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To cite this article: Linda K. Tip, Rupert Brown, Linda Morrice, Michael Collyer & Matthew J. Easterbrook (2020): Believing is achieving: a longitudinal study of self-efficacy and positive affect in resettled refugees, Journal of Ethnic and Migration Studies, DOI: [10.1080/1369183X.2020.1737513](https://doi.org/10.1080/1369183X.2020.1737513)

To link to this article: <https://doi.org/10.1080/1369183X.2020.1737513>



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Believing is achieving: a longitudinal study of self-efficacy and positive affect in resettled refugees

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ABSTRACT

This paper investigates the link between self-efficacy and positive affect among resettled refugees (N = 180). We hypothesised that self-efficacy would play a key role in improving refugee wellbeing. Research used mixed methods. A longitudinal survey with three time points confirmed that higher levels of general self-efficacy were consistently associated with better positive affect at later time points. The reverse effects, from positive affect to later self-efficacy, were not significant. In addition, qualitative interviews with a subsample provide suggestions as to how self-efficacy of refugees might be improved: that is, by improving access to employment and language classes, by clarifying how British social and cultural systems work, including the practical information necessary to navigate daily life, and by providing more opportunities to increase social networks, all suggesting the necessity of a proactive role of the receiving society.

ARTICLE HISTORY

Received 13 August 2019
Accepted 26 February 2020

KEYWORDS

Self-efficacy; positive affect; refugees; employment; language; social networks

Introduction

Refugee resettlement is the transfer of refugees from a country in which they have sought protection to a third country which has agreed to accept them. At a global scale, the demand for refugee resettlement is increasing, although the offer of resettlement is shrinking (UNHCR 2019). However, the UK government recently renewed its commitment to refugee resettlement with the announcement that existing programmes (the Vulnerable Children's Resettlement Scheme, the Syrian Resettlement Scheme and the Gateway Protection Programme) would be consolidated into one scheme. Current levels of resettlement will be sustained, with the aim of resettling approximately 5000 refugees in 2020/2021 (Home Office 2019). The UK selects refugees for resettlement based on UNHCR vulnerability criteria. Refugees do not get a choice in their prospective resettlement country; instead, their country of resettlement, as well as their location within that country, is based on factors such as quota availability, admission criteria, and the refugee's background

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 Supplemental data for this article can be accessed <https://doi.org/10.1080/1369183X.2020.1737513>

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(UNHCR 2011). Once in the UK the responsibility for providing resettlement services rests with Local Authorities. The expansion of the resettlement schemes in the recent past has resulted in people increasingly being resettled to places that have no previous experience with refugee resettlement. For example, in 2014, 18 local authorities in the UK were involved in refugee resettlement (Sim and Laughlin 2014). Only two years later, by the end of 2016, refugees had been resettled to over 200 local authorities in the UK (UNHCR 2017). Refugees who are resettled to the UK are provided with up to five years of material and social support, unlike those entering via the asylum route (Platts-Fowler and Robinson 2011). Support consists of assistance with housing, with accessing welfare benefits, education, employment and health services, and entering mainstream support services. In the context of these local authorities which are developing support plans for newly arriving refugees, it is important to determine which factors improve refugee wellbeing.

It is particularly important to identify these factors because psychological and emotional wellbeing plays an important role in all aspects of integration (Ndofor-Tah et al. 2019), but the experiences of refugees both pre- and post-resettlement have been linked to a decrease in their wellbeing. Common problems including anxiety, depression, phobias, and PTSD have reliably been measured as being higher in refugee populations (e.g. Aspinall and Watters 2010; Giacco and Priebe 2018). The risk to refugee wellbeing increases further as a result of post migration stressors such as lack of social support networks, long-term unemployment, and various legal and migration processes (Bhugra et al. 2014). It has been suggested that when people face major challenges, belief that one has a level of control over these challenges might reduce levels of stress (Benight et al. 1999). In other words: one characteristic that may be particularly beneficial for refugee wellbeing is self-efficacy.

Self-efficacy is the extent to which people believe in their own capabilities to gain control over factors affecting their lives (Bandura 1989). In essence, it is the strength of belief in one's own capabilities to reach goals. Self-efficacy is central to Social Cognitive Theory (SCT; Bandura 1986). SCT suggests that self-efficacy affects the quality of people's functioning via a range of processes, including motivational, cognitive, affective, and decisional processes (Bandura 1997). For example, self-efficacy is expected to affect whether people will think in a positive or negative way, the extent to which they can motivate themselves, the extent to which they persevere when faced with obstacles, and the decisions they make when faced with important choices. Importantly, according to SCT, self-efficacy will also affect susceptibility to stress and depression, and people's emotional wellbeing (Bandura 2012). As summarised by Bandura and Locke (2003): 'Whatever other factors serve as guides and motivators, they are rooted in the core belief that one has the power to produce desired effects; otherwise one has little incentive to act or to persevere in the face of difficulties' (87). This seems particularly relevant for the difficulties confronting refugees upon arrival and settlement in a new country.

There is a wealth of research linking self-efficacy to human functioning. Bandura and Locke (2003) discuss nine meta-analyses on this link, all of which consistently show a positive effect of self-efficacy on performance. The vast majority of the studies described in this review focus on human functioning in terms of performance and behaviour; the link between self-efficacy and wellbeing is much less extensively researched. Yet, there are

ample examples from varying disciplines and a range of participant samples: self-efficacy has found to be positively related to wellbeing among adolescents (Caprara et al. 2006), people who regularly exercise (Briki 2018), South African marginalised youth (Melato et al. 2017), cancer patients in the UK (Foster et al. 2016), new mothers in Israel (Kestler-Peleg, Hamama-Raz, and Osnat 2016), and among young Iranian women (Salehi et al. 2016). Benight and Bandura (2004) conducted a review of studies investigating the role of self-efficacy in recovery from various types of trauma, including natural disasters, technological catastrophes, terrorist attacks, war, and assaults, and found that self-efficacy was positively related to trauma recovery in all studies.

This suggests that for refugees, who are often recovering from trauma whilst at the same time trying to overcome various other challenges associated with building a new life in a very different context, self-efficacy might play a central role in their wellbeing. It is important to investigate whether this is indeed the case, because it would mean that self-efficacy could potentially improve resettlement outcomes if addressed appropriately in resettlement programmes. However, this would only be relevant if it were possible to change refugee's overall (general) self-efficacy beliefs. There is some dispute about this in the literature. General self-efficacy is often defined as a stable, generalised, trait-like belief in one's competence, which is different from Bandura's definition of self-efficacy, which is a more task-specific state-like belief in one's competence (see Sherbaum, Cohen-Charash, and Kern 2006). However, Gangloff and Mazilescu (2017) provide an overview of the literature and conclude that beliefs of efficacy in specific domains contribute to someone's general perceived self-efficacy. It is therefore not surprising that task-specific and general self-efficacy correlate (Sherer et al. 1982). More importantly, Morina et al. (2017) managed to successfully manipulate general self-efficacy in Turkish refugees in Switzerland, suggesting that general self-efficacy in refugees is a state which can be improved (this study is described in further detail below). Pahud et al. (2009) argued that the role of self-efficacy should be investigated in relation to the extent to which refugees manage to overcome adverse circumstances; however, to date there has been very limited research on the link between self-efficacy and wellbeing in refugees specifically. Below we will outline the work that is to our knowledge available on this topic. One of the difficulties here is that wellbeing can mean a variety of things and these studies measure and interpret wellbeing slightly differently. We will discuss this problem and highlight some gaps in this field of research, which will be addressed in the current research.

A study of 186 Kurdish and Afghan resettled refugees in Australia and New Zealand found that those who scored lower on self-efficacy also reported lower subjective wellbeing, suggesting a positive association between self-efficacy and wellbeing (Sulaiman-Hill and Thompson 2013). Alharbi (2017) found a significant positive relationship between self-efficacy and feelings of psychological security among Syrian refugees in Jordan. Kia-Keating and Ellis (2007) found that higher self-efficacy was associated with fewer depressive symptoms in Somali adolescents who were resettled to the United States. Similarly, Yang (2014) found that Hmong refugee adults living in the United States had less symptoms of anxiety and depression when they had higher self-efficacy. However, all of these studies had cross-sectional designs, meaning that they all measured self-efficacy and (aspects of) wellbeing at a single point in time, which prevents any causal inferences. It is unclear whether higher self-efficacy will lead to better wellbeing or whether high levels of wellbeing will lead to more self-efficacy.

These quantitative findings were corroborated in a qualitative study with African and Afghan refugee women in Australia, which indicated that these women often felt incapable, and concluded that refugees would benefit from resettlement support strategies targeting self-efficacy (Vromans et al. 2018). Of course, the qualitative nature of this research makes it difficult to infer causality. Some initial evidence on the causal link between self-efficacy and wellbeing among refugees has been found in research of an experimental design with 40 Turkish refugees seeking treatment as victims of torture in Switzerland (Morina et al. 2017). In this study, torture survivors were given either a positive self-efficacy induction, where they were instructed to talk about something positive they had achieved in their lives, or a neutral induction, where they were instructed to talk about a common, neutral activity. The inductions were followed by viewing trauma-related images which were taken from the International Affective Picture System (Lang, Bradley, and Cuthbert 2008). Participants in the self-efficacy condition reported less negative affect after viewing the images, suggesting that self-efficacy may enhance resilience and hence positively predict wellbeing. However, the authors point out that their findings cannot be generalised to other cultural groups, non-victims of torture, or to non-experimental situations. Their sample was also overwhelmingly male, raising questions about the extent to which the findings can be generalised to women.

As pointed out above, another issue with these studies is that they all link self-efficacy to slightly different aspects of wellbeing. That is, Sulaiman-Hill and Thompson (2013) looked at subjective wellbeing using a questionnaire that focuses on the extent to which people are satisfied with their lives as a whole. Alharbi (2017) investigated feelings of psychological security, Kia-Keating and Ellis (2007) focussed on depressive symptoms, Yang (2014) looked at symptoms of both anxiety and depression, while Morina et al. (2017) used negative affect. In the current study, the positive affect will be used as an indicator of wellbeing. A vast body of research on psychological wellbeing has identified three components of wellbeing: positive affect, negative affect, and subjective wellbeing. Subjective wellbeing is a measure of overall quality of life, whereas positive and negative affect refer to the affective emotions and moods that people experience (e.g. Diener 1984; Watson, Clark, and Tellegen 1988). Considering the pre- and post-resettlement experiences that refugees have lived through, and how these experience often affect their mental health and wellbeing (e.g. Aspinall and Watters 2010; Giacco and Priebe 2018), it does not seem appropriate to focus on a general evaluation of quality of life, or on negative emotions, because it is likely that both these constructs will be heavily affected by refugees' personal experiences. Positive affect seems therefore more appropriate for the purpose of this study. Positive affect has been used as an indicator of wellbeing in a range of other research, and has consistently been linked to various adaptive functions (for an overview, see Dimitropoulou and Leontopoulou 2017).

In sum, the limited previous research indicates that self-efficacy might enhance wellbeing of refugees, but the evidence is as yet fragmentary and open to alternative causal interpretation. This highlights the need for a longitudinal study that can investigate the temporal direction of the relationship, with a sample that is more representative of refugees across the world. The current study aims to fill this gap by investigating longitudinally the link between self-efficacy and positive affect in the largest longitudinal research ever carried out among resettled refugees in the UK. A mixed-methods approach was used

to illuminate some suggestions of *how* positive affect might be improved through increasing self-efficacy (Gifford et al. 2007). We hypothesised that self-efficacy would be positively associated with positive affect over time.

Methods and materials

Participants and procedure

The study had three data collection points, each one year apart (from 2014–2016). The project used a mix of qualitative and quantitative methods. A questionnaire, which was individually administered (usually in respondents' homes), gathered data on demographic background variables and various indicators of wellbeing and integration at each time point. In addition, at each time point semi-structured interviews were conducted with subsamples.

Refugees were recruited in four cities in the UK: Greater Manchester, Brighton and Hove, Norwich, and Sheffield. In contrast to most previous research with resettled refugees in the UK, this study focussed on people who had already been in the country for some time. All participants arrived in the UK in 2010 or earlier and so had at least four years of residency at the time of the first survey in 2014. Participants were approached by Research Assistants (RAs), who were all resettled refugees themselves. RAs received training on research methods before starting their work, during which cultural appropriateness and translations of the items used in the questionnaire were extensively discussed and agreed. Both questionnaire and interviews were designed in English, however the RAs were able to interpret and translate into the community languages of participants when needed. The RAs had good connections among refugee communities and with organisations working with refugees in their city, who knew about this research project and put the RAs in touch with more refugees who had been resettled to the same location. A snowball technique (chain referral sampling) was used to recruit further participants: participants were asked whether they knew other refugees resettled to the same location.

In total, two hundred and eighty resettled refugees living in the UK agreed to fill out the questionnaire at Time 1 (T1). The number of refugees who completed all three phases of quantitative data collection was 180 (64.3% of initial sample; 84 female, 96 male; the mean age was 37.2 years, with a range of 18–80). This final sample was rather heterogeneous, varying in country of origin (Ethiopia, 61; Iraq, 74; Democratic Republic of Congo, 28; Somalia, 17), location of resettlement in the UK (Greater Manchester, 108; Brighton and Hove, 32; Norwich, 23; Sheffield, 17), family situation (at T1: 71% married, 24% single, number of children ranged from 0 to 11), educational background (22% arrived with no education or only elementary, 40% secondary, 11% college, 22% university degree), and employment (at T1: 23% employed, 16% looking for work, 21% looking after children, 13% studying). The UK currently receives refugees through three main resettlement schemes: the Gateway Protection Programme (GPP) which began operating in 2004, the Vulnerable Persons Resettlement Scheme (VPRS), established in 2015 and the Vulnerable Children's Resettlement Scheme (VCRS), established in 2016 (Collyer, Morrice, Tip, Brown, and Odermatt 2018). However, data collection started in 2014, when only the GPP operated, with a quota of 750 refugees per year to be resettled to the UK. This means that all participants were resettled under the GPP, and had been

offered similar support upon arrival. It also means that our quantitative sample of 180 participants equalled at least 24% of the yearly total number of resettled refugees arriving in the UK through the GPP at the time of data collection.

We ran a one-way multivariate analysis of variance (MANOVA) to compare those participants who participated at all three time points ($N = 180$) to those who participated only once or twice ($N = 100$) in their initial scores on self-efficacy and positive affect. Both the overall MANOVA and univariate tests were non-significant (all $p > .05$). Furthermore, a comparison of the correlations between these two variables within the two groups indicated that the associations between self-efficacy and positive affect were similar: both correlations are positive and significant ($r = .24, p = .003$ for those who participated all three time points and $r = .30, p = .002$ for those dropped out at one or more time points). These results suggest that the results presented below are unlikely to have been affected by participant attrition.

Each year, qualitative interviews were conducted with a subsample of 30 people from the initial sample, using a semi-structured protocol, meaning 90 qualitative interviews were conducted in total. Invitations to participate in interviews were extended to all participants - some people were interviewed only once, while others were interviewed at two or three of the time points. All interviews were coded and then analysed thematically (Braun and Clarke 2006), and interviews where people spoke of their belief in their achievements and capabilities (i.e. their self-efficacy) were selected, which resulted in 12 interviews (6 female, 6 male). Interviews were audio-recorded and any identifying information, including location and age, was removed. All names used in this paper are pseudonyms. All participants gave their informed consent prior to their inclusion in the study, and they were made aware of their right to withdraw their participation at any time. All aspects of the research were approved by the relevant ethics committee at the University of Sussex, UK.

Materials

This study was part of a large interdisciplinary research project and the questionnaire included a great number of measures aiming to address a variety of research questions regarding integration outcomes across a number of domains (for more details on this study, see Collyer et al., 2018). In this paper, we initially focus on measures of self-efficacy and positive affect only.

The two key variables – self-efficacy and positive affect – were both measured using well established scales. Self-efficacy was measured with three items from Schwarzer and Jerusalem's (1995) generalised self-efficacy scale. These particular items were chosen, adapted, and shortened for our participants after extensive consultation with the RAs: 'It is easy for me to accomplish my goals', 'I am confident that I could deal with unexpected events', 'I can stay calm when facing difficult situations'. The answers ranged from 1 (Not at all true) to 4 (Exactly true). Tests of internal consistency of this scale showed that the reliability of the scale was good (Cronbach's alphas for each time point: $\alpha_{T1} = .76, \alpha_{T2} = .73, \alpha_{T3} = .82$). Positive affect was measured with five positive items from the international Positive and Negative Affect Schedule (PANAS) Short Form (I-PANAS-SF), which was developed by Thompson (2007) with a focus on its suitability for use with non-native English speakers: 'Thinking about yourself and how you normally feel, to what extent do you generally feel

... alert/inspired/determined/attentive/active’, with the answers ranging from 1 (Never) to 5 (Always). The reliability of this scale was good (Cronbach’s alphas for each time point: $\alpha_{T1} = .83$, $\alpha_{T2} = .83$, $\alpha_{T3} = .74$). Means, standard deviations, and inter-correlations of self-efficacy and positive affect at all time points are displayed in [Table 1](#).

After considering the outcomes of the qualitative data (discussed in the results section), we ran an additional analysis in which we included measures of employment, English language proficiency, cultural understanding, and social capital. Below it is outlined how each of these constructs were measured. Employment was coded as employed vs not employed. English language proficiency was a self-assessment measure, comprised of the mean score of 5 items asking about their current level of English in terms of understanding, speaking, reading, and writing (answers ranging from 1 = Very bad to 5 = Very good) and improvement since arrival (from 1 = Not at all to 5 = Very much; $\alpha_{T1} = .94$, $\alpha_{T2} = .96$, $\alpha_{T3} = .96$). Cultural understanding was measured with the mean of two items which we created in collaboration with our RAs: ‘Do you feel that you understand the British culture?’ and ‘How much do you understand the way that British people behave?’ (answers ranging from 1 = Not at all to 5 = Very much; $\alpha_{T1} = .84$, $\alpha_{T2} = .85$, $\alpha_{T3} = .89$). Social capital was measured with the mean of 5 items which were inspired by Chen et al.’s (2009) Personal Social Capital Scale - although adapted and shortened for our participants after RA consultation. The items asked how many people participants knew who they could trust, who they could ask for help, who would provide them with information, who they could talk to if they had a problem, and how many community groups they actively participate in (answers ranging from 1 = None to 5 = A lot; $\alpha_{T1} = .84$, $\alpha_{T2} = .80$, $\alpha_{T3} = .80$).

The qualitative data was obtained in response to broad questions at each of the time points. Examples of topics asked about are: respondents’ satisfaction with life in the UK in general and their views about support received (at Time 1), experiences of language learning and employment (Time 2), and reflections about what they felt most proud of and what they would do differently (Time 3). Although participants were not directly asked about self-efficacy, themes related to self-efficacy consistently emerged at all three time points.

Results

Longitudinal effects of self-efficacy on positive affect

To investigate the sequential paths of the relationships between self-efficacy and positive affect, we specified a cross-lagged panel model based on our hypothesis (see [Figure 1](#)).

Table 1. Means, standard deviations, and inter-correlations of the main variables.

	M	SD	1	2	3	4	5	6
1. Self-efficacy Time 1	2.83	.72	-	.24**	.34***	.34***	.12	.21**
2. Wellbeing Time 1	3.35	.95		-	.13	.37***	.01	.18*
3. Self-efficacy Time 2	2.73	.61			-	.40***	.14	.22**
4. Wellbeing Time 2	3.16	.89				-	-.05	.40***
5. Self-efficacy Time 3	2.76	.68					-	.18*
6. Wellbeing Time 3	3.16	.81						-

Note: * $p < 0.05$, ** $p < 0.01$, *** $p < .001$.

A cross-lagged panel model tests the effect that one variable has on another over time, while controlling for the stability of that variable over time (Cole and Maxwell 2003). We conducted bootstrapping with 1,000 samples in order to get robust parameter estimates with bias-corrected and accelerated confidence intervals. Within this model, in addition to the paths between self-efficacy and positive affect, we included autoregressive paths between adjacent time points for each variable: that is, we included variables at Time 1 (T1) as predictors of the same variable at Time 2 (T2), and we included variables at T2 as predictors of the same variable at Time 3 (T3), thereby controlling for stability of these variables over time. Paths between T2 and T3 were constrained to be equal to the equivalent paths at T1 and T2. We also specified covariances between the variables within each time point (e.g. between T1 self-efficacy and T1 positive affect). This model had an excellent fit: $\chi^2(14) = 130.01$, $p < .001$; CFI = .99; RMSEA = .022; SRMR = .066 (Kline 2000), meaning that the model was valid and that it was appropriate to further investigate the paths within the model.¹

Please note that all coefficients reported here are standardised coefficients. As shown in Figure 1, self-efficacy positively predicted positive affect of refugees one year later. However, the reverse pathways from earlier positive affect to later self-efficacy were not significant. This means that self-efficacy predicted positive affect over time, while positive affect did not affect self-efficacy over time.

The model discussed here does not include any control variables, as our dataset included many variables that could be used as controls, and our restricted sample size meant that it was impossible to control for all of these. However, because the only previous study which investigated directional effects was conducted with mainly male participants (Morina et al. 2017), we also re-ran the model whilst controlling for gender. The results were substantively the same - for full results we refer to the supplementary materials. In addition, after considering the outcomes of the qualitative data (discussed below), we ran the same model but added employment, English language proficiency, cultural understanding, and social capital at T1 as predictors of positive affect and self-efficacy at T2, and added the same variables at T2 as predictors of positive affect and self-efficacy at T3. Like in the original model, we also specified covariances between the self-efficacy and positive affect within each time point, but in addition to that we also specified covariances between each of the additional variables at T1 and self-efficacy and positive affect at T1, and between each of the additional variables at T2 and self-efficacy and positive affect at T1. We added these covariances

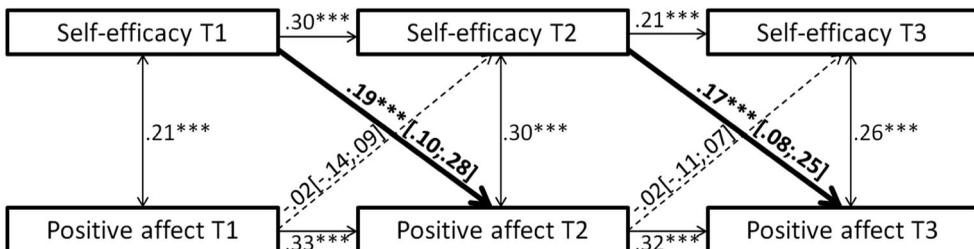


Figure 1. Cross-lagged panel model showing significant temporal relationships between self-efficacy and positive affect at the three time points (95% BCa CIs in square brackets). Note: T1 = time 1, T2 = time 2, T3 = time 3. * β is significant at $p < 0.05$, ** β is significant at $p < 0.01$, *** β is significant at $p < 0.001$.

because this was suggested by the modification indices of the same model that did not include these covariances. The model fit the data well ($\chi^2(34) = 130.01, p = 0.20$; CFI = .95; RMSEA = .036; SRMR = .045), and the effects presented in Figure 1 remained broadly the same: self-efficacy consistently predicted positive affect at later time points ($\beta_{T1-T2} = .14, p = .015$; $\beta_{T2-T3} = .14, p = .014$), but not vice versa ($\beta_{T1-T2} = -.06, p = .34$; $\beta_{T2-T3} = -.05, p = .35$). We opted for the simpler model (shown in Figure 1) because of missing data on the additional variables, which reduced the N from 180 to 149, too small a sample for so complex a model (Kline 2000). However, to give an impression of the relationships between the variables, we have presented a simplified visual representation of the significant effects in this model in Figure 2, where non-significant paths and any covariances have been omitted to ease interpretation of the model. As a result, English language proficiency and cultural understanding are not included in the figure. The figure shows that in addition to the paths mentioned above from earlier self-efficacy to later positive affect, earlier employment was also related to later positive affect in such a way that those who were employed at earlier time points were more likely to have higher scores of positive affect at later time points. Furthermore, earlier social capital was positively associated with later self-efficacy, suggesting that those with wider support networks felt more self-efficacious over time. However, these effects should be interpreted with caution, because - as stated above - the sample used is too small for such a complex model.

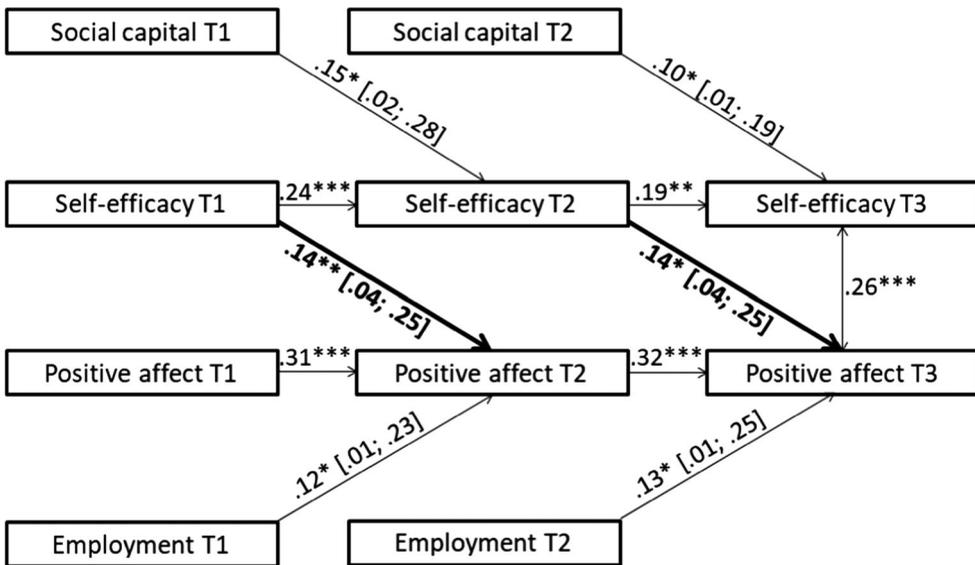


Figure 2. Cross-lagged panel model showing significant temporal relationships between self-efficacy and positive affect at the three time points, where employment, English language proficiency, cultural understanding, and social capital were added at Time 1 as predictors of positive affect and self-efficacy at Time 2, and where the same variables were added at Time 2 as predictors of positive affect and self-efficacy at Time 3 (95% BCa CIs in square brackets). *Note:* Non-significant paths and any covariances have been omitted to ease interpretation of the model, resulting in English language proficiency and cultural understanding not being included in the figure. T1 = time 1, T2 = time 2, T3 = time 3. $^*\beta$ is significant at $p < 0.05$, $^{**}\beta$ is significant at $p < 0.01$, $^{***}\beta$ is significant at $p < 0.001$.

Qualitative results

Interviews were analysed using inductive thematic analysis (Braun and Clarke 2006). After extracting all information related to self-efficacy, four themes emerged which illustrate various ways in which self-efficacy might be linked to positive affect. These themes are: employment, language, understanding the system, and social support. Each of these themes is described in detail below. Please note that we include these results to put the quantitative findings into context. Due to the qualitative nature of this data, it is not possible to make causal inferences (for quantitative results including the same variables, please see the previous section under ‘Longitudinal effects of self-efficacy on positive affect’).

Employment. Having a job was a recurring theme in conversations with all participants, and its link to self-efficacy is evident. Kiyvaa explained why paid employment plays such a large role in the link between self-efficacy and positive affect:

You can do it yourself if you do a job. If you can get money for it, 6, 7 months. Fly everywhere. If you're on benefits you know that you can't do anything.

Kiyvaa, Ethiopia

Not having a job had further reaching implications than simply a lack of financial means. The frustration associated with repeatedly being rejected for job applications could affect wellbeing of the family as a whole. Rasul talks about how his long job search had an impact on his mental state:

The stress, the money, the time, the everything! Sometime I have become very angry, like crazy. With my wife, with the children for, even for a small reason. Because I can't find a job, and what I can do? I am applying and doing my best, my best. [...] Most of the time you don't even get a reply from them ... From the people you apply or the job that you applied for, so it's really, really bad experience.

Rasul, Iraq

This quote from Rasul indicates not only how long-term unemployment impacts on positive affect of individuals and families, but also how unemployment may prevent people from building their self-efficacy. For Rasul, his lack of employment seems to lower his self-efficacy and increase his anxiety and depression. At the time of the interview, Rasul had lived in the UK for almost 6 years, and despite his efforts, he had not once been able to find a job during that time. Adding to his frustrations was the fact that he had a good job back in Iraq, creating a stark contrast to his life in the UK which may have made him feel even less efficacious:

Back in our country I have a main degree and I was a lecturer at a university with nice office, like all, you know it was a good job. Here you can't find a cleaner.

Rasul, Iraq

Language skills. English language skills have been shown to impact wellbeing of refugees in the UK in various ways (e.g. Morrice et al. 2019; Tip et al. 2019), and the interviews revealed how self-efficacy may play a role in this link. Immediately after the support provided by the Gateway Programme ended, which was one year after arrival, some people felt

that they were unable to address problems they faced in their daily lives in the UK. For example, when Cecile was asked whether she felt confident to manage her life when the Gateway support stopped, she answered:

No, but is very difficult because that time if you go to hospital, you don't know good English, become problem you know? Or you go to police, you have got a problem to police, who to your neighbour, now he come problem because you don't know good English.

Cecile, DRC

Cecile's lack of English competency was the basis for her not feeling like she could function effectively in the UK. For some, their lack of English language proficiency caused problems on a longer term. Negasso talked about spending more than £4500 on driving lessons, but he was unable to pass the driving theory test due to his lack of English skills, and was therefore not able to take his practical exam. He explains why he thinks having a driving licence and the independence he would gain with it, would improve his quality of life:

Life easier: the shopping, taking children to any place, everyplace. That is good for me.

Negasso, Ethiopia

A lack of opportunities to learn the language was, for many participants, a major source of frustration, and for some it affected all areas of life and wellbeing:

When I will plan my life? I have no life because I have not English. I do not know how to manage a computer, eh? I don't know anything! I am not able to plan my future.

Mafuta, DRC

Understanding the system. In order to live independently in the UK, refugees need not only to speak English, but also to understand the 'British system', as it was referred to by many participants. This includes the very practical knowledge necessary for daily life, such as payment of bills, who to go to for advice or how the welfare benefit system works. The support provided upon arrival aimed to assist people with these matters, and in some cases support workers had enough time and resources to ensure that people were able to continue their lives independently:

Yeah I can do any-everything because yeah they explain what we have to do when we have to, when we face a problem and they told us [...] where we go and like Citizens Advice Bureau, council. They told us what necessary things, that is good.

Irree, Ethiopia

However, others felt less self-efficacy:

Well 'till now I can't feel like 100% confident of doing that because you know, you receive lots of ... letters from different places, we can't tell now understand the way that how to pay tax, how to pay rent, how to calculate all of that things.

Rasul, Iraq

He then explains that he thinks he has been overpaying rent and council tax, which caused financial problems and a lot of stress, but he does not seem to be able to solve the problems on his own. Referring to these issues, he concludes by stating 'This year it

is really difficult', highlighting how his inability to understand and manage his financial administration, and thereby his lack of self-efficacy, has affected his wellbeing.

Social support from professionals and friends. At times, support workers provided more than just informational support. Adele describes how they helped her to believe in her own capabilities, and how that aided in improving her positive affect over time:

Those support worker they supported us, they believe in us, they saw we had the solution we had, we can overcome it, they helped us. So they give, they giving us help which made us who we are today. Who I am today, I am talking about myself or my friends who I know, they are now working good, thinking 'life is wonderful now', you know? When before thinking 'okay it's a new country, life is tough, how we going to survive?' But now we thinking 'okay life is good!'

Adele, DRC

Adele's story shows that by convincing people to believe in themselves, support workers can play an important role in increasing refugees' self-efficacy. But support workers were not the only source of social support. When Moti was asked what helped him to do well, he answered:

The people. I got a friend that pushed me, you know what I mean, or give me some positive idea to do something, so I've got like an Asian friend or an English friend, and they tell me there's a lot of opportunity in this country, you can do it, you can do it. So that's what helped me.

Moti, Ethiopia

An additional advantage of successful and encouraging friends who are also from a minority background is that they can provide a role model. Caaltu had such a model in her life, she mentions a Somali neighbour who did a course and got a job. She talked about how her neighbour had achieved these things and that achieving the same would improve her life and that of her family. Caaltu was asked whether she was confident that she could accomplish this and believes in herself, she answers:

Yes! Hopeful ... and actually I'm driving now, so I think I shoot for two things - either I will be a child minder or I will be an instructor teaching people to learn to drive.

Caaltu, Ethiopia

In addition to having a role model, her example also shows how relatively small successes (passing a driving test) builds confidence and opens up possibilities for future achievements. She continues talking about what she and her husband will be capable of doing once they have found employment, showing high self-efficacy:

Then I will do a lot. I work, my husband work, then maybe we can buy a house, our own house, and we do so many things. And we do everything for our children.

Caaltu, Ethiopia

It is this which changes things. The belief that doors have opened and the future can be transformed to her own hopes and dreams. Particularly for those who have overcome so many challenges, many of which they have not felt in control of, the question of control is clearly central to positive affect.

Discussion: self-efficacy predicts positive affect

This research is the first study to show a temporal association between self-efficacy and positive affect among refugees, thereby supporting our hypothesis and confirming the importance of self-efficacy in the refugee context. The experiences that refugees go through before, during, and after their flight are often disempowering and likely to affect self-efficacy beliefs (Sulaiman-Hill and Thompson 2013). The quantitative results of this study show that by re-building the self-efficacy of refugees, it may be possible to improve their positive affect. The qualitative results give some ideas as to *how* this might be done and how support for resettled refugees can be improved.

The cross-lagged path model showed that the associations between self-efficacy and positive affect were unidirectional in our sample of 180 refugees in the UK: Note how the paths from positive affect at an earlier time point to self-efficacy at a later one were both negligibly small and unreliable, a clear contrast to the self-efficacy to positive affect paths. It is particularly notable that these longitudinal associations were observed over a two-year period. These findings suggest that self-efficacy may be playing a causal role in promoting positive affect, the more so since the results held even when controlling for gender or for employment, language proficiency, cultural understanding, and social capital. Of course, the causal direction needs to be investigated further in research using experimental interventions with refugees, for example by boosting their feelings of mastery over their environment with the goal to investigate whether similar positive results emerge from such an intervention.

Bandura (2012) proposes four sources of self-efficacy. The first way to acquire self-efficacy is mastery experiences: overcoming barriers through continuing persistence and effort. The second way of developing self-efficacy is by controlling one's physical and emotional states through reducing anxiety and depression. The third is social persuasion, which takes place when people are convinced by others to believe in themselves. Social modelling is the fourth and last resource of self-efficacy and is defined as observing people similar to oneself succeed through persistent effort. In line with SCT (Bandura 1986) the qualitative findings suggested a vital role of these four proposed sources of self-efficacy for refugees: All of these were described by participants as increasing their self-efficacy. This is particularly important because they are partly determined by the receiving society, as we will outline below.

Mastery experiences can only take place if there are pathways and opportunity structures in place that allow refugees to achieve their goals. However, research has shown that too often refugees are treated as a homogeneous group and there are not the tailored pathways in place to enable individuals to access language and employment support appropriate to their needs. For example, refugees arriving with professional backgrounds would benefit from fast track language courses combined with vocational skills which would support faster access to employment commensurate with their background and qualifications (Morrice et al. 2019). This is reflected in the themes emerging from the qualitative data, which showed that barriers to gaining employment and learning the language undermined mastery experiences and negatively influenced individuals' physical and emotional states (and thereby their self-efficacy and positive affect). At the same time, opportunities for developing knowledge and understanding of 'British systems' - i.e. the cultural know-how which is essential for navigating everyday life - need to be available. Our qualitative data also indicate that social support, either from professionals, from friends, or from people who are seen as potential role models has an important part to

play in supporting the development of self-efficacy. A longitudinal study with East-German refugees also confirms this important role of social support by showing that social support could provide a buffer against the negative effect of long-term unemployment on wellbeing (Schwarzer, Hahn, and Jerusalem 1993).

There are some limitations to this research. First, refugees are not a homogenous group - our sample was diverse in terms of country of heritage, educational and employment background, family situation, and year of arrival in the UK. Although this makes the sample representative of most refugee groups, its limited size made it impossible to control for all of these variables in the analyses. However, when we did control for the four variables emerging from the qualitative data (employment, language proficiency, cultural understanding, and social capital), the paths from self-efficacy to positive affect remained similar. The same occurred when controlling for gender. Although the 36% respondent attrition was not ideal, given the two-year period of the study and the hard-to-reach nature of our refugee sample, it was probably to be expected. Finally, self-efficacy was measured with only 3 simplified items, rather than the ten items in Schwarzer and Jerusalem's (1995) original scale. This was necessary when, after meetings with the refugee RAs, it became clear that the original scale would be too long and too complicated for those with only limited English.

These findings add to the growing evidence linking self-efficacy to wellbeing, applying it to the specific case of refugee resettlement. Refugees have very little to no control over their own resettlement process (UNHCR 2011), which could potentially undermine their self-efficacy. In light of the growing demand for resettlement, the findings strongly suggest a proactive role for the host society in ensuring effective integration. Policies and practises of refugee resettlement should be shaped in such a way that they maximise opportunities for refugees to increase their feelings of self-efficacy, thereby creating routes to independence and positive mental health.

Geolocation information: United Kingdom

Note

1. We opted to specify our model using observed variables rather than latent factors given our fairly modest sample size. Our final model freely estimated 17 parameters, which means that our final sample size of $N = 180$ was within the recommendations of Kline (2000) of having at least 10 participants per estimated parameter. A model that specified latent factors rather than observed variables (with factor loadings constrained to be equal at each time point) estimated 72 parameters, making our sample size insufficient for this model. Nevertheless, given concerns about the validity of cross-lagged panel models that do not account for measurement error (Kröger, Hoffmann, and Pakpahan 2016), we also ran a full structural equation model with latent factors instead of observed variables. The substantive results were unchanged. In addition, we ran the same model with negative affect rather than positive affect, to see whether results were different, and they were: no significant paths were present, meaning the effects only take place for positive affect. We report both models in the online supplementary materials.

Acknowledgements

We thank Abdi, Abiyot, Elias, Elizabeth, Elshada, Fatuma, Hussein, Jacques, Marta, Nouri, Obse, Patrick, Sayanti, Sharon, and Wondi for their invaluable assistance with data collection.

Disclosure statement

No potential conflict of interest was reported by the author(s).

Funding

This work was supported the ESRC under grant ES/K006304/1 awarded to Michael Collyer, Linda Morrice, and Rupert Brown. Economic and Social Research Council.

Data availability statement

The quantitative data used in the main model reported in this paper is available at <https://doi.org/10.17033/DATA.00000077>.

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