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“The Boat is full!”:

Predictors of perceived migrant group size and perceived right to stay for immigrants

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Abstract

Predictors of perceived population size and perceived right to reside in the UK were tested for immigrants to Britain. Two studies explored psychological responses of British respondents to immigration to the UK. A questionnaire study examined responses towards migrants living in the UK from India, Poland and Syria (study 1, *N* = 136). In this study, perceived intergroup similarity and intergroup threat predicted intergroup affect, which in turn predicted estimates of the migrant group size and the perceived right of the migrants to reside in the UK. Study 2 (*N* = 126) was an experiment which manipulated similarity and threat, and elicited responses towards a fictional migrant group, to get a better handle on the causal direction of effects observed in study 1. Taken together, the studies showed that perceived population size and perceived right to reside in Britain were predicted by intergroup similarity, threat, and affect.

*Keywords:* immigration; intergroup relations; intergroup threat; intergroup similarity; intergroup affect

“The Boat is full!”:

Predictors of perceived migrant group size and perceived right to stay

Immigration is a key social issue for politicians and the media. International immigration is defined as the movement and settlement of people from one nation state to another (Castles, 2000). The rate of international migration has increased rapidly over recent decades, with 258 million international migrants residing abroad in 2017, accounting for 3.4% of the global population (United Nations, 2017). The presence of migrants can result in perceived intergroup threat or competition and negative intergroup relations among majority members (Esses, Dovidio, Jackson & Armstrong, 2001). Indeed, a 2016 survey across 22 countries found that an average of 78% of respondents viewed the level of immigration to their country as too high (Ipsos MORI, 2016). Anti-immigrant prejudice is also widespread in the UK, with 77% of individuals wanting immigration to be reduced (British Social Attitudes 31, 2014, see also Coenders, Lubbers & Scheepers, 2013).

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This research will study predictors of responses to migrants in Britain. In particular, we will study a) predictors of British respondents believing that immigrants have a right to reside in Britain, and b) predictors of British respondents’ subjectively perceived size of migrant groups. These key outcome variables were chosen because of their theoretical and applied importance. Much previous research has studied antecedents of prejudice and negative intergroup attitudes (e.g., Brown, 2010). However, prejudiced individuals rarely base arguments about the need to reject immigrants on the rationale that they ‘simply don’t like them’. Instead, calls for the need to keep immigration in check often refer to the issue of rights, i.e. who has a right to reside in the land (e.g. Drury in the Daily Mail, 2017). They also often refer to fears related to group size, e.g., ‘the boat is full’ (e.g., Drury in the Daily Mail, 2018). Despite the fact that references to ‘rights’ and ‘size’ prominently feature in political discourse, these concepts have not been directly studied in the psychological literature to date; and the field has instead favored focusing on prejudice itself. By focusing directly on predictors of ‘rights’ and ‘size’, this contribution fills an obvious gap in the existing literature. This work tested the hypothesis that perceived intergroup similarity will decrease perceived intergroup threat, which will in turn render intergroup affect to be more positive, which will in turn lead to lower subjective minority group size estimates and to greater endorsement of the idea that migrant groups have a right to reside in the UK (see Figure 1). In the following, the rationale for these predictions will be explained in more detail.

*Similarity, threat, and affect*. Overall, research suggests that intergroup similarity is associated with more harmonious intergroup relations (López-Rodríguez, Cuadrado, & Navas, 2017). When examining the effect of intergroup similarity on intergroup attitudes and readiness for intergroup contact among high school students, Roccas and Schwartz (1993) found that higher intergroup similarity increased willingness for intergroup contact. Furthermore, manipulation of perceived belief similarity showed that those believing that the outgroup held beliefs more in line with those of their own group had significantly more positive views towards the outgroup (Grant, 1993), and were more willing to interact with members of groups perceived to be similar (Osbeck, Mohaddam & Perrault, 1997). Group similarity has also been found to be a significant predictor of the relations between Spanish majority members and Ecuadorian and Romanian immigrants (López-Rodríguez, Navas, Cuadrado, Coutant & Worchel, 2014). Dustmann and Preston (2007) too found that immigration attitudes were more negative when considering immigrant groups that are more culturally or racially distinct from the ingroup. Although similarity can interfere with desire for positive distinctiveness of the ingroup (Tajfel & Turner, 1986), by and large the presence of a similar group is perceived to be less threatening than that of a dissimilar group (e.g., Rohmann, Piontkowski & van Randenborgh, 2008; Stephan, Ybarra & Morrison, 2009).

As confirmed in a meta-analysis of 95 separate samples (Riek, Gaertner & Mania, 2006), perceived intergroup threat plays a pivotal role in strained intergroup relations. Threat is one of the most commonly reported antecedents of intergroup prejudice (Quillian, 1995; Stephan, Ybarra & Morrison, 2009). Threat can refer to concerns for the ingroup’s culture, values and norms (symbolic threat), but also to more concrete concerns regarding issues such as jobs or resources (realistic threat). Threats need not be real to impact upon intergroup relations; subjective threat suffices (Semyonov, Raijman, Yom Tom & Schmidt, 2004). Perceived threats can have numerous negative intergroup outcomes, such as heightening the risk of conflict, reducing empathy for outgroup members, and arousing negative attitudes and emotions towards the outgroup (Stephan & Mealy, 2009). A significant body of research supports the detrimental effect of threat perceptions on attitudes towards immigrants (e.g., Florack, Piontkowksi, Rohmann, Balzer & Perzig, 2003; Leong & Ward, 2011; Pereira, Vala & Costa-Lopes, 2010; Piontkowksi, Rohmann & Florack, 2002, Schlueter & Scheepers, 2010; however, see Scheibner & Morrison, 2009).

On the basis of this evidence, we hypothesized (see Figure 1) that strong perceived intergroup similarity between British participants and immigrants would lead to less perceived threat (path A), and to more positive affect towards immigrants (path B). Further, we predicted that threat perceived to be emanating from immigrants would decrease positive affect towards immigrants (path C).

*Perceived right to be here*. Perceived right of immigrants to reside in Britain was predicted to be affected by intergroup threat and intergroup affect (see paths D & E, Figure 1). Let us first outline the rationale for predicting an effect of threat. A typical response to threat is to attempt to put distance between the self and the threatening stimulus (Blanchard, Hynd, Minke, Minemoto & Blanchard, 2001). In the context of migration, the desire to create distance between the self and the threatening stimulus might manifest itself in arguments that immigrants should be removed because they have no right to be here.

Turning now to the rationale for predicting an effect of intergroup affect, it is a well-established finding in the interpersonal literature that we are more willing to make allowances for those we like (e.g. Flannagan, Mark & Fuhrman, 2005). For example, while we might be outraged about the lateness or selfishness of a distant colleague, we might be more willing to make excuses or tolerate the same behavior or traits in our closest loved ones. Similar evidence has been found in the realm of group perception, i.e. affect towards outgroup targets can taint judgements about them (Bodenhausen & Moreno, 2000). For example, transgressions committed by disliked outgroup members tend to be judged more harshly than transgressions by ingroup members (Chapman, May, Scofield, DeCoster, & Bui, 2020). Hence, because affect impacts judgements of and psychological privileged granted to others, one might assume that positive affect towards immigrants are positively associated with their perceived right to be in the UK. In short, if migrants are liked, they are likely to be granted psychological rights which would otherwise be withheld. We therefore hypothesized that positive intergroup affect would be positively associated with a perceived right to be in the UK, and that threat would be negatively associated with perceived rights.

Perceived population size. The population sizes of different immigrant groups in the UK differ quite considerably. The perception of the size of outgroups has been shown to impact upon attitudes towards them (Wilson, Hugenberg, & Rule, 2017). Quillian (1995), for example, noted that the amount of prejudice shown to immigrants was determined by the relative size of the majority and minority populations, with greater prejudice associated with larger immigrant groups (see Scheepers, Gjitsberts & Coenders, 2002; Semyonov, Raijman, Yom Tov and Schmidt, 2004; and Strabac, 2011 for similar findings). Indeed, inflated minority population estimates have been found to be associated with opposition to immigration (Herda, 2010; Hjerm 2007).

While previous research has mainly conceptualized perceived size as an antecedent of intergroup attitudes, there is reason to believe that the intergroup attitudes might also influence perceptions of size. The correspondence between actual and perceived minority group size tends to be poor (e.g., Alba, Rumbaut & Marotz, 2005), so perceived size must clearly be informed by subjective psychological processes rather than the observation of objective facts. Following the psychological truth that problems are often seen to loom large and that individuals tend to overestimate the size of negative or feared stimuli (e.g. Cole, Balcetis & Dunning, 2013; Fessler, Holbrook, Pollack, & Hahn-Holbrook, 2014; Leibowich, Cohen & Henik, 2016; van Ulzen, Semin, Oudejans & Beek, 2008), one can hypothesize that those with negative affect towards migrants are likely to overestimate migrant group size. Conversely, those with positive affect towards migrants might be less prone to over-emphasize their group size, resulting in a predicted negative association between positive affect and population estimates (see path F, Figure 1).

Migration country of origin. Previous research has noted that attitudes of majority members tend to be more negative towards immigrant groups labelled as ‘devalued’, as compared to those considered ‘valued’ (Montreuil & Bourhis, 2001). Attitudes also differ towards ‘unauthorized’ compared to ‘authorized’ immigrants (Murray & Marx, 2012). It has also been found that majority individuals differ in attitudes depending on the specific immigrant group in question (López-Rodríguez, et al., 2014), with white and culturally similar groups being viewed most favorably (Ford, 2010). In light of these findings, the current work aimed to explore the differential attitudes held by British participants towards individuals migrating to the UK from different countries of origin.

Context of this research. Having outlined the theoretical rationale for each of the paths in the hypothesized model, the context in which the research was conducted must be briefly described. Since 1994 there has been greater immigration than emigration in Britain, with an estimated net migration figure of 240,000 in 2019 (Office for National Statistics, ONS, 2020). Foreign-born individuals account for approximately 14% of the UK population, an increase of more than a third from 9% in 2004 (Vargas-Silva & Rienzo, 2019).

In 2019, 827,000 individuals born in Poland were living in the UK, making this group the 2nd largest foreign-born population in the UK (ONS, 2019). The vast majority of these individuals have arrived in the years since Poland entered the European Union in 2004, allowing the free movement of individuals across EU borders (Vargas-Silva & Markaki, 2016; Vargas-Silva & Rienzo, 2019). The rate of immigration from Poland has until recently remained high, with annual migration to the UK around 30,000 in 2019, but has been substantially reduced after the Brexit referendum and will be reduced to insignificance with full Brexit implementation, when free movement of people comes to an end (ONS, 2016, Department for Work & Pensions, 2019). Many analysts believe that anti-migrant sentiments were one of the driving forces behind the results of the Brexit referendum (Goodwin & Milazzo, 2017). The explosive nature of the political debate around migration to Britain from Eastern Europe renders Poles a prime migrant group for study in this research.

Indians also present a sizeable group in the UK. The population of individuals born in India living in the UK showed a dramatic rise during the 1960s, almost doubling between 1961 and 1971 following the British Nationality Act of 1948, granting residency for all Commonwealth citizens (ONS, 2013). Indeed, the most common country of birth for people moving to the UK is India, with 837,000 individuals who were born in India living in the UK in the year 2019 (ONS, 2019), warranting the selection of this group for study.

The third group of migrants to be considered are individuals from Syria. In the year ending December 2019, 711 Syrian individuals were given asylum in the UK, and 4340 were offered resettlement under the Syrian Vulnerable Person Resettlement Scheme (Home Office, 2019). This scheme was established in 2014, but considerably broadened in September 2015, at which point the UK government committed to resettle 20,000 Syrian refugees in the UK (Home Office, 2015). Although populations of Syrian individuals in the UK are currently low, the extensive media coverage of the ‘migrant crisis’ in Europe warrants the study of attitudes towards this group.

Predictions were tested in two studies. Study 1 was a questionnaire study eliciting responses to Indians, Poles and Syrians, to test the model displayed in Figure 1. Study 2 was an experiment in which similarity and threat were manipulated in relation to a fictitious immigrant group, to get a better handle on the causal direction of observed processes in a more controlled setting.

Study 1

Method

*Participants*

136 British citizens (99 females) participated in the study. A decision was made to recruit 150 participants prior to the start of the study, given that this sample size has been found sufficient to detect small to medium sized effects in prior research on similar topics (Tip et al., 2012). A few of the participants had to be excluded on the grounds that they indicated that they were not British citizens. A small number of participants who might have been Polish, Indian, or Syrian (e.g. those who indicated their ethnicity as simply ‘Asian’ or ‘Eastern European’) were excluded from the analyses, to ascertain that measures would truly tap into intergroup attitudes. Participants ranged in age from 18-76 years (*M* = 32.57, *SD* = 15.87) and were recruited via the sharing of a web link to the questionnaire on social media channels (i.e., the link was disseminated to contacts via Facebook and Twitter, with a request to send it on to others).

*Design*

All participants completed questions regarding each of the three target groups, with the order of group presentation randomized across participants. Thus, ‘country of origin’ was a within participants factor.

*Variables and Instruments*

Data was collected via an online questionnaire. The first section of the questionnaire asked about demographic characteristics (nationality, age, gender, and ethnicity).

*Similarity.* To measure perceived cultural similarity, participants were asked to indicate the degree to which they felt the culture of the target group was similar to British culture. Responses were given on a 7-point Likert scale ranging from ‘*not at all similar*’ to ‘*extremely similar*’.

*Intergroup threat.* Intergroup threat was examined using an eight-item measure adapted from Stephan and Stephan (1999). Participants rated the degree to which they agreed with various statements on 7-point Likert scales ranging from ‘*strongly disagree*’ to ‘*strongly agree*’. Example items are: ‘The values and beliefs of Polish individuals living in the UK are not compatible with the beliefs and values of most British people’ and ‘Syrian individuals are not displacing British workers from their jobs’. Perceived symbolic and realistic threats were highly correlated (*r* = .701, *p* < .001), and factor analysis showed that the items did not load clearly onto two distinct factors. Thus, the variables were combined into an overall measure of ‘Intergroup Threat’. This measure had high internal consistency for the Polish (α = .844), Syrian (α = .853) and Indian (α = .786) target groups.

*Positive affect.* A one-item measure examined affect towards the groups. Participants were asked to indicate their emotions, ranging from ‘*Extremely negative*’ to *‘extremely positive*’ using a 7-point Likert scale: ‘Please, using the scale below, indicate your feelings towards Indian individuals living in the UK’.

*Perceived right to reside in UK.* Participants indicated the degree of right they felt individuals had to live in the UK, on a 7-point Likert scale ranging from ‘*no right*’ to ‘*total rights*’.

*Perceived population size.* Participants were asked to estimate the percentage of the UK population that each group accounted for by selecting an option. Options increased in increments of 5% (i.e. 0-5%, 5-10%, 10-15% and so on) from 0-50%.

Results

Bivariate correlations are shown in Table 1. In order to simultaneously assess the effects of perceived cultural similarity and intergroup threat via positive affect towards immigrants, structural equation modelling (SEM) was employed, with each target migrant group considered separately.

The model regarding individuals from India, shown in Figure 2 (standardised path values without parentheses), had a good fit with the data, χ2 (4) = 2.43, *p* = .246; GFI= .993; CFI = 1.000; RMSEA= .001. All paths were significant in the specified direction at *p* < .001. This model accounted for 26.5% of the variance in threat, 51.3% of the variance in positive affect, 72% of the variance in perceived right to live in the UK, and 11.9% of the variance in estimated population size. Further support for the model comes from the test of an alternative model with the paths from perceived right and population estimates reversed, which had a considerably poorer fit with the data, χ2 (4) = 53.03, *p* < .001; GFI= .870, CFI = .847, RMSEA = .301.

The model regarding individuals from Poland, shown in Figure 2 (path values in round parentheses), also had a good fit with the data, χ2 (4) = 8.01, *p* = .091; GFI = .977; CFI = .986; RMSEA = .086. All paths were significant in the specified direction at *p* < .001, excluding the path from similarity to positive affect, which was significant at *p* < .05. This model accounted for 36.5% of the variance in perceived intergroup threat, 47.1% of the variance in positive affect, 63.3% of the variance in perceived right to live in the UK and 9.8% of the variance in population size estimate. Further support for the model comes from the test of an alternative model with the paths from perceived right and population estimates reversed, which had a considerably poorer fit with the data, χ2 (4) = 65.22, *p* < .001; GFI= .840, CFI = .792, RMSEA = .337.

Finally, the model regarding migrants from Syria, shown in Figure 2 (path values in square parentheses), also had a good fit with the data, χ2 (4) = 8.19, *p* = .091; GFI = .976; CFI = .988; RMSEA = .088. All paths were significant in the specified direction at *p* < .001, excluding the path from similarity to positive affect, which was significant at *p* < .05. This model accounted for 40.7% of the variance in perceived intergroup threat, 61.9% of the variance in positive affect, 65.4% of the variance in perceived right to live in the UK and 9.4% of the variance in population size estimate. Further support for the model comes from the test of an alternative model with the paths from perceived right and population estimates reversed, which had a considerably poorer fit with the data, χ2 (4) = 77.62, *p* < .001; GFI= .831, CFI = .793, RMSEA = .369. Overall, the model fitted as hypothesized, and this was replicated for three different migrant target groups.

*Exploration of mean-level between-group differences*. Mean-level differences in responses toward the three different migrant groups were explored. A repeated measures ANOVA was run for each of the measured variables, comparing the three groups. Means and the group comparison ANOVAs are shown in Table 2. Perceived cultural similarity showed that Polish culture was rated as the most similar to British culture, followed by Indian culture, and finally Syrian culture. Those from Syria were regarded as significantly more threatening than individuals from India or Poland. Participants reported the most positive affect towards Indian individuals, followed by Polish individuals, and finally the least positive affect towards Syrian individuals. With regards to perceived rights of each of the three groups to reside in the UK, there were significant differences between Syrian individuals on the one hand and Indian and Polish individuals on the other hand. The largest perceived group size was for Indians, followed by Poles, and finally Syrians.

Discussion

The data from Study 1 supported the model, i.e. the idea that lower perceived cultural similarity to the UK resulted in greater threat perceptions and less positive affect. Threat perceptions also positively predicted lower positive affect and perceived UK residency rights. Lower positive affect then predicted lower perceived right to UK residency and larger population estimates.

Interestingly, this study found significant differences regarding mean level responses to the three target groups. Participants reported significantly lower cultural similarity, greater perceived threats, lower positive affect, and lower perceived residency rights of individuals migrating from Syria, as compared to those from India or Poland. However, in terms of psychological processes as tested in the model, results were consistent across the three migrant groups.

It is important to note that Study 1 had a cross-sectional design, which makes it impossible to determine causality with certainty. The poor fit of the alternative structural equation model indicates that the direction in the accepted model is an appropriate interpretation of the data; but experimental and/or longitudinal follow-up work would be needed for firm conclusions over the direction and causation of the effects seen. Study 2 was designed to address this.

Another limitation of Study 1 was that some of the key measures of interest were assessed with single-item measures. This was because we wanted to keep this voluntary, online survey as short as possible, in order to maximize our chances of people agreeing to participate, given that no monetary compensation was offered for participation. However, clearly results need to be interpreted with more caution than would be the case if multi-item measures had been used. A further objective of Study 2 was therefore to replicate the findings but this time using more reliable, multi-item indices for each of the constructs.

Study 2

Study 2 was designed to test for the presence of a causal relationship between perceived intergroup similarity and threat, and responses towards migrant groups coming to the UK. To avoid confounds associated with any real-life group, for this study a fictitious migrant group was described to participants, either being presented as being high or low in similarity to British culture, and either threatening or non-threatening. A fictitious group was used in order to ensure that responses were not clouded by any prior knowledge or attitudes participants had about any specific target group we might have chosen. This group was presented to participants as being a group they simply were not previously aware of. As before, it was hypothesized that similarity and threat would influence affect towards minority members, their perceived rights to reside in the UK, and population size estimates.

Method

*Participants*

126 British psychology undergraduate students (113 females) completed the questionnaire in full and were thus included in the analyses. Participants ranged in age from 18-41 (*M* = 18.92 years, *SD* = 2.43) and were recruited via a London university research participation scheme. A cell size of *N* = 30 was determined prior to data collection, again based on the fact that in experimental work on similar issues this has previously been found sufficient to detect existing effects (Zagefka et al., 2012), and the experiment was closed to new participants as soon as inspection of the data revealed that this target had been reached.

*Design*

This study had a 2 x 2 independent measures design. Descriptions of a fictional group were manipulated on level of similarity to British culture (high vs. low) and level of intergroup threat posed (high vs. low).

*Variables and Instruments*

Data was collected using an online questionnaire regarding participants’ responses towards individuals of the fictitious ‘Abendi’ group who had migrated to live in the UK.

Participants were presented with descriptions of the fictitious ‘Abendi’ group varying in both levels of intergroup similarity and intergroup threat, depending on the condition (see Duckitt & Sibley, 2010, for a similar methodological approach). Participants were randomly allocated to one of four conditions combining high and low similarity with high and low threat.

Demographics. The first section of the questionnaire collected demographic information (e.g., age and gender).

Manipulation of similarity and threat. Each participant read a descriptive paragraph about a fictitious group (presented as a real group) migrating to the UK. Within this paragraph, the levels of threat and similarity to British culture were manipulated. The description used was as follows:

The Abendi are a group of individuals who have, and continue to, migrate to reside in the UK. This group is (English-speaking/not English speaking) and largely (similar/dissimilar) in culture to Britain. (Few/A large number of) jobs are required in order for these individuals to support themselves upon arrival in the UK, and their presence is (unlikely to/may) result in the displacement of British workers. In addition, these individuals (will not/will) require healthcare and welfare resources and thus (do not take more/take more) from the UK than they contribute. It is (likely/unlikely) that the expenses incurred from such migration will be able to be met by the government. As a result, (no significant tax burden/a significant tax burden) will likely fall upon the UK population.

Positive affect. Positive affect towards the Abendi was measured using a scale consisting of seven questions (α = .896). As in study 1, the first question required participants to indicate their general emotions towards the Abendi people, on a 7-point Likert scale ranging from ‘*extremely negative*’ to ‘*extremely positive*’. The other questions consisted of the bipolar adjectives of the General Evaluation Scale (Wright, Aron, McLaughlin-Volpe & Ropp, 1997), e.g. warm-cold, negative-positive, friendly-hostile. Positive values on this scale indicate more positive affect.

Perceived right to reside in the UK. The perceived right of the Abendi individuals to reside in the UK was next assessed using a 3-item measure (α = .934). Participants were asked to report the degree to which they believed that Abendi individuals had the right to live in the UK, the degree to which they should be permitted to live in the UK, and the degree to which Britain ought to be accepting of Abendi individuals wishing to live in the UK. All responses were given using 7-point Likert scales. High values indicate more perceived immigrant rights.

Perceived population size. Estimated population size was examined using two questions (α = 847): Participants were asked to estimate the size of the Abendi population living in the UK using a Likert scale ranging from 1 ‘*extremely small*’ to 7 ‘*extremely large*’, and to numerically estimate the size of the Abendi population in the UK by selecting from the following choices: 0-5000 individuals, 5000-10,000 individuals, 10,000-15,000 individuals, 15,000-20,000 individuals, 20,000 - 25,000 individuals, 25,000 - 30,000 individuals, or 30,000 - 35,000 individuals.

Perceived intergroup similarity. Manipulation checks were also included. Perceived intergroup similarity was examined using a 3-item scale (α = .879). Participants were asked to rate the extent to which they believed that the Abendi are similar to British people in terms of culture, behavior, and attitudes. Responses were given using 7-point Likert scales ranging from 1 ‘*not at all similar*’ to 7 ‘*extremely similar*’.

Perceived intergroup threat. Perceived intergroup threat was examined using the same 7-item measure as in study 1, adapted to focus on the Abendi group (α = .778). At the end of the study participants were given the option of commenting on any aspect of the study in an open-response format, and none of the participants reported any suspicion about the fictitious nature of the target immigrant group Abendi.

Results

Manipulation check. Bivariate correlations are shown in Table 3. As a manipulation check, a multivariate ANOVA was conducted with the Similarity and Threat manipulations as two independent variables, and the measured similarity and threat as two levels of a repeated measures factor. This yielded a significant multivariate effect of similarity, F (2, 121) = 13.15, p < .001, on similarity and threat. Univariate results indicated, as expected, a significant main effect of the similarity manipulation on the measure of similarity, F (1, 122) = 23.35, p < .001, η*p*2 = .161, but not on the measure of threat, F (1, 122) = .034, p = .855, η*p*2 < .001. Also as expected, the manipulation of threat exerted a significant main effect upon the measure of threat, F (1, 122) = 4.07, p < .05, η*p*2 = .032, but not on the measure of similarity, F (1, 122) = .035, p = .853, η*p*2 < .001. There were no significant interactions between the two factors. This suggests that the manipulation was successful.

*Experimental effects.* A MANOVA was conducted with the Similarity and Threat manipulations as IVs, and affect, perceived rights, and size estimate as DVs. This yielded a significant multivariate effect of similarity, *F* (3, 120) = 3.68, *p* < .05, η*p*2 = .084, and threat, *F* (3, 120) = 5.96, *p* = .001, η*p*2 = .130, on affect, perceived right, and size estimate.

Univariate analyses revealed a significant main effect of the threat manipulation upon affect, *F* (1, 122) = 11.80, *p* < .05, η*p*2 = .088, such that those in the high threat condition reported significantly less positive affect (*M* = 4.17) than those in the low threat condition (*M* = 4.64). The threat manipulation also exerted a significant main effect upon perceived right, *F* (1, 122) = 3.99, *p* < .05, η*p*2 = .032, such that those in the high threat condition reported significantly lower perceived rights (*M* = 4.99) than those in the low threat condition (*M* = 5.43). There was no significant effect of the threat manipulation upon group size estimate.

Univariate analyses revealed a significant main effect of the similarity manipulation on size estimate, *F* (1, 122) = 8.60*, p* < .05, η*p*2 = .066. This effect was in the opposite direction to that predicted, however, such that those in the high similarity condition estimate the group as significantly larger (M = 2.68) than those in the low similarity condition (M = 2.17). There were no significant effects of the similarity manipulation on affect and perceived rights.

*Testing the entire Figure 1 model, with manipulation check measures*. Given that similarity and threat were manipulated independently of each other, it was not possible to test the Figure 1 model using the manipulations, because the relationship between manipulated similarity and threat was by necessity zero. Hence, manipulation check measures for similarity and threat were used to test the full model. Of course, given that similarity and threat were actually manipulated, any analyses using the manipulation checks must be interpreted with caution, but it is nonetheless worth exploring whether the pattern is congruent with the results of Study 1.

Structural equation modelling was employed, using the manipulation check measures for similarity and threat, and the measures of positive affect, perceived rights, and perceived population size. The same hypothesized model for the relation between these variables as tested in study 1 was assessed. The model, shown in Figure 2 (path values within the parentheses {}), had a good fit with the data, χ2 (4) = 4.63, *p* = .328; *GFI* = .986; *CFI* = .996; *RMSEA* = .035. The model accounted for 7.2% of the variance in threat, 33.1% of the variance in positive affect, 53.5% of the variance in perceived right to live in the UK, and 2.7% of the variance in population size. Further support for the model comes from the test of an alternative model with the paths from perceived right and population estimates reversed, which had a poorer fit with the data, χ2 (5) = 14.41, *p* < .05; *GFI* = .962, *CFI* = .901, *RMSEA* = .123.

Discussion

The findings of this study offer partial support to the hypotheses. Despite an effective intergroup similarity manipulation, this manipulation did not elicit the hypothesized effects on intergroup affect, perceived rights to live in the UK, or population estimates. However, there were significant differences between groups high and low in threat on affect towards Abendi individuals living in the UK, and on perceived rights of these individuals to live in the UK, suggesting a causal impact of threat in line with the hypotheses. The good fit of the structural model offers additional support for the hypothesized relations between the variables. Mirroring study 1, greater intergroup threat perceptions negatively predicted positive affect. Lower positive affect positively predicted lower perceived rights to UK residency and positively predicted larger population estimates (although this latter path did not reach significance in this present study).

General Discussion

Two studies examined the attitudes of British individuals towards different migrant groups. This work revealed an effect of perceived intergroup similarity and perceptions of intergroup threat from groups migrating to the UK on negative affect towards migrants, their perceived right to reside in the UK, and perceived population size, although it should be acknowledged that the effects on ‘perceived size’ in Study 2 were not consistent with those in Study 1, and this will be discussed in more detail below. Overall though, findings are in line with Intergroup Threat Theory (Stephan, Ybarra & Bachman, 1999; for similar findings, see Florack, Piontkowksi, Rohmann, Balzer & Perzig, 2003; Pereira, Vala & Costa-Lopes, 2010; Quillian, 1995; Raijmann, Semyonov & Schmidt, 2003; Riek, Gaertner & Mania, 2006; Scheepers et al., 2002; Schlueter & Scheepers, 2010), and they present an important insight into psychological processes that might affect the rights immigrants are perceived to have, and the perceived size of immigrant groups.

The results across the two studies also indicate that significantly different attitudes are held towards different migrant groups living in the UK, with some groups, such as those from Syria, viewed considerably more negatively than others. This highlights the importance of considering perceptions regarding specific groups, and not only immigrants in general. However, even though mean-level attitudes differed towards different groups, the psychological processes were remarkably similar across studies and target groups (see the similar path values in Figure 2 across different groups). This suggests that these processes might be generic and could generalize to other groups and other countries too. However, this would need to be tested of course, before this assertion can be made with any certainty.

To us, maybe the most exciting conclusion to emerge from the present data is that political arguments about ‘boats being full’ are potentially driven by psychological concerns, rather than vice versa. In other words, it is not only the size of immigrant groups or their objective right to reside which affect intergroup attitudes, but it is rather that those attitudes themselves drive perceptions of immigrant group size and rights. While previous work has argued that size perceptions drive intergroup attitudes (Alba, Rumbaudt & Marotz, 2005), our data suggest that prior intergroup attitudes also drive size perceptions (see also Cole, Balcetis & Dunning, 2013; Herda, 2010). Our findings suggest that a situation with large migration influx does not necessarily lead to intergroup tensions. Instead, when psychological concerns are properly managed, our data suggest that even in very multicultural societies intergroup tensions are not a foregone conclusion.

Of course, this research has some limitations. Firstly, clearly our samples are not representative, and especially the student sample used in Study 2 means that generalizability of findings to the general population cannot be assumed for certain. Secondly, since the threat manipulation in Study 2 referred to number of jobs, it is possible that this might have inadvertently tapped into perceived size also. Future experimental work could improve on this operationalization. Thirdly, the studies in this research measured only the attitudes of participants. Although interesting and insightful, previous research (e.g. Fazio & Zanna, 1981; Linn, 1965) has shown that attitudes do not necessarily translate into behavior and thus the inclusion of a behavioral measure would have enriched this research. Fourthly, it is also important to note that the factors explored in this research likely do not represent an exhaustive list of determinants of intergroup attitudes, and additional potential influencing factors should continue to be explored in future research.

A few words should be said about results that were not consistent between studies. While findings were reasonably consistent in terms of predictors of ‘perceived rights’, evidence for processes affecting ‘perceived size’ was only found in study 1 but not study 2. One potential reason might be the use of a fictitious group in study 2. Participants had been told that the ‘Abendi’ are a group they had not heard of before, which might have led to bottom effects because most participants would reasonably have assumed that this group must be quite small. In retrospect, this is one potential reason for why it was difficult to detect the hypothesized effects in study 2. Future research could improve on the design and maybe test the hypotheses focusing on real groups (although this of course brings its own methodological problems).

The present findings have some applied implications. One implication relates to perceived threat, and the media representation of migrant groups living in Britain. Previous research has explored the representations of minority groups in the media (Allen & Blinder, 2013), the resultant potential impacts upon threat and identity (e.g. Muslims; Jaspal & Cinnirella, 2010), and the influence of media representations of migrant groups upon attitudes (e.g. Atwell Seate & Mastro, 2016). In light of this, presenting migrants in a non-threatening manner may be a means by which to tackle anti-immigrant sentiment. Beyond threat, an applied implication related to similarity is that this work indicates the presence of an association between perceptions of intergroup similarity and intergroup affect and (in a second step) perceived migrant UK residency rights. Overall, our data, at least in Study 1, suggest that a lack of similarity makes outgroups appear more threatening, and larger in size.

Overall, these studies demonstrate both the complexity of British attitudes towards migrant groups and the importance of intergroup similarity and threat as influencing factors of intergroup outcomes. This study has diverged from the previous literature, which typically studies prejudiced intergroup attitudes, by focusing directly on perceptions which are often utilized in political debate: arguments about migrants’ rights to reside in the country, and arguments about the migrants’ group size being too large. This work shows that such perceptions are driven by ‘classic’ intergroup concerns about cultural similarity and intergroup threat, and it hence highlights a leverage point for interventions aimed at reducing hostility against migrants. Given that the popular vote for Brexit was significantly driven by anti-immigrant sentiments, work highlighting the drivers of such attitudes seems timelier than ever.

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Table 1

*Bivariate correlations for measures in Study 1*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Measure | 1 | 2 | 3 | 4 |
| 1. Similarity | 1 |  |  |  |
| 1. Intergroup Threat | -.704\*\* | 1 |  |  |
| 1. Positive Affect | .656\*\* | -.794\*\* | 1 |  |
| 1. Perceived Right to reside | .660\*\* | -.844\*\* | .811\*\* | 1 |
| 1. Perceived Size | -.246\*\* | .393\*\* | -.370\*\* | -.307\*\* |

*Note: \*\* = significant at p < .001*

Table 2

*Means and standard deviations of variables as a function of migrant country of origin, and ANOVA results, Study 1*

*Note*. Means not sharing the same subscripts are significantly different from each other (row-wise).

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Variable | Indian |  |  | Polish |  |  | Syrian |  | *Df* | *F* | ηp2 | *p* |
|  | *M* | *SD* |  | *M* | SD |  | M | *SD* |  |  |  |  |
| Similarity | 3.43 b | 1.51 |  | 4.57 a | 1.25 |  | 2.79 c | 1.24 | 2 | 110.89 | .451 | <.001 |
| Intergroup Threat | 3.36 b | 1.05 |  | 3.41 b | 1.18 |  | 3.71 a | 1.22 | 2 | 20.39 | .131 | <.001 |
| Positive Affect | 5.47 a | 1.34 |  | 5.14 b | 1.44 |  | 4.91 c | 1.64 | 2 | 12.69 | .086 | <.001 |
| Perceived Right to reside | 5.57 a | 1.60 |  | 5.54 a | 1.54 |  | 4.88 b | 1.84 | 2 | 24.06 | .154 | <.001 |
| Perceived Size | 2.62 a | 1.64 |  | 2.20 b | 1.55 |  | 1.46 c | 1.17 | 2 | 80.84 | .375 | <.001 |
| Error |  |  |  |  |  |  |  |  | 270 |  |  |  |

Table 3

*Bivariate correlations for measures in Study 2*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Measure | 1 | 2 | 3 | 4 |
| 1. Similarity | 1 |  |  |  |
| 1. Intergroup Threat | -.269\*\* | 1 |  |  |
| 1. Positive Affect | .362\*\* | -.527\*\* | 1 |  |
| 1. Perceived Right to reside | .268\*\* | -.610\*\* | .665\*\* | 1 |
| 1. Perceived Size | -.012 | .235\*\* | -.165 | -.176\* |

*Note: \* = significant at p < .05, \*\* = significant at p < .001*

Figure Captions

Figure 1

A model predicting the effects of intergroup similarity, intergroup threat, and intergroup affect on the migrants’ perceived right to reside in the country, and on the perceived migrants’ group size.

Figure 2

Testing the theoretical model. Path values as follows: values outside parentheses are results for Indian group target (Study 1), values in round parentheses are results for Polish group target (Study 1), values in square parentheses are results for Syrian group target (Study 1), and values in {} are results for the Abendi group target (Study 2).

*Note: \* = Significant at p < .05, \*\* = Significant at p < .001.*

Similarity

Perceived Size

Positive Affect

Intergroup Threat

Perceived Right

A (-)

B (+)

C (-)

D (-)

E (+)

F (-)

-.51\*\*

(-.60\*\*)

[-.64\*\*]

{-.27\*}

-.56\*\*

(-.55\*\*)

[-.63\*\*]

{-.46\*\*}

-.35\*\*

(-.31\*\*)

[-.31\*\*]

{-.17}

-.43\*\*

(-.60\*\*)

[-.37\*\*]

{-.36\*\*}

Similarity

Perceived Size

Positive Affect

Intergroup Threat

Perceived Right

.24\*\*

(.19\*)

[.21\*]

{.24\*}

.49\*\*

(.25\*\*)

[.49\*\*]

{.48\*\*}