**Supplementary analyses in Study 2**

Unique factors may predict antipathy toward refugees and economic migrants. With regard to economic migrants, realistic group conflict theory (Sherif et al., 1961), the instrumental model of group conflict (Esses et al., 2001), and integrated threat theory (Stephan et al., 2000, 1999) suggest that economic migrants are often perceived to compete for resources with one’s ingroup, which in turn elicits perceptions of threat and motivates derogation, discrimination, and avoidance. Consistent with these theories and findings, there is robust evidence of prejudice toward economic migrants (e.g., Quillian, 1995; Verkuyten, 2004). This prejudice may be a result of negative media portrayals of economic migrants (Esses, Jackson, & Armstrong, 1998).

With regard to refugees, there are some indications that refugees are seen more positively than economic immigrants (Murray & Marx, 2013; Verkuyten, 2004). At the same time, however, there is evidence of prejudice toward refugees (e.g., Esses, Veenvliet, Hodson, & Mihic, 2008; Lazarev & Sharma, 2015), which may also be rooted in negative media portrayals (Esses, Medianu, & Lawson, 2013). A key consideration is that refugees and economic migrants may differ in how they are perceived; for instance, refugees may be regarded as less responsible for their situation and therefore more deserving of help. These differences in perception may cause individuals’ values, and especially their self-transcendence values (which entail sympathy toward people in need), to relate more strongly to evaluations of refugees than economic migrants. We will explore differences in perceptions of these groups and test whether values relate differently to evaluations of these groups. In either event, the inclusion of both immigrant groups enabled us to test the generalizability of the effects from Study 1. Study 2 explored this possibility in addition to testing our main research aims carried over from Study 1.

**Method**

**Deservingness of help***.* To examine differences in how the two immigrant groups were perceived, we asked participants to rate the extent to which they thought the groups should be protected, are in need of help, and deserve their and other people’s help, paired with a scale from 1 (*not at all*) to 7 (*very much*). These three questions were internally reliable (αs > .86) and formed a measure of the groups’ perceived deservingness of help.

**Results**

**Comparisons between refugees and economic migrants.** To compare perceptions between refugees and economic migrants, we analyzed the perceptions of the immigrant groups’ values, perceptions of the groups’ deservingness of help, and evaluations and symbolic threat toward the groups in paired sample t-tests. Refugees were perceived to be higher in self-transcendence values (*M*diff=1.32, *SE*=0.13), *t*(101)=10.19, *p*<.001, conservation values (*M*diff=0.39, *SE*=0.11), *t*(101)=3.75, *p*<.001, and perceived deservingness of help (*M*diff=1.36, *SE*=0.10), *t*(101)=13.48, *p*<.001, than economic migrants. Refugees were also evaluated more favorably than economic migrants (*M*diff=0.41, *SE*=0.08), *t*(101)=5.23, *p*<.001, whereas the contrast for perceived symbolic threat did not reach significance (*M*diff=−0.14, *SE*=0.08), *t*(101)=1.72, *p*=.088. See Table 4 for these descriptive statistics and correlations among all study variables.

**Study 3**

**Method**

To further explore differences in perceptions of refugees and economic migrants, we assessed the groups’ perceived deservingness of help with an extended scale comprising eight items, adapted from Goff, Jackson, Di Leone, Culotta, and DiTomasso (2014) innocence of children scale. The eight items (e.g., “How much do children need protection?”) loaded on one factor and formed an internally reliable perceived deservingness of help score (αs > .84). In addition, we assessed perceived competition with each group, using Esses et al.’s (1998) zero-sum beliefs measure. To reduce participant burden, we shortened this measure by removing six items that we reasoned were better covered conceptually by other items. One example item is “The more power refugees/economic migrants obtain in Britain, the more difficult it is for British people already living here.”. These statements were answered on a scale from 1 (*strongly disagree*) to 7 (*strongly agree*). They loaded on one common factor and showed high internal reliability (αs > .95). See the Appendix for the full set of perceived deservingness of help and zero-sum beliefs items.

**Comparisons between economic migrants and refugees.** To compare perceptions of economic migrants and refugees, we analyzed perceptions of the immigrant groups’ values, perceptions of the groups’ deservingness of help, zero-sum beliefs with respect to the groups, perceptions of symbolic threat from the groups, and evaluations of the groups in paired sample t-tests. Refugees were perceived to be higher than economic migrants in self-transcendence values (*M*diff=0.83, *SE*=0.16), *t*(159)=5.21, *p*<.001, and higher in perceived deservingness of help (*M*diff=0.55, *SE*=0.14), *t*(159)=3.81, *p*<.001. There were no differences between the immigrant groups in terms of conservation versus openness values (*M*diff=0.08, *SE*=0.16), *t*(159)=0.49, *p*=.63, zero-sum beliefs (*M*diff=−0.07, *SE*=0.22), *t*(159)=−0.32, *p*=.75, perceived symbolic threat (*M*diff=−0.14, *SE*=0.22), *t*(159)=−0.64, *p*=.53, and evaluation (*M*diff=0.02, *SE*=0.16), *t*(159)=0.15, *p*=.88. See Tables 7 and 8 for these descriptive statistics and correlations among all study variables. Hence, the perceived differences in Study 2 and 3 between these groups generally support our speculation that refugees are regarded as less responsible for their situation and therefore more deserving of help than economic migrants.

**Appendix**

Perceived deservingness of help scale in Study 3. Scale from 1 (*not at all*) to 7 (*very much*).

1. How much do they need protection?

2. How much do they need help?

3. How innocent are they?

4. How much do they deserve your and other people’s help?

5. To what extent are they responsible for their situation? *(reversed)*

6. To what extent do you think that they chose to come to this country? *(reversed)*

7. To what extent do you think that they felt forced to come to this country?

8. To what extent do you think they are victims?

Zero-sum beliefs measure. Scale from 1 (*strongly disagree*) to 7 (*strongly agree*).

1. When immigrants who seek work/asylum make economic gains, British people already living here lose out economically.

2. Money spent on social services for immigrants who seek work/asylum means less money for services for British people already living here.

3. The more power immigrants who seek work/asylum obtain in Britain, the more difficult it is for British people already living here.

4. As immigrants who seek work/asylum take advantage of British education, there are fewer spots and opportunities available for British students already living here.

5. Allowing immigrants who seek work/asylum to decide on political issues means that British people already living here have less say in how the country is run.

6. The more immigrants who seek work/asylum the UK accepts, the harder it is for British people already living here to get ahead.

7. More good jobs for immigrants who seek work/asylum means fewer good jobs for British people already living here.

8. Financial aid to immigrants who seek work/asylum hurts British people already living here.

**Supplement – Response Surface Analyses Coefficients for Each Study**

**Study 1: Evaluation – self-transcendence vs self-enhancement dimension**

estimate SE t.value p.value

a1 0.6210100 0.10841472 5.72809663 2.122644e-07

a2 0.0125377 0.12847601 0.09758787 9.225270e-01

a3 -0.1327100 0.11054548 -1.20050136 2.338259e-01

a4 -0.0275623 0.10300392 -0.26758497 7.897734e-01

$p11

[1] 0.07536583

$p10

[1] 2.537125

**Study 1: Symbolic threat – self-transcendence vs self-enhancement dimension**

estimate SE t.value p.value

a1 -1.169290 0.14642404 -7.9856424 1.498444e-11

a2 0.067131 0.16832643 0.3988144 6.911942e-01

a3 0.232390 0.14930155 1.5565143 1.239109e-01

a4 0.252249 0.13520351 1.8656986 6.610141e-02

$p11

[1] -1.354383

$p10

[1] 21.24933

**Study 1: Evaluation – conservation vs openness dimension**

a1 -0.012320 0.11443278 -0.1076615 0.91455960

a2 0.206393 0.11655174 1.7708272 0.08076389

a3 -0.052460 0.09761498 -0.5374175 0.59261372

a4 -0.157687 0.10290766 -1.5323155 0.12976714

$p11

[1] 0.9605076

$p10

[1] 0.3242684

**Study 1: Symbolic threat – conservation vs openness dimension**

estimate SE t.value p.value

a1 0.020750 0.15454502 0.134265086 0.89356245

a2 -0.390855 0.15276821 -2.558483872 0.01258650

a3 0.000590 0.13183218 0.004475387 0.99644138

a4 0.259455 0.13502768 1.921494898 0.05857346

$p11

[1] -0.9835304

$p10

[1] 0.0526331

**Study 2: Evaluation – self-transcendence vs self-enhancement dimension**

estimate SE t.value p.value

a1 0.53130 0.09697608 5.4786707 1.219774e-07

a2 -0.03645 0.08146743 -0.4474181 6.550344e-01

a3 0.03894 0.10888613 0.3576213 7.209859e-01

a4 -0.19417 0.10288713 -1.8872137 6.051099e-02

$p11

[1] 1.677339

$p10

[1] -1.132263

**Study 2: Symbolic threat – self-transcendence vs self-enhancement dimension**

estimate SE t.value p.value

a1 -0.69273 0.1471035 -4.7091331 4.517366e-06

a2 0.05735 0.1209423 0.4741932 6.358548e-01

a3 -0.24917 0.1559134 -1.5981306 1.115175e-01

a4 0.17705 0.1383840 1.2794105 2.021643e-01

$p11

[1] -0.4751577

$p10

[1] 11.13838

**Study 2: Evaluation – conservation vs openness dimension**

estimate SE t.value p.value

a1 -0.18818 0.08681998 -2.1674735 0.03132369

a2 0.06191 0.06524894 0.9488277 0.34379888

a3 -0.01034 0.08811239 -0.1173501 0.90669477

a4 0.03289 0.07732772 0.4253326 0.67102978

$p11

[1] 10.44447

$p10

[1] 32.60483

**Study 2: Symbolic threat – conservation vs openness dimension**

estimate SE t.value p.value

a1 0.29162 0.12109564 2.4081792 0.01689622

a2 -0.02992 0.08634421 -0.3465200 0.72929888

a3 0.07832 0.12240351 0.6398509 0.52296696

a4 0.05552 0.09894341 0.5611289 0.57530796

$p11

[1] -0.2020879

$p10

[1] 1.481591

**Study 3: Evaluation – self-transcendence vs self-enhancement dimension**

estimate SE t.value p.value

a1 0.46838 0.09496054 4.9323646 2.132739e-06

a2 -0.12933 0.06551903 -1.9739304 5.022651e-02

a3 0.19384 0.12671819 1.5296936 1.281987e-01

a4 -0.07703 0.13743514 -0.5604826 5.759865e-01

$p11

[1] -4.191178

$p10

[1] 9.466279

**Study 3: Symbolic threat – self-transcendence vs self-enhancement dimension**

estimate SE t.value p.value

a1 -0.64651 0.13435603 -4.8119166 3.609885e-06

a2 0.18329 0.09332544 1.9639874 5.138010e-02

a3 -0.33271 0.17928561 -1.8557541 6.545086e-02

a4 0.14501 0.19482277 0.7443175 4.578488e-01

$p11

[1] 1.76034

$p10

[1] -4.969298

**Study 3: Evaluation – conservation vs openness dimension**

estimate SE t.value p.value

estimate SE t.value p.value

a1 -0.12469 0.09797407 -1.2726836 0.2050995

a2 0.06699 0.09158547 0.7314479 0.4656468

a3 -0.20253 0.09298049 -2.1781989 0.0309532

a4 -0.20531 0.08672674 -2.3673206 0.0191935

$p11

[1] 0.9388273

$p10

[1] 0.9364738

**Study 3: Symbolic threat – conservation vs openness dimension**

estimate SE t.value p.value

a1 0.17722 0.13861688 1.2784879 0.203052080

a2 -0.06256 0.12988328 -0.4816632 0.630747188

a3 0.36100 0.13155206 2.7441607 0.006807236

a4 0.26616 0.12301896 2.1635689 0.032080771

$p11

[1] -0.9068305

$p10

[1] 2.401818