and context are part of the telling and provide influences on what, how and why particular meanings are offered (Mishler 1999). The situated nature of narrative discourse becomes important for interpretation. The developments in theoretical perspective on the nature of the narrative data in the study are outlined below in Figure 2.

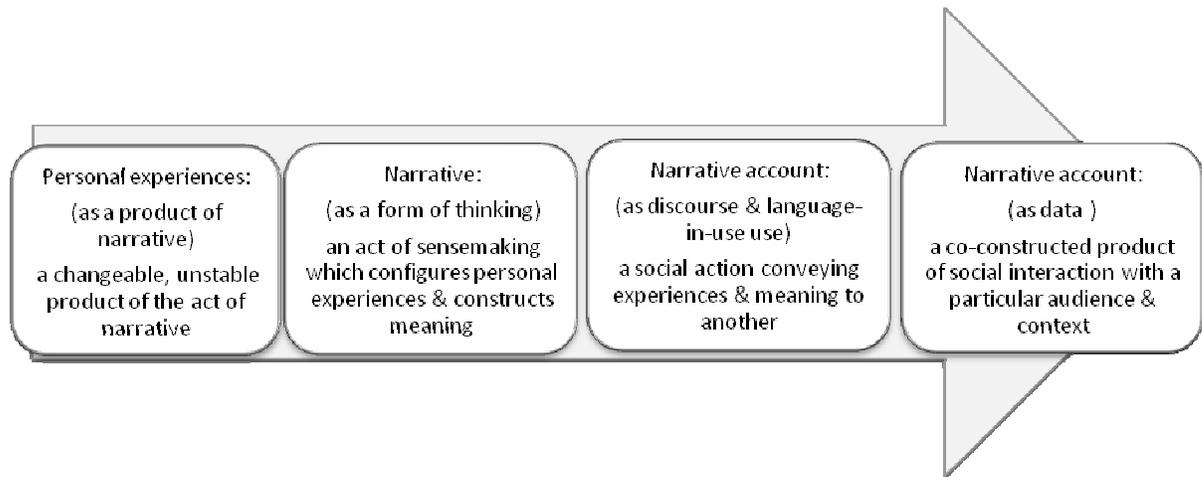


Figure 2: An outline of the changing theoretical perspective on the nature of the narrative data

Furthermore, Ricoeur (1973) argued that an interpretation of narratives should seek a causal explanation for its occurrence. Only an account that provides both a causal explanation and an interpretation of meaning does justice to the discourse (Dauenhauer 1998). An analysis that asks ‘why this narrative account now?’ needs an attention to the context (Wetherell 1998). This interest introduces the importance of incorporating social and language theory within analysis.

In his perspective of narrative as a philosopher and theorist, Ricoeur drew on theory of language and social life that overlaps with perspectives within discourse analysis, and particularly approaches within discourse psychology. While Ricoeur’s interests were in theorising the nature of ‘human understanding’, where narrative, time and the use of language were integral (Changeux and Ricoeur 2000), discourse analysis has an interest in the study of discourse and language in use in social interactions (Potter and Wetherell 1987; Wetherell et al. 2001). This adds a language-centred approach to the study of narratives as offered to another in interaction. In the

move from a focus on narrative as experience to thinking about the study of the narratives themselves, I was directed towards an approach to language offered by A.N.Whitehead (1938/1968 p.32) in his book called “Modes of Thought”, where he describes two functions of language: ‘It is converse with another and it is converse with oneself’ (Stenner 2011). To place a focus on narrative thinking and the role of language in configuring the experience for the person attends to the second function: ‘language used to converse with oneself’. This study has taken an interest the first function of language and its role in the narrative that is told: ‘to converse with another’. As such, discourse analysis, and in particular a synthesised approach drawn from discursive psychology, offers analytic interests that support the study of narrative accounts as a particular form of discourse and, as Ricoeur argued, as ‘discursive meaning production’, with another in a particular context (White 1990 p.x). Wetherell et al. (2001 p.3) suggest that to study narratives in this way is to study ‘human meaning-making’, but using theory on the pragmatics of language in use, language use in social contexts, and theory of social life that provides the frame for meaning-making.

### **3.3.1 Perspectives from discursive psychology**

As a field of research, discourse analysis has a similar diversity in historical traditions, disciplinary interests and multiplicity in approaches that is evident within narrative research (Wetherell et al. 2001; Potter 2009). Adaptation within research studies has multiplied this diversity. As much as this complexity makes discourse analysis a challenging research field to grasp, it also provides an extensive resource for considering narrative data with a more insightful ‘analytic mentality’ (Potter and Wetherell 1994 p.62).

Discursive psychology takes a social constructionist perspective and a different view on language and the interpretation of talk and texts than views in cognitive and behavioural psychology (Edwards and Potter 1992 p.2). As highlighted in chapter two, current physiotherapy practice and ways of understanding ‘psychological talk’ in personal accounts is strongly informed by cognitive and behavioural psychology. Billig (2006) has outlined two questions that underpin discursive psychology research interests:

‘How do we connect the use of language to the lives and purposes of its users? Or, to put it differently, what is the status of psychological concepts used to describe the mentality of individual language users?’ (p.17)

Although the second question has received increasing attention in acute low back pain literature, the first provokes a more serious critique of assumptions about the link between language and routes to an individual's underlying psychology or social status. Previous research on acute low back pain has focused on the 'content' level of personal accounts, treated as a direct route to know about aspects of an acute low back pain experience and a person's thinking and psychological status (Miller et al. 1999; Miller and Lewis 2001; Breen et al. 2007; Hush et al. 2009; Vromen et al. 2009). The perspective in discursive psychology challenges ideas on the 'content' of talk as a direct window into a person's mind and social circumstances, and approaches that do not take account of its performative and interactional functions. The possibility of gaining valuable analytic insights underpinned the use of this alternate perspective since 'psycho-social' risk factors measured through patient self-report and personal accounts have prominence in current research as an influence on acute low back pain problems.

In particular, this study has drawn on a 'synthesised' approach within discursive psychology which applies social constructionist and post-structuralist theory to the study of talk and texts (Wetherell 1998). The approach combines research interests from the overlapping fields of ethnomethodology and conversation analysis, with a critical poststructuralist approach linking language and social life (Parker 1992; Hepburn 2003; Fairclough 2003). There is focus on the fine detail of talk and text for the way that language functions and accomplishes interpersonal actions. In combination with this micro-analytic focus, there is also an interest in the relationship of these features in talk and text to macro-social and ideological features within the broader socio-cultural context (Wetherell 1998; Billig 2006). The combination of these two analytic perspectives has been debated concerning the role and display of wider contextual factors in situated talk (Schegloff 1997; Wetherell 1998; Willig 2001; Wooffitt 2005). This study draws on a growing body of research which has developed valuable insights for practice contexts from combining these perspectives (Potter 2007; De Fina and Georgakopoulou 2008).

Ethnomethodology is a research approach concerned with the practices, codes and methods people use to carry out everyday social life (Garfunkel 1967; Goffman 1969; ten Have 1999; Baker 2002). Analysing the details of how talk is produced and placed within social interactions shows what people are 'doing' and how day to day social life is accomplished (Neville and Rendle-Short 2007). For example, Heritage and Raymond (2005) used this approach to show

how the conversational moves during a medical interaction are used to assert and negotiate rights to knowledge of symptoms while maintaining positive relations.

Conversation Analysis developed out of ethnomethodology and is a social approach to the study of talk and interaction (Sacks et al. 1974; Atkinson and Heritage 1984; Hutchby and Wooffitt 1998, Lynch 2000). There is an interest in describing the structure, codes and practices involved in the sequential turns of talk in social interactions, in everyday or institutional encounters. Parry (2004) used conversation analysis to study interactions between physiotherapists and patients, showing how the communication process and interactional moves were complexly nuanced to manage the information exchange and situated relations.

Critical discourse analysis has an interest in showing connections between language, power and ideology (Stubbe et al. 2003). A critical perspective takes interpretation of narrative data further than a social constructionist view, to consider the constructive power of language in relation to ways of understanding the world and acting within it (Parker 1992). The approach is influenced by post-structural theory on the role of language in the constitution of social and psychological life (Willig 2001). There is a focus on the social and authoritative/political forces produced through language and the implications for social life and experience (Willig 2008). It offers an additional lens to consider why discourse takes the shape it does and what the implications may be for individuals and social practices.

A crucial aspect of social constructionist and post-structuralist perspectives is the disruption of taken-for-granted assumptions about language as a transparent, neutral medium passing on information (Potter and Wetherell 1987; Edwards 1997a; Wetherell 1998; Edley 2001). The following discussion outlines the synthesis of perspectives and the implications for analysis from appreciating language as constructed and constructive, action-orientated, contextually situated, rhetorical, and having social and ideological force.

### **3.3.2 Language as constructed and constructive**

Discourse analysis takes a social constructionist perspective, which sees language as 'constructed' from words, sentence, gestures, meanings and various linguistic devices that achieve its functions (Willig 2001). Language is also 'constructive' in the way that it provides a particular version of things and has a central role in the construction of knowledge and social reality (Burger and Luckman 1967). A social constructionist perspective considers that language

constructs the 'objects' it refers to and this gives rise to particular ways of understanding the world and aspects within it (Burr 2003). It is through language that versions of the social world are constructed and the way its objects are perceived, including the natural world, history, social structure, events, actions, values and experiences. Consequently, language does not give access to knowing the reality of people's lives, mental states, beliefs or thinking processes, only to how people construct and display the sense of these states in social interaction (Potter and Wetherell 1988; Billig 2006). The 'constructive' nature of language means there are always multiple possible versions and no single, underlying reality that is objective and 'true'.

### **3.3.3 Language as action-orientated**

Language is always action-orientated. In philosophy of language, Wittgenstein (1953) offered influential and provocative ideas on conceptions of language that prompted an understanding of language as functional (Allgood 2000). Rather than a tool passing on information, words 'do things' (Austin 1962; Searle 1969). Language performs social actions, such as describing, persuading, denying, promising, arguing, requesting or justifying. As such, language use is 'action-orientated', shaped to accomplish interactional business (Edwards 1997b). Passing on information may only be one aspect of multiple social actions performed by an utterance. Consequently, meanings in what is said within the to and fro of an interaction need to be considered in relation to the functions it serves in those moments.

### **3.3.4 Language as contextually situated**

Context is also key for how language produces meanings and what meanings are produced. Hepburn and Wiggins (2007 p.7) suggest that language is 'contextually situated'; in sequential, socio-cultural and rhetorical contexts, which are all integral to understanding meanings.

Language is sequentially situated whereby the meaning of what is said can only be understood in relation to its situated context in the flow of an interaction (Drew 1985). Unfolding talk is responding to and influenced by what was said before and what might be anticipated to follow (Drew 1986). As such, the 'content' has no fixed relationship to what meanings are being conveyed (Silverstein 2003). A remark may take the form of a statement yet function as a request, complaint or denial. A remark that a window is open may be asking for it to be closed, criticising that it was left open, or responding to a question about noise. It is in the context, not the content, which determines the meanings that words take on. Consequently, the interpretation

of the meaning of an utterance needs to consider the sequential context within the flow of interaction.

Language is also situated as part of a socio-cultural system. This broader context provides conventions, resources and shared meanings for undertaking interactions, which influences what kind of talk takes place in particular settings (Mishler 1996; Goodwin and Duranti 1992). Riessman (1993) argues for the importance of recognising that social contexts exert a crucial influence on what can or cannot be said, ought to be said, what can be taken for granted or needs explaining during social encounters.

Finally, language is 'rhetorically' situated. Talk is 'rhetorical', arguing for its particular version (Billig 1996). Language is inevitably subjective and words do not have intrinsic 'truth-value', as most strongly illustrated in a court of law. The way a version is put together constructs its truthfulness and acts to counter alternative versions (Billig et al. 1988). A rhetorical perspective also brings attention to the dilemmas that are inherent in 'commonsense' for what is right, good and appropriate. Appeals to 'commonsense' to argue a set of values and way of looking at things is 'ideologically' dilemmatic (Billig et al. 1988). There are always alternative and equally 'commonsense' ideas that can be 'pitted against' any perspective taken (Willig 2008 p.167). This is seen in opposing maxims such as "too many cooks spoil the broth" versus "many hands make light work" (Billig et al. 1988). Commonsense rhetoric poses dilemmas for sense-making and rationalising and this unstable 'ideological' context is seen managed within talk.

### **3.3.5 Language as a social and ideological force**

A constructionist perspective suggests there is a free choice in ways of talking and constructing events and objects (Gibson 2000). However, in the same way that narrative accounts are not free-floating outside a social interaction, language and social interaction are not free-floating outside the social systems in which they occur (Wetherell 1998). Social theory linking language and interaction to the wider social system argues that not all options are equal, possible or even available to individuals (Lannamann 1991). Individuals are not free agents and language is not neutral for what can be said since social systems enable, constrain and provide consequences for talk and conduct (Gough and McFadden 2001). As Coupland and Jaworski (2004) point out, if language, meanings and ways of talking were 'innocent' then it wouldn't matter what meanings were conveyed or interpretations reached:

‘There would be no social investment in ways of speaking or effects to be achieved in deploying them.’ (p.15)

As argued by Blommaert et al. (2001), social theory on language and possibilities and constraints on talk are consequential for the possible meanings interpreted when analysing narrative data.

### **3.3.6 Language and post-structuralist perspectives**

Post-structuralist perspectives and especially the work of Foucault (1980) argue that language, knowledge and social practices are not neutral in nature but linked with issues of power (Parker 1992). The impact of the work of Foucault for the analysis of narrative accounts lies in the larger focus on ‘discourses’, often referred to as ‘big D’ discourses, and the influences evident in what individuals say and do (Hepburn 2003). In Foucault’s work, the term ‘discourse’ refers to wider systems of knowledge, language and practices in social systems through which understandings of the world are constructed, influenced and sustained (Parker 1992). Discourses prescribe a set of values and viewpoints that are seen as superior and more appropriate compared to other sets of values and ways of understanding, speaking and behaving (Gee 2005 p.4). Particular ‘discourses’ come to dominate as accepted points of view in society and are seen as natural ways of understanding, behaving towards and talking about things in the world (Parker 1992). These dominant versions, or discourses, are argued to manifest themselves in social life through language and social interaction (Foucault 1980).

The link between language and power comes from the way that certain systems of knowledge, or discourses, become privileged over others to the advantage of the particular institutions which the discourses support and maintain (Parker 1992). Foucault (1973) argued that certain forms of knowledge become privileged through the power invested in institutions. These forms of knowledge are seen as the ‘truth’ about the ways things are or should be and become embedded as reality. Often taken as natural, taken-for-granted and therefore unquestioned and ‘true’, the privileging of certain discourses exerts social power. Aspects of talk are seen as ‘(re)producing dominant socio-cultural practices’ (Stubbe et al. 2003 p.376). Language is seen as a major agent in the manifestation of discourses, the power exerted and the meanings which discourses allow or constrain in the way things are understood, and therefore experienced or told (Parker 1992).

Much that is understood as socially appropriate ways of going about ‘normal’ everyday life is argued to be discourses that have become absorbed into daily social life and conduct (Willig 2008

p.113. For example, the institution of medicine, of which physiotherapy can be seen to be a part, exemplifies an embedded and powerful discourse. The taken-for-granted privileging and authority given to 'medical' knowledge and its practices are seen with the accepted gate-keeping role in sanctioning care, work absence and individuals' 'health' status in government, legal and insurance contexts (Radley and Billig 1996). In a study of clinical decision-making within physiotherapy, Trede and Higgs (2003) used a critical perspective to show the value of moving from the notion of 'expert' knowledge and privileging the values provided by 'scientific reasoning' to a collaborative approach that incorporated patient values and goals as equal knowledge in the clinical reasoning process.

Hepburn (2003 p.162) comments that what a critical perspective encourages is thinking through what functions are served by particular versions, or discourses, when manifesting in social interactions. This perspective links with an analysis of the constructive and action-orientation of language, but broadens the interpretive context. As argued by Wetherell (1998), a critical perspective adds an interest in the relationship between narrative accounts and the resources, influences and ramifications provided by a social context. The synthesised approach broadens the possible ideas about 'why this narrative account (or meaning), in that way, right now?'

### **3.3.7 Language as 'positioning'**

Finally, leading on from post-structural and socio-linguistic theory, the 'positioning' effect of language offers insightful ideas on the construction, actions and implications of talk within interactions (Hollway 1984; Davies and Harré 1990; Harré et al. 2009). A critical feature of language is that the wording and delivery of what is said conveys an ideological stance which 'positions' what is described, the speaker in relation to the topic, and the speaker in relation to the listener (Lemke 1998). Language allows different ways of saying and representing something that also have value-related connotations, such as choosing to say 'plants' or 'weeds' (Fowler 1991 p.3), or 'scientific' or 'alternative' in relation to treatment. One aspect of the connotations arising from what is said by or to a person relates to what it means for the rights, duties and socially appropriate ways of thinking, speaking and acting (Davies and Harré 1990).

Positioning theory introduces attention to the moral dimension of language use as a social act. A person can be judged and accountable against the positions created through their own or others' talk (Davies and Harré 1990). Harré and Langenhove (1999) argue that an analysis of meaning

and the actions of talk needs to take account of participants' orientation to this local moral context and the consequences for what becomes said and done within an interaction. Importantly, this analytic lens helps consider the effects and implications of the 'co-constructed' nature of narrative data.

### **3.3.8 Summary**

This section has described the narrative-discursive approach taken in this study. This synthesis of perspectives has provided an encompassing and theoretically informed framework to study personal accounts of acute low back pain experiences with the aim to extend knowledge for physiotherapy. Since the interpretation of personal accounts is integral to the practice of physiotherapy, especially in the management of acute low back pain, the application of the perspectives adopted was seen as an opportunity to achieve this aim.

### **3.4 A theoretically refined research question**

A consequence of a more nuanced and informed analytic perspective was a refinement of the research question in what was of interest and possible to explore. Some literature suggests that the research question provides one of the 'anchors' from which a research study is undertaken (Denzin and Lincoln 2000 p.22). In this study, there was an iterative relationship between the research question and the research process. Described as a feature of qualitative research, the data analysis and developing the findings produced a more informed understanding of the kind of research question which the theoretical framework enables the study to answer (Wolcott 1990). As such, with a narrative discursive approach as a lens, the research question formed into:

*What features characterise the nature of personal accounts provided across an experience of an acute low back pain problem?*

### **3.5 Choice and rationales of methods for generating narrative data**

A combination of methods was chosen to generate the narrative data, which involved repeated in-depth interviews and two written strategies of a retrospective 'contextual' timeline and a 7 day narrative diary. Although interview and diary methods are common strategies, variations in implementation can be considerable. The perspective taken on a method has significant implications for a study, the nature of the data and the knowledge claims possible (Holstein and Gubrium 1995). The rationales for the choice of methods and the perspective taken on the

methods are now discussed. The practical implementation of the methods is described in the next chapter.

### **3.5.1 Minimally structured in-depth interviews as a source of data**

The design of the study drew on narrative theory and ‘experience-centred’ narrative research supporting the use of in-depth interviews as an appropriate means to generate data on personal experiences (Mishler 1999; Walker et al. 1999; Crossley 2000; Riessman 2002; Freeman 2006). The nature of the interview data came to be appreciated as a co-constructed, action-orientated and researcher influenced product of social interaction. In relation to these qualities, the use and value of interview data as a source of knowledge has been the focus of continued debate (Atkinson and Silverman 1997; Roulston 2001; Lynch 2002; Potter 2002; Speer 2002; Hammersley 2003; Hollway 2005; Mishler 2005a; Potter and Hepburn 2005; Smith 2005a; Atkinson 2009; Frank 2010; Bochner 2010). Arguments suggest that interview data is contrived, ‘unnatural’ and often under-analysed in terms of the situated influences (Antaki et al. 2003; Potter and Hepburn 2005). ‘Naturally occurring’ or ‘naturalistic’ data is argued to be a better source of data, unencumbered by the influences and contamination of an interview situation and the complexities for analysis (Wiggins and Potter 2008 p.78). Methodological ‘contamination’ is seen to relate to participant reactivity to being recorded, researcher imposed interests and assumptions, interviewer/ interviewee relationships, disclosure issues and power imbalances (Hammersley 2003; Potter and Hepburn 2005; Abell et al. 2006). Contrary to the assumption that interview contexts and recording processes are problematic, Speer and Hutchby (2003) have shown how the interview process and the recording device became interactional resources for participants in interviews. Recording devices were addressed directly for emphasis, were a topic for building rapport, and stopping devices acted as a display of respect and trustworthiness.

Furthermore, notions of ‘natural’ versus ‘unnatural’ data have been criticised and Silverman (1997 p.287) argues that no data is pure or unmediated. Data is always an artefact of the research process and ends up as a ‘representation’ in some form. In defending their own interview research, Wilson and Stapleton (2010 p.294) argue that the notion of ‘naturalistic’ settings and data is a construction that depends on the research position taken. Interviews are argued to be ‘naturally occurring’ ordinary activities; a culturally recognised way to elicit information and as ‘natural’ in social life as any other interactionally generated data (Atkinson and Silverman 1997). Interviews are ‘definitely not “time out” from the social worlds that they are talking about’ (Baker

2002 p.783). Even a 'structured' survey interview is argued to be a 'naturally' occurring instance of social interaction where the 'interactional ingredients' are key to the resulting knowledge production (Suchman and Jordan 1990; Maynard and Schaeffer 2002). Briggs (1986) has argued that 'the single most serious shortcoming related to the use of interviews... [is] the commonsensical, unreflexive manner in which most analyses of interview data are conducted.' (p.102). Similarly, Holstein and Gubrium (1995) argue for an 'active interview' approach to interview method, not as a technique but a theoretical perspective. Miller et al. (1995 p.vii) highlight that much more is asked of the researcher who undertakes an 'active interview' approach than 'the ability to skilfully pose questions, empathize, and listen'. An 'active interview' approach is:

'built on the appreciation that any attempt to strip interviews of their interactional ingredients will be futile' (Holstein and Gubrium 1995 p.4).

Although not anticipated in the design of the study, an attention to the 'interactional ingredients' within the narrative accounts of acute low back pain experiences came to be an important part of the analytic endeavour.

For this study, the issue of 'naturalness' of the narrative data generated is one concerning the kind of knowledge possible from the nature of the data and ensuring a reflexive approach to the context of generation. The interest from this perspective changes from what is being 'revealed' about reality by the analysis to what kind of account has been constructed, what is shown about the context and resources drawn on in its construction, and what are the consequences of being constructed this way in relation to the context (Wetherell 1998).

Drawing from Gubrium and Holstein (2008 p.252), this study has adopted the theoretical view that narratives accounts are inevitably linked to 'narrative environments'. Studying these links is seen as a way to learn what, how and why personal experiences come to be given a particular life in a narrative account within whatever interactions they are offered, whether from interviews or other contexts, such as through the written methods now discussed.

### **3.5.2 Written accounts as a source of data: 'My Back Pain Experience'**

The two methods chosen to generate written data involved a retrospective 'contextual timeline' of significant events prior to and surrounding the problem and a seven-day narrative diary during the

experience. The rationale for these written strategies sought to add depth to the corpus of data by using a different medium and context for expression compared to interview method, and allowed participants greater opportunity for reflection. Although written methods are not free of interactional influences, the strategies aimed to allow the provision of personal accounts in more self-determined and flexible ways. The written strategies chosen were combined into a two-part A4 booklet shown in Appendix 1. The rationales for inclusion of these written methods are now discussed and their practical implementation during the study is described later in section 4.3.8.

### **3.5.3 Part 1: A contextual timeline of personal circumstances**

A ‘contextual timeline’ was devised to elicit participants’ reflections on their circumstances in the twelve months preceding or surrounding the onset of their acute low back pain. As outlined in chapter one, the interest in practice prompting this study involved an unexpected discrepancy in ‘psycho-social’ risk factor scores with other scores that indicated recovery. As highlighted in chapter two, ‘psycho-social’ risk factors in a person’s circumstances are considered to interfere with recovery and screening for these risk factors is a part of the approach expected in the assessment of acute low back pain (Kendall et al. 1997; Bekkering et al. 2003).

The ‘contextual timeline’ strategy drew on literature indicating that prior or surrounding life events, social situations and quality of life may have a role in the onset and persistence of back problems (Feuerstein et al. 1989; Craufurd et al. 1990; Carragee et al. 2005; Truchon et al. 2008). Of interest, some ‘stressors’ described were seen as positive and desirable rather than negative, such as weddings, work promotions or having a child. The number of major life events experienced in a year has also been associated with increased illness (Brugha et al. 1985; Creed 1985). Other studies have found no association between personal contexts, stressful life events and low back pain (Leavitt et al. 1979; Skillgate et al. 2007). It seemed valuable to include an exploration of the participants’ perspectives on the relationship between preceding personal circumstances and their back pain experience.

At the time this study was designed, self-report checklists dominated approaches to exploring relationships between stressful life events, quality of life and low back pain problems (Carragee et al. 2005). The open format timeline was designed to generate data on what the participants offered as relevant in their personal contexts, with further discussion in follow-up interviews. In

contrast to a tick box scale or an interview context, the written medium aimed to allow time for reflection and disclosure of personal contexts as felt comfortable.

Since undertaking this study, Skillgate et al. (2007 p.356) used retrospective interviews to 'quantify critical life changes' within a preceding five years. There was no association found with new episodes of low back pain. In a theoretical modelling of factors involved in transitions to low back pain disability using a combination of self-report measures, Truchon et al. (2008) suggested that experiences of 'general emotional distress' added to 'injury-specific distress' and functional disability. These studies concluded that there was a need for further research into contextual factors, such as pre-existing life stressors, emotional difficulties and life events, to gain a better understanding of persistent functional and emotional problems in low back pain. This literature reinforced the value of including the contextual time line strategy.

### **3.5.4 Part 2: Seven-day narrative diary strategy**

The second written strategy involved a seven-day narrative diary with the rationale of generating accounts expressed through a different medium and of a more contemporaneous and participant-determined nature. Diary methods have been used extensively across quantitative and qualitative health research (Plummer 2001; Elliot 2005). Structured diaries have been a common method in low back pain research to generate data on pain symptoms, daily activity, health care seeking, medication and occasions of illness (Turner and Clancy 1986; Deyo et al. 1990; Coste et al. 1994; Hides et al. 1996; Keefe et al. 1997; Rogers and Nicholaas 1998; Klaber Moffet et al. 1999).

Semi-structured written diary formats over various timeframes have also been used to generate data on personal experiences in various contexts (Burman 1995; Stensland and Malterud 1999;. Bolger et al. 2003; Elliot 1997; Siebold 2000; Milligan et al. 2005; Riley & Hawe 2005). In physiotherapy research on low back pain, Miller et al. (1999 p.396) used a two question seven-day diary asking for morning entries on activities that wouldn't be possible because of back pain, and evening reflections on feelings and coping with the back ache during the day. Several methodological considerations were highlighted. This included the importance of language since the experiences reported were strongly cued by question wording and a lack of completion of the morning question. From a 'free text' component in a low back pain questionnaire, Ong et al. (2006a p.651) concluded that this material had offered important insights that strengthened the findings of the survey and interviews, and the study as a whole. These studies suggested the

value of a diary strategy to add richness and a different nature of data for studying narrative accounts of personal acute low back pain experiences.

Drawing on these insights, an ‘open format’ diary was chosen to increase the opportunity for different insights on acute low back pain problems as they were experienced day to day. A seven day duration sought to encourage completion and also limit the imposition required. The choice to use the diary method was not to triangulate data for ‘reliability’, or increase accuracy by countering ‘recall bias’ as suggested by some literature (Zimmerman and Wieder 1977; Clayton and Thorn 2000; Stake 2003). From a constructionist perspective, a comparison for truthfulness, validity or factuality fails to appreciate the constructed nature of narratives (Blaikie 1991; De Fina 2003). An exploration of similarity or difference between accounting mediums was seen as an opportunity for extending previous insights developed through more traditional research perspectives (Borkan et al. 1995; Miller et al. 1999; Miller and Lewis 2001; May 2007).

As discussed previously, the perspective on what could be considered ‘known’ from the written accounts altered as the study progressed and a different understanding of the nature of the data developed. Rather than seeing the timelines and diaries as a straightforward window into preceding circumstances or participants’ mental and social states, the written data formed part of the corpus of data although appreciated and analysed as a form of discourse.

### **3.5.5 Summary**

This section has discussed the methods chosen for data generation and the rationales underpinning their use from the understanding that the data would support an exploration of the ‘perspectives’ and ‘experiences’ of the participants. There was also discussion of the methods in relation to wider debates on the nature of data produced through interview and invited written accounts, and the implications for analysis and the kind of knowledge considered possible.

A reflexive approach was an important endeavour at the outset of this study and integral to the discursive and critical approach described in the previous sections. The next section discusses other aspects of my researcher positioning and context to provide an understanding of the implications for the study, the knowledge developed and the research account provided.

### **3.6 Researcher positioning**

The perspective taken on the role of the researcher within a study and contextual influences involved have important implications for all aspects of a research project. Clarifying my position on aspects of the study supports a more transparent and considered approach to undertaking the study. It also allows a more informed understanding and evaluation of my research by others. The background context and the theoretical framework outlined in previous sections contribute to the understanding of my researcher positioning. Ellis and Bochner (2000) argue that a researcher's positioning is not just a theoretical stance but also derives from personal biography, nationality, language, personal and professional experiences, family background, education and moral commitments. This context includes a researcher's 'frame of reference' and the knowledge, value systems and identity constructions through which a study is undertaken (Higgs and Titchen 1995 p.528). Although appreciated as potential influences, Ellis and Bochner (2000) also suggest these factors may never be experienced consciously as context projecting into a researcher's position.

Research is also entwined with wider contextual factors. A researcher is encouraged to develop an understanding of the context in which they find themselves and the influences provided for their research (Denzin and Lincoln 2000). The perspectives adopted in a study introduce a connection to a particular intellectual community and the academic practices to be followed (Prichard et al. 2004). The influences of the social, historical and personal context of a researcher is seen to extend beyond the research process to available and constraining positions for research dissemination. As highlighted by Harper (2003), a researcher is not outside the arena and influences of discourses. It is suggested that a reflexive understanding of how historical, social, political and disciplinary contexts already shape research practices can enrich an individual's approach to their own research (Prichard et al. 2004 p.231). An understanding of contextual factors allows choices which conform to or resist the positioning effects and the prospects for risk and innovation within a research project, the research account and dissemination (Richardson 2003; Jones 2006; Diversi 2008).

Importantly, it is argued that an attention to a researcher's context and positioning should be more than just recounting personal and social locations to make them unproblematic (Bola et al. 1998). A reflexive approach critically considers the contribution of guiding principles, commitments, motivations, values and ethical practices provided by personal and contextual factors. Such an

understanding also provides a basis for interrogating the limitations, assumptions and findings of research by others as well as one's own research (Prichard et al. 2004). The following discussion considers my researcher positioning and contextual factors in relation to implications for the study and issues of quality and evaluation.

### **3.6.1 Researcher context**

A concern within phenomenological philosophy that has relevance for this study involves the place of the researcher in the interpretation and understanding of others' personal experiences and accounts. Attributed to Heidegger (1889-1976), emphasis is placed on the need to be critically reflexive regarding the assumptions, influences and ways of knowing that are brought to the research process, analysis and interpretations (Bergum 1994). As suggested by Willig (2008), the knowledge developed is dependent on a researcher's positioning and theoretical perspective taken. The exercise of a reflexive approach within interpretation and across every aspect of the research project is an important tenet in this study. Drawing on advice by Maxwell (2005) at the outset of the study for accomplishing more insightful and reflexive research, an identification of contextual factors understood to contribute to my positioning is illustrated in Appendix 2, along with developments as the study progressed. This research project is appreciated as a negotiation between complementary and competing factors explicitly and implicitly imposing on the research.

A constructionist view does not see a researcher's context and positioning as a static 'container' but reflected in and constituted in the practice of research (Parker 1999). My initial 'researcher context' was entwined with a professional and researcher socialisation as a 'movement scientist' informed by the philosophy of science (Carr and Shepherd 1987). Holdaway (1997) remarks on the importance of learning to question what a professional discipline has taken for granted in methods of research and the assumptions underpinning research positions. Physiotherapy has developed from social origins to 'scientific' foundations influenced by positivism (Ecksteen 2004). This professional culture informed my initial research position and the framing of the initial research interest and design of the study. The theoretical and practical shift from a positivist position to an unfamiliar social constructionist position was not straightforward or immediate. A constructionist position required a counter-intuitive epistemological practice to embedded realist understandings. Although offered in relation to the possibilities opened up as a perspective, a comment by Jones (2006 p.65) also highlights a practical challenge: 'social

constructionism asks us to participate in alterior systems of belief and value.’ Although adopted as a ‘theoretical’ position, a constructionist perspective was only embedded as a practical position through undertaking the data analysis.

### **3.6.2 Ethical positioning**

My research position does not see research as a neutral, detached endeavour. Research, like any social action, is considered to be ideological and interested (Smith 1998). There are a number of factors that make my research ‘interested’ and influenced by the values I have taken to the research, Undertaking the study in the context of a professional doctorate introduces interests concerning personal and professional investments in the endeavour. The aim to develop knowledge to enhance physiotherapy practice also situates my positioning within this interest. As discussed, my theoretical position includes a critical perspective although is not as an ‘emancipatory/ oppression’ stance (Hollway 1984; Harding 1991). However, there is an interest in producing ‘social change’ (Fairclough 2003 p.17), since professional practice is a social practice and part of social life.

The research position taken has also considered Mishler’s (2005b) call for an ‘ethic of humane care’. This is not always seen as forefront in ‘*methodology first*’ discourse analytic approaches to narrative data (Thomas 2010 p.652, original emphasis). As Thomas (2010) suggests, such an ethic is mindful that narratives often portray suffering as well as the effects of social systems and professional practices not prioritising the values and needs of patients (Mishler 1984; Borkan et al. 2004). Although the humane ethic adopted in this study has not automatically given participants’ voice an exceptional status above other texts and accounts (Atkinson 2009), patient benefit is central to the research endeavour. Discourse analysis may be seen to ‘deconstruct’ rather than promote the participants’ “voice”. However, the deconstruction aims to benefit those experiencing acute low back pain by applying different understandings to analysing the “voice” within the accounts that the participants have made efforts to provide. As encouraged by Abell and Myers. (2008), issues such as how an interview becomes possible, how interviews and the data produced are used to form academic knowledge and how that knowledge is used for social change also need consideration. Moving beyond a participant’s “voice” to include attention to its relations with situated and wider contextual factors is seen as an important strategy to find ways to improve the humane care of the person with acute low back pain problems.

### 3.6.3 Epistemological positioning

My position on the knowledge generated through my research draws the idea that it is not possible in the social world to have ‘a view from nowhere’ (Nagel 1986). All knowledge is an interpretation and new interpretations need to demonstrate their quality and value as a way of understanding. There is an appreciation of my role in the construction of the data and in the development of the research findings. As Bochner (2001) has highlighted:

‘the process of theorizing, analysing and categorizing personal narratives is shot through and through with the imagination and ways of seeing of the interpreter.’ (p.135-136)

The findings presented in this thesis are not offered as the only interpretations possible. Different interpretations are likely from a re-analysis, applying other theoretical perspectives, or if read from an audience’s own frames of reference (Wolf 1992; Riessman 2003; Roulston 2010). Although alternative interpretations are inevitable, the thesis aims to evidence the relevance, importance and value of the understandings developed for physiotherapy practice. A transparent description of the research position taken, the processes of implementation and analysis, and the engagement with wider theory and research aims to support the value not the truth of the knowledge this study offers.

There are tensions in making knowledge claims from an interpretivist position against the notion of ‘equivalence’ of interpretations associated with a relativist stance (Edwards et al. 2005). The question arises as to how to manage the issue of ‘anything goes’ with knowledge reached from an interpretivist stance and offered as an improved way to understand a phenomenon (Smith and Deemer 2003). Tracy and Craig (1995 p.251) suggest that the value of a piece of knowledge lies in how it functions as a ‘practical truth’ and its ability to guide human action in a way that is useful and beneficial in situated practice. Another resolution to the relativist dilemma comes from using the new knowledge to show ‘that things could be different’ (Willig 1998 p.94). Collier (1998) argues that actions are guided by an understanding of how the world works, and developing different understandings provides more options and possibilities for change. Stainton-Rogers (1991 p.10) also provides a view that has resonance, where the research is not claiming to be ‘telling it like it is’ but rather to ‘look at it this way’. My aim for the knowledge developed from the study also draws from Phillips and Jørgenson (2002) where the value of findings comes

from showing how taken-for-granted 'truths' can be seen as otherwise and challenged as established knowledge, and also in the opportunities that are opened up as a consequence.

### **3.6.4 Demonstrating rigour and quality**

One of the challenges of a study is to demonstrate and convey quality and trustworthiness to support claims of the value of the knowledge developed. Denzin and Lincoln (2000) have suggested that the nature of the research influences the evaluation criteria considered compatible for judging the rigour, ethical integrity and value of a study. For narrative research, Polkinghorne (2007) proposed:

'Readers are asked to make judgments on whether or not the evidence and argument convinces them at the level of plausibility, credibleness, or trustworthiness of the claim. Researchers, thus, should not argue for a level of certainty for their claims beyond that which is possible to conclude from the type of evidence they gather and from the attributes of the realm about which they are inquiring.' (p.477)

The thesis is a form of discourse constructing and characterising its object through language. As such, making the quality visible and the knowledge claims compelling is a mix of the demonstration of 'rigour, ethical integrity and artistry' (Finlay 2006 p.319). Ballinger (2006) suggests four considerations which support quality in research regardless of the researcher's position: coherence, evidencing systematic and careful research conduct, convincing and relevant interpretation, and a sensitivity to the researcher's role. The nature of the audience is also a consideration for the criteria applied for judging the quality of a study as it is represented through the research account. In offering my research for others to appreciate its professional relevance and value, consideration has been given to the approach taken in presenting the research account.

From an interpretivist position, research accounts are not expected to make claims of accurate, reliable knowledge that is a step closer to a single, enduring truth. Instead, the qualities of authenticity, credibility and transparency become important (Schwandt et al. 2007). The use of the first person is one strategy that functions to foreground my role in the research and provides a way to acknowledge responsibility for the findings. The representation of authorship varies across academic writing and between disciplines. In addition, the use of the first person as a credibility mechanism holds different levels of persuasion across different academic and disciplinary contexts (Gilbert and Mulkay 1984; Golden-Biddle and Locke 1993). Managing

evaluative criteria in qualitative research is entwined with issues of ‘politics and public relations’ (Finlay 2006p.320). Reflecting on her own research accounts, Finlay (2006) remarks on being strategic in constructing representations:

‘I value the poetry and communicative resonance of research findings more than seeking to use criteria to justify or prove my scientific credentials. I also value the communicative power of research that challenges and unsettles. However, if I am writing for a scientifically orientated journal, I understand that it is necessary for me to specify criteria that emphasise the systematic and scholarly nature of my qualitative research.’ (p.323)

Less author visibility is a feature within the presentation of research within musculoskeletal physiotherapy practice, and limited in much of the low back pain literature (Newton et al. 2010). The moderate use of the first person is not intended to make myself the focus of the research or tempered to convey objectivity or distance from the findings to create factuality. Rather, the approach seeks a transparent representation of my role in the research while respecting varying receptions to employing the first person in research accounts across disciplinary contexts.

### **3.7 Summary**

This chapter has described the theoretical framework adopted in the study and the perspectives provided for the analysis of narrative data. The chapter has also discussed the data generation methods and the rationales for the choice to use the particular interview and written strategies outlined. Issues surrounding the nature of the narrative data as a means to develop knowledge and considerations introduced by the developments in the theoretical perspective were also discussed. The chapter concluded with a discussion of my researcher positioning and contextual factors in relation to the implications for the study, the knowledge developed and the research account provided. The next chapter outlines the practical implementation of the study and describes the processes involved in generating, managing and analysing the data.

## **4 Chapter Four: Procedures and implementation of the study**

### **4.1 Introduction**

This chapter describes the procedures involved in the implementation of the study. A description is provided of the processes of ethical approval, participant recruitment and the purposive selection of participants. The practical implementation of the methods of data generation is outlined and the ethical considerations addressed within the study are discussed. The chapter moves on to provide context relating to the characteristics of the participants recruited and the nature of the resulting corpus of data. The chapter concludes with a description of the processes involved in the management and analysis of the data leading to the development of the findings.

### **4.2 Research design**

The study used an ‘interview/written account/interview’ design to generate data undertaken from as close to onset and following through acute low back pain problems, up to recovery or as problems persisted. An outline detailing the procedural structure and processes involved in implementation of the study is provided in Figure 3.

### **4.3 Data generation process**

#### **4.3.1 Ethics approval**

Ethics approval for the study was granted from East Sussex Local Research Ethics Committee and East Sussex Hospitals NHS Trust Research and Development Department. The correspondence confirming ethics approval is provided in Appendix 3.

The following discussion outlines the purposive selection criteria applied in this study and then moves on to describe the processes involved in the recruitment of the nineteen participants with which the data was generated. Details of the implementation of the data generation methods undertaken with these participants are then provided.

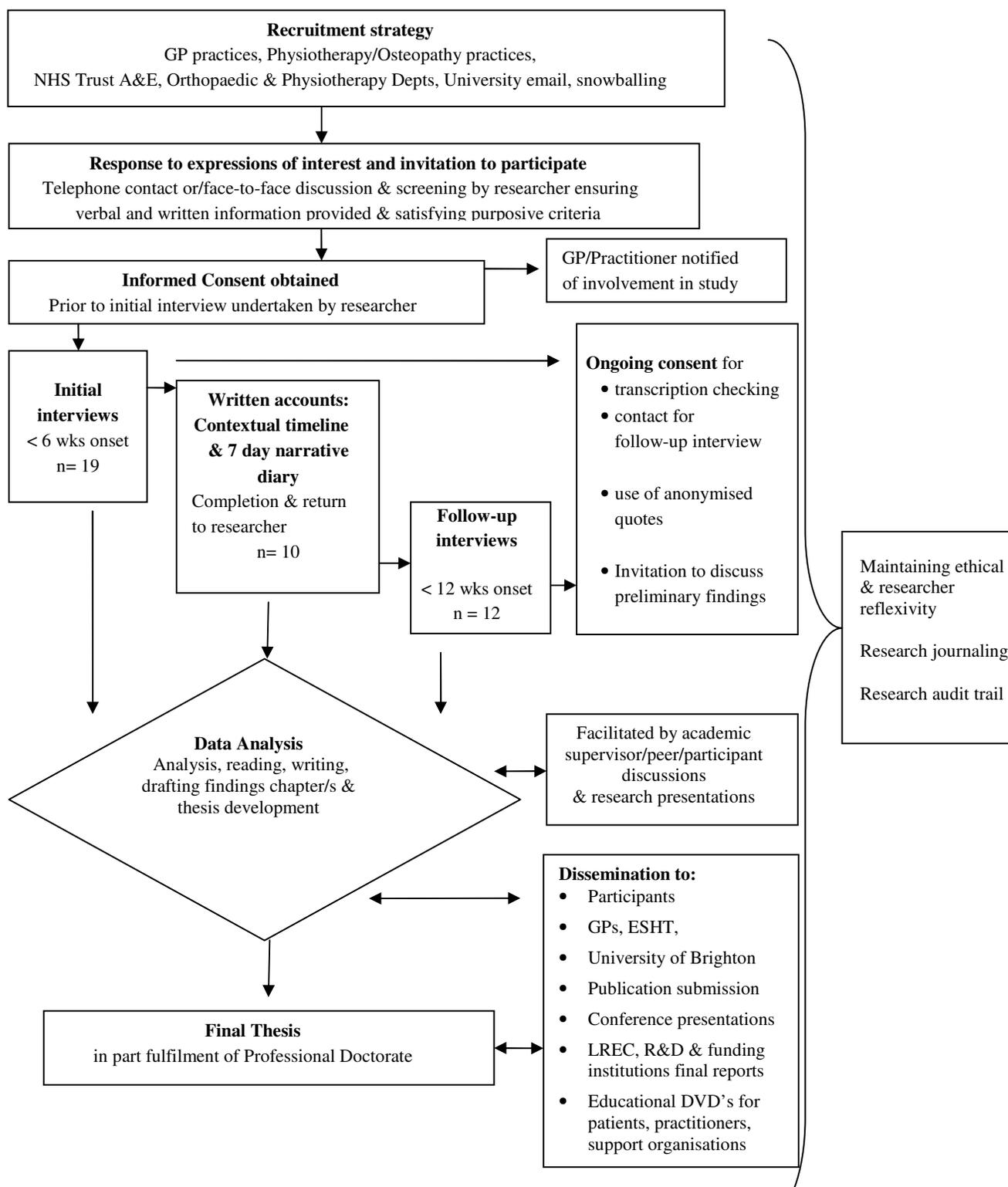


Figure 3: An illustration of the structure and processes within the research study

### **4.3.2 Purposeful selection criteria for participation**

The selection criteria for recruiting participants were applied to ensure both the safety of participants and support the aims of the research. These are seen as ‘inclusion/exclusion’ criteria provided to recruiting practitioners in Appendix 4. Participants were sought who were within the ‘acute’ phase (< 6 weeks) of a ‘non-specific low back pain experience’ and symptomatic at the time of initial interview. As outlined in chapter two, ‘non-specific low back pain’ is a defined diagnostic category for low back pain and the term ‘acute’ relates to a duration of less than six weeks (< 6 wks) (CSAG 1994; Waddell 2004). The term ‘non-specific’ low back pain refers to symptoms in the lower back region, not extending past the thigh and without evidence of serious pathology, nerve involvement or non-musculoskeletal causes (Waddell 1996). In the discussions to follow, ‘acute non-specific low back pain’ is used synonymously with ‘low back pain’ or ‘back pain’ and ‘acute’ and ‘chronic’ distinctions are made when relevant.

The natural history of acute non-specific low back pain typically involves significant recovery by one month or substantially improved by three months, and symptoms past this time often develop into chronic pain and disability (Abbott & Mercer 2002; Pengel et al. 2003). Consistent with this research, several individuals expressing interest reported their symptoms had resolved by the time of making contact. Non-specific low back pain is also recognised to be episodic and recurrent (Pengal et al. 2003; Von Korff 2004). As such, participants with first time and recurrent back pain experiences were sought to explore a spectrum of presentations. For recurrent experiences, a preceding pain-free period of three months was chosen as consistent with previous research (Wand et al. 2004; Boersma and Linton 2005).

National guidelines specify that back problems must be screened for ‘Red Flags’ which are risk factors for serious or sinister pathology (CSAG 2004; Waddell et al. 1996). Positive screening indicates pathways for management that differ to ‘non-specific’ low back pain problems.

Participants were screened and monitored for these risk factors. There was no occasion where any concerns arose during the study. A current history of good general health was also ascertained so the participants’ experiences related back pain experiences rather than other health problems.

Individuals receiving treatment for mental health problems were not recruited through concerns that participation may cause increased psychological distress. Concurrent clinical depression or anxiety disorders may have produced circumstances that are more complex and of a different

nature than sought for this study. Co-existing psychiatric disorders are also suggested to have a strong association with chronic pain and disability (Gatchel and Dersh 2002; Garcia-Cebrian et al. 2006). My selection process could be viewed as having marginalized certain individuals, although the decision had been made in the interests of avoiding participant harm.

For this narrative orientated study, a decision was also made to select participants fluent in spoken and written English. The complexity of 'ways of telling' and interpretation of narratives offered in different languages and cultures has been shown (Maryns and Blommaert 2001; Riessman 2001, 2005; Ramírez-Esparza and Pennebaker 2006; Savy and Sawyer 2008). For this study the aim of an analysis of in-depth and descriptive narrative accounts and diary data was felt to be facilitated by fluency in a shared language. It is appreciated this criterion is marginalizing and the issue is discussed in section 6.5 in relation to further research.

A sample of participants who were both seeking and not seeking formal health care were of interests, and of both genders, although the experiences conveyed or the nature of the data were not assumed to necessarily be gender-influenced (Stokoe and Smithson 2001). The study initially aimed for the involvement of 15 to 20 participants as a starting point drawn from 'sampling logics' discussed within qualitative literature (Potter and Wetherell 1987 p.161; Ryan 2006 p.85). Variation in ages, occupation or lifestyle, and family situation was also sought.

The purposive sampling aimed to increase the opportunity for diverse, detailed and in-depth data, varying personal contexts and a spectrum of individual experiences. Obtaining a representative sample for knowledge generation was not a goal of this study (Silverman 2001). From the discourse analytic perspective taken in this study, wider 'demographic' labels such as 'ethnicity', 'socio-economic status' or 'education level' are not assumed relevant or applicable prior to analysis but of interest as to whether such categories are made relevant or displayed in the data (Potter and Wetherell 1987; Schegloff 1997; Wooffitt 2005).

### **4.3.3 Participant recruitment**

Several strategies were used to support the recruitment of the nineteen participants onto the study who were experiencing an episode of acute low back pain, as well as both seeking and not seeking formal health care.

Thirteen participants seeking care were recruited through an arrangement made with practitioners within local medical, physiotherapy and osteopathy practices, and the Accident and Emergency, Orthopaedic, and Physiotherapy departments of a south eastern UK NHS Trust. The practitioners had been provided with participant recruitment packs. These contained study information outlining the selection criteria as well as participant information leaflets, letters of invitation with response slips, reply-paid envelopes and my telephone contact details to provide to suitable individuals identified (see Appendices 4-8).

The recruitment of participants with acute low back pain but not seeking care was supported by an invitation placed on a university email network of health and non-health faculties, which included non-academic staff. The email invitation is shown in Appendix 9 and interested individuals made direct contact by either telephone or email. Four participants were recruited through this strategy and two participants introduced by existing participants through a snowballing effect (Seale 2004).

Expressions of interest were made by individuals by contacting me directly by telephone, the reply slip or via email. I responded to their contact by telephone if indicated on the reply slips, email, or face to face on occasions when recruited within my own work place. On contacting these individuals, I provided verbal information to support the written information and held a discussion to screen for the criteria discussed above. An invitation to participate was influenced by the purposive criteria to be within the acute phase of a low back pain problem (< 6 weeks) at the time an initial interview could be undertaken, pain-free in the preceding three months and available for a follow-up interview within 12 weeks from onset.

Recruitment was stopped when the sample reached nineteen participants. It is recognised there is no correct or natural limit to the size of the sample (Phillips and Jorgenson 2002). Both single and extensive numbers of interviews and texts have proved valuable sources of data depending on research interests and the analytic method, including one (Woolgar 1980), thirty-seven (Potter and Wetherell 1987) and ninety-six participants (Yardley 1997). The aim of sampling was not to achieve the constructs of saturation, representation or generalisability as with other theoretical perspectives (Riessman 1993; Charmaz 2006a). Rather, a sample was sought which involved a diverse range of participant contexts, problem severity, impacts, responses and recovery or problem persistence described. Recruitment was concluded when an extensive and varied amount of in-depth, richly contextual experiential data had been generated. The sample of nineteen

participants and the accounts being generated were felt to have resonance with the variation encountered in clinical practice.

#### **4.3.4 Consenting process and interview settings**

Individuals satisfying the study criteria were invited to participate and where verbal agreement was expressed then an initial interview was arranged. It was considered important that interested individuals had a good understanding of the design of the study and were able to consider what involvement would entail. Written informed consent was obtained allowing at least 24 hours after information provision and undertaken personally with participants prior to starting the initial interview to ensure their understanding. The consent form is shown in Appendix 7. My role as a 'researcher' was also re-emphasised and that there would be no involvement in their care unless a concern arose regarding participant safety.

Following the consent process, initial interviews were arranged as soon as possible at a time and location suitable for participants. The venues for the interviews included participants' homes, comfortable non-clinical rooms within hospital or university facilities and were dependent on participant preference. Interviews were digitally recorded on a small unobtrusive device. A professional lone worker policy was followed for interviews undertaken in a participant's home. One participant was interviewed by telephone using recording facilities due to a change in work location. Reimbursement for participant travel and parking expenses were provided and reply-paid envelopes supplied for returning documents.

In addition to the initial written consent, an ongoing verbal consent process was repeated throughout the interactions for audio-recording, checking of transcripts and for my contact to arrange follow-up interviews. Hollway and Jefferson (2000 p.88) suggest the decision to consent 'cannot be reduced to a conscious, cognitive process but is a continuing emotional awareness that characterises every interaction.' Adopting this perspective, an ongoing consent process was considered ethical and allowed the participants' decisions to be more informed through their experiences of participation. There were no occasions where participants withdrew use of their data. The letter accompanying the transcripts for participant checking is provided in Appendix 10. After the final interview, verbal consent was re-confirmed for my use of the approved anonymised data as quotes in reporting the research findings.

### 4.3.5 Characteristics of the participants

As discussed, nineteen participants were recruited for the data generation process, including twelve women and seven men with ages ranging from 21 to 60 years. Thirteen participants were experiencing a first episode of back pain. Six participants were experiencing a recurrent episode and had been pain-free from 6 months to 20 years. Four participants had not sought health care while involved in the study. The participants described a variety of full and part time employments including manual, administrative, health care, teaching and professional occupations. One participant was retired and one participant was a full-time university student undertaking a non-health degree. A range of personal and social contexts were described by participants involving single, partnered and married circumstances, with eight participants with family at home. Further contextual information on the participants prefaces the findings in section 5.1.1.

### 4.3.6 Implementation of methods of data generation

Data generation involved three phases across the acute low back pain experiences (see Figure 4).

- Initial interview (within 6 weeks from onset)
- Written accounts: contextual timeline and 7 day narrative diary
- Follow-up interview (within 12 weeks from onset)

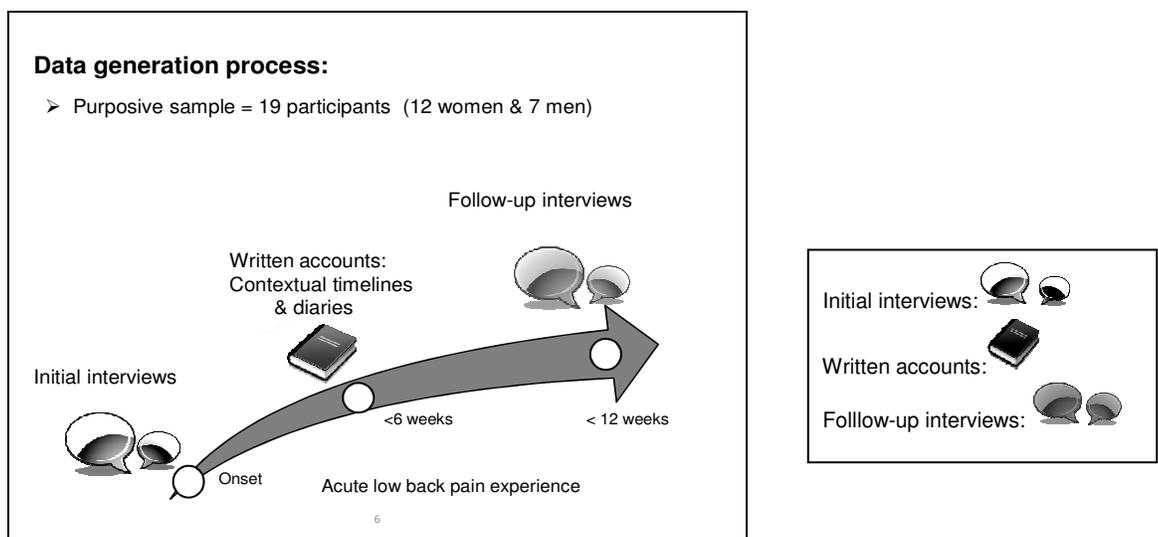


Figure 4: Implementation of the methods of data generation across the acute low back pain experiences

This data generation process involved undertaking an initial interview within six weeks and as close as possible to the onset of an acute low back pain experience. This was followed by an invitation to complete the two part written account involving the contextual timeline & seven day narrative diary. A second interview was undertaken within 12 weeks from onset of the problem to follow the experience and to discuss issues of interest arising from previous interviews, written accounts, and preliminary analysis. The participants' experiences were followed through to twelve weeks, seen as the 'transition' period where back pain problems then become professionally defined as 'chronic' (Waddell 2004).

#### **4.3.7 Generating interview accounts of personal acute low back pain experiences**

In part fulfilment of the professional doctoral programme, an informal practise and reflective assignment was undertaken prior to undertaking the study to pilot the choice of methods of data generation. This requirement provided practical experience of undertaking and managing the data from three 'research-orientated' interviewing experiences. As a physiotherapist, there was awareness that a 'default' clinical interviewing practice could be challenging to alter. The practice interviews were undertaken with acquaintances with back problems and provided an opportunity to develop more 'narratively' sensitive approach, consider the topic guide and learn of the kind of data generated. The practical aspects of co-construction and interactional influences had only previously been a theoretical issue informed by engagement with interview literature (Kvale 1996; Mishler 1999; Rubin and Rubin 2005).

As Franklin (1997) has suggested, the optimal approach to interviewing style to generate 'valuable' data is dependent on the theoretical perspective adopted and the research interest under exploration. A relativist view to interviewing might argue that there are only 'differences' produced in the data from adopting various approaches to interviewing, not greater or lesser value or validity of the data (Burr 1998 p.14). A research agenda is always 'interested' and political, and the 'questioning and exploring' format is never fully conversational, nor power-free despite friendliness or personal disclosure (Oakley 1982). The specific discursive genre of interviews has recognised socio-cultural conventions which will always introduce differences from what is considered to be 'natural conversation' (Baker 2002). My approach aimed to find a suitable practical and ethical compromise within the theoretical debates. An interaction style was sought which provided space for participants to voice their perspectives and introduce, discuss or

discount issues as they felt comfortable. Furthermore, these influences on the data became an analytic interest and were of particular importance in the findings which developed.

My opening question drew on biographic interviewing which ‘invited’ a narrative by using ‘Tell me about your experience...’ with personal efforts to listen responsively and encourage elaboration (Wengraf 2001; Jones 2004). The interviews were supported by the interview guide displayed in Figure 5, which outlined potential areas of interest for exploration.

**Interview Guide- Areas of interest for exploration**

**Initial prompt:**

“Could you tell me about you back pain experience so far?”

Within experiences of back pain:

- Understanding of is/was happening in your back
- Impacts in day to day life / activities
- Reactions/ feelings/emotions experienced & reactions of others or to others
- Thoughts on contributing factors or influences :Work / family aspects/impacts
- Explore aspects that arise which are professionally considered to be ‘psycho-social’
- Relationship between pain and activity- decisions/reasoning
- Influences on life and home situation

**Management strategies /concerns:**

- Helpful and unhelpful strategies/ decisions/ thinking
- Influences on decisions regarding management
- Factors contributing to improvements/persistence of back problem
- Considerations relating to ‘advice’ ‘reassurance’, ‘coping’ and ‘control’
- Understanding of what ‘recovery’ means to you
- How recovery is or will be judged
- Advice for ‘someone else’ who experienced back pain

**Reflections/ Future**

- Factors felt which influenced recovery
- What has having back pain meant for you and thoughts about reoccurrence/future
- Is there something else not discussed which you would like tell me about?
- Thoughts on participating in the interview / study?

Figure 5: Interview guide and areas of interest identified at the outset of the data generation stage

There was an interest in what features participants made relevant and the kinds of issues voiced concerning causes, impacts, and responses to their back problem. There was also an interest in the understandings and reasoning participants offered, along with their perceptions of influences on the process of recovery or persisting problems. It was recognised that the interests in the guide were shaped by disciplinary understandings, engagement with the literature, and professional,

societal and personal pre-suppositions about back pain experiences. However, the topics acted as much as a point of departure for the discussions rather than strongly directing topics.

The interviews aimed to generate 'rich' and descriptively detailed data (Geertz 1973).

'Rich, detailed data give you explicit materials with which to work. ... Rich data afford views of human experience that etiquette, social conventions and inaccessibility hide or minimize in ordinary discourse. Hence, rich data reveal thoughts, feelings and actions as well as context and structure.' (Charmaz 1995 p.33)

As the study progressed, a minimally structured, 'guided conversation' approach developed whereby the unfolding participants' accounts provided the structure of the interviews (DiCicco-Bloom and Crabtree 2006 p.40). Issues in the interview guide were explored when considered valuable to pursue in particular participant's contexts. The flexibility sought to counter being too directive, allow the participants to shape the material and to facilitate a purposeful yet relaxed exchange. Interactions with participants prior to the interviews had developed some initial levels of rapport and shared background knowledge, which included shared understandings of the local region and familiar facilities. As such, generating data through a less informal but focused approach was felt most appropriate and respectful as participants offered their accounts of the experiences within this context. A less formal approach was seen to allow an ease with exploring and probing aspects of interest, especially within repeated interviews and diary discussions.

As encouraged by the literature, my interviewing practice aimed for a reflexive approach towards the influence I would have on the participants' accounts (Rubin and Rubin 2005). Within the immediate and spontaneous dynamics of the interactions, practicing reflexivity within the interviews was challenging. Consequently, the consideration of influences on the data generated such as topic control, situated relations and power asymmetries became important aspects to explore during analysis. This critical reflexivity taken to the data generation was pivotal in the analysis and in the development of the findings. As discussed in chapter three, interactional factors came to be an important area of analysis and took the research interest and the conceptual framework applied beyond the experiences portrayed to consider the nature of the accounts of the experiences.

Finally, informality in my interview approach was felt to support sensitivity and responsiveness to the participants who were often in physical discomfort and offering emotional disclosures and

concerns. Informality and flexibility aimed to support confidence within the participants to voice discomfort, change positions or take breaks if needed. Journal notes were made following the interviews which included reflections on the interactions, the interview environment, my experiences during the interviews and issues to consider within future interviews.

#### **4.3.8 Generating written personal accounts of “My Back Pain Experience”**

At the closure of the initial interview, participants were invited to complete the two-part written account notebook containing the contextual timeline and seven day open format diary shown in Appendix 1. Participants received a verbal explanation that the written account aimed to provide an alternative perspective to an interview. There was the potential of different insights from the more immediate, personally determined content of the day to day diary entries. The written accounts would inform discussions at their follow-up interview in six to eight weeks and undertaking and returning the written account was entirely voluntary.

Confidentiality and anonymity were assured and an opportunity was given to ask questions or express concerns. The participants were encouraged to write about anything considered of relevance or importance in their circumstances and concerning their day to day experiences of the acute low back pain problem, and only as they felt comfortable. It was explained that suggestions had been provided although these were not meant to restrict or dictate what could be written. A pre-paid envelope was provided and returning the written account was considered consent for its use within the study, however ongoing consent was sought at follow-up interview. The written accounts were used to inform discussions in the second interview and formed part of the anonymised corpus of data.

The notebook was titled “My Back Pain Experience” and opened to a written explanation of the structure and purpose of the two parts; the contextual timeline and the seven day narrative diary. The introduction to the timeline strategy invited participants to comment on ‘significant positive or negative events, big or small, occurring in the preceding year or on or around the onset of the acute low back pain experience’ (see Figure 6). Two further blank ‘timeline’ pages were provided. The data would be used to inform discussions in the follow-up interviews.

### **Part 1: Timeline**

This is a timeline for you to complete highlighting any particular significant events which have occurred during the previous year, or around the onset of your problem, both big and small, positive and negative.

Eg. Date/Month	Event
March:	Moved house- very busy trying to work and arrange estate agent, finance etc, very tired with packing, very stressful but excited about moving
November:	Started new job- much better, more time, has gym so have started using it, much better to be able to exercise again and also less travel to work. Can work from home some days

Figure 6: 'My Back Pain Experience' notebook- Part 1: Timeline. Introductory prompts for the contextual timeline

The prompts for Part 2, the diary, encouraged reflections on personal impacts, feelings, decision-making with activities and thoughts on influences and advice, as shown in Figure 7. A further 20 faintly lined pages were included with a date prompt and headed 'My Back Pain Experience'.

### **Part 2: 'My Back Pain Experience'**

Its purpose is for you to write about the experience of your day each day, and the impact of your back problem within it.

Some things to consider writing about might be:-

What you have done during the day

Why you decided to do or not do particular things during your day.

What were the influences on why or why not?

How did you feel?

How about the social side of things, and with the people around you?

What about the mental/psychological side of things?

Did you discuss this problem or any other problems/ concerns bothering you with anyone else today? Any advice received?

Please write down anything else you feel you would like to add

Figure 7: 'My Back Pain Experience' notebook - Part 2: Introductory prompts for the narrative diary

### **4.3.9 Follow-up interviews**

Participants were contacted again as had been consented and were invited for a follow-up interview undertaken within 12 weeks from onset. It was emphasised that continued participation remained completely voluntary. A follow-up interview was not arranged where some participants had reported being virtually ‘back to normal’ at initial interview with no further impacts when contacted again. The follow-up interview generated accounts of the progress of the acute low back pain experience as participants’ moved towards or had achieved recovery, or reported persistent problems. During the follow-up interviews, areas of interest from written accounts and from the preliminary analysis were explored.

The corpus of narrative data generated included nineteen initial interview accounts, ten written accounts and twelve follow-up interview accounts. As contextual information on the data generated for analysis, some characteristics of the participant sample, the status of the back problems and the time frames when the accounts were generated across the acute low back pain experiences will now be outlined.

## **4.4 Contextual information on the narrative data**

### **4.4.1 The characteristics of the data generated**

As discussed, nineteen participants were recruited onto the study. The number of participants and the timeframes for the initial interviews, diary/timeline completion and follow-up interviews in weeks from the onset of the acute low back pain problems are illustrated in Figure 8. Two participants were interviewed within 1 week of onset, four participants within 2 weeks, eight participants within 3 weeks, two participants within 4 weeks, two participants within 5 weeks and two participants within 6 weeks from onset.

Seven participants described being significantly improved at the initial interview and twelve participants described various degrees of persisting problems. The interviews varied in length from 45 minutes to 2 hours.

Ten participants returned written accounts varying in length from 2 pages to 20 pages. Not all the timeline sections were completed, with five left blank or remarks that the information was given in the initial interview. The depth of description, content and style of the completed contextual

time lines and diary entries varied in interesting ways. The accounts were valuable material for discussion at second interviews and formed part of the corpus of narrative data for analysis.

Twelve follow-up interviews were undertaken with a range of experience described:

- Four participants described being fully recovered
- Eight participants described episodic, improving or persistent problems

During the interviews, two participants came to disclose histories of low mood although were asymptomatic at the start of the study. These participants and another participant described developing low mood problems during their low back experiences. Suggestions to withdraw were offered but the desire to remain in the study was expressed and their accounts were valuable data.

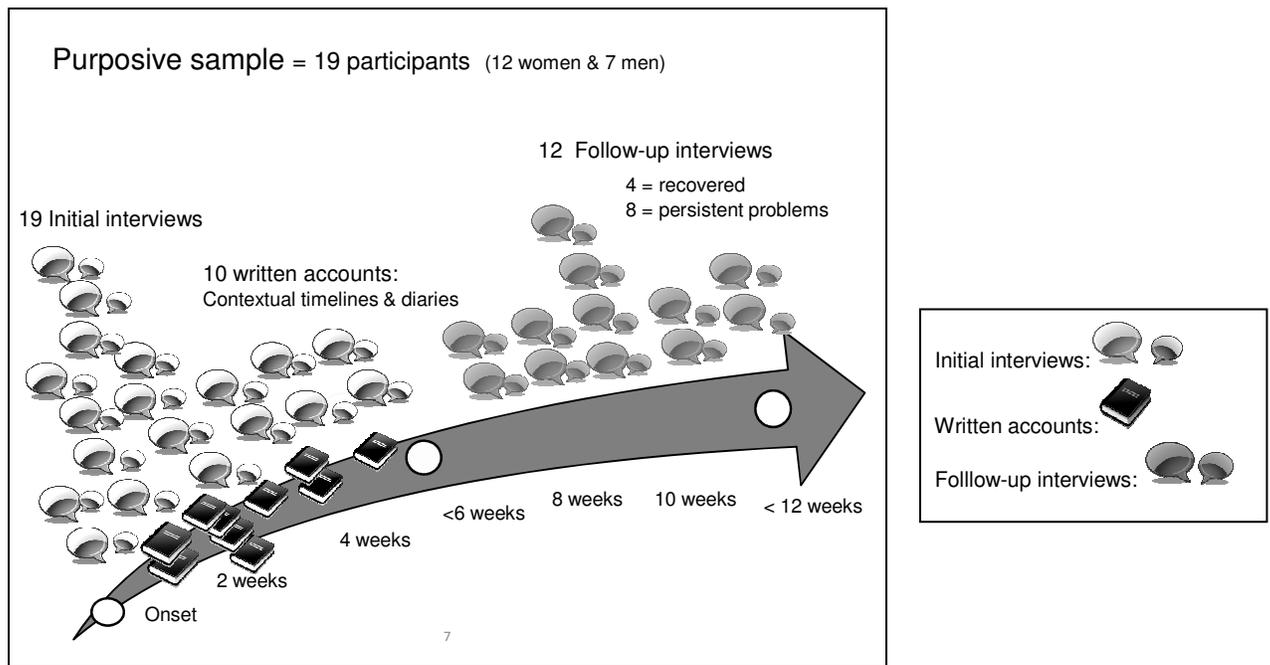


Figure 8: A pictorial illustration of the number and timing of initial interviews, written accounts and follow-up interviews provided during the acute low back pain experiences

## 4.5 Data analysis

### 4.5.1 Contextual background

The next section describes the processes undertaken in the analysis to illustrate the development of the findings. The description includes the most significant aspects of the analytic process and provides some brief examples to illustrate the underlying analytic reasoning. Some steps will be

touched on which did not seem to produce analytical insights but played a significant role in moving the analysis towards the findings developed. The activities of ‘managing’ the data, continually engaging with the data and the literature, and undertaking and writing the analysis and discussion were essential to the process of developing the findings. The entwined nature of these activities will be reflected within the descriptions that follow. An illustration of the data management, analytic processes and thesis development is displayed in Figure 9 overleaf.

Firstly, the concept of ‘analysis’ seems important to define as there are different meanings adopted across qualitative research projects. Coffey and Atkinson (1996 p.6-7) highlight one of the distinctions in meaning:

‘For some authors, analysis refers primarily to the tasks of coding, indexing, sorting, retrieving, or otherwise manipulating data. From such a perspective, the task of analysis can be conceived primarily in terms of data handling. For others in the field, analysis refers primarily to the imaginative work of interpretation, and the more procedural categorizing tasks are relegated to the preliminary work of ordering and sorting the data.’  
(p.6–7)

In this study, the sense in which ‘analysis’ is used to describe the process of developing the findings encompasses both of the processes described by Coffey and Atkinson (1996). The ‘manipulating’ and ‘handling’ the data, the ‘imaginative work of interpretation’, and the interrelated processes of reading and writing were all considered part of the data analysis. Representing and re-presenting the data in different styles of transcription formed part of the analytic procedure. So too were the choices as to how the data was manipulated for filing and when excerpts were cut out of their transcripts under themes and later tested as illustrations while writing. These choices were shaped by analytic decisions and shaping of what came into view during the analysis process. Freshwater and Avis (2004 p.7) have remarked on ‘the creative and inventive aspects’ of analysis and interpretation, being both inductive and deductive in nature as interpretations cycle through reasoning and critical evaluation processes. Critical reflexivity is also argued to act as a creative ‘divining rod’, where analytic reasoning and ‘working hypotheses’ are tested against existing theory and research and a researcher/practitioner’s own knowledge and interests (Freshwater and Avis 2004 p.5). Throughout the following analysis, an underlying test for the developing interpretations and a form of ‘divining rod’ involved continually asking the question - ‘So what for physiotherapy practice?’

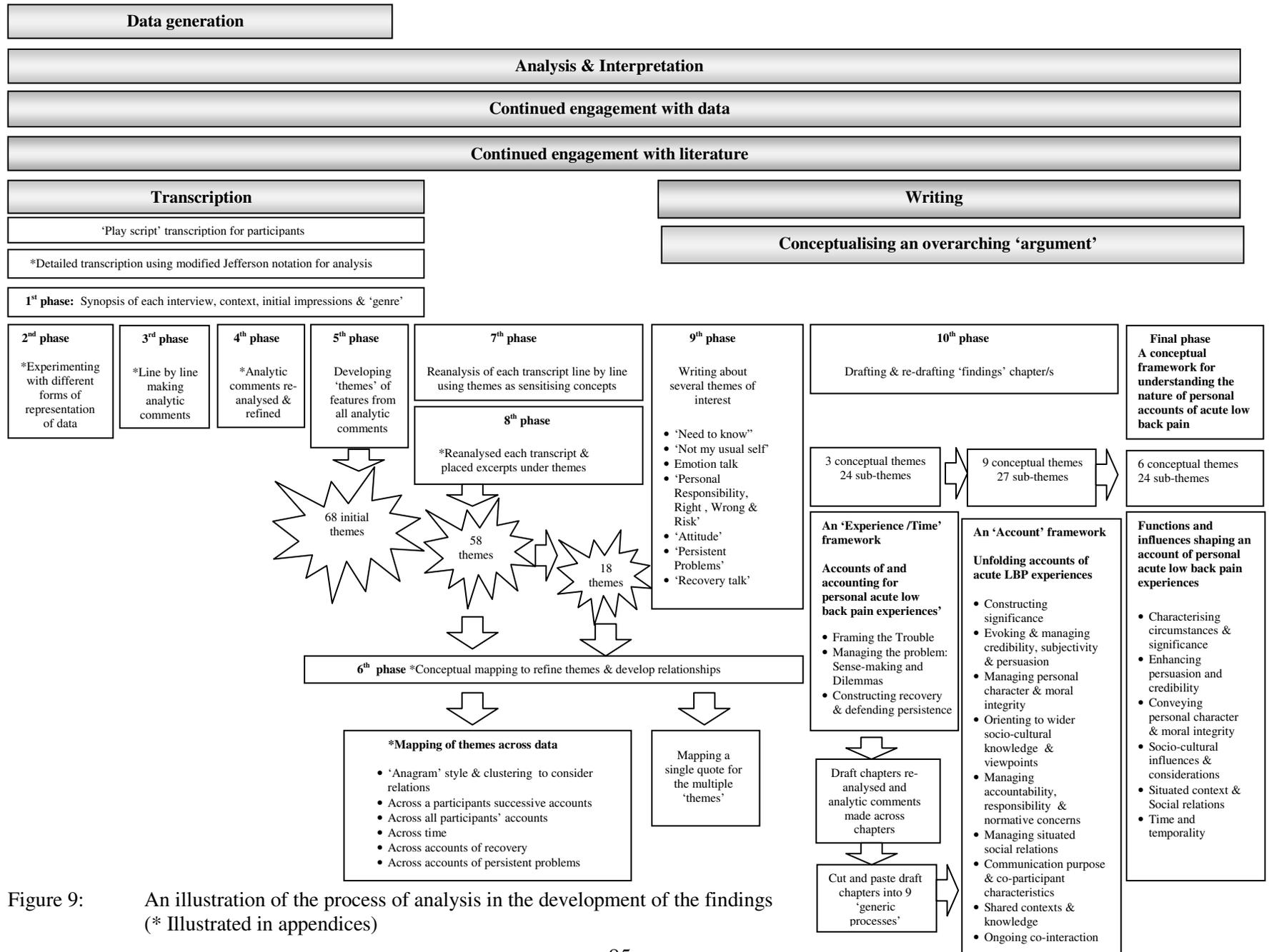


Figure 9: An illustration of the process of analysis in the development of the findings (\* Illustrated in appendices)

The experience of undertaking the data analysis reflected the enmeshed, iterative relationship and acknowledged ‘messiness’ and ‘struggle for meaning’ in the practice of analysis described across qualitative and discourse analysis experiences (Ballinger 1999; Harper 2003; Khalib-Abdul 2008; Schiellerup 2008). The iterative complexity of the processes within the analysis has offered a challenge to portray under procedural headings. The challenge to find ‘meaning’ and ‘make sense of the data’ was initially seeking insight into the ‘experience’ of acute low back pain. Gradually, a theoretical shift became a practical shift that moved the analysis interest to focus on the nature of the narrative accounts themselves rather than the experiences being portrayed. Such a practical shift also needed a skill development to implement a very different analytical lens than I had been socialised into using (Gudmundsdottir 1996). The challenge continued across the analysis to recognise, refine and make sense of the many areas of meaning which did eventually become apparent as my analytical sensitivities developed. Equally, forming an encompassing ‘research narrative’ (Charmaz 2003) that had a meaningful “so what” for physiotherapy practice proved part of the struggle for meaning in the phases of analysis now described.

#### **4.5.2 Transcription of the data**

The interviews were digitally recorded and downloaded for storage, transcription and listening during the analysis. Firstly, each interview was transcribed verbatim in a simple ‘play script’ style for ease of reading for participants to check their transcripts. Identifying features were anonymised and changes to the returned transcripts were added.

The detail of the transcription was then increased by using a ‘modified’ level of Jefferson transcription and each line consecutively numbered (ten Have 1999; Jefferson 2004). Since the narrative accounts were considered personally ‘hearable’ from my participation in the interviews, very detailed ‘conversation analysis’ level notation seemed obstructive rather than assistive in the initial analysis. The notation is displayed in Appendix 11. Verbatim features were retained such as pauses, interruptions, ‘you know’, ‘umm’, situated grammar, and characteristics such as sarcasm, laughter, whispering and gestures recalled. Repeated listening informed decisions on how the transcripts became notated since placing full stops, commas and reconstructed dialogue greatly influenced the meanings construed when read as ‘text’. As Norrick (2000) comments, written texts are structured around grammatical rules for meaning and complete sentences, whereas spoken language is practically organised around intonation

units and the speaker's need to take a breath. The repeated listening helped begin to engage with the data and the importance of considering language and the meaning which comes from the flow of conversation across an interaction.

### **4.5.3 Perspective on interview transcription**

Theoretical perspectives influence the choices made for the conversion of interview data to transcripts. It is recognised that the representation of an interview interaction, firstly as an audio-recording and then as text, is both a theoretical and a practical issue. Debates continue within the research literature regarding perspectives on transcription (Poland 1995; Tilley 2003; Potter and Hepburn 2005; Smith 2005; Mishler 2005; Bucholtz 2007; Brown and Stenner 2009). This concerns the degree of detail necessary to facilitate the analysis process and for subsequent interpretation by others. Potter and Hepburn (2005 p.287) argue that a sufficiently detailed transcription will better capture what has occurred in the audio-recording and make it more 'hearable' for analysis and reader interpretation. However, Poland (1995 p.292) proposes that the 'very notion of accuracy of transcription is problematic given the inter-subjective nature of human communication and transcription as an interpretative activity'.

Audio-recording and transcription are increasingly reductive and interpretatively influenced processes. Each stage of representation loses more of the complex features of the communicative process. Even with increasing sophistication of application, neither the recording nor the transcription, closes the gap with the 'original event' (Brown and Stenner 2009 p.149). Furthermore, a constructionist view also sees the experiences offered in an interview as already a constructed reality. As suggested by Brown and Stenner (2009), the representational relations between the recording, the transcript and the interview need to be considered for the implications for deriving knowledge. In a theoretical and practical compromise, moderately detailed transcription was applied to allow a sensitivity to the reading of the narrative accounts as a 'sense-offering' exercise while displaying the nuances of the language and the exchange (Blommaert 2007). It is acknowledged that transcript styles will meet different purposes. Both detailed conversation analysis level transcription and very simplified transcription have value depending upon analyst and reader interests. A moderate level of transcription was chosen to present the extracts in this thesis so as to facilitate ease of reading across audiences. It is acknowledged this modification does not support a reading with conversation analysis interests.

The returned written contextual timelines and diaries were scanned for storage and transcripts of each were created. Structural features, original punctuation and illustrative features were reproduced as possible, such as expressive faces or arrow-linking. It was recognised that the personal character and aesthetic effect accompanying individual hand writing and punctuation was lost in these transcribed representations and so the original accounts were revisited during analysis. Excerpts from a contextual timeline and a diary are provided in Appendix 12 and Appendix 13.

The analysis process will now be described as a set of phases in the process of reaching the findings. Some phases were a progression while other phases were ongoing and in parallel across the study.

#### **4.5.4 Phases within the analysis of the data**

As discussed in chapter three, this study drew from a developing synthesis of narrative and discursive theoretical perspectives. This development produced parallel changes in the interests and strategies applied during analysis. My initial approach drew on ‘experience-centred’ narrative research projects (Bell 1988; Gee 1990; Riessman 1993; Ochs and Capps 1996; Lieblich et al. 1998; Walker et al. 1999; Clandinin and Connelly 2000; Murray 2000; Squire 2005). My initial analysis drew on several strategies described in this body of literature as ways to start to explore the accumulating data. The initial analytic focus sought insights from the accounts into the ‘experience’ of personal acute low back pain. Rather than a formula, the literature provided a set of ‘narrative’ sensibilities and strategies for exploring the data and prompting insights.

##### **1<sup>st</sup> Phase: Synopses of interviews**

Following each interview, a synopsis was constructed as a form of ‘field notes’, as encouraged in ethnographic approaches to narrative inquiry (Silverman 1993). This strategy described each interview noting contextual information along with thoughts and ideas about the participants, their contexts and features in the data. In composing the synopses, consideration was given to the narrative ‘meaning-making’ or ‘sense-making’ aspect of the accounts, including the contexts of participants’ experiences, consequences and significance understood from what had been described. Although not fully appreciated for the analytic relevance at the time, constructing each synopsis also prompted a consideration encouraged by Holstein and Gubrium (1995) of the

narrative environment. The ‘conditions of storytelling’ came to be an important factor in the analysis and in the development of the findings (Holstein and Gubrium 1998 p.163)

Each synopsis was extended to include written accounts and second interviews as the study progressed. To apply a ‘narrative’ sensibility, each synopsis considered initial reflections on the various genres within the accounts, such as described by Gergen and Gergen (1988), Ezzy (1990) and Robinson (1990), and the narrative typologies offered by Frank (1995 p.76) of ‘quest’, ‘chaos’ and ‘restitution’. Within each account, there was a mix of genres, often contradictory, and understandably related to the circumstances and attitudes being portrayed at particular points. The application of this ‘genre’ approach seemed too global and assigning a typology seemed to obscure other aspects conveyed in alternative ways within an account. A ‘genre’ approach did not seem to take the analysis in a meaningful direction although the process had started to hint at the variation within and across a participant’s account concerning the situated nature of attitudes, beliefs and the portrayal of circumstances.

## **2<sup>nd</sup> Phase: Experimenting with representation**

While the data was gradually generated, another analytic strategy involved experimenting with alternative styles of representation, drawing on suggestions from the narrative literature. The interview accounts were ‘narrativised’ into a monologue, content-driven format (Kleinman 1988; Poindexter 2002). This approach largely obscured my participation except to allow the personal narrative to be followed. Some of the accounts were formed into stanza/idea unit style transcription (Gee 1991; Riessman 1993), a storied format (Clough 2002; Sparkes 1996) and a poetic format (Richardson 1993; Glesne 1994; Whitley 2004). Some brief examples are shown in Appendix 14. Each effort was trying a different way to prompt some analytical insight into the data and to counter a practitioner’s view by creating a ‘different angle of repose’ (Richardson 1997 p.5).

At the time, these representation strategies did not seem to create any meaningful analytic insights although a strong familiarisation with the accounts had developed with the accompanying ‘immersion’ in the data (Hammersley and Atkinson 1983). During the experimentation, there was an increasing tension experienced with the inconsistency of these representations against a developing appreciation of the relevance and importance of co-construction. These alternative forms of representation assume a one to one correspondence between narratives and what was described; that is, between the narrative and reality (Atkinson

and Silverman 1997). Developing an analytic perspective that practised an attention to construction and contexts of narrative production made the implications of my involvement in the data generation an important consideration (Riessman and Quinney 2005 p.397). These 'narrative' strategies were placed aside to pursue other approaches. However, a sensitivity to the concepts of 'meaning', 'sequence', 'consequence' and 'time' remained an analytic consideration. It was later in the study that the impressions on the analysis of this experimentation with representation resurfaced. Creating the 'storied' versions had provided an exposure to how each participant's narrative 'content' had built up the 'context' for appreciating their personal circumstances, which included the kind of person they were. The strategies had also embedded an appreciation of the importance of language and word usage. The role of aesthetics in data representation and the compelling, moving effect of reading the storied and poetic 'personal' accounts became emphasised against the sterile interview transcripts.

Repeated listening using an MP3 player in conjunction with repeated reading of the transcripts was integral to analysis. As completed, a participant's initial and follow-up interviews were listened to consecutively. Repeated listening initially supported the transcription task and then listening while exploring the transcripts continued throughout the ensuing analysis.

### **3<sup>rd</sup> Phase: Line-by-line, word-by-word analytic comments**

The main strategy in analysis started with working line by line, word by word through each interview while listening to the recording and each transcript of the contextual timelines and diaries. Analytic comments included descriptions of what was understood to be happening in what was being said, and expressed any tentative ideas about the data such as topics raised, personal impacts, 'actions' of the talk, interactional effects or features of the experiences made relevant. Without experience in narrative or discourse analysis, my analytic strategy involved 'viewing the discourse through the previous established assumptive lenses and seeing what can be noticed' (Tracy and Carjuzáa 1993 p.175).

An interest in 'meaning' was initially pursued by asking three questions drawn from Leech (1983), who had encouraged attention to the practical and social function of language:

- What is being meant by what is said?
- What does it mean in this situation?
- Why is this being said or meant in this way?

These questions prompted a consideration of the relations between meaning and context as well as the precipitants and functions of what and how something was said (Kasper & Rose 2001).

The analysis increasingly incorporated ideas, questions and analytic concepts prompted from research from within other disciplines. A growing synthesis of ways to consider the data were provided from analytic considerations drawn from sociology (Silverman 1993; Gubrium and Holstein 2003), and discursive and critical discourse analysis in psychology (Potter and Wetherell 1987; Davies and Harré 1990; Parker 1992; Fairclough 1992; Edwards 1997a; Wetherell 1998; Taylor 2006). Potter and Wetherell (1994, p.55-61) offered the following analytic considerations for undertaking analysis:

- Using variation as a lever
- Reading the detail
- Looking for rhetorical organisation
- Looking for accountability
- Cross-referencing discourse studies

Edwards and Potter (1992 p.24) have developed a 'Discursive Action Model' and the concepts provided a way to consider the 'sense-making' rationales offered by participants:

- 'Actions' of an attribution
- Fact construction
- Stake and Interest
- Agency (causality) & Accountability (for actions/conduct)

In addition, a helpful concept drawn from Tracy and Carjuzáa (1993) involved using the pragmatics of communicative practices:

'People make comments in light of what they take for granted and expect others to do so as well. These taken-for-granted provided an especially good way to capture participants' understood realities, and can be recovered by examining what people say and asking "what would a speaker need to believe for this comment to be reasonable and sensible?"' (p.175)

Ways to consider the data were also drawn from other related fields including cultural socio-linguistics (Scollon and Scollon 1981; Gergen 1982; Tannen 1984), communication and language studies (Tracy 1995; Lemke 1995; Baker 1997; Johnstone 2000), organisational studies

(Alvesson and Deetz 2000; Alvesson and Sköldberg 2000) and pragmatics (Stilwell Peccei 1999; Horn and Ward 2005).

Engagement with this literature helped develop the 'craft skills' needed for an adequate and insightful discourse analysis (Parker 1992; Potter 1996; Antaki et al. 2002). As suggested by Schwalbe et al. (2000 p. ), a sensitizing theory 'can help tell us what to look for when the lids are off but not exactly what we will see'. An indication of the kinds of questions asked of the data as the analysis progressed can be seen in Figure 10.

- What kind of description is being offered about the experience?
- What impact/significance/meaning is being voiced?
- What contexts are being constructed to accompany descriptions/information?
- What work might the 'context' offered be doing within the interaction?
- What effect does the 'context' provided have on the meaning of what is said?
- What does this particular description achieve in relation to the situated interaction?
- How does this utterance achieve its effect?
- How might the conversational context influence construction?
- What changes occur in features in accounts over time?
- Do rationales differ with the description of changing or unchanging circumstances & why?
- What similarities and differences feature in accounts of recovery or persisting problems?
- How does the context of the interview inflect an account?
- What kind of 'stance' is being conveyed & with what effect : towards the information and the listener??
- How are participants 'positioning' themselves, or being positioned, by a piece of talk and what might such 'positioning' achieve or influence?
- What might the participant trying to do by saying particular things in that way?
- What might be at stake and why?
- What 'discourses' are used? How are they drawn on and used, and what 'work' does the use of the discourse have or do?
- How might contextual aspects influence what and how something is said?
- What needs to be understood as background or taken for granted to understand what is said?
- What values/assumptions are displayed in what is said?
- What kinds of conventions are displayed or are taken for granted in the talk?
- How do communication conventions influence what is said and what is displayed about the relationship?

Figure 10: Examples of the nature of the questions applied to the data during analysis

Consequently, the literature was a resource for analytic strategies and for critiquing my working hypotheses and evidence during the reasoning processes underlying the analysis (Freshwater and

Avis 2004 p.8). The analytic sensitivities from this literature helped to consider the data from both the micro-level of language and interaction, and the relations to macro-level socio-cultural concepts with regard the ‘how’ and ‘why’ of the experiences portrayed and the features displayed within the accounts of acute low back pain problems (Hall 1995, 1997a).

Working through line by line, analytic comments were made across each transcript using the ‘reviewer comments’ tool in Word 2007™ and an example can be seen in Appendix 15. A brief excerpt of analysis below in Figure 11 shows the analytic comments made in the first phase of analysis against lines of an initial interview transcript (Liz). The comments were thoughts on meanings and accomplishments of wording, and my interpretation of what a participant’s remarks seemed to be conveying within Liz’s account of her situation:

Line		
50	<i>Liz: It is very difficult and in those circumstances. You would normally go in and soldier on which is why I don't tend to take time off sick, for that very reason. But they were very supportive, actually.</i>	Impact on others being off sick means that it makes for increased moral obligation felt to colleagues
51		
52		
		Use of metaphor- to soldier on-keep working despite adversity
		To be seen as stoic, to continue working especially in spite of difficulties
53	<i>There was no way I could have done that. Anyway, I made the decision. It was that bad. It was worse than anything I have had around it before.</i>	Certainty of difficulty undertaking job in the circumstances – positioned against any criticism levelled at her for taking time off
54		
55		
		Explanation allows another to see that the decision not to go to work wasn't easily taken Places this experience in the context of other experiences

Figure 11: An example of analytic comments made against lines of an interview transcript

#### **4<sup>th</sup> Phase: Second analysis of analytic comments**

After completing the first line-by-line analysis of each participant’s interview and written account transcripts, the analytic comments were drawn together for each participant. A second analysis of the initial analytic comments was then undertaken since the first phase had generated over 160 pages of analytic comments. An example page of the second analysis is provided in Appendix 16. The re-analysis considered the initial comments against the transcripts to refine

the lengthy descriptive remarks into more precise conceptual ideas. For example, the analytic comment seen above against Liz's transcript (lines 50-52) of *'Use of metaphor – to soldier on – keep working despite adversity'* became refined to *'Identity- positioning. Use of metaphor- soldier on-despite adversity. Stoic nature'*. This phase of analysis produced the 'second analysis' comments which were then used in the next phase as a resource for refining conceptual ideas on features within the data.

### **5<sup>th</sup> Phase: Developing themes from the analytic comments**

The next phase involved working through the refined analytic comments from the re-analysis to 'theme' the features interpreted within the data. The term 'theme' is used flexibly to encompass a unifying idea, a quality or a discursive feature identified in the data. Each analytic comment had been cross-referenced to the corresponding line in the participants' transcripts and so were printed and cut into the individual comments. Undertaken as a paper exercise, each comment was then considered to try to discern a more conceptual theme that captured the essence of the analytic comment or feature identified. Comments seen to relate to several themes were replicated. This phase of analysis generated an initial 68 'themes' of varying nature, which included features within the talk, meanings, topics, actions, effects, and disciplinary concepts (see Appendix 17).

### **6<sup>th</sup> Phase: Conceptual mapping of themes**

The arrangement of the 68 themes seen in Appendix 17 shows the beginning of a parallel strategy of conceptual mapping, also described as 'situational analysis' (Clark 2003 p.554). It was also a way to manage the escalation rather than reduction in complexity that had occurred with trying to consider relations between themes. The mapping was an ongoing strategy to help prompt ideas on what was being seen in the data and to consider the relevance and relations of particular themes. It was one of the strategies used to try to think differently about the themes and to start to find a framework to draw the themes together against the complexity that seemed increasingly evident in the nature of the data and considered a feature of social science research (Law and Mol 2002; Law 2004). Other ways of mapping themes across the data were undertaken and are described later in the phases in which they were undertaken.

In addition to the conceptual challenges during analysis, moving to a paper exercise to theme the analytic comments had introduced a practical problem. Only cross-referencing the analytic

themes to the transcripts rather than having the corresponding quotes attached had created a logistical difficulty since there had been over three thousand comments with cross-referenced quotes. At the outset of the research project, the use of a CAQDAS package for a narrative-orientated analysis seemed inappropriate. However, there was a growing appreciation of the role played by software packages for physically ‘handling’ the data and helping access the growing body of documents generated during analysis. The paper strategy to develop themes added to the difficulties of managing the forty-one transcripts with escalating word files and hard copies of analysis documents. To continue in this way seemed unmanageable and to change to a computer supported strategy at this point seemed equally daunting and time-consuming although recognised as a necessity.

Encountering this practical issue prompted the creation of a database in Microsoft Excel 2007™ to manage the data and keep the phases of analysis directly linked to the transcripts. A workbook was created for each participant where the transcripts and previous phases in the analysis were placed alongside each other. New analytic strategies could be added and additional workbooks created which were all accessible in one file. It was also discovered that direct ‘hyperlink’ access, similar to websites, could be made between ‘cells’ in a workbook to corresponding places in the original Word documents and digital recordings, or to cells in another workbook. Clicking on the hyperlinks allowed direct access to listen or return to the place where a quote had been lifted from a transcript. Importantly, this linking allowed concurrent listening while analysing a selected quote and immediate access to the context in the transcript. Listening and considering the context of extracts became increasingly important. Decontextualised interpretations could significantly differ compared to hearing an extract in its situated production. Of significance, resolving the ‘data management’ problem and the process of creating the database was serendipitous and had unforeseen value for prompting the next phases in the analysis.

### **7<sup>th</sup> Phase: Re-analysis of transcripts using themes as sensitising concepts**

Following the development of the database, the participants’ interview and written account transcripts were revisited for a further time. There was an intention to use the initial ‘themed’ analytic comments to file and cross-reference respective quotes under the theme headings. This process was abandoned with the appreciation that the interpretations within the early transcripts had significantly altered across the time span of undertaking the analysis.

Instead, a third line-by-line re-analysis of the transcripts was undertaken using the themes as sensitising concepts to re-explore the data. Themes were placed against corresponding instances in the transcripts, refined or revised to suit new interpretations (see Appendix 18). For instance, most talk seemed to relate to ‘Sense-making’ and so this theme was abandoned. More specific ideas were applied such as ‘knowing’, ‘risk’, ‘right and wrong’, ‘commonsense’, ‘careful’, ‘fear issues’, ‘acceptance’, ‘hope’ or ‘future’ although the ‘meanings’ in the same utterance could be construed in multiple ways. On many occasions the same utterance was given a number of different themes and can be seen in the continuing illustration from Liz’s transcript in Figure 12.

<i>Line</i>				
50	<i>Liz: It is very difficult and in those circumstances. You</i>			
51	<i>would normally go in and soldier on which is why I</i>			
52	<i>don't tend to take time off sick, for that very reason</i>	Use of metaphor- to soldier on-keep working despite adversity Liz 58	Identity-positioning - Use of metaphor- soldier on- despite adversity, Stoic nature Liz 58	Identity- soldier on Liz 58 Before / now self Liz 58 Personal characteristics Liz 58 Meanings through Metaphor Liz 58

Figure 12: An illustration of multiple analytic themes identified within a single utterance

There was often difficulty with capturing the nature of the wording with a single abstract theme and qualifying wording was added. For example, the theme ‘Personal Characteristics’ had positive and negative meanings and concurrent interactional functions as shown in Figure 13.

Personal Characteristics - strength of character detrimental to self
Personal Characteristics- determination created risk- needs limitations set
Personal Characteristics- detrimental - need controlling
Personal Characteristics- hardiness/ ignoring- contributed to worse problem
Personal Characteristics- high pain threshold
Personal Characteristics- motivated
Personal Characteristics- ‘own nature’ a risk - justifies work absence
Personal Characteristics- resilient, not complain
Personal Characteristics- not give in - contradictory as has
Personal Characteristics- compliance to please therapist
Personal Characteristics- manage ‘capability failure’ talk

Figure 13: An example of meaning and function variations in the theme - ‘Personal Characteristics’

These instances started to point to the fluid nature of some of the themes and the slipperiness of meanings which could be given to utterances. Concepts such as ‘Personal Characteristics’ could

simultaneously be relating to a topic raised, a feature displayed, an impression managed and a strategic resource used within the interaction. Consequently, what had started as a reluctant but necessary 'data management' strategy produced an unanticipated and important phase in development of the analysis. The number of 'themes' given to features in the data became revised to fifty-nine although many were losing relevance with the direction the analysis was gradually taking.

After having themed the individual accounts, the conceptual mapping strategy was continually used to explore the transcripts since the application of the themes. The incidence and relations between the themes in the transcripts were considered against other ideas about the data. The mapping strategy explored similarities or differences and the incidence or absence of themes in relation other features. Themes were mapped and the occurrence of themes were compared in the following ways:

- The occurrence of themes generally
- Across all the individual participants' accounts
- Across time:
  - Between initial and follow-up accounts
  - Across an individual participant's successive accounts
- Across accounts of recovery compared persistent problems
- Across written accounts
- Comparing oral accounts to written accounts

The general occurrence of themes can be seen in Appendix 19. The increased prevalence of certain themes was evident, such as 'Work issues', 'Individual responsibility/Social expectations', 'Physical/functional impacts', 'Emotional impacts/Emotion talk', 'Attitude talk', 'Problem solving', 'Personal knowledge/experience', 'Identity', 'Control talk-passive/active', 'Personal characteristics', 'Moral issues/Integrity' and 'Legitimacy'. The issue of prevalence was a prompt to consider why and what relations might exist between the themes, across time or personal circumstances. An example showing the mapping of the occurrence of themes across Angela's three accounts and circumstances of persistent problems is provided in Appendix 20.

It was possible to consider the similarities and differences in how certain themes occurred in relation to particular circumstances. For example, themes of 'legitimacy', 'personal qualities', 'accountability' and 'moral integrity' were strongly evident in the initial accounts of problems

and when problems persisted yet were minimal in accounts of recovery. However, there were instances countering this pattern. Positive accounts of recovery still contained talk of ‘personal qualities’ and ‘accountability’ talk with describing ‘knowledge/behaviour gaps’. This complexity required finding a frame to encompass the themes and the complex relations seen in the data.

### **8<sup>th</sup> Phase: Re-analysis of transcripts placing excerpts under themes**

As each transcript was re-analysed and themed line by line, the corresponding extracts were placed under the ‘theme’ headings across a workbook spreadsheet. An example of the theme ‘Right & Wrong’ can be seen in Appendix 21. Extracts were often placed under several themes. For instance, an extract from Denise’s transcript in relation to ‘Work Concerns’ was also placed under ‘Moral Responsibility’, ‘Risk Talk’, ‘Careful’, ‘Personal Characteristics’, ‘Accountability’ and ‘Impact on Others’. Contradictory extracts were also noted within and across participants’ accounts. Extracts from each participant were then colour-coded and with graduated shading for successive accounts. This strategy highlighted the extent of and variation in themes within participants’ accounts. The themes represented in this way can be seen in Appendix 22.

### **9<sup>th</sup> Phase: Writing about themes of interest**

My analysis seemed to be resisting an adequate way to conceptualise the themes. A suggestion had been made to write about themes of particular interest. Five themes were selected; ‘Need to know’, ‘Not my usual self’, ‘Right, wrong, risk and responsibility’, ‘Attitudes’, and ‘Persistent problem talk’. This produced a previously unrealised appreciation that writing formed a significant part of the analytic project for developing analytic insights and refining, reasoning and extending concepts. Engaging with literature from other disciplines beyond the field of low back pain also opened up different ways of conceiving of themes and prompted critical thinking in relation to physiotherapy concerns. Through continual engagement with the data and literature as part of the writing process, the nature of the interpretations continued to shift. As such, the analysis was not a separate phase finalised and then left behind to move onto ‘writing up’ the findings. As suggested by Spradley (1980), writing forced a more intensive kind of analysis and critical approach to the theorisation

### **10<sup>th</sup> Phase: ‘Rendering through writing’: developing an encompassing framework**

In an iterative process, the analysis, the findings and the central argument concerning the importance and implications of the previously undescribed complexity in the nature of the accounts were ‘rendered through writing’ (Charmaz 2006 p.172). The efforts of writing to

develop an appropriate chapter framework, choose evidence for themes, illustrate interpretations and build the discussion were integral to reaching the final findings. Within this formative work, there had been an ongoing search for an ‘experience-orientated’ organising framework to conceptualise the themes. Such a framework seemed in keeping with a narrative approach that had followed accounts over time.

Early drafts attempted to frame the findings around a research narrative of beginning, middles/muddles and end towards recovery or persistent problems as shown in Figure 9 (p.1); ‘Framing the Problem’, ‘Dilemmas in Sense-making and Responding’ and ‘Constructing Recovery or Persistent Problems’. This ‘experience/temporal’ descriptive approach failed to capture the findings adequately and was disrupted with each effort to discuss a theme. Writing about a selected extract to illustrate one theme kept exposing the slippage into a different theme. Extracts could be seen to suit illustrating multiple themes. This experience was frustrating but proved analytically significant. It became increasingly evident that an ‘experience’ orientated organising framework could not support the findings that were seen as important and of particular relevance and significance for physiotherapy practice.

### **Final Phase: Settling on a conceptual framework**

The continued inadequacy and frustration with writing and thinking linearly, and the complexity in relations between themes, produced a shift from an ‘experience/temporal’ framework to make sense of the features in the data to one that was ‘account’ orientated. In a gradual process of abstraction, the themes and their relations could finally be adequately organised by a conceptual framework of generic processes that were ‘trans-situational’ (Prus 1996 p.129). Rather than an organising framework, the conceptual ‘slipperiness’ of time became its own feature along with the other features which seemed to capture what felt to be important about the findings against the question- ‘so what for practice?’ Redrafting of the findings chapter continued and the conceptual framework of ‘functions and influences shaping the nature of the accounts of personal acute low back pain experiences’ came to be developed. Finally a point was reached that was felt to satisfy criteria for a good analysis suggested by Tracy (1995 p.214):

- Simplifying a complexity without doing injustice to the components,
- The development of a coherent central claim
- Relevance
- Intellectual implicature

- Practical theory contribution

#### **4.5.5 Research journaling and maintaining critical reflexivity**

Reflexivity within the analysis and undertaking the study with ethical integrity was supported by research journaling. Journal entries were a mix of reflections, field notes and ‘auto-ethnographic’ remarks, sketching out analytic thinking, mapping relationships, developing interpretations and drawing up possible frameworks. Journal notes were also made of supervisor meetings, colleague discussions, preliminary presentations and communication with other researchers. Discussion of the analysis with supervisors, other researchers, academic and work colleagues and thoughtful inquiries from friends was an important mechanism to interrogate my thinking and stimulate analytical refinement. Presenting at conferences, research forums and my workplace also facilitated the process and substantiated ideas. Conference presentations given during the study are provided in Appendix 23.

The purpose of peer-review warrants consideration concerning its function in enhancing interpretative validity or credibility. It seems probable that individuals within the same discipline with similar theoretical understandings would derive similar interpretations and offer consensus. Such circumstances are not an argument for truthfulness or reliability. However, the peer review encouraged my thinking, critical reflexivity and accountability in the analytic process. It was also a strategy supporting rigour and transparency in my efforts to develop considered and professionally meaningful findings from the study.

There was opportunity to offer preliminary analysis to participants at follow-up interviews and contact when returning the transcripts. Impressions that the ‘analysis involved a psychological evaluation were dispelled. Later discussions with interested participants occurred on several occasions face to face and via email. Articulating preliminary findings without using academic terminology and conveying themes that were a deconstruction of participants’ accounts was challenging. These difficulties were valuable to help develop ways to both articulate and consider the relevance of the discursive and critical aspects of the developing findings.

The concept of ‘member checking’ has been suggested as a measure to support the credibility and quality of a study from some standpoints (Lincoln and Guba 1985). However, there is debate as to the contribution played by participant ‘validation’ in advancing the quality of a study (Bloor 1983; Ashworth 1993; Sandelowski 1993). However, participants’ viewpoints

remain subject to the same social and contextual influences as in data generation processes where they may feel compelled to agree or present themselves and their views in particular ways. Perspectives, values and understandings of relevance may differ from the researcher's, especially with a discourse analysis approach (Ballinger and Payne 2000).

My discussions with interested participants were encouraging and dispelled concerns for a disparity in expectations of the findings that may have limited their personal resonance. In contrast, participants expressed strong affiliation with the impacts, dilemmas and impression management identified and challenges provided by 'structural' constraints and normative 'social expectations'. A participant with a background in teaching offered fruitful discussions on the Foucauldian lens taken to the findings. Another participant had an unexpected literature background and their familiarity with 'discourse' language that became the way I could understand and express my findings allowed in-depth discussions. The experience taught me not to make assumptions about the possible contribution participants could offer in the research process. The agreement of participants with my interpretations remains theoretically problematic as evidence of 'validity' or accuracy. However, indications of resonance with participants' views was encouraging for the usefulness of the findings as practice knowledge.

As a practitioner in parallel with undertaking the study, there was no boundary separating the developing research insights from evaluating their occurrence and relevance in practice. The research experience was implicitly informing my practice and my practice experiences were an informal testing ground for the resonance of analytic insights. With this realisation, my journaling tried to draw out influences from the research undertaking which had filtered into my practice. This aspect of the research journey and the personal and professional learning from the research process are discussed in the final chapter. The following section discusses ethical considerations addressed within the study and in relation to dissemination of the findings.

#### **4.6 Ethical considerations**

Ethical considerations and responsibilities featured throughout the research project, beginning with the design, within its implementation, writing up, and will continue throughout dissemination. Undertaking the research with ethical integrity underpinned the project. Central to this research was to avoid potential harm to participants. Confidentiality and anonymity of participants has been maintained by the use of pseudonyms and identifying details, references to

others, events or locations have been adjusted. Anonymised interview recordings, diary documents, journal notes and transcriptions were stored securely and personal information was stored on an encrypted NHS computer to ensure compliance with the Data Protection Act 1998.

It was recognised that health professionals featuring in the participants' experiences may be my professional colleagues which could influence discussions and disclosure within accounts. Participants were encouraged only to provide information as felt comfortable and were reassured of confidentiality. Disclosure of participation in the study to professionals involved in their care was at the participants' discretion. Personal checking of their transcripts was a further opportunity for reflection, censorship and consent for use of anonymised extracts.

The participants were fully informed that I was a physiotherapist undertaking the research, where my title of Consultant Physiotherapist was provided on the information sheets. It was recognised that my practitioner background would both inform and influence the interview context, interaction and data generated. I introduced myself as a physiotherapist although emphasised that the study was undertaken as a 'researching doctoral student' attached to the local university. A verbal explanation clarified that the research study did not involve the provision of treatment and would not influence any care being received.

For colleagues involved in recruitment, my role as a researcher was emphasised with reassurance that the study was not an evaluation of professional practice. Case discussions involving participants that might otherwise occur in supporting colleagues' clinical practice would be directed to other senior colleagues to preserve confidentiality. There was the consideration that a colleague's awareness of their patient's participation in the study may have influenced management although it was expected that the influence would be beneficial rather than harmful.

Sensitivity was required during interviewing with the depth of exploration into the participants' experiences since quite personal information was often disclosed. Ethical integrity was exercised as to how much to explore sensitive disclosures and the relevance to the research aims. I was aware of the implications of researcher power and possible obligations to provide information in the interview context. The consequences of an increased rapport brought to the second interview heightened the importance of a reflexive approach concerning familiarity with participants and this influence on the interactions.

Participants were recruited because of their acute low back pain problem and I remained alert for 'red flags' indicating serious pathology discussed earlier (p.72). There were also consideration concerning emotional distress from relating difficult experiences. As a Consultant Physiotherapist, my professional practice involves the management and care of individuals experiencing painful and distressing musculoskeletal conditions including back pain. Compassion and empathy in the research interview and with informal contact during the study was expressed in the same way that was inherent to interacting in professional practice. The research protocol made provision that an established NHS Trust support pathway would be followed as with the professional care of any emotionally distressed patient or health concern. Information on the Patient Advice and Liaison Service was also provided. No occasion arose for onward management.

My involvement with participants aimed for respect of their willingness to offer accounts of personally difficult experiences and desires for a resolution. A professional sense of care and concern was unavoidable although I endeavoured not to 'intervene'. Influences were inevitable and my experiences with this issue required ethical and analytical reflexivity. Participants often sought advice or reassurance about their back pain understandings within the interview. Such instances were responded to in a way that respectfully aimed to guide queries towards their treating practitioners unless not under care. Participants were reassured that I would discuss any issue arising that was considered of professional concern or harm. Their queries were also an opportunity to explore their understandings. Reflecting on these queries was integral to analysis.

#### **4.7 Summary**

This chapter has described the implementation of the study leading up to the development of the findings. The procedures undertaken to generate the corpus of data have been outlined. The processes of data analysis through which the findings were generated have been discussed. The discussion has highlighted the underlying analytical reasoning and decisions within the process which took the analysis toward the final findings and conceptual framework described and evidenced in the next chapter. Ethical considerations within the research process have also been discussed. The next chapter presents the findings developed from the analysis.

## **5 Chapter Five: 'Word doing deeds': Personal accounts of acute low back pain experiences**

### **5.1 Introduction**

As discussed in the previous chapter, the development of the findings was underpinned by a 'discursive' viewpoint from which to explore personal accounts of acute low back pain experiences. Traditionally, language and talk of experiences has been seen as a vehicle for transferring information from the teller to the listener. This view underpins most current low back pain research and interventional practice, and consequently shapes how acute back problems are understood and managed. However, as highlighted in chapter three, theory on the use of language in interaction and broader social theory sees it as significantly more complex than the idea of 'information transfer' suggests. The following sections present findings from an analysis of accounts of acute low back pain experiences using this alternative perspective. The chapter illustrates the complexity of factors shaping the accounts of personal acute low back pain experiences which has received little attention previously within physiotherapy practice literature and acute low back pain research.

The key findings are presented in six sections. Each deals in depth with a specific function or influence shaping the accounts of personal low back pain experiences from an analysis which considered the accounts as a product of social interaction. The sections build on each other to provide a conceptual framework to understand the entwined functions and influences shaping the personal accounts. An illustration of the framework that is developed over the six sections is provided overleaf in Figure 14. The generation and interpretation of the information produced through interactions with patients is core to the physiotherapy management of and research into acute low back pain problems. The findings aim to evidence the complex nature of the information within the participants' accounts and the importance of this complexity for the interpretation and use of accounts for practice and research purposes. The accompanying discussion considers the findings in the context of current research on low back pain and literature and theory within other disciplines. The discussion draws out insights for physiotherapy practice concerning the management and current research evidence on acute low back pain, which also has application to other health problem contexts.

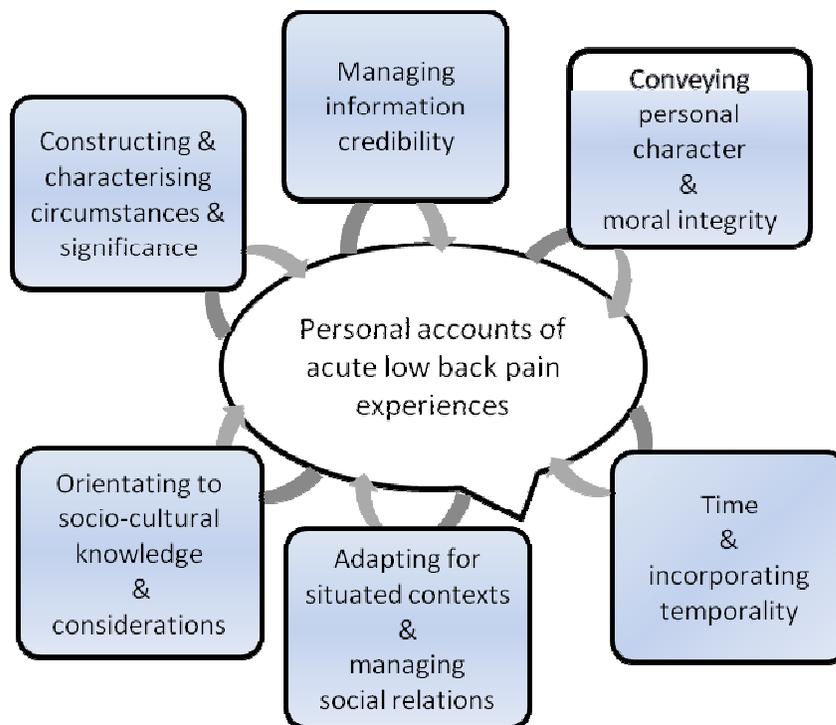


Figure 14: Functions and influences shaping personal accounts of acute low back pain experiences

### 5.1.1 The participants in the study

The following overview of ‘participant characteristics’ aims to provide a sense of the participants involved in the study, the nature of their acute low back pain problems and the diversity and complexity of the personal ‘contexts’ appreciated from their interviews and written accounts. From a constructionist perspective, ‘context’ is not simply a separate background of influences and determinants which exist against which a person’s actions and experiences can be assumed to be understood (Schwandt 2007). Neither is providing such ‘context’ a neutral action. Context is seen as a frame that surrounds what is being examined, provides resources for interpretation and the relevance of ‘contexts’ has a fluid boundary, shaped by the issue at hand (Duranti & Goodman 1992; Schegloff 1997). The contexts provided below aim to allow an appreciation of the participants whose deconstructed accounts of their experiences have been used to illustrate the findings to follow.

<p><b>Brian</b></p> <ul style="list-style-type: none"> <li>• 50, labourer, living with partner</li> <li>• First episode</li> <li>• Interviewed at: 2 &amp; 9 wks &amp; 2 written accounts</li> <li>• Getting better:</li> </ul> <p><i>'Much better but more careful now'</i></p>	<p><i>While on annual leave, Brian accepted an agency job emptying recycling bins. When lifting only the third bin Brian developed sudden severe back pain. He took two hours to walk to A&amp;E where he was given pain medication and discharged. Feeling better the next week, Brian 'made the mistake' of cycling and set himself back, blaming a 'false confidence with taking the tablets'. Brian was angry with himself and was now mistrusting his judgement. Brian was back at work but 'not 100% yet.'</i></p>
<p><b>Angela</b></p> <ul style="list-style-type: none"> <li>• 21, nurse, single, active</li> <li>• First episode</li> <li>• Interviewed at 5 wks, 9 wks, 12 wks</li> <li>• Persisting pain</li> </ul> <p><i>'Still in a lot of pain with everything'</i></p>	<p><i>Angela had never hurt her back before. She had felt aching in the weeks before but continued to work. Then some days later 'the same patient pulled me' and she felt really severe pain. Angela returned to work after 2 months on reduced hours. At the second interview, physiotherapy had started, which was helping but pain after treatment was discouraging her to re-attend. Angela still had problems at her third interview and been referred to Orthopaedics.</i></p>
<p><b>Judy</b></p> <ul style="list-style-type: none"> <li>• 55, midwife, partner, 4 rescue dogs</li> <li>• Previous back problem 10 yrs ago</li> <li>• Interviewed at 2 &amp; 8 wks &amp; written account</li> <li>• Getting better</li> </ul> <p><i>'getting better gradually but I'm very careful'</i></p>	<p><i>Judy slipped on a wet floor after grooming her dogs. She twisted and 'heard it tear' as she fell. Her GP suggested A&amp;E so she called an ambulance. Judy was X rayed, given medication and returned home by taxi 'in bare feet and a blanket'. Her GP seemed dismissive, 'not believing in back problems'. Physiotherapy had been some help. At her second interview, Judy had returned to work although was feeling 'very vulnerable' and had been referred to a pain clinic.</i></p>
<p><b>Mark</b></p> <ul style="list-style-type: none"> <li>• 38, married, 2 children, manager, sports</li> <li>• Previous back problem 20 yrs ago</li> <li>• Interviewed at 4 wks &amp; written account</li> <li>• Persisting pain</li> </ul> <p><i>'Very annoying and just not going away'</i></p>	<p><i>Mark had a previous problem 20 years ago but 'this isn't anything as severe because then I couldn't even stand up.' Mark was frustrated that this time it wasn't changing. He was not aware of why the pain had started, or 'anything different about life or psychological' for why it hadn't improved. It had occasionally affected his mood, making him more 'irritable'. Mark planned a GP visit but wasn't convinced anything could be done and understood there was a wait for physiotherapy.</i></p>
<p><b>Julia</b></p> <ul style="list-style-type: none"> <li>• 38, married, 3 children, fulltime lecturer,</li> <li>• First episode</li> <li>• Interviewed at 3 &amp; 11 weeks &amp; written account</li> <li>• Persisting pain</li> </ul> <p><i>'It occupies your mind all the time'</i></p>	<p><i>Julia injured her back pain 3 weeks before on a skiing holiday helping her son who had become scared. Julia described a number of complex contexts at home and work in which her back pain was proving an increasingly significant challenge. She was having treatment but not sure if it was helping. Julia was wary of exercise programmes and felt she needed a lot of guidance so she did not do anything wrong. Julia was still very affected by the problem at 11 week but had remained at work.</i></p>
<p><b>Jayne</b></p> <ul style="list-style-type: none"> <li>• 51, Administrator, married, swimming, yoga</li> <li>• Previous back pain 6 years ago</li> <li>• Interviewed at 2 &amp; 11 weeks &amp; written account</li> <li>• Recovered:</li> </ul> <p><i>'the odd niggle, but dreading it happening again'</i></p>	<p><i>Jayne notice mild pain reaching to make the bed. She went to work but it 'seized up' and couldn't bend so was sent home. Jayne called the emergency GP service and received some stronger tablets: 'It was so bad I couldn't get a drink or on and off the toilet....to walk to the toilet was terrifying'. Jayne's problem gradually settled over the next three weeks and she had returned to work.</i></p>
<p><b>Liz</b></p> <ul style="list-style-type: none"> <li>• 40 y o full-time pharmacist, P/T MSc student</li> <li>• First experience</li> <li>• Interviewed at 1 &amp; 8 weeks</li> <li>• Recovered</li> </ul> <p><i>'I never want that kind of pain again'</i></p>	<p><i>Liz felt her back pull when bending to pull on running gear. It gradually worsened over the day: 'By the evening I was nearly in tears, it was that painful'. Liz was feeling better gradually but had mowed the lawn and set herself back, 'it's only the size of a fishpond and it was terrible after that!' Liz was very distressed at having to call in sick: 'there is really no-one to cover but I couldn't drive'. Liz's problem improved quickly with treatment and exercises and she had started running- 'it seemed Ok'.</i></p>

<p><b>Mandy</b></p> <ul style="list-style-type: none"> <li>• 36, secretary, married, children &amp; grandchild</li> <li>• First experience</li> <li>• Interviewed at 3 weeks</li> <li>• Recovered</li> </ul> <p><i>'It hasn't even twinged in the last week or two'</i></p>	<p><i>Mandy had a sudden onset of pain trying to move some rubbish before work. Mandy felt she had to still go in that day with a colleague away on holiday. She felt a burden to others at work with needing help with tasks. Mandy's husband was off work due to health problems but been trying to help. Mandy's problem settled in three weeks and she was pleased it had not been more serious. She was making an effort to be careful now.</i></p>
<p><b>Kim</b></p> <ul style="list-style-type: none"> <li>• 42, full-time physical job, married, 2 children</li> <li>• Previous problem 2 years ago</li> <li>• Interviewed at 3 weeks</li> <li>• Recovering</li> </ul> <p><i>'it is all a positive outlook ,this pain needs to go!'</i></p>	<p><i>Kim experienced a sudden onset of severe pain she felt was from sitting more at work at the moment. She had some treatment and the strong pain had significantly improved. The pain was quite distressing initially. Kim was still very 'aware' of her back. She had been making every effort to be careful although felt 'it would be no time at all before you forget and go back to all those bad habits'.</i></p>
<p><b>Jill</b></p> <ul style="list-style-type: none"> <li>• 56, business manager, with a partner</li> <li>• First experience</li> <li>• Interviewed at 3 weeks</li> <li>• Recovering</li> </ul> <p><i>'Feel a bit of a fraud'</i></p>	<p><i>Jill was outside walking her dogs and felt a nigggle, then when back in the house it 'went'. She felt patronized by her GP who blamed her weight but Jill had pressed strongly for physiotherapy and stronger tablets. Jill was being made redundant so only took 3 days off work for her sick record. She was making sure to look after herself and not lift. Jill found physiotherapy helpful. Her back had 'gone' again a few times but felt hopeful that it would be better soon. She considered a positive attitude was essential.</i></p>
<p><b>Denise</b></p> <ul style="list-style-type: none"> <li>• 32, Occupational Therapy assistant, married, gardening, tennis</li> <li>• Previous problem 6 years ago</li> <li>• Interviewed at 3 weeks</li> <li>• Recovered</li> </ul> <p><i>'consciously trying to be a little bit more careful'</i></p>	<p><i>Denise's job 'is fairly physical'. She has had a problem in the past and it often 'grumbles' but she is usually able to work through it. This episode seemed to be because of heavier activities both at work and home. Denise has had treatment and it has been helpful. Denise managed to avoid time off work due to 'determination and a strong work ethic'. She had since significantly improved and felt her problem has virtually settled.</i></p>
<p><b>Neil</b></p> <ul style="list-style-type: none"> <li>• 58, Salesman, married, golf, garden allotment</li> <li>• Previous problem 2 years ago</li> <li>• Interviewed at 3 &amp; 11 weeks</li> <li>• Persistent problems but improved:</li> </ul> <p><i>'get a sort of sharp reminder, then it goes away'</i></p>	<p><i>Neil works in an office, often at the computer and on the phone. He was using the lawn strimmer, felt twinges initially but then quite severe pain. Neil is usually very active. He has had previous problems that have settled in two or three days. Neil had visited his GP for tablets but felt there was little more his GP could offer. Neil was having private physiotherapy. Although better, his problem was persisting and he was very frustrated.</i></p>
<p><b>Anna</b></p> <ul style="list-style-type: none"> <li>• 40, married, factory assembly work</li> <li>• Previous severe problem 16 years ago</li> <li>• Interviewed at 3 &amp; 9 wks &amp; written account</li> <li>• Recovered</li> </ul> <p><i>'Fantastic. So much better, no pain, nothing.'</i></p>	<p><i>Anna developed back pain and stiffness but with no incident or trauma that she could recall. She remembered driving over a large pothole which seemed to jar her neck but didn't seem to affect her back at the time. Anna had a severe problem 16 years ago which lasted nearly a year and she was very disabled at that time: 'I was crawling on the floor to get around'. Anna had used her savings to have 6 months of physiotherapy to recover. This time she had a week off work and had physiotherapy through the GP.</i></p>
<p><b>Peter</b></p> <ul style="list-style-type: none"> <li>• 29, pub chef, married with new baby</li> <li>• Previous problems over 8 years</li> <li>• Interviewed at 3 weeks</li> <li>• Recovered</li> </ul> <p><i>'It is good days and bad days, today's a sore day'</i></p>	<p><i>Peter had a sudden episode of severe back pain that seemed related to using crutches for an infected foot from wasp sting. He was already off work at the time. Peter was hospitalized for two days because of severe back pain. This has never happened before but had been stuck on the floor with the pain. Peter had previous problems and knew his limits. Peter had gradually improved and was returning to work the following week.</i></p>

<p><b>Sue</b></p> <ul style="list-style-type: none"> <li>• 54, teacher, single, new grandmother, gardener</li> <li>• First experience</li> <li>• Interviewed at 4 &amp; 10 weeks</li> <li>• Recovered</li> </ul> <p><i>'Absolutely fine. No problems at all'</i></p>	<p><i>Sue didn't remember hurting her back but had increasing pain with the shopping and any lifting or bending. She needed help with these activities and was concerned that the problem was persisting. Sue had not had time off work as this was difficult as a teacher. Back problems run in her family and Sue was concerned with getting a scoliosis that had greatly affected her mother with pain and immobility. Sue hadn't sought treatment and would see how it went. Her daughter's baby had arrived 'so that worry was over.'</i></p>
<p><b>Jim</b></p> <ul style="list-style-type: none"> <li>• 56, semi-retired, married, grandchildren, diver</li> <li>• Previous back problems</li> <li>• Interviewed at 6 &amp; 12 weeks &amp; written account</li> <li>• Persistent problems</li> </ul> <p><i>'I just ...I just live with it'</i></p>	<p><i>Jim described his back pain starting on a diving holiday and it had not settled several weeks later. He had consulted his GP for painkillers and continued to do voluntary work but was finding it increasingly difficult. Jim was also getting medication side effects. He was 'not a tablet taker but needed the biggest dose'. Jim felt the pain had really affected his mood and this was impacting on others. Jim described being 'stubborn' with trying to still do things but was struggling to manage.</i></p>
<p><b>David</b></p> <ul style="list-style-type: none"> <li>• 60, retired electrician, married</li> <li>• Previous mild back problems</li> <li>• Interviewed at 5 weeks &amp; written account</li> <li>• Recovered</li> </ul> <p><i>'when you're in so much pain it is frightening'</i></p>	<p><i>David woke one morning with severe back pain, He 'stuck it' til the morning then called the ambulance. He was admitted for a day and then discharged with painkillers. David had physiotherapy in hospital and another session once home. It is the 'worst pain' he'd ever experienced but had mostly settled and he was 'just being careful not to overdo it'</i></p>
<p><b>Linda</b></p> <ul style="list-style-type: none"> <li>• 52, Health Care Visitor</li> <li>• First experience</li> <li>• Interviewed at 6 &amp; 12 weeks &amp; written account</li> <li>• Persistent problems but improving</li> </ul> <p><i>'I'm doing a lot more, I wasn't doing well before'</i></p>	<p><i>Linda had a head-on car accident a week before Christmas: 'the ambulance guys were worried about my neck but it was my back'. Linda was very upset about not being able to work was in quite severe pain initially which was gradually settling. She cares for her elderly parents and didn't want them to worry. Her experiences with treatment were mixed and she has started hydrotherapy- 'it was like magic'. Linda has significantly improved but still on restricted duties.</i></p>
<p><b>Cathy</b></p> <ul style="list-style-type: none"> <li>• 28, carer for learning disabled adults Partner, teenage daughter</li> <li>• First episode</li> <li>• Interviewed at &amp; 11 weeks &amp; written account</li> <li>• Persisting problems</li> </ul> <p><i>'no-one can explain why it keeps going into spasm'</i></p>	<p><i>Cathy slipped on a wet floor on a training day and had immediate severe pain. Her GP was very supportive, signing her off work with 'strong painkillers'. Cathy and her partner had just purchased a new house and moved the following week. Cathy works with learning disabled adults, driving the bus and providing day care. The clients can be physical and require active care. She enjoys work and is eager to return. Cathy was attending physiotherapy. She had little contact from work and found this upsetting. Cathy was seeking legal advice and remains off work.</i></p>

### 5.1.2 Presentation of the data

In presenting the six sections, the separation of features simplifies the relations between the social functions and influences illustrated. The functions and influences shaping the accounts were inter-dependent and often concurrently evident within the same utterance. Some excerpts have been used on several different occasions to give a sense of this complexity within the nature of the accounts. The discussion also draws out some of the reciprocal interplay and consequential relations between the functions and influences evident within the unfolding interactions.

### 5.1.3 Use of terms and presentation of excerpts

The findings are illustrated through excerpts from the interviews and written accounts and particular choices of terminology have been adopted in the thesis. As discussed in chapter three, the term ‘narrative account’ has been used to refer to the participants’ talk and written text. The narrative data became appreciated as both an account ‘of’ and accounting ‘for’ their personal experiences (Scott and Lyman 1968; Scott 1991; Buttny 1993; Orbuch 1997). Scott and Lyman (1968 p.46) found that within the telling of events, there was often accompanying explanation or justification for the event. This feature was evident in the data. The briefer term ‘account’ is used in the findings, although the accounts are appreciated as a form of narrative discourse.

Words selected to describe speaking actions, such as ‘offer’, ‘convey’, ‘claim’, ‘evoke’ or ‘assert’ are not used to reflect qualities of truthfulness or sincerity. These descriptors aim to capture my interpretation of the function being accomplished within the nature of the interaction and also relate to the particular analytic lens being applied. All of the participants’ interview and written accounts have informed the development of the findings although not all participants’ accounts appear equally as illustrations. Interview excerpts are presented in italics, inverted commas and indented, for example:

*‘I’m sort of moving around more because I honestly thought... I wondered whether I’d carry on walking, you know, it really affected me that badly’ (Judy IB92)*

Excerpts from the written accounts are in alternative fonts to be distinct from the interview data and preserve the different nature of this accounting medium, as shown in the following:

*‘I spent the day in bed hobbling downstairs whenever I needed a drink (Jayne D5)*

The interview occasion and the position of the excerpt within a transcript are indicated in this order in brackets: (2 **B234**) and a diary excerpt as: (**D125**). Numbering is not provided when only a sense of what a participant had conveyed is discussed or if it would obstruct reading. Underlining has been used occasionally to highlight features in excerpts. An exchange of dialogue is included as a verbatim excerpt when the nature of an interaction is important to illustrate. With excerpts taken from within a section of talk, then background context is provided. Brief excerpts used within the text prose are italicized in ‘single’ inverted commas and occasionally tense has been adjusted to facilitate reading. Speech quoted by participants appears in “double” inverted commas. Adjustments to transcripts made by the participants from ‘member checking’ appear in (brackets).

## 5.2 Characterising circumstances and conveying significance

### 5.2.1 Introduction

The following section illustrates and discusses the first feature inherent within the nature of participants' accounts and involves the way that descriptions functioned to characterise their acute low back pain circumstances as a problem and as significant in various ways (see Figure 15). Significance relates to what is 'signified' and can be understood as the meaning expressed or implied. The nature of the participants' circumstances became appreciated as an acute low back pain problem and a personal difficulty through the way their descriptions were constructed.

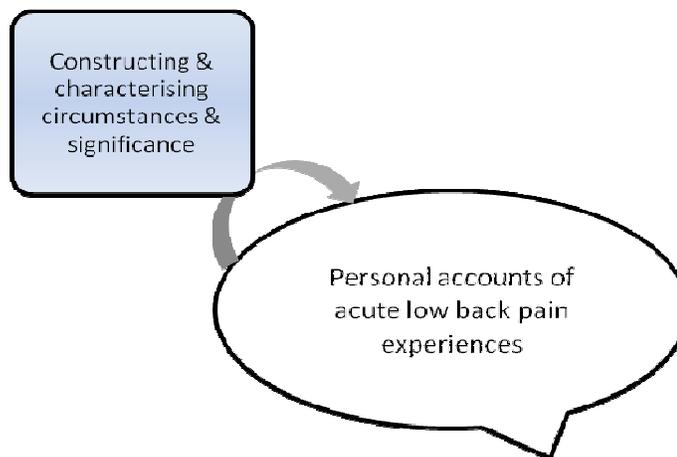


Figure 15: Constructing and characterising circumstances and significance

Participants' descriptions acted to characterise situations with various kinds and degrees of negative qualities which supported an appreciation of the meaning of circumstances as personally, socially and morally significant and problematic. Descriptions functioned to convey negative or positive characteristics that indexed levels of unpleasantness, undesirability, importance and unfairness. The way in which these characterisations and meanings were achieved are illustrated. Of particular relevance, the 'character' given to situations, events and personal conduct through their description become appreciated as integral to the meanings and impressions formed of personal circumstances and their selves. The constructions and characterisations have important implications such as deserving help and justifying personal conduct.

### 5.2.2 Characterising problems as ‘unusual’, ‘out of the ordinary’ or ‘unexplained’

Participants used characteristics of unusual, out of the ordinary and unexplained as one strategy to convey the problematic nature of their acute low back pain circumstances. Asserting a ‘never before’ quality was a typical way to frame the circumstances as unusual and convey characteristics which signalled a problem, particularly with a first experience of a back problem. Sue’s account is illustrative of a typical contextualisation offered:

*‘Up until this summer I had never experienced any back pain.’ (Sue1B8).*

Liz also portrayed this quality when describing her circumstances: *‘I’ve never had anything like that before.’* (1B7). Along with ‘never before’ qualities, circumstances were also given qualities of ‘uncertainty’ and ‘unfamiliarity’ to convey a problematic nature, seen in Cathy’s account:

*‘It is a pain I have never had to deal with before which is...you can deal with, like period pain, no matter what. You know that it is that. But back pain you are never too sure exactly where it is coming from. I know basically where mine is, but it is a completely different kind of pain, I’ve never had anything like that before.’* (Cathy1B101)

The description emphasised the highly unusual nature of the back pain as Cathy conveyed the nature of her problem: *‘a pain I have never had to deal with before’, ‘completely different and ‘never had anything like that before.’* Describing the situation as something she has to ‘deal with’ signalled the unusual nature as negative and undesirable (Lemke 1998). The qualities of difference and uncertainty of the back pain were contrasted with other pains ‘like period pain’ and, despite its severity, was given a positive quality of familiarity: *‘You know that it is that’*.

Context was also provided of someone resilient and very capable of dealing with explained pains: *‘you can deal with, like period pain, no matter what’*. The kind of person one is seen as impacts on how their assertions become interpreted and this remark supports her characterisation of the back problem. The relation between personal qualities and the meanings derived from information was a key feature of the accounts and is illustrated and discussed fully in section 5.3.8 concerning personal credibility, and conveying personal character and integrity in section 5.4. The uncertain nature of the situation was corroborated by a general ‘fact’ - of the elusive nature of back pain: *‘But back pain, you are never too sure exactly where it is coming from’*. However, Cathy modified the generalisation that may have been considered an exaggeration and so the state of affairs was revised: *‘I know basically where mine is, but it is a completely different kind*

*of pain*'. The description of '*completely different*' can be appreciated as a negative evaluation. The evaluations offered also signal the personal stance taken on the information being offered (Lemke 1998). Stance-taking guides a listener as to what should be made of information, including the implications for the speaker/listener relationship (Lemke 1998). The importance of stance-taking within information for the influence on social relations is discussed further in section 5.6.4.

'Uncertainty' as a problematic feature of situations has been described across chronic low back pain research (Sparkes 1996; Walker et al. 1999. 2006; Lilrank 2003; Ong et al. 2006a; Corbett et al. 2007; Vroman et al. 2009). The theme also appears extensively across other 'acute' and chronic health problem research (Bury 1982; Charmaz 1991; Frank 1995; Carricaburu and Pierret 1995; Brody and Flor 1997; Williams and Bendelow 2000). In acute injury and illness experiences, Rosenfield (2006 p 64) identified 'uncertainty' as a common theme and concluded that uncertainty was 'an added source of distress'. Across research contexts, it is evident that the feature of 'uncertainty' is consistently appreciated as a significant state of affairs and as a 'legitimate complainable' issue (Pomerantz 1986 p.227). The breadth of recognition shows how conveying the quality of 'uncertainty' effectively construes 'significance' within a shared socio-cultural value system (Nilhof 1998).

Participants with previous back problems also constructed current situations with qualities of 'unusual', 'out of the ordinary' and 'undesirable', as seen in Kim's description:

*'This was the worst back pain I've had, I've ever had. So, yes, I wouldn't want to go through that weekend again, it was really bad.'* (Kim1D78)

The 'state of affairs' was altered from not just '*the worst back pain I've had*', but upgraded to the worst '*I've ever had*'. Kim's assertion: '*I wouldn't want to go through that weekend again*' portrayed the undesirability of this experience, reinforced with a final remark: '*it was really bad*'.

Mandy's account also establish significance using the 'never before' contrast. The unfolding description of her sense-making helps substantiate the abnormal nature of current circumstances:

*'I couldn't understand where it was coming from either really, because I've had a bit... I mean, I get the odd niggle near the bottom of my back sometimes and a bit of achy sort of pain, but I've never had anything like that before. It was quite frightening really.'*  
(Mandy1B6)

Portraying situations as usually ordinary and typical, such as '*the odd niggle*' and '*a bit of achy*' creates context to argue a change, to claims of 'out of the ordinary' and 'atypical' (Sacks 1992). Against the normality of previous experiences, a dramatic contrast is established: '*but I've never had anything like that before*'.

The continuing account was constructing further context for appreciating the unexplained nature of Mandy's circumstances:

*'I was trying to clear things out of the way so this man could come in and get this old rubbish out of the garden. I did a bit of bending but nothing and it wasn't anything heavy. It was a broken chair and a couple of boxes and, um, and then it was ok... I mean, I went back out with the dog and when I got out into the garden it just suddenly kind of, it went into spasm. It was really severe pain and I couldn't move. I felt like I couldn't even begin to walk it was that severe'* (Mandy1B10)

In the same manner that Mandy's descriptions minimised the significance of previous back pain experiences, the 'ordinariness' of the preceding circumstances was also established: '*a bit of bending*', '*but nothing*' and '*wasn't anything heavy*'. The 'ordinary' situation is further evidenced by listing what was lifted: '*a broken chair and a couple of boxes*'. The reference to the items establishes that there was nothing 'out of the ordinary' about the preceding situation and, importantly, her own actions.

As topics, everyday 'mundane' actions such as lifting and bending would normally be 'unremarkable' and irrelevant (Dourish 2004 p.24). However, in descriptions of back problems, and with an interviewing physiotherapist, these descriptions become relevant and important because of shared knowledge of possible causes which might have implications for accountability. The 'ordinariness' of the preceding situation reinforced a lack of explanation and, importantly, no personal blame which might otherwise have the situation discounted as problem. The concurrent function of managing issues of personal accountability and blame through the descriptions offered by participants is discussed further in section 5.6.3.

Constructing descriptions in this way is described as 'contrastive rhetoric' (Johnstone 2008 p.7). In written experiences of low back pain diagnoses, Lilrank (2003 p.1049) found that the narratives 'convey significance' by contrasting mundane situations with situations of uncertainty, unmanageability and interrupted lives. In personal accounts of paranormal experiences, Wooffitt (1992) identified how circumstances were made 'ordinary' and 'rational'

before announcing ‘extraordinary’ events and sightings to support the teller’s version. The practice of conveying normality in prior situations was described by Sacks (1992 Vol.11 p.215) as doing “being ordinary”. Being ‘an ordinary person in ordinary circumstances’ are important qualities for whether new circumstances become evaluated as ‘out of the ordinary’ and qualify as significant.

Degrees of significance were also indirectly achieved by commonly appreciated meanings associated with classifications (Bowker and Leigh Star 1999 p.285), such as muscle, disc or bone pathology. Across participants’ accounts, a reference to ‘muscle’ involvement signalled the insignificance of situations, as seen in Anna’s account:

*‘knowing it was just something kind of muscular certainly it made me feel more calm about it. I think initially I was worried that I had done something, some damage that was going to take a long time to get better’ (Anna1B26)*

Accepted understanding of the positive healing capacities of ‘just something kind of muscular’ portrayed the self-evident way that a situation was then experienced as less consequential. The reverse is seen with the connotations attached to the classifications used by Mandy:

*‘I don’t know, it was just... as I say, I was really scared that I had done something severe to it, damaged a vertebra, slipped a disc or something like that. (Mandy1B11)*

The ‘self-evident’ negative implications of the pathologies did not need explaining in this particular context with myself, a physiotherapist. Concerns for these kinds of pathology provided a rational basis for the significance asserted about her circumstances which had suddenly become very ‘out of the ordinary’, ‘unexplained’, and ‘unpleasant’, and with possible long term consequences.

Successfully having back pain situations appreciated as ‘different’ and ‘bad’, such as the meanings inherent in ‘unusual’, ‘out of the ordinary’ or ‘unexplained’, can have important implication depending on the context. A situation ‘qualifying’ as a problem in another’s evaluation ascribes certain ‘rights’ and authorises particular actions (Pomerantz 1984; Jordan 1984). This is particularly evident in back pain situations (Radley and May 1996).

Circumstances considered usual or typical may not be evaluated as ‘sufficiently’ problematic to warrant help. Situations that count as a ‘problem’ and qualify as ‘significant’ rest on evaluations of the listener, not by virtue of claims by the speaker (Drew 1989; Hyland 2005). Consequently,

establishing significance is an interactively negotiated accomplishment (Meehan 1989; Drew and Holt 1987; Heinemann and Traverso 2008). The participants' characterisations of their situations show efforts towards this negotiation that may be straightforward or challenging in different contexts, and depending what is understood to be at stake in the interaction (Edwards and Potter 1992).

In health care contexts, successfully portraying problems as 'significant' is important for the sanctions which become available through clinical assessment (Radley and Billig 1996; Salmon and Hall 2003). A problem of sufficient significance qualifies for access to services and there are often gatekeepers determining whether a situation or person qualifies for help (Buttny 1993; May et al. 2004). In medical encounters, Heritage and Robinson (2006 p.60) found that patients not only described their illness, but also shaped information to justify the consultation and 'doctorability' of their problem. Establishing the character and significance of acute low back pain experiences was similarly a process negotiated through the way descriptions were shaped.

### **5.2.3 Characterising problems through emotion and mental states**

The description of emotion and mental states and the use of emotively expressive descriptors within participants' accounts also functioned to convey circumstances with degrees of significance, although with a different dimension of qualities. For a profession seeking to determine a patient's 'psycho-social' status during interactions, this strategy is of particular relevance. Evaluations of circumstances or events were often provided in the form of 'affect' evaluations or as emotion or mental 'states', as seen in Mandy's remarks: '*it was frightening*' and '*I was really scared that I had done something severe to it*'. This use of 'affect' (emotion/feeling) evaluations helps index qualities such as personal relevance, importance and un/desirability (Martin and Rose 2003).

Brian's written account also illustrates the use of emotional and mental 'state' descriptions to characterise the nature of experiences of acute low back pain. In the first few minutes of a new job emptying bins, Brian recounted a sudden onset of severe back pain. Unable to climb into the truck, Brian explained that the only option was to walk to a nearby hospital. The disproportionate time of '*taking 1½ hours to cover those two blocks*' started to portray the personal difficulties. The situation was then given a very aesthetically different character:

*'I felt totally overwhelmed by the pain and totally worried for the first time in my life that I couldn't make it any further without a clue what to do.'* (Brian D6)

A different appreciation of the pain experience was accomplished by the description of extreme emotion and mental states: *'totally overwhelmed'*, *'totally worried'*, *'first time in my life'*, *'couldn't make it any further'*, *'without a clue what to do'*. The powerfully emotive descriptions signalled a distressing situation that may not have been appreciated through the initial 'time/amount' indexing. Extreme expression is argued to offer an effective way to invoke an appreciation of situations by an audience (Pomerantz 1986; Lemke 1998). Within particular contexts, descriptions which otherwise be considered an exaggeration work as an engaging conversational device (Edwards 2000). The parallel function of these 'extreme case' descriptions as a strategy of persuasion within participants' accounts is illustrated further in section 5.3.9.

Several concurrent functions were accomplished through the account Brian offered. Firstly, *'without a clue'* implied the mental state of 'not knowing' and the feature of 'uncertainty' already discussed for its effect in ascribing significance to situations (see section 5.2.2). Secondly, the mental state of 'not knowing' helped account for the degree of emotional distress described (Buttny 1993). The emotional reaction is justified 'in the circumstances' of the severe physical incapacity, uncertainty and sense of vulnerability implied. The 'circumstances' also make the extreme descriptions offered acceptable as a means to convey his problematic situation, considered as having 'local rationality' within the telling (ten Have 2007 p.194). Brian's description shows how the expression of strongly negative emotional and mental states accomplishes a powerful characterisation of significance and personal difficulty of the situation.

The participants' descriptions of emotion and mental states and the use of emotive evaluations were ways to ascribe circumstances with degrees of 'good' and 'bad'. Particular emotion states were powerful ways to convey 'bad' and strongly negative situations, such as: *'in tears'*, *'almost in tears'*, *'crying'*, *'nearly crying'*, *'in absolute agony'*, *'frightening'*, *'scary'* or *'terrifying'* offered by Jayne, Liz, Angela, David, Judy, Brian, Denise, Anna, Linda, Peter, Jill, Mandy and Kim. Other emotive evaluations were also evident: *'very distressing'* (Judy1B18), *'unbearable'* (Cathy1B5), *'really a shocking pain'* (Kim1C6), *'so unbearable'* (Jayne1 C46), and *'horrendous'* (Julia1B109).

Although less common, written accounts contained similarly expressive evaluations:

*Whenever the pain hit, I became wretched and depressed (Jayne D16).*

*I was panic-stricken about the pain (Jayne D16).*

*Ultimately the fear is that something will snap and be ruined forever (Julia D9)*

Shared socio-cultural understanding of the qualities associated with emotion and mental states allow their description to convey the personal meaning of circumstances (Fredrickson 2005 p.120). Emotions have various intrinsic ‘value’ and ‘moral’ qualities of good or bad and right or wrong implied within their meaning (Nabi 1998). This makes their description an important ‘appraisal resource’ to give situations meaning (Martin 1995 p.28). Particular emotion-related appraisals of situations enable meanings to be generated concerning importance, undesirability and unpleasantness (Dillard and Meijinders 2002 ). The participants’ descriptions can be seen accomplishing these effects and indexing circumstances as ‘bad’, ‘wrong’ and therefore problematic (Jordan 1984; Martin and White 2005), as seen with ‘*wretched*’, ‘*depressed*’ and ‘*miserable*’, ‘*unbearable*’, ‘*terrifying*’, ‘*frightening*’ and ‘*excruciating*’. Importantly, the ability to give a stronger negative value to circumstances that are appreciated by a listener as bad and wrong strengthens the warrant for a resolution (Pomerantz 1986).

Of interest, findings in neuro-physiological research reflect the pragmatic achievements seen within participants’ accounts of acute low back pain experiences. In fMRI studies, the relational influences of descriptions of pain, fear, distress and related negative emotions on brain activity show physiological evidence of why the use of ‘frightening’, ‘scary’ or ‘terrifying’ were particularly effective descriptors for participants to create appreciations of negative circumstances. Expressing these types of emotions has been shown to elicit socially supportive responses such as empathy and sympathy in listeners (Gergen and Graumann 1996; Epstein et al. 2007). In fMRI studies, Richter et al. (2010) found that reading and imagining the experience of negative descriptors that were ‘pain-related’ produced significantly greater fMRI activity in ‘attention’ centres in the brain than ‘non-pain-related’ descriptors. Participants’ accounts in this study show the real-life function and interactional uses of these laboratory induced findings. Furthermore, references to particular emotion or mental states were important for conveying moral significance and the relational implications that come into play as a consequence, as illustrated in Angela’s description of family help:

*‘It was awful, really. It was nice to know you have got people around you so if you are in a lot of pain then you are not suffering’ (Angela 1A184)*

The evaluation of ‘*awful*’ conveyed the unpleasant, undesired nature of her circumstances. However, Angela’s reference to ‘*suffering*’ conveys the circumstances as ‘wrong’.

The portrayal of experiences as ‘suffering’ featuring within the participants’ accounts also features in research on chronic low back pain and illness (Ware 1992; Dekkers 1998; Walker et al. 1999; Williams and Bendelow 2000; Roberto and Reynolds 2002; Werner et al. 2004; Vroman et al. 2009). Assertions of ‘suffering’ create meanings that have moral connotations suggested to relate to undeserved misery and indignity (Morris 1996). Emotions are integrally tied with moral rights and orders within a socio-cultural system (Stenner 2005). A right to relief and obligations for others to help are encoded into a Western socio-cultural understanding of ‘suffering’, especially in health contexts (Kleinman 1988; Pullman 2002; Brennan and Cousins 2004; Charon 2006). Describing or implying suffering can be appreciated as an important interactional tool. Cassell (2004) suggests that witnessing the suffering of another prompts feelings of compassion and helping behaviours as supported by the fMRI studies. However, responses are also strongly entwined with judgments of personal culpability and this issue is discussed further for the way the accounts contained ‘personal character’ information in section 5.4 and shaped to manage personal accountability and blame in section 5.5.

The use of strongly emotive description was not universal. Less evocative emotion and mental states or ‘amount’ descriptors were also used, such as Angela’s *‘frustration and irritation’* (1B95) and Mark’s *‘tough time’* (1B111), Sue’s *‘quite bad really’* (1B20) and Neil’s *‘very annoyed’* (1B185). Other ‘problematic’ qualities were also conveyed, including themes of persistence and solution failure (Neil, Mark, Phil, Angela, Val, Judy), fluctuation (Rob) and unpredictability (Jayne, Angela, Julia, Brian).

Finally, the description of behaviours and actions in accounts also signalled emotion/mental states that implied a significant problem, such as *‘tossing and turning’* (Liz), *‘I nearly passed out’* (Phil), *‘very quiet with the pain’* (Anna) and *‘it affected my breathing’* (Judy). Brian’s initial account shows this effect:

*‘I just had to stand and hold onto the fence like. I closed me eyes and sometimes if you just shout a bit, it helps.’ (Brian1B15)*

The descriptions drew on understandings of behaviours associated with pain and distress as a way to convey the personal difficulty (Martin 1995). The nature of these descriptions also had a concurrent role in creating persuasive force and credibility which are discussed in section 5.3.9.

#### 5.2.4 Characterising problems through impacts on activities

In conjunction with the ‘difference’ and ‘emotion/mental-related’ strategies illustrated, descriptions of impacts on personal activities also served important functions in characterising the nature of their difficulties. However, physical impacts were only one dimension of these descriptions. The meanings that were conveyed by these activity descriptions projected far beyond the bio-medical ‘objective’, ‘amount/severity’ notions of ‘functional disability’ assumed to be measured through back pain outcome measures (Fairbank et al. 1980; Roland and Morris 1983; Deyo et al. 1998; Crombez et al. 1999). Physical difficulties were given meaning related to personal, social and moral significance. Mandy’s account discussed earlier in section 5.2.2 is illustrative, where her description of the onset went on to convey physical impacts:

*‘I couldn’t move. I felt like I couldn’t even begin to walk it was that severe.’ (Mandy1B11)*

Against an ordinary and mundane state of affairs, the severity and significance of the acute low back pain was reiterated through these extreme physical consequences. In contrast, Mark used activity impacts to minimise impressions about severity and significance:

*‘I wouldn’t say it was a kind of pain where it really stops me doing anything’. (Mark1B8)*

The remark evidences the way that impacts on activities are a recognised way to index ‘degrees’ of back pain problems as opposed to using ‘affect/emotion’ evaluations illustrated in the previous discussions.

In addition to constructing ‘severity’, descriptions of physical difficulties also functioned to construct moral significance in back problems. Describing an inability to participate in family activities produced meanings of loss and being denied as qualities of Cathy’s circumstances:

*‘I don’t want to sit at home, I want to join in, you know, I do want to walk round, but sometimes I walk and I am...like, I have just got to stop and I have just got to sit down or- “I will go back to the car and I will wait for you.” That is the hardest part.’ (Cathy1B96)*

Cathy asserted three times with increasing emphasis that a personal unwillingness to undertake the physical activity was not the barrier: *‘I don’t want to sit at home’, ‘I want to join in’, ‘I do want to walk round’*. Her wording selection implied a complete denial of a choice in her conduct: *‘I have just got to stop’ and ‘just got to sit down’*. This finding reflects the theme of ‘loss’ identified in chronic low back pain research (Walker et al. 2006; Corbett et al. 2007;

Vroman et al. 2009). The feature of 'loss', like 'uncertainty', is a common signifier of problem significance across a breadth of chronic illness contexts (Bury 1982; Williams 1984; Charmaz 1995; Pierret 2003; Miles et al. 2005; Kerr and Ballinger 2010). Participating independently in everyday life and undertaking essential as well as socially valued activities or socially expected conduct requires an ability to move. The value of that ability and the choices it allows for going about life was a common dimension of significance constructed within participants' accounts.

The loss of physical capability was also made relevant within participants' accounts for its role as a 'tool' for conducting oneself. A dimension of responsible personal conduct is accomplished through physical actions (Telfer 1995). Participants made this feature of significance especially evident by describing problems with self-care, as seen in Linda's remarks:

*'She had to get me undressed, she had to help me get dressed...just physically to get into the shower, having a shower, getting dried.'* (Linda1B290)

The value inherent in the physical capacity to satisfy personal needs such as dressing and showering and the relationship to personal well-being is easily appreciated. Linda's description of the dependency and help needed to undress, shower and 'getting dried' is also meaningful for loss of physical autonomy and its relationship with personal dignity (Dillon 1995).

Brian's account was more explicit about the indignity of his physical incapacity:

*'I am a bit of an independent person and the missus has had to help me have a wash and that. I mean, that is awful, I can wash most of it ...when it comes to doing down here... I can... it is ever so embarrassing to have to have your missus do that for you.'* (Brian1B125)

Impacts on self-care ascribe significance beyond suffering the unpleasantness of pain. The nature of certain physical activities as 'personal' and 'private' have these characteristics because of implicit moral dimensions. The descriptions of interference with these kinds of activities allowed participants to impart meanings of significance in relation to personal, social and moral worth and conduct when prevented.

The participants' descriptions of a loss of physical capacity as a way to convey the impacts and significance of circumstances can be appreciated for the human value placed on 'personal freedom', 'autonomy', 'dignity' and 'personal integrity' (Dillon 1995). These qualities have moral meaning related to conditions that allow self-respect and self-worth (Telfer 1968, 1995).

This philosophical view sees 'self-respect' grounded in personal character and conduct. Personal autonomy becomes important for allowing dignified conduct and the opportunity to conduct one's self in a worthy way (Meyers 1995; Telfer 1995). These values are argued to link with self-worth and being a valuable and moral person (Dillon 2001). Circumstances that deny physical capacity and the opportunity to be autonomous and dignified are suggested to deny the constituents that allow personal 'well-being' and 'flourishing' (Sen 1985; Nussbaum 2000). From this perspective, participants' descriptions of impacts on activities, such as self-care difficulties, created an appreciable indexing of significance in this personal and moral dimension, considered core to personhood.

Furthermore, participants' descriptions of emotion or mental 'states' were complexly tied into managing concerns with personal character and integrity and accountability that arise for describing physical incapacity. Brian's remark of '*it is ever so embarrassing*' made the moral nature of his physical incapacity explicit. Expressing embarrassment acknowledges a breach in appropriate conduct (Semin and Manstead 1982). Accounts of incapacity may be judged as a personal failure and threaten 'claims to good character', which make the mitigation of discrediting circumstances important in certain contexts (Buttny 1993 p.86). The participants' accounts displayed these mitigation efforts. Acknowledging undignified conduct and expressing disapproval of the physical incapacities become a redeeming display of propriety (Hill 1991). The inclusion of 'emotional' consequences as part of the participants' descriptions of activity limitations helped to manage such breaches in personal conduct as well as index significance.

In physiotherapy practice, there is no capacity for patients to manage this complex relationship with 'personal conduct' through tick-box responses to 'functional disability' scales or 'days of sick leave' that are professionally encouraged as 'objective' measures of back pain problems (van der Windt et al. 2008 p.86). In developing an outcome measure for low back pain, Mullis et al. (2009) concluded that the layers of relationship between patient- identified problems, single activity scores and global health scoring is complex. The concept of importance was suggested to have 'confounded evaluations' of activities and so should be included as a 'factor' in scoring (Mullis et al. 2009 p.10). This issue of 'confounding' reflects complexities evident in the construct of 'self-efficacy' and its measurement in physiotherapy research, where self-report scores do not correlate with improvements in back pain in the ways expected (Woby et al. 2007).

The ‘yes/no’ options and responses on a Likert scale to de-contextualised self-report outcome measures assumed to represent the difficulties of back-related physical activities, such as the ‘Roland Morris Disability’<sup>1</sup> and ‘Oswestry’ Low Back Pain <sup>2</sup> questionnaires used across research and practice contexts, can be understood to capture little or possibly none of the meanings expressed when participants voiced difficulties with physical capabilities and difficulties in their accounts. The descriptions of physical difficulties within the accounts echo the argument offered by Wood and Kroger (1994), that physical movements form actions, and actions form activities which are imbued with value and social meaning. Describing impacts on activities was one of the strategies used to index the difficulty of circumstances and convey the personal, social and moral significance of the acute low back pain problems.

### 5.2.5 Characterising problems through a change in ‘self’

A change in usual ‘self’ or ‘not being myself’ was a common impact described within the participants’ accounts regardless of duration. Participants often contrasted remarks of changed ‘self’ with descriptions of usual personal qualities and behaviour to support an appreciation of this personal impact, as seen in Angela’s and Linda’s comments:

*‘I am normally so active and just quite happy to just to get on with everything.’ (Angela1B27)*

*‘what I coped with before, it’s gone. I’d walk into town, come back and get on my bike and cycle the other way, but I can’t.’ (Linda1B925)*

Participants’ ‘usual’ self descriptions emphasised a change in positive, capable qualities that helped evidence the impact but also conveyed meanings of loss and denial. Linda’s account also illustrates this theme relating to a usual ‘professional’ self:

*‘not give them 100% like I normally do [ ] When you’re dealing with patients you’ve got to put them first..[ ] ..John will tell you. That’s just not me, you see. That does really concern me ...um, but all I can do is try.’ (Linda1C235)*

The description of interference with a ‘normal’ professional ethic conveyed the compromise. The offer of a ‘character witness’ also supported the claim: ‘John will tell you’ and the concern expressed emphasised its undesirability. As seen previously, reporting a failure in personal conduct was accompanied by redeeming intentions: ‘all I can do is try’. The moral issue of not

---

<sup>1</sup> Roland & Morris Disability Questionnaire (Roland and Morris 1983)

<sup>2</sup> Oswestry Low Back Pain Questionnaire (Fairbank et al. 1980)

conducting oneself as one ‘normally’ would and ‘should’ was countered by the virtuous intentions of personal effort (Driver 1996). A ‘virtue’ is understood to be something that makes its possessor ‘good’ such as honesty, compassion or courage (Driver 2001). A ‘virtuous’ person is admired and seen as morally good because the ‘right’ thing has been done and personal actions are underpinned by virtuous intentions, irrespective of the outcome (Miller 2003). As compromised personal conduct was described, the implicit use of virtue ethics and expressing intentions to overcome the constraints caused by back pain helped construct and maintain ‘good character’ (Annas 2006). Consistency in personal qualities is also argued to underpin predictability and trustworthiness, support positive interactions, and enhance access to resources (Maguire et al. 2001; Geurin 2003). Consequently, the threat placed on personal and social concerns by disruptions to valued characteristics and sources of personal and social esteem can be appreciated as a personally significant issue.

However, in ethical debates, and as will be evidenced later within participants’ accounts, virtues can also be considered ‘not good’ if bad consequences occur (Smith 2005b). The two perspectives argue ‘duty’ against ‘consequence’ and whether greater ethical value rests in ‘intentions’ or ‘outcomes’ (Watson 1996). As will be shown, ‘bad’ outcomes within acute low back pain experiences made ‘virtuous’ qualities such as determination and stoicism become reframed as foolhardy and detrimental when problems persisted (see section 5.7.5). This reframing allowed a change in conduct to be justified, such descriptions of *‘finally giving in’*.

In contrasting circumstances of recovery, returning to a ‘normal’ self was equally used to index circumstances with positive qualities:

*‘At first off I wasn’t walking fast like I normally do because I do tear around a bit sometimes, and I have noticed I’m getting much quicker again [ ] I’m “me” again.’ (Anna1B 204)*

The theme of problems impacting on a usual ‘self’ features in chronic low back pain research (Tarasuk and Eakin 1994; Walker et al. 1999; Holloway et al. 2000; Ong et al. 2006a; Vroman et al. 2009; Crowe et al. 2010). It also features strongly in chronic pain and illness research (Charmaz 1983; Eccleston et al. 1997; Kelley 1998; Risdon et al. 2003; Morley et al. 2005; Harris et al. 2003; Miles et al. 2005; Campbell and Cramb 2008). Of particular interest, Risdon et al. (2003) found varying features in ‘self’ statements including references to loss and change, but also to enduring qualities that defended against implications for weakness of character.

The findings of this study show that the impacts on a 'usual' self as an issue of significance are not just a consequence expressed in 'chronic' circumstances but appear as a feature of back pain accounts irrelevant of duration. It acts as powerful information 'content' to support circumstances being appreciated as a significant difficulty and qualifying as a problem. However, the surrounding talk within the participants' acute low back pain accounts showed it was a topic that also often required managing in interactions for meanings construed concerning personal character and conduct touched on above, and for the work this topic accomplished concerning issues of blame, discussed later sections 5.4 and 5.5.

Of interest, the negative impacts conveyed in relation to personal back pain problems appear to defy medically imposed 'acute' and 'chronic' distinctions. The expression of disruptions to lives, influences on activities and emotions, impacts on relationships or work and social spheres, concerns for legitimacy, and future concerns associated with 'chronicity' were expressed near onset in 'acute' low back pain accounts. Trede (2000) also reported that patients did not make a distinction between acute or chronic low back pain that were being made by the physiotherapists.

The findings in this study challenge 'transitional' models of chronicity that propose a development of features associated with chronicity and disability with time (Gatchel et al. 2005; Leeuw et al. 2007; Dunn et al. 2008). Many features that characterised the acute low back pain problems 'persisted' in accounts rather than 'developed', especially the undesirability and distress expressed with circumstances. More recently, Gatchel et al. (2008) commented that the difference in measures for acute pain and chronic pain groups for emotional distress supported the 'transition' model. However, research comparing acute and chronic pain questionnaire responses found that duration did not differentiate between responses, except acute situations had 'greater expectations for a cure' and were 'less accepting' that the pain was unsolvable (Crombez et al. 2008 p.561). The participants of this study also expressed ongoing and increasing frustration and undesirability of persisting problems and expressing negative emotions was a powerful tool to communicate personal stances on their situations. As Stokoe and Edwards (1997) have suggested, the description of emotion states cannot be prised away from the interactional business being performed when offered within an account. The features illustrated in this section were always entwined within the descriptions offered.

In this study and reflected across research contexts, aspects of 'experiences' have been abstracted into 'categories' for the task of illustration and discussion; physical, emotional,

psychological, social, moral, identity, roles, relationships, work, family, social evaluation, legitimacy or stigma. Regardless of the categories created, Sayer (2006 p.450) argues that 'importance' and 'significance' is imputed into situations and appreciated by others through shared socio-cultural understandings of what constitutes personal 'well-being', 'ill-being' and 'flourishing'. Establishing significance is suggested to be always an appeal to the values and ethics that underpin local socio-cultural understandings and meaning (Crary 2007). Descriptions and evaluations are argued to be 'at the heart of negotiating meanings' (Hunston and Thompson 2000 p.143). There is also a culturally shared assumption that the worse a problem then the more necessary and justified it is to do something about it (Pomerantz 1986). The ways in which the participants' accounts characterised acute low back pain circumstances as significant problems similarly displayed the use of this ethical appeal.

### **5.2.6 Summary**

This first section has discussed ways in which the participants' accounts constructed and characterised the nature of their acute low back pain circumstances as a problem with various degrees and qualities of significance. The illustrations showed how wording, topics and inferences functioned to construct personal circumstances with negative qualities understood as important, unpleasant, undesirable and unfair. Other studies of low back pain and chronic illness experiences similarly demonstrate the accounting accomplishment and researcher appreciation of participants' constructions of significance and which become 'realised' as common research findings across publications. Constructing characteristics such as changes, impacts, losses and constraints across personal, moral or socially valued or required dimensions of life supported the appreciation of circumstances as 'significant problems' warranting solutions.

Discussions within this section have also alluded to the important ways in which the unfolding accounts were concurrently managing other concerns, as well as being influenced by and adapting to contextual issues. The complexity of the process of information provision, of its product and its interpretation touched on in this section starts to highlight some of the possible consequences for interactions and therapeutic approaches within physiotherapy where certain assumptions about communication and interaction underpin practice. The next section moves on to illustrate and discuss the way in which the accounts were shaped to enhance persuasion and the credibility of the information provided about personal experiences.

## 5.3 Managing information credibility

### 5.3.1 Introduction

As illustrated in the previous section, by looking beneath the familiar process of description, it was possible to see how participants' acute low back pain experiences were conveyed in ways that supported an appreciation of the nature of the circumstances experienced. Whether persisting, improving or resolved, or the experience of good or bad circumstances, the descriptions and characterisations constructed the worlds of difficulty or recovery and relief. From participants' accounts, it was also possible to see that the nature of the constructions were also managing issues of information credibility, as illustrated in Figure 16.

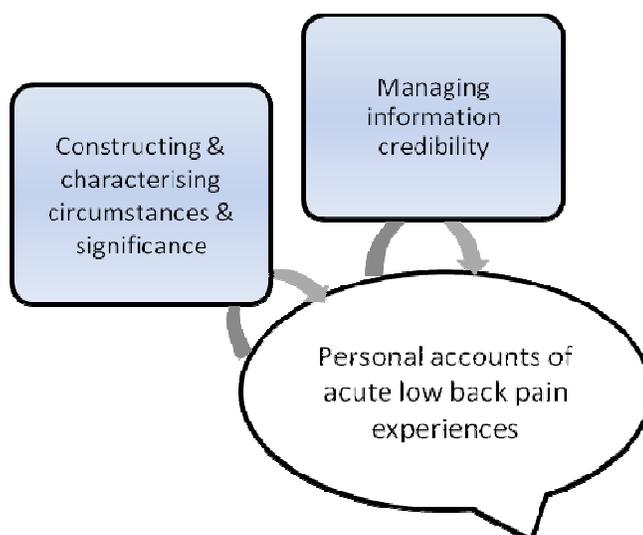


Figure 16: Managing information credibility

Circumstances as good or bad, recovered or problematic, only gain credibility if the information provided is seen as reliable, trustworthy or persuasive through in its form of delivery.

Participants displayed an awareness of this relationship and its importance, and that not all constructions accomplish an appreciation of circumstances in the same way or to the same degree, or at all. The type of construction that will act as 'information' in the process of achieving another's understanding is not set, but is linked with the context surrounding the provision and rests on evaluations made by the listener. Descriptions achieved these meanings by drawing on shared understandings of what counts as meaningful for circumstances to be

appreciated as an experience of a personally significant problem or one resolved and therefore no longer a 'problem'. The management of the credibility, reliability and persuasiveness of the accounts offered was a topic of concern as well as an implicit feature which shaped their accounts. Having circumstances appreciated in a certain way rests on both the account and the participant being perceived as credible.

Credibility and persuasive force was found to be accomplished in a combination of ways evident within the accounts. These involved constructing information with a factual, logical and objective nature, the participant as a 'reputable' source, and aesthetic forms which engaged and moved the imagination so as to support an understanding of their acute low back pain circumstance and experiences. This 'evocative' function was entwined with the 'descriptive' function, allowing the characterisation discussed in the previous section to be appreciated as the state of affairs. The following section illustrates how the participants' accounts displayed and constructed these qualities to make what was being described as credible and persuasive. A discussion of these feature in the context of other literature and in relation to issues which become relevant for low back pain research and aspects of physiotherapy practice is provided.

### **5.3.2 Credibility as a topic and a concern**

As professionals, researchers and in society more generally, Main et al. (2008) have commented:

'We still tend to view chronic pain with inherent suspicion and mistrust the chronic pain patient.' (p.405)

The participant's accounts indicated this scepticism of the acute low back pain patient, which was explicitly and implicitly evident in the shaping of accounts to manage issues of information and personal credibility. Judgments of the credibility of information of back pain experiences were a concern expressed and a practice displayed by participants. Jim's remark below implicitly functioned to support his own information credibility and illustrates the 'hearsay' status often attributed to personal back pain information:

*'Now the Orthopaedics has moved on and they can actually measure it, record it on a computer and then get you to do the same thing 3 weeks later. They can actually tell if people are telling the truth or not' (Jim1B153)*

The qualities of 'scientific objectivity' given to the measurement is ascribed an ability to produce 'true' facts (Gilbert and Mulkay 1984). In Jim's comment, the unproblematic and

repeatable ‘reliability’ of observable medical test procedures and results from a ‘verified’ source, was placed against the sceptical nature of ‘unverifiable’ personal assertions (Davis et al. 2007 p.73): *‘if people are telling the truth’*. Information seen as ‘hearsay’ has questionable truth-value because there is no access to the evidence and so this form of information is vulnerable to issues of inaccuracy, dishonesty or self-interest (Willett 1988; Speas 2004).

Feeling judged for the genuine nature of back pain problems was commonly expressed, as seen in Linda’s concern:

*‘I am three, four months down the line and I look perfectly normal. I just feel that people think that I am sort of ‘swinging the lead’.’ (Linda2B36).*

Participants also expressed making judgements of others’ back pain claims:

*‘Some people say- ‘Oh, I have got really bad backache’ and you think- Oh yes, “Backache” (gesturing inverted commas). Until you have actually had back ache you really don’t know.’ (Cathy2 B425)*

The issue of credibility was equally relevant in persuading of recovery, as seen in Brian’s efforts to get permission to return to work:

*‘And also I was determined... So basically, I went round playing one off against the other a little bit... He sort of said ‘Yes if you feel like it.’ - ‘Well, yes, I feel fine now.’... I mentioned it to the physio as well, I pestered her about it, you know, gave her a bit of grief... to convince them I was Ok.’ (Brian 2 B 124)*

The following sections illustrate ways that the participants’ accounts were given qualities that supported the credibility and reliability of their information along with discussion of the relevance for practice and research contexts.

### **5.3.3 Enhancing credibility through ‘facts’, ‘logic’ and ‘objectivity’**

The persuasive force of the information in accounts given ‘factual’, ‘logical’ and ‘objective’ qualities as a form of presentation went largely unnoticed and taken for granted in the unfolding interactions as a ‘credibility’ strategy. The familiarity of this form of presentation of information made the credibility and persuasive effects ‘natural’, suggested by Johnstone (1989 p.142) to reflect an expectation and cultural convention that when being ‘informed’ by talk, it

has these rational, 'quasi-logical' qualities. Talk or text is not automatically 'information' or convincing but is given that character as it is constructed.

The participants' accounts used particular word choices, phrasing and implication to give their information factual, reliable and objective qualities, which supported its credibility and reliability. Angela's account illustrates the creation of a 'factual' nature to her state of affairs:

*'the fact that it has gone on for so long now... It is just frustrating not being there, I just hate knowing that I can't just go back in...'* (Angela 1B44)

The information is prefaced with a with a credibility 'booster': *'the fact that'*. This framing immediately added persuasive force and is argued to 'close down' the opportunity to contest information (White 2003 p.259). Credibility boosting phrases were common in accounts, such as Julia's *'the truth of the matter...'*, Judy's *'quite honestly...'* and Jim's legally styled *'For the record..'*. These phrases assert claims of truthfulness and argue for the factual and reliable status of the information to follow (Davis et al. 2007).

The seemingly mundane structuring of Angela's remark as a 'statement' was also an important way in which participants created 'facts'. Certainty is invested into her remark by the use definite language- *'it has'* (Cassell 1976) . Statements have persuasive force since co-operative communication assumes a person has evidence for the information offered (Allgood 2000). Persuasion rests on the idea that anyone in possession of the 'facts' should come to the same conclusion (Billig 1989). Referring to the back problem as a separate *'it'* also conveyed her problem as 'observed' in a personally unconnected way. This distancing strategy reflects the same 'neutral', 'reliable' and 'unbiased' stance shown to be created through the objective styled 'reports' of scientists (Gilbert and Mulkay 1984; McKinlay and Potter 1987) and academics (Tracy and Cajuzaa 1993). In this instance, Angela's use of detached wording positioned her as a victim of the situation described. This 'fact' was important for ascertaining a situation that wasn't from personal choice. Giving descriptions a factual, objective nature had importance for the entwined function of managing other concerns such as personal character information and for issues of accountability and blame.

#### **5.3.4 Constructing 'narrative' facts using tense and evaluation**

Another taken for granted but important strategy was the use of tenses and evaluations to create a sense of fact, a feature of narrative form and evident Angela's remark: *'it has gone on for so*

*long now*'. A 'history' is constructed through the temporal wording (Schiffrin 1981; Mushin 2000). The workings of implication mean that the entity being evaluated, her back problem, must be assumed to be real for her evaluations and states of mind '*frustration*' and '*hate*' to have meaning (Rubovitz 1999). The wording gives the preceding circumstances a sense of being real, as having happened and still happening in the current context '*now*' (Hyland 2005). The use of past and present tenses implicitly argue that something 'has existed or does exist' and so must be proven otherwise (Shuy 2001 p.443). The combined persuasive power of statements and tenses arises from the certainty and temporality indexed into the information. This increases the resistance to dispute and challenges carry relational implications regarding factual status and recall ability (Guerin 2003). Angela's remark shows another common strategy evident across accounts which involved offering information that was 'vague' where ambiguity is also difficult to challenge (Dines 1980; Zhang 1998).

The persuasive use of 'fact' construction was also evident in participants' written accounts, as seen with David's diary drawing on the 'commonsense' of pain as a warning system:

*I do not spend so much time doing them as I used to. My back tells me when to stop.*  
(David D 11)

David constructs this compliance with his back's instructions as self-evident conduct, therefore justifying his remark about reduced activity. The structure makes the information difficult to challenge without discrediting his understanding and his conduct.

### **5.3.5 Using emotion and mental state description to index information credibility**

In the acute low back pain accounts, the 'authority' of information framed as perceptions and feelings was used to strengthen the credibility of the information. An important factor in the credibility of information concerns the 'source' of information, which includes how information comes to be 'known' (Davis et al. 2007). The framing of information within mental states such as 'I know' and 'I feel' was common and accomplished important credibility work. These stances have 'epistemological' power that indexes certainty and knowledge authority into information (Speas 2004). This is seen with Angela's remark: '*I just hate knowing*', which gave a factual nature to the subsequent assertion '*that I can't just go back in*'. Angela's emotion/mental 'states' of '*frustration*' and '*hate*' possessed similar factual strength as a 'firsthand' perception and impossible to prove as wrong (Willett 1988).

In clinical contexts, patients have been shown to use the authority of personal perception claims to persuade of the authenticity of their information on their symptoms (Peters et al. 1998; Horton-Salway 2001). Gill (1998 p.357) also found that patients asserted this authoritative certainty in claims of symptoms experienced, whereas assertions about causes were tentative. Furthermore, information framed as 'knowing' or 'feeling' is argued to strengthen claims because personal integrity is intimately tied into being the 'source' of this form of information (Sayre-McCord 2007). To challenge the perceptual claims would question the person's honesty or motivations and risk social relations (Guerin 2003). Medical practitioners have reported relational difficulties as a significant issue when challenging information framed as personal perceptions by chronic low back pain patients (Chew-Graham and May 1999).

Within the acute low back pain accounts, the relevance of whether information required persuasive force was seen to influence the indexing of certainty and reliability. In a context where the factual nature of information had increased importance, such as matters of blame or justifying personal conduct then the framing of information within particular 'mental/emotion' states such as '*I know it is*' (Jayne 1B56) or '*I feel worse*' (Neil 2B35) made situations 'factual'. The framing of information in mental or emotion 'state' claims was also used to adapt certainty, seen with the differences appreciated in 'knowing', 'feeling', 'believing' or 'wondering'. As suggested by Edwards (2006 p41), the situated context significantly influenced the meanings that mental or emotion related words produced and the 'interactional business' accomplished. The role of these states of 'mind' to temper the authority indexed into information is discussed further in section 5.4.6 for the relationship to social relational issues.

### **5.3.6 Enhancing persuasion by providing detailed contextual information**

Providing detailed context formats also functioned to enhance the credibility and 'factual' nature of participants' information, as seen in Cathy's justification for remaining off work:

*'It is not like a normal nursing home really, where you have a cook. We also take turns in going shopping so you are talking 15, sometimes 30 carrier bags, but we have to push that trolley around Tesco's. You have to pack the van up with it. You have to carry it. Put it all away and then start cooking. Same with all the housework it is divided up, like, you are hoovering or you are dusting or you are...so bending over the baths, bending down in the showers, cleaning their bedrooms...So, it is hard really.'* (Cathy2 B177)

Cathy's provision of detail and 'context' for her decision to remain off work powerfully convinced that her work duties were *'not like a normal nursing home'* and held risks for re-injury. The offer of detail and being explicit suggests qualities of honesty and transparency which link with persuasion (O'Keefe 1998). Detailed and graphic depictions also support the reliability of information through a sense of authority, accuracy and depth of knowledge (Potter and Edwards 1990). Detail also enhances the opportunity for personal resonance and a more detail impression, and therefore a stronger understanding (Petraglia 2009). In a study exploring the experience of completing a battery of low back pain questionnaires, Ong et al.(2006b p.86) found that patients expressed a need 'to explain themselves more fully by, for example, giving information about social or historical context'. In medical encounters, Stivers and Heritage (2001) also found that patients volunteered 'expansions' beyond the original questions asked. The provision of detail is considered important for convincing of situations and as adequate context to support the right meanings to be ascertained (Guerin 2003).

### **5.3.7 Enhancing persuasion by incorporating authoritative and independent sources**

Throughout the participants' account, their information incorporated medical terminology and 'authoritative' or 'independent' sources in the process of conveying their experiences. Information that has an 'authoritative' nature is more likely to be seen as reliable (Speas 2004). David's explanation of the cause of his back problem illustrates this feature:

*'It is all the nerve endings. I know more about...because I've been on the Net.'* (David1B238)

Persuasive force is created by the 'informed' nature of the medical terminology and strengthened by the logical argument offered, resting on the 'self-evident' reliability of his source: *'because I've been on the Net'* (Mintz 1992; Fleischman 1999).

Julia's offer of a rationale includes a combination of strategies to create persuasive and credible information:

*'If your pelvis is out of alignment, and I don't fully understand the mechanics there, then surely it is going to put strain on some areas and, you know, all the rest of it.'* (Julia 1B66)

The 'if/then' structure portrayed 'logic' and reasoning, which is characteristic of the persuasive force underpinning scientific 'cause/effect' rationales (Hilton 1990). Julia inserted a disclaimer to mitigate inaccuracy as the 'reporter' of the professional information: *'I don't fully understand*

*the mechanics*'. The use of a 'general list completer' of *'all the rest of it'* persuades by giving the impression of telling more than it actually does (Dines 1980; Overstreet and Yule 2002).

Incorporating 'independent' evidence through descriptions of the actions, beliefs and dialogue of others was another persuasive strategy. This strategy is seen as Peter offers a substantiating remark of a shared experience which implicitly builds credibility:

*'He was really bad too so he knows what I am going through.'* (Peter1B194)

Kim's descriptions of 'family help' functioned in a similar way by implication:

*'(my family's) help has been really, really good, really good'.* (Kim 1B121)

Corroboration was also accomplished by describing or 'recounting' GP responses and dialogue:

*'I've been to my GP and he keeps signing me off and he's not happy with my back.'*  
(Angela2B6)

*'He has been great, ringing me sometimes saying "Do you need another week off?" or he has just, like he says "Just ring up don't make an appointment, just say you need another week off and that I will get it ready for you.'* (Cathy1B154)

Presenting information as the concerns of doctors and recounting their offers of support constructed authoritative 'testimony' to personal circumstances and conduct. Edwards and Potter (1992) have suggested that information in this form creates independent expert 'evidence' that has the impression of being unbiased and objective. Persuasive power rests on the 'self-evident' authority of the institution of medicine (Matoeasian 2005). Proving inaccuracy is difficult and challenging this information could imply false recall or dishonesty (Guerin 2003). Reported dialogue has inherent persuasive power in its sense as a report of the past being recounted in the present (Mayes 1990). Despite a 'verbatim' appearance, the wording is argued to be a re-construction shaped to support the speaker's current interactional concerns (Alvarez-Caccamo 1996; Koven 2001; Tannen 2007). This flexible strategy was a way to present information with inherent persuasive force was common across the acute low back pain accounts.

In relation to physiotherapy practice, the shaping of accounts to have a credible and reliable nature is important when considering what is appropriate to extrapolate from hearing acute low back pain accounts. For example, 'solicitous' family relationships feature in back pain literature

as an unhelpful factor perpetuating chronic pain and disability (Main et al. 2008). However, descriptions that are functioning in the interaction to support the credibility of situations may be misconstrued as a 'risk factor'. The interpretation of patients' information at only a 'content' level may not give adequate consideration to the complex nature of the information in accounts from a social interactional viewpoint, especially in encounters where sanctions for care may depend on 'credible' circumstances.

The feature of constructing 'factual', 'certain' and 'objective' forms of information to enhance its credibility and sense of reliability reflects the persuasive strategy in Aristotelian Rhetoric of 'logos' (translated as 'words'), which refers to using logic, reasoning and evidence to strengthen information (Neel 1994). There has also been mention above of how the reliability of the 'source' was tied into the persuasive qualities of information (Jayyusi 2007). Reinforcing personal reliability as either the 'source' or 'reporter' of information was strongly evident within participants' accounts and this feature is now illustrated and discussed.

### **5.3.8 Enhancing persuasion by conveying personal reliability**

The participants' accounts evidenced that when information is difficult to prove then attention may shift to the reliability and motivations of the person providing the information (Sayre-McCord 2007). A strong feature shaping the accounts involved the incorporation of information and displays of conduct which functioned to enhance a participant's personal reliability and credibility as the 'source' or 'reporter' of the information provided. In Aristotelian Rhetoric, this form of appeal is understood as 'ethos', where the reputation or particular qualities in a speaker support the persuasive force of their information (Neel 1994 p.165). The description of personal qualities and behaviours as well as their display during the provision of the accounts illustrated this appeal to 'ethos'. Descriptions of events and situations were often shaped to evidence a personal reliability to make valid evaluations and provide genuine and truthful accounts, as seen with Mandy's description illustrated earlier:

*It was something... I've never had pain like that before. I'm not a person who gives into pain and I don't really stop what I'm doing but I nearly couldn't come in that day.*

*(Mandy1B6)*

Providing information on resilience added an important 'source reliability frame' for hearing the evaluations of the back pain severity (Jayyusi 2007 p.35). Self-descriptions countered

judgements of weakness of character which could diminish the validity of claims, seen as Brian qualified his claim to *'fairly high pain tolerance'* by recounting a hand injury:

*'I have got a great cut across my hand (laughter) and I haven't realised. I haven't felt a thing, you know, things like that.'* (Brian1B294)

Describing such instances presented a participant as someone who would be expected not to exaggerate about a back pain problem.

The reliability as a 'source' of information was also enhanced by the way information was provided. The use of logical and reasoned argument acted as a display of rationality, seen as the virtue of 'practical wisdom' (Fisher 1980; Carey 2004). That one 'ought' to be rational is considered to be a Western socio-cultural concern linking to the idea of appropriate social behaviour, which also includes the way that information 'should' be presented (Johnstone 1989; Driver 2001). The display by participants of qualities such as sincerity and efforts at accuracy also conveyed the possession of 'truth-conducive' personal qualities (Baehr 2007 p.193), illustrated in Jim's account by his rewording of a personal claim:

*'I have got... I believe I have got a very high pain tolerance. And that is not a macho thing, I just compare it to other people.'* (Jim1B125)

Jim's claim of a *'very high pain tolerance'* was downgraded in the moment from presenting a 'fact': *'I have got...'* to a considered opinion: *'I believe I have got a very high pain tolerance.'* Although recasting reduced its 'factual' force, the information remained persuasive since the action demonstrated the respected quality of reflexivity in his account. Conveying virtuous qualities enhances persuasion and 'source' reliability through the increased expectations for sincerity, truthfulness and the reliability of information (Driver 2001).

Other displays of behaviour that supported being seen as truthful and genuine included disclosures of sensitive or personally discrediting information. This was evident earlier with Cathy's confession of doubting others' claims of back pain problems and also in Liz's remark:

*'I have to admit for your study that I'm one of those people [ ] I will think it is cancer or something ..'* (Liz1B172)

Actions of disclosure and intimacy supported credibility by showing the virtue of a commitment to honesty despite potential repercussions (Carey 1994; Baehr 2006). It is suggested that acts of

intimacy are linked with trustworthiness, affiliation and the solidarity created by providing 'private' information and the bonds of secrecy (Richardson, 1988; Laurenceau et al. 1998). Participants' accounts showed an attention to conveying a 'personality which invites belief' (Carey 1994 p.36). The 'subjective' nature of personal experiences is a commonplace understanding but the relevance varies depending on the context (Buttny 1993; Lemke 1995). Establishing a 'believable' personality was understandable in an interview context of unfamiliarity where conditions supporting truthfulness and authenticity were not yet established (Hanks 1996; Speas 2004). Concerns with being a reliable source of information has featured within personal accounts in chronic low back pain and chronic pain contexts (Lillrank 2003; Werner and Malterud 2003; Ong et al. 2006a). Across many other contexts, references to personal qualities and conduct provided an important bargaining stance for supporting the credibility of information when circumstances were not yet established or if disputed, including illness experiences (Heritage and Robinson 2006; Horton-Salway 2004), mental health (Harper 1999), law courts (Maynard 1990), news reports (Jayyusi 2007) and academic institutions (Tracy and Carjuzaa 1993).

In physiotherapy practice, the 'ethos' building efforts and inclusion of this form of information in a clinical assessment context may be perceived as a 'deviation'. However, it can be appreciated that a patient may see this 'additional' information as an important strategy to secure a reputation of being reliable and credible source so their information is seen as genuine. If the detailed contextual information about issues or themselves is considered necessary and important to adequately establish the 'facts' and guide professional understandings for appropriate care, then limitations on the provision of detail could be a source of patient dissatisfaction and frustration. Positive features of professional encounters reported by low back pain patients included adequate time, being listened to and feeling believed (Williams and Calnan 1991; Skelton et al 1996; Osborn and Smith 1998; Walker et al. 1999; Verbeek et al. 2004). Chronic low back pain patients have reported frustration with not being listened to and were more likely to participate in treatments designed 'with considerations of their preferences, circumstances and past exercise experiences' (Slade et al. 2009 p.115). These features are not limited to the context of low back pain and are reported across many illness contexts that link communication and satisfaction (Williams et al. 1998; Werner and Malterud 2003). The value of adequate dialogue and 'credibility' supportive encounters may be reflected in the increased satisfaction expressed with approaches considered to be more 'patient-centred' and which have been associated with

effective rehabilitation from the perspectives of patients and therapists (Stenmar and Nordholm 1994; Gyllensten et al. 1999; Daykin & Richardson 2004; Yardley et al. 2010).

The final way of presenting information to illustrate how accounts were constructed with persuasive force involves the use of aesthetic qualities. These drew on the emotions and imagination to enhance the process through which the participants' information came to be understood. This form of persuasion reflects the third Aristotelian rhetorical strategy of 'pathos', an appeal to the audience's emotions and 'sympathies' (Gross and Walzer 2000 p.193). This form of persuasion had important consequences in the interview interactions. This feature is now illustrated and discussed. Recognising how it functioned and considering its use in the accounts of acute low back pain experiences has implications for understanding patients' accounts in practice.

### **5.3.9 Enhancing persuasion through aesthetic and emotional appeals**

Although logic and credibility often foster agreement, these forms of persuasion are suggested rarely to lead to conviction (Waddell 1990). It was for this reason that Aristotle argued that effective persuasion was the interplay between appeals to logic, speaker credibility and the audience's emotions. This interplay was strongly evident within the participants' accounts and is seen as Linda recounted her initial experience:

*'I was just so uncomfortable. I couldn't... the whole experience, the whole thing. I couldn't move, I could hardly walk, walking was painful, sitting was painful, moving in bed was... I couldn't do it.[Ok] Actually, at night because I wanted to move over, I couldn't move over... Scary!'* (Linda1B34)

Linda's account of incapacity was convincingly conveyed. However, not so much through the severity indicated by the list of widespread impacts. Rather, a combination of aesthetic strategies built an engaging and dramatically powerful and credible picture. The persuasive effect achieved through the performative nature can be appreciated when Linda's description is represented in an alternative transcription style drawn from Gee (1991). It illustrates Richardson's (1990) argument that researchers' representations of participants' accounts matter. 'Performative' in this sense relates to how information provision has an 'aesthetic' form that is less apparent in a play-script representation above and adopted for the thesis. The alternative transcription conveys the aesthetic/poetic elements in Linda's remarks:

*'I was just so uncomfortable.*

*I couldn't...*  
*The whole experience, the whole thing.*  
*I couldn't move, I could hardly walk.*  
*Walking was painful, sitting was painful,*  
*Moving in bed was... I couldn't do it.*  
*[Ok]*  
*Actually at night because I wanted to move over,*  
*I couldn't move over*  
*...Scary!'* *(Linda 1B34)*

In this presentational format, it is possible to see that an appreciation of the situation was enhanced through the vision of the scene and the emotional appeal created (Johnstone 2008). With each unfolding utterance, Linda's efforts are imagined then halted as each activity was repeatedly thwarted by the pain. This effect is seen in the dramatic emphasis created with repeated use of '*I couldn't*,' '*I could hardly*,' '*I couldn't*,' '*Walking was painful, sitting was painful*' and '*the whole experience, the whole thing*'. The words and the images built an overpowering situation of difficulty. The descriptions persuaded, not through the number of impacts evidencing 'reliability' but by an encouragement to share a point of view on a situation of suffering and unfairness (Tannen 2007). As Linda's description continued, the extent and force of the denial continued, even '*at night*' and then the account was emotively punctuated with '*Scary!*' Providing information of acute low back pain experiences in this way was common across the participants' accounts and displays the effects described by Johnstone (1989 p.147), where 'presentational' forms persuade by emotionally moving the audience: 'like being swept by a rhythmic flow of words and sounds in the way people are swept along by poetry'.

The incorporation of imagery and aesthetic sound devices created by listing, alliteration, rhyming and repetition is argued to compliment listening involvement (Chafe 1982; Tannen 2007). Involvement relates to the social aspect of information concerning the level of intimacy, attention and engagement in the process of telling and with what is being said. Involvement is suggested to encourage the audience to go a step further in the type of understanding reached, to adopt the same stance on ideas rather than just seeing the information as correct, valid and believable (Cacioppo and Petty 1989; Johnson and Eagly 1989).

As mentioned earlier with Brian's 'extreme case' descriptions, such as '*totally frightening*' and '*totally worried for the first time in my life*' to characterise his experience in section 5.2.3.

Linda's description also illustrates this engaging persuasion device: 'so uncomfortable', 'I couldn't', 'the whole thing', 'couldn't move', 'couldn't do it' and later:

*'Scary! Because you think- 'Oh God! I've got to work, how am I ever going to work?'*  
(Linda 1B35)

Extreme case formulations are accepted as a means of intensification rather than being taken literally and as an exaggeration (Pomerantz 1986; Beach 1996; Edwards 2000). McCarthy and Carter (2004 p.170) found that this 'up-scaling of reality' was a common feature in conversation data. Stenvall (2008 p.1577) shows how journalism uses the interpersonal character of wording. In particular, 'fear' and its powerful negativity is considered more 'newsworthy' than any other emotion (Harcup and O'Neill 2001; Stenvall 2008). Reflecting the news strategies, the participants' descriptions of fear, distress and related emotions in their descriptions draw on the same interpersonal power for engaging an audience.

Like Linda's description, the participants' accounts were reflecting the feature understood in Aristotelian rhetoric as 'pathos', appealing to the 'sympathies and imagination' of an audience through their emotions, own experiences, senses of identity and their self-interests (Neel 1994). It is understood that this approach enhances persuasion by creating moods and feelings in a listener. Understanding and agreement comes from emotionally appreciating the tragedy or pleasure, creating resonance and identification, and building affiliation that encourages the same viewpoint. There is also a subtle relationship between evoking of emotions and persuasion since the information must appear genuine to be persuasive (Campbell and Kirmani 2008).

Finally, participants' accounts drew on aesthetic persuasion in other ways, seen as Jayne manipulates a numerical score to be more evocative:

*'... I have this burning pain down there that is copeable, you know, maybe on a pain score of 0 to 10, it's about 3[Right]But the acute pain when you move badly, um, is probably 12 out of 10, that's how terrible really.'* (Jayne1B46)

In clinical practice, the offer of an exaggerated rating above the "worst pain ever" designation of "10 out of 10" is familiar to most clinicians when verbally using a Visual Analogue Scale (VAS) (Carlesson 1983). Jayne's verbal flouting of the VAS score '12 out of 10' produces a more persuasive indexing of the nature of the 'acute' pain experienced.

A marked line on a scale and a verbal description can be seen as evaluations which by their nature cannot converge to represent the same entity. A verbal account ‘constructs’ the nature of the acute low back pain experience and its relevant qualities for the context of the telling. In contrast, the VAS tool imposes the quality being measured, for example how ‘bad’, ‘strong’ or ‘bothersome’ and often in a decontextualised frame. The score is assumed to be an ‘objective’ and representative measure. In physiotherapy practice and research, a mark on a line may achieve little to capture the meaning of acute low back pain. Ironically, flouting the ‘scientific objectivity’ of the VAS helped Jayne achieve her emphasis.

To a lesser degree, the written accounts also showed aesthetic qualities and engaging language, as illustrated previously in section 5.2.3, as well as through punctuation and visually expressive strategies such as drawing facial expressions. Kreuz et al. (1998 p.94) found the use of exaggeration (hyperbole) in oral information performed important and accepted social functions including persuasion and emphasis. Deliberate exaggeration within oral information made greater impacts and was more accurately recalled. Of interest, the same exaggeration in written information was judged as nonsensical and inappropriate. The difference in linguistic style between the interview and written accounts of participants’ experiences is likely to reflect the conventions attached to the different information formats.

In a physiotherapy practice context, the difference in the way oral and written languages function and how meanings are derived is an important consideration since interpretations of patients’ situations are often developed from oral and written tools. The participants’ interview and written accounts reflect theories arguing that oral and written forms are two different ‘languages’ with different meaning-generating conventions (Chafe 1982; Jahandarie 1999; Tannen 2007). Applying the same assumptions when interpreting the different forms of expression may be consequential for physiotherapy research and practice and may create misunderstandings of phenomena. Different interactive accomplishments seen in oral and written mediums may have importance for the conversion of experiences of back pain problems into written self-report outcome measures and for their subsequent interpretation. The selection of high scores in de-contextualised self report outcome measures may function in ways not recognised in current assumptions about the meanings attributed to the scores.

This feature may explain discrepancies consistently noted in comparisons of verbal reports and outcome measures in written form (Mallinson 2002; Campbell et al. 2003; Paterson 2004; Ong

et al. 2006b). Efforts persist to develop 'reliable' and 'valid' written self-report measures that adequately match patients' verbalised experiences of back pain and recovery (Brown et al. 2007; Hush et al. 2009; Mullis et al. 2009) and with chronic pain more generally (Turk et al. 2008; Vowles and McCracken 2008; Sandborgh et al. 2008; Thorne and Morley 2009). Written scores may reflect efforts to impart emphasis and importance or manage how an answer might reflect on personal credibility or character with the lack of opportunity to manage interpretive contexts. The importance of providing context when patients complete outcome scores has been shown (Ong et al. 2006a) and was echoed within the accounts of acute low back pain problems. This indicates important considerations for the use and interpretation of self-report scales. Whether oral or written, the use of more intensely indexed negativity in their descriptions was a powerful strategy to incite an appreciation of their situations.

Furthermore, information presented in logical, evidenced and sequential formats is argued to be given greater value and respect in Western cultures (Scollon and Scollon 1981; Johnstone 1989). Physiotherapists have been shown to judge other styles of information provision by patients as irrelevant, incoherent, irrational, evasive, or emotional, with the patients labelled as 'difficult' and causing barriers to effective care (Potter et al. 2003 p.57). In medical contexts, Roberts et al. (2003) found that if patients reversed the expected cultural norms by talking about emotional dimensions before physical symptoms then this order resulted in the patients being labelled as 'anxious'. This contrasts with research on other cultures where greater value is placed on aesthetic and figurative styles of information or providing analogies to argue a point (Johnstone 1989; Kleef et al. 2004). In non-western cultures, information has been considered more persuasive in formats that make emotional appeals, express feelings about situations, or emphasise the social relations involved and the ethics required of the other person's status, duty and responsibility (Brett and Gelfand 2006).

The significant influence of culture and the assumptions it embeds concerning appropriate communication practices is important for understanding the aesthetic features within the participants' accounts and within physiotherapy practice contexts. It is possible to see that experiences of dissatisfaction, miscommunication, and relational misunderstandings within physiotherapy encounters may arise from discrepancies in what is considered appropriate or valued as ways to present or receive information. This issue is evident in research on the

difficulties in providing care to patients from other cultures (Jaggi & Blithell 1995; Kleinman et al. 2006; Sze-Mun Lee et al. 2006).

In physiotherapy contexts, it would be expected that the credibility features evident in the participants accounts would arise in patients' accounts to encourage practitioners to reach appropriate understandings, and as has been evidenced in other health professional research. This effort may be impeded by consultations that are time-constrained or vulnerable to the institutional power to interrupt, dictate turn-taking, topics and end consultations. In medical encounters, Mishler (1984) and Robinson (2003) highlight the influential constraints on patients' accounts that result from medical practitioners' interruptions. Talk-limiting strategies and biomedical agendas have also been shown to influence interactions in physiotherapy encounters (Trede 2000; Green et al. 2008) and medical encounters (Marvel et al. 1999). Of interest, Stivers and Heritage (2001 p.151) found that patients countered the restrictive structure of medical interactions by giving 'expanded' answers and 'volunteering more information than was asked for'. In physiotherapy texts, improving skills to 'control and structure the information gathering' process underpins approaches to improve assessment interviews (Goldingay 2006 p.79). In 'history taking' procedures, physiotherapists have been encouraged to ensure the sources and methods used avoid collecting 'unreliable' data (Refshauge et al. 2004 p.115). It is understandable that patients may be viewed as 'difficult' and 'resisting' such efforts to control interactions to gain what is professionally considered as 'reliable' data. A possible conflict may occur in what physiotherapists are taught to value as 'reliable' against what patients may perceive is required in their information to enhance credibility and an accurate appreciation of their problem.

In research on physiotherapy practitioners' management of low back pain patients, the inclusion of personal stories and expressive information was found to be ill-fitting with the technical, objective approaches observed in practice (Trede and Higgs 2003; Trede 2007; Daykin and Richardson 2004). Patients labelled by physiotherapists as 'difficult' have been seen as 'poor historians' and 'overtalkative' (Potter et al. 2003a p.57). A study of clinical encounters found that physiotherapists dominated interactions, spending more than twice as much time talking than the patient and where the physiotherapists' activities were described as 'taking a history' and 'giving advice' (Roberts et al. 2007). In contrast, Thornquist (2008 p.174) found that an experienced physiotherapist had encouraged the provision of context and what the patient

'thinks is significant', and that displays of acceptance validated and confirmed that both the patient's experience and opinion was important. The therapist was suggested to have operated across the examination in a way that had not placed any 'hierarchy' on types of information, whether verbal or physical (Thornquist 2008 p.180).

An understanding of the functions of aesthetic forms of information suggests it is important in practice contexts to consider the consequences of how this form of information becomes interpreted, especially if a practice ideology values factual, objective, and sequential formats. In physiotherapy practice, the communicative challenges of 'discharging' a patient when recovery is not complete and the disheartening experiences with 'difficult' patients are well described (Potter et al. 2003a; Daykin and Richardson 2004; Wiles et al. 2004). As suggested by Thornquist (2008 p.186), in a clinical context where a patient is seeking care and a physiotherapist is authorised to give it, a patient's attention to being persuasive is understandable and inevitable. A critical perspective would consider this feature, not from the viewpoint of the information format, but in relation to the socio-cultural frames in which physiotherapy encounters operate and that provide the frames for evaluating patients' information. These wider socio-cultural influences and considerations as factors shaping the participants' experiences and the accounts they provided forms the focus of section 5.5.

### **5.3.10 Summary**

Regardless of whether the participants talked of their circumstances, other people, causes for problems, claims of recovery or their personal achievements, the accounts were shaped to construct descriptions with persuasive qualities of various kinds. With a lack of personal familiarity and shared background knowledge of their personal circumstances in the interview context, it is understandable that the credibility of information and of their personal reliability were given attention as participants offered their accounts. Establishing persuasive qualities within their information and of themselves, whether as reliable and rational or aesthetically engaging and affiliative, was an important quality in the nature of their accounts. Explicit and implicit strategies were illustrated and discussed, including the construction of a factual and logical character to information, oneself as a credible and reliable source, and aesthetic features that enhanced persuasion through relational influences. The relationship between the credibility of information and accomplishing appropriate evaluations of circumstances, impacts and significance was also highlighted.

Differences in the way information was presented and the forms of persuasion used in the oral and written accounts were also illustrated and the implications for physiotherapy practice and research discussed concerning the effects and interpretation of accounts. The following section illustrates and discusses how the accounts functioned to convey particular personal qualities and the relationship of these character negotiations to other social concerns when providing an account of an acute low back pain experience.

## 5.4 Conveying personal character and moral integrity

### 5.4.1 Introduction

The previous sections have discussed how participants' accounts were functioning to characterise the nature of their experiences and incorporated various persuasive strategies within the descriptions to manage the credibility of their accounts. It has been shown how participants described not being their 'usual self' as an impact of their experiences and provided information or displayed qualities in accounts which enhanced their personal reputation for being truthful and reliable. However, the claims and displays of personal characteristics and qualities were not just confined to issues of personal change, conduct or credibility. Across the accounts, the participants' descriptions of circumstances, themselves and their conduct were shaped explicitly and implicitly to convey an understanding of their personal characteristics and moral integrity, as illustrated in Figure 17).

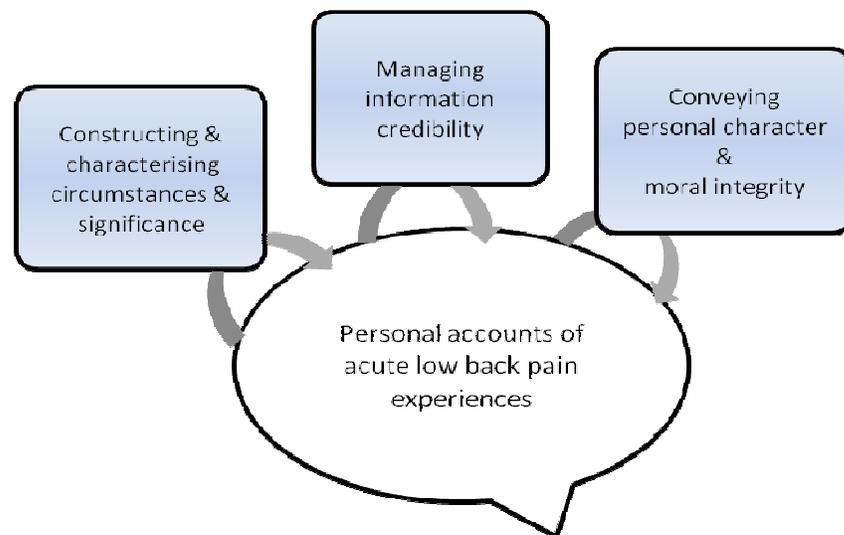


Figure 17: Conveying personal character and moral integrity

Within the accounts, participants conveyed, resisted and challenged particular personal and moral characteristics conferred on them by possible views of their circumstances, by others within their experiences and within the interview interactions. The concept of integrity concerns the sense of consistency and coherence between personal actions and values, and 'moral' integrity relates this concern to socially shared concepts of what is 'right' and 'should' be done (Dunn 2008 p.103). The following section illustrates and discusses the way that the accounts

were shaped to convey personal characteristics and moral integrity within the descriptions of their acute low back pain experiences.

#### 5.4.2 Conveying personal characteristics

As discussed, a significant feature of the participants' accounts was the incorporation of information on personal characteristics that was integral to providing context and managing impressions of their circumstances and conduct (Goffman 1959; Schlenker et al. 2009). The following excerpts illustrate some of the more explicit ways in which personal qualities were conveyed:

*'I'm such a doer and a goer, I don't stop really' (Jayne1B148)*

*'I don't like taking tablets and am very much a "paracetamol" sort of person' (Mandy1B119)*

*'I'm a workaholic, definitely a workaholic' (Jim1B186)*

Self-descriptions of positive personal qualities were common, as seen with *'I'm such a doer and a goer'* and *'I'm a workaholic'*. Character qualities were also implied, such as the temperance and propriety conveyed by *'a "paracetamol" sort of person'*. Descriptions of personal conduct also portrayed socially admired and morally virtuous personal qualities: *'I don't stop really'* and *'I don't like taking tablets'*.

Ascribing personal qualities and a particular 'identity' was also accomplished by constructing similarity or difference to others. This feature is illustrated in Denise's remarks, as her possession of particular qualities was implied by describing qualities in others with persistent problems. In the context of being *'virtually better'*, Denise attributed recovery to personality issues:

*'I think, this is going to sound dreadful, I feel as if they are not particularly strong people. I feel as if they are weak, people that are quite needy. The personality of people that I can think of, that I have worked with, they are what I call a 'flaky' personality.'* (Denise1B170)

By implication, the remarks accredited Denise with a personal character opposite to being *'weak'*, *'needy'* or *'flaky'*. Consequently, the personal characteristics of strength, independence and resilience were given credit for enhancing recovery, self-evidenced by having continued to work through the problem. Accompanying credibility work is seen as the argument was strengthened by offering evidence of a direct experience: *'people that I can think of'*.

Comparisons were used flexibly, seen as Liz identifies herself as a worrier but ‘normality’ was conveyed by creating similarity and grouping herself with others:

*‘I am one of these people that, if I have got something wrong with me, I will think it is cancer.’ (Liz1B172)*

The behaviour accompanying the delivery of information as well as deflecting a question or remaining silent also conveyed impressions of personal character. Within social interactions, not only words but conduct is evaluated and becomes construed as personal characteristics (Schlenker et al. 2001). The accounts showed the use of these conventions to convey information about themselves. For example, personal characteristics were displayed through the stances taken on issues and can be seen in Jill’s account recounting the purchase of a heatpack:

*‘Please don’t get the wrong idea, but [ ] I said I need some heat pads. [ ]. He said- “Do you realise how expensive they are?” and I said something like- “Do you realise what it is like to have fist in the face?!” [ ] I said- “Don’t even go there, I want the expensive ones. The other ones you had to put on over clothes or something, I am going to ruin my clothes. The others work, if I know they work I am going to have them”.’ (Jill 1B234)*

Displaying a stance within information or describing personal conduct in accounts functioned to convey particular personal characteristics. The display of defiance as Cathy exerted self-worth and the demand for respect of her value as a person can be seen within the exchange of dialogue she had reconstructed. A similar display was seen in Brian’s cunning to persuade of his fitness for work in section 5.3.2. Through their information and its delivery, participants created impressions of the type of person they were.

Personal character was a feature conveyed within all accounts and evident as direct claims, portrayed in the stances taken on issues and in the type of information expressed. It can be seen how the information provided and the way it was provided were resources for the participants to assert their identity. Displays of personal character and identity are argued to have important relational functions for establishing or maintaining social relationships as well as for contributing to personal and social esteem (Goffman 1969; Schlenker 1980; Harré and Langenhove 1999; Baumeister and Wilson 1996; Benwell and Stokoe 2006; Watson 2008).

Importantly, Drew (1998) has highlighted that a person’s motives for conveying particular personal characterisations need to be evaluated as innocent otherwise the efforts will be seen as

contrived, self-serving and personally discrediting. Both Jill and Denise displayed this concern and managed evaluations of impropriety by their initial remarks: *'please don't get the wrong idea'* and *'this is going to sound dreadful'*. The prefacing remarks helped avert discrediting impressions of their personal character (Fraser 1990). The remarks suggested that the pending information was not improper but necessary and *'reluctantly arrived at'* (Edwards 2005 p.4).

The management of personal character evaluations by managing social transgressions was strongly evident within participants' accounts. Constructions of personal character and managing issues of propriety and moral integrity were evident across participants' accounts, reflecting findings in medical, therapy and organisation encounters (Edwards 1995; Gill 1998; Watson 2008) and in personal accounts of depression (La France and Stoppard 2005). The feature is also evident across other contexts including scientists' accounts (Gilbert and Mulkey 1984; Lee and Roth 2004). Enfield (2006) has suggested that the common ground accomplished by displays of the kind of person someone is and the information on personal character is an investment that looks ahead to the future to build and maintain an interpretative frame for ensuing information and for shoring up the social relationship. In addition to the abilities and capabilities conveyed as personal characteristics, the integral feature of maintaining impressions of moral integrity within participants' accounts is now illustrated and discussed

### **5.4.3 Conveying moral integrity within discrediting information**

Of interest, participants did not always present themselves in a positive light. On occasions, participants portrayed aspects of themselves or their conduct in a negative way. What was interesting is that when personal failings or discrediting personal qualities were described, the information was still shaped to convey their moral integrity. This feature is illustrated as Julia recounted her lack of success with exercising that always seemed to end in failure. Yet, in describing the lack of capability that was a potential discredit, her remarks incorporated other virtuous personal qualities:

*'I have always been competitive and I thought- Well, I don't do myself any favours really. I don't really relax. I am constantly pushing myself, do this, do that, do this better. So, when I do yoga it is like, do better, do it like she is doing it, you know, do it properly. Then you lose touch with what your body is saying to you.'* (Julia 1B49)

In this context, the *'competitive'* quality was conveyed as detrimental and a reason for the failure of her attempts at exercise. However, although Julia's remark attributed personal blame for the

circumstances described, the conduct as a result of the ‘competitiveness’ was given virtuous intentions which were personally crediting: ‘*constantly pushing myself*’, ‘*do better*’ ‘*do it properly*’ (Driver 2001).

Providing information in ways that conveyed moral integrity despite describing failures in personal conduct featured across participants’ accounts and Brian’s interview and written accounts provide various illustrations. Firstly, in blaming himself for a setback from his own actions, Brian reported a detrimental change in his personal qualities. This started with a characterisation of his qualities before the acute low back pain problem:

*‘I probably ain’t the brightest bloke in town so that’s it, I mean, brute force and ignorance. This is part of the problem see. That is my main sort of selling point.’ (Brian1B187)*

Although ‘*ignorance*’ is potentially discrediting, the idea that intelligence is a trait someone is born with and the misfortune of not being ‘*the brightest bloke in town*’ enhances compassion, even pity (Greenspan 2001). Cassell (2004 p.438) suggests knowing more about someone and their ‘*frailties*’ is more likely to enhance compassionate responses to their personal difficulties and participants’ provision of character information functioned in this way. Across Brian’s two interviews, descriptions of various interactions, events, jobs, activities and personal conduct portrayed the possession of particular personal characteristics with which he identified himself. The following excerpts illustrate some instances within his accounts:

*‘It is nice to have that feeling of, you know, being untouchable. I loved (that).’ (1B538)*

*‘That feeling of invincibility....oh, don’t worry, what ever comes up I can do it, you know. Whatever job the agency throws I think- yes, I will be there. I will cycle down there and cycle back’.(1B605)*

*‘I don’t panic at all. I mean, a little while back I was riding a motorbike with no brakes at all hardly.’ (2B12)*

*‘I was always.....you know I have done mountain climbing and all that.’ (2B120)*

Brian’s descriptions constructed a previously capable, rational and courageous identity: ‘being untouchable. I loved that.’, ‘invincibility’, ‘what ever comes up I can do it’, ‘I don’t panic at all’ and ‘always [ ]done mountain climbing’. However, the personal capabilities and confidence afforded by these personal qualities were seen as lost to a revised ‘identity’ of wariness and self-mistrust. His ‘invincibility had been dispelled to leave a ‘normal’ vulnerability requiring caution:

*'You know, I am now just like the rest of the lads, I am prone to getting, you know, my back could go at any moment.'* (Brian2B542)

Like the lack of intelligence, the description of a personal weakness could be personally discrediting. However, Brian's account reflects the common feature where participants' descriptions of incapability were accompanied by the portrayal of virtuous intentions. Conveying the 'right' intentions was touched on earlier accompanying the characterisation of back problems such as Linda's loss of her 'usual self' in section 5.2.5, and displayed in the management of personal credibility as Liz admitted difficulties remaining positive in section 5.3.8. Brian's interview and written accounts continue to provide examples of this feature:

*'I'll have a go. I mean, to a certain extent now I try not to be totally...try not to push myself, you know'* (Brian2B734)

*24 November- Not so eager to dive in and do all the lifting for people. Making sure we all do our fair share these days.* (Brian Diary2/ 7)

Despite the descriptions of constrained efforts, his personal integrity and ethical conduct were reinforced within Brian's remarks: *'I'll have a go'* and *'making sure we all do our fair share'*. These assertions countered ascriptions of fear, laziness or unwillingness. In a final illustration, Brian's written account also featured moral integrity work embedded within descriptions of conduct that breached what might be socially expected or valued:

*20 September-: Worried about distance out of comfort zone so took a taxi. Unfortunate tension meant had to take tablet early. Successful but felt like it cheated so added on a bit extra comfort zone walking.* (Brian Diary1/32)

The diary excerpt shows the morally infused descriptions of Brian's circumstances which displays remorse for a failure in conduct (Bergmann 1998): *'had to take tablet early'*, *'successful but felt like it cheated'*, and *'added on a bit extra'*. Within philosophical discussions of personal morality, Driver (2001) argues that virtuous intentions and conducting oneself in the right spirit are key to possessing a good moral character. Participants' accounts showed a practical display of this theoretical view. Presenting information in ways that constructed respected intentions implicitly argued against evaluations that may see personal incapacity, work absences or expressions of caution as a lack of moral character. Rather, descriptions of the reduction of personal risk conveyed rationality since there is something 'intuitively out of the

ordinary' to undertake actions that risk doing harm to oneself without good reason (Copp 2002 p.91).

Furthermore, virtue theory argues that not all personal characteristics are 'moral' and make a person 'good'. A distinction is argued between 'ability' characteristics, or 'personal excellences', which make someone good at something as opposed to moral characteristics which involve intentions to do the 'right' thing (Baehr 2007 p.456). Reflecting these theoretical distinctions, participants' accounts were able to express failures in personal capability or a loss in 'ability characteristics' however possess 'moral characteristics' and moral integrity by embedding praiseworthy efforts and respected motives within their descriptions.

#### **5.4.4 Conveying, accepting and resisting characteristics**

Although discussed up until now as an accomplishment of the information provided by the participants, a final point to be emphasised concerns the way that personal characteristics and moral integrity were actually 'realised' through a negotiated, subtle process of participants' assertions and their acceptance or challenge. The following exchange from Mark's interview illustrates how socially admirable dispositions were negotiated and established within the unfolding interactions. The exchange developed from my remark that Mark's back pain didn't seem to cause any interference to his activities:

*Carol: It doesn't sound like it stops you doing anything really*

*Mark: It's not just the back, I try and get through things anyway rather than just stopping doing things. I don't really like stopping... I just get bored if I stop doing things so I try and get on and do things.*

*Carol: So, it is very much your nature.*

*Mark: Yes, I think it is really, yes. (Mark1 B123-9)*

Countering my remark, Mark conveyed a disposition of 'resilience' and 'carrying on' as reasons for his continued activities: '*It's not just the back. I try and get through things*'. My next response took his stance, that the reasons for the situation was Mark's character rather than any other circumstances: '*So, it is very much your nature*', which Mark confirmed: '*Yes, I think so, yes.*' The co-constructed nature of his positive personal qualities and my involvement in the personal characterisation are evident. The characterisations were not accomplished solely by the participant providing information. Rather, a process of offering and managing information on

circumstances and themselves concurrently conveyed particular personal qualities and gained validation in the situated moments of the unfolding accounts.

The nuances of the process can be seen in the way Mark's remarks constructed the valued personal characteristics through the power of language. Fiedler and Semin (1996 p.94) emphasise the important qualities of particular words and sentence structures, where certain verbs achieve particular inferences. The attribution of 'effort' arises from the use of '*I try*', which in turn infers positive moral integrity since an 'exertion of will' and 'perseverance' are considered virtuous characteristics (Driver 2001; Peterson and Seligman 2004). Through a different grammatical mechanism, the remark '*I don't [ ] like stopping*' has created an 'enduring' personal quality because no context was given (Fiedler and Semin 1996 p.100).

Mark's claims to 'perseverance' and 'exertion of will' were tightly bound to the context that made them appropriate and positive characteristics within the circumstances conveyed in the moment of telling. Research has found that a person is more likely to give reasons that are related to themselves in positive personal situations and to other factors in negative situations (Nisbett et al 1973; Watson 1982; Malle and Nelson 2003). 'Reasons' provide flexible ways to influence evaluations of personal character and moral integrity (Mills 1940; Scott and Lyman 1968; Semin and Manstead 1983). Mark's account illustrated this influence, where his situation involved a persistent although not worsening problem: '*I don't think it has got any worse really. I just don't think it has got any better*'. As such, 'perseverance' was reasonable and not considered detrimental or discrediting in the context reported. As such, it remained a positive personal quality to claim (Goffman 1959; Schlenker and Pontari 2000).

In describing circumstances and explaining conduct within experiences of acute low back pain, participants' accounts negotiated the ascription of particular personal qualities, not always positive, but always maintaining moral integrity. This feature reflects findings in medical encounters. Patients' accounts have been shown to pre-empt negative impressions of their personal character when reporting a failure to undertake appropriate self-care (Stivers and Heritage 2001). Halkowski (2006 p.111) also found that patients presented problems in ways to convey qualities of a 'reasonable' patient. In another medical context, Heritage and Robinson (2006 p.76) described patients' displays of "troubles resistance" and qualities of fortitude that functioned to support positive personal impressions and their legitimacy in seeking care. The management of personal impressions in the medical encounters parallel the construction and

portrayal of various praiseworthy personal intentions, characteristics and conduct conveyed within the accounts of acute low back pain experiences.

The character constructions within participants' accounts link with the idea that particular qualities are predictive of 'typical' behaviours, and so are influential on the plausibility of circumstances and personal conduct (Wright and Lopez 2005 p.34). In police interrogations, suspects conveyed positive personal qualities and moral dispositions to defend against discrediting accusations (Edwards 2006). The ascription of character traits to suspects shaped how their motives and actions came to be defined and whether their behaviour was seen as normal or deviant. The role played by the evaluation of intentions for how states of affairs and how circumstances become categorised is well recognised in judicial proceedings (Atkinson and Drew 1979; Drew 1992). Malle and Nelson (2003 p.563) have shown that 'moral' or 'immoral' ascriptions to intentions and personal 'motives' have significant consequences in states of affairs under dispute. In contexts such as a person's account of rape, personal characterisations have been shown to be integral to evaluations of circumstances (Wood and Rennie 1994; Anderson and Doherty 2008).

In the contrasting context of trial cross-examinations, Drew (1990) showed how counsels for the defence construct negative personal characterisations to discredit victims and witnesses, and to insinuate personal responsibility. Research has shown how the character of patients, their competence and behaviour have been discredited to validate or explain the failure of biomedical interventions in medical (Silverman 1997) and physiotherapy contexts (Potter et al. 2003a). When managing low back pain, doctors have reported making judgments of credibility, morality and personal motives when evaluating patients' problems (May et al. 2004; Macneela et al. 2010). Character and conduct evaluations are linked with approval or condemnation of patients' situations and responses such as empathy, compassion, and sanctions for care (Radley and Billig 1996; Cassell 2004; May et al. 2004). Mirroring this finding, chronic back pain patients described orientating to evaluations of their personal character (Holloway et al. 2000; Ong et al. 2004; Campbell and Cramb 2008; Vroman et al. 2009). The feature of personal evaluation appears extensively in research on chronic pain and illness (Pollock 1993; Charmaz 1999; Horton-Salway 2001; Werner et al. 2004; Townsend et al. 2006), multiple sclerosis (Robinson 1990; Riessman 2003), cancer (Wilkinson and Kitzinger 2000), menopause (Stephens and Breheny 2008) and diabetes (Broom and Whittaker 2004; Peel et al. 2005).

In addition, efforts to portray personal character are likely to contribute to the content of ‘expansions beyond the question’ reported in medical encounters (Stivers and Heritage 2001). The participants’ accounts of acute low back pain experiences reflected a similar concern to manage their evaluation by portraying admired and respected personal characteristics. The addition of this context is suggested to significantly enrich and influence the meaning taken from things that are said (Enfield 2009).

In physiotherapy practice, the findings would suggest that personal character constructions would form part of patients’ accounts and their efforts to manage interpretations of circumstances and themselves. The influence of personal character evaluations in shaping how a state of affairs becomes perceived is seen across research contexts and within different institutional and social practices (Schlenker et al. 2009). Within circumstances of acute low back pain problems, the relevance of others’ adjudication, such as qualifying for treatment interventions, work fitness or financial support, from both health care policy and practice perspectives is strongly evident (Radley and Billig 1996; Chou et al. 2007; NICE 2009; DWP 2010). As such, it is possible to see the important role played by the participants’ construction of information to convey positive moral qualities. As argued by Bensing (2000 p.18), acknowledging efforts such as these may help bridge the gap between clinical science and the patient to create an evidence-based ‘patient-centred medicine’.

#### **5.4.5 Summary**

The findings in this section have illustrated how personal character and moral integrity were conveyed and interactionally achieved within the participants’ accounts. Information on or displays of personal qualities and moral integrity served as context for interpreting circumstances, persuading of credibility and managing evaluations of responsibility for personal situations and conduct. Like the issues of ‘significance’ and ‘credibility’, the shaping of accounts to convey personal character and moral integrity showed a relationship with considerations provided by social evaluation as to what counts as good or bad and right or wrong. As mentioned within the previous sections, participant’ accounts displayed an orientation to and management of wider socio-cultural influences and considerations of what is appropriate and right. The next section illustrates and discusses this significant influence on the shape of the acute low back pain accounts.

## 5.5 Orientating to socio-cultural knowledge and social considerations

### 5.5.1 Introduction

This section illustrates and discussed ways in which an orientation to socio-cultural knowledge and social considerations influenced the accounts provided and the experiences described by the participants. The previous sections brought attention to the way that the participants' accounts were shaped in various ways to characterise the nature of their experiences while also managing issues of credibility, their personal character and moral integrity. As previously touched on, these features were interrelated with wider socio-cultural knowledge, practices, considerations and the various conventions provided for all aspects of social life. Socio-cultural considerations already mentioned have included issues such as what counted as a problem, significance, recovery, credibility or admired or discrediting personal characteristics or conduct. These socio-cultural considerations are shown to be topics raised and dilemmas experiences by participants and displayed as a shaping forces on the acute low back pain experiences described and for how the accounts were provided, as depicted in Figure 18. .

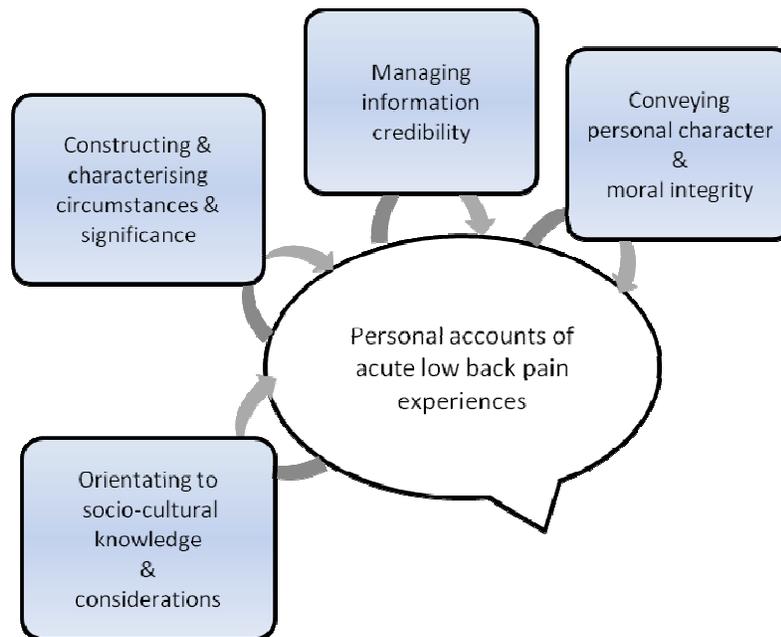


Figure 18: Orientating to socio-cultural knowledge and social considerations

The accompanying discussion addresses the way these entwined influences on the nature of the accounts are significant for the interpretation of accounts of acute low back pain and assumptions about what accounts may be indicating about an individual, their thinking and their situation.

### 5.5.2 Orientating to ‘authoritative knowledge’ and the shaping of experiences

An orientation to ‘authoritative’ sources of knowledge as the way to understand back problems and for providing rationales for personal conduct was strongly evident within the accounts. This orientation was seen to manifest as understandings and consequences concerning right and wrong, and as forces creating appropriate conduct related to issues of accountability, personal responsibility and risk. One influence on participants’ experiences was seen in descriptions drawing on the implicit meanings within back injury terminology. The naturalised relationship given to diagnostic terms and ‘the way of the world is’ (Hall 1997b ) can be seen in Anna’s two interviews and the ‘self-evident’ nature given to her rationales:

*‘It seems to be responding to the treatment so it must be muscular’ (Anna 1B169)*

*‘I suppose I was just lucky that mine was muscular’ (Anna 2B100)*

The use of ‘*muscular*’ reflects an expectation of shared wider knowledge of the healing capabilities implied in different diagnostic terms. The relationship between diagnostic terms, the prognosis encoded in their meanings and the participants’ experiences was displayed across accounts, and is illustrated in Mandy’s comment:

*‘Knowing it was just something kind of muscular, certainly it made me feel more calm about it. [ ] I was worried that I had done something, some damage that was going to take a long time to get better.’ (Mandy1B26)*

The state of ‘*calm*’ described shows the consequences for personal experience from the meanings attached to terminology as a system of knowledge. The contrasting influence of a ‘disc’ diagnosis is seen in Liz’s account:

*‘I was a bit shocked when he said it is disc involvement. I understand that it is very common and once you have had that, it is really bad news so I was a bit unhappy.’ (Liz1B23)*

It is argued that experiences of symptoms and illnesses become inseparable from the socio-cultural understandings that inform their meaning (Kirmayer 2008). Mandy’s ‘*calm*’ and Liz’s ‘*shock*’ show the shaping forces of these understandings on the nature of their personal experiences. When envisaged through a diagnosis, participants’ situations were ‘experienced’ in relation to the socio-cultural meanings that the terms were understood to signify. This influence on experiences from meanings construed from medical terms reflects findings evident in other research contexts (Lakoff and Johnson 1980; Sontag 1991; Burton et al. 1999; Lambert and

Rose 1996; Mabeck and Olesen 1997). Consistent with these findings, there is evidence that the language used by physiotherapists can influence patients' pain experiences (Jeffels and Foster 2003; Barker et al. 2009). As Johnstone (2008) suggests, it is possible to see within the accounts how language formulates the social world we live in and what becomes 'lived' within it.

The self-evident way in which the participants' accounts displayed influential relations between medical terms and their experiences has implications for both the iatrogenic and positive effects of language. Previous research has argued for changing broader socio-cultural understandings associated with back pain (Buchbinder et al. 2001; Buchbinder and Jolley 2005). Improving unhelpful connotations attached to words currently associated with negative outcomes seems an important direction of intervention, such as public education on the positive natural history of 'discs' and 'nerve' injury evidenced by epidemiological studies (Bush et al. 1992; Peul et al. 2007). It has been found that increasing understandings of the positive outcomes from other health problems such as survivorship and normal lives following cancer has significantly improved the patient experience of such problems (Ashing-Giwa et al. 2004; Adams 2005). The findings of this study support the value of public education as strategy for improving personal impacts during low back pain problems. Authoritative knowledge is seen as what counts and is made to appear legitimate, reasonable and grounds for action (Jordan 1991). Across the accounts, various forms of knowledge were ascribed with this 'authority' and the regulation that is imposed. Descriptions of the back pain experiences were pervaded with an attention to determining what was good and bad, right and wrong, and should and shouldn't in situations, thinking and personal responses, as illustrated:

*'You just want to know that you can do this and you shouldn't do that' (Mandy1B99)*

*'I am looking for a professional telling me more, and whether what I am doing is right, or no, you should go back earlier' (Neil1B223)*

*'Even if it is one appointment, they give you some advice and what you should do and what you shouldn't do' (Angela1B139)*

As Jordan (1997) suggests and also evident in the back pain accounts:

*'for any particular domain, several knowledge systems exist, some of which come to carry more weight than others, either because they explain the state of the world better for the purposes at hand or because they are associated with a stronger power base, and usually both' (p.56)*

The weight given to particular sources of back pain knowledge as self-evidently right and appropriate was seen within the accounts. The most commonly referenced or implied source of knowledge for what was right and appropriate was ‘medical/professional’ expertise, with the associated rules, risks and obligations inferred:

*‘You are being given professional advice about things you should be doing, about things you shouldn’t be doing, how much should push with that’ (Denise1B110)*

*‘Sometimes, I have got my partner to really rub it and my physio said he shouldn’t really push it’ (Cathy1B76)*

*‘I went to see him (GP) and he said keep off running and don’t go pounding, you know. He couldn’t tell me how long for though.’ (Liz1B32)*

The participants’ remarks ascribed their sources with the possession of knowledge ‘as to what counts’ (Sargent and Bascope 1997 p.183).

Participants also displayed how the research context was not immune from the authoritative ‘expertise’ attributed to my professional background, as shown in Neil’s diary:

*Carol, from reading through the diary, does anything stand out that I should try and do? (Neil Diary36)*

Other sources were given authority as knowing the ‘rights’ and ‘wrongs’ for back pain problems. The internet, ‘the Net’, was discussed in section 5.3.5 for its use as an ‘authoritative’ and reliable source to support David’s explanation of his back pain. Authority and legitimacy was also given to sources such as books, health and safety advice, newspapers, and others with experience of back pain, for example:

*‘My missus had a bad back and she had a book on it. Sort of bone things and little grissly things in between’ (Brian1B61)*

*‘Well there are things up on the wall that says, you know, don’t over lift and be careful you try to follow’ (Brian2B508)*

*‘I do breaststroke. And someone said after about doing breaststroke because it is a bit better.’ (Liz1B32)*

In relation to the field of medicine, Starr (1982 p.9) suggested that authoritative knowledge 'entails the control of action; in this sense, authority implies the possession of some status, quality or claim that compels trust or obedience'. This trust and obedience is displayed in the remarks above. It is also seen in the participants' orientation to 'good' ergonomics as a system of knowledge, which now has accepted 'cultural authority' and provides the reality for personal actions and back problems (Starr 1982 p.24). The regulation provided for appropriate personal conduct and constraints on actions was conveyed as an accepted and natural guide within all accounts and is seen with Kim's and Linda's remark:

*'I've changed um the chair and I try now, whether it will last but I try to get up slowly and I don't get up and twist all in one go. I think about that and getting into the car as well' (Kim 1B78)*

*'You won't see me bend over now, you'll see me squat.'* (Linda 1B334)

The remarks portray distinctions between personal actions where some are 'right' ways to move to reduce back pain risks. A lack of qualifying information indicates that the meaning of the remarks were self-explanatory (Hanks 1996). Whether systems of knowledge are assumed to be shared or not and, in this case given privilege in the accounts, can be seen from the construction of remarks and the reliance on wider meanings to make sense. Chairs, not twisting or bending and squatting are all meaningful as natural 'shoulds' and 'shouldn'ts' for back problems. The findings in this study reflect findings in a study of accounts of chronic low back pain, where Ong et al. (2004 p.535) described the use of a 'language of low back pain' that incorporated a mix of biomechanical explanations and 'expert' knowledge.

The accounts show how an orientation to 'authoritative' knowledge as a way of understanding and responding to back problems exerted 'experience-making' influences and social forces on the participants' personal conduct (Foucault 1980; Bourdieu 1990, 1991; Jordan 1997). This 'authoritative' influence was a topic in accounts and implied as personal duties and obligations for what was 'right' and 'should' be done concerning back pain. The authoritative forces on personal conduct and the influence on experiences are shown within Cathy's remarks:

*'I am scared of swimming. I can only breaststroke but that is bad for backs. And I have a friend who does massage,[ ] but I am a bit scared whether I would do further damage or not, or try a TENS, I was a bit concerned to buy one and be told you shouldn't be doing that' (Cathy 1B80)*

In a medical context, Starr (1982 p.13-15) has argued that some forms of knowledge become 'cultural knowledge', where 'particular definitions of reality and judgements of value and meaning become seen as reality and true', and that doctors become in charge of the 'facts'. Cathy's description of the constraints illustrate the authority given to professional knowledge, which is privileged over Cathy's own ways of knowing as to whether swimming, TENS or massage may be helpful options: '*I am scared of swimming*', '*scared whether I would do further damage*', '*a bit concerned to buy one*'. An orientation to rules, risks and personal responsibilities provided by the authority invested in systems of knowledge other than the participants' own knowledge was strongly evident. As suggested by Jordan (1997), personal ways of knowing can become devalued and even illegitimate against the social and cultural authority given to other knowledge systems.

As argued by Foucault (1980), the links between privileged knowledge as a naturalised entity or 'discourse', power and the individual can be seen in the authoritative forces and resulting impacts on personal experiences and conduct displayed within the participants' accounts. Hall (1997a p.80) argues that an orientation to the knowledge and conventions privileged in a socio-cultural context as a frame of understanding and for appropriate conduct makes a person subject to its 'meaning, power, and regulations'. This constitutive effect provided by the wider socio-cultural context on personal experiences and accounts was evident.

Similar orientations to authoritative 'back pain' knowledge and the practices conveyed as appropriate are evident within low back pain research across different international populations (Borkan et al. 1995; Walker et al. 1999; May et al. 2000; Ong et al. 2004; Holloway et al. 2007; Crowe et al. 2010). In accounts of back pain within Israeli communities, similar features of right and wrong, appropriate conduct and risks associated with particular actions were identified by the researchers and attributed to 'personal belief systems' (Borkan et al. 1995 p.977). The commonalities evident in personal accounts across populations could be taken as a display of similar 'personal beliefs' about back pain.

However, critical social theory applied to the commonalities would suggest that a particular system of 'back pain' knowledge and language has become a naturalised and widespread socio-cultural force on ways of knowing, responding to and talking about back pain problems (Skelton 1998; May et al. 1999). From a study on 'lay' beliefs, Shaw (2002) argued that individuals' accounts incorporated wider socio-cultural knowledge and the idea of 'lay' beliefs that were a

sole, 'inner' property of the individual and immune from this wider influence was strongly challenged. Radley and Billig (1996 p.221) argue that 'legitimacy' and 'social fitness' will be enhanced by conveying 'medical rationality' and the accepted practices within this view. Discussed earlier in section 5.4.3, the description of compliance with dominant socio-cultural knowledge and practices infers respected personal qualities, such as exercising good ergonomics. Non-compliance can be discrediting or risking penalty in employment or insurance contexts. In a similar argument developed from a historical review of the medical management of low back pain, May et al. (1999) have proposed that:

'we should see expressed symptoms not simply in terms of 'lay understandings' of illness, but more in terms of lay understandings of how to meet the demands of a system of expert knowledge and practice.' (p 533)

The findings of this study support a recognition that 'personal' accounts and the understandings expressed are tied up with socio-cultural influences which provide socially appropriate and naturalised ways of talking about acute low back pain problems.

### **5.5.3 Orientating to 'authoritative knowledge' as an accountability resource**

As Jordan (1997) remarked, systems of knowledge are resources that are given weight because of their ability to explain the state of the world better for the purposes at hand. The ability to 'explain better' was not just a concern for personal understandings but also when offering a description of the 'state of the world' to another. These systems of knowledge and the associated rights, rules and obligations attached were concurrently also resources used to manage impressions of the person, their circumstances, conduct and information. Professional systems of knowledge and the resulting accountabilities evoked have been illustrated but were not universally given weight when participants described and 'explained' their personal conduct. Accounts gave weight and 'authority' to their own or other sources of knowledge as a resource to legitimise personal conduct other or less than might be socially expected. This was seen earlier in David's diary where his back was offered as the legislator of his personal conduct:

*I do not spend so much time doing them as I used to. My back tells me when to stop.*  
(David Diary 11)

Sue also offered a 'personal' knowledge system in the frame of perceptions of pain and awareness of body positions to rationalise and justify a change in her conduct at work:

*If it is hurting then what are you doing is wrong, try and adjust it, and obviously it is one side, the left hand side at the bottom, and if I have been bending over for too long I am going to feel it, so I have just got to adjust' (Sue2B32)*

It is possible to see that broader socio-cultural systems of knowledge, conventions and practices were a strong feature orientated to and shaping the accounts participants offered. However, these forces and considerations were not universally deterministic in what was experienced or provided as information in the participants' accounts. There was a complex play between managing how descriptions of personal circumstances, character and conduct may become interpreted, and a broader context of social and personal accountability against authoritative and normative considerations of good, bad, right, wrong, should and shouldn'ts that may be tied into to reaching those interpretations.

Of particular importance, the participants' accounts displayed perceptions of concrete, certain and precise 'rights' and 'wrongs' for back pain problems. In contrast, tentative, uncertain and inconsistent stances on factors that are right, wrong or a risk are a feature of current low back pain knowledge in academic domains (Blyth et al. 2007; van Tulder et al. 2006b). Koes et al. (2006) have highlighted the limitations in current 'professional' knowledge:

'Non-specific low back pain is defined as symptoms without a clear specific cause – that is low back pain of unknown origin... At present, no reliable and valid classification system exists for most cases of non-specific low back pain. In clinical practice as well as in the literature, non-specific low back pain is usually classified by the duration of the complaints.' (p.1430)

The uncertainty and lack of concrete knowledge have been continually reiterated since early research (Waddell et al. 1984; Nachemson 1992; Waddell 2004; Gatchel et al. 2007). The only claim expressed in language of certainty is 'strong' evidence for a 'recommendation against inactivity' (Hagan et al. 2005 p.546). Unlike the widespread 'should' and 'shouldn't' concerns expressed within the personal accounts, there are no precise directives for personal conduct except abstract recommendations encouraging a gradual return to 'normal activities' and 'self-management' (van Tulder et al. 2006b; Savigny 2009). Conflicting research on 'risks' with particular physical activities or movements is also widely acknowledged (Bigos et al. 1986; Marras et al. 1993; Hoogendoorn et al. 2000; Waddell and Burton 2001). Such professional uncertainty was not reflected in descriptions of professional advice in the participants' accounts.

#### 5.5.4 Orientating to multiple accountabilities

Issues of personal accountability and blame could be seen to have consequences for the shape of participants' accounts and the way that their information was constructed. The management of accountability and personal responsibility was entwined with managing other evaluations of personal circumstances, the nature of problems, personal credibility, and social relational concerns. The accounts also showed how multiple and often conflicting social responsibilities and domains of accountability were present in any one context and surrounded each description offered. Managing these multiple accountabilities was less than straightforward and made evident as personal dilemmas within the accounts. The complexity of this shaping influence on experiences and the accounts provided is seen as Brian expressed an eagerness to return to work:

*'I wanted to.... but I didn't want to go back to work and sort of bugger it up again because, you know, the bosses would just sort of say I told you to come back when you are 100%, and you obviously came back when you weren't 100%.'* (Brian 2B638)

The competing personal responsibilities were made evident. Brian's desire to return to work satisfied a socially expected work ethic. However, the '100% fit' rule made Brian personally blameworthy if a re-injury and further unproductivity occurred. The management of these conflicting issues of accountability and blame can be seen as Brian highlighted the irony:

*'But how do you know when you are 100%, you know? If you are not doing anything, you are going to feel 100% because you are not doing anything (hhh)'* (Brian 2B640)

In the context of the interaction, Brian's use of logic countered his blameworthiness and converted the intention to return to work into the responsible behaviour of determining his work fitness. Julia offered a reflection on the personal difficulty arising from competing responsibilities and efforts to do the right thing, avoid risk, and to know and be seen to be doing what is appropriate:

*'I'm sure what comes out in these transcript is constant conflict... which is exhausting really.'* (Julia 2B277)

Various strategies used to shape understandings of circumstances and personal conduct also managed personal accountability, blame and the risks associated with negative evaluations. Angela's account illustrates the use of a mental state, of 'not knowing' as an explanation that concurrently managed personal accountability for her work absence:

*'I don't know what I'm meant to be doing. I don't want to do anything that is going to make it worse.'* (Angela 1B27)

A potential discredit from a situation that breaches social responsibilities was made rational and justified by the uncertainty of the 'right' thing to do and being responsible to avoid harm. In chronic low back pain research, a 'need to know' was also expressed, especially regarding diagnosis and actions needed to help resolve problems (Osborn 1995; Osborn and Smith 1998; Walker et al. 1999; Glenton 2002; Barker et al. 2009).

Western socio-cultural understandings value 'rationality', where it is considered appropriate and responsible to gain further knowledge before acting (Driver 2005 p.34). Seeking knowledge is seen as important for increasing rational capacity and the ability to enhance well-being (Driver 2005). Claims of insufficient knowledge have been shown to be a common resource drawn on across conversations, media interviews and institutional contexts to manage issues of accountability (Beach and Metzger 1997; Abell and Stokoe 1999; Aijmer 2009). In the acute low back pain accounts, characterising the state of affairs as 'uncertain' and 'needing to know' help situations be appreciated as a problem, as illustrated in section 5.2.2, but concurrently helped manage responsibility and blame when describing situations or deviations from normal or expected conduct.

Reporting negative personal situations such as a lack of improvement or worsening symptoms provides another situation where descriptions were being shaped to manage accompanying concerns of personal accountability. In this instance, it related to an expectation to maintain a 'positive attitude'. Angela's accounts continue to offer an illustration of managing the complexity of multiple social considerations and dilemmas while describing personal circumstances:

*'I am quite a positive person anyway really. I am sitting here whinging about it (hhh) but I am quite a positive person.'* (Angela 1B95)

Accompanying her claim of a positive disposition, Angela acknowledged the contradiction in the display of negativity. The act of reflexivity displayed by the acknowledgement conveyed an 'intellectual virtue' that also counteracted discrediting evaluations (Driver 2000 p.126). Expressions of acknowledgement, regret and remorse are considered 'more credible' than denials or excuses (Cody and Dunn 2000).

A socially accountable situation was also evidenced and counteracted by the embedded laughter (*hhh*), considered a social device to 'repair' announcements of inappropriate behaviour (Pomerantz 1984; Edwards 1995). Wilkinson (2007) found this feature strongly evident in speech therapy interactions where speech efforts were socially inappropriate and personally embarrassing. The dilemma in meeting the expectation of a positive attitude while describing negative situations was evident across accounts. A 'negative' attitude is considered detrimental to recovery and a breach of appropriate social behaviour (Pollock 1993; Frith and Kitzinger 2001). Being construed as '*whinging*' or as pessimistic or complaining can risk personal discredit and averting these social labels reflects a common finding when negative circumstances are expressed (Drew 1998; Wilkinson and Kitzinger 2000).

Later in Angela's accounts, a display of negativity that contradicted claims of a positive disposition was made reasonable by reinforcing her situation as undeserved, unjust and out of her control:

*'It is so frustrating because it is like I'm twenty-one for God's sake! And I'm walking and I'm in pain, it just gets on my nerves.'*(Angela 3B137)

The expression of the mental and emotion states of personal 'frustration' and 'annoyance' constructed a situation of adversity and Angela as a victim of a situation beyond her personal influence. The construction of situations as unjust and underserved has been found in the chronic pain research (McParland et al. 2010). Furthermore, a person cannot be held accountable in a situation that is out of their personal control (Buttny 1993). In addition, it has been found that reasons aligning with 'general' public views of a situation, such as its gravity and moral significance, evoke greater credibility (Foress Bennett 1997). A severe back pain at twenty-one is plausible and credible reason to be negative despite a positive disposition.

In one final excerpt, Angela's account illustrates how participants reinforced a positive attitude and personal efforts in negative situations and defended against evaluations of negative psychological states or mentalities. In this instance, an Occupational Health assessment attributing the persistent problems to a personal confidence issue is strongly countered:

*'It really annoyed me, because she said you are being.. it sounds like it's your confidence that has been knocked a lot and we need to put your confidence back [ ] I don't think I can be any more positive about it, I am trying to do everything that I can'* (Angela 2B157)

The attribution of low confidence placed personal responsibility and blame for the situation onto Angela. The placement of a problem in the personal psychology, attitudes or beliefs or conduct shifts blame to the individual. The moral discredit is argued to have implications for sanctions to care (Bendalov and Williams 1995; Ogden 2004). The effective management of blame can be appreciated as important and consequential in contexts where another's evaluation determines the rights afforded in situations, such as access to treatment or work fitness certification.

The resistance to psychological explanations reflects research findings in chronic low back pain contexts. Lillrank (2003) found that psychological involvement had implications for personal integrity, such as laziness, psychosis and stigma. The personal discredit and stigma experienced with a psychological diagnosis echoes in findings by Holloway et al. (2007) and Slade et al. (2009). In the context of M.E., Horton-Salway (1998) found that patients' accounts disputed 'psychological' explanations by asserting there was a medical 'motive' due to a lack of medical understanding of the illness. The link between personal accountability and blame, and social undesirability and personal discredit in these health contexts mirrors findings in other research contexts. Tracy and Anderson (1999) found that callers for police assistance were 'disassociating' themselves from the problem reported to help qualify for assistance. The accounts of acute low back pain experiences reflect similar efforts to avert the potential discredit and the associated implications if seen to have contributed to their problem.

As discussed in relation to characterising circumstances in section 5.2.3, information credibility in section 5.3.4 and personal integrity in section 5.4.3, whether helping behaviours such as compassion and empathy are evoked depends on the satisfaction of certain moral conditions (Goffman 1959; Cassell 2004; Knobe and Mendlow 2004). Circumstances must be judged as legitimate, underserved and not self-inflicted. Where circumstances are self-inflicted then there should be remorse and regret. This moral evaluation is reported by practitioners managing low back pain patients and is not just a perception of patients (Leavitt et al. 1986; May et al. 2004). The shaping of accounts to concurrently accomplish degrees of significance, credible information and morally virtuous selves not responsible for situations can be seen to be a practical accomplishment of the criteria for evoking compassion and the right to a resolution. The resistance to attributions of cause to personal psychology, mentalities or conduct and the shaping of accounts to counter such interpretations are understandable in contexts where a failure to satisfy evaluations of accountability may jeopardise care and support. The dilemmas

inherent in portraying a personal problem yet managing these requirements is strongly evident in the shaping of the acute low back pain accounts.

### **5.5.5 Orientating to situated accountabilities and producing 'inconsistency'**

In the descriptions of experiences, 'inconsistent' information was evident and could be seen to be an effect of managing varying and often competing accountability concerns within unfolding descriptions. This feature is illustrated in different discussions of the incident of Kim's back injury across her account and the situated accountabilities being managed. In initially describing the injury incident, Kim had '*pulled it with a patient*':

*'I was at work for two days and then she done again, this same patient and, although I was really careful, she grabbed hold of me and so there wasn't much I could do' (Kim 1B9)*

In the unfolding interview, this description portrayed the exercise of personal care and responsible management of the personal risk which placed blame for the injury on being pulled: '*although I was really careful*' and portrays circumstances out of her control: '*there wasn't much I could do*'. However, the injury incident is reintroduced when explaining her absence from work. In this context, Kim positioned herself as incapable of being careful:

*'because obviously, if I had just taken a bit of time and stepped away from everything instead of climbing in, really hands on. I can't just stand there and be like- Oh no, I can't help.'* (Kim 1B115)

In this later interview moment concerning the injury, a willing and helpful personal disposition was blamed for not letting Kim be as careful as she 'should' have been. Her rationale drew on socio-cultural understandings of the 'inevitability' of personal dispositions to influence a person's behaviour (Funder 1991). This alternative 'state of affairs' blamed the injury on an admirable personality trait and work ethic, which countered discredit for contributing to the injury. In this instance, these personal qualities can be appreciated as 'risks' for re-injury which made remaining off work appropriate and responsible conduct. It can be seen that in different interview moments, 'contradictory' states of affairs were conveyed for the 'same' event.

Appreciating the effects of managing multiple and often competing social considerations when providing information makes inconsistency normal and expected. Consistent with research in other contexts, variation, inconsistency and 'contradictions' in the 'state of affairs', personal attitudes, behaviour and dispositions are inevitable when the 'content' of descriptions is taken

out context and compared (Potter and Wetherell 1987; Gough et al. 1997; Stephens et al. 2004). Circumstances, events, selves and personal behaviours portrayed through talk are argued to be 'discursive' rather than any enduring trait, quality or static reality (Harré 1991; Edwards 1997b). This feature reflects findings within accounts on scientific processes (Gilbert and Mulkay 1984), racism (Potter and Wetherell 1987), being single (Reynolds et al. 2007) and personal finance and identity talk (Sonnenberg 2008).

Of interest, research has found that negative personal qualities, mentalities, behaviours, contrived intentions, inconsistency and poor history giving were reported as typical characteristics of 'difficult patients' and as barriers to effective treatment (Corney et al. 1988; Gerrard and Riddell 1988; Potter et al. 2003). However, the findings of this study suggest that discrediting an account or a speaker because of variability and inconsistency within accounts of a problem may fail to appreciate the natural effects of managing socio-cultural considerations and accountabilities.

Importantly, the models currently explaining the transition to chronic pain and disability suggest 'person-intrinsic' psycho-social risk factors such as a person's attitudes, beliefs, emotions and behaviours are strong influences (Gatchel et al. 2005; Boersma and Linton 2005; Main et al. 2008). These factors have received labels such as 'fear-avoidance beliefs' (Waddell et al. 1993), 'pain-related fear' (Boersma and Linton 2006), 'catastrophising' and low 'self-efficacy' (Woby et al. 2005). In practice contexts, these models which encourage the identification of 'psycho-social' factors in a patient's circumstances and mentality, accounts constructing credible, rational, cautious, responsible and risk aware thinking and conduct may result in labels of 'fear avoidance', 'low self-efficacy', and 'mal-adaption' (Linton 2005b; Main et al. 2008). These models produce a double bind for the patient with acute low back pain offering information about their problem.

In addition to the lack of evidence for these abstract 'causal' factors, the self-report tools measuring these factors require responses that are recognised as socially undesirable (Pincus and Morley 2002). In Western socio-cultural contexts, these 'person-intrinsic' factors place blame and discredit on the individual which, ironically, are 'moral risk factors' for not qualifying for compassion and care. The orientation to accountability within participants' accounts evidence how moral evaluation is a relevant issue when talking about an acute low back pain problem. Claims to personal qualities and mentalities such as a 'strong work ethic' and 'positive attitude',

‘uncertainty’ and ‘frustration’, and comments that portrayed personal integrity helped manage the implications for personal accountability, blame and discredit when describing their situations and themselves. These ‘appropriate’ moral stances are also entwined with the supporting evaluations of the credibility of an account. The entwined relationship between managing issues of accountability, morality and having information and situations seen as credible and warranting support can be appreciated.

In physiotherapy practice, the influence of socio-cultural considerations and issues of accountability suggests the need for caution when interpreting a patient’s account. This feature suggests care when the ‘content’ is prised away from an account and considered to be a straightforward reflection of ‘inner’ attitudes, beliefs, fears and emotions or the state of a person’s social situation. The complexity in the nature of accounts suggests the importance of understanding information as both ‘a moral and practical action’ (Tracy 2001 p.738). An individual’s ‘states of affairs’, conduct and rationales may be given more insightful treatment by recognising the situated and socio-cultural influences shaping the nature of the accounts and the experiences described.

### **5.5.6 Accountability differences in positive circumstances**

In contrast to descriptions of problematic situations, participants’ accounts showed minimal orientation to accountability and blame when describing circumstances and outcomes that were positive. Accounts of improvements or recovery conveyed participants as active agents with choices and personally responsibility for their situations, as seen in Linda’s remarks:

*‘One had a walking stick and I am thinking- it’s so easy to be... if I wasn’t the person I am I could have been quite disabled by now.’ (Linda 2B137)*

The remark constructed Linda’s determined nature and an ‘exercise of will’ achieving her positive circumstances. This remark took personal responsibility for her recovery and described making the ‘choice’ to get better. The comparison implied that the ‘disabled’ people had chosen the ‘easy’ option and a lack of personal effort was to blame for their persistent problems. Of interest, this rationale reflects the same socio-cultural viewpoint seen resisted in Angela’s account in section 5.5.4 when a persisting problem was ‘blamed’ on her lack of confidence.

In circumstances conveyed as positive or offered as less significant, participant's descriptions made little reference to the regulatory concerns of good 'back care' or issues of right and wrong, risk or personal accountability. This can be seen in Neil's description of a gradually improving situation of having some 'aches':

*'If I go now and [ ] do some activity on the allotment, not straight away, but very quickly, I am stiff and very quickly my back aches. Then I have to, sort of, loosen up and shower or apply heat in some way or another, and then eventually I loosen up. Then I am OK again.'* (Neil 2B19)

The descriptions did not show any orientation to accountability for Neil's conduct causing the moderate problem: 'very quickly my back aches', as one that returns to a positive outcome: 'I am Ok again'. Neil's account made his own actions responsible for both the back ache and getting better. Issues of personal accountability and blame appeared irrelevant or of no discredit with the report of a resolved problem.

A final illustration shows how circumstances of recovery and not claiming a problem altered the relevance of accountability for conduct and blame for situations. Anna's account conveys responsibility for reducing her exercises yet no orientation to this as an accountable issue:

*'I don't do them every day, just now and again, just to make sure everything is moving in the right way'* (Anna 2B116)

Everything is still 'right' and therefore good. This conduct may have attracted blame and disapproval for 'non-compliance' in the context of a persisting problem (Schneiders and Zusman 1998; Kolt and McEvoy 2003; Jack et al. 2010). A failure to act as one 'ought' only appeared relevant and blameworthy when reporting negative circumstances or circumstances which risked attracting social disapproval or personal discredit. Research in normative ethics suggests 'blame' is not an issue with good outcomes (Knobe 2004; Driver 2008). As such, the type of outcome described was a significant shaping force on the accounts and whether issues of accountability and blame needed management.

The findings concerning the relationship between the participants' accounts, the experiences described and socio-cultural influences challenges assumptions that personal 'attitudes', 'beliefs' and 'behaviours' derive from 'intrinsic factors' within an individual (Linton 2000). Considering the extrinsic influence of social-cultural contexts may help explain why interventions which aim

to identify and alter characteristics ‘within’ patients with tailored ‘psycho-social’ approaches do not demonstrate the success expected (Boersma and Linton 2005a; Hay et al. 2005; Jellema et al. 2005b; Swinkels-Meewisse et al. 2006b).

Since undertaking this study, a call to expand approaches to understand the development of chronic problems has entered the literature. More nuanced perspectives and research designs to investigate and understand treatment in the individual case have been encouraged (Vlaeyen and Morley 2005; Young and Chapman 2007 p.230; MacFarlane 2008). Main et al. (2008 p.396) suggest that a clearer understanding of the process of change needs more imaginative research:

‘Failure to grasp the challenge of addressing such individual differences may result in failure to advance beyond the present models in increasing our success rate in prevention and in leaving individuals vulnerable to well intentioned but misdirected initiatives ‘  
(Main et al. 2008 p.396)

This section has shown how experiences and ways of understanding, describing and going about acute low back pain appear strongly shaped by socio-cultural influences. The findings support other research suggesting a false dichotomy between individual and social influences and that a ‘systems’ approach may provide better understandings and interventions (Stenner 2005; Young and Chapman 2007; Brown 2006; Main et al. 2008). This study also supports recent calls for intervention that combines individual-centred with system-based solutions (Blyth et al. 2007; Main et al. 2008; Croft et al. 2010).

As suggested by other physiotherapy research, the power dynamics produced by the possession of ‘authoritative knowledge’ and the ‘expertise’ invoked and used within practice encounters warrant further attention (Williams and Harrison 1999; Trede and Higgs 2003). In particular, consideration needs to be given to socio-cultural influences on the information generated within these encounters and professional assumptions taken to communication and language as tools integral to the generation of ‘knowledge’ used for clinical reasoning and decision-making purposes. This includes assumptions concerning the concepts physiotherapists understand can be discerned through their interactions with patients and how these concepts are interpreted in relation to strategies for patient care, especially ‘psycho-social risk factors’.

### **5.5.7 Summary**

This section has drawn attention to the way in which the accounts of acute low back pain experiences were shaped by and shaped to manage socio-cultural knowledge and considerations including issues of personal accountability and blame. There was illustration and discussion of the influences provided by ‘authoritative’ knowledge and socio-cultural understandings, practices and expectations on the experiences described and the type of accounts given. As such, ways of understanding, responding to and talking about back pain were shown to be provided by naturalised and accepted sources of knowledge and practices. It was also shown how the accounts were managing issues of accountability, responsibility and blame in relation to what was considered ‘right’ and ‘appropriate’ concerning circumstances, conduct and rationales. The effects of competing domains of social considerations and accountabilities were shown to manifest as personal dilemmas as well as variation an inconsistency within an account. Finally, there was an illustration of how personal accountability and blame became irrelevant in accounts of positive circumstances. In contrast, positive circumstances were described in ways that attributed the participants with personal responsibility and choice.

The discussion touched on the way that knowledge, practices and considerations from the wider socio-cultural context were not always made relevant and or universally applied in accounts but were influenced by factors within the particular situation. The next section illustrates and discusses the way in which the participants’ accounts were seen to be adapting to and influenced by factors concerning the situated context and social relations.

## 5.6 Adapting for situated contexts and managing social relations

### 5.6.1 Introduction

The previous section illustrated how broader socio-cultural contextual factors and considerations provided shaping influences on the experiences and responses within acute low back pain situations, as well influencing the accounts provided by participants. Adding to the complexity in the nature of the accounts, these broader influences and considerations were not universal but orientated to or made relevant depending on the particular situation and context. Considerations provided by the situated context of an interaction also introduced social relational factors which were also being managed through the way an account was provided, as illustrated in Figure 19.

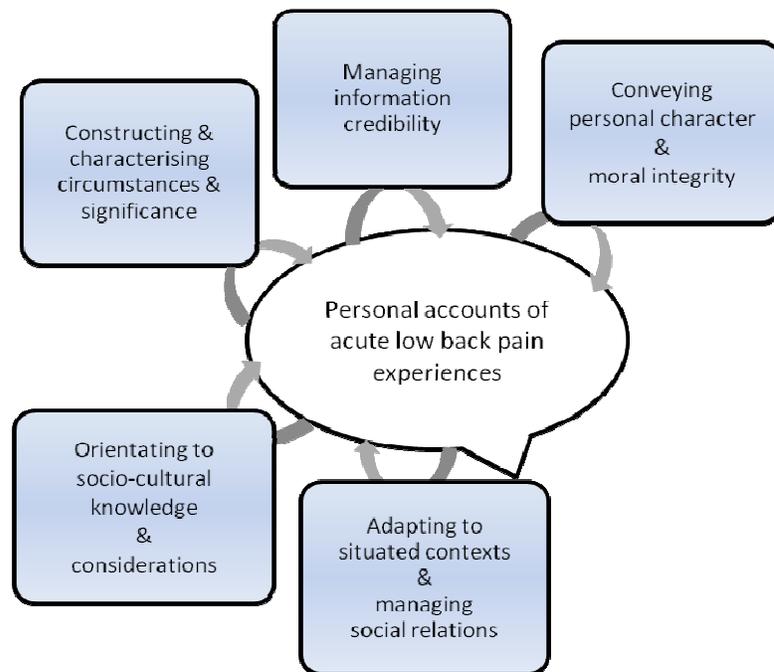


Figure 19: Adapting to situated contexts and managing social relations

The participants' accounts could be seen orientating to and being shaped in various ways by situated contextual and relational considerations. This section illustrates and discusses these influences on the accounts, including purposes and social roles within interactions, known or presumed background of those in the interaction and particular qualities considered appropriate in the information provided. Importantly, an account was always the product of an unfolding interaction. This provided moment by moment social considerations and micro-contexts which reiterated or reshaped the particularities of the situation and the nature of the 'situated' context.

### 5.6.2 Adapting for interaction purposes and roles

Within accounts, it was very apparent from participants' accounts that not just any information will suffice for any situation. Concerns for the shaping of information for a situated purpose and the roles provided by the accompanying social considerations were strongly evident, as illustrated in Anna's description of a GP encounter:

*'She asked a lot of questions. Sometimes you think- Oh, have I said the right thing? But yes, she knew what was wrong and she obviously saw fit to send me for further treatment.'* (Anna 1B56)

The roles of 'patient/ information provider' and her GP as 'expert/gatekeeper' were visible: '*She asked a lot of questions*', '*knew what was wrong*' and '*saw fit to send me for further treatment.*' The description illustrates how the particularities of an interaction, in this instance seeking care, shaped the qualities required and the type of account given. Similar orientations to the roles and 'procedural work' provided by the social conventions for particular interactions have been found in examinations of medical encounters (Heath 1989; Robinson and Heritage 2005). Research in physiotherapy encounters has also shown the 'role and relationship' aspect of communication, considered decisive for diagnosis and the 'climate of cooperation' (Thornquist 1992 p.196).

Furthermore, the uncritical form of Anna's remarks showed the accepted nature of her role and its requirements in the situation (Fairclough 1992; Longino 2011). Anna's concern with saying '*the right thing*' conveyed a responsibility for providing 'appropriate' information, accurate and relevant for the task. The shaping of information for the context was given credit for achieving her diagnosis and the sanctioning desired: '*she obviously saw fit to send me for further treatment*'. Accomplishing particular qualities in accounts has been discussed in previous sections concerning the shaping of accounts to accomplish significance in section 5.2 and persuasive force in section 5.3. Bourdieu (1991) suggests that individuals acquiring a 'practical sense' of the conditions attached to a context and the communication behaviours which are appropriate. This practical sense includes an awareness of the social consequences of behaving appropriately, or otherwise (Shirato and Yell 2000).

Every occasion of providing information could be seen influenced by the purpose of interaction, the consequences intended and the particular roles taken up within the particular interactions. As back pain experiences were described, participants also told of the shaping of accounts for the purpose of an interaction and for the social functions accomplished by their information.

Brian described his efforts to shape his account:

*'You try and cover.. cover it up by saying it is sort of feeling...not wanting them to worry.'*  
(Brian 1B302)

In an interaction with his partner, Brian describes adapting his information on his back problem to control the social effect: *'not wanting them to worry'*.

Participants also showed an orientation to what information was appropriate for the research context and the responsibilities made relevant as a 'participant'. The situated purpose of 'learning from acute low back pain experiences' introduced considerations within participants accounts for information 'appropriateness'. Remarks during the interviews displayed these considerations:

*'So that's how I manage. Is that the sort of thing you want?'* (Jayne 1B108)

*'It helps with your studies... I mean, it is part of my duty, isn't it?'* (Brian 2B758)

*'It will be pretty boring really. I'll have to think what you want me to say'* (Brian 1B370)

Expressing concerns such as *'is that the sort of thing you want?'* and *'it is part of my duty, isn't it?'* showed the orientation of participants to the evaluation of their information and their responsibilities in the context as a 'participant'. The quality of 'tellability' argued to be an influence for what counts as an experience to be told is seen with Brian's hedge of *'it will be pretty boring really'* (Maynard 1990; Ochs and Capps 2001). Myers (2000 p.172) found that experiences of an event were not inherently 'tellable' but needed constructing with 'appropriate' characteristics to achieve 'tellability' and qualify as socially acceptable and plausible. This form of evaluation could be seen shaping how the participants provided their information.

Reflecting the way that the conditions provided by particular interactions within the participants' experiences created requirements of the accounts they provided, the accounts provided in the research context showed similar shaping by the situated conditions. The following excerpts illustrate the orientations displayed by participants to some of the qualities in accounts made relevant by the situated context, such as accuracy, honesty or qualifying as having an acute low back pain problem:

*'I had to sort of try and be honest about how I felt. It is difficult isn't it?'* (Judy 2B396)

*'But to come in today and saying I feel 90% better, I feel like a fraud and I thought I can't cancel because that is not fair on anybody.'* (Jill 1B341)

Judy's remark to '*try and be honest*' and Jill's concern with feeling '*90% better*' show how responsibilities for providing appropriate information was a consideration made relevant. The expectations of criteria for 'useful' information, seen as concerns of accuracy, truthfulness, interest and significance as a problem, showed values the participants considered were relevant by the purpose of the research.

The existence of conventions brought to particular contexts and that provide conditions for information has been found in other research contexts. In the context of chronic low back pain research, May et al. (2000) commented that:

'subjects in this study were highly practised at giving accounts of their symptoms and disability that met what they perceived to be the informal and formal requirements of an interview with a health professional.' (p.224)

The conventions for what is 'appropriate' to tell in accounts of chronic low back pain were considered 'met' by the researchers' evaluations of the interview products. The evaluation of being 'highly practised' actually rested with the researchers and the remark displays the researchers' own assumptions concerning 'requirements' and what kind of accounts satisfy these 'requirements'.

Of interest is how participants come to know and be able to appear 'practised' at meeting the various requirements of an interview with a health professional, including the context of this study of acute low back pain accounts. Baker (2002) has commented on the way a participant comes to know what parameters are expected for providing an account:

'Interviewees can be seen to account for the social category to which the interviewer has assigned them. That is, people are interviewed *as members* of some specific category, or population...Accounting for oneself involves invoking a social world in which one's version of competent membership in a category could make sense.' (p.781 original emphasis)

Research within chronic low back pain contexts and the participants' accounts in this acute low back pain context show how socio-cultural conditions in situated contexts infiltrate and influence both the provision and interpretation of accounts.

The findings of this study highlight the entwined relations of situated functions of accounts, socio-cultural considerations and aspects of a situation which make these considerations relevant. Equally, it encourages a consideration what assumptions underpin professional

judgements as to whether information ‘requirements’ have been met. This finding provokes an interest in why efforts might be made to meet requirements of information in a particular context, whether in research or importantly in physiotherapy practice contexts. The influence of co-interaction still to be illustrated in section 5.6.5 supports the view that health professionals involved in interviewing, whether in research or in practice contexts, are inseparable from their contribution to ‘the informal and formal requirements’ provided and being satisfied or not in the interviewee or patient accounts of low back pain.

Within the research context of acute low back pain, the orientation to a ‘participant role’ with its associated social and moral responsibilities was strongly displayed within the participants’ accounts. Moral responsibilities attached to research participation and the accounting process were often made explicit: ‘*it is part of my duty, isn’t it?*’ (Brian 2B758). The moral concerns within the role of being a participant and providing an account was also implied and seen in Jill’s remark previously (p.174): ‘*I can’t cancel because that is not fair*’. The participants also showed consideration to responsibilities within their written accounts, seen in Brian’s reflections:

*Brian: I am sorry about some of the stuff in my file because it is disjointed...Well, I mean, when I look back at it now, I think about some of the mumbo jumbo.*

*Carol: But that just catches what you were like at the time. [ ] That’s all you can do is write what it feels at the time. So it was really helpful. (Brian 2B626-630)*

The apology suggested that evaluations of quality undermined the validity of his written account and threatened the representative value for his experience. Lakoff (2005) argues that one main function of apologies is to manage relational threats and maintain positive relationships. Brian’s apology for his ‘*disjointed*’, ‘*mumbo jumbo*’ account reflects this social function arising because of the possible failure to meet the conventions for an adequate account. This inseparable feature of the accounts being responsive to meet social conventions provided by situated contexts is discussed further in section 5.7.5.

The retrospective evaluations voiced in the accounts concerning appropriateness and representation of experiences shows the entwined relations of time as an influence shaping what counted as the ‘true’ state of affairs. The contentions surrounding ‘accurate’ and ‘true’ representations displayed within the participants accounts reflect debates on truthfulness, accuracy and reliability of information within research on low back pain in other contexts

(Biering-Sørensen and Hilden 1984; Bolton 1999). This includes views that ‘contemporaneous’ information provides a more ‘truthful’ representation of what actually happened. Concerns with the ‘distortion’, ‘inaccuracy’ and ‘biases’ in information provided by time, recall and memory feature extensively in chronic pain research, along with efforts to eliminate these biases to gain more reliable information (Linton and Melin 1982; Feine et al. 1998; Hass et al. 2002; Gatchel et al. 2004). Contemporaneous accounts and documentation are seen as more truthful and reliable. This view is also reflected in other contexts and seen as assumptions underpinning what is given value as ‘true’ in law contexts (Lamb et al. 2000), personal relationships (Reis and Patrick 1996) and medical histories (Barsky 2002; Must et al. 2002).

In contrast, the participants’ accounts unsettled this notion of what was a true representation of their experiences in relation to the passing of time. As illustrated in Brian’s account, the ‘value’ and ‘clarity’ provided by retrospective evaluations argued against the truthfulness of ‘contemporaneous’ representations where effects of the experience could interfere with the ability to provide accurate and reliable information. The influence of considerations provided by situated contexts significantly shaped criteria the participants displayed as relevant concerning what counted as valuable, true or authentic when representing their acute low back pain experiences. The influence of time and its entwined relations with the accounts provided by the participants is discussed later in section 5.7.

Dingwall (1997 p.59) argues that interviewees are concerned to demonstrate ‘competence as a member of whatever community is invoked by the interview topic’. The data generated becomes influenced by issues of self-presentation and ‘whatever interactional cues have been given off by the interviewer about the acceptability or otherwise of the accounts being presented’ (Dingwall 1997 p.59). Reassurance for the ‘acceptability’ of Brian’s account and his ‘competence’ in providing it is seen within my response to his remark: *‘all you can do is write what it feels at the time. So it was really helpful.’* Consequently, the status of his information and what came to count as an ‘experience’ was negotiated and set within the unfolding exchange. My response was integral in this process and to the account being valid and valuable rather than discarded as poor information. The influence and relevance of my involvement in the production of the participants’ accounts is illustrated and discussed further in section 5.6.5.

The concerns for particular qualities within accounts according to situational demands of the interview reflected the same feature evident within the participants’ experiences discussed

earlier in section 5.6.2 , seen with the *'right'* information for Anna's GP interaction and Brian shaping his information in a way that didn't *'worry'*. The participants' concerns for what counted as useful, credible, reliable and valuable accounts mirrors the value criteria argued to influence what comes to count as *'knowledge'* from qualitative research accounts across disciplinary contexts (Malterud, 2001; Spencer et al. 2003; Sandelowski and Barosso 2003; Brady 2004; Denzin et al. 2006; Yardley 2008). Within participants' experiences and shown in their interview accounts, what is *'appropriate'* as information did not have set criteria. Rather, the nature of the situated context shaped what criteria were relevant for the provision of an account.

### **5.6.3 Adapting information to manage social relations**

Making adaptations to manage social relational concerns was a further influence on the nature of the participants' accounts. Locher and Watts (2008 p.96) describe social relational work as an investment in the *'construction, maintenance, reproduction and transformation'* of interpersonal relationships between people engaged in interaction. Shaping accounts to manage social relations was a feature described within the participants' experiences and evident explicitly and implicitly within the research interactions. Linda's comment illustrates the shaping of a back pain account to manage social relations:

*'You don't tell everybody because you think- Oh, they don't want to keep hearing. "How are you?" - "Oh well I've got this ache, I've got that ache". So I just say- "Well, I'm getting better slowly, thank you for asking."' (Linda 1B692)*

Linda's scenario made explicit some of the relational considerations with reporting a back pain problem and being seen as *'complaining'* (Drew 1998 p.246): *'You don't tell everybody because[ ] they don't want to keep hearing'*. The participants described how reports of their problems were adapted, or *'narratively occasioned'* (Gubrium and Holstein 2008 p.248), to manage social relational concerns in particular contexts.

The context of the research interview was no exception to seeing information adapted for a situated context. This is seen as Jill shaped her account to incorporate a remark that functioned to manage situated social relational issues. It illustrates the appreciation that relating a *'personal acute low back pain problem'* to another was a particular social action with repercussions for the listener and where social duties may become evoked:

*'Obviously, you are asking me for information, but you do have this thing that you don't want to be a burden to other people' (Jill 1B345)*

Jill's remark shows management of the possible social consequences of the action of relating a problem and the implication that such an action asks something socially of the listener. As seen with Jill's dislike of being a 'burden', such displays of reflexivity and propriety within participants' accounts helped counter threats to social relations and manage obligations evoked that the telling of personal problems could produce (Jefferson and Lee 1981; Driver 2000).

The entwined relationship of situated contexts to the shaping and functions performed within the accounts can be seen with the features illustrated in previous sections. In a context of personal unfamiliarity, the characterisation of circumstances shown in section 5.2 and the inclusion of personal character information discussed in sections 5.3 and 5.4 have increased relevance and importance for supporting the interpretation, credibility and reliability of an account. Contexts of whether a problem has resolved or not is another example. As shown in section 5.5.6, accountability and blame were irrelevant as social considerations when describing positive circumstances.

The adaptation of personal accounts to suit situated contexts has been found in other contexts. Emotional experiences were found to be down-graded or up-graded in institutional interactions according to 'role-related' rules for appropriate emotional display (Coupland et al. 2008 p.327). The adaptation of information to enhance social relations is also evident in other interview based research (Roulston et al. 2001; Ellis et al. 2002; Tanggaard 2009). Of particular importance, this finding in the acute low back pain accounts reflects similar situated adaptations found in clinical contexts to manage social relational concerns by physiotherapists during interactions with patients (Parry 2004, 2009), in medical encounters (Gill et al. 2001; Ainsworth-Vaughn 1995; Chew-Graham and May 1999, Stivers 2002), in examinations of everyday conversations (Jefferson and Lee 1981; Drew 1998). In the context of relating a problem, the relevance of maintaining positive social relations and positive mood in a listener is suggested to be associated with encouraging helping behaviours (Batson 1991), co-operation and empathy, seeing virtue in others and appreciating others' points of view (Mayer and Hanson 1995; Hewitt 2005).

Important considerations for physiotherapy practice are suggested by the accumulation of findings illustrating how accounts become shaped to manage social relational concerns. This issue is reinforced by Linda's remark about her physiotherapy encounter:

*'I don't like to make a fuss... and I'll get on with it. I don't think, when I saw the physio, that sort of came across' (Linda 2B20)*

The social complexity in relating back problems to another, as illustrated in this remark, reflects a similarly complex relationship found in research on the interpretation of pain experiences. It has been shown that underestimations of pain experiences are common by health professionals (Whelan 2003; Kappesser et al. 2006; Prkachin et al. 2007) and parents (Chambers et al. 1999). However, this misinterpretation of pain experiences found in research contexts and described within the participants' accounts in this study becomes less surprising with recognition of the social dilemmas in describing pain problems. Being viewed as 'complaining' can be discrediting and detrimental for social relations (Drew 1998). At the same time, compassion rests on judgements of unfairness and being undeserved, which in turn rest on judgements of the significance of a problem, moral integrity and blameworthiness (Cassell 2004; Fleishman 2005; MacNeela et al. 2010). The complexity evident invites an appreciation of the challenge for achieving significance and compassion while managing the erosive effects of personal discredit and social disapproval accompanying the report of negative personal circumstances.

Of interest, neuro-imaging studies have shown the influence of social relational considerations when witnessing pain and distress of others. Both 'threat-avoidance' and 'empathetic' centres in the brain are activated when witnessing the pain distress of another (Cheng et al. 2007; Hein and Singer 2008; Jackson et al. 2006; Yamada and Decety 2009). Of particular interest, the responses in the threat or empathy centres in witnesses was also influenced by contextual factors. Empathetic responses were influenced by personal and moral evaluations of the person in distress (Gu and Han 2007; Lamm et al. 2007; Singer et al. 2006). In addition, research on fMRI responses to pictures of painful facial expressions found that when the people pictured were given unlikable qualities there was an increase in activation of 'threat-avoidance' centres and reduced 'empathy' activation (Yamada and Decety 2009). Goubert et al. (2009) suggest that 'situated contexts' such as personal character impressions appear to influence mechanisms in the brain which modulate competing responses towards another's distress.

The concurrent interactional functions seen within the acute low back pain accounts would appear to be a real-life illustration of these laboratory findings. The participants' expression of distress, emotionally engaging information, managing credibility, positive impressions of their character and integrity and of social relations would seem to be showing the 'real-life' practical efforts to manage the responses in the 'threat' and 'empathy' centres of another that has been theorised in the laboratory based neuro-imaging research Goubert et al. 2009). The fMRI

findings provide a physiological basis for why the participants' accounts could be seen pragmatically functioning in the ways found and the combination of research approaches brings together an exciting opportunity to learn more about acute low back pain interventions.

#### **5.6.4 Adapting wording to manage social relations**

The adaptation of the wording in line with social conventions and considerations provided by situated contextual features was an important feature shaping the nature of the participants' accounts. Of particular importance was the way that situated relational concerns were being managed through the wording of information. The relationship of particular wording to manage social relational consequences has significance for assumptions currently underpinning physiotherapy practice in acute low back pain intervention. Some features seen within the accounts which illustrate the significance will now be illustrated and discussed.

One important relational influence concerned the shaping of wording in the accounts involved entitlements to make particular assertions in a particular context. An illustration of this influence and its significance for the shaping the nature of the information provided can be seen with the participants' orientation to my professional background and presumed knowledge. Their information could be seen to be shaped to show deference to my professional role and association with other health professionals, evident within Jim's comment on his medication:

*'And I think that sometimes, not all doctors, with all respect to the medical profession, are not completely open about side effects.'* (Jim 1B86)

Jim managed the relational implications of a remark on the medical profession by incorporating several hedging strategies which soften his critical stance: *'I think'*, *'sometimes'*, *'not all doctors'* and the disclaimer *'with all respect'*. The wording choices helped counter disrespect for my professional alliance and the discredit of Jim for criticising a socially esteemed profession. The display of respect was supportive of positive social relations. Such management of the wording of assertions in the context of my professional background was seen across the accounts.

An orientation to differences in the authority to make certain assertions in the interview context was also strongly displayed in choices of wording, as seen with the different stances taken on different types of information within Mark's account:

*'I can't think that there was... No, I just put it down to... I don't know what I put it down to really. I made an effort to sit better at work, I don't think that probably helps.'* (Mark 1B14)

*'When I had the problem before [ ] I had the manipulation to break these adhesions. So, I think maybe something like that has just come back again, I don't know.'* (Mark 1B57)

A difference is seen in the certainty given to the information on actions undertaken compared to the uncertain wording used for his rationales for the cause of his problem. Mark's actions were framed as factual statements: *'I made an effort to sit better'* and *'I had the manipulation to break these adhesions'*. The right to present this information with a stance implying 'certainty' rested in the authoritative force provided by personal experience (Pryor 2000; Kärkkäinen 2006).

In contrast, moving from 'personal source' information to the rationales for the cause of the back pain showed a change to hesitant and tentative stances. The wording repeatedly diluted the 'certainty' claims within this particular information (Speas 2004; Barnes and Moss 2007): *'I can't think that'*, *'I think'*, *'maybe'*, *'I don't think'*, *'probably'*, *'something like that'* and his concluding *'I don't know'*. The adaptations made to the stances taken on the different forms of information served a relational function in this situated context with myself, a physiotherapist. Although now extended as a theory, Grice (1975) argued that one of the four maxims of cooperative communication in everyday life entrusts a speaker not to say anything they believe is false or which lacks adequate evidence (Levinson 1983; Sarangi and Slembrouk 1992). The wording of an account also influences the accountability for its accuracy and Marks' tentative stances taken on his back pain rationales allowed scope for the assertions to be wrong (Schwartz 1996). The diluted certainty in the rationales displayed social consideration for my physiotherapy background and differences in our 'entitlements' to certain back problem knowledge.

The possession or presumptions about particular forms of 'knowledge' in situations is argued to introduce social conventions involving 'entitlements' to the types of assertions and challenges to information which can be made (Drew 1991; Sacks 1992; Tuominen and Savolainen 1997). Knowledge 'entitlements' produce a social right for the information asserted to be believed and 'authority' to challenge the truth of related information (Davies 2004). The adaptation in wording displayed by the participants' accounts functioned to reduce the risk of threats to social relations such as if I had responded with a correction or challenge. Adaptation strategies are considered to support positive relations by providing the opportunity for the preservation of

'face' during interactions (Goffman 1959; Brown and Levinson 1987; Tannen 1986, 1993). The participants' accounts reflect the pragmatics of interaction proposed by Goffman (1967a) in that:

'much of the activity occurring during an encounter can be understood as an effort on everyone's part to get through the occasion and all the unanticipated and unintentional events that can cast participants in an undesirable light, without disrupting the relationships of the participants.' (p.41)

The orientation to social conventions and relational consequences associated with personal assertions and 'knowledge' claims that was strongly evident within the accounts and reflects findings in other research contexts. In medical encounters, Pomerantz et al. (2007 p.131) found that the delivery of patients' personal impressions of medical problems were adjusted to appear 'rational' while orienting to constraints on 'knowledge entitlements' and the authority of 'medical expertise'. Halkowski (2006 p.93) also found relational work in the way patients managed their information within medical encounters to support being seen as 'reasonable'.

This shaping to construct personal stances on information such as 'attitudes', 'beliefs', 'thinking' or 'uncertainty' was described as a feature within personal experiences and evident in the research interactions with myself, a researching physiotherapist. Importantly, 'attitudes' and 'beliefs' were adapted to manage positive personal impressions, social relations and display 'rationality' rather than reflecting internal 'mental states' within the individual. Expressing 'beliefs' and 'attitudes' have been shown to be strategies used to convey a speaker in a certain light within other interview and conversational contexts (Potter and Wetherell 1987; Abell and Stokoe 1998; Sbisà 2001; Antaki 2004;). The presentation of information within the acute low back pain accounts showed similar variation and flexibility in response to the context. There was attention to how explanations fitted with 'biomedical' knowledge, which construed certain social impressions and influenced relations with myself as a particular kind of co-interactant, a researching physiotherapist. The presentation of information whether as facts, beliefs, attitudes or opinions was always also a form of relational activity.

The findings in this study support arguments offered within Discursive Psychology literature, that 'mental entities' such as personal 'understandings', 'beliefs', 'wonderings' or 'attitudes' are open to shaping and change in their construction within and across participants' accounts (Potter and Wetherell 1987; Edwards and Potter 1992; Wood and Kroger 2000). Seen as 'stances' in

socio-linguistic literature, this shaping of information is argued to be an interactional tool for numerous social and aesthetic effects and shifts in stances show the interactional and co-constructed nature of stance taking, and in this case, ‘institutionally’ grounded (Jaffe 2009 p.7).

### 5.6.5 Adapting to influences from co-interaction

A final and important influence of the situated context concerns that way that the acute low back pain accounts were products of unfolding interactions and shaped by the process of co-interaction. The constituting influence of this process is highlighted because the influence on the nature of the acute low back pain accounts and the significance for their interpretation. The influence of co-construction is well recognised as a consideration in research contexts and one to be approached with reflexivity concerning the data generated. This influence has particular importance and potentially greater consequence as an issue in physiotherapy practice contexts where accounts is being generated, interpreted and used to inform clinical decision-making.

Of particular interest were the implicit ways in which the process of co-interaction influenced the account product. The process and products of co-interaction have been touched on already in section 5.4.4 where Mark’s disposition of ‘resilience’ was not a given but was offered and acknowledged during the interview exchange. The influence of co-interaction was also seen in section 5.6.2 in the negotiation of the type of information that was appropriate and useful as an account, both within the interviews and the written accounts.

Every utterance within the participants’ accounts was shaped by influences of co-interaction, such as the questions, agreement, silence, surprise or challenge that provided conditions for next their responses. An exchange with Linda provides a valuable illustration of the shaping influence of co-interaction on the unfolding accounts. Linda initially provided her explanation of the back pain framed in some uncertainty:

- Linda: I could feel where it hurts, it’s not a joint, I think it’s just, it’s just where... you know, what happens, I might be right or wrong, is that you get like little fractures in the muscles, don’t you, where it tears.*
- Carol: Yes, you get some strains*
- Linda: I’m sure that’s what this is here* (Linda 1B190-193)

The tentative rationale offered by Linda included an invitation for my agreement through an embedded tag question: ‘don’t you?’. My response expressed agreement. However, it also

included an implicit correction of her terminology, '*some strains*', which is described by Jefferson (1987) as an embedded correction compared to an exposed correction. The aligning and affiliative form of this response was consequential for the information Linda then offered in her next turn. A positive social context had been maintained and Linda increased the certainty of her explanation: '*I'm sure that's what this is*'. Her remark continued the positive social relations by aligning with my rewording.

The flow of talk within the exchange was a continually shaping the instantaneous 'situated context' and each alternating utterance provided conditions for what became relevant and appropriate to say next. As such, the stance indexed within Linda's explanation moved from '*I think*' to '*I'm sure*'. As a consequence of the co-interaction, Linda's level of understanding of the cause of her back pain can be seen changing from uncertain 'thoughts' to asserting a 'belief'.

However, if my response had disagreed with her terminology: 'No, muscles aren't thought of as having fractures', with such a correction it is likely that Linda's final 'belief' would have been different. The exchange shows how the content and meaning of an utterance, as with Linda's 'beliefs' of the back pain cause: '*I'm sure that's what this is here*', needs to be considered for the interpersonal action it performs in that instance (Antaki 2004). Meaning is only adequately understood by reference to the situated contexts of an unfolding exchange (Heritage 1984 p.242). The influence of co-interaction in providing the 'situated context' was intimately consequential for the information and the type of 'state of affairs' conveyed.

Well recognised as a 'methodological' consideration in research contexts, the issue of 'co-production' of interview information and its consequences has been given little attention within physiotherapy practice and low back pain literature that uses 'interview method' within most intervention contexts. Within research contexts, the consequences of question wording, topics raised and the stances taken in interactions with participants are well acknowledged as a shaping influence demanding reflexivity in the interpretation of data generated (Briggs 1986; Holstein and Gubrium 1995; Wilkinson 1998). The significant influences of co-production on the acute low back pain accounts emphasises the importance a reflexive approach to this influence on the information produced and then interpreted within a physiotherapy practice or research context.

The findings in this study support arguments within the accumulating language and social interactional orientated research for the importance of understanding that personal accounts are pragmatic actions accomplishing situated social functions where the 'content' may have little or

no relevance as information in another context (Potter and Wetherell 1987; Potter and Edwards 1992). Furthermore, Milne (2009) argues that understanding the ‘certainty’ status given to information is explained by understanding normative and social relational concerns attached to the practice of information provision, rather than as a degree of ‘knowing’ within the speaker. The use of exaggerated ‘extreme case’ descriptors discussed for constructing significance in 5.2.3 and for persuasive force in section 5.3.7 showed this flexibility in commitment produced by situated contexts. Wolgast (1977) argued that despite what is conveyed by the certainty indexed within assertions, this may bear no relation to a speaker’s commitment the ‘truth-value’ of what has been said, such as when words are by mistake but convey information as a ‘belief’ or ‘fact’.

The context specificity of meanings shown suggests caution in practice or research contexts of giving personal assertions the status of an ‘internal’ cognition. In the exchange discussed above (p.183), Linda used two different words to describe the cause of her back pain; ‘*fractures*’ and ‘*tears*’. She then followed my response using the term ‘*strains*’ with: ‘*I’m sure that’s what this is here*’. If abstracted from the context, Linda’s remarks across the exchange would suggest she held the ‘beliefs’ that her back pain was because her muscles had ‘fractures’ or ‘tears’ or the ‘strains’ I had suggested, or possibly all of them with the vague nature of her concluding remark. In an unfolding interaction, the various ‘iterations’ that a piece of information may go through in the construction of what finally comes to be the ‘state of affairs’ can be seen in this example.

Furthermore, Dummett (1981 p.311) has argued that assertions need to be understood as ‘linguistic acts’ governed by social conventions. As discussed in section 5.3.2 concerning the construction of credible information, the linguistic force of a statement rests on ‘convention-governed’ expectations of commitments and consequences with the use of this form of assertion (Milne 2009 p.271). Milne (2009) argues that the social conventions attached to the practice of asserting information in interactions include expectations about factuality along with an accountability to be able to provide adequate evidence to justify an assertion. The commitments and social consequences can then be managed either by withdrawing an assertion or defending it. Since providing information is a social practice, Milne (2009) argues that there is also a local flexibility that:

‘operates under the sanction of the community of participants in that practice. Thus while the norm speaks of commitment to logical consequences, in practice the community determines what counts as consequences (p.272)

As such, social relations can be seen to be managed in the intricacies of unfolding utterances and the way these utterances were worded. The ‘sanctioning’ process as a co-interactant underpins the management of positive social relations and is seen in my affiliative correction that did not directly dispute Linda’s terminology or compel her to either withdraw or prove her assertions. An ‘embedded’ correction is socially affiliative because it keeps the ‘incompetence and/or impropriety off the conversational surface’ (Jefferson (1987 p.100). It is a correction performed with discretion and the corrected speaker can then accept or reject the act of discretion as well as the correction (Jefferson 1987). Linda’s ‘alignment’ with my embedded correction does both and maintains affiliative relations (Korner 2010). Linda’s initial speculative stance when initially presenting her information was also a social relational strategy. The exchange shows how, as co-participants, we have both orientated to conventions associated with the ‘social practice’ of providing affiliative responses to support positive social relations. Enfield (2006) argues that:

‘each little choice we make in communicative interaction can be assessed for its optimality for information exchange, it can equally be assessed for its optimality for maintaining (or forging) the current social relationship at an appropriate level of intensity or intimacy.’  
(p.235)

The findings show how social relational considerations strongly influenced the design of the accounts. Research in medical contexts has shown a relationship between affiliative strategies and patient satisfaction with care (Little et al. 2001; Campbell et al. 2007). In physiotherapy contexts, a practitioner’s skill in constructing affiliative responses would seem important for achieving ‘patient-centred’ or ‘collaborative’ encounters.

De-contextualising information presented as an ‘attitude’, ‘belief’ or ‘opinion’ appears consequential. The findings unsettle the value and relevance of extrapolating from what a person says to attribute them with concrete ‘attitudes’ and ‘beliefs’ existing beyond the situation these stances have been offered. The problems arising in practice and research contexts can be appreciated if the effects of co-interaction and interpersonal shaping are not given consideration when interpreting accounts. Furthermore, the findings indicate a need to consider both the consequences of using such assumptions to underpin interventions and their evaluation, particularly if based on changing a person’s ‘attitudes’ and ‘beliefs’ that have been abstracted from interactions or measured by decontextualised questionnaires. Regardless of what

'cognitive' activity may have been occurring in the minds of the participants, the mental entities of 'attitudes', 'beliefs' or 'thoughts' conveyed by accounts were influenced by the situated context and adapted to accomplish social relational functions in the unfolding interaction. In physiotherapy practice, failing to recognise the pragmatic accomplishments of these framings and the multiple influences on the way assertions are presented may inappropriately give a static, enduring quality to flexible, socially contingent conversational devices.

### **5.6.6 Summary**

This section has illustrated and discussed how situated contextual factors and managing social relations provided important influences on the nature of the accounts and the complexities for their interpretation and use for practice purposes. Some of the influential considerations shown included the purposes and required qualities of information which drew from shared socio-cultural understandings of roles and responsibilities associated with particular social contexts. Entwined social conventions and relational considerations became relevant and variously orientated to within the accounting process depending on contextual factors. The way that the process of co-interaction shaped accounts was also shown and its interrelationship with maintaining positive social relations which influenced both what and how personal acute low back pain experiences were conveyed.

It has been shown how the accounts of acute low back pain experiences were influenced by interacting relations between wider socio-cultural conventions and considerations, situated factors and the unfolding contexts produced during interactions. All these aspects contributed to the kind of 'state of affairs' which became constructed and to the way accounts managed social relational concerns. The final section of this chapter illustrates and discusses the way that time and temporality were important features shaping the nature of the participants' accounts and were also complexly entwined with the functions and influences already illustrated.

## 5.7 Time and incorporating temporality

This final section illustrates and discusses ‘time’ and the incorporation of temporality as a meaningful resource for constructing descriptions, as an influential socio-cultural context, and as a shaping influence on the nature of the accounts (see Figure 20). The concept of time can be understood in different senses and these ways of orientating to time as a context, a social influence and a finite entity of value were evident in shaping the accounts. The term ‘temporality’ refers to the orientation to time as a linear procession of past, present and future, as discussed in chapter three (p.48).

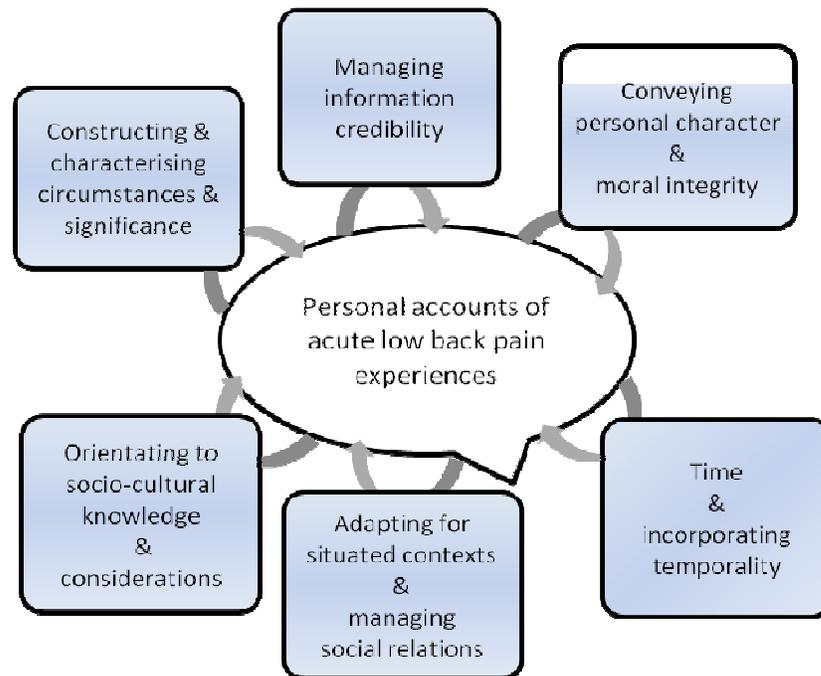


Figure 20: Time and incorporating temporality

The entwined relations of time with features in previous sections have been mentioned. The following illustrations and discussion revisits some of these relationships and expands on the way time was an influence as a socio-cultural context. This section also shows how time, as a personally and socially meaningful entity, and the incorporation of temporality were used as resources in the description of personal experiences and situations. Finally, there is illustration of the way that the passing of time provided an influence shaping the nature of the accounts through the changes produced in circumstances, contexts and socio-cultural considerations.

### **5.7.1 Incorporating ‘time’ within information**

As illustrated in earlier sections, the incorporation of time and temporality within the participants’ accounts was integral to characterising the acute low back pain experiences. Gaining an appreciation of circumstances as a significant problem drew on shared understandings of ‘time’ as a context in which the back pain experiences occurred. In section 5.2, the illustrations showed how the participants’ descriptions characterised circumstances by incorporating temporality and creating time points such as ‘before’ and ‘after’, ‘then’ and ‘now’, ‘still in pain’ to index current situations and convey a significant problem. Time was also shown to be integral in making characterisations signal circumstances as a change and a problem, such as ‘*never before*’, or creating ‘past experiences’ against which contrasts were framed or a ‘future’ into which consequences were forecast.

The incorporation of ‘temporality’ also touched on earlier in section 5.3 with the construction of credible information. The integral relationship between conveying time and the sense of reality and fact given to experiences was illustrated. It was shown how wording created chronology and sequence that constructed the sense of something as having happened, happening or anticipated. The use of past and present tense and acts such as ‘recounting’ past events and memories or ‘re-enacting’ dialogue were seen to give the participants’ information factually and aesthetically persuasive qualities that enhanced the credibility and appreciation of their accounts. Issues were also given the sense of a cause, reason or justification by being conveyed as preceding an effect or outcome, therefore appreciable as a ‘cause/effect’ relationship or as a rational and logical explanation. In this way, the shaping of accounts could be seen to draw on shared understandings of time and temporality to convey circumstances, character, conduct and experiences as a persuasively credible and appreciable reality.

### **5.7.2 ‘Time’ as a valued and meaningful entity**

The participants’ accounts also drew on and incorporated the concept of time, not just for its role as a wider context, but as an entity with social and personal meaning and value. ‘Time’ was used as a device to convey the impact of problems and index circumstances as bad, wrong and significant along with the other strategies, such as conveying levels of pain, negative emotions, activity impacts or changed ‘selves’ illustrated in section 5.2. This form of indexing situations drew on the significance and meaning of time as a measurement system and a limited personal resource that links to the finite nature of human life. The issue of mortality as a part of the

human condition ascribes time with personal and social value and importance (Adam 1995). Some ways that time indicated personal impact and significance drew on the interrelationship of time as a dimension of a problem, illustrated in Jayne's remark:

*'it was my expectation that it would last for a couple of days, get worse before it got better and that is what happened.'* (Jayne1B185)

As a meaningfully quantifiable entity, the length of time expressed, *'it would last a couple of days'*, was used as a natural and relevant measuring system to convey the nature of the problem. Duration, in the sense of 'enduring', is meaningful as an index of suffering and exposure to an unpleasant or undesired situation, conveyed with the references to time in the following remarks:

*'I mean, I have gone from March to now like this.'* (Angela 3 B184)

*'Try to sleep a bit... to try and shorten the day.'* (Brian 374)

In reverse, reductions in time exposed to problems helped convey 'recovery' and less suffering:

*'No, I think the main thing is not thinking about it all the time and not having the pain all the time. That's the relief not to have the pain all the time because that really got me down'* (Julia 2B347)

From positions of recovery, accountabilities changed with positive outcomes as discussed in section 5.5.6. Blame is not a social concern when outcomes are good. As such, time was seen offered as a self-evident, socially acceptable rationale for a 'knowledge /behaviour' gap and for 'irresponsible' personal conduct:

*I know what I should be doing and I still don't do it. So for a multitude of factors most of which is time, I guess.'* (Denise1B110)

Where being sensible and careful might be considered the expected behaviour, the concept of time was used to rationalise a desensitisation to injury 'risk':

*'I think I never learn and I think I'm a great one for as soon as it feels better again, oh that it's right, and I can do everything again.'* (Kim1B78)

Framing 'time' as an entity of value also featured as a reasonable explanation for poor exercise adherence within accounts of chronic low back pain patients and physiotherapists (Dean et al. 2005). As a valuable commodity that is constrained by its finite nature, time was shown to be a socially acceptable reason to account for behaviour when circumstances do not also involve the report of a personal problem.

### 5.7.3 'Time' as a future situation and envisaged consequences

Descriptions of envisaged situations and consequences or voicing threats, risks and concerns for the 'future' gave the sense there were impacts still to be encountered. This draws on shared understandings of a person's 'time' ahead as a valued dimension of life and still to be experienced. A pessimistic future is understandable as a personal problem. Anticipations indexed in a negative way are illustrated in Judy's remark: '*if I have another fall my back would just break*' (2B340). It is also seen in Linda's dramatic and engaging question discussed previously as an aesthetic and persuasive form or information presentation to index concern: '*Oh God, I've got to work, how am I going to work?*'. The future orientated remarks constructed situations of vulnerability and threat, which is understandable as a personal difficulty and an unwanted situation. Linda's written account also expressed future-orientated characteristics of problems shaping her current experience:

*I felt totally drained and tearful. I was very unsure of my future if I couldn't manage my situation. (Linda Diary16)*

Emotion and mental states that were 'future-orientated', such as worry, fear and uncertainty, functioned to signal problematic situations. Mark's rationale for needing help and the undesirability of his situation was also future-orientated, expressing threatened aspirations:

*'I think that as I get older I don't want it to get any worse. I want to be quite active as I get older as I like doing active things and I want to cure it as quick as possible.'* (Mark 1B147)

Describing an anticipated or potential future problem was a strategy in accounts which can be seen to convey the significance of personal circumstances which might not be appreciated from the current levels of pain or impacts described. The incorporation of a future concern helped Mark justify an intention to seek care: '*I want to cure it as quick as possible*'.

As discussed in section 5.5.2, back injury terminology is invested with prognostic meanings that are about future impacts. Two dimensions of a prognosis, understood literally as 'fore-knowing', are time and progression of back problems (Pengel et al. 2003). The prognostic meaning attached to back injury terminology and the effect on current and anticipated personal experiences from expected consequences was discussed in section 5.5.1. These time-related meanings were also a resource used to rationalise personal actions, as conduct or thoughts. This is seen with Neil's expression of concern:

*'I mean this is now about the third week, well nearer the fourth, so I am thinking what on earth...is there something more seriously wrong than just sort of muscular or something of that sort?'* (Neil 1B56)

Within participant's accounts, it could be seen that the expression of concern and negative thoughts was an accountable social action and were often accompanied by rationales. Neil's use of the logic of prognostic understandings and time durations make his concern for '*something more seriously wrong*' reasonable in these circumstances.

In contrast, recovery was indexed by positive and optimistic stances on the future, as seen in Sue's account and the resolution of her concerns for anticipated problems:

*'I feel a lot better about the future, because I was really starting to think I am going to end up some dodder old lady.'* (Sue 2B185)

The meanings underpinning time-related information allowed the construction of significance and the demonstration of rationality in personal thinking and conduct while conveying personal situations as problematic or improved. These time-orientated remarks helped with the management of personal accounts as a form of social action and therefore a form of personal conduct reflecting on personal character, moral integrity and personal accountability. Personal conduct is an accountable issue when situations are being constructed as problematic.

Descriptions of a threat to current 'recovered' situations enabled personal situations to be characterised as still affected and a justification for current personal conduct, such as reports of caution with Judy's feeling of a back that '*might break*', Linda's concerns for her ability to work, Mark's intention to seek help despite a problem portrayed as mild '*it doesn't stop me doing anything*', and Neil's concern for '*something more serious*'. Anna also offered a hypothetical circumstance as her '*biggest worry*' despite a report of feeling recovered: '*having your independence taken away, it is a horrible thought*' (Anna 2B31).

Future-orientated concerns also feature in accounts in other research contexts. In accounts of personal trauma. Patterson (2008 p.34) suggested that 'narrative imaginings' were a way to express ongoing repercussions and threats in the aftermath of a traumatic experience. Workers with back injuries were also found to express future-orientated concerns for a 'heightened vulnerability' to re-injury (Tarasuk and Eakin (1994 p.55). It was suggested that these perceptions of vulnerability were a cause for the workers' sickness behaviour, whereby the perceived threat was 'itself disabling and appeared to discourage a return to normal social roles.'

(Tarasuk and Eakin 1994 p.55). However, rather than a 'cause' of behaviour, the findings of this study suggest that negative talk of the future serves important relational functions in interactions. In this study, information framed as a future threat acted to signal a personal situation as still problematic and also managed personal accountability for conduct being described as currently or potentially constrained in some way. Managing accountability is important to avert discredit while providing an account. Accounts that describe vulnerability along with efforts to preserve future health and avoid personal harm convey rational intentions and a valid reason to account for work absence. It can be seen that future-orientated information provided 'reasons' in unfolding interactions that can be appreciated as contextually rational justifications for circumstances or conduct described that might otherwise be met with social disapproval (Tanney 1995 p.105).

Importantly, whether directed towards the past, present or future, the 'stances' taken in accounts towards personal circumstances acted as a form of 'conduct' within interactions. Such conduct has potential consequences for character evaluations and for social relations. It is suggested that a person is accountable for stances taken, judged against broader social values and norms (Du Bois 2007). Offering a 'stance' that is rational implies personal rationality, which in turn enhances social esteem and positive social relations (Driver 2000). This feature in the accounts was evident regardless of the duration of a problem or when during an experience of a problem that account was given.

Appreciating the intertwined interactional concerns being managed by any utterance about the past or future suggests caution if extrapolating 'causes' from a situated account. In physiotherapy practice, a patient's expression of concern for anticipated problems may be seen as 'catastrophising' (Linton et al. 2000; Sullivan et al. 2001). Despite poor evidence, 'catastrophising' is argued to be a psycho-social risk factor for developing chronic pain and disability (Burton et al. 1995; Vlaeyen et al. 1995; Linton 2000). Research has found that 'catastrophising' adults over-predict experimental pain (Goubert et al. 2004) and have greater difficulty disengaging attention from pain (Van Damme et al. 2002). However, as a 'psychological construct', catastrophising measured through self-report scales has not shown correlations with the development of chronic problems or responsiveness to targeted interventions (Pincus et al. 2002; Jellema et al. 2005a).

Of particular interest for this study, Sullivan et al. (2006) found that observers reported relying on patients' facial expressions rather than movements when estimating pain. It was suggested that protective physical behaviours poorly communicate pain levels. A lack of relationship has been found between expressions of pain, self-report scores and what was physically done (Thibault et al. 2008). This finding in an experimental context is echoed in Jayne's diary which illustrates the 'social' role of accounts for communicating and indexing personal difficulties which are not always evident physically:

*Comments were made that my back must be better. On the contrary, I was holding my body rigid in case I jarred it! (Jayne D14)*

In chronic pain contexts, 'catastrophic' talk and the expression of future concerns, anxieties and fears has been suggested to function as a powerful social influence to have emotional and support needs met in problematic situations (Thibault et al. 2008). The relational function of expressions of future concerns shown in the context of this acute low back pain research supports and extends this theory on the 'social' role of communicating pain and distress (Sullivan et al. 2001; Hadjistavropoulos and Craig 2002). As shown in section 5.3.9, exaggerated or 'catastrophic' remarks about the future can have aesthetic power that socially engaging and creates persuasive appeals for significance, compassion and empathy. Although currently encouraged in practice, the findings of this study suggest that the labelling of a patient's talk of future concerns, threats and risks as 'catastrophising' and a 'barrier to recovery' (Picavet et al. 2002; Linton 2005b) may fail to appreciate the interactional functions served by such expressions in the context of telling.

#### **5.7.4 Time passing: changing significance with changing contexts**

The physical passage of time and the changing contexts produced by ongoing lives also provided a shaping influence on the participants' accounts. Changes in the significance of issues or altered relevance with the changing contexts were evident across accounts. Sue's two accounts illustrate the change often seen in what counted as significant with the passing of time. Initially, Sue expressed concern about her garden as a personal impact of her back pain problem.

*'The garden really worries me because I really enjoy working in the garden and I started to think I would pay someone to come in and do it.'* (Sue1 B32)

After ten weeks, a change was described and gardening held little concern:

*Carol: And you have... gardening was a big thing for you, looking after the garden-*

*Sue: -Yes, I am absolutely fine at the moment (2B28)*

However, in the interim Sue had also become a grandmother and a new activity was significant:

*'I find it difficult still. If I give baby a bath. I can't bend down. I have got to go down on my knees.'* (Sue2B15)

Although Sue reported being '*absolutely fine*' in relation to gardening in the follow up interview, she still experienced a problem that now related to the task of caring for her new grandchild. Her account illustrates how issues or activities expressed as significant could be seen to change with time and with the changing personal and social contexts produced. As such, significance did not inhere in the activity but related to the importance placed on particular activities in the context of telling. It also shows how personally unique activities were often offered within the accounts to indicate personal problems. In addition, the relationship between problematic personal circumstances and the ability to perform particular activities was not static. The accounts showed that personal circumstances could still be described as a problem despite improvements in a particular activity.

In the context of chronic low back pain, Sanchez et al. (2009) found that commonly used measurement tools for disability did not capture issues important to patients. The findings in the accounts of acute low back pain also suggest that functional outcome measures may not capture the dimension of relevance in undertaking activities that are particular to individuals, particular to contexts, and sensitive to the altering of personal. It is possible to see how a verbal report of a patient's status could be inconsistent with scores of 'improvement' from structured self-report measures of decontextualised statements or if measuring single activities taken across time. In their use as an indication of physical disability or recovery, such measures rely on the assumption that 'all other factors' remain the same. Assumptions that the achievement of a selected 'patient-specific' goal indicates overall recovery may not allow for changed contexts that create different personal difficulties.

The changing relevancies of activities and concerns within and across the participants' accounts from influences of time and context are consistent with and may explain similar findings in other research contexts. In a comparison of nine 'patient-generated' measurement tools, Jolles et al. (2005) found that comparisons across the tools showed marked variation for a single individual,

despite all consisting of ‘patient-generated’ items. It is also not surprising that Medina-Mirapeix et al. (2009) found that physiotherapy patients with chronic back or neck pain had different ‘beliefs and perceptions’ on exercise adherence depending upon whether in a period of exacerbation or remission when asked. The importance of using individual-relevant and personally identified impact and improvement measures to capture meaningful change in a person’s problem such as acute low back pain appears important. However, the findings also suggests that high ‘consistency’ may be an inappropriate expectation within and between verbal reports and written measures over time and that changing impacts across time may need consideration in interpretations of ‘recovery’.

With the complexity seen within participants’ accounts with representing personal ‘functioning’ and activity difficulties, it is also not surprising that decontextualised self-report outcome measures of ‘physical function’ have not correlated with verbally reported perceptions of the status of back pain problems (Kuijer et al. (2006). The difficulty of outcome measurement is recognised across rehabilitation contexts (McPherson et al. 2010). The complexity in the participants’ accounts provides some understanding towards the conclusions offered by Kuijer (2006) following quantitative research into ‘disability’ measurement in low back pain:

‘Measuring disability is much more complicated than just measuring limitations in ADL, work-related activities or restrictions in work participation.’ (p.165)

Despite the different theoretical perspectives applied, the findings from this study support the recommendations by Kuijer’s (2006):

‘to make a shift in focus in the assessment of work-related disability. This means a more qualitative way of assessing work capacity, work demands and other factors that determine work-related disability.’ (p.158)

The social and moral complexity of descriptions of physical impacts and the influences of time and context found in this study suggest qualitative approaches are valuable for studying the nature of the outcomes focussed on by quantitative research of ‘physical function’ and ‘disability’.

#### **5.7.5 Time passing: changing social considerations and changing rationales**

Finally, the relationship between time passing and changes in social considerations and rationales was strongly evident in shaping the accounts across an experience. It was shown earlier in section 5.6.6 that with the passing of time and positive outcomes, the accounts did not need to

manage of issues of accountability and blame. However, with persisting problems and reporting difficulties over a period of time the accounts were shaped differently. These accounts showed that social considerations such as credibility, personal character and integrity, accountability and blame were increasingly relevant and evident as issues managed within descriptions.

A time-related influence on social considerations and appropriateness when describing an ongoing problem or displays of negativity is illustrated in Linda's comment on adapting the account of her problem:

*'Oh, they don't want to keep hearing- "How are you?"- "Oh well I've got this ache, I've got that ache'. (Linda 1B692)*

The remark illustrates an expected fatigue in interest and social tolerance with hearing of personal difficulties (Bergmann 1998). The relevance of time as an influence on the social practice of providing information in interactions is highlighted (Hanks 1996 p.272). Accounts of problems are not relationally neutral. Ongoing actions of 'complaining' that make continuing relational demands on a listener may risk social disapproval and personal discredit.

Neil's account also conveys the fatigue element produced by passing time in explaining how personal conduct may appear socially inappropriate 'out of context' but more rational knowing the circumstances that involved a time factor:

*'It builds up and then you are fine for a while and then the straw breaks the camel's back and you snap at somebody and they think what on earth did you do that for because all I said was so and so?' (Neil 2B115)*

An appreciation of the influence of time and the continual exposure to a problem underpinned his rationale for inappropriate conduct: '*and you snap at somebody*'. It is possible to see the role of 'duration' as and appreciable as difficult. The passage of time was a meaningful context that influenced the nature of whether something was considered socially appropriate. The relationship of time with reduced tolerance for enduring negative situations was evident in Neil's account of his behaviour and Linda concern to avoid repeatedly exposing others to her negativity.

Of particular importance, the accounts across time showed changes and reversals in rationales offered by the participants. In earlier accounts close to onset, personal qualities and socially expected conduct such as a 'positive attitude', 'determination', 'resilience' or 'a high pain tolerance' were portrayed or directly claimed to be important, helpful and even essential for

recovery. However, with the passing of time and in circumstances of persisting problems, these personal qualities became offered as detrimental and reasons for persisting problems. It was evident that there was a dilemma where rationales should display socially expected and admired conduct against substantiating that socially appropriate ‘attitudes’ and personal conduct were not helpful or making problems worse. A lack of improvement was self-evident proof. This failure of beneficial effect permitted accounts to describe a change in conduct which may have otherwise attracted disapproval and personal discredit, such as: ‘*should have given in sooner*’ (Julia 2B77), ‘*making more of a fuss now*’ (Linda 2B35) or ‘*being more careful and selfish*’ (Jayne 2B91), Jill’s remark illustrates the change evident in the nature of accounts:

*‘Whereas my nature is to help other people, I am looking after me, and I did.’* (Jill 1B262)

Similarly, an altered perspective created by ‘hindsight’ is seen in Anna’s remark:

*‘I must admit I didn’t have any time off, but looking back. I think maybe I should have, but I didn’t want to give up.’* (Anna 1B117)

The effect of time on social considerations and accountability for personal situations and conduct was evident as an influence on the accounts across the trajectory of a back pain problem.

The development of accounting dilemmas was also evident with providing rationales that managed changing social considerations with passing time and when problems persisted. As discussed earlier in section 5.5.4, professional explanations often moved from a ‘physical’ rationale to a ‘psychological’ rationale when problems persisted, which placed personal responsibility and blame onto the participants. Physical problems imply time and nature are responsible for improvement but resolving psychological problems require a personal change in ‘thinking’, ‘attitude’ and ‘beliefs’ (Linton 2005a). Therefore, a lack of resolution implies a personal failure of the individual (Potter et al. 2003b). With Angela’s report of persisting problems illustrated in section 5.5.4, her account was shown to be managing the dilemma for personal conduct that social expectations and competing personal responsibilities impose: ‘*doing everything possible*’ but ‘*being careful not to overdo it*’. To defend the increasing personal accountability for unresolved back problem, a lack of professional knowledge of the particular pathology was increasingly emphasised: ‘*They still don’t even know what is wrong*’. Offering a professional failure helped manage the dilemma of personal character and conduct discredit with a continued lack of improvement.

Conceptualisation of time in the accounts took many variations. Its complexity as a social context, a valued and finite personal commodity and a resource used accomplish functions within the accounts is portrayed by Adam (1994):

‘(Time) is multifaceted: it is involved in physical processes and social conventions, in the abstract relations of mathematics and concrete relations between people. We measure it in clock-time units and by celestial motions, and with the aid of recurrent events and through changes in our bodies. We utilise it as a medium of exchange for goods, services or payments. We use it as a resource of nature, of society, of people, and of institutions ... time for us is clearly not exhausted by the clock-time measure.’ (p 508)

### **5.7.6 Summary**

This section has illustrated the shaping influence of time on the accounts, producing changing circumstances and contexts. As an entity of value and finite availability, time was also a feature used to convey the character and significance of situations. Time as a personally and socially meaningful entity was used as a resource to perform interactional functions, such as enhancing the credibility of accounts and impressions of personal character, integrity and accountability. It was shown how time and temporality were incorporated within descriptions and rationales to explain personal conduct and justify responses. The influence of time on accounts of experiences was also evident in producing changing ‘contexts’, which in turn shaped the kind of information provided and stances offered within and between situated occasions of providing an account. This influence was seen as adaptations in perspectives and concerns, and in changing socio-cultural considerations influencing the accounts across time.

This chapter has illustrated the complex nature of personal accounts of acute low back pain experiences. Accounts are not a straightforward as a form of information. The importance of this complexity for the interpretation and use of accounts as a source of knowledge for practice and research purposes has been highlighted. The final chapter provides an overall discussion of the contribution to knowledge made by this new understanding of the complexity of the accounts and the implications leading from the findings of this study for practice, research and education.

## **6 Chapter Six: Overall Discussion & Conclusions**

### **6.1 Introduction**

In this chapter, the findings and discussions presented are drawn together in an overall discussion to offer the conclusions and contribution to knowledge of this study. The implications for physiotherapy practice, professional education and for current research evidence and policy are discussed. Directions for further research arising from this study are outlined. The chapter then turns to consider the study in relation to the original aims and the new understandings developed of the issues which had prompted this research. Consideration is then given to the limitations of the study and the wider application of the findings. The chapter moves on to offer my reflections on the personal and professional learning linked with the research process and on the changes experienced within my professional practice. A summary of key points and final thoughts on the study conclude the chapter.

### **6.2 Key findings & conclusions**

This thesis has developed a new conceptual framework for understanding the nature of accounts of personal acute low back pain experiences. Interviewing patients and the interpretation of the information generated during clinical interactions is core to managing acute low back pain problems. However, the nature of accounts as a form of information is significantly more complex than previously described within physiotherapy and low back pain literature, or in models of clinical reasoning which underpin current practice. An account is not a straightforward transfer of information. It is dynamically and contingently shaped for and shaped by the particular context in which it is provided. An account is shaped to support an appropriate understanding and appreciation of personal circumstances, character and conduct. Considerations provided by the broader and situated social context as well as the unfolding interaction also shape the nature of an account and the kinds of experiences described. Understanding this complexity supports a more informed approach to the generation, interpretation and use of personal accounts as a source of knowledge in practice and research contexts.

Importantly, a personal account of an acute low back pain experience is accomplishing a number of concurrent and interrelated functions within an interaction. Descriptions within an account construct and characterise circumstances, events and experiences to convey qualities, such as

degrees of significance, importance, unfairness, difficulty, improvement or achievement. An account is also shaped to manage issues of information credibility and reliability, impressions of personal character and moral integrity, personal conduct and accountability. These impressions have important influences on the interpretation of circumstances and on social relations within an interaction which are potentially consequential for the person with an acute low back pain problem seeking care. Evaluations of whether a problem deserves a resolution and the provision of care have important links with interpretations of the person's circumstances, personal character, moral conduct and personal accountability.

Accounts are also influenced by considerations within the situated context, including the purpose of an account, characteristics and background knowledge of the listener, social roles and social relations. The wider socio-cultural context also provides influences, such as from 'authoritative knowledge' on back pain, institutional practices, social norms, communication conventions and commonsense understandings. This influence includes considerations as to what is judged to be 'right', 'known', 'significant', 'appropriate', 'unfair' or 'justified' in relation to experiences and how an account is provided. Adding to this complexity, the 'to and fro' across an unfolding interaction provides momentary contexts and influences that shape the accounts.

It is possible to see that drawing meanings from this form of information is not straightforward when consideration is given to the complex functions and influences shaping accounts. The complexity encourages careful consideration of what might be assumed possible to know about an individual, their circumstances and experiences from the interpretation of an account. The new understanding developed by the study provides a foundation for relating to accounts and interpreting the information provided in a more reflexive, informed and insightful way. The following discussion considers the degree to which the aims of the study have been achieved and the contribution to knowledge for practice provided by the study.

### **6.3 Contribution to knowledge**

The aim of this research project was to gain further insights into acute low back pain problems and to extend knowledge for physiotherapy practice and research. This aim was pursued through an exploration of personal accounts of acute low back pain experiences followed through to recovery or to 12 weeks when problems persisted, considered a time of transition

after which problems are defined as ‘chronic’. A methodology novel to physiotherapy research, a narrative-discursive approach, has been used to explore interview and written accounts of acute low back pain experiences. The increased understanding developed of the nature of the accounts and its value in explaining some of the challenges evident in practice and research concerning the management of patients with acute low back is seen to have achieved the aims of the research. This understanding of the complexity has not featured within previous literature on acute low back pain or within current physiotherapy literature.

The study is considered to have contributed to knowledge for physiotherapy practice and research in the following ways:

- Firstly, at a micro-level, the framework supports a more insightful approach to accounts as a source of knowledge for use in practice. Accounts are an integral aspect of physiotherapy practice for decision making and providing patient care. This new understanding challenges assumptions that an account is information gathered from an individual by an uninvolved, neutral practitioner. An account is a social activity where the information offered is influenced by the unfolding social interaction, the situated context and social relational considerations

The new understanding developed also challenges views that a single, static reality beyond the context of an account can be unproblematically discerned through an interpretation and evaluation of the ‘content’ of an account. Accounts are not a straightforward means of revealing a person’s psychology, their attitudes and beliefs or aspects of their social life. Rather, accounts are dynamic and contingent products of the unfolding social interaction and complex contextual influences. The management of credibility, impressions personal character and integrity, personal accountability and social relations within accounts uses topics, stances and states of mind and emotions as resources, and produces natural variation, inconsistency and contradiction within information.

Perspectives which equate variation and inconsistency in personal accounts with inaccuracy and unreliability against an underlying ‘true’ account, and which do not appreciate the situated interactional functions and socio-cultural considerations being managed within accounts may be consequential. An account and the individual may be judged disapprovingly, as less undeserving of care, or discounted for qualities in accounts that are natural and can be expected in social interactions.

- Secondly, the findings extend beyond the nature of the account to provide an understanding of the way that personal experiences of acute low back pain are shaped by and draw from the wider socio-cultural context. The socio-cultural context provides perspectives for individuals on what is appropriate, right, natural and commonsense when ascribing meanings to, responding to and providing accounts of acute low back pain problems.

Of particular importance for approaches to intervention, this orientation towards socio-cultural influences shows that acute low back pain experiences are never solely a ‘personal’ phenomenon but are integrally tied to practices, influences and considerations provided by the wider socio-cultural context. Competing arenas of knowledge, personal responsibility and accountability from multiple and often conflicting socio-cultural conventions and considerations are reflected in accounts as sources of personal concern, dilemmas and distress for understanding a problem and for personal conduct.

- Thirdly, this study has used a methodological perspective not previously evident within physiotherapy literature. The value for researching issues in practice that are otherwise taken for granted and seemingly mundane is evident. Of particular significance, drawing on alternative theoretical perspectives and understandings within other disciplines beyond the traditional sources of physical and psychological sciences has provided a valuable extension in knowledge for physiotherapy. The narrative-discursive approach has developed increased insight into accounts often assumed as straightforward, taken for granted sources of ‘clinical knowledge’ in physiotherapy practice and research. A tenet developed in anthropology to ‘make the familiar strange’ (Geertz 1973) has helped develop new knowledge not just of ‘what’ is happening but offering understandings on ‘how?’ and ‘why?’

The approach has provided a new perspective on the complexity of the information within accounts not previously considered within physiotherapy practice literature or the research evidence which currently underpins ‘best practice’ in the management of acute low back pain. To ‘know-why’ may help to develop more insightful and encompassing strategies for intervening in acute low back pain through micro-interactional level and macro-sociological level knowledge of patient /practitioner interactions, institutional practices, research approaches and the development and implementation of policy. This study suggests the value of drawing on

a combination of theoretical perspectives in the development of physiotherapy knowledge and research evidence to help achieve more humanistic and collaborative approaches to care. The perspectives help recognise and give attention to the importance of the patients' 'voice' while also understanding the situated and broader complexities shaping the nature of this 'voice'.

## **6.4 Implications and recommendations**

### **6.4.1 Implications and recommendations for practice**

The management of back pain problems within physiotherapy practice strongly parallels approaches taken to the management of most conditions (Jones et al. 2002). As such, the findings are seen to have implications for physiotherapy practice across specialities, not just acute low back pain or other musculoskeletal problem contexts. Furthermore, the breadth of theory underpinning the findings also suggests relevance for other health professions and problem contexts where information generated through interactions informs clinical decisions and approaches to intervention.

Importantly, this study suggests extending the incorporation of broader perspectives within physiotherapy beyond the development of 'propositional' knowledge but to their use as viewpoints to consider the 'knowledge' developed through patient/practitioner encounters. Previous physiotherapy literature has encouraged the use of broader perspectives in the generation of 'propositional' practice knowledge (Higgs et al. 2008 p.155). An appreciation within physiotherapy of the historical and socially constructed nature of the propositional knowledge underpinning practice has also been encouraged in relation to clinical decision-making (Larsen et al 2008). The value in broadening practice epistemologies to incorporate interpretative and critical perspectives into the day to day practice of physiotherapy is evident from this study. The application of interpretivist and critical perspectives may support a more informed and critically reflexive approach to the generation, interpretation and use of this clinically derived 'knowledge'. This includes the translation and use of this knowledge for clinical and intervention purposes.

In addition, the study suggests the benefit of extending current clinical reasoning models to include consideration of the complexity in the information derived from clinical interactions and the consequences for the kind of knowledge possible. The models would be enhanced by incorporating the more nuanced understanding of the nature of the information on which their

effectiveness centres. The philosophy of scientific realism currently underpins models of musculoskeletal physiotherapy practice. This perspective places value on rational, accurate, objective knowledge and where 'scientific rigour' is seen as 'good' and 'virtuous' in practice (Kerry et al. 2008 p.406). This taken for granted, realist approach currently underpins the interpretation and use of information within current models of clinical reasoning (Edwards et al. 2004, 2008), back pain sub-classification (McCarthy et al. 2004; Dankaerts et al. 2006; Wand et al. 2009) and the cognitive-behavioural approach underpinning 'biopsychosocial' interventions (Guzman et al. 2001; Kendall et al. 1997; Linton 2005a). The models assume that the reality of a patient's circumstances and thinking can be discerned from an account with objective, skilful interview techniques and informed professional knowledge. From this perspective, influences from the practitioner, the interaction or the context are not considered to be implicated in the 'clinical data' or the consequences that these influences may have for interpretation (Edwards et al. 2004 p.72).

However, this study suggest a reflexive perspective is needed on what can be considered as 'known' of an individual's circumstances, character, thinking, beliefs or responses from an account generated within practice interactions. The meaning and function of what is said depends on the situated context and is not a simple mirror of reality. Unproblematically taking an account as representing a static, enduring reality beyond the context it is offered fails to appreciate that accounts are shaped to perform situated social actions as well as being a product of the influences from the interaction and wider context. The study suggests that generating and interpreting information in practice encounters would benefit from the same critical reflexivity encouraged in research practice. A change in assumptions are encouraged from seeing information generated in practice encounters as solely 'personal' accounts to be accurately and reliably revealed from within the individual. Reflexivity would consider the functional, interactive and context-dependent nature of an account and what an account is 'doing' there and then in the practice encounter. The enablement, constraints and consequences from broader contextual influences, norms and considerations as well as situated issues such as time constraints in practice encounters are important considerations for the accounts and the way interactions are undertaken.

Consideration would also be given to influences from factors such as control over topics and turns, 'knowledge entitlements' afforded by expertise, the power of 'authoritative' knowledge

and institutional practices, and the status as a gatekeeper of services. A reflexive approach to the constructed, relational and contextually influenced nature of an account and the consequences for its interpretation supports more considered interactions and use of the information in practice and research contexts. Transparency in the values given precedence in the interpretation of accounts and decision-making processes, as well as consideration as to whose values are privileged, would be incorporated into the practices of a critically reflexive practitioner.

In summary, this study encourages the development of practices within physiotherapy that are informed by a breadth of perspectives and a critically reflexive approach towards all forms of knowledge generation and use. This concerns not only 'propositional' and 'non- propositional' knowledge such as professional and personal experience, morals and values, but also the knowledge which becomes translated from patient /practitioner interactions. Professional practices informed in this way may foster more humanist, ethical and socially sensitive interactions, information interpretation and interventions undertaken with individuals presenting with problems such as acute low back pain, and to the practice of physiotherapy more generally.

Critical reflexivity provides a humanistic counter to traditional views that rational, controlled, unemotional accounts are more reliable, accurate and legitimate as a form of information within physiotherapy practice. Appreciating the co-constructed, relational, rhetorical and contextually influenced nature of accounts encourages the interpretation and use of this source of 'knowledge' in practice in ways that will be more considered, enriched and insightful. A critically reflexive practitioner would consider not only the benefits but also the consequences and implications of adopting a chosen perspective, whether realist, interpretivist, critical or other possible views and standpoints. Finally, a critical reflexive practice may help encourage increased creativity, collaboration and innovation in care, a critical evaluation of the kinds of approaches to intervention currently accepted as natural and right, and of the kind of outcomes currently given priority.

#### **6.4.2 Implications for the management of acute low back pain**

The complexity of accounts of acute low back pain experiences is a starting point to re-consider current knowledge, research evidence and models for intervention. This complexity has not featured in the models used for acute low back pain intervention. Information provided within clinical encounters is perceived as an unproblematic route to 'internal' psychologies and

'external' social factors which are currently seen as 'risk factors' for persistent pain and disability. As highlighted in chapter two, scientific methods have been unable to identify physiological causes for persistent back problems. Models explaining chronicity and disability implicate factors within the individual and their social environment (Main et al. 2008). These models place significant emphasis on identifying modifiable 'barriers to recovery' within the individual and their social circumstances. The psychological barriers within the individual are a strong focus of current approaches to intervention.

The complex features within accounts suggest the need to reconsider current models for practice and interventions which assume accounts are an unproblematic way to elicit and identify 'psycho-social' factors. The findings challenge a simplistic ascription of 'psychological' or 'social' factors to individuals, or the identification of personal inner 'cognitions' by extrapolating from the information provided within an account. The complex rhetorical, relational and contextual nature of accounts questions the practice of attributing enduring attitudes, beliefs, dispositions or mental and emotional states to the individual from what is said during an interaction or ticked on a questionnaire. This study has shown how talk which might be construed as 'psycho-social factors' accomplishes social functions, gives information particular qualities, supports impressions and achieves relational effects within interactions. Features such as politeness, resilience, persuasiveness and personal integrity were conveyed through the construction of what may be professionally considered to reflect 'psycho-social' factors. The way that accounts are tied to influences from wider socio-cultural practices, conventions and shared knowledge also questions assumptions that see accounts as an unproblematic way to identify 'psycho-social' risk factors. The 'psycho-social' concepts perceived in accounts need to be recognised for their role as discursive resources rather than reflecting 'out there' enduring realities.

The findings suggest extending the interpersonal theory proposed on the 'communicative role of pain expression' (Sullivan et al. 2001; Thibault et al. 2008; Craig 2009). The inclusion of other 'psycho-social' concepts derived from accounts and currently seen as mediators of recovery or chronicity, such as 'anxiety', 'distress', 'fear', 'avoidance', 'self-efficacy', 'personal control', 'illness perceptions' or 'solicitous family relations' all have a communicative role when conveyed within the interaction in which they are expressed or described. This study has shown that a 'psycho-social factor' portrayed in a person's account could equally be seen to be functioning to persuade, explain, justify, avert blame, encourage affiliation, claim personal

accomplishments, or convey normality or abnormality. Constructions within accounts, whether as discourse or behaviour, are never detached from their social interactional functions. Within practice and research, it is important to appreciate that information provided on states of affairs or the display of personal qualities serves more than a 'representational' function. Approaches to assessment and intervention may benefit from considering the social communicative functions and relational effects of 'representing' back pain experiences, personal character or conduct in particular ways during an interaction or through a written outcome measure.

There are further implications for the application within practice interactions of the 'cognitive-behavioural' explanatory model for the transition of acute to chronic low back pain and disability. The model places causal mechanisms for the persistence of a problem within the psychology and conduct of the individual, as 'unhelpful' and 'mal-adaptive' beliefs and behaviour (Main et al. 2008 p.46). As a 'causal' explanation for a negative outcome, the model implicitly attributes blame for a persistent back problem onto factors within an individual. The accounts in this study showed strong resistance against psychological explanations for problem persistence and the implications for personal responsibility and inadequacy. Biological explanations which were not attributable to a failure in character or conduct were sought or argued for in the accounts. When a practitioner applies this 'causal' model in the treatment of an individual in practice encounters, there are moral implications invoked for the individual's accountability and personal character. Despite the explanatory value of the theory, implementing the 'psycho-' aspect of the model in practice has potential consequences for social relations. When guidelines are based on models with such implications for the patient and the encounter, then the implementation of 'evidence' may be challenging to enact in practice encounters.

Furthermore, the findings support an approach that considers the potentially detrimental nature of many circulating socio-cultural understandings, social conventions and 'commonsense' ideas that inform an individual's responses to a back problem. The issue especially concerns notions of '*right and wrong*' and '*should and shouldn't*s' that are given a concrete and certain nature that is not supported by current research. Models need to consider the influence of wider socio-cultural and institutional resources available for a person to understand, manage and talk about a personal low back pain problem. The issue of wider considerations leads onto the implications of the findings for policy and practice guidelines.

### **6.4.3 Implications for policy and guidelines**

This study supports broadening intervention strategies to target socio-cultural influences which were shown to be integral to experiencing and responding to acute low back pain. The findings indicate that attention is needed at the socio-cultural level of policy, institutional practices and public education to help reduce the impact and consequences of acute low back pain problems on individuals and therefore society. There are increasing moves to improve system level interventions and the effectiveness of interventions at a socio-cultural level has been evidenced (Painting et al. 1998; Buchbinder and Jolley 2004; Main et al. 2005; Blyth et al 2007). The implementation of changes in work certification processes (DWP 2010) and improving pathways to access care for individuals with back problems, such as the self-referral strategies (Holdsworth et al. 2007; Leemrijse et al. 2008), are some of the institutional innovations which may help prevent long term disability at an individual level.

The study highlighted the challenges for individuals in managing ideas of certainty regarding right, wrong and risk in acute low back pain problems which contrasts with the uncertainty acknowledged in research evidence. Government websites and guidelines offering patient information may help alter unsupported ideas of definitive ‘right and wrongs’ since the only strong research evidence for managing acute low back pain is avoiding bed rest. The ‘authoritative’ force of practitioners was also reflected within accounts as reinforcing individuals’ certainty about right and wrong in acute low back pain. Yet there is evidence that professional advice and approaches to intervention are discrepant with research evidence (Bishop et al. 2008; Pincus et al. 2010; Szeto et al. 2010). Resolving such discrepancies appears an important agenda for policy development and implementation.

From a government policy perspective, ‘patient experience’ has been put at the forefront of English government policy and health care delivery (The NHS Plan 2000; The NHS Improvement Plan 2004). The recent English government policy White Paper, “Equity and Excellence: Liberating the NHS” (Department of Health 2010 p.4), sets out proposals for ‘a new approach that puts people in the driving seat’ and improving ‘patient experience and outcomes for all’. The White Paper states that:

‘We will also encourage more widespread use of patient experience surveys and real-time feedback.’ (Department of Health 2010 p.4)

This study suggests that it is critical that consideration is given to the complexity in interpreting 'patient experience' information at this important level of determining NHS policy, especially since its 'measurement' currently links with NHS governance and financial strategies.

Finally, at a more general level, the study suggests the value of drawing on both physical science and social science knowledge as well as qualitative and quantitative research in the development of policies and guidelines. The combination of perspectives may enhance shared decision-making and support more humanistic and effective approaches to patient care in a current climate of cost-benefit weighting of evidence and health strategy.

#### **6.4.4 Implications for professional education**

The findings of this study have implications for professional education within undergraduate programmes and clinical practice. The importance and value of drawing on a breadth of philosophical perspectives to underpin undergraduate and post-graduate education, including interpretivist, constructionist, critical and other research and practice standpoints is indicated. Physiotherapy is a discipline historically informed by and professionally socialised into philosophies of science that value physical science sources of knowledge and approaches to knowledge generation. An understanding of alternative perspectives may support the development of different kinds of knowledge in practice and the ability to be a more reflexive student or practitioner. It is recognised that multiple philosophical perspectives are complex to come to understand and a challenge to embed as a practice. An ability to tolerate and manage competing ways of knowing and to appreciate the competing values of different philosophies is also required. Time is also a constraint on the content of an undergraduate curriculum (Crosbie et al. 2002). However, the link between epistemological perspectives and how a curriculum becomes 'enacted' in practice suggests that an exposure to different philosophical perspectives and learning about the nature of 'knowledge' are important education pursuits. A reflexive and critically thinking profession also seems essential to respond to changing wider contexts and health care environments. Contextual sensitivity within practitioners may enhance abilities to recognise and adapt to the inevitable changes at a socio-cultural level and its manifestations at an individual and professional practice level.

The study suggests value in educating undergraduate and post-graduate students about their discipline's perspectives and having mixed discipline modules and placements to broaden

perspectives. The use of problem-based learning offers an educational strategy to balance the physical science knowledge in education with other forms of knowledge and ways of learning (Sadlo et al. 1994; Sadlo and Richardson 2003; Abrandt Dahlgren and Dahlgren 2002; Solomon 2005; Richardson et al. 2007; Jones and Shepherd 2008). A problem-based approach is suggested to support an appreciation of the particularities of contexts and the complexities of social worlds (Abrandt Dahlgren and Dahlgren 2002). The findings of this study suggest the value of incorporating these factors within solution strategies that a scientific, evidence-driven approach may ignore.

Researchers and academics can help broaden the scope of perspectives within the physiotherapy profession by providing different forms of knowledge and showing their respective value for practice. Professional journals offer a way to broaden perspectives adopted into practice. Editorials, masterclasses and scholarly papers provide an opportunity to introduce different views and stimulate debate to challenge and broaden traditional perspectives. Encouraging students and practitioners to read beyond the traditional disciplinary journals offers another way to introduce an exposure to alternative ways of understanding or researching a problem. The use of physical science knowledge and an evidence-informed practice may be enhanced by learning about the sociology of science. Finally, the language associated with different philosophies can be challenging. It is important that accessible language is used to support the understanding of different philosophical perspectives by students and practitioners.

The conceptual framework developed from the study findings provides the structure for an undergraduate and post-graduate module to develop interactional skills. The framework offers a foundation to learn to generate, interpret and respond in an informed and nuanced way to information provided within clinical interactions. Developing greater sensitivity to the functions and influences shaping an account may change what comes into view during an interaction and the interpretations reached. For example, features that make a practitioner perceive a patient as 'difficult' may be understood in a different light with more nuanced understandings of the way information is constructed and functions within an encounter. Learning about communication practices and how accounts function may help to understand how variation, contradiction and emotional forms of presentation are not poor accounts but natural qualities as accounts function and are influenced within an interaction.

The development of a DVD of scenarios and an appraisal tool would provide a mechanism to help the development of a sensitivity to hearing different functions and influences evident within clinical exchanges. Sensitivity to the credibility, character and accountability work performed by patients' information would change what comes into view when considering the information provided. The understanding developed by the study can be developed into a learning tool to enhance interactional skills so as to be 'a wise situational judge' (Tracy 2002 p.191). The guide could be used to enhance the ability to 'hear' the way that a patient's information is accomplishing various situated functions or how a practitioner's question or response has positioned the patient in terms of credibility, character, accountability or personal competency. Acknowledging the patient's concerns for the situated interaction may enhance the patient's sense of feeling 'listened to' and being given 'patient-centred' care.

Physiotherapists are also 'sense-givers' (Fleming 2001), accomplished through the information and advice offered to patients. The potentially iatrogenic effect of information and advice offered by practitioners has been suggested (Burton et al. 1999) and the accounts reflected evidence of this effect. The development of a reflexive guide could be used to help sensitise practitioners to the effects of phrasing and the meanings which may be construed by patients. Critical appraisal offers a way to consider how a student or practitioner influences the construction of information provided during a clinical interaction. Understanding the nature of accounts allows practitioners to reflect on how they construct questions and responses within interactions and the functions these serve such as displays of 'authority', 'empathy', 'reassurance', 'factual' advice or 'motivation'. The findings provide a framework for considering how phrasing of questions, responses or advice within clinical interaction may discredit a patient or place blame against moral frames of integrity, appropriateness and accountability. The framework encourages a practitioner to reflect on the contextual conditions and institutional practices and conventions which influence what becomes said or interpreted in particular ways during clinical encounters.

#### **6.4.5 Implications for patients**

The development of a DVD reconstructing aspects of the personal experiences described, and in particular the dilemmas expressed by the participants arising from situated and wider contextual factors is seen as an educational and dissemination tool. The value of a DVD for professional and patient education forums has been personally experienced (Sofaer-Bennett 2008). This

strategy provides an avenue to disseminate the findings of the study more widely as an informative tool for individuals presenting with back problems and it may have value for use by support organisations such as Back Care and Arthritis Care. The personal value of hearing shared experiences was expressed in the participants' accounts and has been shown in chronic low back pain, whiplash, and other contexts as well as websites for patients such as NHS Choice and Healthtalkonline.com. The DVD may also be a useful strategy to disseminate findings to the participants and as an education tool for health care professionals.

### **Other dissemination plans**

Dissemination of the findings in the study is also planned through further conference presentations, various publication strategies that encompass professional contexts, such as journals related to low back pain, for example *Spine*, *Pain* and the *Clinical Journal of Pain*, as well as physiotherapy professional journals, such as *The Journal of Physiotherapy*, *Manual Therapy* and *Physical Therapy* and interdisciplinary publications, such as *Qualitative Health Research*, *Discourse Studies* and *Social Science and Medicine*. There is also an interest in publishing articles on the methodology and its value as an approach for researching practice, such as *Qualitative Inquiry*, *Qualitative Research* and *International Journal of Qualitative Methods*.

## **6.5 Directions for further research**

A major direction for further research involves comparing the conceptualisation developed in this study to practice contexts and patient/therapist encounters. The interest includes an exploration of accounts from individuals excluded by the selection criteria of this study, such as where English is a second language and individuals with concurrent depression and anxiety. Exploring patient (client)/practitioner interactions within other disciplines, such as Occupational Therapy and Psychology, offers an opportunity to broaden knowledge for physiotherapy practice.

Future research would also aim to use video-recordings rather than audio recordings where ethically possible. Conveying meaning in an interaction is not just verbally but also physically accomplished, and presupposes and relies on what is shared concerning physical contexts as well as shared knowledge, culture and communicative practices (Brown and Stenner 2009). It is now appreciated that video-recording allows the exploration of non-verbal aspects not captured by

audio-recording. The use of video-recording introduces other considerations such as the influence of videoing on an interaction and maintaining anonymity. However, the value is seen in other physiotherapy research contexts (Parry 2004, 2009). Although audio-recordings and transcripts were a particular form of representation of the interview data, the personal experience of having participated in generating the accounts helped inform the analysis, as discussed in section 4.5.2. As a practitioner undertaking my own and observing the clinical interactions of others in parallel with the study, this inevitable ‘informal ethnography’ was an opportunity to consider the developing analysis of the accounts. It has some parallels with the methods described in the construction and testing of ‘grounded’ theory (Charmaz 2006b). This implicit and inevitable process as a researching practitioner supported the analysis and development of the findings and indicates the value of using video data for future research.

A second direction involves an interest in researching the therapeutic value of written accounts as an approach to intervention in acute low back pain problems. Several participants remarked on the positive effect of the in-depth interview and diary, illustrated and discussed further in my reflections on the study process in relation to ethical issues in section 6.7. There is evidence for and ongoing debate regarding the ‘therapeutic value’ of research interviews and diaries (Mattingly and Garro 1994; Elliot 1997; Stensland and Malterud 2001; Rosenthal 2003; Hislop et al. 2005; McLeod 2006; Ramírez-Esparza and Pennebaker 2006; Bornat and Walmsley 2008). The use of written narratives as a therapeutic intervention has been explored in chronic low back pain (Ølen et al. 2007) and in other illness contexts (Pennebaker 1997; Greenhalgh 1999; Wright 2005). As such, the use of writing about a personal acute low back pain problem as a therapeutic intervention is a direction for further research.

Thirdly, further research is needed into the concept of ‘psycho-social risk factors’ which currently underpins management of acute low back pain as well as other musculoskeletal problems. These factors are screened for and influence intervention decisions in practice. Despite the fact that ‘psycho-social factors’ have proved difficult to evidence, measure and address when targeted, in physiotherapy practice these ‘factors’ are taken to indicate a risk for chronicity and used to classify patients for intervention purposes. This study has shown how ‘psychological’ and ‘social’ factors were constructed, adapted and contested in interactions to accomplish various functions and manage impression. As discussed in chapter two, the early detection of ‘psycho-social factors’ has been identified as a major focus for future research

globally (van Tulder and Koes 2010). In light of the findings of this study, further research into the nature of these 'factors' that are currently taken as 'barriers to recovery' seems paramount.

A fourth direction of future research extends from the value of a narrative-discursive methodology to explore other aspects of practice being 'done' within interactions. There are concepts in practice which remain implicit within an patient/therapist encounter, such as 'expertise', 'patient centred care', 'good communication skills', 'therapeutic relationships' and 'reassurance'. The 'non-specific effects' in placebo and 'sham' interventions currently understood as influences from the interaction are also of particular interest to explore with this methodology. There is currently a limited understanding of how these are accomplished as situated actions, therapeutic influences and skills 'done' within the 'to and fro' of a practice encounter (Simmonds 2000; Kaptchuk 2002; Bendetti et al. 2006; Miller and Kaptchuk 2008). The methodology used in this study provides an avenue to improve the understanding of these mechanisms and the interpersonal actions contributing to 'placebo' and 'therapeutic influences in practice contexts.

A fifth interest involves research into 'macro' socio-cultural factors as well as the 'micro' level features of the accomplishment of these phenomena within clinical interactions. A critical perspective offers a valuable lens for further research. For example, enacting 'expertise' in practice may also be explored for issues of knowledge entitlement/power relations that make the practitioner 'informed and authoritative' and the patient a novice requiring education. There is also an interest in the exploration of the current rhetoric surrounding concepts in current practice in relation to 'patient-centredness', 'collaboration', 'empowerment', 'acceptance' and what the facilitation of these phenomena in physiotherapy practice might look like within situated encounters and from patient and practitioner perspectives. The possibility of mapping the institutionally shaped communicative practices involved could provide a basis for undergraduate and post-graduate education and mentoring in clinical contexts.

A final interest for future research is the relationship between evidence-informed guidelines for acute low back pain and their implementation and translation as knowledge in situated contexts within practice. Research indicates there is a lack of implementation of guidelines within practice based on questionnaire/interview data. It would seem valuable to explore how guideline implementation gets 'done' in practice. This may help gain a better understanding of the contexts and conditions within practice contexts where practitioners apply this theoretical

knowledge or take other approaches. It may be possible to develop guidelines more responsive to practice contexts by exploring how practitioners apply theoretical knowledge/research evidence within patient encounters. Insights gained by observing what happens, compared to what is said about it, produces different kind of knowledge (Ballinger and Payne 2000). Researching patient/practitioner encounters may help understand contexts where the guidelines prove difficult to implement as indicated by research on experiences of practitioners (Breen et al. 2007; Coudeyre et al. 2006; Bishop et al. 2008). Research into tailoring medical evidence to individual patients is exploring ways to categorise features within patient accounts to help in the application of evidence (Griffiths et al. 2010). However, this research has taken a representational view of accounts that has not considered their complexity. Exploring patient/practitioner encounters may help towards developing guidelines and situated practices which support the effective adaptation of population-level evidence to meet the particularity of individual circumstances and interactions in practice contexts. The following section considers limitations of the study and the application of the findings to other contexts.

## **6.6 Limitations and transferability of the research**

It may be argued that a limitation to the transferability of the findings is that the study was undertaken in a situated 'research' context with a focus directed at exploring acute low back pain accounts. However, a number of considerations support the transferability of the findings from this research to other contexts. A simplistic 'container' view that the context was purely a 'research' one was shown to be unravelled by the way the participants orientated to the research nature of the occasion but also as an opportunity to seek clinical information and advice. The participants also adapted their information in response to the context of my physiotherapy 'practitioner' background. Furthermore, accounts offered within similar socio-cultural context would have influences from the same wider 'knowledge', conventions and social considerations relevant for communication and for talking about personal acute low back pain problems. The framework offered in the thesis also developed from evidence of the shaping of accounts of acute low back pain within the participants' personal lives, work and health care contexts as well as during the 'research' interactions analysed in the study. The contextually shaped nature of accounts is argued to be a universal feature.

The thesis is not arguing for the transferability of the 'content' of information provided within the account or the kind of experiences described. Neither is the new understanding developed

offered for use as predictive knowledge about the content of accounts across contexts. Rather, it is argued that the contexts in which accounts are offered will have an influence on the nature of the information provided. Features shaping the accounts will involve social actions and contextual and interactional factors, whatever the nature of the particular interaction or its context. As such, all accounts are products of a social interaction and the situated and wider contexts and considerations. The thesis seeks to encourage consideration of the complex nature of the information provided during interactions and the implications with its use as 'data', in practice and research contexts. Transferability of the findings is supported by the commonality of the features identified with research on interactions in other disciplinary, institutional, clinical and natural setting contexts. As such, the conceptualisation developed is seen as a foundation for understanding the nature of accounts beyond the context of personal acute low back pain experiences to accounts of other kinds of personal experiences in other interaction contexts, including physiotherapy practice and other health or natural setting contexts.

Sample size and participant characteristics are sometimes argued to influence the transferability and relevance of findings to other contexts. Research within other paradigms sees large sample sizes and the demographics and characteristics of participants as imperatives for developing universal, generalisable knowledge about acute low back pain. However, the findings offer knowledge for physiotherapy practice on the nature of the accounts not their content. The thesis argues for the importance of the particularised nature of accounts about acute low back pain to be considered when used as a source of 'knowledge' for practice purposes, especially if labelling patients and using accounts for decision-making about management. Whatever the characteristics or size of the sample studied, participants' accounts are shaped for and by the situated occasion and context. In one or one hundred accounts studied, an account will be shaped by and for the situation and influenced by the characteristics of the individual and audience, presence of partners, interpreters, the purpose of the occasion, and the wider culture/s and language/s in which the interactions take place.

Some perspectives may see the influence of personal 'biases' and 'subjectivity' as a limitation of the knowledge produced from personal interpretations of data (Patton 1990). From the theoretical perspective adopted in this study, subjectivity is inevitable in the nature of a research project and the knowledge produced (Potter and Wetherell 1987; Holstein and Gubrium 1995). The findings of the study are not seen to be final and complete, or 'the truth', but offered as

knowledge rigorously developed and theorised for the consideration and evaluation by others. The analysis has been undertaken critically and reflexively from research and physiotherapy practice perspectives, which is displayed and made as transparent as possible within the thesis. It is recognised the findings were shaped by personal, professional, social, and wider contextual factors. The influences of 'habitus' as described by Bourdieu (1990, 1991) and made natural as processes in familiar 'communities of practice' (Wenger 1998) become evident on reflection in research and practice undertakings. These factors offer a challenge to consciously recognise, if that is completely possible, to make explicit and to discern the influence so that this aspect can be considered when evaluating the study. What might be considered a bias is also a lens taken to the research. An important lens has been my 'researching practitioner' perspective, where the 'so what?' for physiotherapy practice drove the pursuit of useful and insightful findings. There are always alternative lenses to use and other ways to explore and understand the data of a study. From the approach taken, this thesis offers as an empirically grounded and more informed way to understand accounts of acute low back pain experiences. It argues for an appreciation of the complexity of accounts and of the consequences of this complexity when accounts are interpreted and used in practice contexts.

Furthermore, it is through the research account that the knowledge achieves its credibility and makes its appeal to be incorporated into another's understanding. A research account draws on the same discursive devices as accounts of acute low back pain experiences. The similarities and significance are highlighted by Alvesson and Kärreman (2000):

'There are obvious parallels between the researcher's situation and the informant's or interviewee's situation: The production of an account is a complex accomplishment that needs to be understood in its own terms. Accounts are, as stated above, more than simple mirrors of experiences, observations, and insights relating to the world out there or even of personal, subjective realities such as feelings or meanings.' (p.142)

The 'terms' referred to by Alvesson and Kärreman (2000) through which to understand this research account include the description provided of the study and the way a discursive account is able to convey the quality and value of a study. This includes providing an adequate understanding of the context of the research and my position as the researcher, consistency with the perspective taken, and the efforts at rigour and ethical integrity within the research process.

## 6.7 Reflections on the research process

The thesis began by introducing a research interest arising from my physiotherapy practice concerning understandings of acute low back pain problems. As discussed in chapter one, my research interest developed following clinical involvement in a research trial. An unexpected finding from the trial had sparked a curiosity that patients who had treatment delayed for six weeks showed psycho-social ‘risk factors’ scores which had not improved despite significant improvements in ‘pain’ and ‘function’ scores. At the time, this statistical finding seemed retrospectively to justify the personal angst felt as a clinician when required to refrain from treating the patients randomised to a six week wait for treatment. The search for a better understanding of these issues prompted the research journey to study acute low back pain.

At the outset of the research, the angst of delaying care was put aside as just a personal matter. The research pursued the seemingly unrelated professional interest in what might be happening during the acute phase of low back pain problems with or without treatment. Why should poor ‘psycho-social’ scores persist despite recovery in ‘pain’ and ‘function’? The findings of this study question assumptions that ‘psycho-social’ factors can be captured from a series self-report questionnaires and that they are an accurate measure of a person’s circumstances and psychological state. The discrepancy in the statistical findings within the research trial can now be seen as unsurprising rather than surprising. This study has shown the problematic nature of the assumption that decontextualised questionnaire statements reflected an underlying reality that could be measured across time and contexts.

Unexpectedly, the findings have provided an answer to the issue of the angst about delayed treatment experienced as a clinician during that clinical trial. The patients’ accounts of their acute low back pain problems during the clinical trial can now be appreciated as functioning in similar ways as the participants’ accounts in this research, although with more at stake in a treatment encounter. The patients’ accounts provided years earlier had obviously created a persuasive appeal that evoked my compassion and experience of angst when not permitted to provide help.

The interview experience was explored with participants at the end of each interview as a form of exit strategy and debrief from the process. Positive influences were expressed by several participants who suggested the in-depth interview process and diary undertakings were helpful within their experiences. Other researchers have proposed that a research interview can be a congenial context for personal narration which participants find pleasurable and report benefit

(Redman 2005; Taylor 2005). Several participants in this study had expressed that the interview process and the diary completion was a personally valuable exercise, as seen below:

*'I would say that you need someone you can really talk to about it, like this. That's what you really need. [ ] It is knowing that someone is listening to you, saying what you are thinking and what you need.'* (Julia1B130)

*'They helped (me) to get back to normal. [Make you feel better?] Hell of a lot better. I recommend you do that for treatment for people.'* (Brian2B712)

*'I found, in fact, it (diary) was very interesting'* (Judy2B175)

The expression of this positive effect suggested that the interview and diary process had not been a source of distress or personal harm for the participants. This issue was also discussed in section 6.9 as a direction for future research concerning the possible benefits of a diary strategy in the management of acute low back pain problems.

Decisions concerning ethical issues relate not only to the protection of participants but extended beyond this relationship. Continual evaluation and negotiation of ethical issues was important throughout the study and will continue to be so through dissemination processes. As Finlay (2006) suggests, dissemination requires ethical conduct, to be undertaken in a way that is responsible and has integrity, value and meaning. Gomm (2004 p.16) has argued for the importance of developing 'moral expertise' to support appropriate research decisions. Based on an ethical framework offered by Gomm (2004 p.304), an evaluation of participant harm and good was undertaken prior to and after completion of the research project and is provided in Appendix 24.

The research has proved to be an incredible learning process as a researcher and a practitioner. Previously, the perspective from which research should be undertaken was a taken for granted and untroubled idea. Understandings of acute low back pain problems in physiotherapy practice, and most other problems, remain largely informed by a view that values experimental approaches and objective measurement of professionally defined domains across populations. The kind of problems being dealt with, the value and effectiveness of various screening tools, classification processes, outcome measures and intervention approaches has derived from building on population-based research. My initial intention had been to build on this knowledge. The narrative-discursive approach was a philosophical perspective which developed and became practised only as the research progressed. The development of a methodological approach across

the life of a study has been described by other researchers (Wengraf et al. 2001; Ballinger 1999; Townsend 2006; Shaw and Bailey 2009; Griffiths et al. 2010). An examination of theory and research within and beyond the field of low back pain provided an exposure to theoretical perspectives and other disciplinary understandings outside the traditional sources from which I had usually sought knowledge as a physiotherapist. A broader understanding gradually evolved of the different perspectives from which a problem could be understood and therefore explored. This understanding also unsettled my assumptions on the kind of knowledge which could be produced and that had been privileged as a relevant and useful outcome from undertaking research.

In conceptualising different learning endeavours in the context of organisational learning, Chiva et al. (2010 p.125) highlight both the value and the pitfalls of 'the building-up of knowledge' described as 'adaptive learning' against 'generative learning' which generates new knowledge. Drawing on complexity theory, 'adaptive learning' is characterised by building on what is known through logical deductive reasoning, concentration, discussion and improvement. This form of learning is considered a refinement of existing competences, technologies and paradigms without necessarily examining or challenging underlying beliefs and assumptions. It is argued that 'adaptive learning' builds on and reorganises current knowledge but remains within the limits of that knowledge. In contrast, 'generative learning' provides a new way of looking at the world (Chiva et al. 2010 p.125). Drawing on this view, the form of learning from this research process reflects the qualities of generative learning which Chiva et al. (2010) argue is characterised by a fundamental shift of mind:

'Generative learning is developed individually or socially at the edge of chaos, through intuition, attention, dialogue and inquiry.' (p.119)

From the outset of the research, there seemed a need to think differently but not knowing how to. For increasing moments, I could glimpse the constraints of my default way of thinking and seeing, which would then slip back to a measurable, objective and 'table-thumping' realists' world (Edwards et al. 1995 p.27). In the literature, I admired research that told of starting an investigation in one place but had ended up in a place somehow 'over there', perpendicular to the initial problem and the direction anticipated. These research projects described finding that a much more appropriate question had been answered than applied at their outset. At that time, I was frustrated by not knowing how to get my own research project 'over there'. There is a realisation now that the process of undertaking the research is what takes it 'over there', where

better questions become visible. The experience within this study reflected a characteristic, even an expectation, of social science research described by King et al. (1996), of an imperfect fit between the initial research question, the theory and the data despite a carefully considered research design. This 'imperfect fit' and the researcher's response to this discrepancy can prove very significant. King et al. (1996 p.13) have suggested that 'data has a way of disciplining thought'. Recasting a theoretical question or posing an entirely different question not originally foreseen can produce a more important research project. This reflects my experience of undertaking this study.

Like the research I had admired, my research, my thinking and my way of seeing have moved to a very different place. Now, as I thump on the real table, I can also see, hear and feel the relative, constructed perspective through which it can also be understood. There is also some thought towards what each perspective can contribute to understanding and knowledge, as well as whose interests certain views might serve. The research experience and the practice it has encouraged have provided significantly broadened perspectives to consider issues of interest and the way problems are construed.

The contrast that was evident between my research practice and my clinical practice, both contexts generating and interpreting data for their various purposes, was an important insight for the direction of the study. In the research context, my practice involved intensively considered efforts to undertake and make carefully reflexive interpretations from a post-modern, 'active interviewing' approach. The process of data generation was scrutinised for influences and ethical concerns while analysis considered the consequences of the co-produced, contextually influenced nature of the interview data. Within every aspect of the research endeavour, a conscious effort was being made to apply a reflexive approach. In stark contrast, in the clinical context my practice and the practice of colleagues applied a completely different, 'unproblematic' set of assumptions to the clinical interview and the 'data' produced.

My research approach had come to be practiced from a social constructionist, reflexive perspective, yet this view had not penetrated my clinical day or clinical reasoning practices. In the clinical context, the 'data' generated with patients was treated as if immune from all the influences given attention in a research context. The incongruous nature of my 'practices' across the two contexts was striking and became a significant factor informing the development of the thesis. Reciprocally, my clinical practice became strongly enriched by my learning during the research undertaking and produced a significant change in the knowledge applied in my practice.

What would physiotherapy practice be like from a socially constructed perspective? Many taken for granted notions would become unravelled. Hunt et al. (1999) have argued for a social constructionist approach to considering physiotherapy knowledge but the view that has been encouraged has not yet encompassed undertaking practice from a fully constructionist perspective (Higgs et al. 2008). A social constructionist practice would understand there is no certainty to be achieved in the knowledge generated during interactions, and that the kind of evaluations made depend on the values given to different forms of knowledge. Establishing authenticity and a shared understanding may be the aim of a patient assessment, along with an understanding of what might be at stake in providing or responding to an account in a particular way in a particular context. As suggested by Griffiths et al. (2010 p.2), a conscious decision would be made, as to how information generated during interactions is ‘cut out of space and time... and where to place the boundary around it to delineate it from its relationships and context’.

A social constructionist sensibility in physiotherapy would anticipate that meanings taken from decontextualised responses on screening tools and outcome measures may not align with a situated oral account. In practice encounters when a real life context presents itself for portraying one’s difficulties, conduct, social situation and reasons, then the information offered will reflect concerns with what is at stake in that context, portraying socially acceptable and appropriate explanations and managing impressions of credibility and personal character. The information offered would be understood in terms of interactional adequacy and social relations rather than accuracy and reliability against notions of a single truth and reality. The information would not be expected to indicate causes for problems, as might be traditionally assumed. The reality perceived and the process through which it becomes constructed would figure in the practitioner’s clinical reasoning process. Rather than working out how to treat the particular reality constructed most effectively, how might constructions that are more beneficial be reported?

## **6.8 Reflections on changes in my practice**

There has been a significant change in my clinical practice from the experience of undertaking the research, ‘listening with different ears’ an insightful colleague suggested. The learning that occurred within the research process gradually flowed into my clinical world. The same discursive features, functions and influences so familiar in the research data became obvious within the flow of descriptions offered by patients, regardless of the nature of their health issue. In fact, these features became obvious within any dialogue. The constructions offered by another,

and the ones I offer, now resound with the negotiation of interactional business, both rhetorical and relational, although not always as might have been intended. My own and my colleagues' firing of questions, perpetual interruptions to obtain the information felt necessary and cutting off 'time-wasting' stories or details became obvious.

The recognition now jars as the interactional effects of these practices and influence on the information generated can be seen. Patients are witnessed trying to manage such moments where much seems at stake for their care. The actions that patients' accounts are trying to achieve are acknowledged during the interactions. The significance and difficulty of a problem is appreciated, although resolutions are not always easily achieved with what we currently know. Concerns for personal and information credibility are acknowledged. Reassurance is given when patients can be heard managing evaluations of their character and integrity or the dilemmas from issues of accountability, as circumstances and rationales for conduct are described.

The research has brought a deeper understanding of the interactions process, the information generated and the positive effect experienced with applying this understanding in my clinical practice. The experience has also broadened my approach to the professional development and clinical queries of my colleagues. My approach is to encourage their reflexivity towards the assumptions underlying the knowledge they apply in making judgements of information from patient encounters. Consideration given to the nature of the knowledge applied in patient care is also encouraged, whether 'propositional', 'experiential' or the 'clinical' knowledge derived from interactions with patients. The enhanced practice which comes from considering the interactional functions that patients' accounts perform, the contextual influences and the consequences on and for the interpretation of accounts and for social relations within interactions supports the practical value of the findings. The findings have also provided explanations and alternative ways of responding to the experiences and challenges colleagues describe during their clinical interactions.

As a final word, Gee (2005) offers a comment that captures the nature of the link between the endeavour of this research to extend knowledge, to improve physiotherapy practice and to extend personal learning, and their relations to a wider social life in which all are encompassed:

'In the end, discourse analysis is one way to engage in a very important human task. The task is this: to think more deeply about the meanings we give people's words so as to make ourselves better, more humane people and the world a better, more humane place.' (p.xii)

## 6.9 Conclusion

*'That's what I would like to become, the person without back pain any more.'*

*(Jayne IB113)*

This thesis began by introducing the issues in my practice that had prompted this research, with its aim to extend current understandings of acute low back pain and its management for physiotherapy practice. Acute low back pain and preventing the development of chronic pain and long term disability remains a challenge, not just for the people experiencing a problem that persists, like Jayne, but also for health professionals and researchers seeking to improve ways to prevent the personal and broader impacts of low back pain problems.

In physiotherapy practice and research contexts, the interpretation and use of personal accounts generated through patient/ practitioner interactions or through research encounters, whether in verbal or written form, are integral to current approaches to the management of acute low back pain. The thesis has shown that the nature of personal accounts is significantly more complex than previously described in physiotherapy literature or given consideration in models of clinical reasoning and acute low back pain intervention. The findings of this study challenge assumptions that see accounts as a straightforward source of information. Personal accounts are dynamically and contingently shaped for and shaped by the particular contexts in which they are provided, the unfolding interaction and by wider socio-cultural influences.

When consideration is given to the interactional functions and the situated and wider influences shaping both the experiences described and the way accounts are provided, it is possible to see that neither the experiences conveyed nor the accounts provided are straightforward for what might be considered as known about a person's circumstances, character, thinking or conduct. Accounts need to be appreciated for the social actions they perform and the situated and wider contextual factors which influence the nature of an account. The study has extended understandings of this complexity and brought attention to the implications for the generation and interpretation of accounts. The findings provide a more informed approach to the use of accounts to develop knowledge for clinical interventions and research purposes. The new understandings encourage a more nuanced and sophisticated approach to eliciting, inevitably contributing to and interpreting accounts of acute low back problems or of other health problems, in both practice and research contexts.

The thesis has shown the complexity of an important source of information in practice and research that has been taken for granted as a basis for developing knowledge for the management of acute low back pain. The study has also highlighted hidden consequences of the complexity within personal accounts for undertaking interactions in practice, for researching low back pain and for those seeking care. A number of important implications have been discussed for professional and undergraduate education, which include the value of incorporating a breadth of theoretical perspectives to inform the development of professional knowledge and using the findings to enhance interactional skills.

The study has also shown the value of the narrative-discursive methodology as an approach for researching issues in physiotherapy and for extending knowledge on the nature of its practices. Noticing aspects of physiotherapy practice which are 'taken for granted' is a challenging task by the very nature of this quality. However, the study has shown that the theory, understandings and approaches to research used within other disciplines provide a valuable way to contrast and notice what is otherwise considered routine within the discipline of physiotherapy and for which greater or different understandings may be developed. Drawing on the insights from other disciplines and undertaking multi-disciplinary research projects may help develop a broader and more insightful set of practices and approaches to patient care incorporated into physiotherapy, both in the context of acute low back pain as shown in this study, and for the many other health and illness issues which physiotherapy endeavours to improve.

---§---

## 7 References

- Abbott J & Mercer S (2002). The natural history of acute low back pain. *New Zealand Journal of Physiotherapy* 30, 3, 8-16.
- Abdul-Khalid S (2009). Sense-making in interpretive management accounting research: constructing a credible account. *International Journal of Qualitative Methods* 8, 1, 41-53.
- Abell J, Locke A, Condor S, Gibson S, Stevenson C (2006). Trying similarity, doing difference: the role of interviewer self-disclosure in interview talk with young people. *Qualitative Research* 6, 2, 221-244.
- Abell J & Myers G (2008). Analysing research interviews. In R Wodak & Kryzanowski M (eds) *Qualitative Discourse Analysis in the Social Sciences*, Basingstoke: Palgrave Macmillan.
- Abell J & Stokoe E (1999). I take full responsibility, I take some responsibility, I'll take half of it but no more than that: Princess Diana and the location of blame in the Panorama interview. *Discourse Studies*, 1, 3, 297-319.
- Abrandt Dahlgren M & Dalgren L (2002). Portraits of PBL: students' experiences of the characteristics of problem-based learning in physiotherapy, computer engineering and psychology. *Instructional Science* 30, 111-127.
- Adam B (1994). Perceptions of Time. In Ingold T (ed) *Companion Encyclopedia of Anthropology*, London: Routledge
- Adam B (1995). Timewatch. *The Social Analysis of Time*. Cambridge: Polity Press.
- Adams M (1991). Information and education across the phases of cancer care. *Seminars in Oncology Nursing* 7, 2, 105-111.
- Aijmer K (2009). "So er I just sort of I dunno I think it's just because ...": A corpus study of I don't know and dunno in learners' spoken English. Jucker A, Schreier D, Hundt M (eds). *Corpora: Pragmatics and Discourse*, p.151-168, Amsterdam: Rodopi,.
- Ainsworth-Vaughn N (1995). Claiming power in the medical encounter: The whirlpool discourse. *Qualitative Health Research* 5, 3, 270-291.
- Airaksinen O, Brox J, Cedraschi C, Hildebrandt J, Klaber-Moffett J, Kovacs F, et al. (2006). European guidelines for the management of chronic non-specific low back pain. *European Spine Journal* (suppl.2), S192-300.
- Allgood J (2000). An activity based approach to pragmatics. In Bunt H & Black B (eds). *Abduction, belief and context in dialogue; Studies in Computational Pragmatics*. Amsterdam: John Benjamins.
- Álvarez-Cáccamo C (1996). The power of reflexive language(s): code displacement in reported speech. *Journal of Pragmatics* 25, 33-59.
- Alvesson M & Deetz S (2000). *Doing Critical Management Research*. London: Sage.
- Alvesson M & Kärreman D (2000). Taking the linguistic turn in organizational research: Challenges, responses, consequences. *Journal of Applied Behavioral Science* 36, 136-158.
- Alvesson M & Sköldbberg K (2000). *Reflexive methodology*. London: Sage
- Anderson I & Doherty K (2008). *Accounting for rape: psychology, feminism and discourse analysis in the study of sexual violence*. Hove, East Sussex: Routledge.
- Annas J (2006). Virtue Ethics. In Copp D (ed.). *The Oxford Handbook of Ethical Theory*. Oxford University Press. p. 15-36

- Annunen S, Paassilta P, Lohiniva J, Perala M, Pihaljamaa T, Karppinen J et al. (1999). An allele of COL9A2 associated with intervertebral disc disease. *Science* 285, 409-412.
- Antaki C (2002). Personalising a question to repair a failed answer. *Discourse Studies* 4, 411-428.
- Antaki C (2004). Reading minds or dealing with interactional implications. *Theory & Psychology* 14, 667-683.
- Antaki C, Billig M, Edwards D, Potter J (2003). Discourse analysis means doing analysis: A critique of six analytic shortcomings. *Discourse Analysis Online 1*.  
<http://www.shu.ac.uk/daol/articles/v1/n1/a1/antaki2002002-t.html>.
- Apkarian A, Baliki M, Geha P (2009). Towards a theory of chronic pain. *Progress in Neurobiology* 87, 2, 81-97.
- Ashworth P (1993). Participant agreement in the justification of qualitative findings. *Journal of Phenomenological Psychology* 24, 3-16.
- Asmundson G & Norton G (1995). Anxiety sensitivity in patients with physically unexplained chronic back pain: A preliminary report. *Behaviour Research & Therapy* 33, 7, 771-777.
- Asmundson G, Vlaeyen J, Crombez G (2004). *Understanding & Treating Fear of Pain*. New York: Oxford University Press.
- Atkinson J & Drew P (1979). *Order in Court: the organization of verbal interaction in judicial settings*. London: Macmillan.
- Atkinson J & Heritage J (eds) (1984). *Structures of Social Action: Studies in conversation analysis*. Cambridge: Cambridge University Press.
- Atkinson P (1997). Narrative turn or blind alley? *Qualitative Health Research* 7, 3, 325-344.
- Atkinson P (2009). Illness narratives revisited: The failure of narrative reductionism. *Sociological Research Online* 14, 5, 16. <http://www.socresonline.org.uk/14/5/16.html>
- Atkinson P (2010). The contested terrain of narrative analysis - an appreciative response. *Sociology of Health & Illness* 32, 4, 661-667.
- Atkinson P & Silverman D (1997). Kundera's Immortality: the interview society and the invention of the self. *Qualitative Inquiry* 3, 3, 304-325.
- Austin J (1962). *How to do things with words*. Oxford: Clarendon Press.
- Australian Acute Musculoskeletal Pain Guidelines Group NHMRC(2004). *Evidence-Based Management of Acute Musculoskeletal Pain: A Guide for Clinicians*. Bowen Hills, Australian Academic Press.
- Baehr J (2006). Character, reliability and virtue epistemology. *The Philosophical Quarterly* 56, 223, 193- 212.
- Baehr J (2007). On the reliability of moral and intellectual virtues. *Metaphilosophy* 38, 4, 456-470.
- Baker C (1997). Membership categorisation and interview accounts. In Silverman D (ed.). *Qualitative Research: Issues of Theory and Method*, p.130-143. London: Sage.
- Baker C (2002). Ethnomethodological analysis of interviews. In Gubrium J & Holstein J (eds). *Handbook of Interviewing: Context and Method*, p.777-795. Thousand Oaks, CA: Sage.
- Baliki M, Chialvo D, Geha P, Levy R et al.(2006). Chronic pain and the emotional brain: specific brain activity associated with spontaneous fluctuations of intensity of chronic back pain. *Journal of Neuroscience* 26, 12165-12173.

- Ballinger C (1999). Falls and falling as explanations concerning health and self in older people. *Unpublished PhD thesis*, University of Southampton.
- Ballinger C (2006). Demonstrating rigour and quality? In Finlay L & Ballinger C (eds). *Qualitative Research for Allied Health Professionals: Challenging choices*. Chichester: John Wiley.
- Ballinger C & Payne S (2000). Falling from grace or into expert hands? Alternative accounts about falling in older people. *British Journal of Occupational Therapy* 63, 12, 573-579.
- Bamberg M (1997). Positioning between structure and performance. *Journal of Narrative & Life History* 7, 1-4, 335-342.
- Bamberg M (2006). Stories: big or small: why do we care? *Narrative Inquiry* 16, 1, 139-147.
- Barker K, Reid M, Minns Lowe C (2009). Divided by a lack of common language – a qualitative study exploring the use of language by health professionals treating back pain. *BMC Musculoskeletal Disorders* 10, 123 doi:10.1186/1471-2474-10-123.
- Barnes R & Moss D (2007). Communicating a feeling: the social organization of ‘private thoughts’. *Discourse Studies* 9, 2, 123-148.
- Barsky A (2002). Forgetting, Fabricating and telescoping. The instability of the medical history. *Archives of Internal Medicine* 162, 981-984.
- Batson C (1991). The altruism question: toward a social-psychological answer. *Hillsdale, NJ: Routledge*.
- Battie M, Cherkin D, Dunn R (1994). Managing low back pain: Attitudes and treatment preferences of physical therapists. *Physical Therapy* 74, 219-226.
- Baumeister R & Wilson B (1996). Life stories and the four needs for meaning, *Psychological Inquiry* 7, 322-325.
- Beach W (1996). *Conversations about illness: Family preoccupations with bulimia*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Beach W & Metzger T (1997). Claiming insufficient knowledge. *Human Communication Research* 23, 562-588.
- Beattie P (2001). Measurement of health outcomes in the clinical setting: applications to physiotherapy. *Physiotherapy Theory & Practice* 17, 173-85.
- Biering-Sørensen F & Hilden J (1984). Reproducibility of the history of low-back trouble. *Spine* 9, 280-286.
- Bekkering G, Engers A, Wensing M et al.(2003). Development of an implementation strategy for physiotherapy guidelines on low back pain. *Australian Journal of Physiotherapy* 49, 208-214.
- Bell, S (1988). “Becoming a political woman: The reconstruction and interpretation of experience through stories.” In Todd AD & Fisher S (eds). *Gender & Discourse: the power of talk*, Norwood, NJ: Ablex Publishing Corporation.
- Bendalov G & Williams S (1995). Transcending the dualisms: Towards a sociology of pain. *Sociology of Health & Illness* 17, 2, 139-165.
- Benedetti F, Mayberg H, Wager T, Stohler C, Zubieta J (2005). Neurobiological mechanisms of the placebo effect. *Journal of Neuroscience* 25, 10390-10402.
- Bensing J (2000). Bridging the gap. The separate worlds of evidence-based medicine and patient-centered medicine. *Patient Education & Counseling* 39, 1, 17-25.
- Benwell B & Stokoe E (2006). *Discourse & Identity*. Edinburgh: Edinburgh University Press.

- Bergmann J (1998). Introduction: Morality in discourse. *Research on Language & Social Interaction* 31, 3&4, 279-294.
- Bergum V (1994). Being a phenomenological researcher. In Morse J (ed.). *Qualitative Nursing Research. A Contemporary Dialogue*. Revised edition, p.55-71, Newbury Park, CA: Sage.
- Bigos S, Bowyer O et al. (1994). Acute low back problems in adults. Clinical practice guideline. Rockville MD: *US Department of Health & Human Services, Public Health Service, Agency for Health Care Policy and Research*.
- Bigos S, Spengler D, Margin N, Zeh J, Fisher L, Nachemson A, Wang M (1986). Back Injuries in industry: A Retrospective Study: II. Injury Factors. *Spine* 11, 3, 246-251.
- Billig M (1989). The argumentative nature of holding strong views: A case study. *European Journal of Social Psychology* 19, 203- 223.
- Billig M (1996). *Arguing and Thinking: A rhetorical approach to social psychology* (2nd edition.): Cambridge: Cambridge Press.
- Billig M (2006). A psychoanalytic discursive psychology: from consciousness to unconsciousness. *Discourse Studies* 8, 1, 17-24.
- Billig M, Condor S, Edwards D, Gane M, Middleton D & Radley AR. (1988). *Ideological Dilemmas*. Sage: London.
- Billis E, McCarthy C, Oldham J (2007). Sub-classification of low back pain: a cross-country comparison. *European Spine Journal* 16, 7, 865-879.
- Bishop A, Foster N, Thomas E, Hay E, (2008). How does the self-reported clinical management of patients with low back pain relate to the attitudes and beliefs of health care practitioners? A survey of UK general practitioners and physiotherapists. *Pain* 135, 187-195.
- Blaikie N (1991). A critique of the use of triangulation in social research. *Quality & Quantity* 25, 115-136.
- Blaikie N (2007). Review & Critique of the Research Paradigms, Chp.6. In *Approaches to social enquiry: advancing knowledge*. Cambridge Polity Press.
- Blommaert J (2001). Context is/as Critique. *Critique of Anthropology* 21, 13-32.
- Blommaert J (2007). Narrative, interaction, or both. *Discourse Studies* 9, 828-830.
- Blommaert J, Collins J, Heller M, Rampton B, Slembrouck S, Verschueren J (2001). Discourse & critique: Part one: Introduction. *Critique of Anthropology* 21, 5-12.
- Bloor M (1983). Notes of member validation. In Emerson R (ed.). *Contemporary Field Research: A Collection of Readings*. Boston: Little Brown.
- Blyth F, Macfarlane G, Nicholas M (2007). The contribution of psychosocial factors to the development of chronic pain: The key to better outcomes for patients? *Pain* 129, 8-11.
- Bochner A (2001). Narrative's virtues. *Qualitative Inquiry*, 7, 131-57.
- Boersma K & Linton S (2005a). Screening to identify patients at risk: profiles of psychological risk factors for early intervention. *Clinical Journal of Pain* 21, 38-43.
- Boersma K & Linton S (2005b). How does persistent pain develop? An analysis of the relationship between psychological variables, pain and function across stages of chronicity. *Behaviour Research & Therapy* 43, 1495-1507.

- Boersma K & Linton S (2006). Psychological processes underlying the development of a chronic pain problem. A prospective study of the relationship between profiles of psychological variables in the fear-avoidance model in disability. *Clinical Journal of Pain* 22, 160-166.
- Bola M, Drew C, Gill R, Harding S, King E, Seu B (1998). Representing ourselves and representing others: a response. *Feminism & Psychology* 8, 105-110.
- Bolger N, Davis A, Rafaeli E (2003). Diary methods: capturing life as it is lived. *Annual Reviews in Psychology* 54, 579-616.
- Bolton J (1999). Accuracy of recall of usual pain intensity in back pain patients. *Pain* 83, 533-539.
- Borkan J (2004). Mixed methods studies: A foundation for primary care research. *Annals of Family Medicine* 2, 4-6.
- Borkan J, Quirk, M, Sullivan, M. (1991). Finding meaning after the fall: Injury narratives from elderly hip fracture patients. *Social Science & Medicine* 33, 947-957.
- Borkan J, Reis S, Hermoni D, Biderman A (1995). Talking about the pain: a patient-centered study of low back pain in primary care. *Social Science & Medicine* 40, 7, 977-988.
- Borkan J, Reis S, Medalie J (2001). Narratives in Family medicine: tales of transformation, points of breakthrough for family physicians. *Families, Systems & Health*, 19, 2, 121-134.
- Borsook D & Becerra L (2003). Pain Imaging: Future Applications to Integrative Clinical and Basic Neurobiology. *Advanced Drug Delivery Reviews* 55, 967-986.
- Bourdieu P (1990). *The Logic of Practice*. Stanford, CA: Polity.
- Bourdieu P (1991). *Language and Symbolic Power*. Cambridge: Polity Press.
- Bousema E, Verbunt J, Seelen H, Vlaeyen J, Knottnerus J (2007). Disuse and physical deconditioning in the first year after the onset of back pain. *Pain* 130, 3, 279-286.
- Bouter L, van Tulder MW, Koes, BW. (1998). Methodologic issues in low back pain research in primary care. *Spine* 23, 18, 2014-2020.
- Bowker G & Star S (1999). *Sorting Things Out: Classification and its Consequences*. London: MIT Press.
- Brady I (2004). In defense of the sensual: meaning construction in ethnography and poetics. *Qualitative Inquiry* 10, 4, 622-644.
- Breen A, Austin H, Champion-Smith C, Carr E, Mann E (2007). "You feel so hopeless". A qualitative study of GP management of acute back pain. *European Journal of Pain* 11, 1, 21-29.
- Brennan F & Cousins M (2004). Pain relief as a human right. *Pain Clinical Updates* 12, 1-4.
- Brennan G, Fritz J, Hunter S, Thackeray A et al. (2006). Identifying subgroups of patients with acute/subacute "nonspecific" low back pain: results of a randomized clinical trial. *Spine* 31, 6, 623-631.
- Brett J & Gelfand M (2006). A cultural analysis of the underlying assumptions of negotiation theory. In Thompson L (ed.). *Negotiation Theory & Research*, p.173-201, York: New Psychology Press,
- Briggs C (1986). *Learning How To Ask: A sociolinguistic appraisal of the role of the interview in social science research*. Cambridge University Press.
- Britten N (2010). Qualitative research and the take-up of evidence-based practice. *Journal of Research in Nursing* 15, 537-544.
- Brockmeier J & Carbaugh D (2001). *Narrative & Identity Studies: Autobiography, Self & Culture*. Philadelphia, PA: Benjamins.

- Brody G & Flor D (1997). Maternal psychological functioning, family processes and child adjustment in rural, single-parent, African American families. *Developmental Psychology* 33, 6, 1000-1011.
- Broom D & Whittaker A (2004). Controlling diabetes, controlling diabetics: Moral language in the management of diabetes type 2. *Social Science & Medicine* 58, 2371-2382.
- Browder D, Childs J, Cleland J, Fritz J (2007). Effectiveness of an extension-oriented treatment approach in a subgroup of subjects with low back pain: a randomized clinical trial. *Physical Therapy* 87, 12, 1608-1618.
- Brown C (2006). The application of complex adaptive systems theory to clinical practice in rehabilitation. *Disability & Rehabilitation* 28, 9, 587-593.
- Brown P & Levinson S (1987). *Politeness: Some Universals in Language Use*. Cambridge: Cambridge University Press.
- Brown S & Stenner P (2009). *Psychology Without Foundations, History, Philosophy & Psychosocial Theory*. London: Sage.
- Brown C (2007). The role of paradoxical beliefs in chronic pain: a complex adaptive systems perspective. *Scandinavian Journal of Caring Sciences* 21, 2, 207-213.
- Brugha T, Bebington P, Tennant C, Hurry J (1985). The list of threatening experiences: A subset of 12 life events categories with considerable long-term contextual threat. *Psychological Medicine* 15, 189-194.
- Bruner J (1990). *Acts of Meaning*. Cambridge, MA: Harvard University Press.
- Bruns D & Desorbio J (2009). Assessment of biopsychosocial risk factors for medical treatment: a collaborative approach. *Journal of Clinical Psychology in Medical Settings* 16, 127-147.
- Bryman A & Cramer D (1990). *Quantitative Data Analysis for Social Scientists*. London, Routledge.
- Buchbinder R, Jolley D, Wyatt, M et al. (2001). Volvo award winner in clinical studies: effects of a media campaign on back pain beliefs and its potential influence on management of low back pain in general practice. *Spine* 26, 2535-2542.
- Buchbinder R & Jolley D (2004). Effects of a media campaign on back beliefs is sustained 3 years after its cessation. *Spine* 30, 1323-1330.
- Bucholtz M (2007). Variation in transcription. *Discourse Studies*, 9, 784-808.
- Burger P & Luckman T (1967). *The Social Construction of Reality*. London: Penguin Group.
- Burman M (1995). Health diaries in nursing research & practice. *Journal of Nursing Scholarship* 27, 2, 147-152.
- Burr V (1998). *Gender & Social Psychology*. London: Routledge.
- Burr V (2003). *Social Constructionism* (2<sup>nd</sup> edition). London: Routledge.
- Burton A, Balagus F, Cardon G, Eriksen H, Henrotin Y, Lahad A et al. (2006). European guidelines for prevention in low back pain. *European Spine Journal* 15, S136-S168.
- Burton A, Tillotson K, Main C, Hollis S (1995). Psychosocial predictors of outcome in acute and sub-acute low back pain. *Spine* 20, 6, 722-728.
- Burton A, Waddell G, Tillotson K et al. (1999). Information and advice to patients with back pain can have a positive effect. A randomized controlled trial of a novel education booklet in primary care. *Spine* 24, 23, 2484-2491.
- Bury M (1982). Chronic illness as biographical disruption. *Sociology of Health & Illness* 4, 2, 167-182.

- Buttny R (1993). *Social Accountability in Communication*. Newbury Park: Sage.
- Cacioppo J & Petty R (1989). Effects of message repetition on argument processing, recall and persuasion. *Journal of Basic & Applied Social Psychology* 10, 3-12.
- Calley D, Jackson S, Collins H, George S (2010). Identifying patient fear-avoidance beliefs by physical therapists managing patients with low back pain. *Journal of Orthopaedic Sports Physical Therapy*, doi:10.2519/jospt.2010.3381.
- Campbell C, Cramb G (2008). ‘Nobody likes a back bore’ - exploring lay perspectives of chronic pain: revealing the hidden voices of non-service users. *Scandinavian Journal of Caring Sciences* 22,3,383-390.
- Campbell M and Kirmani A (2008). “I know what you’re doing and why you’re doing it”: the use of the persuasion knowledge model in consumer research. In Haugtvedt C, Herr P, Kardes F (eds). *Handbook of Consumer Psychology*, p.549-573, Mahwah, NJ: Lawrence Erlbaum Associates.
- Campbell R, Quilty B, Dieppe P (2003). Discrepancies between patients’ assessments of outcome: qualitative study nested within a randomised controlled trial. *British Medical Journal* 326, 252-253.
- Campbell S, Gately C, Gask L (2007). Identifying the patient perspective of the quality of mental healthcare for common chronic problems: a qualitative study. *Chronic Illness* 3, 46-65.
- Carey C (1994). Rhetorical means of persuasion. In Worthington I (ed.) *Persuasion: Greek rhetoric in action*. p. 26-45, London: Routledge.
- Carey C (2004). *The Rhetoric of Diabole*. <http://eprint.ucl.ac.uk/archive/403281> (Accessed 30 Oct. 07).
- Carey T, Evans A, Hadler N, Lieberman G, Kalsbeek W, Jackman A et al. (1996). Acute severe low back pain: a population-based study of prevalence and care-seeking. *Spine* 21, 3, 339-344.
- Carey T, Garrett J, Jackman A (2000). Beyond the good prognosis: examination of an inception cohort of patients with chronic low back pain. *Spine* 25, 1, 115-120.
- Carleson A (1983). Assessment of chronic pain. Aspects of the reliability and validity of the visual analogue scale. *Pain*, 16, 87-101.
- Carr J, Shepherd R (1987). *Movement Science Foundations for Physical Therapy in Rehabilitation*. London: Butterworth Heinemann.
- Carragee E & Hannibal M (2004). Diagnostic evaluation of low back pain. *Orthopaedic Clinics of North America*, 35, 7-16.
- Carragee E, Alamin T, Miller J et al.(2005). Discographic, MRI and psychosocial determinants of low back pain disability & remission: a prospective study in subjects with benign persistent back pain. *The Spine Journal* 5, 1, 24-35.
- Carragee E, Lincoln T, Parmar V, Alamin T (2006). A gold standard evaluation of the “discogenic pain” diagnosis as determined by provocative discography. *Spine* 31, 18, 2115-2123.
- Carricaburu D & Pierret J (1995). From biographical disruption to biographical reinforcement: The case of HIV-positive men. *Sociology of Health & Illness* 17, 65-88.
- Carroll L, Cassidy J, Côté P (2003). Depression as a risk factor for onset of an episode of troublesome neck and low back pain. *Pain* 107, 1, 134-139.
- Cassell E (1976). Disease as an “it”: Concepts of disease revealed by patients’ presentation of symptoms. *Social Science & Medicine* 10, 3-4, 143-146.
- Cassell E (2004). *The Nature of Suffering & the Goals of Medicine* (2nd edition). New York: Oxford University Press.

- Cassidy D, Côté P, Carroll L, Kristman V (2005). Incidence and course of low back pain episodes in the general population. *Spine* 30, 24, 2817-2823.
- Chafe W (1982). Integration and involvement in speaking, writing and oral literature. In Tannen D (ed.), *Spoken & Written Language: Exploring Orality & Literacy*. p. 35-54, Norwood, NJ: Ablex.
- Chambers C, Reid G, Craig K, McGrath P, Finley G (1999). Agreement between child and parent reports of pain. *Clinical Journal of Pain* 14, 336-342.
- Changeux J & Ricoeur P (2000). *What Makes Us Think?* New Jersey, Princeton University Press.
- Charmaz K (1983). Loss of self: a fundamental form of suffering in the chronically ill. *Sociology of Health & Illness* 5, 168-195.
- Charmaz K (1991). *Good Days, Bad Days: The Self in Chronic Illness and Time*. New Brunswick NJ: Rutgers University Press.
- Charmaz K (1999). Stories of suffering: subjective tales and research narratives. *Qualitative Health Research* 9, 362-382.
- Charmaz K (1995). The body, identity and self: adapting to impairment. *The Sociological Quarterly* 36, 657-680.
- Charmaz K (2003). Grounded theory. In Smith J (ed.), *Qualitative Psychology: A Practical Guide to Research Methods*. p.81-110, London: Sage.
- Charmaz K (2006a). *Constructing Grounded Theory: A Practical Guide Through Qualitative Analysis*. London: Sage.
- Charmaz K (2006b). Measuring pursuits, marking self: meaning construction in chronic illness. *International Journal of Qualitative Studies on Health & Well-being* 1, 1, 27-37.
- Charon R (2006). *Narrative Medicine: Honoring the Stories of Illness*. NY: Oxford University Press.
- Chase S (2005). Narrative inquiry: multiple lenses, approaches, voices. In Denzin N & Lincoln Y (eds). *The Sage Handbook of Qualitative Research* (3rd edit) p.651-680, London: Sage.
- Cheng Y, Lin C, Liu H, Hsu Y, Lim K, Hung D, Decety J (2007). Expertise modulates the perception of pain in others. *Current Biology* 17, 1708-1713.
- Cherkin D, Kovacs F, Croft P, Borkan J, Foster N, Öberg B et al. (2009). The Ninth International Forum for Primary Care Research on Low Back Pain. *Spine* 34, 3, 304-307.
- Chew-Graham C & May C (1999). Chronic low back pain in general practice: the challenge of the consultation. *Family Practice* 16, 1, 46-49.
- Childs J, Fritz J, Flynn T, Irrgang J, Johnson K, Majkowski G (2004). A clinical prediction rule to identify patients with low back pain most likely to benefit from spinal manipulation: a validation study. *Annals of Internal Medicine* 141, 920-928.
- Chiva R, Grandio A, Alegre J (2010). Adaptive and generative learning: implications from complexity theories. *International Journal of Management Reviews* 12, 2, 114-129.
- Chou R, Qasseem A, Snow V, Casey D, Cross J, Shekelle P (2007). Diagnosis and treatment of low back pain: a joint clinical practice guideline from the American College of Physicians and the American Pain Society. *Annals of Internal Medicine* 147, 478-491.
- Clandinin D & Connelly F (2000). *Narrative Inquiry: Experience & Story in Qualitative Research*. San Francisco: Jossey-Bass.

- Clandinin D, Pushor D, Orr, A (2007) Navigating sites for narrative inquiry *Journal of Teacher Education* 58, 1, 21-35.
- Clark A (2003). Situational analyses: grounded theory mapping after the postmodern turn. *Symbolic Interaction* 26, 553-576.
- Clayton A & Thorne T (2000). Diary data enhancing rigour: Analysis framework and verification tool. *Journal of Advanced Nursing* 32, 6, 1514-1521.
- Clinical Standards Advisory Group (CSAG) (1994). The epidemiology and cost of back pain. *The Annex to the Clinical Advisory Group's Report on Low Back Pain*, HMSO.
- Clough P (2002). *Narratives & Fictions in Educational Research*. Buckingham: Open University Press.
- Cody M & Dunn D (2007). Accounts. In Whaley B & Samter W (eds). *Explaining Communication: Contemporary Theories and Exemplars*. , p.237-256. Mahwah, NJ: Lawrence Erlbaum.
- Coffey A & Atkinson P (1996). *Making Sense of Qualitative Data: Complementary Research Strategies*. Thousand Oaks CA: Sage.
- Collier A (1998). Language, Practice & Realism. In Parker I (ed.). *Social Constructionism, Discourse & Realism*. p.47-58, London: Sage,.
- Cook D, Lange G, Ciccone D, Liu W, Steffener J, Natelson B. (2004). Functional imaging of pain in patients with primary fibromyalgia. *Journal of Rheumatology* 31, 2, 364-78.
- Copp D (2002). Gert on Reasons, Rationality, Harms & Lists. In Sinnott-Armstrong W & Audi R (eds). *Rationality, rules and ideals: critical essays on Bernard Gert's moral theory*, p.89-108. Oxford: Rowman & Littlefield.
- Corbett M, Foster N, Ong B (2007). Living with low back pain - stories of hope and despair. *Social Science & Medicine* 65, 8, 1584-1594.
- Corney R, Strathdee G, Higgs R, King M et al. (1988). Managing the difficult patient: practical suggestions from a study day. *Journal of the Royal College of General Practitioners* 38, 349-352.
- Coste J, Delecoeuillierie G, Cohen de Lara A, Le Parc J , Paolagg B (1994). Clinical course and prognostic factors in acute low back pain: an inception cohort study in primary care practice. *British Medical Journal* 308, 6928, 577-80.
- Coste J, LeFrancois G, Guillemin F, Pouchot J (2004). Prognosis and quality of life in patients with acute low back pain: insights from a comprehensive inception cohort study. *Arthritis Care Research* 51, 2, 168-176.
- Côté A, Durand M, Tousignant M, Poitras S (2009). Physiotherapists and use of low back pain guidelines: A qualitative study of the barriers and facilitators. *Journal of Occupational Rehabilitation* 19, 1, 94-106.
- Coudeyre E, Rannou F, Tubach F, Baron G, Coriat F et al. (2006). General practitioners' fear-avoidance beliefs influence their management of patients with low back pain. *Pain* 124, 3, 330-337.
- Coupland N & Jaworski A (2004). Sociolinguistic perspectives on metalanguage: reflexivity, evaluation and ideology. In Jaworski et al. (eds). *Metalanguage: Social & Ideological Perspectives* p.15-52. Berlin: Walter de Gruyter.
- Coupland C, Brown A, Daniels K, Humphreys M (2008). Saying it with feeling: analysing speakable emotions. *Human Relations* 61, 3, 327-353.
- Craig K (2009). The social communication model of pain. *Canadian Psychology* 50, 1, 22-32.
- Crary A (2007). *Beyond Moral Judgment*. Cambridge MA: Harvard University Press.

- Craufurd D, Creed F, Jayson M (1990). Life events and psychological disturbance in patients with low-back pain. *Spine* 15, 6, 490-494.
- Creed F(1985). Life events and physical illness. *Journal of Psychosomatic Research* 29, 2, 113-123.
- Croft P, Macfarlane J, Papegeorgiou A, Thomas E, Silman A (1998). Outcome of low back pain in general practice: a prospective study. *British Medical Journal* 316, 1356-1359.
- Croft P, Peat G, Van Der Windt D (2010). Primary care research and musculoskeletal medicine. *Primary Health Care Research and Development* 11, 4-16.
- Crombez G, Eccleston C, Van Hamme G, De Vlieger P (2008). Attempting to solve the problem of pain: a questionnaire study in acute and chronic pain patients. *Pain* 137, 556-563.
- Crombez G, Vlaeyen J, Heuts P Hysens R (1999). Pain related fear is more disabling than pain itself: evidence on the role of pain-related fear in chronic back pain disability. *Pain* 80, 329-339.
- Crosbie J, Gass E, Jull G, Morris M, Rivett D, et al. (2002). Sustainable undergraduate education and professional competency. *Australian Journal of Physiotherapy* 48, 5-7.
- Crossley M (2000). *Introducing Narrative Psychology: Self, Trauma and the Construction of Meaning*. Buckingham: Open University Press.
- Crowe M, Whitehead L, Gagan M, Baxter G, Pankhurst A et al. (2010). Listening to the body and talking to myself - the impact of chronic lower back pain: A qualitative study. *International Journal of Nursing Studies*, 47, 586-592.
- Dagenais S, Caro J, Haldeman S. (2008). A systematic review of low back pain cost of illness studies in the United States and internationally. *Spine Journal* 8, 1, 8-20.
- Dankaerts W, O'Sullivan P, Straker L et al. (2006). The inter-examiner reliability of a classification method for nonspecific chronic low back pain patients with motor control impairment. *Manual Therapy* 11, 1, 28-39.
- Dauenhauer B (1998) *Paul Ricoeur: The Promise and Risk of Politics* Lanham MD:Rowman &Littlefield
- Davies M (2004). Epistemic entitlement, warrant transmission and easy knowledge. *The Aristotelian Society Supplementary Volume* 78, 1, 213-245.
- Davis C, Potts C, Speas M, (2007). The pragmatic values of evidential sentences. In Friedman T & Gibson M (eds). *Proceedings of SALT XVII* , p.71-88, Ithaca, NY: Cornell University.
- Davies B & Harre R (1990). 'Positioning: the discursive production of selves'. *Journal for the Theory of Social Behaviour* 20, 1, 43-63.
- Daykin A & Richardson B (2004). Physiotherapists' pain beliefs and their influence on the management of patients with chronic low back pain. *Spine* 29, 7, 783-795.
- De Fina A (2003). *Identity in Narrative: A Study of Immigrant Discourse*. Amsterdam: John Benjamins
- De Fina A (2009). Narratives in interview-the case of accounts: for an interactional approach to narrative genres. *Narrative Inquiry* 19, 2, 233-258.
- De Fina A & Georgakopoulou A (2008). Analysing narratives as practices. *Qualitative Research* 8, 3, 379-387.
- De Vet H, Heymans M, Dunn K, Pope D, van der Beek A, Macfarlane G et al. (2002). Episodes of low back pain: a proposal for uniform definitions to be used in research. *Spine* 27, 21, 2409-2416.

- Dean S, Smith J, Payne S, Weinman J. (2005). Managing time: an interpretative phenomenological analysis of patients' and physiotherapists' perceptions of adherence to therapeutic exercise for low back pain. *Disability & Rehabilitation* 27, 625-636.
- Dekkers W (1998). Hermeneutics and experiences of the body. The case of low back pain. *Theoretical Medicine & Bioethics* 19, 277-293.
- Delitto A (1994). Are measures of function and disability important in low back care? *Physical Therapy* 74, 452-462.
- Delitto A (2005). Research in low back pain: time to stop seeking the elusive "magic bullet". *Physical Therapy* 85, 206-208.
- Denison E, Asenlöf P, Sandborgh M, Lindberg P (2007). Musculoskeletal pain in primary health care: subgroups based on pain intensity, disability, self-efficacy, and fear-avoidance variables. *Journal of Pain* 8, 67-74.
- Denzin N & Lincoln Y (2000). Introduction: The discipline and practice of qualitative research. In Denzin N & Lincoln Y (eds). *Handbook of Qualitative Research* (2nd edition) p.1-32. Thousand Oaks, CA: Sage.
- Department of Health (2000). *The NHS Plan: a plan of investment, a plan for reform*. The Stationery Office, London.
- Department of Health (2004). *The NHS Improvement Plan: Putting People at the heart of Public Services*. The Stationery Office, London.
- Department of Health (2010). *Equity and excellence: Liberating the NHS*. [www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH\\_117353](http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_117353).
- Department of Work and Pensions (2010). *Statement of Fitness for Work: A guide for General Practitioners and other doctors*. [www.dwp.gov.uk/fitnote](http://www.dwp.gov.uk/fitnote)
- Deyo R, Battie M, Beurskens A, Bombardier C, Croft P, Koes B, et al. (1998). Outcome measures for low back pain research: a proposal for standardized use. *Spine* 23, 2003-2013.
- Deyo R, Mirza S, Turner J, Martin B (2009). Over treating chronic back pain: time to back off? *Journal of American Board of Family Medicine* 22, 62- 68.
- Deyo R, Walsh N, Schoenfeld L, Ramamurthy S (1990). Can trials of physical treatments be blinded?: the example of transcutaneous electrical nerve stimulation for chronic pain. *American Journal of Physical Medicine & Rehabilitation* 69, 1, 6-10.
- DiCicco-Bloom B, Crabtree B (2006). The qualitative research interview. *Medical Education* 40, 314-321.
- Dillard J & Meijnders A (2002). Persuasion and the structure of affect. In Dillard J, & Pfau M (eds). *The Persuasion Handbook: Developments in Theory & Practice* p.309-328, Thousand Oaks, CA: Sage,
- Dillon R (1995). *Dignity, Character & Self-Respect*. New York: Routledge.
- Dillon R (2001). Self-Forgiveness & self-respect. *Ethics* 112, 1, 53-83.
- Dines E (1980). Variation in discourse - "and stuff like that." *Language in Society* 9, 13-31.
- Dingwall M (1997). Accounts, interviews and observations. In G. Miller & R. Dingwall (eds), *Context & Method in Qualitative Research*, p.51-65. London: Sage.
- Dionne C, Bourbonnais R, Fremont P, Rossignol M, Stock S, Larocque I (2005). Clinical return-to-work rule for patients with back pain. *Canadian Medical Association Journal* 172, 1559-1567.
- Dionne C, Dunn K, Croft P, Nachemson A, Buchbinder R, et al. (2008). A consensus approach toward the standardization of back pain definitions for use in prevalence studies. *Spine* 33, 1, 95-103.

- Dionne C, Koepsell T, Von Korff M, Deyo R et al. (1997). Predicting long-term functional limitations among back pain patients in primary care settings. *Journal of Clinical Epidemiology* 50, 31-43.
- Diversi M (2008). Young and strapped in America: learning through a short story about a Latino youth finding meaning in Tupac's rap. In Liamputtong P & Rumbold J (eds). *Knowing Differently: Arts-Based & Collaborative Research Methods* p.67-80, New York: Nova Science.
- Djais N & Kalim H (2005). The role of lumbar spine radiography in the outcomes of patients with simple acute low back pain. *International of Journal of Rheumatology* 8, 1, 45-50.
- Dourish P (2004). What we talk about when we talk about context. *Personal & Ubiquitous Computing* 8, 19-30.
- Drew P (1985). Analyzing the use of language in courtroom interaction. In van Dijk TA (ed.). *Handbook Of Discourse Analysis* vol. III: p.133-147. London: Academic Press,
- Drew P (1989). Recalling someone from the past. In Roger D, Bull P (eds). *Conversation: An Interdisciplinary Perspective*. p. 96-115. Clevedon: Multilingual Matters.
- Drew P (1990). Strategies in the contest between lawyer and witness in cross-examination. In Levi JN & Walker AG (eds.). *Language in the Judicial Process* p.39-64. New York: Plenum Press.
- Drew P (1991). Asymmetries of knowledge in conversational interactions. In Markova I & Foppa K, *Asymmetries in Dialogue* p.21-48. Hemel Hempstead: Harvester Wheatsheaf.
- Drew P (1992). Contested evidence in courtroom cross-examination: the case of a trial for rape. In Drew P & Heritage J (eds). *Talk at Work Interactions in Institutional Settings* p.470-520. Cambridge: Cambridge University Press.
- Drew P (1998). Complaints about transgressions and misconduct. *Research on Language and Social Interaction* 31, 295-325.
- Drew P & Holt E (1988). Complainable matters: the use of idiomatic expressions in making complaints. *Social Problems* 35, 398-417.
- Driver J (1996). The Virtues and Human Nature. In Crisp (ed.) *How Should One Live? Essays on the virtues*. p.111-130, Oxford: Oxford University Press.
- Driver J (2000). Moral and Epistemic Virtue. In Axtell G (ed.). *Knowledge, belief, and character: readings in virtue epistemology* p.123-134. Lanham, Maryland; Rowman & Littlefield.
- Driver J (2001). *Uneasy Virtue*. Cambridge: Cambridge University Press.
- Driver J (2005). Normative Ethics. In Jackson F & Smith M (eds). *The Oxford Handbook of Contemporary Philosophy* p.31-62. Oxford: Oxford University Press.
- Driver J (2008). Attributions of causation and moral responsibility. In Sinnott-Armstrong W (ed.). *Moral Psychology: The cognitive science of morality: intuition & diversity*. p,423-439. Cambridge, MA: MIT Press.
- Du Bois (2007). The stance triangle. In Englebretson R (ed.). *Stance Taking in Discourse* p.139-182 Amsterdam; John Benjamins.
- Duijts S, Kant I, Landeweerd J, Swaen G (2006). Prediction of sickness absence: development of a screening instrument. *Occupational & Environmental Medicine* 63, 64-569.
- Dummett M (1981). *The Interpretation of Frege's Philosophy*. Duckworth: London.
- Dunbar K (1995). How scientists really reason: scientific reasoning in real-world laboratories. In Stenberg R & Davidson J (eds). *The Nature of Insight* p.365-395. Cambridge, MA: MIT Press.
- Dunn C (2009). Integrity Matters. *International Journal of Leadership Studies* 5, 2, 102-125.

- Dunn K, Croft P, Main C, Von Korff M (2008). A prognostic approach to defining chronic pain: replication in a UK primary care low back pain population. *Pain* 135, 48-54.
- Eccleston C, Williams A, Stainton Rogers W (1997). Patients' and professionals' understandings of the causes of chronic pain: blame, responsibility and identity protection. *Social Science & Medicine* 45, 699-709.
- Ecksteen, C (2004). Balancing the practice of physiotherapy science. *8th International Federation of Orthopaedic Manipulative Therapists' Conference Proceedings*, 21-25 March 2004, p.118 International Convention Centre, Cape Town.
- Edley N (2001). Unravelling social constructionism. *Theory & Psychology* 11, 433-441.
- Edwards D (1995). Two to tango: Script formulations, dispositions, and rhetorical symmetry in relationship troubles talk. *Research on Language & Social Interaction* 28, 4, 319-350.
- Edwards D (1997a). *Discourse & Cognition*. London: Sage.
- Edwards D (1997b). Structure & function in the analysis of everyday narratives. *Journal of Narrative & Life History* 7, 1-4, 139-146.
- Edwards D (2000). Extreme case formulations: softeners, investment, and doing non-literal. *Research on Language & Social Interaction* 33, 4, 347-373.
- Edwards D (2005). Moaning, whinging and laughing: the subjective side of complaints. *Discourse Studies* 7, 1, 5-29.
- Edwards D (2006). "To Be Honest": sequential uses of honesty phrases in talk-in-interaction. *Research on Language & Social Interaction* 39, 4, 343-376.
- Edwards D, Ashmore M, Potter J (1995). Death and furniture: the rhetoric, politics and theology of bottom line arguments against relativism. *History of the Human Sciences* 8, 25-49.
- Edwards D & Potter J (1992). *Discursive Psychology*. London: Sage.
- Edwards D & Potter J (2005). Discursive psychology, mental states and descriptions. In Molder H & Potter J (eds). *Conversation & Cognition* p.241-249. Cambridge: Cambridge University Press.
- Edwards I, Jones M, Higgs J, Trede F, Jensen G (2004). What is collaborative reasoning? *Advances in Physiotherapy* 6, 70-83.
- Eide A & Røysamb E (2002). The relationship between level of disability, psychological problems, social activity, and social networks. *Rehabilitation Psychology* 47, 2, 165-183.
- Elliott H (1997). The use of diaries in sociological research on health experience. *Sociological Research Online*, 2, 2. <http://www.socresonline.org.uk/2/2/7.htm>
- Ellis A, West B, Ryan A, DeShon R (2002). The use of impression management tactics in structured interviews: a function of question type? *Journal of Applied Psychology* 87, 6, 1200-1208.
- Ellis C & Bochner A (2000). Autoethnography, personal narrative, reflexivity researcher as subject. In Denzin N & Lincoln Y (eds). *Handbook of Qualitative Research* p.733-768. London: Sage.
- Enfield N (2006). Social consequences of common ground. In Enfield N & Levinson S (eds). *Roots of Human Sociality: Culture, Cognition, & Interaction*. p.399-430. Oxford: Berg.
- Enfield N (2009). Relationship thinking and human pragmatics. *Journal of Pragmatics* 41, 60-78.
- Enthoven P, Skargren E, Kjellman G, Oberg B (2003). Course of back pain in primary care: a prospective study of physical measures. *Journal of Rehabilitative Medicine* 35, 168-217.

- Epstein R, Hadee T, Carroll J et al. (2007). "Could this be something serious?" Reassurance, uncertainty, and empathy in response to patients' expressions of worry. *Journal of General Internal Medicine* 22, 12, 1731-1739.
- Esposito A & Marinaro M (2007). What pauses can tell us about gesture partnership. In Esposito (ed.). *Fundamentals of Verbal and Nonverbal Communication and the Biometric Issue* p.45 -57.
- Evans D (2003). Hierarchy of evidence: a framework for ranking evidence evaluating healthcare interventions: *Journal of Clinical Nursing* 12, 1, 77-84.
- Ezzy D (1998). Lived experience and interpretation in narrative theory: experiences of living with HIV/AIDS. *Qualitative Sociology* 21, 2, 169-179.
- Ezzy D (2000). Illness narratives: time, hope and HIV. *Social Science & Medicine* 50, 5, 605-617.
- Fairbank J & Couper J, Davies J. (1980). The Oswestry low back pain questionnaire. *Physiotherapy* 66, 271-273.
- Fairclough N (1992). *Discourse & Social Change*. Cambridge: Polity Press.
- Fairclough N (2003). *Analysing Discourse: Textual Analysis for Social Research*. London: Routledge.
- Feine J, Lavigne G, Thuan Dao T, Morin C, Lund J (1998). Memories of chronic pain and perceptions of relief. *Pain* 77, 2, 137-141.
- Feuerstein M, Sult S, Houle M (1985). Environmental stressors and chronic low back pain: life events, family and work environment. *Pain* 22, 295-307.
- Fiedler K & Semin G (1996). Language in applied contexts. In Semin G & Fiedler K (eds). *Applied Social Psychology* p.91-112. London: Sage.
- Finlay L (2006). 'Rigour', 'Ethical Integrity' or 'Artistry'? Reflexively reviewing criteria for evaluating qualitative research. *British Journal of Occupational Therapy* 69, 7, 319-326.
- Fisher W (1980). Rationality and the logic of good reasons. *Philosophy & Rhetoric* 13, 2, 121-130.
- Fleischman S (1999). I am . . . , I have . . . , I suffer from . . . : a linguist reflects on the language of illness and disease. *Journal of Medical Humanities* 20, 1, 3-32.
- Fleischman S (2005). Language & Medicine. In Schifffrin D, Tannen D, Hamilton H (eds) *The Handbook of Discourse Analysis* p.470-502. Oxford: Blackwell.
- Fleming D (2001) Narrative leadership: using the power of stories. *Strategy & Leadership* 29, 4.
- Flor H, Braun C, Elbert T, Birbaumer N (1997). Extensive reorganization of primary somatosensory cortex in chronic back pain patients. *Neuroscience Letters* 224, 5-8.
- Flynn T, Fritz J, Whitman M, Wainner R, Magel J, et al.(2002). A clinical prediction rule for classifying patients with low back pain who demonstrate short-term improvement with spinal manipulation. *Spine* 27, 24, 2835-2843.
- Foress Bennett J (1997). Credibility, plausibility and autobiographical oral narrative: some suggestions from the analysis of a rape survivor's testimony. In Levett A, Kottler A, Burman E, Parker I (eds). *Culture, Power and Difference: Discourse Analysis in South Africa* p.96-108. London: Zed Books.
- Foster N (2007). Beliefs & Preferences: do they help determine the outcome of musculoskeletal problems? *Physical Therapy Reviews* 12, 199-206.
- Foster N, Bishop A, Thomas E, Main C et al. (2008). Illness perceptions of low back pain patients in primary care: what are they, do they change and are they associated with outcome? *Pain* 136, 177-187.

- Foster N, Hill J, Hay E (2011). Sub-grouping patients with low back pain in primary care: are we getting any better at it? *Manual Therapy* 16, 1, 3-8.
- Foster N, Thomas E, Bishop A, Dunn K, Main CJ. (2010a). Distinctiveness of psychological obstacles to recovery in low back pain patients in primary care. *Pain* 148, 398-406.
- Foster N, Dunn K, Bishop A, Main CJ. (2010b) Response to letter by Roelofs et al. *Pain* 150, 208-209.
- Foster N, Thompson K, Baxter G, Allen J (1999). Management of non-specific low back pain by physiotherapists in Britain & Ireland. *Spine* 24, 1332-1342.
- Foucault M (1973). *The Birth of the Clinic*. London: Tavistock.
- Foucault M (1980). *Power/Knowledge: Selected Interviews and Other Writings 1972-1977*. Brighton: Harvester.
- Foucault M (1984). *The History of Sexuality Volume 1. An Introduction*. Hammondsworth: Penguin.
- Foucault M (1981). "The order of discourse". In Young R (ed.). *Untying the Text: A Poststructuralist Reader* p.48-77. London: Routledge & Keegan Paul.
- Fowler R (1991). *Language in the News: Discourse and Ideology in the Press*. London: Routledge.
- Frank A (1995). *The Wounded Storyteller: Body, Illness and Ethics*. Chicago: University of Chicago Press.
- Frank A (2010). In defence of narrative exceptionalism. *Sociology of Health & Illness* 32, 4, 665-667.
- Franklin M (1997). Making Sense: interviewing and narrative representation. In Gergen M & Davis S (eds), *Toward a New Psychology of Gender* p.99-116. New York: Routledge.
- Fraser B (1990). An approach to discourse markers. *Journal of Pragmatics* 14, 383-395.
- Freburger J, Holmes G, Agans R, Jackman A, Darter J, Wallace A et al. (2009). The rising prevalence of chronic low back pain. *Archives of Internal Medicine* 169, 3, 251-258.
- Fredrickson B, Losada M (2005). Positive affect and the complex dynamics of human flourishing. *American Psychologist* 60, 7, 678-686.
- Freeman M (2006). Life on 'holiday'? In defense of big stories. *Narrative Inquiry* 16, 131-138.
- Freeman M & Rossignol A (2000). Effect of eliminating compensation for pain and suffering on the outcome of insurance claims. *The New England Journal of Medicine* 343, 1118-1120.
- Freshwater D & Avis M (2004). Analysing interpretation and reinterpreting analysis: exploring the logic of critical reflection. *Nursing Philosophy* 5, 4-11.
- Frith H & Kitzinger C (2001). Reformulating sexual script theory: developing a discursive psychology of sexual negotiation. *Theory & Psychology* 11, 209-232.
- Fritz J, Delitto A, Erhard R (2003). Comparison of classification-based physical therapy with therapy based on clinical practice guidelines for patients with acute low back pain: a randomised clinical trial. *Spine* 28, 13, 1363-1372.
- Froggett L, Chamberlayne P, Buckner S, Wengraf T (2005). Methodology - Evolution & Review. In Report on the Bromley-by-Bow Healthy Living Centre's work with Older People, p. 28-46. Preston: University of Central Lancashire.
- Funder D (1991). Global Traits: A neo-allportian approach to personality. *Psychological Science* 2, 131-139.
- Gabel C, Melloh M, Yelland M, Burkett B, Roiko A (2010). Predictive ability of a modified Örebro musculoksteletal pain questionnaire in an acute/subacute low back pain working population. *European Spine Journal*. DOI: 10.1007/s00586-010-1509-4.

- Garcia-Cebrian A, Ghandi P, Demyttenaere K, Peveler R (2006). The association of depression and painful physical symptoms – a review of the European literature. *European Psychiatry* 21, 6, 379-388.
- Garfunkel H (1967). *Studies in Ethnomethodology*. Englewood Cliffs, New Jersey: Prentice Hall.
- Gatchel R (2004). Comorbidity of chronic pain and mental health: The bio-psychosocial perspective. *American Psychologist* 59, 792-794.
- Gatchel R, Bernstein D, Stowell A, Pransky G (2008). Psychosocial differences between high-risk acute vs chronic low back pain patients. *Pain Practice* 8, 2, 91-97.
- Gatchel R & Dersh J (2002). Psychological disorders and chronic pain: are there cause and effect relationships? In: Turk D, Gatchel R (eds). *Psychological Approaches to Pain Management: A Practitioner's Handbook* 30-51. New York: Guilford.
- Gatchel R, Mayer T, Hazard R, Rainville J, Mooney V (1992). Functional restoration: pitfalls in evaluating efficacy. *Spine* 17, 8, 988.
- Gatchel R, Peng Y, Peters M, Fuchs P, Turk D (2007). The bio-psychosocial approach to chronic pain: scientific advances and future directions. *Psychological Bulletin* 133, 4, 581-624.
- Gatchel, R Polatin, P Mayer, T (1995). The dominant role of psychosocial risk factors in the development of chronic low back pain disability. *Spine* 20, 24, 2702-2709.
- Gatchel R, Polatin P, Mayer T et al. (1998). Use of the SF-36 health status survey with a chronically disabled back pain population: strengths and limitations. *Journal of Occupational Rehabilitation*, 8, 4, 237-246.
- Gatchel R, Polatin P, Noe C et al. (2003). Treatment and cost effectiveness of early intervention for acute low back pain patients: A one-year prospective study. *Journal of Occupational Rehabilitation* 13, 1-9.
- Gee J (1990). *Social Linguistics & Literacies*. New York: Routledge.
- Gee J (1991). A linguistic approach to narrative. *Journal of Narrative & Life History* 1, 1, 15-39.
- Gee J (2005). *Introduction to Discourse Analysis: Theory & Method*. London: Routledge.
- Geertz C (1973). *The Interpretation of Cultures*. New York: Harper.
- Georgakopolou A (2010). Narrative analysis. In Johnstone B, Wodak R, Kerswill P. (eds). *The SAGE Handbook of Sociolinguistics* p.396-411. London: Sage.
- George S (2008). What is the effectiveness of a biopsychosocial approach to individual physiotherapy care for chronic low back pain? *The Internet Journal of Allied Health Sciences & Practice* 6, 1, 1-10.
- George S, Bialosky J, Fritz J (2004). Physical therapist management of a patient with acute low back pain and elevated fear avoidance beliefs. *Physical Therapy* 84, 6, 538.
- George S, Zeppieri G, Cere A, Cere M, Borut M, Hodges M, Reed D et al. (2008). A randomized trial of behavioural physical therapy interventions for acute and sub-acute low back pain. *Pain* 140,1, 145-157
- George S, Valencia C, Zeppieri G, Robinson M (2009). Development of a self report measure of fearful activities for patients with low back pain - the fear of daily activities questionnaire (FDAQ). *Physical Therapy* 89, 9, 969-979.
- Gergen K (1982). *Toward Transformation in Social Knowledge*. New York: Springer-Verlag.
- Gergen K & Gergen M (1986). 'Narrative form and the construction of psychological science. In Sarbin T (ed.). *Narrative Psychology: The Storied Nature of Human Conduct* p.22-44. New York: Praeger.
- Gergen K & Gergen M. (1988). Narrative and the self as relationship. In L. Berkowitz (ed.). *Advances in Experimental Social Psychology* p.17-56. San Diego, CA: Academic Press.

- Gergen K & Graumann C (1996). Psychological discourse in historical context: an introduction. In Graumann C & Gergen K (eds). *Historical Dimensions of Psychological Discourse* p.1-16. Cambridge: Cambridge University Press.
- Gerrard T & Riddell J (1988). Difficult patients: Black holes and secrets. *British Medical Journal* 297, 530 -532.
- Gibson D (2000). Seizing the moment: the problem of conversational agency. *Sociological Theory* 18, 3, 368-382.
- Gifford L (ed.) (2000). *Topical Issues in Pain 2*. Bio-psychosocial assessment & management. Falmouth: CNS Press.
- Gifford L (ed.) (2002). *Topical Issues in Pain 3*. Falmouth: CNS Press
- Gifford L (ed.) (2006). *Topical Issues in Pain 5*. Falmouth: CNS Press.
- Gilbert N & Mulkay M (1984). *Opening up Pandora's Box*. Cambridge: Cambridge University Press.
- Gill V (1998). Doing attributions in medical interaction: patients' explanations for illness and doctors' responses. *Social Psychology Quarterly* 61, 342-60.
- Gill V, Halkowski T, Roberts F (2001). Accomplishing a request without making one: a single case analysis of a primary care visit. *Text* 21, 1-2, 5-81.
- Glenton, C (2002). Developing patient-centred information for back pain sufferers. *Health Expectations* 5, 4, 319-329
- Glenton C (2003). Chronic back pain sufferers, striving for the sick role. *Social Science & Medicine* 57, 2243-2252.
- Glesne C (1997). That rare feeling: re-presenting research through poetic transcription. *Qualitative Inquiry* 3, 2, 202-221.
- Goffman E (1959). *The Presentation of Self in Everyday Life*. University of Edinburgh Social Sciences Research Centre. Anchor Books
- Goffman E (1967a). *Interaction Ritual: Essays on Face-to-Face Behavior*. Harmondsworth, Middlesex: Penguin
- Goffman E (1967b). Embarrassment & Social Organization. In Goffman E. *Interaction Ritual* p.97-112. New York: Pantheon Books.
- Goffman E (1968). *Stigma: Notes on the Management of Spoiled Identity*. Harmondsworth: Penguin.
- Goffman E (1969). *Strategic Interaction*. Philadelphia: University of Pennsylvania Press.
- Golden-Biddle K & Locke K (1993). Appealing work: an investigation of how ethnographic texts convince *Organization Science*. 4, 4, 595-616.
- Goldingay S (2006). Communication and assessment: what are the issues for physiotherapists? In Gifford L (ed.). *Topical Issues in Pain 5*. Falmouth: CNS Press
- Goldthorpe J (2007). *On Sociology* (2nd edition. 2 vols). Stanford, CA: Stanford University Press
- Gomm R (2004). *Social Research Methodology: A Critical Introduction* Basingstoke: Palgrave MacMillan.
- Goodwin C & Duranti A (1992). Rethinking Context: An Introduction. In Duranti A & Goodwin C (eds). *Rethinking Context: Language as an Interactive Phenomenon* p.1-42. Cambridge: Cambridge University Press.

- Goossens M, Vlaeyan J, Hidding A, Kole-Snijders A, Evers S (2005). Treatment expectancy affects the outcome of cognitive-behavioural interventions in chronic pain. *The Clinical Journal of Pain*, 21, 18-26.
- Goubert L, Crombez G, De Bourdeaudhuij I (2004). Low back pain, disability and back pain myths in a community sample: prevalence and interrelationships. *European Journal of Pain* 8, 4, 385-394.
- Goubert L, Vergoort T, Crombez G (2009). Pain demands attention from others: the approach/avoidance paradox. *Pain* 143, 5-6.
- Gough B & McFadden M (2001). *Critical Social Psychology: An Introduction*. Basingstoke: Palgrave.
- Gough B & Reavey P (1997). Parental accounts regarding the physical punishment of children: Discourses of Disempowerment. *Child Abuse & Neglect* 21, 5, 417-430.
- Gracely R, Petzke F, Wolf J, Clauw D (2002). Functional magnetic resonance imaging evidence of augmented pain processing in fibromyalgia. *Arthritis & Rheumatism* 46, 1333-1343.
- Grachev I, Frederickson B, Apkarian A (2000). Abnormal brain chemistry in chronic back pain. An in-vivo proton magnetic resonance spectroscopy study. *Pain* 89, 7-18.
- Green A, Jackson D, Klaber Moffett J (2008). An observational study of physiotherapists' use of cognitive behavioural principles in the management of patients with back pain and neck pain. *Physiotherapy* 94, 306-313.
- Greenhalgh T (1999). Narrative based medicine in an evidence based world. *British Medical Journal* 318, 323.
- Greenspan P (2001). Genes, electrotransmitters and free will. In Wasserman D & Wachbroit R (eds). *Genetics & Criminal Behaviour* p.243-258. Cambridge: Cambridge University Press.
- Grice H (1975). Logic and conversation. In Cole P & Morgan J (eds). *Syntax & Semantics 3: Speech Acts* p.41-58. New York: Academic Press.
- Griffiths F, Borkan J, Byrne D, Crabtree B, Dorwick C et al.(2010). developing evidence for how to tailor medical interventions for the individual patient. *Qualitative Health Research* 20, 12, 1629-1641.
- Grimmer K, Milanese S, Bialocerkowski A (2003). Clinical guidelines for low back pain: physiotherapy perspective. *Physiotherapy Canada* 55, 4, 185-194.
- Grimmer K, Sheppard L, Pitt M et al.(1999). Differences in stakeholder expectations in the outcome of physiotherapy management of acute low back pain. *International Journal for Quality in Health Care* 11, 2, 155-162.
- Gross A & Walzer A (2000). *Re-reading Aristotle's Rhetoric*. Southern Illinois University: Illinois.
- Grotle M, Brox J, Veierod M, Glomsrod B, Lonn J, Vollestad N (2005). Prognostic factors in first time care seekers due to acute low back pain. *Spine* 30, 8, 976-982.
- Grotle M, Foster N, Dunn K, Croft P (2010). Are prognostic indicators for poor outcome different for acute and chronic low back pain consulters in primary care? *Pain* 151, 790-797.
- Gu X & Han S (2007). Attention and reality constraints on the neural processes of empathy for pain. *NeuroImage* 36, 256-267.
- Gubrium J & Holstein J (eds) (2003). *Postmodern Interviewing*. London: Sage.
- Gubrium J & Holstein J (2008). Narrative Ethnography. In Hesse-Biber S & Leavy P (eds). *Handbook of Emergent Methods* p.241-264. New York: Guildford Press.
- Gudmundsdottir S (1996). The teller, the tale and the one being told: The narrative nature of the research interview. *Curriculum Inquiry* 26, 3, 293-306.

- Guerin B (2003). Language use as social strategy: A review and an analytic framework for the social sciences *Review of General Psychology* 7, 3, 251-298.
- Gustin S, Wrigley P, Siddall P, Henderson L (2010). Brain anatomy changes associated with persistent neuropathic pain following spinal cord injury. *Cerebral Cortex* 20, 6, 1409-1419.
- Guzman J, Esmail R, Karjalainen K, Malmivaara A, Irvin E, Bombardier C (2003). Multidisciplinary rehabilitation for chronic low back pain: systematic review. *British Medical Journal* 322, 1511-1516.
- Gyllensten A, Gard G, Salford E, Ekdahl C (1999). Interaction between patient and physiotherapist: a qualitative study reflecting the physiotherapists' perspective. *Physiotherapy Research International* 4, 2, 89-109.
- Hadjistavropoulos T & Craig K (2002). A theoretical framework for understanding self-report and observational measures of pain: A communications model. *Behaviour Research & Therapy* 40, 551-570.
- Hagan K, Jamtvedt G, Hilde G, Winnem M (2005). The updated Cochrane Review of Bed Rest for Low Back Pain and Sciatica. *Spine* 30, 5, 542-546.
- Haldeman S & Dagenais S (2008). What have we learned about the evidence-informed management of chronic low back pain? *The Spine Journal* 8, 1, 266-277.
- Halkowski T (2006). Realizing the illness: patients' narratives of symptom discovery. In Heritage J & Maynard D.(eds) *Communication in Medical Care: Interaction Between Primary Care Physicians & Patients* p.86-114. Cambridge: Cambridge University Press.
- Hall S (1995). The consequences of qualitative analysis for sociological theory: beyond the micro level. *Sociological Quarterly* 36, 397-423.
- Hall S (1997a). Meta-power, social organization and the shaping of social action. *Symbolic Interaction* 20, 397-418.
- Hall S (1997b) The work of Representation. In S.Hall (ed.) *Representation: Cultural Representations and Signifying Practices* p.13-75, London: Sage.
- Hammersley M (2003). 'Analytics' are no substitute for methodology: a response to Speer and Hutchby. *Sociology* 37, 2, 339-351.
- Hammersley M & Atkinson P (1983). *Ethnography: Principles in Practice*. London: Routledge.
- Hanks W (1996). *Language & Communicative Practices*. Colorado: Westview Press.
- Hannes K, Staes F, Goedhuys J, Aertgeerts B. (2009 ) Obstacles to the implementation of evidence-based physiotherapy in practice: A focus group-based study in Belgium (Flanders). *Physiotherapy Theory & Practice* 25, 7, 476-488.
- Harcup T & O'Neill D (2001). What is news? Galtung & Ruge revisited. *Journalism Studies* 2,2, 261-280.
- Harding S (1991). *Whose Science? Whose Knowledge?: Thinking From Women's Lives*. New York: Cornell University Press.
- Harding V & Williams A (1995). Extending physiotherapy skills using a psychological approach cognitive-behavioural management of chronic pain. *Physiotherapy* 81, 11, 681-688.
- Harland N (2003). Research, physiotherapy and modern musculoskeletal medicine: Discourse analysis. *Physiotherapy* 89, 2, 192-197.
- Harper D (1999). Tablet talk and depot discourse: Discourse analysis and psychiatric medication. In Willig C (ed.). *Applied Discourse Analysis: Social & Psychological Interventions*. Buckingham: Open University Press.

- Harper D (2003). Developing a critically reflexive position using discourse analysis. In Finlay L & Gough B (eds). *Reflexivity: A Practical Guide for Researchers in Health & Social Sciences*. Oxford: Blackwell Science.
- Harré R & van Langenhove L (1999). *Positioning Theory*. Malden MA: Blackwell.
- Harré R, Moghaddam F, Pilkerton Cairnie T, Rothbart D, Sabat S (2009). Recent advances in positioning theory. *Theory & Psychology* 19, 1, 5-30.
- Harris S, Morley S, Barton S (2003). Role loss and emotional adjustment in chronic pain. *Pain* 105, 1, 363-370.
- Harstall C, Taenzer P, Angus D, Moga C, Schuller T, Scott N (2010). Creating a multidisciplinary low back pain guideline: Anatomy of a guideline adaptation process. *Journal of Evaluation in Clinical Practice*. DOI: 10.1111/j.1365-2753.2010.01420.x
- Hass M, Nyiendo J, Aickin M (2002). One-year trend in pain and disability relief recall in acute and chronic ambulatory low back pain patients. *Pain* 95, 1, 83-91.
- Hay E, Mullis R, Lewis M, Vehora K, Main CJ, Watson PJ et al. (2005). Comparison of physical treatments versus a brief pain-management programme for back pain in primary care: a randomized clinical trial in physiotherapy practice. *The Lancet* 365, 2024-2031.
- Heath C (1989). Pain talk: the expression of suffering in the medical consultation. *Social Psychology Quarterly* 52, 113-25.
- Hein G & Singer T (2008). I feel how you feel but not always: The empathic brain and its modulation. *Current Opinion in Neurobiology* 18, 153-158.
- Heinemann T & Traverso V (2009). Complaining in interaction. *Journal of Pragmatics* 41, 2381-2384.
- Heitz C, Hilfiker R, Bachmann L et al.(2009). Comparison of risk factors predicting return to work between patients with sub-acute and chronic non-specific low back pain: systematic review. *European Spine Journal* 18, 12, 1829-1835.
- Heneweer H, Aufdemkampe G, van Tulder M, Kiers H, Stappaerts K, Vanhees L (2007). Psychosocial variables in patients with sub-acute low back pain. *Spine* 32, 5, 586-592.
- Henschke N, Maher C, Refshauge K, Herbert RD et al. (2008). Prognosis in patients with recent onset low back pain in Australian primary care: inception cohort study. *British Medical Journal* 337, 154-157.
- Hepburn A (2003). *An Introduction to Critical Social Psychology*. London: Sage.
- Heritage J (1984). *Garfinkel & Ethnomethodology*. Cambridge: Polity Press.
- Heritage J & Raymond G (2005). The terms of agreement: indexing epistemic authority and subordination in talk-in-interaction. *Social Psychology Quarterly* 68, 1, 15-38.
- Heritage J & Robinson J (2006). Interaction Between Primary Care Physicians and Patients. In Heritage J & Maynard D (eds). *Communication in Medical Care: Interaction Between Primary Care Physicians and Patients*, p. 48-85, Cambridge: Cambridge University Books.
- Hewitt J (2005). The social construction of self-esteem. In Snyder C & Lopez S (eds). *Handbook of Positive Psychology* p.135-147. Oxford: Oxford University Press.
- Hicks G, Fritz J, Delitto A, McGill S (2005). Preliminary development of a clinical prediction rule for determining which patients with low back pain will respond to a stabilization exercise program. *Archives of Physical Medicine & Rehabilitation* 86, 1753-1762.
- Higgs J, Jones M, Loftus S, Christensen N (2008). *Clinical Reasoning in the Health Professions* (3rd edition). Oxford: Elsevier.

- Hides J, Richardson C, Jull G (1996). Multifidus muscle recovery is not automatic after resolution of acute, first-episode low back pain. *Spine* 21, 23, 2763-2769.
- Higgs J & Titchen A (1995). The nature, generation and verification of knowledge. *Physiotherapy* 81, 9, 521-530.
- Hilfiker R, Bachmann L, Heitz C, Lorenz T, Joronen H, Klipstein A (2007). Value of predictive instruments to determine persisting restriction of function in patients with sub-acute, non-specific low back pain. Systematic review. *European Spine Journal* 16, 1755-1775.
- Hill J, Dunn K, Lewis M, Mullis R, Main C, Foster N, Hay E (2008). A primary care back pain screening tool: identifying patient sub-groups for initial treatment. *Arthritis & Rheumatism* 59, 5, 632-41.
- Hill J, Foster N, Hay E (2010). Cognitive behavioural therapy shown to be an effective and low cost treatment for sub-acute and chronic low-back pain, improving pain and disability scores in a pragmatic RCT. *Evidence Based Medicine*. 15, 4, 118-119.
- Hill S (2010). Commentary: the Illness Perceptions Questionnaire-Revised (IPQ-R). *Journal of Physiotherapy* 56, 4, 280.
- Hill T (1991). *Autonomy & Self-Respect*. Cambridge: Cambridge University Press
- Hilton D (1990). *Conversational Processes & Causal Explanation Psychological Bulletin* 107, 1, 65-81.
- Holdaway, E (1997). Quality Issues in Postgraduate Education . In Burgess R (ed.). *Beyond the First Degree*. Buckingham: Open University Press
- Holloway I, Sofaer B, Walker B, (2000). The transition from well person to “pain afflicted” patient: the career of people with chronic back pain. *Illness, Crisis & Loss* 8, 4, 373-387.
- Holloway I, Sofaer-Bennett B, Walker J (2007). The stigmatisation of people with chronic back pain. *Disability & Rehabilitation* 29, 18, 1456-1464.
- Hollway W (1984). Gender difference and the production of subjectivity. In Henriques J, Hollway W, Urwin C et al. (eds). *Changing the Subject* p.227-263. London: Methuen.
- Hollway W (2005). Commentaries on Potter and Hepburn, 'Qualitative interviews in psychology: problems and possibilities'. Commentary 2. *Qualitative Research in Psychology* 2, 312-314.
- Hollway W & Jefferson T (2000). *Doing Qualitative Research Differently: Free Association, Narrative and the Interview Method*. London: Sage.
- Hollway W & Jefferson T (2004). The free association narrative interview method. In Lewis-Beck M, Bryman A & Futing Liao T (eds). *Encyclopedia of Social Science Methods* p.704-709, London: Sage.
- Holstein JA, & Gubrium JF (1995). *The Active Interview*. Thousand Oaks, CA: Sage.
- Horn L & Ward G (2005). *The Handbook of Pragmatics*. Oxford: Blackwell.
- Horng Y, Hwang Y, Wu H, Liang H, Mhe Y, Twu F, Wang, J (2005). Predicting health-related quality of life in patients with low back pain. *Spine* 30, 5, 551-555.
- Horton-Salway M (2001). Narrative identities and the management of personal accountability in talk about me: a discursive psychology approach to illness narrative. *Journal of Health Psychology* 6, 2, 247-259.
- Horton-Salway M (2004). The local production of knowledge: disease labels, identities and category entitlements in ME support group talk. *Health: An Interdisciplinary Journal for the Social Study of Health, Illness & Medicine* 8, 3, 351-371.
- Hunston S & Thompson G (eds) (2000). *Evaluation in Text. Authorial Stance and the Construction of Discourse*. Oxford: Oxford University Press.

- Hunt A, Higgs J, Adamson B, Harris L (1999). University education & the physiotherapy professional. *Physiotherapy*, 84, 6, 264-273.
- Hush J, Refshauge K, Sullivan G, De Souza L, Maher CG, McAuley JH (2009). Recovery: what does this mean to patients with low back pain? *Arthritis Care & Research* 61, 1, 1240-131.
- Hutchby I & Wooffitt R (1998). *Conversation Analysis: Principles, Practices & Applications*. Cambridge: Polity Press.
- Hyland K (2005). Stance & engagement: a model of interaction in academic discourse. *Discourse Studies* 7, 2, 173-192.
- Jack K, McLean S, Klaber Moffett J, Gardiner E (2010). Barriers to treatment adherence in physiotherapy outpatient clinics: a systematic review. *Manual Therapy* 15, 220-228.
- Jackson JE (1992). "After a while no one believes you", real and unreal pain. In Good M, Brodwin P, Good B, Kleinman A (eds). *Pain as Human Experience: an Anthropological Perspective* p.138-168. Berkeley: University of California Press,
- Jackson P, Rainville P, Decety J (2006). To what extent do we share the pain of others? Insight from the neural bases of pain empathy. *Pain* 125, 5-9.
- Jaffe A (ed.) (2009). Stance: Sociolinguistic Perspectives. *Oxford Studies in Sociolinguistics*. New York: Oxford University Press.
- Jaggi A & Blithell C (1995). Relationships between physiotherapists' level of contact, cultural awareness and communication with Bangladeshi patients in two health authorities. *Physiotherapy* 81, 330-337.
- Jahandarie K (1999). Spoken and written discourse: a multidisciplinary perspective. Stamford: Ablex.
- Jarvik J, Hollingworth W, Heagerty P, Haynor D, Deyo R (2001). The longitudinal assessment of imaging and disability of the back (LAID Back) study: baseline data. *Spine* 26, 1158-1166.
- Jayyusi L (2007). Between saying and showing: making and contesting truth claims in the media. *Ethnographic Studies* 9, 19-43.
- Jeffels K & Foster N (2003). Can aspects of physiotherapist communication influence patients' pain experiences? A systematic review. *Physical Therapy Reviews* 8, 197-210.
- Jefferson G (1984). On stepwise transition from talk about a trouble to inappropriately next-positioned matters. In Atkinson J & Heritage J (eds). Structures of Social Actions: *Studies in Conversation Analysis* p.191-222. Cambridge: Cambridge University Press.
- Jefferson G (1987). On exposed and embedded correction in conversation. In Button G & Lee J (eds). *Talk & Social Organization* p.86-100. Clevedon: Multilingual matters.
- Jefferson G (2004). Glossary of transcript symbols with an introduction. In Lerner G (ed.). *Conversation Analysis: Studies from the First Generation* p.13-31. Amsterdam: John Benjamins.
- Jefferson G & Lee J (1981). The rejection of advice: managing the problematic convergence of a 'troubles-telling' and a 'service encounter'. *Journal of Pragmatics* 5, 399-422.
- Jellema P, van der Windt D, van der Horst H, Blankenstein A, et al. (2005a). Why is a treatment aimed at psychosocial factors not effective in patients with sub-acute low back pain? *Pain* 118, 350-359.
- Jellema P, van der Windt D, van der Horst H, Twisk J, Stalman W, Bouter L (2005b). Should treatment of sub-acute low back pain be aimed at psychosocial prognostic factors? Cluster randomised clinical trial in general practice. *British Medical Journal* 331, 84-90.

- Jensen M, Brandt-Zawadzki M, Obuchowski N, Modic M et al. (1994). Magnetic resonance imaging of the lumbar spine in people without back pain. *New England Journal of Medicine* 331, 69-73.
- Jette A, Smith K, Haley S, Davis K (1994). Physical therapy episodes of care for patients with low back pain. *Physical Therapy* 74, 101-115.
- Johannes C, Kim Le T, Zhou Z, Johnston J, Dworkin R (2010). The prevalence of chronic pain in United States adults: results of an internet-based survey. *The Journal of Pain*. DOI:0.1016/j.jpain.2010.07.002.
- Johnson B & Eagly A (1989). Effects of involvement on persuasion: a meta-analysis. *Psychological Bulletin* 106, 290-314.
- Johnstone B (1989). Linguistic strategies and cultural styles for persuasive discourse. In Sting-Toomey S & Korzenny F (eds). *Language, Communication and Culture* p.139-156. Newbury Park, CA: Sage.
- Johnstone B (2000). The individual voice in language. *Annual Review of Anthropology* 29, 405-424.
- Johnstone B (2008). *Discourse Analysis* (2nd Edition). Oxford: Blackwell.
- Jolles B, Buchbinder R, Beaton D (2005). A study compared nine patient-specific indices for musculoskeletal disorders. *Journal of Clinical Epidemiology* 58, 791-801.
- Jones A & Sheppard L (2008). Physiotherapy education: a proposed evidence-based model. *Advances in Physiotherapy* 10, 1, 9-13.
- Jones G, Johnson R, Wiles N, Chaddock C et al. (2006a). Predicting persistent disabling low back pain in general practice: a prospective cohort study. *British Journal of General Practice* 56, 526, 334-341.
- Jones K (2004). Minimalist passive interviewing technique and team analysis of narrative qualitative data. In Rapport F (ed.). *New Qualitative Methodologies in Health & Social Care*, p.35-54. London: Routledge.
- Jones K (2006). A biographic researcher in pursuit of an aesthetic: the use of arts-based representations in “performative” dissemination of life stories. *Qualitative Sociology Review* 2, 1, 66-85.
- Jones M, Edwards I, Gifford L (2002). Conceptual models for implementing bio-psychosocial theory in clinical practice. *Manual Therapy* 7, 1, 2-9.
- Jones M, Grimmer K, Edwards I, Higgs J, Trede F (2006b). Challenges in applying best evidence to physiotherapy practice: art 2 - health and clinical reasoning models to facilitate evidence-based practice. *The Internet Journal of Allied Health Sciences & Practice* 4, 4, 1-9.
- Jones R & Candlin C (2003). Constructing risk across timescales and trajectories: gay men’s stories of sexual encounters. *Health Risk & Society* 5, 2, 199-213.
- Jordan M (1984). *Rhetoric of Everyday English Texts*. London: Allen & Unwin.
- Jull G & Moore A (2002). What is a suitable dosage of physical therapy treatment? *Manual Therapy* 7, 4, 181-182.
- Juni P, Battaglia M, Nuesch E, Hammerle G, Eser P, et al. (2009). A randomised controlled trial of spinal manipulative therapy in acute low back pain. *Annals of the Rheumatic Diseases* 68, 9, 1420-1427.
- Kamper S, Maher C, Hancock M, Koes B, Croft P, Hays E (2010). Treatment-based sub-groups of low back pain: A guide to appraisal of research studies and a summary of current evidence. *Clinical Rheumatology* 24, 2, 181-191.
- Kappesser J, Williams A, Prkachin K (2006). Testing two accounts of pain underestimation. *Pain*, 124, 109-116.
- Kaptchuk T (2002). The placebo effect in alternative medicine: can the performance of a healing ritual have clinical significance? *Annals of Internal Medicine* 136, 817-825.

- Kärkkäinen E (2006). Stance taking in conversation: From subjectivity to inter-subjectivity. *Text & Talk* 26, 6, 699-731.
- Kasper G & Rose K (2001). Pragmatics in language teaching: Introduction. In Rose K & Kasper G (eds). *Pragmatics in Language Teaching* p.1-10. Cambridge: Cambridge University Press.
- Katz J (2006). Lumbar disc disorders and low-back pain: socioeconomic factors and consequences. *Journal of Bone & Joint Surgery (Am)*, 88 (suppl 2) 21-24.
- Keefe F, Lefebver J, Maixner W, Salley A, Caldwell D (1997). Self-efficacy for arthritis pain: relationship to perception of thermal laboratory pain stimuli. *Arthritis Care Research* 10, 177-184.
- Kelley P (1998). Loss experienced in chronic pain and illness. In Harvey J (ed.). *Perspectives on Loss: A sourcebook* p.201-20. London: Taylor & Francis.
- Kendall N, Linton S, Main C (1997). Guide to assessing psychosocial yellow flags in acute low back pain: risk factors for long-term disability and work loss. *Accident Rehabilitation & Compensation Insurance Corporation of New Zealand & the National Health Committee, Wellington, New Zealand.* <http://www.nhc.govt.nz>.
- Kent P & Keating J (2008). Can we predict poor recovery from recent-onset nonspecific low back pain? A systematic review. *Manual Therapy* 13, 120-28.
- Kent P, Keating J, Taylor N (2009). Primary care clinicians use variable methods to assess acute nonspecific low back pain and usually focus on impairments. *Manual Therapy* 14, 88-100.
- Kerr A & Ballinger C (2010). Living with chronic lung disease: an occupational perspective. *Occupational Science* 17, 1, 34-39.
- Kerry R, Maddocks M, Mumford S (2008). Philosophy of science and physiotherapy: An insight into practice. *Physiotherapy Theory & Practice* 24, 6, 397-407.
- Kirmayer L (2008). Culture and the metaphoric mediation of pain. *Transcultural Psychiatry* 45, 2, 318-338.
- Klüber Moffett J, Jackson D, Gardiner E, Torgerson D, Coulton S et al. (2006). Randomized trial of two physiotherapy interventions for primary care neck and back pain patients: 'McKenzie' vs brief physiotherapy pain management. *Rheumatology* 45, 1514-1521.
- Klüber Moffett J, Newbronner E, Waddell G, Croucher K, Spear S (1995). Public perceptions about low back pain and its management: a gap between expectations and reality? *Health Expectations* 3, 3, 161-168.
- Klüber Moffett J & Richardson G (1995). Costs and effectiveness: Approaches to the management of back pain. In Aspden R & Porter R (eds). *Lumbar Spine Disorders: Current Concepts*. London: World Scientific.
- Klüber Moffett J, Torgerson D, Bell-Syer S et al. (1999). Randomised controlled trial of exercise for low back pain: clinical outcomes, costs and preferences. *British Medical Journal* 319, 279-283.
- Kleef G, van de Dreu C, Manstead A (2004). The interpersonal effects of emotions in negotiations: a motivated information processing approach. *Journal of Personality & Social Psychology* 87, 510-528.
- Kleinman A, (1988). *The Illness Narratives. Suffering, Healing and the Human Condition*. NY: Basic Books.
- Kleinman A, Eisenberg L & Good B (2006). Culture, illness and care: clinical lessons from anthropologic and cross-cultural research. *Focus* 4, 140-149.
- Klenerman L, Slade P, Stanley I, Pennie B, Reilly J, Atchison et al. (1995). The prediction of chronicity in patients with an acute attack of low back pain in a general practice setting. *Spine* 20, 4, 478-484.
- Knobe J (2004). Intention, intentional action and moral considerations. *Analysis* 64, 181-187.

- Knobe J & Mendlow G (2004). The good, the bad, and the blameworthy: understanding the role of evaluative considerations in folk psychology. *Journal of Theoretical & Philosophical Psychology* 24, 259-269.
- Koes B, van Tulder M, Ostelo R, Burton K, Waddell G (2001). Clinical guidelines for the management of low back pain in primary care: an international comparison. *Spine* 26, 22, 2504-2514.
- Koes B, van Tulder M, Thomas S (2006). Diagnosis and treatment of low back pain. *British Medical Journal* 332, 1430-1434.
- Kolt G & McEvoy J (2003). Adherence to rehabilitation in patients with low back pain. *Manual Therapy* 8, 2, 110-116.
- Körner H (2010). Negotiating treatment for hepatitis C: Interpersonal alignment in the clinical encounter. *Health An Interdisciplinary Journal for the Social Study of Health, Illness & Medicine*, 14, 272-291.
- Koven M (2001). Comparing bilinguals' quoted performances of self and others in tellings of the same experience in two languages. *Language in Society* 30, 513-58.
- Kreuz R, Kessler M, Copenrath L (1998). The use of exaggeration in discourse: cognitive and social facets. In Fussell S & Kreuz R (eds). *Social & Cognitive Approaches to Interpersonal Communication* p.91-112. Mahwah, New Jersey: Lawrence Erlbaum.
- Kuijer W (2006). Measuring disability in patients with chronic low back pain: the usefulness of different instruments. *Unpublished PhD thesis*, University of Groningen, The Netherlands.
- Kuijer W, Brouwer S, Schiphorst Preuper H, Groothoff J, Geertzen J, Dijkstra P (2006). Work status and chronic low back pain: exploring the international classification of functioning, disability and health. *Disability & Rehabilitation* 28, 6, 379-388.
- Kumar S, Negi M, Sharma V, Shukla R, Dev R, Mishra U (2009). Efficacy of two multimodal treatments of physical strength of occupationality sub-grouped male with low back pain. *Journal of Back & Musculoskeletal Rehabilitation* 22, 3, 179-188.
- Kvale S (1996). *Interviews: An Introduction to Qualitative Research Interviewing*. London: Sage.
- Labov W (1972). *Language in the Inner City: Studies in the Black English Vernacular*. Oxford: Basil Blackwell.
- Labov W & Waletzky J (1967). Narrative analysis: oral versions of personal experience. In Helms J (ed.). *Essays in the Verbal and Visual Arts*. p. 12-44 Seattle: University of Washington.
- Lafrance M & Stoppard J (2006). Constructing a non-depressed self: Women's accounts of recovery from depression. *Feminism & Psychology* 16, 3, 307-325.
- Lakatos I (1970). Falsification and the Methodology of Scientific Research Programmes. In Lakatos I & Musgrave A (eds). *Criticism and the Growth of Knowledge* p.95-195. Cambridge: Cambridge University Press.
- Lakke S, Soer R, Takken T, Reneman M (2009). Risk and prognostic factors for non-specific musculoskeletal pain: a synthesis of evidence from systematic reviews classified into ICF dimensions. *Pain* 15, 47, 1-3, 153-164.
- Lakoff G & Johnson M (1980). *Metaphors We Live By*. Chicago: University of Chicago Press.
- Lakoff R (2005). Nine ways of looking at apologies: the necessity for interdisciplinary theory and method in discourse analysis. In Schiffrin D, Tannen D, Hamilton H (eds). *The Handbook of Discourse Analysis* (3rd edition), p.199-214. Oxford: Blackwell.

- Lamb M, Orbach Y, Sternberg K, Hershkowitz I, Horowitz D (2000). Accuracy of investigators' verbatim notes of their forensic interviews with alleged child abuse victims. *Law & Human Behaviour* 6, 699-708.
- Lamb S, Lall R, Hansen Z, Castelnuovo E, Withers E et al. (2010). A multicentred randomised controlled trial of a primary care-based cognitive behavioural programme for low back pain. The Back Skills Training Trial (BeST), BeST trial group. *Health Technology Assessment* 14, 41, 1-253.
- Lambert H & Rose H (1996). Disembodies knowledge? Making sense of medical science. In Irwin R & Wynne B (eds). *Misunderstanding Science* p.65-83. Cambridge: Cambridge University Press.
- Lamm C, Meltzoff A, Decety J (2007). How do we empathize with someone who is not like us? - a functional magnetic resonance imaging study. *Journal of Cognitive Neuroscience* 22, 2, 362-376.
- Langworthy J, Breen A (2007). Psychosocial factors and their predictive value in chiropractic patients with low back pain: a prospective inception cohort study. *Chiropractic & Osteopathy* 29, 15, 5.
- Lannamann J (1991). Interpersonal communication as ideological practice. *Communication Theory* 1, 179-203.
- Larsen D, Loftus S, Higgs J (2008). Understanding knowledge as a socio-cultural historical phenomenon. In Higgs J, Jones M, Loftus S, Christensen N (2008). *Clinical Reasoning in the Health Professions* (3rd edition) p.173-180. Oxford: Elsevier.
- Laurenceau J, Barrett L, Pietromonaco P (1998). Intimacy as an interpersonal process: the importance of self-disclosure, partner disclosure and perceived partner responsiveness in interpersonal exchanges. *Journal of Personality & Social Psychology* 74, 1238-1251.
- Law J (2004). *After Method: Mess in Social Science Research*. London: Routledge.
- Law J & Mol A (2002). *Complexities: Social Studies of Knowledge Practices*. Danvers, MA: Duke University Press.
- Leavitt F, Garron D, Bieliauskas L (1979). Stressing life events and the experience of low back pain. *Journal of Psychosomatic Research* 23, 1, 49-55.
- Lee T, Sullivan G, Lansbury C (2006). Physiotherapists' perceptions of clients from culturally diverse backgrounds, *Physiotherapy* 92, 166-170.
- Lee Y & Roth W (2004). Making a scientist: discursive "doing" of identity and self-presentation during research interviews. *Forum Qualitative Sozialforschung/Forum: Qualitative Social Research*, 5 (1), Art.12. <http://nbn-resolving.de/urn:nbn:de:0114-fqs0401123>
- Leech G (1983). *Principles of Pragmatics*. New York: Longman. Morgan.
- Leemrijse C, Swinkels I, Veenhof, C (2008). Direct access to physical therapy in the Netherlands: Results from the first year in community-based physical therapy. *Physical Therapy* 88,8, 936-946.
- Leeuw M, Houben R, Severeijns R, Picavet H, Schouten E, Vlaeyen J (2007). Pain-related fear in low back pain: a prospective study in the general population. *European Journal of Pain* 11, 256-66.
- Lemke J (1995). *Textual Politics: Discourse & Social Dynamics*. London: Taylor & Francis.
- Lemke J (1998). Resources for attitudinal meaning: Evaluative orientations in text semantics. *Functions of Language* 5, 1, 33-56.
- Levinson S (1983). *Pragmatics*. Cambridge: Cambridge University Press.
- Liddle S, Baxter D, Gracey J (2007). Chronic low back pain: patients' experiences, opinions and expectations for clinical management. *Disability & Rehabilitation* 29, 24, 1899-1909.

- Lieblich A, Tuval-Mashiach R, Zilber T (1998). *Narrative Research: Reading, Analysis and Interpretation*. Newbury Park, CA: Sage.
- Lillrank A (2003). Back pain and the resolution of diagnostic uncertainty in illness narratives. *Social Science & Medicine* 57, 6, 1045-1054.
- Lincoln Y & Guba E (1985). *Naturalistic Inquiry*. Beverly Hills, California: Sage.
- Linton S (2000). A review of psychosocial risk factors in back and neck pain. *Spine* 25, 1148-1156.
- Linton S (2005a). *Understanding Pain for Better Clinical Practice: A Psychological Perspective*. London: Elsevier.
- Linton S (2005b). Do psychological factors increase the risk for back pain in the general population in both a cross-sectional and prospective analysis? *Pain*, 9, 355-361.
- Linton S, Boersma K, Jansson M, Svard L, Botvalde M (2005). The effects of cognitive-behavioural and physical therapy preventative interventions on pain related sick leave: a randomised controlled trial. *Clinical Journal of Pain* 21, 2, 109-119.
- Linton S, Buer N, Vlaeyen J, Hellsing A (2000). A re fear-avoidance beliefs related to the inception of an episode of back pain? A prospective study. *Psychology & Health* 14, 1051-1059.
- Linton S, Hallden K (1998). Can we screen for problematic back pain? A screening questionnaire for predicting outcome in acute and sub-acute back pain. *The Clinical Journal of Pain* 14, 209-215.
- Linton S & Melin L (1982). The accuracy of remembering chronic pain. *Pain* 13, 281-285.
- Linton S, Nordin E (2006) A 5-year follow-up evaluation of the health and economic consequences of an early cognitive behavioral intervention for back pain: a randomized controlled trial. *Spine*, 31, 853-858.
- Little P, Everitt H, Williamson I, Warner G, Moore M et al. (2001). Preferences of patients for patient centred approach to consultation in primary care: observational study. *British Medical Journal* 322, 468-472.
- Locher M & Watts R (2008). Relational work and impoliteness: negotiating norms of linguistic behaviour. In Bousfield D & Locher M (eds). *Impoliteness in Language. Studies on its Interplay with Power in Theory & Practice* p.77-99. New York: Mouton de Gruyter.
- Longino H (2011). The social dimensions of scientific knowledge. In Zalta E (ed.). *The Stanford Encyclopedia of Philosophy*. (Spring edition).  
<http://plato.stanford.edu/archives/spr2011/entries/scientific-knowledge-social/>
- Lundberg M, Jorma Styf J, Jansson B (2009). On what patients does the tampa scale for kinesiophobia fit? *Physiotherapy Theory & Practice* 25, 7, 495-506.
- Luo X, Pietrobon R, Sun S, Liu G, Hey L(2004). Estimates and patterns of direct health care expenditures among individuals with back pain in the United States. *Spine* 29, 79-86.
- Lynch M (2000). The Ethnomethodological Foundations of Conversation Analysis, *Text* 20, 4, 517-32.
- Lynch M (2002). From naturally occurring data to naturally organized ordinary activities: comment on Speer *Discourse Studies* 4, 4, 531-537.
- Mabeck C & Olesen F (1997). Metaphorically transmitted diseases. How do patients embody medical explanations? *Family Practice* 14, 271-278.
- MacFarlane G (2008). Changing patient perceptions of their illness: can they contribute to an improved outcome for episodes of musculoskeletal pain? *Pain* 136, 1-2.
- MacFarlane G, Jones G, Hannaford P (2006). Managing low back pain presenting to primary care: where do we go from here? *Pain* 122, 219-222.

- MacNeela P, Gibbons A, McGuire B, Murphy A (2010). "We Need to Get You Focused": *General Practitioners' Representations of Chronic Low Back Pain Patients Qualitative Health Research Online First* (March 24, 2010) doi:10.1177/1049732310364219.
- Maguire S, Phillips N, Hardy C (2001). Construction of identity in the Canadian HIV/AIDS treatment domain when 'silence = death', keep talking: Trust, control and the discursive. *Organization Studies* 22, 285-310.
- Main C, Phillips C, Watson P (2005). Secondary prevention in healthcare and occupational settings in musculoskeletal conditions, focusing on low back pain. In Shultz I, Gatchel RJ (eds). *Handbook of Complex Occupational Disability Claims: Early Risk Identification Intervention and Prevention* p.387-404, New York: Kluwer Academic.
- Main C, Sullivan M, Watson P (2008). *Pain Management: Practical Application of the Biopsychosocial Perspective in Clinical and Occupational Settings*. Edinburgh: Churchill Livingstone.
- Main C & Watson P (1999). Psychological aspects of pain. *Manual Therapy* 4, 4, 203-215.
- Malle B & Nelson S (2003). Judging Mens Rea: The tension between folk concepts and legal concepts of intentionality. *Behavioral Sciences & the Law* 21, 563-580.
- Mallinson S (2002). Listening to respondents: a qualitative assessment of the short form 36 health status questionnaire. *Social Science & Medicine* 54, 11-21.
- Malterud K (2001). The art and science of clinical knowledge: evidence beyond measures and numbers. *Lancet* 358, 397-400.
- Maniadakis N & Gray A (2000). The economic burden of back pain in the UK. *Pain* 84, 1, 95-103.
- Marras W, Lavender S, Leurgans S, Rajulu S, Allread W et al. (1993). The role of dynamic three-dimensional trunk motion in occupationally-related low back disorders. The effects of workplace factors, trunk position, and trunk motion characteristics on risk of injury. *Spine* 18, 5, 617-628.
- Martin J (1995). Interpersonal meaning, persuasion and public discourse: packing semiotic punch. *Australian Journal of Linguistics* 15, 1, 33-67.
- Martin, J & Rose D (2003). *Working with Discourse: Meaning Beyond the Clause*. London: Continuum.
- Martin J & White, PR (2005). *The Language of Evaluation: Appraisal in English*. London: Palgrave.
- Marvel M, Epstein R, Flowers K, Beckman H (1999). Soliciting the patient's agenda: have we improved? *Journal of the American Medical Association* 281, 283-287.
- Maryns K & Blommaert J (2001). Stylistic and thematic shifting as a narrative resource: assessing asylum seekers' repertoires. *Multilingua* 20, 61-84.
- Matoesian G (2005). Struck by speech revisited: embodied stance in jurisdictional discourse. *Journal of Sociolinguistics* 9, 2, 167-193.
- Mattingly C (1998). *Healing Dramas & Clinical Plots: The Narrative Construction of Experience*. Cambridge: Cambridge University Press.
- Maxwell J (2005). *Qualitative Research Design* (2nd edition). London: Sage.
- May C, Allison G, Chapple A, Chew-Graham C, Dixon C, et al. (2004). Framing the doctor-patient relationship in chronic illness: a comparative study of general practitioners' accounts. *Sociology of Health & Illness*, 26, 2, 135-158.
- May C, Doyle H, Chew-Graham C (1999). Medical knowledge and the intractable patient: the case of chronic low back pain. *Social Science & Medicine* 48, 523-534.

- May C, Rapley T, Moreira T, Finch T, Heaven B (2006). Techno-governance: evidence, subjectivity, and the clinical encounter in primary care medicine. *Social Science & Medicine* 62, 1022-1030.
- May C, Rose M, Johnstone F (2000). Dealing with doubt: how patients account for non-specific chronic low back pain. *Journal of Psychosomatic Research* 49, 223- 225.
- May S (2001). Patient satisfaction with management of back pain. Part 2: An explorative qualitative study into patient's satisfaction with physiotherapy. *Physiotherapy* 87, 1, 4-9.
- May S (2007). Patients' attitudes and beliefs about back pain and its management after physiotherapy for low back pain. *Physiotherapy Research International* 12, 3, 126-135.
- Mayer J & Hanson E (1995). Mood-congruent judgment over time. *Personality & Social Psychology Bulletin* 21, 237-244.
- Mayes P (1990). Quotation in spoken English. *Studies in Language* 14, 325-363.
- Maynard D (1990). On narrative and narrative structure in plea bargaining. In Levi J & Walker A (eds). *Language in the Judicial Process* p.65-95. New York: Plenum Press.
- Maynard D & Schaeffer N (2002). Refusal conversion and tailoring. In Maynard D, Houtkoop-Steenstra H, Schaeffer N, Van Der Zouwen J (eds). *Standardization and Tacit Knowledge. Interaction & Practice in the Survey Interview* 219-239. New York: Wiley.
- McCarthy M & Carter R (2004). "There's millions of them" hyperbole in everyday conversation. *Journal of Pragmatics* 36, 149-184.
- McCarthy C, Arnall F, Strimpakos N, Freemont A, Oldham J (2004). The biopsychosocial classification of non-specific low back pain: A systematic review. *Physical Therapy Reviews* 9, 1, 17-30.
- McKinlay A & Potter J (1987). Model discourse: interpretative repertoires in scientists' conference talk. *Social Studies of Science* 17, 3, 443-463.
- McParland J, Eccleston C, Osborn M, Hezseltine L (2010). It's not fair: An Interpretative Phenomenological Analysis of discourses of justice and fairness in chronic pain. *Health* (London) doi:10.1177/1363459310383593.
- McPherson K, Taylor W, Leplege A (2010). Rehabilitation outcomes: Values, methodologies and applications. *Disability & Rehabilitation* 32, 12, 961-964.
- Medina-Mirapeix F (2009). Personal characteristics influencing patients' adherence to home exercise during chronic pain: a qualitative study. *Journal of Rehabilitation Medicine* 41, 47-52.
- Meehan A (1989). Assessing the "police-worthiness" of citizens' complaints to the police accountability and the negotiation of "facts". In Helm D, Anderson W, Meehan A & Rawls A (eds). *The Interactional Order: New Direction in the Study of Social Order* p.116-140. New York: Irvington.
- Mellor D (2005). Time. In Jackson F & Smith M (eds). *The Oxford Handbook of Contemporary Philosophy*, p.615-635. Oxford: Oxford University Press.
- Mercer C, Jackson A, Hettinga D, Barlos P, Ferguson S (2006). *Clinical Guidelines for the physiotherapy management of persistent low back pain, Part 1: Exercise*. London: Chartered Society of Physiotherapy.
- Meyers M (1995). Dignity, death and modern virtue. *American Philosophical Quarterly*, 32, 1, 45-55.
- Miettinen O (2003). Commentary on 'a critical appraisal of evidence-based medicine: some ethical considerations'. *Journal of Evaluation in Clinical Practice* 9, 2, 123-127.
- Miles A, Curran H, Pearce S (2005). Managing constraint: the experience of people with chronic pain. *Social Science & Medicine* 61, 2, 431-441.

- Miller A & Lewis A (2001). How patients experience acute low back pain and how primary care physiotherapy affects their recovery. *Physiotherapy*, 87, 11, 600.
- Miller C (2003). Social psychology and virtue ethics. *The Journal of Ethics* 7, 365-392.
- Miller F & Kaptchuk T (2008). The power of context: reconceptualizing the placebo effect. *Journal of the Royal Society of Medicine* 101, 222-225.
- Miller M, Manning P, Van Maanen J (1995). Series Editors' Introduction. In Holstein J & Gubrium J. (eds) *The Active Interview*. p.iv-ix, London: Sage
- Miller J, Pinnington M, Stanley I (1999). The early stages of low back pain: a pilot study of patient diaries as a source of data. *Family Practice* 16, 4, 395-401.
- Milligan C, Bingley A, Gatrell A (2005). Digging deep: using diary techniques to explore the place of health and well-being amongst older people. *Social Science & Medicine* 61, 9, 1882-1892.
- Mills C(1940). Situated action and the vocabulary of motives. *American Sociological Review* 5, 4, 904-913.
- Milne P (2009). What is the normative role of logic? *Proceedings of the Aristotelian Society, Supplementary* vol. 83, 1, 269-298.
- Mintz D (1992). What's in a word: the distancing function of language in medicine. *Journal of Medical Humanities* 13, 4, 223-233.
- Mishler E (1984). *The Discourse of Medicine: Dialectics of Medical Interviews*. Norwood NJ: Ablex
- Mishler E (1991). *Research Interviewing: Context and Narrative*. Cambridge MA: Harvard University Press.
- Mishler E (1995). Models of narrative analysis: a typology. *Journal of Narrative & Life History* 5, 87-123.
- Mishler E (1996). Missing persons: recovering developmental stories/histories. In Colby A & Shweder R (eds). *Ethnography & Human Development: Context & Meaning* p.73-100. Chicago: Chicago University Press.
- Mishler E (1999). *Storylines: Craft artists; Narratives of Identity*. Cambridge: Harvard University Press.
- Mishler E (2005a). Commentaries on Potter & Hepburn, 'Qualitative interviews in psychology: problems and possibilities' commentary 3. *Qualitative Research in Psychology* 2, 315- 325.
- Mishler E (2005b). Patient stories, narratives of resistance and the ethics of humane care: a la recherche du temps perdu. *Health* 9, 4, 431-451.
- Modic M, Obuchowski N, Ross J, Brant-Zawadzki M (2005). Acute low back pain and radiculopathy: MRI imaging findings and their prognostic role and effect on outcome. *Radiology* 237, 2, 597-604.
- Mogil J, Wilson S, Chesler E, Rankin A et al. (2003). The melanocortin-1 receptor gene mediates female-specific mechanisms of analgesia in mice and humans. *Proceedings of the National Academy of Sciences of the United States of America* 100, 8, 4867-4872.
- Mondloch M, Cole D, Frank J (2001). Does how you do depend on how you think you'll do? A systematic review of the evidence for a relation between patients' recovery expectations and health outcomes. *Canadian Medical Association Journal* 165, 2, 174-179.
- Moore A & Jull G (2006). The systematic review of systematic reviews has arrived! *Manual Therapy* 11, 91-92.
- Morley S, Davies C, Barton S (2005). Possible selves in chronic pain: self-pain enmeshment, adjustment and acceptance. *Pain* 115, 84-94.
- Morris D (1996). About suffering: Voice, genre and moral community (how literature represents suffering). *Daedalus* 125, 25-45.

- Moseley G (2004). Widespread brain activity during an abdominal task markedly reduced after pain physiology education: fMRI evaluation of a single patient with chronic low back pain. *Australian Journal of Physiotherapy* 51, 49-52.
- Mullis R, Lewis M, Hay E (2009). Testing a model of association between patient- identified problems and responses to global measures of health in low back pain patients: a prospective study. *Health & Quality of Life Outcomes* 7, 74. doi:10.1186/1477-7525-7-7.
- Murray M (2000). Levels of narrative analysis in health psychology. *Journal of Health Psychology* 5, 3, 337-347.
- Must A, Phillips S, Naumova E, Blum M et al. (2002). Recall of early menstrual history and menarcheal body size: after 30 years, how well do women remember? *American Journal of Epidemiology* 155, 7, 672-679.
- Myers G (2000). Entitlement and sincerity in broadcast interviews about Princess Diana. *Media, Culture & Society* 22, 167-185.
- Nabi R (1998). Discrete Emotions & Persuasion. In Dillard J & Pfau M (eds). *The Persuasion Handbook: Developments in Theory & Practice* p.289-308. London: Sage.
- Nachemson A (1992). Newest knowledge of low back pain: a critical look. *Clinical Orthopaedics & Related Research* 279, 8-20.
- Nagel T (1986). *The View From Nowhere*. Oxford: Oxford University Press.
- Nair D (2005). About being BOLD. *Brain Research Reviews* 50, 229-43.
- Neel J (1994). *Aristotle's Voice: Rhetoric, Theory & Writing in America*. Carbondale: Southern Illinois University Press.
- Neubauer E, Junge A, Pirron P, Seemann H, Schiltewolf M (2006). HKF-R-10 - screening for predicting chronicity in acute low back pain (LBP): a prospective clinical trial. *European Journal of Pain* 10, 559-566.
- Nevile M & Rendle-Short J (2007). Language as Action. *Australian Review of Applied Linguistics* 30,3, 1-13.
- Newton B, Southall J, Raphael J, Ashford R, LeMarchand K (2010). A narrative review of the impact of disbelief in chronic pain. *Pain Management Nursing*. DOI.10.10.16/j.pmn2010.09.001.
- Nicholas M (2010). Obstacles to recovery after an episode of low back pain: The 'usual suspects' are not always guilty. Commentary. *Pain* 148, 363-364.
- Nilhof G (1998). Naming as naturalization in the medical encounter. *Journal of Pragmatics* 30, 735-753.
- Nisbett R, Caputo C, Legant P, Maracek J (1973). Behavior as seen by the actor and as seen by the observer. *Journal of Personality and Social Psychology* 27, 154-164.
- Norrick N (2000). Poetics and Conversation. *Connotations* 10, 2-3, 243-267.
- Nussbaum M (2000). Aristotle, politics and human capabilities: A response to Antony, Arneson, Charlesworth & Mulgan. *Ethics* 111, 1, 102-140.
- O'Connell N (2010). Psychological obstacles to recovery in back pain: a rumble in the journal. *Body & Mind*, 24 Sept 2010. <http://bodyinmind.com.au/psychological-obstacles-to-recovery-in-back-pain-a-rumble-in-the-journal/>
- O'Keefe D (1998). Justification explicitness and persuasive effect: a meta-analytic review of the effects of varying support articulation in persuasive messages. *Argumentation & Advocacy* 35, 61-75.
- O'Sullivan P & Beale D (2007). Diagnosis and classification of pelvic girdle pain disorders -Part 1: A mechanism based approach within a biopsychosocial framework. *Manual Therapy* 12, 86-97.

- Oakley A (1982). Interviewing women: a contradiction in terms. In H. Roberts (ed.). *Doing Feminist Research*. London: Routledge.
- Ochs E & Capps L (2001). *Living Narrative*. Cambridge MA: Harvard University Press.
- Ogden J (1997). Diet as a vehicle for self-control. In Yardley L (ed.). *Material Discourses of Health & Illness* p.199-216. London: Routledge.
- Ogden J (2004). *Health Psychology: A Textbook*. Maidenhead: Open University Press.
- Ølen A, Iversen S, Stensland P (2007). Narratives of embodied experiences - therapy processes in Norwegian psychomotor physiotherapy. *Physiotherapy* 9, 1, 31-39.
- Ong BN & Coady D (2006). Qualitative research: its relevance and use in musculoskeletal medicine. *Topical Reviews: Arc Reports on the Rheumatic Diseases*, Series 5: No. 9, <http://www.arc.org.uk/arhinfo/medpubs/6629/6629>
- Ong BN, Dunn K, Croft P (2006b). "Since you're asking. . .": free text commentaries in an epidemiological study of low back pain consultants in primary care. *Quality & Quantity* 40, 651-659.
- Ong BN, Hooper H, Dunn K, Croft P (2004). Establishing self and meaning in low back pain narratives. *Sociological Review* 52, 4, 532-549.
- Ong BN, Hooper H, Jinks C, Dunn K, Croft P (2006a). 'I suppose that depends on how I was feeling at the time': perspectives on questionnaires measuring quality of life and musculoskeletal pain. *Journal of Health Services Research & Policy* 11, 2, 81-88.
- Osborne M (1995). Personal experiences of chronic pain. *Health Psychology Update* 19, 38-41.
- Osborn M & Smith J A (1998). The personal experience of chronic benign lower back pain: an interpretative phenomenological analysis. *British Journal of Health Psychology* 3, 65-83.
- Osborn M & Rodham K (2010). Insights into pain: a review of qualitative research. *Reviews in Pain* 4, 2-7.
- Orbuch T (1997). People's accounts count: The sociology of accounts. *Annual Review of Sociology*, 23, 455-478.
- Ostelo R, Deyo R, Stratford P, Waddell G, Croft P, et al.(2008). Interpreting change scores for pain and functional status in low back pain: towards international consensus regarding minimal important change. *Spine* 33, 1, 90-94.
- Ostelo R, Croft P, van der Weijden T, van Tulder M (2010). Challenges in using evidence to inform your clinical practice in low back pain. *Clinical Rheumatology* 24, 2, 281-289.
- Ott S (1999). Physical therapy, chiropractic manipulation, or an educational booklet for back pain. *New England Journal of Medicine* 340, 5, 389-390.
- Overstreet M & Yule G (2002). The metapragmatics of and everything. *Journal of Pragmatics* 34, 785-794.
- Owens D (1998). Spine update: patient preferences & the development of practice guidelines. *Spine* 23, 9, 1073-1079.
- Paatelma M, Karvonen E, Heinonen A (2009). Inter-tester reliability in classifying acute and sub-acute low back pain patients into clinical sub-groups: a comparison of specialists and non-specialists. A Pilot Study. *The Journal of Manual & Manipulative Therapy* 17, 4, 221-229.
- Painting S, Favarin I et al. (1998). The management of acute industrial low back pain. *Physiotherapy* 84, 3, 110-117.

- Papageorgiou A, Croft PR, Ferry S, Jayson MI, Silman AJ (1995). Estimating the prevalence of low back pain in the general population. Evidence from the South Manchester back pain survey. *Spine* 20, 1889–1894.
- Parker I (1992). *Discourse Dynamics: Critical Analysis for Social and Individual Psychology*. London: Routledge.
- Parker I (1999). Qualitative data and the subjectivity of ‘objective’ facts. In Dorling D & Simpson L (eds). *Statistics in Society: The Arithmetic of Politics*. London: Arnold.
- Parker I (2004). Criteria for qualitative research in psychology. *Qualitative Research in Psychology* 1, 1-12.
- Parry R (2004). Communication during goal setting in physiotherapy treatment sessions. *Clinical Rehabilitation* 18, 68–82.
- Paterson C (2004). Seeking the patient’s perspective: a qualitative assessment of EuroQol, COOP-WONCA charts and MYMOP. *Quality of Life Research* 13, 871–881.
- Patterson W (2008). Narratives of events: Labovian event analysis and its limitations. In Andrews M, Squire C, Tamboukou M (eds). *Doing Narrative Research*. p. 22-40, London: Sage.
- Patton Q (1990). *Qualitative Evaluation & Research Methods* (2nd edition). London: Sage.
- Peat G (2006). Attributed disability: a spot of local difficulty. *Journal of Evaluation in Clinical Practice* 12, 8-12.
- Peel E, Parry O, Douglas M, Lawton J (2005). Taking the biscuit? A discursive approach to managing diet in type 2 diabetes. *Journal of Health Psychology* 10, 6, 779-791.
- Pengel LH, Herbert RD, Maher C, Refshauge K (2003). Acute low back pain: systematic review of its prognosis. *British Medical Journal* 327, 323-330.
- Pennebaker J (1997). *Opening Up: The Healing Power of Emotional Expression*. New York: Guilford.
- Peters S, Stanley I, Rose M, Salmon P (1998). Patients’ accounts of medically unexplained symptoms: sources of patients’ authority and implications for demands on medical care. *Social Science & Medicine* 46, 559-565.
- Peterson C & Seligman M (2004). *Character Strengths and Virtues: A handbook and classification*. Oxford: Oxford University Press.
- Petersen T, Laslett M, Thorsen H, Manniche C et al. (2003). Diagnostic classification of non-specific low back pain. A new system integrating pathoanatomic and clinical categories. *Physiotherapy Theory & Practice* 19, 213–237.
- Petraglia J (2009). The importance of being authentic: Persuasion, narration, and dialogue in health communication and education *Health Communication*, 24, 176–185.
- Phillips L & Jørgensen M (2002). *Discourse Analysis as Theory and Method*. London: Sage.
- Picavet H, Vlaeyen J, Schouten J (2002). Pain catastrophizing and kinesiophobia: predictors of chronic low back pain. *American Journal of Epidemiology* 156, 1028–1034.
- Pierret J (2003). The illness experience: state of knowledge and perspectives for research. *Sociology of Health & Illness* 25 (Silver Anniversary Issue), 4-22.
- Pincus T, Burton A, Vogel S, Field A. (2002). A systematic review of psychological factors as predictors of chronicity/disability in prospective cohorts of low back pain. *Spine* 27, 5, E109-120.
- Pincus T, Morley S (2001). Cognitive-processing bias in chronic pain: a review and integration. *Psychological Bulletin* 127, 599-617.

- Pincus T, Santos R, Breen A, Burton AK et al. (2008). A review and proposal for a core set of factors for prospective cohorts in low back pain: a consensus statement. *Arthritis & Rheumatism* 59, 1, 14-24.
- Pincus T, Vogel S, Burton A, Santos R, Field A (2006). Fear avoidance and prognosis in back pain: a systematic review and synthesis of current evidence. *Arthritis & Rheumatism* 54, 3999-4010.
- Pincus T, Williams A, Vogel S, Field A (2004). The development and testing of the depression, anxiety, and positive outlook scale (DAPOS). *Pain* 109, 1-2, 181-188.
- Plummer K (2001). *Documents of Life 2: An Invitation to Critical Humanism*. London: Sage
- Poindexter C (2002). 'Meaning from methods: e-presenting stories of an HIV affected caregiver'. *Qualitative Social Work: Research & Practice* 1, 1, 59-78.
- Polkinghorne D (2007). Validity Issues in Narrative Research. *Qualitative Inquiry* 13, 4, 471-486.
- Pollock K (1993). Attitude of mind as a means of resisting illness. In Radley A (ed.) *Worlds on Illness: Biographical & Cultural Perspectives on Health & Disease* p.49-70. London: Routledge.
- Pomerantz A (1984). Agreeing and disagreeing with assessments: some features of referred/dispreferred turn shapes. In Atkinson J. & Heritage J (eds). *Structures of Social Action: Studies in Conversation Analysis* p.57-101. Cambridge: Cambridge University Press.
- Potter J (1996). *Representing Reality: Discourse, Rhetoric and Social Construction*. London: Sage.
- Potter J (2002). Two kinds of natural. *Discourse Studies* 4, 539-542.
- Potter J (2007). *Discourse & Psychology*. London: Sage.
- Potter J & Hepburn A (2005). Qualitative interviews in psychology: problems and possibilities. *Qualitative Research in Psychology* 2, 281-307.
- Potter J & Wetherell M (1987). *Discourse & Social Psychology*. London: Sage.
- Potter J & Wetherell M (1988). Accomplishing attitudes: fact and evaluation in racist discourse, *Text*, 8, 51-68.
- Potter J & Wetherell M (1994). Analyzing discourse. In Bryman A & Burgess B (eds). *Analyzing Qualitative Data*, p.47-56. London; Routledge
- Potter M, Gordon S, Hamer P (2003a). The difficult patient in private practice physiotherapy: a qualitative study. *Australian Journal of Physiotherapy* 49, 53-6.
- Potter M, Gordon S, Hamer P (2003b). The physiotherapy experience in private practice: the patients' perspective. *Australian Journal of Physiotherapy* 49, 195-20.
- Prichard C, Jones D, Stablein R (2004). Doing discourse analysis in organization studies. In Grant DC, Hardy C, Osrick C, Putnam L (eds). *Handbook of Organizational Discourse* p.213-236. London: Sage.
- Prkachin K, Solomon P, Ross J (2007). Underestimation of pain by health-care providers: towards a model of the process of inferring pain in others. *Canadian Journal of Nursing Research* 39, 88-106.
- Prus R, (1996). *Symbolic Interaction and Ethnographic Research*. Albany, NY: SUNY Press.
- Pryor J (2000). The Sceptic and the Dogmatist, *Nous* 34, 517-549
- Quartana P, Campbell C, Edwards R (2009). Pain catastrophizing: a critical review. *Expert Review of Neurotherapeutics* 9, 5, 745-758.
- Raak R, Wahren LK (2006). Health experiences and employment status in subjects with chronic back pain: a long-term perspective. *Pain Management Nursing* 7, 64-70.
- Radley A & Billig M (1996). Accounts of health and illness: dilemmas and representations. *Sociology of Health & Illness* 18, 2, 220-240.

- Ramírez-Esparza N, & Pennebaker JW (2006). Do good stories produce good health? Exploring words, language, and culture. *Narrative Inquiry* 16, 211-219.
- Ramond A, Bouton C, Richard I, Roquelaure Y, Baufreton C et al. (2011). Psychosocial risk factors for chronic low back pain in primary care - a systematic review. *Family Practice* 28, 1, 12-21.
- Redman P (2005). The narrative formation of identity revisited. *Narrative Inquiry* 15, 1, 25-44.
- Refshauge K & Gass E (eds) (2004). *Musculoskeletal Physiotherapy: Its Clinical Science and Evidence-Based Practice*. London: Elsevier.
- Reis HT, & Patrick BC (1996). Attachment and intimacy: Component processes. In Higgins E & Kruglanski A (eds). *Social Psychology: Handbook of Basic Principles* p.523-563. New York: Guilford.
- Reneman M, Schiphorst Preuper H, Kleen M, Geertzen J, Dijkstra P (2007). Are pain and pain-related fear related to performances in a functional capacity evaluation in patients with chronic low back pain? *Journal of Occupational Rehabilitation* 17, 247-253.
- Reynolds J, Wetherell M, Taylor S (2007). Choice and chance: negotiating agency in narratives of singleness. *The Sociological Review* 55, 331-351.
- Richardson J, Dawson L, Sadlo G, Jenkins V, McInnes J (2007). Perceived academic quality and approaches to studying in the health professions. *Medical Teacher* 29, e108–e116.
- Richardson J, Ong BN, Sims J (2006). Is chronic widespread pain biographically disruptive? *Social Science & Medicine* 63, 6, 1573-1585.
- Richardson L (1988). Secrecy and status: the social construction of forbidden relationships. *American Sociological Review* 53, 209-219.
- Richardson L (1990). Narrative and sociology. *Journal of Contemporary Ethnography* 19, 116-135.
- Richardson L (1993). Poetics, dramatics, and transgressive validity: the case of the skipped line. *The Sociological Quarterly* 4, 695-710.
- Richardson L (1997). *Fields of Play: Constructing an Academic Life*. New Brunswick, NJ: Rutgers University Press.
- Richardson L (2003). Writing: A Method of Inquiry. In Lincoln Y & Denzin N (eds). *Turning Points in Qualitative Research: Tying Knots in a Handkerchief* p.379-396. Lanham, MD: Rowman & Littlefield.
- Richter M, Eck J, Straube T, Miltner W, Weiss T (2010). Do words hurt? Brain activation during the processing of pain-related words. *Pain* 148, 2, 198-205.
- Ricoeur P (1973). The model of the text: meaningful action considered as a text. *New Literary Historian* 5, 91-120.
- Ricoeur P (1980). Narrative Time. *Critical Inquiry* 7, 1, 169-190.
- Ricoeur P (1984). *Time and Narrative*. Chicago: Chicago University Press.
- Ricoeur P (1991). 'Life in quest of narrative'. In Wood D (ed.). *On Paul Ricoeur: Narrative and Interpretation*. London: Routledge
- Riessman CK (1990). *Divorce Talk: Women and Men Make Sense of Personal Relationships*. London, Rutgers University Press.
- Riessman CK(1993). *Narrative Analysis*. London, Sage.
- Riessman CK (2001). Personal troubles as social issues: a narrative of infertility in context. In Shaw I & Gould N (eds). *Qualitative Research in Social Work: Method and Context* p.73-82. Thousand Oaks, CA: Sage.

- Riessman CK (2002). Analysis of personal narratives. In Gubrium J & Holstein J (eds). *Handbook of Interview Research* p.695-710. Newbury Park, CA: Sage
- Riessman CK (2003). Performing identities in illness narrative: masculinity and multiple sclerosis. *Qualitative Research* 3, 1, 5-33.
- Riessman CK (2005). Exporting ethics: A narrative about narrative research in South India. *Health :An Interdisciplinary Journal for the Social Study of Health, Illness & Medicine* 9, 4, 473-490.
- Riessman CK (2008). *Narrative Methods in the Human Sciences*. New York, Sage
- Riessman CK & Quinney L (2005). Narrative in social work: a critical review. *Qualitative Social Work* 4, 4, 383-404.
- Riley T & Hawe P (2005). Researching practice: the methodological case for narrative inquiry. *Health Education Research* 20, 2, 226-236.
- Risdon A, Eccleston C, Crombez G, McCracken L (2003). How can we learn to live with pain? A Q-methodological analysis of the diverse understandings of acceptance of chronic pain. *Social Science & Medicine* 56, 375-86.
- Roberto KA & Reynolds SG (2002). Older women's experiences with chronic pain: daily challenges and self-care practices. *Journal of Women & Aging* 14, 3-4, 5-23.
- Roberts C, Wass V, Jones R, Sarangi S, Gillet A (2003). A discourse analysis study of 'good' and 'poor' communication in an OSCE: a proposed new framework for teaching students. *Medical Education* 37, 192-201.
- Roberts L, Bucksey S (2007). Communicating with patients: what happens in practice? *Physical Therapy* 87, 5, 586-594.
- Robinson I (1990). Personal narratives, social careers and medical courses: Analyzing life trajectories in autobiographies of people with multiple sclerosis. *Social Science & Medicine* , 30, 11, 1173-1186.
- Robinson J (2003). An interactional structure of medical activities during acute visits and its implications for patients' participation. *Health Communication* 15, 27-59.
- Robinson J & Heritage J (2005). The structure of patients' presenting concerns: the completion relevance of current symptoms. *Social Science & Medicine* 61, 481-493.
- Rodriguez-Raecke R, Niemeier A, Ihle ,K Ruether W, May A (2009). Brain gray matter decrease in chronic pain is the consequence and not the cause of pain. *The Journal of Neuroscience* 29, 44, 13746-13750.
- Roelofs P, Bramsen I, Kuiper C (2010). Psychological constructs are of minor predictive value in the course of low back pain in primary care: call for correction of Foster et al. *Pain* 150, 1, 208-209.
- Rogers A & Nicholaas G (1998). Understanding the patterns and processes of primary care use: a combined quantitative & qualitative approach. *Sociological Research Online* 3, 4. [http://\\_www.socresonline.org.uk/3/4/5.html](http://_www.socresonline.org.uk/3/4/5.html)
- Roland M, Morris R (1983). A study of the natural history of back pain. Part I: development of a reliable and sensitive measure of disability in low back pain. *Spine* 8, 141-144.
- Rose M, Reilly JP, Slade PD, Dewey M (1995). A Comparative Analysis of Psychological and Physical Models of Low Back Pain Experience. *Physiotherapy* 81, 12, 710-716.
- Rosenfeld D (2006). Similarities and differences between acute illness and injury narratives and their implications for medical sociology. *Social Theory & Health* 4, 1, 64-84.
- Rosner A (2003). Fables or foibles: inherent problems with RCTs. *Journal of Manipulative & Physiological Therapeutics* 26, 460-467.

- Rossignol M, Poitras S, Dionne C, Tousignant M, Truchon M et al. (2007). An interdisciplinary guideline development process: the clinic on low-back pain in interdisciplinary practice (CLIP). Low-back pain guidelines. *Implementation Science* 24, 2, 36. doi:10.1186/1748-5908-2-36.
- Roulston K(2001). Data analysis and 'theorizing as ideology'. *Qualitative Research* 1, 3, 279-302.
- Roulston K (2010). Considering quality in qualitative interviewing. *Qualitative Research* 10, 199-228.
- Roulston K, Baker C, Liljestrom A (2001). Analyzing the researcher's work in generating data: the case of complaints. *Qualitative Inquiry* 7, 6, 745-772.
- Rubin H & Rubin I (2005). *Qualitative Interviewing: The Art of Hearing Data*. Thousand Oaks: Sage.
- Rubovitz T (1999). Evidential existentials: The interaction between discourse and sentence structure. *Journal of Pragmatics* 31, 1025-1040.
- Ryan A (2006). Methodology: collecting data. In Antonesa M, Fallon H, Ryan A et al. (eds). *Researching & Writing Your Thesis: A Guide for Postgraduate Students* p.70-89. Maynooth: MACE.
- Sackett D, Rosenberg W, Gray J, et al. (1996). Evidence based medicine: what it is and what it isn't. *British Medical Journal* 312, 71-2.
- Sacks H (1992). *Lectures on Conversation.(Vols. I and II)*. Cambridge, UK: Blackwell.
- Sacks H, Schegloff E, Jefferson G. (1974) A simplest systematics for the organisation of turn-taking for conversation. *Language*, 50, 696–735.
- Sadlo G, Piper D, Agnew P (1994). Problem-based learning in the development of an occupational therapy curriculum, Part 1: The process of problem-based learning. *British Journal of Occupational Therapy* 57, 2, 49-54.
- Sadlo G & Richardson J (2003). Approaches to studying and perceptions of the academic environment in students following problem-based and subject-based curricula. *Higher Education Research & Development*, 22, 3, 253-274.
- Salmon P & Hall G (2003). Patient empowerment and control: a psychological discourse in the service of Medicine. *Social Science & Medicine* 57, 1969-1980.
- Sambrook P, MacGregor A, Spector T (1999). Genetic influences on cervical and lumbar disc degeneration: a magnetic resonance imaging study in twins. *Arthritis & Rheumatism* 42, 66-372.
- Sanchez K, Papelard A, Nguyen C, Jousse M et al. (2002). Patient-preference disability assessment for disabling chronic low back pain: a cross-sectional survey. *Spine* 34, 1052–1059.
- Sandborgh M,Lindberg P, Denison E (2008). The Pain Belief Screening Instrument (PBSI): predictive validity for disability status in persistent musculoskeletal pain. *Disability & Rehabilitation* 30, 15,1123-1130.
- Sandelowski M & Barroso J (2003). Classifying the findings in qualitative studies. *Qualitative Health Research*, 13, 7, 905-923.
- Sarangi S & Slembrouck S (1992). Non-cooperation in communication. *Journal of Pragmatics* 17, 2, 117-154.
- Sarbin T (1986). *Narrative Psychology. The Storied Nature of Human Conduct*. New York: Praeger.
- Savigny P, Kuntze S, Watson P et al. (2009). Low Back Pain: Early management of persistent non-specific low back pain. *London: National Collaborating Centre for Primary Care & Royal College of General Practitioners*.
- Savy P & Sawyer A (2008). Risk, suffering and competing narratives in the psychiatric assessment of an Iraqi refugee culture. *Medicine & Psychiatry* 32, 84-101.

- Savoy R (2005). Experimental design in brain activation MRI: Cautionary tales. *Brain Research Bulletin* 67, 361-367.
- Sayer A (2006). Language and significance or the importance of import. *Journal of Language & Politics* 5, 3, 449-471.
- Sayre-McCord, G (2010). Metaethics. *The Stanford Encyclopedia of Philosophy* (Fall 2008 Edition) Zalta E (ed.). [http:// plato.stanford.edu/archives/ fall2008/entries/metaethics](http://plato.stanford.edu/archives/fall2008/entries/metaethics). [accessed 5 February 2010]
- Sbisa M (2001). Illocutionary force and degrees of strength in language use. *Journal of Pragmatics* 33, 1791-1814.
- Schegloff E (1997). Whose text? Whose context? *Discourse & Society* 8, 165-187.
- Schiellerup P (2008). Stop making sense: the trials and tribulations of qualitative data analysis. *Area* 40, 2, 163-171.
- Schiffrin D (1981). Tense variation in narrative. *Language* 57, 45-62.
- Schiffrin D (1990). The language of discourse: connections inside and out. *Text* 10 (1/2), 97-100.
- Schiffrin D (2003). We knew that's it: Retelling the turning point of a narrative *Discourse Studies* 5, 4, 535-561.
- Schiottz-Christensen B, Nielsen G, Hansen V, Schodt T, Sorensen H, Olesen F (1999). Long-term prognosis of acute low back pain in patients seen in general practice: A 1-year prospective follow-up study. *Family Practice* 16, 223-232.
- Schirato T & Yell S (2000). *Communication and Cultural Literacy* (2nd edition) St Leonards, NSW: Allen & Unwin.
- Schlenker B (1980). *Impression Management: The Self-Concept, Social Identity, and Interpersonal Relations*. Monterey, CA: Brooks/Cole.
- Schlenker B, Miller M, Johnson R (2009). Moral Identity, Integrity, and Personal Responsibility. In Narvaez D & Lapsley D (eds). *Personality, Identity, and Character: Explorations in Moral Psychology*, p.316-340. Cambridge: Cambridge University Press.
- Schlenker B, Pontari B, Tesser A, Felson R (2000). The strategic control of information: Impression management and self-presentation in daily life. In A Tesser & R Felson (eds.). *Psychological Perspectives on Self and Identity* p.199-232, Washington: American Psychological Association.
- Schlenker B, Pontari B, Christopher A (2001). Excuses and Character: Personal and social implications of excuses. *Personality & Social Psychology Review* 5, 1, 15-32.
- Schneiders A, Zusman M, Singer K (1998). Exercise therapy compliance in acute low back pain patients. *Manual Therapy* 3, 3, 147-152.
- Schwalbe M, Godwin S, Holden D, Schrock D, Thompson S, Wolkomir M (2000). Generic processes in the reproduction of inequality: an interactionist analysis. *Social Forces* 79, 419-452
- Schwandt T, Lincoln Y, Guba E (2007). Judging interpretations: but is it rigorous? Trustworthiness and authenticity in naturalistic evaluation . *New Directions for Evaluation* 114, 11-25.
- Scollon R & Scollon S (1981). *Narrative, Literacy and Face in Interethnic Communication*. Norwood, NJ: Ablex.
- Scott I (2007). The evolving science of translating research evidence into clinical practice. *Evidence Based Medicine* 12, 4-7.
- Scott J (1991). The evidence of experience. *Critical Inquiry* 17, 4, 773-797.
- Scott M, Lyman M (1968). Accounts. *American Sociological Review* 33, 1, 46-62.

- Seale C (ed.).(2004) *Researching Society & Culture*. Sage, London, UK,
- Searle J (1969). *Speech Acts: An Essay in the Philosophy of Language*. Cambridge: Cambridge University Press.
- Seers K & Friedli K (1996). The patients' experiences of their chronic non-malignant pain. *Journal of Advanced Nursing* 24, 1160-1168.
- Seibold C (2000). Qualitative research from a feminist perspective in the postmodern era: methodological, ethical and reflexive concerns. *Nursing Inquiry* 7, 147-155.
- Semin G & Manstead A (1982). The social implications of embarrassment displays and restitution behaviour. *European Journal of Social Psychology* 12, 367-377.
- Semin G & Manstead A (1983). *The Accountability of Conduct: A Social Psychological Analysis*. London: Academic Press.
- Sen A (1985). Well-being, agency & freedom: The Dewey Lectures 1984. *The Journal of Philosophy* 82, 169-221.
- Shaw I (2002). 'How lay are lay beliefs?' *Health* 6, 3, 287-299.
- Shaw S & Bailey J (2009). Discourse analysis: what is it and why is it relevant to family practice? *Family Practice*, 26, 5, 413-419.
- Shaw W, Pransky G, Patterson W et al. (2007). Patient clusters in acute, work-related back pain based on patterns of disability risk factors. *Journal of Occupational Environmental Medicine* 49, 185-193.
- Shu R (2001). Forensic linguistics. In Aronoff M & Rees-Miller R (eds). *The Handbook of Linguistics*. p.683-691, Malden, MA: Blackwell.
- Sieben J, Portigijis P, Vlaeyen J, Knottnerus J (2005). Pain-related fear at the start of a new low back pain episode. *European Journal of Pain* 9, 635-641.
- Silverman D (1993). *Interpreting Qualitative Data: Methods for Analysing Talk, Text and Interaction*. London: Sage.
- Silverman D (1997). *Qualitative Research: Theory, Method & Practice*. London: Sage.
- Silverman D (2001). *Analyzing Talk & Text*. London: Sage.
- Silverstein M (2003). Indexical order and the dialectics of sociolinguistic life. *Language & Communication* 23, 193-229.
- Simmonds M (2000). Pain and the placebo in physiotherapy: a benevolent lie? *Physiotherapy* 86, 12, 631-637.
- Simmonds M, Kumar S, Lechelt E (1996). Psychological factors in disabling low back pain: causes or consequences? *Disability & Rehabilitation* 18, 4, 161-168.
- Singer T, Seymour B, O'Doherty J, Stephan K, Dolan R, Frith C (2006). Empathic neural responses and modulated by the perceived fairness of others. *Nature* 439, 7075, 466-469.
- Skelton A (1998). The hidden curriculum of patient education for low back pain in general practice. *Sociology of Health & Illness* 20, 1, 96-111.
- Skelton A, Murphy E, Murphy R, O'Dowd T (1996). Patients' views of low back pain and its management in general practice. *British Journal of General Practice* 46, 153-156.
- Skillgate E Vingård E, Josephson M, Theorell T, Alfredsson L (2007). Life events and the risk of low back and neck/shoulder pain of the kind people are seeking care for: results from the MUSIC-Norrköping case-control study. *Journal of Epidemiology & Community Health* 61, 356-361.

- Slade S, Molloy E, Keating J (2009). People with non-specific chronic low back pain who have participated in exercise programs have preferences about exercise: a qualitative study. *Australian Journal of Physiotherapy* 55, 115-121.
- Smith B, MacFarlane G, Torrance N (2007). Epidemiology of chronic pain, from the laboratory to the bus stop: time to add understanding of biological mechanisms to the study of risk factors in population-based research? *Pain* 127, 5-10.
- Smith JA (2005). Commentaries on Potter & Hepburn, 'Qualitative interviews in psychology: problems and possibilities'. Commentary 1. *Qualitative Research in Psychology* 2, 309- 311.
- Smith JA & Osborne M (2007). Pain as an assault on the self: an interpretative phenomenological analysis of the psychological impact of chronic benign low back pain. *Psychology & Health* 22, 5, 517-534.
- Smith J & Deemer D (2003). The problem of criteria in the age of relativism. In Denzin N & Lincoln Y (eds). *Handbook of Qualitative Research* (2nd edition) p.427-457. Thousand Oaks, CA:Sage.
- Smith M (1998). *Social Science in Question* London: Sage.
- Smith M (2005) Metaethics, In Jackson F & Smith M (eds) (2005). *The Oxford Handbook of Contemporary Philosophy*. p.3-30, New York: Oxford University Press.
- Sofaer-Bennett B (2008). Understanding the Experience of Pain: 'Pain is what I say it is'. *International Association for the Study of Pain*, 12th World Congress on Pain, Topical Workshop: Patient Voices. Glasgow Scotland (19 August 2008). Invited workshop.
- Solomon P (2005). Problem-based learning: a review of current issues relevant to physiotherapy education. *Physiotherapy Theory & Practice* 21, 1, 37-49.
- Solovieva S, Kouhia S, Leino-Arjas P, Ala-Kokko L et al. (2004). Interleukin 1 polymorphisms and intervertebral disc degeneration. *Epidemiology* 15, 5, 626-633.
- Sonnenberg S (2008). Household financial organisation and discursive practice: Managing money and identity. *The Journal of Socio-Economics* 37, 533-551.
- Sontag S (1991). *Illness as a Metaphor: AIDS and its Metaphors*. London: Penguin.
- Sparkes A (1996). The fatal flaw: a narrative of the fragile body-self. *Qualitative Inquiry* 463-494.
- Speer S (2002). Transcending the 'natural'/'contrived' distinction: A rejoinder to ten Have, Lynch and Potter. *Discourse Studies* 4, 4, 543-548.
- Speer S & Hutchby I (2003). From ethics to analytics: aspects of participants' orientations to the presence and relevance of recording devices. *Sociology* 39, 315-337.
- Spencer L, Ritchie J, Lewis J, Dillon L (2003). *Quality in Qualitative Evaluation: A Framework for Assessing Research Evidence*. Government Chief Social Researcher's Office, London, Occasional Papers Series 2. [http://www.policyhub.cmps.gov.uk/servlet/DocViewer/doc=1421/qual\\_eval\\_exe\\_summ.htm](http://www.policyhub.cmps.gov.uk/servlet/DocViewer/doc=1421/qual_eval_exe_summ.htm)
- Spengelink C, Hutten M, Hermens H, Greitemann B (2002). Assessment of activities of daily living with an ambulatory monitoring system: a comparative study in patients with chronic low back pain and non-symptomatic controls. *Clinical Rehabilitation* 16, 16-26.
- Spiro H (2009). The narrative approach to pain. In Moore R (ed.) *Biobehavioral Approaches to Pain* p.85-93 New York: Springer
- Spradley J (1980). *Participant Observation*. New York: Holt.
- Squire C (2005). Reading Narratives. *Group Analysis* 38, 1, 91-107.

- Stainton-Rogers W (1991). *Explaining Health and Illness: An Exploration of Diversity*. Hemel Hempstead: Harvester Wheatsheaf.
- Stake R (2006). *Multiple Case Study Analysis*. New York: Guildford Press.
- Stanton T, Henschke N, Maher C, Refshauge K et al. (2008). After an episode of acute low back pain, recurrence is unpredictable and not as common as previously thought. *Spine* 33, 26, 2923-2928.
- Stenmar L & Nordholm L (1994). Swedish physical therapists' beliefs on what makes therapy work. *Physical Therapy* 74, 11, 1034-1039.
- Stenner P (2005). Rights and emotions, or: the importance of having the right emotions. *History & Philosophy of Psychology* 7, 1- 11.
- Stenner P (2011). *Personal Communication* (2 Jan 2011).
- Stensland P & Malterud K (1999). Communicating symptoms through illness diaries. Qualitative evaluation of a clinical method to expand communication. *Scandinavian Journal of Primary Health Care* 17, 75-80.
- Stensland P & Malterud K (2001). Unravelling empowering internal voices - a case study on the interactive use of illness diaries. *Family Practice* 18, 4, 425-429.
- Stenvall M (2008). On emotions and the journalistic ideals of factuality and objectivity - tools for analysis. *Journal of Pragmatics* 40, 1569-1586.
- Stephens C & Breheny M (2008). Menopause and the virtuous woman: The importance of the moral order in accounting for medical decision making. *Health* 12, 1, 7-24.
- Stephens C, Carver J, Budge C (2004). To have or to take: discourse, positioning, and narrative identity in women's accounts of HRT. *Health* 8, 3, 329-350.
- Stilwell Peccei J (1999). *Pragmatics*. London: Routledge.
- Stivers T (2002). Presenting the problem in paediatric encounters: 'symptoms only' and 'candidate diagnoses'. *Health Communication* 14, 3, 299-338.
- Stivers T & Heritage J (2001). Breaking the sequential mould: Answering 'more than the question' during comprehensive history taking. *Text* 21, 151-185.
- Stokoe E, & Smithson J (2001). Making gender relevant: conversation analysis and gender categories in interaction. *Discourse & Society*, 12, 2, 243-269.
- Stokoe E, Edwards D (2006). Story formulations in talk-in-interaction. *Narrative Inquiry* 16, 1, 59-68.
- Stubbe M, Lane C, Hilder J, Vine E, Vine B, Marra M, Holmes J, Weatherall A (2003). Multiple discourse analyses of a workplace interaction. *Discourse Studies* 5, 351- 388.
- Suchman L, & Jordan B (1990). Interactional troubles in face-to-face survey interviews. *Journal of the American Statistical Association* 85, 232-253.
- Sullivan M & Adams H (2010). Psychosocial treatment techniques to augment the impact of physiotherapy interventions for low back pain. *Physiotherapy Canada* 62, 3, 180-189.
- Sullivan M, Martel M, Savard A, Crombez G (2006). The relation between catastrophizing and the communication of pain experience. *Pain* 122, 282-288.
- Sullivan M, Rodgers W, Kirsch I (2001). Catastrophizing, depression and expectancies for pain and emotional distress. *Pain* 91, 1, 147-154.
- Sullivan M, Thorn B, Haythornthwaite J, Keefe F, Martin M et al. (2001). Theoretical perspectives on the relation between catastrophizing and pain. *Clinical Journal of Pain* 17, 1, 52-64.

- Swinkels-Meewisse I, Roelofs J, Oostendorp R, Verbeek A, Vlaeyen J (2006a). Acute low back pain: pain related fear and pain catastrophizing influence physical performance and perceived disability. *Pain* 120, 1-2, 36-43.
- Swinkels-Meewisse I, Roelofs J, Schouten E, Verbeek A, Oostendorp R, Vlaeyen J (2006b), Fear of movement/ (re)injury predicting chronic disabling low back pain: a prospective inception cohort study. *Spine* 31, 6, 658-664.
- Tanggaard L (2009). The research interview as a dialogical context for the production of social life and personal narratives. *Qualitative Inquiry* 15, 9, 1498-1515.
- Tannen D (1984). Coherence in spoken and written discourse. In Freedle R (ed.) *Advances in Discourse Processes*. p.21-44. Norwood, NJ: Ablex.
- Tannen D (1987). Repetition in conversation: towards a poetics of talk. *Language* 63, 3, 574-605.
- Tannen D (2007). *Talking Voices: Repetition, Dialogue, & Imagery in Conversational Discourse*. Cambridge: Cambridge University Press.
- Tannen D & Wallat C (1986). Medical professionals and parents: a linguistic analysis of communication across contexts. *Language in Society* 15, 3, 295-311.
- Tanney J (1995). Why reasons may not be causes. *Mind & Language* 10, 1-2, 105-128.
- Tarasuk V & Eakin J (1994). Back problems are for life: perceived vulnerability and its implications for chronic disability. *Journal of Occupational Rehabilitation* 4, 1, 55-64.
- Taylor S (2003). A place for the future? Residence and continuity in women's lives. *Narrative Inquiry* 13, 1, 193-215.
- Taylor S (2005). Self-narration as rehearsal. *Narrative Inquiry* 15, 1, 45-50.
- Taylor S (2006). Narrative as construction and discursive resource. *Narrative Inquiry* 16, 1, 94-102.
- Telfer E (1968). Self respect. *Philosophical Quarterly* 18, 114-121.
- Telfer E (1995). Self respect. In Dillon R (ed). *Dignity, Character, and Selfrespect*, p.107-116, London: Routledge.
- Ten Have P (1999). *Doing Conversation Analysis: A Practical Guide*. London: Sage.
- Ten Have P (2007). *Doing Conversation Analysis: A Practical Guide*. London: Sage.
- Thibault P, Loisel P, Durand M, Catchlove R, Sullivan M (2008). Psychological predictors of pain expression and activity intolerance in chronic pain patients. *Pain* 139, 47-54.
- Thomas C (2010). Negotiating the contested terrain of narrative methods in illness contexts. *Sociology of Health & Illness* 32, 4, 647-660.
- Thomas E, Silman A, Croft P, Papageorgiou A, Jayson M, Macfarlane G (1999). Predicting who develops chronic low back pain in primary care: a prospective study. *British Medical Journal* 318, 1662-1667.
- Thorne F & Morley S (2009). Perspective judgements of acceptable outcomes for pain, interference and activity: patient determined outcome criteria. *Pain* 144, 262-269.
- Thornquist E (1992). Examination and communication: a study of first encounters between patients and physiotherapists. *Family Practice* 9, 2, 195-202.
- Thornquist E (2008). Musculoskeletal suffering: diagnosis and a variant view. *Sociology of Health & Illness* 17, 2, 166-192.

- Tilley S (2003). "Challenging" research practices: turning a critical lens on the work of transcription. *Qualitative Inquiry* 9, 5, 750-773.
- Todres L, Galvin K, Holloway I (2009). The humanisation of healthcare: A value framework for qualitative research. *International Journal of Qualitative Studies on Health & Well-being* 4, 68-77.
- Townsend A (2006). Multiple morbidity and moral identity in mid-life: accounts of chronic illness and the place of the GP consultation in overall management strategies. *Unpublished PhD thesis*, University of Glasgow.
- Townsend A, Wyke S, Hunt K (2006). Self-managing and managing self: practical and moral dilemmas in accounts of living with chronic illness. *Chronic Illness* 2, 185-194.
- Tracy K (1995). Action-implicative Discourse Analysis *Journal of Language & Social Psychology* 14, 195-215.
- Tracy K (2001). Discourse analysis in communication. In Schiffrin D, Tannen D, Hamilton H (eds). *The Handbook of Discourse Analysis* p.725-749, Oxford: Blackwell.
- Tracy K (2002). *Everyday Talk: Building and Reflecting Identities*. New York: Guildford.
- Tracy K & Anderson D (1999). The relational positioning strategies in police calls: a dilemma. *Discourse Studies* 1, 2, 201-225.
- Tracy K & Carjuzaa J (1993). Identity enactment in intellectual discussion. *Journal of Language & Social Psychology* 12, 3, 171-194.
- Trede F (2000). Physiotherapists' approach to low back pain education. *Physiotherapy* 86, 8, 427-433.
- Trede F (2006). A Critical Practice Model for Physiotherapy *Unpublished PhD Thesis*, University of Sydney.
- Trede F & Higgs J (2003). Re-framing the clinician's role in collaborative clinical decision making: re-thinking practice knowledge and the notion of clinician - patient relationships. *Learning in Health & Social Care* 2, 2, 66-73.
- Trede F & Higgs J (2008). Collaborative decision making. In Higgs J, Jones M, Loftus S, Christensen N, (2008). *Clinical Reasoning in the Health Professions* (3rd Edition) p.43-55. Oxford: Elsevier.
- Truchon M & Côté D (2005). Predictive validity of the chronic pain coping inventory in sub-acute low back pain. *Pain* 116, 205-212.
- Truchon M, Côté D, Fillion L, Arsenault B, Dionne C (2008). Low-back-pain related disability: an integration of psychological risk factors into the stress process model. *Pain* 137, 3, 564-573.
- Tuominen K & Savolainen R (1997). Social constructionist approach to the study of information use as discursive action. In Vakkari P, Savolainen R, & Dervin B (eds). *Information Seeking in Context (ISIC): Proceedings of an International Conference on Research in Information Needs, Seeking and Use in Different Contexts, Tampere* 14-16 (Aug 1996) p.81-96. Taylor Graham: London.
- Turk D, Dworkin R, Revicki D, Harding G, Burke L et al. (2008). Identifying important outcome domains for chronic pain trials: an IMMPACT survey of people with pain. *Pain* 137, 276-285.
- Turner J & Clancy S (1986). Strategies for coping with chronic low back pain: relationship to pain and disability. *Pain* 24, 3, 355-364.
- UK BEAM Trial Team (2004). United Kingdom back pain exercise and manipulation (UK BEAM) randomised trial: effectiveness of physical treatments for back pain in primary care. *British Medical Journal* 329, 1377. doi:10.1136/bmj.38282.669225.
- Van Damme S, Crombez G, Bijttebier P, Goubert L, Van Houdenhove B (2002). A confirmatory factor analysis of the pain catastrophizing scale: invariant factor structure across clinical and non-clinical populations. *Pain* 96, 319-324.

- Van den Berg-Emons R, Schasfoort F, De Vos L, Bussmann J, Stam H (2007). Impact of chronic pain on everyday physical activities. *European Journal of Pain* 11, 5, 587-593.
- Van der Windt D, Hay E, Jellema P; Main C (2008). Psychosocial interventions for low back pain in primary care: lessons learned from recent trials. *Spine* 33, 1, 81-89.
- Van Manen M (1990). *Researching Lived Experience: Human Science for an Action Sensitive Pedagogy*. Ontario: Althouse Press.
- Van Tulder M, Becker A, Bekkering T, Breen A et al. (2006b). European guidelines for the management of acute non-specific low back pain in primary care. *European Journal of Spine* 15(suppl.2) S169-191.
- Van Tulder M & Koes B (2010). Chronic low back pain. In Stanard C, Kalso E, Ballantyne J. *Evidence-Based Chronic Pain Management* p.71-82. Oxford: Wiley-Blackwell.
- Van Tulder M, Koes B, Bouter L (1997). Conservative treatment of acute and chronic non-specific low back pain: a systematic review of randomised controlled trials of the most common interventions. *Spine* 22, 18, 2128-2156.
- Van Tulder M, Koes B, Malmivaara A (2006a). Outcome of non-invasive treatment modalities on back pain: an evidence-based review. *European Spine Journal* 15, Suppl 1:S109-17
- Verbeek J, Sengers M, Riemens L, Haafkens J (2004). Patient expectations of the treatment for back pain: A systematic review of qualitative and quantitative studies. *Spine* 29, 2309-2318.
- Villela-Petit M (2003). Narrative Identity and Ipseity by Paul Ricoeur: From Ricoeur's 'Time and Narrative' to 'Oneself As An Other'. Article on-line available from <http://www.onlineoriginals.com/s/howitem.asp?itemID=287&articleID=11> (accessed 12 January 2008)
- Vlaeyen J, de Jong J, Geilen M, Heuts P, van Breukelen G (2001). Graded exposure in vivo in the treatment of pain-related fear: A replicated single-case experimental design in four patients with chronic low back pain. *Behaviour Research & Therapy* 39, 151-166.
- Vlaeyen J, Kole-Snijders A, Boeren R, Van Eek H (1995). Fear of movement/(re) injury in chronic low back pain and its relation to behavioural performance. *Pain* 62, 363-372.
- Vlaeyen J, & Linton S (2000). Fear-avoidance and its consequences in chronic musculoskeletal pain: a state of the art review. *Pain* 85, 317-332.
- Vlaeyen J & Morley S (2004). Active despite pain: the putative role of stop-rules and current mood. *Pain*, 110, 512-516.
- Vlaeyen J & Morley S (2005). Cognitive behavioural treatments: what works for whom? *The Clinical Journal of Pain* 21, 1, 1-8.
- Von Korff M (2004). Acute low back pain improves rapidly, however recovery is not complete and recurrence is common-commentary. *Australian Journal of Physiotherapy* 50, 1, 58.
- Von Korff M, Lin E, Fenton J, Saunders K (2007). Frequency and priority of pain patients' healthcare use. *The Clinical Journal of Pain* 23, 5, 400-408.
- Vowles K & McCracken L (2008). Acceptance and values-based action in chronic pain: a study of treatment effectiveness and process. *Journal of Consulting and Clinical Psychology* 76, 397-407.
- Vroman K, Warner R, Chamberlain K (2009). "Now let me tell you in my own words": Narratives of acute and chronic low back pain. *Disability & Rehabilitation* 31, 12, 976-987.
- Waddell C (1990). The role of pathos in the decision-making process: A study in the rhetoric of science policy. *Quarterly Journal of Speech* 76, 381-400.
- Waddell G (1987). A new clinical model for the treatment of low-back pain. *Spine* 12, 7, 632-644.

- Waddell G (2002). Recent Developments in Low Back Pain. In Giamberardino, M (ed.). *Pain: An updated Review*, p. 259-268, IASP Press, Seattle USA,
- Waddell G (2004). *The Back Pain Revolution* (2nd edition). Edinburgh: Churchill Livingstone.
- Waddell G & Burton A (2001). Occupational health guidelines for the management of low back pain at work: evidence review. *Occupational Medicine* (London) 51, 2, 124–135.
- Waddell G, Feder G, McIntosh A, Lewis M, & Hutchinson A (1996). Low back pain: clinical guidelines and evidence review. *Royal College of General Practitioners*, London (revised 1999).
- Waddell G, Main C (1984). Assessment of the severity in low back pain disorders. *Spine* 9, 204-208.
- Waddell G, Newton M, Henderson I, Somerville D, Main C (1993). Fear avoidance beliefs questionnaire (FABQ) and the role of fear avoidance beliefs in chronic low back pain and disability. *Pain* 5, 157-168.
- Walker J, Holloway I, Sofaer B (1999). In the system: the lived experience of acute low back pain from the perspectives of those seeking help from pain clinics. *Pain*, 80, 621- 628.
- Walker J, Sofaer B, Holloway I. (2006). The experience of chronic back pain: accounts of loss in those seeking help from pain clinics. *European Journal of Pain* 10,199-207.
- Walker B (2000). The prevalence of low back pain: a systematic review of the literature from 1966 to 1998. *Journal of Spinal Disorders* 13, 205-217.
- Walsh K, Cruddas M, Coggon D (1992). Low back pain in eight areas of Britain. *Journal of Epidemiology & Community Health* 46, 227-230.
- Walt S (1997). The Progressive Power of Realism. *American Political Science Review* 91, 4, 931-935.
- Wand B, Bird C, McAuley J, Dore C, MacDowell M, De Souza L (2004). Early intervention for the management of acute low back pain: a single-blind randomized controlled trial of biopsychosocial education, manual therapy and exercise. *Spine* 29, 2350–2356.
- Wand B, McAuley J, Marston L, De Souza L (2009). Predicting outcome in acute low back pain using different models of patient profiling. *Spine*, 34, 18, 1970–1975.
- Wand B & O’Connell N (2008). Chronic non specific low back pain - sub grouping or a single mechanism? *BMC Musculoskeletal Disorders* 9, 11. doi:10.1186/1471-2474-9-11.
- Ware N (1992). Suffering and the social construction of illness: the deligitimation of illness experience in chronic fatigue syndrome. *Medical Anthropology Quarterly* 6, 4, 347-361.
- WasiakR, Young A, Dunn K, Côté P, Gross D, Heymans M, Von K (2009). Back pain recurrence: an evaluation of existing indicators and direction for future research. *Spine* 34, 970-977.
- Watson G (1982) (ed.) *Freewill*. Oxford: Oxford University Press.
- Watson G (1996). Two faces of responsibility. *Philosophical Topics* 24, 227-248.
- Watson T (2008). Managing identity: identity work, personal predicaments and structural circumstances. *Organization* 15, 1, 121–143.
- Wengraf T (2001). *Qualitative Research Interviewing Biographic Narrative & Semi-Structured Methods*. London: Sage.
- Wengraf T (2004). Paradigm wars around interview methodologies: Constructionism and postmodernism "on tap" or "on top"? *Review Essay. Forum: Qualitative Research OnLine* 5, 1, Art. 30. <http://nbn-resolving.de/urn:nbn:de:0114-fqs0401309>
- Werner A & Malterud K (2003). It is hard work behaving as a credible patient: encounters between women with chronic pain and their doctors. *Social Science & Medicine* 57, 1409-1419.

- Werner A, Widding Isaksen L, Malterud K (2004). 'I am not the kind of woman who complains of everything': Illness stories on self and shame in women with chronic pain. *Social Science & Medicine* 59, 1035-1045.
- Wetherell M (1998). Positioning and interpretative repertoires: conversation analysis and post-structuralism in dialogue. *Discourse & Society* 9, 387-412.
- Wetherell M, Taylor S, Yates S (2001). *Discourse as Data: A Guide for Analysis*. London: Sage.
- Whelan E (2003). Putting pain to paper: endometriosis and the documentation of suffering. *Health: An Interdisciplinary. Journal for the Social Study of Health, Illness & Medicine* 7, 4, 463-482.
- White H (1990). *The Content of the Form: Narrative Discourse & Historical Representation*. Baltimore, Maryland: The John Hopkins University Press.
- White P (2003). Beyond modality and hedging: A dialogic view of the language of intersubjective stance. *Text* 23, 2, 259-284.
- Whitley S (2004). Don't you wish you had blond hair. *Qualitative Inquiry* 10, 788-793.
- Wiggins S & Potter J (2008). Discursive Psychology. In Willig C & Stainton-Rogers W (eds). *The Sage Handbook of Qualitative Research in Psychology* p.73-90. London: Sage.
- Wiles R, Ashburn A, Payne S, Murphy C (2004). Discharge from physiotherapy following stroke: the management of disappointment. *Social Science & Medicine* 59, 1263-1273.
- Wilkinson R (2007). Managing linguistic incompetence as a delicate issue in aphasic talk-in-interaction. On the use of laughter in prolonged repair sequences. *Journal of Pragmatics* 39, 542-569.
- Wilkinson S (1998). Focus groups in feminist research: power, interaction, and the co-construction of meaning. *Women's Studies International Forum* 21, 1, 111-125.
- Wilkinson S & Kitzinger C (2000). Thinking differently about thinking positive: a discursive approach to cancer patients' talk. *Social Science & Medicine* 50, 797-811.
- Willett T (1988). A cross-linguistic survey of the grammaticization of evidentiality. *Studies in Language* 12, 51, 51-97.
- Williams G (1984). The genesis of chronic illness: narrative re-construction. *Sociology of Health & Illness* 6, 2, 175-200.
- Williams S & Calnan M (1991). Convergence and divergence: Assessing criteria of consumer satisfaction across general practice, dental and hospital care settings. *Social Science & Medicine* 33, 707-716.
- Williams S & Bendelow G (1998). *The Lived Body: Sociological Themes, Embodies Issues*. London: Routledge.
- Williams S, Weinman J, Dale J (1998). Doctor-patient communication and patient satisfaction: a review. *Family Practice* 15, 5, 480-492.
- Willig C (1998). Social constructionism and revolutionary socialism: A contradiction in terms? In Parker I (ed.). *Social Constructionism, Discourse & Realism* p.91-104. London: Sage.
- Willig C (2001). *Introducing Qualitative Research in Psychology: Adventures in Theory and Method*. Buckinghamshire: Open University Press.
- Willig C (2008). Discourse analysis. In Smith J (ed.). *Qualitative Psychology, A Practical Guide to Research Methods* (2nd edition), p.160-185. London: Sage.
- Wilson J & Stapleton K (2010). The big story about small stories: Narratives of crime and terrorism. *Journal of Sociolinguistics* 14, 3, 287-312.

- Winship C & Sobel M (2004). Causal inference in sociological studies. In Hardy M & Bryman A (eds). *Handbook of Data Analysis* p.481-503. London: Sage.
- Wittgenstein L (1953). *Philosophical Investigations, trans. G.E.M. Anscombe*. Oxford: Basil Blackwell.
- Woby S, Watson P, Roach N, Urmston M (2005). Coping strategy use: Does it predict adjustment to chronic back pain after controlling for catastrophic thinking and self-efficacy for pain control? *Journal of Rehabilitation Medicine* 37, 2, 100-107.
- Woby S, Roach N, Urmston M, Watson P (2007). Self-efficacy mediates the relation between pain-related fear and outcome in chronic low back pain patients. *European Journal of Pain* 11, 8, 869-877.
- Wolcott H (1990). *Writing up Qualitative Research*. Thousand Oaks CA: Sage.
- Wolf M (1992). *A Thrice Told Tale: Feminism, Postmodernism & Ethnographic Responsibility*. Stanford CA: Stanford University Press.
- Wolgast E (1977). *Paradoxes of Knowledge*. Ithaca, NY: Cornell University Press.
- Wood L & Kroger R (1994). The analysis of face work in discourse: review and proposal. *Journal of Language & Social Psychology* 13, 248-277.
- Wood L & Kroger R (2000). *Doing Discourse Analysis: Methods for Studying Action in Talk and Text*. London: Sage.
- Wood L & Rennie H (1994). Formulating rap: the discursive constructions of victims and villains. *Discourse & Society* 5, 1, 125-148.
- Wood P (2010). Variations in brain gray matter associated with chronic pain. *Current Rheumatology Reports* 12, 6, 462-469.
- Wooffitt R (1992). *Telling Tales of the Unexpected: The Organization of Factual Discourse*. London: Harvester/Wheatsheaf.
- Woolgar S (1980). Discovery, logic and sequence in a scientific text. In Knorr-Cetina K, Krohn R & Whitley R (eds). *The Social Process of Scientific Investigation, Sociology of the Sciences Yearbook*, Vol. 4, p. 239-68. Dordrecht: Reidel.
- Wright A, Lloyd-Davies A, Williams S, Ellis R (2005). Individual active treatment combined with group exercise for acute and sub-acute low back pain. *Spine*, 30, 11, 1235-1241.
- Wright B & Lopez S (2005). Widening the diagnostic focus: a case for including human strengths and environmental resources. In Snyder C & Lopez S (eds). *Handbook of Positive Psychology*, p.26-44. New York: Oxford University Press.
- Wright J (2005). Writing therapy in brief workplace counselling: Collaborative writing as inquiry. *Counselling & Psychotherapy Research* 5, 2, 111-119.
- Yamada M & Decety J (2009). Unconscious affective processing and empathy: An investigation of subliminal priming on the detection of painful facial expressions. *Pain* 43, 71-75.
- Yardley L (2008). Demonstrating validity in qualitative psychology. In Smith J (ed.). *Qualitative Psychology: A Practical Guide to Research Methods* (2nd edition). London: Sage.
- Yardley L, Dennison L, Coker R, et al. (2010). Patients' views of receiving lessons in the Alexander Technique and an exercise prescription for managing back pain in the ATEAM trial. *Family Practice* 27, 2, 198-204.
- Yates S (2004). *Doing Social Science Research*. London: Sage.

- Young G & Chapman R (2007). Pain, affect, nonlinear dynamical systems and chronic pain: Bringing Order to disorder. In Young G, Nicholson K, Kane A (eds). *Causality of Psychological Injury: Presenting Evidence in Court* p.197-241. New York: Springer.
- Young Casey C, Greenberg M, Nicassio P, Harpin R, Hubbard D (2008). Transition from acute to chronic pain and disability: a model including cognitive, affective and trauma factors. *Pain* 134, 69-79.
- Zhang Q (1998). Fuzziness-vagueness-generality-ambiguity. *Journal of Pragmatics* 29, 13-31.
- Zimmerman D & Wieder D (1977). The Diary Interview Method. *Urban Life*, 5, 4, 479-499.

## 8 Appendices

APPENDIX 1: Notebook provided for written accounts: 'My Back Pain Experience'. Contextual timeline (3 pages) and seven day narrative diary (20 pages).



My back pain experience.

Thank you for taking the time to make entries into this notebook for the next week.

It is absolutely your choice about how much and about what you write.

Part 1: This is a timeline for you to complete highlighting any particular significant events which have occurred during the previous year, or around the onset of your problem, both big and small, positive and negative.

Part 2: Its purpose is for you to write about the experience of your day each day, and the impact of your back problem within it.

Some things to consider writing about might be:-

What have you done during the day

Why you decided to do or not do particular things during your day. What were the influences on why or why not?

How did you feel?

How about the social side of things, and with the people around you?

What about the mental/psychological side of things?

Did you discuss this problem or any other problems/ concerns bothering you with anyone else today? Any advice received?

Please write down anything else you feel you would like to add.

## Part 1: Time Line

Date /Month

Event

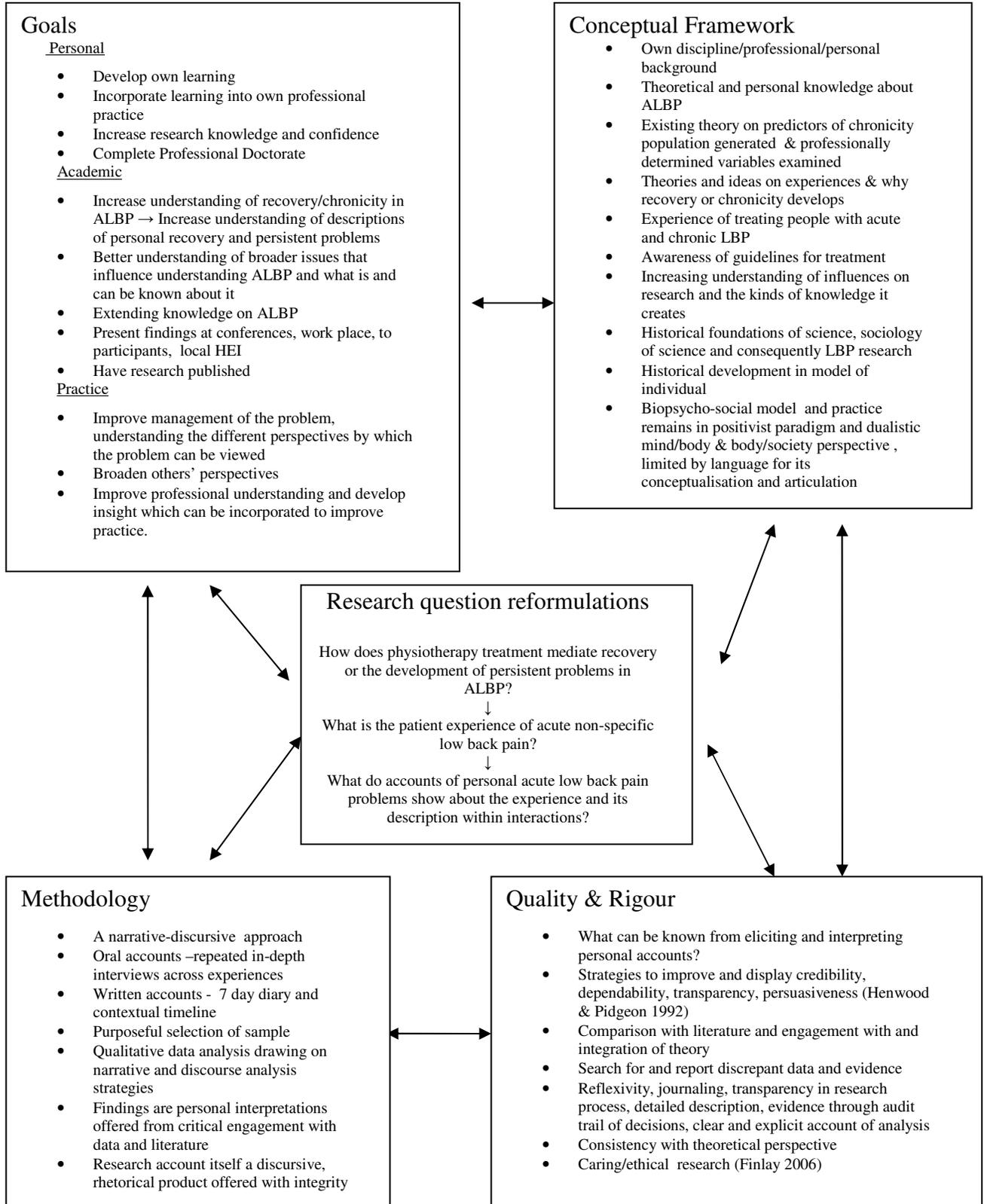
Eg.

March Moved house- very busy trying to work and arrange estate agent, finance etc, very tired with packing, very stressful but excited about moving

November Started new job- much better, more time, has gym so have started using it, much better to able to exercise again and also less travel to work. Can work from home some days



APPENDIX 2: The identification of contextual factors understood to contribute to my positioning





**Brighton and Mid Sussex Research Ethics Committee  
East Sussex Research Ethics Committee**

Brighton and Hove City Teaching PCT  
Brighton & Hove City Teaching PCT  
1<sup>st</sup> Floor  
PRESTAMEX HOUSE  
171-173 Preston Road  
Brighton  
BN1 6AG  
Tel: 01273 545371 or 373  
Fax: 01273 545372

06 April 2006

Miss Carol McCrum  
Consultant Physiotherapist  
East Sussex Hospitals Trust  
Physiotherapy Department, Eastbourne District General Hospital  
Kings Drive  
Eastbourne  
BN21 2UD

or: michelle.roman@bhcpct.nhs.uk

Dear Miss McCrum

**Full title of study:** What is the experience of acute non-specific low back pain from the patient's perspective- A pilot study  
**REC reference number:** 05/Q1905/154

Thank you for your letter of 7/3/2006, responding to the Committee's request for further information on the above research and submitting revised documentation.

The further information has been considered on behalf of the Committee by the Alternate Vice-Chair.

**Confirmation of ethical opinion**

On behalf of the Committee, I am pleased to confirm a favourable ethical opinion for the above research on the basis described in the application form, protocol and supporting documentation [as revised].

**Ethical review of research sites**

The Committee agreed that all sites in this study should be exempt from site-specific assessment (SSA). There is no need to complete Part C of the application form or to inform Local Research Ethics Committees (LRECs) about the research. However, all researchers and local research collaborators who intend to participate in this study at NHS sites should notify the R&D Department for the relevant care organisation and seek research governance approval.

**Conditions of approval**

The favourable opinion is given provided that you comply with the conditions set out in the attached document. You are advised to study the conditions carefully.

**Approved documents**

The final list of documents reviewed and approved by the Committee is as follows:

Document	Version	Date
----------	---------	------

Application	part A & B	23 January 2006
Investigator CV		17 December 2005
Protocol	2	07 March 2006
Covering Letter		07 March 2006
Covering Letter		14 December 2005
Summary/Synopsis 1		08 December 2005
Letter from Sponsor		12 December 2005
Compensation Arrangements		19 December 2005
Interview Schedules/Topic Guides 1		08 December 2005
Letter of invitation to participant	2	07 March 2006
GP/Consultant Information Sheets	1	08 December 2005
Participant Information Sheet	2	07 March 2006
Participant Consent Form	2	07 March 2006
Response to Request for Further Information		
staff information sheet	1	08 December 2005
Risk assessment checklist		19 December 2005
Academic Supervisor Checklist		20 December 2005
Summary CV for Supervisor		20 December 2005

#### Research governance approval

The study should not commence at any NHS site until the local Principal Investigator has obtained final research governance approval from the R&D Department for the relevant NHS care organisation.

#### Statement of compliance

The Committee is constituted in accordance with the Governance Arrangements for Research Ethics Committees (July 2001) and complies fully with the Standard Operating Procedures for Research Ethics Committees in the UK.

<b>05/Q1905/154</b>	<b>Please quote this number on all correspondence</b>
---------------------	---

With the Committee's best wishes for the success of this project

Yours sincerely



**Michelle Roman**  
**Research Ethics Committee Coordinator**  
**East Sussex Local Research Ethics Committee**

**On behalf of the Chairman**

*Enclosures: Standard approval conditions*

Copy to: Professor Ann Moore  
University of Brighton  
Clinical Research Centre  
49 Darley Road  
Eastbourne  
  
East Sussex Hospitals NHS Trust

SF1 list of approved sites

East Sussex Hospitals   
NHS Trust

Research & Development  
Room 2.1 24, Ground Floor  
Eastbourne District General Hospital  
Kings Drive, Eastbourne  
East Sussex, BN21 2UD

Telephone 01323 417400  
Extension 3042

Ms Carol McCrum  
Consultant Physiotherapist  
Physiotherapy Department  
Eastbourne DGH

April 7<sup>th</sup>  
March, 2006

Dear Ms McCrum,

**Re: Experience of Acute Low Back Pain – Patient perspectives (Ref T06-09).**

Thank you for your application to TTRIG for R&D approval of the above study. I confirm that the Trust would be happy to support this study.

It is important that the protocol is adhered to and that no additional costs are incurred other than those stated within the application.

I wish you well in your study.

Yours sincerely



**Dr Guy Lloyd**  
Chair of the R&D Committee

CC Dr R Jones

## APPENDIX 4: Letter of Invitation to support recruitment process

Dear Colleague

**Re: Research study: Individual experiences of acute non-specific low back pain.**

I wish to inform you of doctoral research I am undertaking through University of Brighton. This aims to study factors involved in the transition of acute low back pain to chronic pain and disability. This study follows on from previous research undertaken in an RCT investigating early intervention for acute low back pain (Wand et al. 2004). This research study is a qualitative design involving interviews with acute low back pain patients recruited from General Practice, A&E and Eastbourne District General Hospital. I would like to recruit people who are both have treatment and self-managing. I aim to explore patient perceptions of factors influencing recovery, and reasoning/decision processes underlying their responses to the back pain. Interviews need to occur as soon as possible into an episode and again at six weeks to follow their journey. Approval has been granted by East Sussex Research Ethics Committee and ESHT R&D Dept. I would greatly appreciate your help with recruiting participants and have attached a letter of invitation to potential participants.

Inclusion criteria

- Onset of acute low back pain less than six weeks (**pain free previous 3 months**)
- Lumbo-sacral symptoms not extending past the thigh
- No evidence of neurological signs or symptoms
- No evidence of possible serious pathology/ 'Red flags'
- Mechanically varying with activity and time
- 20 - 60 years (to comply with 'Red Flag' screening, RCGP Guidelines, 1999).
- Good general health
- Fluency in English

Exclusion Criteria

- Concomitant body pains or health problems affecting participant wellbeing
- Pregnancy
- Psychiatric/psychological disorders

Thank you for any assistance you may be able to provide and do not hesitate to make contact regarding any aspect of this research. I will also forward the research findings once the study is completed.

Yours sincerely

Carol McCrum

Consultant Physiotherapist  
East Sussex Hospitals Trust  
Kings Drive Eastbourne  
Tel: 01323 417400

References:

Waddell, G et al. (1999) Low Back Pain. Clinical Guidelines and Evidence Review, Royal College of General Practitioners, London.  
Wand et al. (2004) Early intervention for the management of acute low back pain: a single-blind randomised controlled trial of biopsychosocial education, manual therapy and exercise. Spine, 29, 21, 2350-2356.

APPENDIX 5: Letter of Invitation to participate in the research study

I understand you may have recently experienced a back problem and I would like to invite you to take part in a doctoral research study aiming to explore personal experiences of low back pain. I would like to interview you about your experience of your back problem.

It is hoped the findings will help learn more about low back pain. This could give a better insight into back pain problems to improve future care.

I would aim to interview you as soon as possible after the back problem has started. Then interview you again after 6 weeks to follow up on the experience. You will also be invited to write about the experience in a diary for a week.

If you would be interested in taking part or would like further information please return the response slip in the prepaid envelope or call me and leaving your name and contact details -

Telephone: 01323 417400

There is a much more detailed information sheet for you to read about the research being done and what it will involve. Thank you for considering this invitation.



Yours sincerely

Carol McCrum  
Consultant Physiotherapist  
East Sussex Hospitals Trust  
Kings Drive  
Eastbourne BN21 2UD

---

Research title: 'The patient experience of acute non-specific low back pain.'

Dear Carol

I am interested in taking part in this research study and would like to be contacted with further information.

Name \_\_\_\_\_ Contact Tel No. \_\_\_\_\_ Preferred time to call \_\_\_\_\_

### **Participant Information Sheet**

**Title: Individual experiences of acute non-specific low back pain**

You are invited to take part in a research study. Before you decide, it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully.

- *Part 1* - tells you the purpose of this study and what will happen if you take part
- *Part 2* - gives you more detailed information about the conduct of the study
- 

Please ask if there is anything that is not clear or if you would like more information.. Please take time to decide whether or not you wish to take part.

**Part 1- Information about the research study:-**

What is the purpose of the study?

The purpose of the study is to explore patient experiences of acute low back pain. It is hoped the findings will help to learn from the patient perspective how acute low back pain is experienced and factors influencing recovery. The aim is to help improve future care of acute low back pain problems.

Why have I been chosen?

You have been invited to participate as you have recently experienced an acute low back problem.

Do I have to take part?

No, participation is entirely voluntary. It is your choice whether or not you would like to take part. If you decide to take part, you will be given this information sheet to keep, and be asked to sign a consent form, with a copy for you. You are free to withdraw from the research study at any time and without giving a reason. A decision not to take part or to withdraw at any time will not affect your care in any way.

What will happen if I take part?

You will be interviewed to discuss some of your thoughts, ideas and opinions about your back pain experience. Interviewing may last up to about an hour and will be tape recorded. Some notes may be taken during the interview. You will be interviewed on two occasions; at the earliest possible stage, and six weeks later to follow up on your experience. The interviews will be arranged at a time and place convenient to you. Between interviews, you will also be invited to keep a notebook of issues arising for you from the back problem which can be explored in the follow up interview. The recorded interviews will be transcribed and made anonymous. The transcript will be sent to you for checking that it is an accurate representation of your experience. You will be able to comment, make changes, remove or clarify any part of the transcript.

What are the possible benefits and disadvantages of participating?

The research aims to provide a greater insight into understanding the experience of acute low back pain. Findings will be used to improve future care and help develop more effective ways to achieve faster recovery. You may also gain some insight into your problem yourself from the discussion.

Occasionally, talking about an experience which has been painful or affecting your day to day life can be emotional. However, the interview needs to be only about things you feel comfortable to discuss. If you should feel distressed I can

suggest a resource for you to seek support. There is also advice and support available from the independent Patient Advice and Liaison Service provided within the hospital which will deal with any concerns regarding your care. Please continue to read if you are interested in participating.

## **Part 2 - Additional information;-**

### Will it be confidential?

All the notes, tape recordings and transcripts will be anonymous and protected under the Data Protection Act (1998) and will be kept in locked storage. Only the researcher will have access to this material and it will be treated in the strictest confidence. The research academic supervisors will read only the anonymous transcripts to verify the findings from the study.

This material will be destroyed after the required time for academic research. Some anonymous verbatim quotations may be used in the final research write-up to illustrate the experiences of participants. With your consent, your GP can be informed of your participation in the research study.

### Expenses

Reimbursement for bus, taxi fare or car mileage (25 p/mile <1500 cc, 40 p/mile>1500 cc) will be provided for travel to attend for an interview.

### Publication

The findings from this research study will be used to form part of the researcher's Professional Doctorate thesis undertaken at University of Brighton. It is aimed that the overall research findings will be submitted for publication in professional literature and presentation at professional conferences.

You will be provided with a written summary of the findings from this research study for your own interest.

### Research approval

This research is being carried out under the supervision and research governance approval of University of Brighton, with approval from the East Sussex Research Ethics Committee and the Research and Development Department of East Sussex Hospitals Trust.

### Research Funding

This research has been awarded a small amount of external funding towards costs.

Thank you for taking the time to read this information sheet. If you need further information or have any concerns please contact:-

#### Researcher:-

Carol McCrum  
Consultant Physiotherapist  
East Sussex Hospitals Trust  
Kings Drive  
Eastbourne BN21 2UD  
Tel: 01323 417400

#### Research Supervisor:-

Professor Ann Moore  
Clinical Research Centre for Health Professions  
University of Brighton  
49 Darley Road  
Eastbourne BN20 7UR

### **The independent Patient Advice and Liaison Service**

(PALS) may also be contacted regarding any concerns about this research:

East Sussex Hospitals Trust  
Kings Drive  
Eastbourne BN21 2UD.

Opening hours: 10.00am to 4.00pm Monday to Friday  
Telephone: (01323) 435886  
Email: [palse@esht.nhs.uk](mailto:palse@esht.nhs.uk)

Study Reference number: 05/Q1905/154  
Patient identification number:

**PARTICIPANT CONSENT FORM**

Study Title: Individual experiences of Acute Non-specific Low Back Pain.

Name of researcher: Carol McCrum  
box.

Please initial

- I confirm that I have read and understand the information sheet dated 070906/Version3 for the above study. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily.
- I understand that my participation is voluntary and that I am free to withdraw at any time without giving reason and without my medical care or legal rights being affected.
- I would like my GP to be informed of my participation in this research study. Yes/No
- All information collected during the study will be treated in the strictest confidence. I understand that my details will be kept anonymous in the results of the research.
- I understand that anonymous verbatim quotes may be used in the written findings of the study to illustrate the experiences of participants.

I agree to take part in the above study. Yes/No

\_\_\_\_\_  
Name (please print)                      Date                      Signature

\_\_\_\_\_  
Name of person taking consent                      Date                      Signature

Completed copies to:  Participant     Researcher file     Medical notes (NHS patients)

**Information Sheet****Research study: The patient experience of acute non-specific low back pain.**

I wish to inform you about a doctoral research study I am undertaking through University of Brighton investigating acute low back pain from the patient's perspective. This aims to research factors involved in the transition of acute low back pain to chronic pain and disability. This study follows on from previous research undertaken in an RCT investigating early intervention for acute low back pain (Wand et al. 2004)<sup>3</sup>. The research study aims to gain a better understanding of influences on recovery. This may help improve current practice to facilitate recovery and prevent transition to chronic pain and disability.

The study is a qualitative design with participants recruited from GP practices and referrals into Eastbourne District General Hospital for an episode of acute low back pain. Interviews will be used to explore patient perceptions of factors influencing their recovery, and reasoning/decision processes underlying their responses to their back problem. Interviews will occur as soon as possible into an episode and again at six weeks to follow their journey.

I would greatly appreciate your help in recruiting participants for this study and have attached inclusion/exclusion criteria and a letter of invitation to potential participants.

Inclusion criteria

- Onset of acute low back pain < six weeks (**pain free in previous 3 months**)
- Lumbo-sacral symptoms not extending past the thigh
- No evidence of neurological signs or symptoms
- No evidence of possible serious pathology/ red flags
- Mechanically varying with activity and time
- 20 - 60 years (to comply with Red flag screening for potential serious pathology RCGP Guidelines, 1999).
- Good general health
- Fluency in English
- 

Exclusion Criteria

- Concomitant body pains or health problems affecting participant wellbeing
- Pregnancy
- Psychiatric/psychological disorders

Confidentiality will be maintained regarding their participation in the research study. As the researcher I will not be involved in their care in any way and I will ask any management discussions to be undertaken with other senior colleagues to avoid my influencing their experience.

If a patient expresses interest to participate, a detail information sheet will be given and a consent form signed. Interviews will be arranged at a convenient time and place and the study interview period aims to be between January and July 2007. Participants are free to withdraw at any time and without explanation.

With consent their GP can be informed if their participation. All information collected during the study will be treated with confidence and data anonymised.

Approval has been granted by East Sussex Research Ethics Committee and ESHT Research & Development Department.

For more information contact:-

Carol McCrum  
Consultant Physiotherapist  
East Sussex Hospitals NHS Trust  
Kings Drive  
Eastbourne Tel: 01323 417400

<sup>3</sup> Waddell, G., Feder, G., McIntosh, A., Lewis, M., & Hutchinson, A. 1999, Low Back Pain: Clinical Guidelines and Evidence Review, Royal College of General Practitioners, London.

Wand B et al. 2004 Early intervention for the management of acute low back pain: a single-blind randomised controlled trial of biopsyo-social education, manual therapy, and exercise., *Spine*, vol. 29, no. 21, pp.2350-2356.

**From:**

**Sent:** Fri 13/07/2007 16:25

**Subject:** FW: Have your just hurt your back? - Research participants needed

## Have you just hurt your back?



Would you be willing to be interviewed about your back pain experience?

You are invited to participate in a doctoral research study exploring acute back pain experiences.

It aims to follow the back problem, interviewing close to onset, and then again further into the experience.

You will also be invited journal the experience briefly over a week to highlight its impact day-to-day.

Determining the most effective way to manage back problems and preventing persistent problems remains a challenge. It is hoped that hearing from the perspective of the person experiencing it may increase our understanding of the problem. The findings aim to provide greater insight into improving the management of back problems and how recovery can be better facilitated.

Participants need to have:

- ✓ Pain localised to the lower back (no referral below the knee)
- ✓ Onset less than 6 weeks ago
- ✓ No back problem for 3 months previously
- ✓ Aged 20-60 years

If you are interested in participating and would like to tell your story, or would like more information, please contact:

Carol McCrum  
Clinical Research Centre for Health Professionals  
University of Brighton  
Tel: x 3183 (+ voicemail)  
Email: [carol.mccrum@esht.nhs.uk](mailto:carol.mccrum@esht.nhs.uk)

Dear

**Re: Research study- The patient experience of acute non-specific low back pain.**

I wish to thank you for agreeing to be interviewed about the back pain problem you have experienced and giving up your time for the interview.

I have attached a copy of the transcript of our discussion. I would like to ask you to read through the transcript as to whether it is an accurate reflection of your thoughts and our discussion. Please make any alterations, comments or deletions which you feel are warranted. Your thoughts are valuable and appreciated. All information will remain anonymous and I assure you of absolute confidentiality.

Please return the transcript with any changes in the envelope provided by (date).

If the transcript has not been returned by this date I will assume it is satisfactory and no changes are indicated. Please do not hesitate to make contact with regard to any queries and any discussion would be welcome.

When the research study is completed I will forward a summary the research findings for your interest.

Thank you again for your helpful involvement in my research study.

Yours sincerely

Carol McCrum  
Consultant physiotherapist  
East Sussex Hospitals Trust  
Kings Drive  
Eastbourne  
East Sussex  
Tel: 01323 417400

Moderate 'Jefferson' (2004) Notation Symbols:

.	End of intonation, sentence completion
,	End of intonation, sentence continuing
....	Pause in talk proportional to length
!	Animated remark
?	Rising intonation indicating a question
[ Yes ]	Interjection of other speaker during talk or overlapping talk,
[ ]	Omitted talk
( )	Transcription comment, descriptors or information about gestures, laughter, whispering, unclear context or anonymised reference
-	Interruption, word cut off
CAPS	Stressed pitch, loud talk/shouting
<u>underline</u>	Stressed word or part of word
(hh)	Injection of laughter into a word or punctuating end of sentence

An example of transcription from section 5.4.4 at a moderate conversation analysis level can be seen below:

Carol: *-It doesn't sound like it (..) stops you <doing anything ↑really*  
 Mark: *[It's not]*  
 Carol: *Ok-*  
 Mark: *-just the back, umm..I try and get ↑through things anyway (.)  
 rather than just stopping doing things. I don't really  
 ↑like stopping ( ) I just get bored if °hh I stop doing things.*  
 Carol: *[mm (..) Yes.]*  
 Mark: *-so I try and (.) get on and (..) ah (.) do things.*  
 Carol: *<So, it is very much (..) your ↑nature.*  
 Mark: *Yes, °hh (..) I think it is re::ally, °hh yes. (Mark1 B123)*

APPENDIX 12: An excerpt from a contextual timeline entry

Part 1: Timeline

Date /Month Event

<u>April</u>	<i>Closed down consultancy all contracts in (city) Commuting and working day too long</i>
<u>May</u>	<i>Part-time work as a Professional Advisor to business and Council  -Have mental need to work (Purpose in life- Full retirement not an option)</i>
<u>June</u>	<i>Took granddaughter to (holiday destination )- activities for 7 days probably aggravated back  I am a (sportsperson)- probably aggravated back injury  - pain acute to date (xx/xx/xx)</i>
<u>Aug</u>	<i>Acute pain- forced to visit GP- Prescribed Tramadol &amp; Codeine Phosphate- Not getting on with side effects- reverted to Co-codamol</i>

APPENDIX 13: An excerpt from a narrative diary transcript

*16<sup>th</sup> January 2007 - Woke up pain-free and ready to face this challenge again. I was very positive that I would be able to manage.*

*Again within a short time at work the lower back pain had returned. I was relieved that I would be seeing physio today to help me manage the discomfort and advice on an exercise programme to help stabilise my spine.*

*My visit to the physio was not a positive experience but that could have been because of my unrealistic expectations. I wanted someone to wave a magic wand and say all will be better but I was told that I had scoliosis of the spine and I could take between 3-6 months for an improvement if any.*

*A little down I returned to my office and contemplated how I could incorporate standing up and moving every 20 minutes into my daily routine. At the time this seemed an unrealistic goal taking into consideration my work.*

*Anyway day over and off home now to relax and if I feel okay to walk. Only walked to the local store as I felt unable to walk any great distance tonight. It's all about pacing but for a very active person this is not easy. Another early night.*

*17<sup>th</sup> January 2007 - Woke up pain-free but just the thought of another day with the discomfort caused me to feel a little fed up. This was commented on by my colleagues, one of which spoke with my manager as she felt I wasn't managing. My emotions are a roller coaster, up and down, laughing and then crying. No wonder she felt I wasn't coping.*

*Phoned my sister to see if she wanted to go to the cinema with me this afternoon so that I had something positive to look forward to at the end of my 4 hours. Having to take my medication regularly which "grates" a little as previous I was reluctant to take Paracetamol for a headache. I was all over the place emotionally and very tearful, angry with myself that I was unable to rationally and logically work this through. The normal me would have dealt with this differently but when in constant pain anything can tip the balance.*

*Went to the pictures, found the seating very comfortable and enjoyed the film. Early night again, after doing a few exercises and a warm bath*

## APPENDIX 14: Different styles of transcription and data representation

- **Stanza / Linguistic Representation** (Gee 1991)

H: *It has been 5 weeks. [ok]  
It starts getting better  
and then it kind of just goes again.  
If I do one thing that will kind of irritate it slightly,  
I am just back at square one, so....*

C: *And do you have a perception of what you think is..um..happening inside?*

H: *I haven't got a clue really(h).  
I just know it hurts a lot and it aches and it twinges.*

C: *Are you, are you concerned about what is happening inside or do you think it is going to settle? Or what do you feel?*

H: *The fact that it has gone on for so long now  
and anything I am doing is pulling it or twinging it, or aggravating it.  
I just kind of feel, like,  
I am twenty one, and now it's, like,  
I am walking around with back pain.  
I just think about,  
like obviously with my career and stuff,  
like going into nursing and  
it has just kind of made me  
think twice about it.*

- **Monologue representation:**

*If I can get somewhere I will because then I can, like if I can get to work and I always can except for when I was so bad, um, I will because I find if I sit around and nurture it makes it worse and stays with you and, um, whereas if I can distract myself it's better. So I prefer to be active and be careful and I don't like people waiting on me. I suppose I like to do that to them. I like to make people feel better. And the family and change the bed myself because nobody can do it quite like me, you know, um, so I will always try and keep going. And also the love of my garden, you know. If I see weeds I've just got to bend down and try and get them out because I love it not to have a weed there. Do you know what I mean? So, um, I do love my garden although I find it quite tiring.*

*What matters to me? Actually somebody to help me when I can't as I got very frustrated with Peter and I tried not to put pressure on him. He's very deaf so if he left the room he couldn't hear and so I can't bear the image of me shouting from my bed "Can I have a cup of tea" or something, you know, "I need to go to the toilet", you know, So I feel like a fishwife, um, and but I actually do it because he can't hear me. Well he does get a bit bothered by it sometimes and he hears the tone of voice which I can't avoid because I'm shouting so that's a problem personally, um, and um, what's the question again? Sorry! (J1)*

- **Poetic representation:**

It looks like I will be having it for the rest of my life

And now I have done it, it is not going to go away is it?

Well that is the general opinion of everyone I have spoken to  
that you have got it now,  
you have got it for life

The phone rang and there was an agency job

Yes I'll go for it,

You know, you have to move it a bit quick don't you  
when they want you, don't you?

It was those small bins, those recycling bins.

I bent down to pick up about the third or fourth bin  
and this real searing pain  
caught me here.

Well you know like neuralgic sharp pain, and I thought oh bugger What have I done here?

I thought maybe it's just strained you know,

So I thought, tell you what I'll do,

I'll have a go at a few more, see if ...  
and I sort of bent down more slowly, sort of crouched down,  
try to keep your back exactly straight

It got worse and I thought it's no good

And it came in waves like,  
and so what I found was,  
if it was real bad

if I just shuffled along  
and then it went off a bit

When it really got you, all you could do is..

the pain really took you for a little while  
and you just couldn't move, for a little while.

It seemed to sort of take over your whole body, like.  
Your whole senses.

I closed me eyes, and sometimes

if you just shout a bit, it helps, don't it?

It controls everything, somehow,  
and that gave me the control to get down here

- **'Storied' representation**

One early morning before work, when her back 'suddenly went', Mandy had lifted something her husband had forgotten to move. Mandy is in her mid forties and has been in the same administrative job for 'over twenty years'. At one point Mandy elaborated on how she was caring for her husband who was off work long term with depression. Their son had recently left home with a new job explaining 'he usually did these odd jobs', and they had their young grandson to stay most weekends, a possible reason her husband had forgotten the rubbish collection. She recounted about gardening in good weather, the holiday they had just shared, all the walking, and 'all the lumping luggage about' to illustrate her usual fitness. Mandy had never had a back problem, emphasising:

*'back pain was something... I've never had pain like that before. I'm not a person who gives into pain and I don't really stop what I'm doing but I nearly couldn't come in that day because it was so bad, and it came on so suddenly. I was worried that it was something serious..'* (Mandy C6)

Two colleagues were on holidays the morning Mandy hurt her back which place pressure on Mandy: 'I felt that I couldn't leave the place empty' despite having already described herself as being 'completely overloaded' at work. Feeling 'apologetic' she asked for help and, with supportive colleagues, Mandy found she could manage with hot packs and medication.

APPENDIX 15: An example of a transcript with analytic comments

1 So I am thinking  
 2 if I do go back early  
 3 then I will just...  
 4 because I won't just stand back.  
 5 I won't just think  
 6 'oh my back, I can't do it'.  
 7 I'll just do things.  
 8 I know  
 9 what I am like just picking a box off the floor or something,  
 10 I know...I know  
 11 I am going to end up in a lot of pain.  
 12  
 13 C -  
 14 Is that something that scares you?  
 15  
 16 H -  
 17 Yes. It's just thinking  
 18 I am going to be in a lot of *pain* when I go back to work.  
 19 It's not really what I want to do.  
 20 Especially when you have got patients that you are meant to be looking after and  
 21 making *them* feel better  
 22 and you are walking around with a sour face  
 23 because *you* are in pain.  
 24

- Comment:**  
 'Early' perceived as before her back is ready or healed or when 100% or not painful  
 ?'Early' being before it is ready or appropriate or wise, before an expected time or before prepared/arranged?
- Comment:**  
 As in previous interview describes herself as a do-er, not reticent or lazy precious or fragile  
 Positions herself as someone who needs protecting against herself and her nature that this strength of character could be detrimental to her health
- Comment:**  
 Someone who will throw 'caution to the wind', wont heed warnings, put herself in danger, disregard advice ie no lifting  
 Wont pay attention to what she needs to to prevent reinjury
- Comment:**  
 Using pain as a guide  
 'I know' Providing evidence which is difficult to challenge because of use of her own experience, fact that cant be discredited or challenged. Acts to increase the legitimacy of her caution because she has evidence that her pain occurs with lifting- which might be considered as a risk factor for injuring a back?  
 Drawing on No lifting policy  
 Ending up in pain should draw agreement because no one should wish someone to be caused pain - considered cruel?
- Comment:**  
 Catastrophising?  
 Fear of pain
- Comment:**  
 She offers her feeling about concern about pain with return to work  
 In a way this contrasts with her description of her character as one who would ignore warnings and pain or warning and go ahead anyway
- Comment:**  
 Describing the pressures and professional responsibilities felt in her job  
 Perceptive about the effect of own mood on others care  
 Challenge of effect on mood with undertaking nursing job
- Comment:**  
 Highlighting effect on mood and accepted by most that one will feel down if in pain  
 Further evidence one shouldn't be at work if in pain  
 Is feeling down and that effect on patient enough to a reason not to be at work

- 1 C –  
 2 Yes.ok. Is it fearful that it will injure more by doing those sorts of things or just it's  
 3 going to be sore when you do it?  
 4  
 5 H –  
 6 It's just going to irritate it more.  
 7 I don't think I  
 8 can really injure much more what it is...been  
 9  
 10 C –  
 11 And... what sort of happened as far as any treatment.....you were having  
 12 treatment in the beginning?  
 13  
 14 H –  
 15 Yes I had some physio. Then..  
 16  
 17 C –  
 18 How did you find that?  
 19  
 20 H –  
 21 It was OK,  
 22 but then I was finding...  
 23 I was in a lot of pain afterwards, so  
 24 and then obviously driving back I wasn't,  
 25 it wasn't very comfortable,  
 26 so I didn't go for about a week  
 27 and then I went on holiday.  
 28 And then after the holiday  
 29 I had to  
 30 look after, my Mum and Dad went away for a week,  
 31 so I had to  
 32 look after my brother, who has got a learning disability,  
 33 so I had to have him  
 34 and then we've moved out, I  
 35 haven't really been... I haven't really been back...  
 36  
 37 C –  
 38 It's been hard to come back?  
 39  
 40 H –  
 41 Yes. My boyfriend has been like doing all everything the physio showed me.  
 42 He's been doing that  
 43 and obviously she said to me go for walks, go for swims,  
 44 so I have been doing that as well.  
 45  
 46 C-

**Comment:**

Hurt = harm belief  
 Just being in pain is enough not to be expected to undertake an activity

**Comment:**

Qualifying that it so injured it is as bad as it can get- evidence as to how bad it is and a legitimate problem

**Comment:**

Physio not meeting expectations  
 ?continuing on Pain= harm belief as opposed to no pain no gain  
 Provides a valid reason not to re-attend because increased pain could 'rightly' be viewed as harmful

**Comment:**

Not common sense to continue with something that is meant to relieve pain but makes it worse  
 Justifiable to avoid going

**Comment:**

Responsibility of looking after brother for parents- a stress or psychosocial factor?  
 Does it indicate complexity in the family – is to be assumed (maybe wrongly) it is more complex than any typical family without this dynamic? Maybe the situation is very sorted and not stressful  
 Responsibility within family to look after brother

**Comment:**

Moved house  
 Pressures associated with moving house  
 Could be perceived as stressful event- next interview actually doesn't imply that it was stressful at all- rather it seemed a positive

**Comment:**

Explanation given for not attending physio which has previously been a focus of not being available/ a contribution to her suffering and the wait which was imposed by the poor communication experienced between professionals  
 The service wasn't actually accessed as much as might be judged it should have however it was qualified by the information that her boyfriend was doing what the physio was and she was taking the advice that had been given so was positioning herself as a compliant patient and reinforcing that the boyfriend was capable of doing 'all' the physio had showed her

**APPENDIX 16: A scanned example of continuing levels of analytical refinement of initial explorations and features within the data**

**Participant H 2nd Interview Analysis comments**

Use of GP to support the unsatisfactory situation and to support her legitimacy of still being off work, and that it remains unhealed, not recovered

**Comment [MSOffice1]:**  
Victim/ defensive legitimating genre

Conflict in information received and effect on patient's level of reassurance  
Uncertainty of diagnosis  
Emotions which relate to uncertainty

**Comment [MSOffice2]:**  
Legitimising talk- Gp validates unsatisfactory situation

**Comment [MSOffice3]:**  
Reassurance eroded by information conflict  
Uncertainty in diagnosis

Variations in terms use to explain non-specific low back pain

**Comment [MSOffice4]:**  
Inconsistent terminology to explain NSLBP

Received further advice from different source  
Further conflict in how she should be managed  
Has been given escalating information about her problem  
Other's authority /knowledge- trying to make sense of and evaluate information

**Comment [MSOffice5]:**  
Conflicts in Professional knowledge  
disconcerting, unsettling- emotions created

Qualifying situation  
Pain remains main focus  
Relating the impact with the use of all the time

**Comment [MSOffice6]:**  
Persistent pain – pain main focus  
Generalization talk- all the time- affects everything

Impacts or affected by anything

Then qualifies this as not trying to do too much in case it might be suggested she is responsible for causing it by going against advice or aggravating it herself – averting blame from self

**Comment [MSOffice7]:**  
Personal responsibility- not do too much, against advice- averting blame from self

The tension experienced against not doing harm or being responsible and responsible for doing harm

**Comment [MSOffice8]:**  
Conflicts within expected illness  
responsibilities- do no harm /get on with it

Said in a way that is accepted knowledge that despite a valid problem she needs to undertake some activities

Relates how easily her pain is experienced with simple movements

**Comment [MSOffice9]:**  
Evidence talk- illustrations in talk  
'Trying talk' & consequences- positioning talk

Reporting being in pain constantly describes the impact and challenge of coping with that

**Comment [MSOffice10]:**  
Challenge of coping with constant pain- impact

Describes activity she has been undertaking to show she is trying but also qualifies this with the experience of pain that happens

**Comment [MSOffice11]:**  
Emotions- frustration, irritation, no direction in talk

Emotions  
Describing how she feels –loss of control  
Metaphor used-illustrating meaning making  
Indicating not changing  
Frustration described  
No direction

**Comment [MSOffice12]:**  
Metaphors illustrating meaning making process

Slight improvement

Describing how problem has plateau, unchanged  
?Frustration  
?very focused on the pain level

**Comment [MSOffice13]:**  
Contradictions in talk- better positive attitude/ not changing, underserving

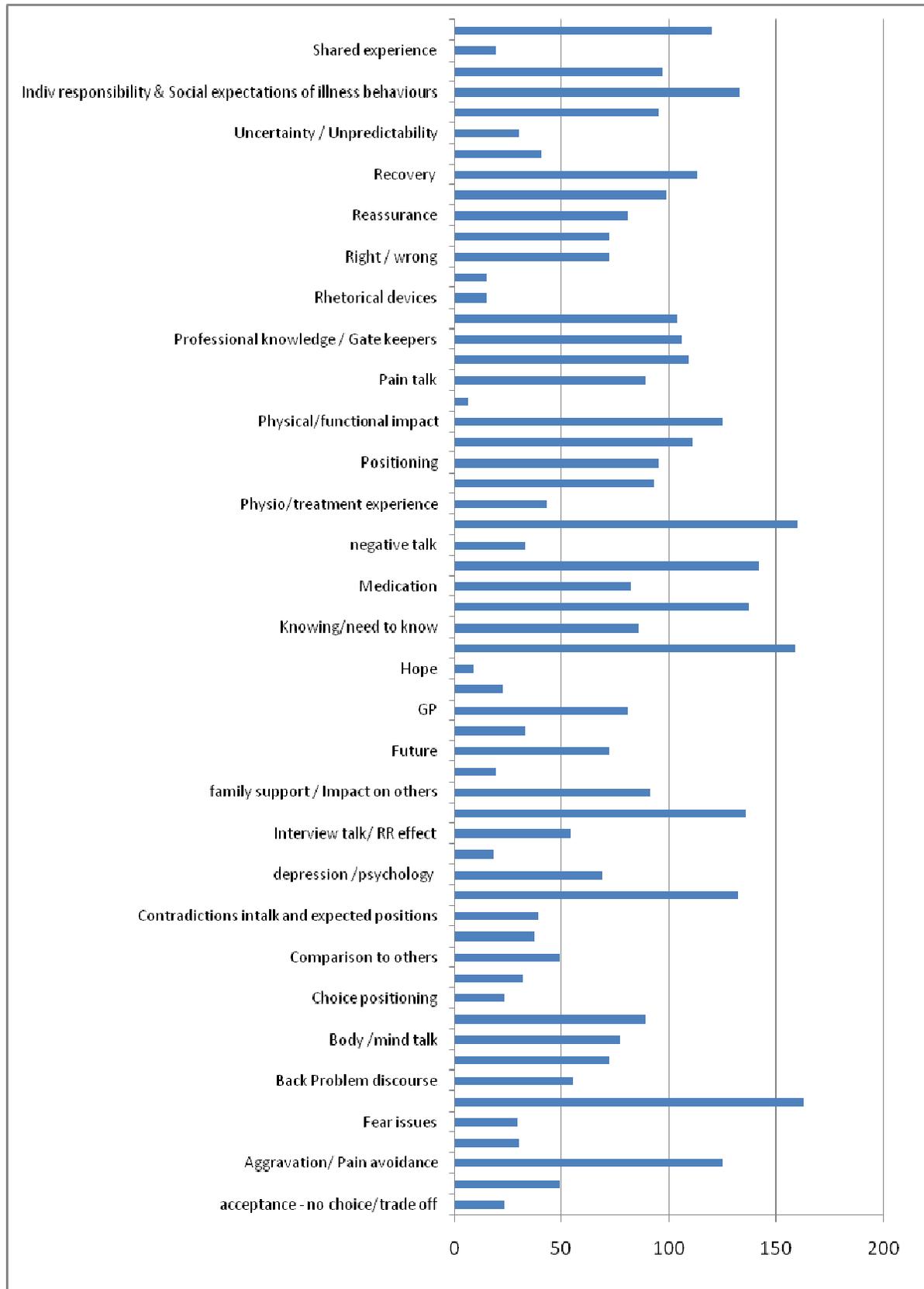


**APPENDIX 18:** A section of analysis illustrating the gradual process of developing and refining themes, meaning and discursive features

Participant Kim 2 <sup>nd</sup> Interview 13.07.07	First Analysis & audio link	Second analysis	Meaning / action of talk	Meaning / action of talk
C – -Do want to tell me about your experience since we last met?)				
K- It has been since the end of March now. I've been to my GP and he keeps signing me off and he's not happy with it.	?Use of GP to support the unsatisfactory situation and to support her legitimacy of still being off work, and that it remains unhealed, not recovered <a href="#">K2 4</a>	Done to/Passive receiver/Victim/ defensive legitimating genre	<i>genre - victim /legitimising/ defending</i>	<i>providing context for situation-justified</i>
I don't even know what it is anymore because I have been told it is torn muscles, pulled muscles and I now have been told it's facet joint...disc something. So I am a bit... I don't know. I have been down to Occ. Health and they said that I might need some steroid injections and [ok] and things...but..	Conflict in information received and effect on patient's level of reassurance <a href="#">K2 8</a>	Legitimising talk- GP validates unsatisfactory situation	<i>legitimacy- GP validates - reported authority</i>	<i>Others making decisions</i>
	Uncertainty of diagnosis	Reassurance eroded by information conflict	<i>reassurance eroded- info conflict</i>	<i>Reporting others speech and opinion to give evidence</i>
	Emotions which relate to uncertainty	Uncertainty in diagnosis	<i>reassurance- diagnostic uncertainty unhelpful</i>	
	Variations in terms use to explain non-specific low back pain <a href="#">K2 12</a> Received further advice from different source	Inconsistent terminology to explain NSLBP Conflicts in Professional knowledge disconcerting, unsettling- emotions created	<i>diagnosis- NSLBP poorly explained professional knowledge- conflict unsettling- emotional impact - erodes right /wrong persisting-</i>	<i>explanation not fit experiential understanding sense making eroded by info conflict</i>
Further conflict in how she should be managed	Persistent pain – pain main focus			<i>pain focused 'I don't know' avoids stating concrete info- avoid committing to opinion and risk of judgement</i>
Has been given escalating information about her problem <a href="#">K2 15</a>	Generalization talk- all the time- affects everything		<i>pain descriptors- generalisations 'everything' 'all the time'</i>	<i>extreme description-for evidence</i>
Other's authority /knowledge- trying to make sense of and evaluate information	Personal responsibility- not do too much, against advice- averting blame from self		<i>personal responsibility- not against advice</i>	<i>positioned as not going against advice</i>

	Qualifying situation	Conflicts within expected illness responsibilities- do no harm /get on with it	<i>social responsibilities- do no harm/ get on</i>	
	Pain remains main focus <u>K2 17</u>	Evidence talk- illustrations in talk	<i>evidence talk- illustrations about trying describing instances</i>	
	Relating the impact with the use of all the time	'Trying talk' & consequences- positioning talk	<i>trying talk &amp; consequences</i>	<i>positioning as trying</i>
	Impacts or affected by anything	Challenge of coping with constant pain- impact	<i>emotional impact - constant pain- hard to cope</i>	
<i>C – So what has been happening symptoms wise and ..?</i>		Emotions- frustration, irritation, no direction in talk	<i>emotional impact - frustration, irritation</i>	<i>passive talk - no direction in talk</i>
<i>K – I am still in pain virtually all the time.</i>	Then qualifies this as not trying to do too much in case it might be suggested she is responsible for causing it by going against advice or aggravating it herself – averting blame from self	Metaphors illustrating meaning making process	<i>sense making- metaphors</i>	
<i>C – So lower back pain?</i>	The tension experienced against not doing harm or being responsible and responsible for doing harm	Contradictions in talk- better positive attitude/ not changing, undeserving	<i>contradictions- positive attitude but undeserving and negative experience descriptors</i>	
	Said in a way that is accepted knowledge that despite a valid problem she needs to undertake some activities	Authoritative nature of professional knowledge- certainty	<i>professional knowledge- authoritative nature- certainty- accepting</i>	
<i>K – Yes. Anything I am doing, if I am... obviously moving and trying not to do too much but, at the same time, you have got to do things. So I have been trying to sort everything out and it's just anything, if I am bending, if I am reaching for something, if I am turning, anything I am doing it is just pulling on my back so I am just getting pain constantly(h).</i>	Relates how easily her pain is experienced with simple movements	Passive language- accepting, 'done to'	<i>passive language- 'done to', accepting</i>	
	Reporting being in pain constantly describes the impact	Qualifying talk- evidence giving- simple movements – severe pain-	<i>legitimacy - trying but examples of aggravation</i>	

**APPENDIX 19: General incidence of analytical themes across all participants' accounts**



## APPENDIX 20: Brief extract of comparison of themes across a participant's successive accounts

### Ppt H 1<sup>st</sup> Interview

age discourse- too young, undeserving/wrong

aggravation avoidance

aggravation - avoid 'setback' - commonsense

aggravation avoidance but lacks control at work

aggravation avoidance strong

aggravation avoidance strong

aggravation avoidance strong

attribution cause- physical injury not healed  
attitude - positive- cultural belief defeats adversity

attitude influence

attitude- positive important

attributing blame for cause

attribution of cause- physical-

avoiding aggravation - positioned as proactive

back problem discourse- lay beliefs

back problem discourse- life long

before/ now self

before/ now self

care seeking justified- evidence

care seeking passive or proactive

careful - to avoid harm  
careful- exerting control- proactive reducing risk

certainty language- 'I know'

commonsense

contradiction -criticises waiting but DNA  
contradictions- between - positive and frustration/agonny

contradictions- trying to voice optimism but concerned not recovering

control- at mercy of gatekeepers

control over medication regimen  
control- positive emotions - sense of doing something

coping- proactive v passive

cultural psychology influences

### Ppt H 2<sup>nd</sup> Interview

aggravating pain = persistent pain

aggravation avoidance  
aggravation avoidance - not fear, attitude - careful

attitude- positive helps reduce mood impact not induce physical healing  
back problem discourse- movement important

before / now self

Blame- averting blame from self

certainty talk- 'I know' - indisputable

commonsense aggravation avoidance  
commonsense aggravation avoidance not fear

commonsense- being responsible

commonsense- reducing risk, not avoidant

comparison to others attitude

complex contexts- brother/carer, moved house, but voiced positively

context not couched in stress discourse  
contradictions- ignoring pain but very avoidant  
contradiction - criticises delayed physio but DNA

contradiction- doesn't want to be off work but not want current job  
contradiction- eager to change work but not driving

contradiction- treatment helpful but still reporting persistent problem  
contradictions- positive attitude but undeserving and negative experience descriptors  
criticism- waiting in system- but didn't use- mitigates

defensive of apportioning blame at her

diagnosis- NSLBP poorly explained  
diagnostic uncertainty- right wrong concern for treatment  
emotional impact - constant pain- hard to cope

emotional impact - frustration, irritation

emotional impact- bored  
emotional impact- negative mood- impacts others

emotional impact of character criticised  
evidence talk- illustrations about trying describing instances

expecting as state of mind

### Ppt H 3<sup>rd</sup> Interview

aging discourse

attitude- positioned as positive- trying

avoidance- couched in commonsense

back problem discourse- pain = harm, pain = unhealed

before / now self

before / now self- dislike

before / now self- disliked  
before / now self- seeing self pulling back

blaming nursing- undisputed

care seeking- passive or active

careful - permission to avoid lifting  
contradiction - positioned as not wanting special treatment - but seeks protection  
contradiction - positive attitude not helped

control- others in control- instructed

emotional impact - guilt, burden

emotional impact - miserable  
emotional impact - mood- frustrated, irritated, impatient

emotional impact - on relationships

emotional impact - ridiculous

emotional impact - tears- evidence of severity

emotional impact - tense, nervous  
emotional impact / physical impact 'struggling'

family - looking after her

hope- wishful thinking

humour- physical impact couched

identity- not one to fuss, seek attention

identity- professional- expected to control mood for patients  
identity- protect vulnerability not fearful- criticism unfounded

identity- rational to protect self  
legitimacy - defends potential accusations against attitude  
legitimacy - likes work but at risk- not avoidant  
legitimacy - visibility- limp despite resilience

diagnosis- needed for right management	family - cared for	legitimacy- others advice- evidence
done to' talk	genre - victim /legitimising/ defending	legitimacy- support from those that know (old self)
early intervention viewed helpful	hope - waiting	loss of self- avoidant restricted self
emotional impact - concerns/ feelings	hurt = harm strong	loss of self- pulling back
emotional impact - disappointed	identity - defending against fault/ blame	medication - evidence of severity
emotional impact - efforts defeated	identity - positioning- rational, valid thinking	medication - justifying use
emotional impact - suffering evidenced	identity- defending character and 'attitude'	medication - moral issues / identity
emotional impact - suffering evidenced	identity- likes work - averts criticism	medication -contradiction in discourse and actions
emotional impact - unpredictability	identity- not fragile, reticent , lazy- a 'doer'	metaphor- aging discourse
emotional impact - vulnerable	identity- not very useful, not contributing	mind / body - body limiting minds wishes
emotional impact - vulnerable	identity-own nature needs protecting against self	moral issues- colleague support v work load
emotional impact- feeling dismissed - not taken seriously -occ H	impact - financial loss- evidence unwanted situation	moral issues- obligations to patients- best effort
emotional impact- frustration/ irritating- not fear	impact on others- negative mood	moral issues- work ethic, impact on others
emotional impact- problem imposed on self	legitimacy - trying but examples of aggravation	negative talk- defends being negative against expected positive attitude
emotional value of cared for- decreases suffering - impact	legitimacy- GP validates - reported authority	Occ health experience- supported, listened to, legitimised
emotive impact- agony, suffering	loss of self - not useful, not contributing	others advice - change not endure powerful
emotive language	medication - little benefit	others experiences- mother- powerful
experience not enough information/'education'	medication- reluctance	others judgements- concern/ anxiety
fear of re-injury strong	metaphor- own worse enemy	others judgements- right s to criticise
future- negative talk- life long- personal knowledge	metaphors to illustrate - night mare	others to monitor and control risk
future- worry- concerns	moral issues- work - to be positive/ happy for pt care	outcome efficacy - Consultant trying to build
genre - defensive /victim/justification/ legitimacy	pain as guide- hurt = harm	ownership- no one knew my limitations
Gp experience - 'just said' - feel dismissed	pain descriptors- generalisations 'everything' ' all the time'	ownership- not- being done to
healing model- time expected	pain persisting- pain focused	pain talk- blames pain- pain focused
hope- wishful	pain related avoidance	passive- being directed by others
hope- wishful	pain talk- getting used to so doing more	passive- directed by occ health
I know' - factual status- personal authority - difficult to challenge	pain talk severity - medication as evidence	passive language - powerless- at mercy
I' talk- illustrating control	passive- external forces- subjected to situation	passive- no opinion on needs
identity - positioning- not one to give up	passive language- 'done to', accepting	passive talk
identity- being sensible	passive language- others decision makers, 'done to', accepting	passive talk- wait- will let me know
identity- character at stake	passive- no agency voiced- waiting	passive- voiced as onlooker of different self
identity- defending complaining	passive- others have the solutions- no initiative	passive- waiting for others to make decisions
identity maintenance- not to blame	passive recipient	Passive occ health offers passive approaches

## APPENDIX 21: An example of a theme file of excerpts: ‘Right & Wrong’, colour-coded to participants and hyperlinked to transcripts & digital recording(Original in colour)

### Right & Wrong Theme

Mm. Um, I think it was fear as a result of this pain that I had and, um, you just want to know that you can do this and you shouldn't do that, you know. J1 250

I went to the Back School that was run then. I don't know if it still is and, um, the simple advice like this is the kind of mattress you should be buying next time you change your mattress J1 336

He said don't run but I could do any other exercise. Walking, cycling, but actually it felt too bad to do that and swimming he said with caution D1- 82

On Saturday we went out for a swim and it was quite pinchy after that. I do breaststroke and someone said after about doing breaststroke because it is a bit better, see, I just don't know really D1 - 118

: Um, I... I... know not to.... Having had the advice from the doctor, you know, I went to see him and he said keep off running and don't go pounding, you know. He couldn't tell me how long for. But, you know, avoid it at the moment, um, and then build up slowly to it again, so I know to do that. I would know to take anti-inflammatories and things, so, Um, possibly I've still got stock. So I wouldn't necessarily have to go and see him. I just start taking them, and regularly, not just for pain relief but take them [as a course] Um, and to limit my activities so that I'm not having pain but to do enough to keep active D 2 - 206

You know what you are doing quicker. You know what to do to help yourself. Even if it is one appointment, they give you some advice and what you should do and what you shouldn't do, at least you are getting that out of it.

Not really. Obviously, I have been taking painkillers every four hours [OK] or whatever it is, especially recently to relieve it and stuff, but I am just.... I have been going swimming, I have been walking. When I am swimming it is hurting. So, I

Ideally, I would like to go, obviously going back onto my ward isn't the best of ideas at the moment, because of the way I am. But I would like to go back to work because I am...I am just not doing anything with myself at the moment

It is frustrating for me as well because I don't even know exactly what is wrong with me because I have been told three different things. It is like well if somebody could give me a proper answer and say what is wrong(h) with it.

I do want to go back to physio and see, but then if everyone is saying there is different things that's wrong with my back how do they know which way to go with the treatment? I don't really know what is the best thing to do for it. So, maybe i

Because no-one really knew my limitations, because going back Occ. Health and my GP said don't do any manual handling so .... And, yeah, obviously the ward didn't really know what I was doing when I went back. I wasn't one hundred percent sure because I

I am still finding my, like, I think it is mainly being on my feet all that time. Although I am trying not to put myself in the situation where I am bending and trying to bend with my knees, and everything else, it's hard to do at work. I mean, I am s

Well, yes. The first thing I learnt from her experience was the doctor told her to rest and she rested for about a week and then the physio came in and read the riot act to her so he didn't like that so as soon as I done my back, right, I will try and d

I think I upset her a bit because I didn't do my exercises because... I normally come in early to see her. Yes, well...an I got this appointment late and oh bugger it I have got to go all that time without no pain relief

Yes. You get a twinge there, don't you? And I was trying... I was saying to her a little while back, you know that twinge do I try to ignore it? That's just a prior warning 'Just don't go too far'? Or do I soon as I feel it do I... I've been you k

I certainly seems like it is going on longer term goal than I first thought and that. That first week, you know, I hopped on that bike I thought that's it, but I done what the physio said, not laid about and it has worked. See? So it's like do the exe

Well there are things up on the wall that says, you know, don't over lift and be careful, but unfortunately it is up on the wall there and you sort of don't... I think we, sort of, should just doing refresher courses and that sort of thing every couple of

You are sitting up straight, I would love to be sitting like that, but I mustn't because I have to have some support now

you know oh can you just do this, and no I can't do that stuff. You sometimes think that they think you are being obstructive, but you are saying no I am responsible for my own health, you told me that and if you expect me to...yes I can move this from

Yes and I think I am not going to move, and any movement is like, you know. Which I know is wrong. I have got keep moving, and then trying to get in the bath when you are like that, you know

Yes well when I said push through I didn't want to like before, just sit in a chair and seize up altogether. I think actually that was the wrong thing to do before. I am sure it was.

So as I say sometimes, I have got my partner to really rub it and my physio said he shouldn't really push it, which is what I have been doing as well because I'm... 'oh that feels so much better' and then my physio said I shouldn't because I am moving th

I have got a friend who does massage, she works in beauty shop and she keeps saying I will massage you, but I am a bit too scared whether I would do damage or not.

so my physio has just done some more on my back but I was a bit dubious before whether to say to my friend yes, do it, whether it would make it worse or not, I can't speak for that, or where she should be doing it and if where shouldn't be doing it and if

but I am probably a bit scared of getting someone who doesn't really know a lot about my back, and if she does general massage in the beauty shop, whether that kind of massage would be too abrupt for my back or not or whether it would do good or not. I d

and then I was a bit scared to go and buy (24.11) one and then be told you shouldn't be doing that.

It's...I still won't lift anything heavy because I am still paranoid of lifting, which is great. Get the old boy to lift the shopping at Tesco's (hhh).

I feel that I can identify the back problem as a very physical. You know, I can understand the mechanism of why it occurred. I can completely see that things we were doing wrong at work. We were probably doing excessive lifting.

I think if you are seeking professional advice and you are being given professional advice about things you should be doing, about things you shouldn't be doing, how much should push with that and you are not heeding that advice, then I think there is an

Certainly there is an awful lot of responsibility about being sensible, about things you are doing, about pushing your back, about when you know you can.

Well I have been doing yoga and during yoga, which was once a week and I have actually stopped doing it now, I wasn't quite sure if it was the right thing because I was doing some quite strong moves

Then you lose touch with what your body is saying to you, but I find that so hard to know, and that's all part and parcel of therapy, it's all knowing who you are, what you believe is right, the right thing to do not what so and so thinks but what do you

What I find worrying is, my yoga teacher, if I talk to her she says to me you have got to keep on with yoga because it is the only way, and then I go to somebody else and they say you have got to this because it is the only way.

I immediately got it from her like "What, hasn't he even given you any exercises" you know, and of course I can smile about it now but at the time I found it very worrying I thought Oh God what's going on here then, God, and, you know, she immediately g

So the first time I went along she took me through things. A couple of the things I wasn't quite sure about, I wasn't quite sure if I was doing it right or not. I get quite concerned about that because I worry I will do it again. So I really want a lot

And I sort felt really nice. Then after that I thought- I felt OK... and I was really battling with myself to think that was good that she was watching me and giving me advice, and all the rest of it. But I couldn't help feeling that I had been doing it a

And I do lots of different things, the wobble board, and the bike, and running on the trampet, which I'm never quite sure that it is the right thing to do.

Not this week, last ... not last Friday but the Friday before I had three of four days of feeling awful. And I was thinking should I go to the gym on Monday night, may be I will, may be I wont. And I went and of course it was better, it felt better. It was

I haven't really focussed on my back. It is quite sore as I'm sitting here. I think that the improvement of that muscle there (buttock) has really helped. I think I need to be doing a lot more exercise generally but for me it's working out what to do bec

It is a struggle all the time to know the right thing to do. Should I do this or should I be doing that.

The chairs that we have to sit on at work aren't at all, they're not right. It's not until you've got a problem you realise that they're not right and you realise your sitting posture is really, really bad.

Mm, she didn't. I said well give me some exercises to do and she said well you've got good movement (12.30) Interviewer: Oh right Interviewee: Thinking ...but I could still do with you to tell me these, these are the exercises that perhaps I should be

She was really really nice but I suppose because I'm a professional as well people, um, you are a bit not stand-offish, you're aware aren't you that they know stuff and you know stuff but I don't know what she knows Interviewer: Yeah that's right Inte

I think it's frustration that I want to do things I can't because I've done too much perhaps and I really should pace myself

I thought I've seen them how they do things and how I must do things and retrain myself as well, because you won't see me bend over now, you'll see me squat

You just want someone to come in and take care of you and tell you what to do

I said I can do breast stroke and that's not very good when you've got a bad back. I know it's not a good thing because I listen to the Consultant when he was talking.

So you have been quite resilient really with keeping on doing things? P- I would say so, yes. I think I asked the Chiropractor if I could make it worse and he said he didn't think I could make it worse so if he said "Yes, you should rest it" then I pr

I think we probably try not to do silly things like lift heavy weights or anything

What is interesting is I am frightened to go to the gym . I haven't been to the gym. C – I was going to ask you if you had been to the gym (27.06) P – No, because I don't believe there is anybody there who is qualified to . There are personal trainers

You need to do this but you know . When I hurt my let they just said keep off the treadmill

I don't know. I am looking for a professional telling me more, and whether what I am doing is right or no you should go back earlier .

I think from my point of view that I now know it is not cancer or it is not something else or whatever. It sounds silly but that is what you immediately think when you are my age, late 50's, early 60's, you hear friends and people dying and so forth, ter

It's hard to know, because I sort of, like, whatever I've done here, I've strained or something after doing some of the exercises yesterday and it's gone again now. So, it's really painful and I don't really know. I think they must do because they wouldn

when it eases off, I start doing more. And, of course, that makes it hurt more and so I got told off.

doing the right thing to get better and what is sort of common sense not to do– S: When It really hurts

Before I would have just tried to have carried on. This time... I'm slowing down. I don't know whether it's right or not ?

You know, I mean I know what I'm doing and I know what there is. If somebody doesn't, you know, what about that poor person

Yes, I mean I wouldn't try anything that was unsafe

Whereas, if I had been waiting 6 weeks to see somebody it could go stiff or anything . You could be doing the wrong kind of exercise because you think any exercise is better than none .

she was saying her spine was a little bit out of alignment and everything. And she was saying he told her what to do. She was showing me what he told her to do and I am thinking, maybe I ought to have a go at that! Then I thought, maybe not, it might be

I think somebody said to me that their sister-in-law had scoliosis and it was recommended to her and she actually did find it a lot of help so I thought well that's nice and easy going and quite relaxing or whatever, so I will try that .

It does worry me that I don't know whether them showing me literally a picture of my back does make me think then I am not sitting straight. You know. It never crossed my mind before and I am thinking am I actually making it worse. I don't know. Am I

I used to sit very badly, I have decided. I have just realised . I would be slouched in a chair like this, but I know now I am not going to do it if I have got something behind my back, lower back. If I am driving. So even when I am driving. If I am

Just sort of think before you do it . I think to be honest I am having less trouble.

Yes, that was one of my big worries, but I think it is just change the way you stand. If it is hurting then what are you doing wrong . try and adjust it, and obviously it is one side, the left hand side at the bottom, and if I have been bending over for

Yes, if it hadn't eased and if I hadn't have seen what I was doing wrong then I probably would have gone to the doctors, because I think it was worrying me that my mums back is really bad . She can barely walk for about 15 minutes before she gets a bad b

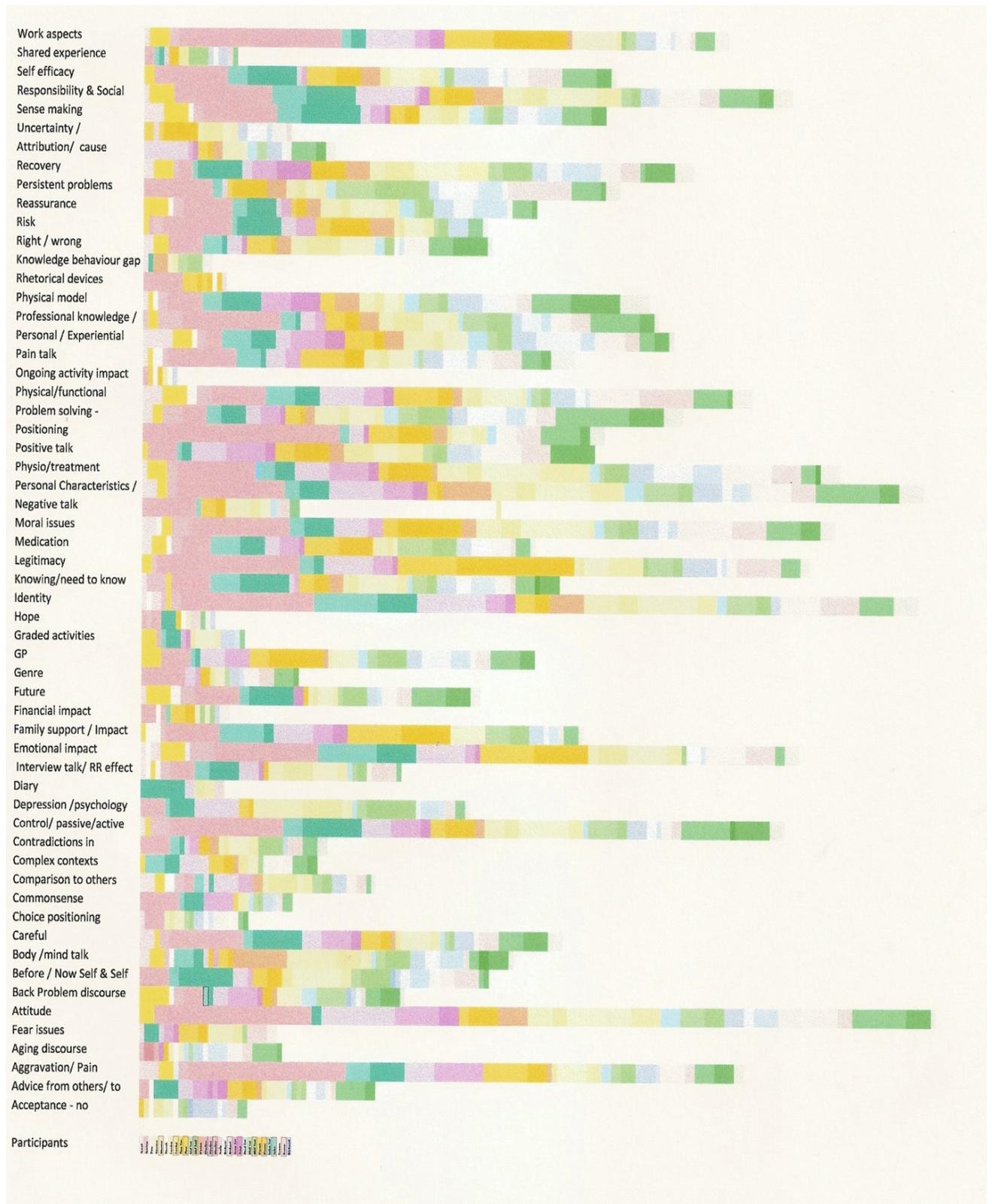
Yes as I say I have got in mind now be more careful how you sit, don't just slouch . Sit properly. Make sure you are in a better position when you go to sleep. Save up enough money to buy myself a goose down pillow . Apparently they are very, very goo

She was saying there is a difference, it might just be that you have never actually bothered to use these muscles properly, you should be able to recognise it, but at the same time you have got to recognise when you are actually doing too much and might d

Yes, she was saying that sometimes people, because something hurts, they might change their position slightly and in actual fact you are then using the wrong muscles for something .

. I definitely, I do think more like posture-wise at work, I've changed the chair that was the first thing I did, I changed the chair and I've like moved the computer over so that I've just got the um keyboard in front of me and you know so that I can j

**APPENDIX 22: Incidence of themes across participants (Original in colour)**



**APPENDIX 23:** Conference platform and poster presentations given during the research study

## **PLATFORM PRESENTATIONS**

McCrum C (2006) *My research so far...Reflections on my small-scale study*. Annual Doctoral Student Presentations, Aldro Building, University of Brighton, 8 July 2006.

McCrum C (2007) *Acute Low Back Pain-Influences on recovery*. Annual Doctoral Student Presentations, Aldro Building, University of Brighton, 12 July 2007.

McCrum C (2008) *The 'Told' and the 'Telling' in Accounts of an Acute Low Back Pain Experience- A narrative analysis approach*. Annual Doctoral Student Presentations, Aldro Building, University of Brighton, 15 July 2008.

McCrum C (2007) *Acute Low Back Pain: influences on recovery*. South East Musculoskeletal Research & Audit Group – Clinical Academic Collaborative Research Seminar, Maidstone Hospital Kent, 18th October 2007.

McCrum C (2006) *Accounting for Personal Experiences of Acute Low Back Pain*. 3<sup>rd</sup> Qualitative Research Colloquium, University of East Anglia, 8 May 2006.

McCrum C (2009) *The Wind that Blows the Yellow Flag: The 'told' and the 'telling' in accounts of acute low back pain*. Annual Doctoral Student Presentations, Aldro Building, University of Brighton, 15 July 2009.

McCrum C (2009) *Personal Experiences of Acute Non-specific Low Back Pain*. 5<sup>th</sup> Qualitative Research Colloquium University of East Anglia, 7 May 2009.

McCrum C (2009) *It's not just what they say but how they say it: Personal experiences of acute low back pain*. 2<sup>nd</sup> Professional Doctorate Southern Universities Alliance for Doctoral Education (SUADE) Conference, Mayfield House, University of Brighton, 17 April 2009.

McCrum C, Moore A, Hall V (2009) *Talking Function: Personal Accounts of Acute Non-Specific Low Back Pain Experiences*. 3<sup>rd</sup> International KCMACP Scientific Conference Edinburgh, International Conference Centre, 29-31 Oct 2009.

McCrum C (2010) *Exploring accounts of personal experiences of acute low back pain*. Annual Doctoral Student Presentations, Robert Dodd Building, University of Brighton, 12 July 2010.

McCrum C (2010) *Function and influences, but not as we know it: Personal accounts across acute low back pain experiences*. 16<sup>th</sup> International Qualitative Health Research, 3-5 Oct 2010, Abstract published in International Journal of Qualitative Methods, 9, 4, 334-433.

## **POSTER PRESENTATIONS**

McCrum C, Moore A, Hall V (2007) *Acute non-specific low back pain & the patient's experience: Patient perspectives of influences on their recovery*. 15<sup>th</sup> World Congress of Physical Therapists 2007 International Conference Centre, Vancouver, Canada, 3-5 June 2007.

McCrum C, Moore A, Hall V (2009) *It's not just what is said but the way it's said: Personal Experiences of Acute Non-specific Low Back Pain*. Chartered Society of Physiotherapy Congress, Liverpool, 16-17 October 2009.

APPENDIX 24: Research evaluation of doing harm and good to study participants undertaken prior to and following completion of the research project (Adapted from Gomm 2004 p.304)

Possibilities	Possible Harm	Possible Good	Evaluation: Pre-research	Evaluation: Post- research
<b>Physical Harm/Good</b>	Very unlikely and potential risk to physical health and safety	Possible good if therapeutic effect from research No direct good	Most likely no harm or possibly some good	No evidence of physical harm arose or issues of health risk to participants
<b>Psychological Harm/Good</b>	Possible risk of emotional harm Offend participants by interpretations/ findings	Possibility of improving people's emotional state What counts as benefit may depend on my perspective/ judgements	The risk of possible harm is probably equivalent to opportunity for emotional good- little empirical evidence of therapeutic good through interviews and giving accounts May be difficult as researcher to discover effects of research activities on participants- may only be retrospectively possible to estimate effects of research on participant emotional state, self-image, self-esteem or personal relationships- difficult to determine in advance (Gomm 2001)	No evidence of psychological harm evident,. No occasion where additional support needed to be arranged Several participants commented on the positive influence of being involved in the research study. The opportunity for an in-depth discussion of their experience was reported to be therapeutic. Several participants commented on the positive therapeutic value of completing the diary and suggested it could be a beneficial adjunct to current practice.
<b>Education</b>	Nothing may be learned by participants, or participants may perceive interview context as positively reinforcing their current management strategies which may actually be maladaptive	May have educational effect if participant explores their own reasoning and reflects on their behaviour and cognitions, developing more positive and helpful outlook or understandings and more effective strategies, increase in self-efficacy. 'Monitors' may become more hyper-vigilant /catastrophic	What people learn about themselves may not be congruent with their ideals ie become aware of conflict with their attitudes/ beliefs and behaviour- may not necessarily be empowering, may lower self esteem and self-efficacy. Counselling literature suggests such relationships may be viewed as manipulative	On no occasion did participants report any adverse aspect of being involved in the study or a negative educational experience. Participants voiced the positive effect of exploring their knowledge and understanding and reflecting on their sense making processes stimulated by the interviews and diary undertaking.
<b>Self-determination</b>	Informed consent May need ongoing consent if research project changes direction Participants may still not be aware of demands to be placed on them, issues with acceptable degrees of disclosure, transcript checking Assertiveness to withdraw from study	It may be a 'transformative' aim to help people develop greater control of their situation ie empowering effect	Conflict between participants' right to self-determination and researcher need to inform in a way so as to not influence participant accounts. Hawthorn effect	The opportunity for ongoing informed consent through the repeated interviews and transcription checking acted to increase confidence in the ethical propriety achieved. Participants had opportunity to fully develop an understanding of the research process and how the data generated would be used and how it appeared as text for anonymous quotes. No participants withdrew from the study.
<b>Privacy and Confidentiality</b>	May have serious consequences to participant	Very unlikely possible good for participant	Unlikely, however may be possible conflict between preventing harm and right to confidentiality- conflict between two ethical values	Information relating to participants identity, their involvement in the study, contextual descriptions and quotes were anonymised and confidentiality maintained throughout the study.
<b>Material, Political and reputation gains/losses</b>	Research may influence policy and practice against participants' perceived interests. May reinforce a stereotypical view of them or current understandings	Research may influence policy and practice in favour of participants, may improve understandings of participant circumstances	Gains for participants may be at the compromise of some others eg funding changes, policy changes What counts as 'benefit' and 'greater insight and understanding depends on perspectives and beliefs	Participants were reimbursed for expenses incurred for travel and parking. The influence politically aims to be positive and for patient benefit. The knowledge contribution aims to add the perspective of individuals as a voice in the larger agenda.