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The Unique Effects of Blatant Dehumanization on Attitudes and Behavior towards Muslim Refugees during the European 'Refugee Crisis' Across Four Countries

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Abstract

Blatant dehumanization has recently been demonstrated to predict negative outgroup attitudes and behaviors. Here, we examined blatant dehumanization of Muslim refugees during the 'Refugee Crisis' among large samples in four European countries: the Czech Republic (N = 1307), Hungary (N = 502), Spain (N = 1049), and Greece (N = 934). Our results suggest that blatant dehumanization of Muslim refugees is (a) prevalent among Europeans, and (b) uniquely associated with anti-refugee attitudes and behavior, beyond political ideology, prejudice, and—of particular relevance to the refugee crisis—empathy. We also find that blatant dehumanization of Muslim refugees is significantly higher and more strongly associated with intergroup behavior in the Eastern European countries (especially the Czech Republic) than in Spain and Greece. Examining a range of outgroup targets beyond refugees, our results further illustrate that blatant dehumanization is not purely an ethnocentric bias: while individuals across contexts feel warmer towards their group than all others, they rate several high-status outgroups as equally or more fully 'evolved and civilized' than the ingroup. Our research extends theoretical understanding of blatant dehumanization, and suggests that blatant dehumanization plays an important and independent role in the rejection of Muslim refugees throughout Europe.

Keywords

Disciplines

Cognition and Perception | Cognitive Psychology | Communication | Community Psychology | Defense and Security Studies | Gender, Race, Sexuality, and Ethnicity in Communication | International and Area Studies | International and Intercultural Communication | International Relations | Peace and Conflict Studies | Personality and Social Contexts | Social and Behavioral Sciences | Social Influence and Political Communication | Social Psychology | Social Psychology and Interaction

The unique effects of blatant dehumanization on attitudes and behavior towards

Muslim refugees during the European 'Refugee Crisis' across four countries

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Word Count: 10,931

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48 Key words: Dehumanization; Empathy; Refugees; Islamophobia
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Introduction

In 2015, over one million people sought to escape conflicts in Syria and across the Middle East by seeking refuge in Europe. Boats, often loaded far past capacity, carried these refugees across the Mediterranean from Turkey and North Africa, mostly to Greece. As the migration accelerated, it was quickly dubbed a 'refugee crisis'. European governments responded in a variety of ways ("Migrant crisis: Migration to Europe explained in seven charts," 2016). Some countries, like Germany, opened their doors to the refugees, while others took hardline anti-refugee stances, with Denmark passing overt anti-refugee laws allowing the seizure of asylum seekers' valuables (Tange, 2016), and Hungary erecting a 175 km fence along its southern border and launching a large-scale public service campaign discouraging the settlement of Muslim refugees (Nolan, 2015).

Some commentators derided the harsh responses towards refugees during the crisis, suggesting that hostility towards refugees reflected a dehumanizing view of Muslims held by many in Europe (Ferrieira, 2015; Taylor, 2015). The statements of several European politicians lend credence to this perspective. Responding to the crisis, David Cameron referred to the refugees as a "swarm", Janusz Koran-Mekka, a Polish Member of the European Parliament (MEP), referred to an "invasion of human trash", and Zsolt Bayer, founder of Hungary's ruling Fidesz party, published an editorial referring to the "hordes" of migrants as "wild beasts" and "lice" (Bayer, 2015).

These statements suggest that Muslim refugees are perceived – at least by some Europeans – as less than fully human. But how prevalent, consequential and comparable is this view across Europe? We designed the current research to address these questions.

Our work is not the first to suggest that dehumanization may be an important contributor to hostility, including that targeted at refugee groups. At the same time, there are several important features of our work that combine to distinguish it from prior research on anti-refugee hostility, including its (1) emphasis on overt (*vs.* more subtle) dehumanization, (2) the use (and, where possible, comparison) of several large community samples across Europe during a unique point in time when it was directly impacted by an acute refugee 'crisis', (3) examination of actual behavior, and (4) examination of dehumanization controlling not only for political conservatism and affective prejudice (considered in prior work), but also empathy, a construct particularly likely to be relevant in the context of the refugee crises. We discuss each of these points below in developing the rationale for our predictions.

Previous research on the dehumanization of refugees

Although early theorizing about dehumanization focused on its more blatant and explicit incarnations, empirical research on dehumanization over the past several decades has primarily examined dehumanization in its more subtle, 'everyday' forms. One prominent branch of this research, for example, has shown that people have the tendency to attribute fewer 'human-specific' emotions and traits to outgroup others (for review, see Haslam & Loughnan, 2014). For example, Cuddy, Rock, and Norton (2007) found that individuals who attributed fewer uniquely-human emotions to outgroup survivors of Hurricane Katrina (i.e., 'infrahumanized' them; see Leyens et al., 2000) intended to help them less, and Andrighetto, Baldissari, Lattanzio, Loughnan, and Volpato (2014) similarly observed that Italians who denied Haitians uniquely-human traits expressed less willingness to help after a humanitarian crisis. Lending experimental support, work in

Europe indicates that Turks who are described with infrahumanizing words are more strongly discriminated against than those described with humanizing words or with no humanity-relevant words (Pereira, Vala, & Leyens, 2009). Of particular relevance to the current research, previous work (completed before the refugee crisis) showed that Europeans who infrahumanized Muslim refugees by denying them human-specific emotions were more likely to oppose Muslim immigration to Europe (Leyens, Demoulin, Vaes, Gaunt, & Paladino, 2007; see also Esses, Medianu, & Lawson, 2013, for an important review of research examining subtle or implicit dehumanization towards refugees in Canada).

This previous work demonstrates that subtle dehumanization has a role to play in people's responses to refugees. However, the statements by European leaders in recent years suggest that the dehumanization held by a portion of the European populace may extend beyond subtle and potentially unconscious perceptions to overt and blatant expressions. And the distinction between blatant and subtle dehumanization appears to be consequential, with recent research suggesting that they are separable constructs with distinct effects (see Kteily & Bruneau, in press, for a review). Indeed, these two forms of dehumanization assessed among Americans, Brits, Israelis, and Hungarians towards a host of target groups (e.g., Arabs, Muslims, the Roma) are only weakly correlated (rs ~ .1-.3), and blatant dehumanization is the stronger predictor of hostile and aggressive outcomes (Kteily, Bruneau, Waytz, & Cotterill 2015). For example, in the U.S. and the U.K., the degree to which Arabs, Muslims and Mexican immigrants are blatantly dehumanized predicts support for aggressive anti-terrorism policies better than subtle

measures of dehumanization, which tend to have weaker and less consistent effects

(Kteily et al., 2015; Kteily & Bruneau, 2017).

Given that blatant dehumanization is strongly associated with the types of hostile

attitudes that may be particularly relevant to the refugee crisis (e.g., the barring of entry

to refugees; the sequestering of refugees within confined spaces), it is important to extend

the examination of dehumanization beyond the subtle and implicit to the more blatant and

overt. In the current research, we used validated measures to examine blatant

dehumanization of Muslim refugees during the refugee crisis across a range of European

countries (the Czech Republic, Greece, Spain, and Hungary), using large community

samples (Ns = ~ 500 – 1,400), and examined both attitudes and behavior.

We examined the unique contribution of blatant dehumanization to intergroup

attitudes and behavior in concert with a range of other predictors. Previous work

assessing the unique association between dehumanization and intergroup outcomes has

included as parallel predictors measures of ideological orientation— including social

dominance orientation (SDO; Esses et al., 2008; Kteily et al., 2015), right-wing

authoritarianism (Kteily et al., 2015), and political conservatism (Kteily et al., 2015;

Kteily, Hodson, & Bruneau, 2016; Leidner, Castano, & Ginges, 2013; Maoz &

McCauley, 2008), as well as measures of prejudice (Goff et al., 2008, 2014; Jardina &

Piston, 2016; Kteily et al., 2015; Kteily et al., 2016; Kteily & Bruneau, 2017). In the

current research, we also include measures of political conservatism and affective

prejudice. Additionally, and new to the current research, we also consider the extent to

which blatant dehumanization predicts outcomes controlling for empathy.

Blatant dehumanization and empathy

Like prejudice and right-leaning ideological beliefs, empathic failures have been broadly implicated in intergroup conflict (Batson & Ahmad, 2009; Cikara, Bruneau, & Saxe, 2011; Bruneau, Cikara, & Saxe, 2017), and there is good reason to think that empathy may be especially relevant during an acute humanitarian crisis like the one we consider here: Many of the images emanating from the refugee crisis, including those with direct appeals for help, depict individuals in desperate conditions as they are escaping atrocities in their homeland, and many of these images and stories have been shared widely on social media. Perhaps no example is more striking than the image of Aylan Kurdi – a two-year old Syrian boy whose lifeless body was photographed on a Turkish beach after he had drowned during an attempt to escape Syria for Europe. Images of Kurdi sparked an outpouring of empathy worldwide, exemplified through 10-fold increases in charitable donations in the week following the release of his image ("Refugee donations surge after Aylan Kurdi photo", 2015).

We therefore reasoned that empathy would be an important (and heretofore unconsidered) predictor to control for when examining the unique effects of blatant dehumanization on intergroup outcomes. Specifically, we included in our regression analyses measures of trait empathic concern (the proclivity to feel compassionate towards others) and trait perspective-taking (the propensity to adopt another's perspective) (Davis, 1983). In intergroup contexts, empathic concern is strongly associated with altruism, even towards outgroup others (Batson, Chang, Orr, & Rowland, 2002), and perspective taking has been shown to decrease stereotypes and reduce ingroup favoritism (Galinsky & Moskowitz, 2000). Empathy has also been shown to be associated with subtle forms of dehumanization when negotiating intergroup conflict (Čehajić, Brown, &

González, 2009) and when considering humanitarian aid. In fact, the effect of Italians'

subtle dehumanization of Haitians on their unwillingness to help after a humanitarian

crisis was entirely explained by the association between subtle dehumanization and

empathy (Andrighetto et al., 2014).

Previous research has largely measured state empathy towards an outgroup, and

conceptualized dehumanization as a precursor to outgroup empathy (Andrighetto et al.,

2014; Čehajić, Brown, & González, 2009). In the current research, we instead used

measures of trait empathy. Because trait measures are generally considered to reflect

stable personality characteristics, we conceptualized blatant dehumanization and trait

empathy as parallel psychological processes affecting outcomes (as in previous work,

e.g., Mekawi, Bresin, & Hunger, 2016).

Blatant dehumanization and prejudice

One concern with measures of blatant dehumanization is that they are so overt

that people might use them merely as reflections of their extreme dislike for another

group (Haslam & Loughnan, 2014). Previous studies do show that the 'Ascent of

(Hu)Man' measure of blatant dehumanization and feeling thermometer ratings typically

correlate robustly with each other (*r*s ~ .50-.60; Kteily et al., 2015; Kteily & Bruneau,

2017).

At the same time, there is good reason to believe that blatant dehumanization and

prejudice could be conceptually distinct. For example, people may dislike an outgroup

but still acknowledge the scientific and technical advances achieved by that group, or the

sophistication of their culture or system of government. Conversely, individuals might

feel warmly towards another group even as they view them as relatively primitive or

incapable (e.g., the 'Noble Savage'). Even when they align, prejudice and dehumanization could predict outcomes for different reasons: for example, if someone perceives refugees as savage, aggressive, and lacking morality (attributes central to blatant dehumanization; Bastian, Haslam, & Denson, 2013; Kteily et al., 2015) that might help explain their desire to bar them entry into the country (i.e., to limit any perceived physical threat), beyond someone's level of dislike for refugees. Similarly, individuals could seek to avoid the entry of another group they disliked even if they didn't necessarily see them being less human— perhaps, for example, because they perceived their values as *different* (if equally human-like), felt that they would place an undue strain on the ingroup, or simply didn't see them as a group with whom their interests are aligned. Indeed, previous work has shown that blatant dehumanization and affective prejudice independently predict intergroup outcomes similar to those considered here (e.g., Jardina & Piston, 2016; Kteily et al., 2015; Kteily & Bruneau, 2017).

In the current research, we sought to further theorizing about the distinction between blatant dehumanization and prejudice in two ways: First, we investigated whether dehumanization and prejudice independently predicted attitudes and behavior towards refugees (while also taking into account trait empathy and political conservatism).[1] Second, we took advantage of the fact that Ascent dehumanization and feeling thermometer ratings were measured in each sample towards a broad array of target groups to test whether blatant dehumanization and prejudice ratings across groups might diverge. Specifically, we reasoned that individuals would likely feel greater

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[1] Notably, some research has examined affective prejudice as a mediator of dehumanization's effects on outcome measures (e.g., Esses et al., 2008). Although it is certainly plausible that seeing a group as less than human could induce dislike, which would in turn impact behavior, we chose not to specify any causal ordering between these two constructs here given our correlational data.

warmth towards their ingroup versus all outgroups (consistent with research on ingroup

favoritism; e.g., Tajfel & Turner, 1979), but that they might nevertheless perceive

members of relatively advantaged, 'highly developed' countries to be equally (or more)

'evolved and civilized' than their ingroup. The inclusion of target groups from relatively

advantaged countries (e.g., Germans, Swedes) allowed us to directly examine this

potential dissociation (see also Capozza, Andrighetto, Di Bernardo, & Falvo, 2012;

Iatridis, 2013; and Vaes & Paladino, 2010 for related examinations with subtle or implicit

dehumanization).

Cross-national comparisons

The primary goal of the present research was to document the unique role of

blatant dehumanization in the attitudinal and behavioral rejection of refugees during

Europe's 'refugee crisis'. However, since the large community samples all included a few

measures in common, and three of the four samples were collected during the same time

window, we also engaged in cross-national comparisons where feasible and appropriate.[2]

Although previous cross-national research in Europe has not examined dehumanization,

Pew Global Surveys, the European Social Survey, European Value Study, and

Eurobarometers show the same broad pattern: Similarly high levels of prejudice and

hostility towards Muslims and immigrants in the Czech Republic, Hungary and Greece,

with markedly lower levels in Spain (e.g., Doebler, 2013; Meuleman, Davidow, & Billiet,

2009; Schlueter, Meuleman, & Davidov, 2012; Strabac & Listhaug, 2008).

Given this past research, we predicted that Spain would report less anti-refugee

hostility than the Czech Republic and Hungary. Our prediction for Greece was less clear.

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[2] Each translation was completed by a bilingual social scientist (fluent in English and the local language) from the target country.

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On the one hand, Greece received approximately 80% of the over 1 million refugees arriving to European shores by sea in 2015, and this massive influx of 'outsiders' could generate levels of symbolic and realistic threat (Stephan & Stephan, 2000) greater than in the Czech Republic and Hungary, where the influx of refugees was far less. Such threat might keep dehumanization and prejudice as high (or higher) among Greeks as among Hungarians and Czechs.

On the other hand, at least two factors might lead blatant dehumanization and prejudice among Greeks to be lower than observed in Hungary and the Czech Republic. First, the policies of the left-wing Greek ruling party were far more pro-refugee than the overtly anti-refugee stances taken by leaders in both Hungary and the Czech Republic (and the previous Greek government; Psaropoulos, 2015). Since previous work suggests that generous integration policies provide a normative cue to the populace that reduces anti-immigrant attitudes (Schleuter, Meuleman, & Davidov, 2012), this might result in lower levels of dehumanization and prejudice in Greece relative to Hungary and the Czech Republic (see also research in political science on elite framing effects; e.g., Kinder and Sanders, 1990; Sniderman and Theriault, 1999). Second, the close proximity of Greek citizens to the refugees provided greater opportunities for both direct and indirect contact, which has been shown in many contexts to reduce prejudice (Pettigrew, Christ, Wagner, & Stellmacher, 2007; Tropp & Pettigrew, 2006), and which we reasoned might also lower dehumanization (Capozza, Trifletti, Vezzali, & Favara, 2013). The levels of blatant dehumanization and prejudice in Greece as compared to Hungary and the Czech Republic— as well as these countries' levels compared to Spain— were therefore of particular interest in the cross-national analyses.

Present Research

We conducted this research using four large samples (and one supplemental sample). In Study 1, we examined blatant dehumanization towards Muslim refugees in the Czech Republic using a large, representative sample in March, 2017. Studies 2-4 included large samples obtained in Hungary, Spain, and Greece a year and a half earlier (September to November of 2015), during the peak (thus far) of refugee migration. In these samples, we examined the unique link between dehumanization and opposition to refugees using blatant dehumanization, prejudice and trait empathy (i.e., empathic concern and perspective taking) as predictors, and a set of outcome measures assessing policy support and behavior. Although the samples were not perfectly matched across countries, we also engaged in an exploratory cross- national analysis.[3]

Study 1

Method

Participants. In March, 2017 we collected data from a sample of 2,012 Czechs. Participant responses were collected via phone ($N = 705$) and internet ($N = 1,307$). The survey company with which we worked ("Median") was contracted to ensure representativeness across several criteria (through targeted sampling and sample weighting), including age, gender, work status, education, region, and settlement size (as well as age x education). The Ascent dehumanization measure – which requires the presentation of visual material – was included only for the internet respondents. In order to best compare across the online samples collected from the other countries, we

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[3] Data and syntax files for all studies available at DOI 10.17605/OSF.IO/W98CH

restricted our analyses in Study 1 to the internet sample (*M* age = 40.50, *SD* = 14.20; 49.9% male).

Measures.

For Study 1 and each of the other studies, items were included in the surveys that were beyond the scope of the current research (e.g., examining attitudes towards the Roma minority population). These results are not reported here.

For each of the studies, items were presented in the native language, and all measures were presented in the order presented here.

Prejudice was assessed using a feeling thermometer, which asked participants "How warm (favorable) or cold (unfavorable) do you feel towards the following groups?" (Haddock, Zanna, & Esses, 1993). Ratings were made for the following groups: Czechs, Germans, Jews, the Roma, Eastern European immigrants, Muslim refugees ("uprchlíci z převážně muslimských zemí")[4], Czech city dwellers and Czech villagers. Ratings were made using a 5-point scale anchored at 1 ('Very unfavorable') and 5 ('Very favorable'); scores were converted to a 100-point scale for ease of comparison with blatant dehumanization. Relative prejudice towards each group was computed by subtracting warmth expressed towards the target outgroup from warmth expressed for the Czech ingroup.

Blatant Dehumanization was assessed using the 'Ascent of (Hu)Man' scale (Kteily et al., 2015). Participants used slider bars to indicate how 'evolved and civilized' they considered each of the target groups included in the prejudice measure. Groups were presented in random order across participants, and responses were provided on a scale

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[4] For this and all subsequent studies, we provide the translation for the key target group: 'Muslim refugees'. Translators were instructed to use the translation that was most commonly understood in the target country, rather than the literal translation.

anchored at 0 (left side of the image) and 100 (right side of the image). As in previous

work (e.g., Kteily et al., 2015), we computed relative dehumanization of each group by

subtracting the target group's Ascent rating from Czechs' (i.e., ingroup) Ascent rating,

such that higher scores indicate greater outgroup dehumanization.[5]

Anti-refugee policies support was assessed by providing participants with four

policies that were being debated in the Czech Republic at the time of the survey: e.g.,

"We should not be afraid to use violence if needed to keep Muslims out of the Czech

Republic" (see supplementary materials). Ratings were made on 5-point scales anchored

at 1 ('Strongly agree') and 5 ('Strongly disagree') (α = .79).

Asylum Support was assessed with the following: "Last year, of the 330,000

people from Muslim majority countries seeking asylum in the EU, 460 were granted

asylum in the Czech Republic. Do you think this number is too high, about right, or too

low?" Responses were made on a 5-point scale, anchored at -2 ("We should accept much

less than 460 per year") and +2 ("We should accept much more than 460 per year").

Sign refugee petitions. To obtain a measure of behavior towards refugees, we

provided participants with the opportunity to sign two petitions about Muslim refugees.

Specifically, we provided participants with the following: "Since we are collecting

information from a representative sample of Czechs, we plan to deliver these last

responses to the Czech government for consideration in making policies. Please let us

know if you would like your vote counted for (or against) the following petitions: (1)

'We should be investing more money and resources to support the refugees who are

fleeing war and hardship and coming to our borders' (pro-refugee) and (2) 'We should be

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[5] We obtained very similar results across studies if we used absolute humanity attributions of the outgroup rather than ratings relative to the ingroup.

seizing assets from Muslim immigrants and refugees to pay for their stay in the Czech

Republic' (anti-refugee). Participants reported whether they wanted their vote counted for

the petition (coded 1), against the petition (coded -1), or not counted (coded 0). The zero-

order correlation between these items was low ($r = -.26$), so they were each examined

separately.

Another blatant dehumanization measure based on attributions of overt

animalistic traits (see Bastian & Haslam, 2010; Kteily et al., 2015) was included in the

survey; results using this measure are reported in supplementary analyses. For this study

and the following studies, measures were included in our omnibus survey for purposes

beyond the current research; those measures are not considered here. For the full surveys,

see supplemental materials.

Results and Discussion

For mean responses and zero-order correlations of all measures, see Table S1.

We observed substantial mean-level dehumanization of Muslim refugees, who

were rated to be over 37 points lower on the Ascent scale than Czechs. Muslim refugees

were dehumanized more than all other groups ($ts > 31.0$, $ps < .001$), except Muslims and

the Roma (Table 1).

Participants also reported strong opposition to refugees on all measures (see Table

S1). For example, when asked whether the Czech Republic's granting of asylum to 460

Muslim refugees in the past year was too low or too high, the modal response (made by

49.4% of participants) was "We should accept *much less* than 460 per year". In addition,

more than twice as many respondents signed the petition endorsing violence against

refugees to protect the border ($N = 455$) than signed the petition opposing such violence

(N = 187; M = 0.22, SD = 0.69, relative to the scale midpoint of 0: $t(1215)$ = 11.1, $p <$

0.001), and more people signed the petition against providing more aid to refugees (N =

464) than signed in favor of providing aid (N = 189; M = –0.23, SD = 0.70, relative to the

scale midpoint of 0: $t(1198)$ = 11.3, $p < 0.001$).

We next examined whether these anti-refugee attitudes and behaviors were

uniquely related to blatant dehumanization of Muslim refugees, controlling for prejudice

(feeling thermometer ratings) and demographics (age, gender). As can be seen in Table 2,

blatant dehumanization of Muslims was strongly and uniquely associated with each of the

outcome measures, as was prejudice. Study 1 also included an alternate measure of

dehumanization (trait-based blatant dehumanization), as well as other demographic

variables (education, SES) that could be included as covariates.[6] Results remained

similar (with blatant dehumanization and prejudice independently predicting all of the

outcomes) when the trait-based measure of dehumanization was used in place of the

Ascent measure (see Table S2), when education and SES were included as additional

covariates, and/or when all covariates were excluded from analyses.

Thus, the results of Study 1 were consistent with previous work (Esses et al.,

2008; Esses et al., 2012) in illustrating the importance of dehumanization to anti-refugee

hostility, and extend that work by illustrating a unique association between blatant

dehumanization and both attitudes *and* behavior directed at Muslim refugees using a

validated measure of blatant dehumanization in a large community sample broadly

representative of Czech society (across a range of criteria) during an acute influx of

refugees.

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[6] To remain consistent with the other studies, we included as covariates only the demographic variables that were also measured in Studies 2-4 (age, gender), and not those that were unique to Study 1. When the additional covariates were included here, results remained similar.

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Finally, these results highlight a distinction between blatant dehumanization and 'mere' prejudice by showing that although Czechs report significant prejudice towards all outgroups relative to their own, they do not dehumanize all other groups relative to Czechs. Specifically, Czech people rated Germans ($M = 89.96$, $SD = 18.35$) to be just as 'evolved and civilized' as Czechs ($M = 90.43$, $SD = 16.02$; $t(1306) = 1.05$, $p = .29$), despite rating all groups (including Germans) as significantly lower in warmth using the feeling thermometer measure of prejudice ($ps < .001$; see Table 1).

Study 2

Study 2 took place during November, 2015 in Hungary, which served as a flashpoint of the refugee crisis around this time. In early 2015, the Hungarian government launched a major anti-immigration campaign by posting a series of billboards around the country that were ostensibly aimed at immigrants (e.g., "If you come to Hungary, you cannot steal our jobs"). Hungary also constructed a fence along their southern border, expressly built to keep refugees out of the country, and blocked the transportation of refugees through the country on the railway system. Combined with high-profile comments by Hungarian leaders dehumanizing Muslim refugees (e.g., Bayer, 2015), the political elites in Hungary seemed particularly encouraging of anti-refugee dehumanization and hostility.

On the other hand, an outpouring of concern was also observed at this time around the world in response to several harrowing images of refugees drowning in their attempts to reach Europe, including the image of Aylan Kurdi. We therefore thought that a disposition towards empathy would be important to take into account, and reasoned that it was likely to predict more positive attitudes and behavior towards Muslims. To test

this, we included trait empathic concern and trait perspective taking as additional

predictors, along with blatant dehumanization and prejudice. We also measured political

conservatism in Study 2, which we included in our regressions.

Of note, the survey in Hungary also included a measure of subtle dehumanization

(i.e., infrahumanization; Leyens et al., 2000). This allowed us to examine (in

supplemental analyses) whether blatant dehumanization was, as we theorized, a stronger

predictor of anti-refugee hostility than subtle dehumanization, and therefore to connect

the present research with prior work investigating the association between subtle

dehumanization and anti-refugee sentiments (Esses et al., 2013; Leyens et al., 2007).

Methods

Participants. We recruited a sample of 604 Hungarian participants using a

Hungarian survey company ('Kerdoivem'). A stratified random sampling method based

on quotas for gender, age (18-64), and region (i.e., capital city, county center, city and

village community) was used to obtain a sample representative of Hungarian society on

these three criteria. Of the participants, 102 missed one of two check questions embedded

in the survey, leaving 502 participants (M age = 40.56, SD = 13.15; 46.6% male).

Measures.

We measured blatant dehumanization and prejudice as in Study 1, but with

'Hungarians' as the ingroup on both measures, and with the following outgroup targets:

Germans, French, Transylvanians, Slovaks, the Roma, and Muslim refugees

("menekültek"). Among other context-specific items assessing anti-refugee hostility, we

also had one outcome measure identical to an item presented in Study 1: a single petition

item requesting additional aid for refugees (as in Study 1, participants were given the opportunity to sign this petition, to sign *against* this petition, or to not sign either).

Also included in the survey were two measures of trait empathy (i.e., empathic concern, and perspective taking), a measure of conservatism, and items assessing anti-refugee policy support and support for asylum (all described below).

Trait Empathic Concern was assessed by presenting participants with the seven items from the Interpersonal Reactivity Index (IRI; Davis, 1980) that comprise the Empathic Concern subscale (e.g. "I often have tender, concerned feelings for people less fortunate than me"; $\alpha = .80$). Participants indicated how true each statement was for them on a 4-point Likert scale, anchored at 1 ('Not at all true') and 4 ('Very true').

Trait Perspective Taking was assessed by presenting participants with the seven items from the IRI that comprise the Perspective Taking subscale (e.g. "I try to look at everybody's side of a disagreement before I make a decision"; $\alpha = .71$), using the same rating scale as for trait empathic concern. Items from the empathic concern and perspective taking subscales were interspersed with each other and presented in random order for each participant.

Anti-refugee policies support was assessed by providing participants with four policies that were debated during Europe's refugee 'crisis': e.g., "We should dramatically decrease the amount of aid we provide to refugees in order to deter them from trying to come to our country". Ratings were made using sliders anchored at 0 ('Strongly oppose') and 100 ('Strongly support') ($\alpha = .84$).

Asylum. In order to directly assess how many refugees participants would be willing to accept into Hungary, we asked the following: "Of the estimated 1,000,000

refugees who could reach Europe this year, how many do you think Hungary should

grant asylum to, allowing them to live there permanently? (Range: 0 - 100,000)" Because

of the large range of possible responses, results were log transformed.

Social Distance. We assessed social distance (Bogardus, 1933) by having

participants report how strongly they agreed with 5 scenarios that put them in social

proximity with refugees (e.g., "It would bother me if my son or daughter ended up

marrying a Muslim refugee"). Responses were made using unmarked sliders anchored at

0 ('Completely disagree') and 100 ('Completely agree') ($\alpha = .87$).

Response to Injustice. To examine how Hungarians responded to injustices

perpetrated by their ingroup towards the refugees, we provided participants with a news

story of a Hungarian who had handed out orange juice laced with laxative to needy

Muslim refugees, and a tweet praising the act that had over 2,500 'likes'. We asked

participants to report how much anger, guilt and shame they felt as a Hungarian on

unmarked sliders anchored at 0 ('None at all') and 100 ('A lot'). Past work has shown

that group-based emotions such as anger, guilt and shame in response to ingroup

wrongdoings motivate pro-social behavior across group boundaries (Brown & Cehajic,

2008; Glasford, 2013; Hewstone et al., 2004). Although these emotions can be thought of

as separate constructs, responses across all three items were strongly correlated, so

responses were averaged to create a single measure ($\alpha = .87$).

Results

For mean responses and zero-order correlations of all measures, see Table S3.

As in the Czech Republic, Muslims refugees were heavily dehumanized in

Hungary, rated more than 25 points below the ingroup on the Ascent scale. Refugees

were dehumanized more than all other groups ($ts > 17.0$, $ps < .001$), except the Roma

(Table 3). Participants also reported high prejudice towards refugees, rating them over 40

points lower on the feeling thermometer than the ingroup.

For the outcome measures, Hungarians were willing to take in an average of

13,827 refugees (range = 0 - 40,000; $SD = 33,859$), were generally supportive of anti-

refugee policies ($M = 59.59$, $SD = 29.31$; relative to the scale midpoint of 50: $t(501) =$

7.33, $p < 0.001$), and were significantly more willing to petition *against* refugee aid than

for it ($M = –0.13$, $SD = 0.81$, relative to the scale midpoint of 0: $t(501) = 3.52$, $p < 0.001$).

Consistent with our predictions, dehumanization of Muslim refugees was

significantly (though weakly) negatively correlated with trait empathic concern ($r = -.18$,

$p < .001$) and perspective taking ($r = -.18$, $p < .001$). Consistent with previous research

(Kteily et al., 2015; Kteily & Bruneau, 2017), blatant dehumanization was robustly

correlated with both prejudice ($r = .66$, $p < .001$) and with political ideology ($r = .38$, $p <$

.001).

Also consistent with Study 1, blatant dehumanization and prejudice were each

uniquely associated with all of the outcome measures (including both attitudes and

behavior), controlling for all other measures. Here, we included not only demographic

covariates (age and gender), but also trait empathic concern, trait perspective taking, and

conservatism (Table 4). Trait empathic concern and conservatism were independently

associated with four of the outcome measures (with more empathic and more liberal

individuals exhibiting less hostile attitudes towards refugees), whereas trait perspective

taking was not significantly associated with any.[7] As with the Czech data, the results

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[7] As in Study 1 (and true also for all subsequent studies) results were consistent when covariates were
removed from regression analyses.

were similar when using either of the blatant dehumanization measures: Replacing

'Ascent dehumanization' with a trait-based measure of blatant dehumanization yielded

similar results, with blatant dehumanization and prejudice independently predicting all of

the outcomes (see Table S4).

The inclusion of infrahumanization in the Hungarian sample also allowed us to

directly compare the association between the outcome measures and each of subtle versus

blatant dehumanization (see supplemental materials and Table S5). We found that blatant

dehumanization was significantly more strongly correlated with each of the outcome

measures than subtle dehumanization (Steiger's $Zs > 5.20$, ps < .001), and subtle

dehumanization remained a significant predictor of only 2 outcome measures (social

distance, and anti-refugee policy support) once blatant dehumanization was accounted

for. These results highlight the divergence between subtle and blatant dehumanization,

and the importance of examining blatant dehumanization with respect to hostile

responses (Kteily & Bruneau, in press).

When examining the ratings of blatant dehumanization and prejudice towards the

ingroup relative to each of the target outgroups, we found that Hungarians, like Czechs,

did not dehumanize Germans relative to their own group. On the other hand, and in line

with the Czech respondents, Hungarians reported significant levels of prejudice towards

all groups (including Germans) relative to the ingroup (see Table 3).

Discussion

Study 2 expanded our analysis of anti-refugee sentiment to another Eastern

European country at the heart of the refugee 'crisis', and extended the analysis to include

trait empathy and conservatism as predictors. Similar to the Czech sample, we found that

Hungarian dehumanization of (and prejudice towards) refugees was high, and that blatant

dehumanization was uniquely associated with all outcomes. Also similar to the Czech

sample, Hungarians reported liking other groups considerably less than Hungarians,

despite rating Germans as equally 'evolved and civilized'.

Despite the insights generated by Studies 1 and 2, these results were limited to

Eastern Europe, where prejudice and xenophobia are generally quite high relative to other

parts of Europe (Doebler, 2013; Meuleman, Davidow, & Billiet, 2009; Schlueter,

Meuleman, & Davidov, 2012; Strabac & Listhaug, 2008). In Study 3, we sought to

examine the extent of blatant dehumanization and its association with anti-refugee

hostility in Spain, a Western European country previously found in the same surveys

cited above to show relatively tolerant intergroup attitudes.

Study 3

Method

Participants. We recruited an online sample of 1188 Spanish participants in late

September 2015 using a Spanish survey company ('Netquest'); the panel from which the

sample was randomly drawn is approximately representative of Spain in terms of gender,

age, and geographic region, albeit slightly over-represented with respect to middle-age

individuals and women (the demographics of our sample closely approximated those of

the panel at large). Of the participants, 140 missed one of two check questions embedded

in the survey, leaving 1049 participants (M age = 38.81; SD = 11.56; 45.5% male).

Measures.

As in Studies 1 and 2, blatant dehumanization was assessed with the Ascent

Dehumanization measure (0-100 scale), and prejudice was assessed with feeling

thermometers (0-10 scale, converted to 0-100 scale), here with the following target

groups: Spaniards, Muslim refugees ("Refugiados musulmanes"), Muslims, Roma,

Africans, Turks, Christians, Americans, French, Germans, Swedes. Conservatism, trait

empathic concern (α = .73) and trait perspective taking (α = .69) were assessed as in

Study 2. Our behavioral measure of anti-refugee behavior was assessed with the petition

item included in both Study 1 and Study 2. Anti-refugee policy support (α = .81) and

support for asylum were assessed as in Study 2, with the following exception: We

expanded the range of the asylum item from 0-40,000 to 0-100,000 to accommodate the

larger population in Spain (~45 million) compared to Hungary (~10 million).

Results

For mean responses and zero-order correlations of all measures, see Table S6.

Our analyses focused first on mean levels of dehumanization and position on

policy stances towards Muslim refugees. As with the Czech sample, refugees were rated

to be significantly less human than the ingroup: Spaniards rated Muslim refugees to be 15

points lower on the Ascent scale than Spaniards. Refugees were dehumanized

significantly more than all groups examined ($ts > 4.5$, $ps < .001$), except Africans,

Muslims and the Roma (Table 5).

Contrary to the results from the Czech Republic and Hungary, Spanish people

were generally opposed to anti-refugee policies ($M = 39.01$, SD = 24.25; relative to the

scale midpoint of 50: $t(1048) = 14.68$, $p < 0.001$) and significantly more willing to

petition in favor of refugee aid than against it ($M = 0.44$, $SD = 0.74$; relative to the scale

midpoint of 0: $t(1047) = 19.56$, $p < 0.001$). Spaniards were willing to take in an average

of nearly 20,000 refugees (range = 0 - 100,000; $M = 18,963$, $SD = 21,046$),

Examining the inter-relationship between dehumanization and empathy, we observed that dehumanization of Muslim refugees was weakly negatively correlated with trait empathic concern ($r = -.09$, $p = .004$) and trait perspective taking ($r = -.17$, $p < .001$), similar to Study 2. Consistent with Studies 1 and 2, and previous work (Kteily et al., 2015; Kteily & Bruneau, 2017), blatant dehumanization was robustly correlated with both prejudice ($r = .52$, $p < .001$) and with political conservatism ($r = .26$, $p < .001$).

Most importantly for our purposes, and as in Studies 1 and 2, we found in a series of simultaneous regressions that dehumanization was uniquely associated with each of the outcome measures, including both attitudes (support for anti-refugee policies, rejection of refugee asylum seekers) and behavior (signing a petition in support of refugees). Separately, trait empathic concern and conservatism were also significantly associated with both anti-refugee policies support and the behavior outcome, and trait perspective taking predicted support for anti-refugee policies. Prejudice uniquely predicted all three outcome measures (see Table 6).

As in Studies 1 and 2, we also analyzed ratings of blatant dehumanization and prejudice towards the ingroup versus each of the target outgroups (see Table 5). We found that Spaniards did not dehumanize Americans and French relative to the ingroup, and significantly dehumanized their own group relative to Germans and Swedes. By contrast, Spanish participants expressed significant levels of prejudice towards all outgroups (including Germans and Swedes; $ps < .001$). Highlighting the distinction between prejudice and blatant dehumanization, Germans, for example, were rated 3 points higher than the Spanish ingroup on the blatant dehumanization scale, but 22 points lower on warmth.

Discussion

Study 3 extended the results of our analyses to a European country outside of Eastern Europe that has been shown on previous surveys to be relatively tolerant (Doebler, 2013; Meuleman, Davidow, & Billiet, 2009; Schlueter, Meuleman, & Davidov, 2012; Strabac & Listhaug, 2008). Consistent with this previous work, Spaniards in our sample were generally supportive versus antagonistic towards Muslim refugees. Despite this, we found that Muslim refugees were rated as significantly less human than the Spanish ingroup, and more importantly, that blatant dehumanization of refugees was a significant predictor of hostile anti-refugee attitudes and behavior, even when controlling for prejudice, trait empathy, and conservatism (each of which uniquely predicted at least some of the outcomes, as well). Our results were therefore consistent with Studies 1 and 2 in documenting an important and unique role of blatant dehumanization. Notably, and again as in Studies 1 and 2, we observed a discrepancy between the pattern of dehumanization and prejudice across groups, with Spaniards feeling warmer towards their group than all others, but attributing certain other groups just as much— or, here, even more— humanity than the ingroup.

Study 4

In Study 4, we aimed to examine blatant dehumanization in a country at the immediate forefront of the refugee 'crisis'. In September 2015 alone (when the survey was conducted) 160,000 refugees arrived in Greece, nearly a 30-fold increase from January of the same year (*Nationality of arrivals to Greece, Italy and Spain* 2015).

Methods

Participants. We recruited an online sample of 1101 Greek participants in late

September 2015. A Greek survey company ('The Hellenic Research House') drew this

sample from a panel representative of Greece with respect to gender, age and geographic

region. However, those who completed the survey under-represented the youngest (18-

24) and oldest (55-65) ages and included a higher number of women (63%) than the

general population (49%). Of these participants, 167 missed one of two check questions

embedded in the survey, resulting in 934 participants (*M* age = 39.23, *SD* = 10.29; 63.3%

female).

Measures.

Dehumanization (Ascent scale) and Prejudice (Feeling thermometer) were

measured as in Studies 1-3, and towards the same target groups as in Study 3, including

Muslim refugees ("Μουσουλμάνοι πρόσφυγες"), except that 'Spaniards' were replaced

with 'Greeks'.

Conservatism and trait empathy (i.e., empathic concern: α = .68; trait perspective

taking: α = .69) were measured as in Studies 2 and 3, and one of the outcome variables

(Signing pro-refugee petition) was measured as in Studies 1-3. The second outcome

variable (Asylum) was measured as in Studies 2 and 3, but, given the Greek population

size, the range was constrained to 0 – 40,000, as in Hungary (rather than 0 – 100,000, as

in Spain). The third outcome variable (anti-refugee policies support) was a four-item

measure which included three items assessed in Studies 2 and 3, and a fourth item that

differed: "We should increase the number of patrols to ensure that nobody gets into our

country illegally". Many participants reported feeling ambivalent about the fourth item in

open-ended comments at the end of the survey, since increasing patrols would hinder

refugees from entering but also prevent refugee drowning deaths. Dropping this item

from the analysis resulted in a 3-item measure of adequate reliability (α = .62); including

the fourth item clearly decreased reliability.

Results

For mean responses and zero-order correlations of all measures, see Table S7.

Similar to the Spanish sample, Greeks rated Muslim refugees to be 15 points

lower on the Ascent scale than Greeks. Also strikingly similar to the Spanish sample,

refugees were dehumanized significantly less than Muslims ($t(923) = 8.20$, $p < .001$) and

the Roma ($t(923) = 14.96$, $p < .001$), similarly to Africans ($t(924) = 1.71$, $p = .089$) (and

also Turks: $t(924) = 1.83$, $p = .067$), and significantly more than all other groups

examined (ts > 16.8, ps $< .001$) (Table 7).

For the outcome measures, Greeks were on average willing to take in nearly

10,000 refugees (range = 0 - 40,000; $M = 9,504$, $SD = 13,035$). Similar to Spaniards (and

in contrast to Hungarians and Czechs), Greeks were generally opposed to anti-refugee

policies ($M = 41.91$ $SD = 21.41$; relative to scale midpoint of 50: $t(931) = 11.54$, $p <$

$.001$), and significantly more willing to petition for refugee aid than against it ($M = 0.43$,

$SD = 0.77$; relative to the scale midpoint of 0: $t(931) = 17.09$, $p < 0.001$).[8]

As with Studies 2 and 3, dehumanization of Muslim refugees was weakly

negatively correlated with both empathic concern ($r = -.08$, $p = .02$) and perspective

taking ($r = -.08$, $p = .01$), and more strongly correlated with both prejudice ($r = .53$, $p <$

$.001$) and political ideology ($r = .26$, $p < .001$) (see Table S7).

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[8] Note that although the Greek sample included a larger proportion of women than the general population, we observed no significant gender differences in Ascent ratings of Muslim refugees (Women: $M = 72.27$, $SD = 27.72$, Men: $M = 72.04$, $SD = 27.76$; $t(924) = .119$, $p = .91$), or in their tendency to sign petitions in support of refugee funding (Women: $M = .46$, $SD = .76$, Men: $M = .38$, $SD = .79$; $t(930) = 1.46$, $p = .145$).

Most importantly for our purposes, and consistent with all the other samples, blatant dehumanization was significantly or marginally associated with all three of the outcome measures, including attitudes and behavior, after controlling for prejudice, trait empathy, and political conservatism (see Table 8). Prejudice was itself also uniquely associated with all outcomes, and trait empathic concern and conservatism were independently associated with anti-refugee policies support and signing a petition to increase refugee aid. Consistent with the weak associations between trait perspective taking and outcomes in Studies 2 and 3, trait perspective taking was not significantly associated with any of the outcome measures in Study 4.

Similar to the Spanish sample, we found that Greeks did not dehumanize Americans, and dehumanized their own group relative to both the French and Swedes (see Table 7). By contrast, and consistent with the other samples, Greeks reported significant levels of prejudice for all outgroups (for example, rating Swedes more than 16 points lower than Greeks in warmth despite rating them as 3 points more 'evolved' than Greeks).

Discussion

Overall, Study 4 was consistent with the previous studies in showing that blatant dehumanization uniquely predicted outcomes, even when considering the effects of prejudice, conservatism and trait empathy. Together, these results provide evidence for the independent association of blatant dehumanization with attitudes and behavior directly linked to rejecting and withholding support from Muslim refugees across Europe during Europe's 'refugee crisis'. As with Studies 2 and 3, this was true controlling not only for prejudice and conservatism, but also controlling for trait empathic concern and

perspective taking (with trait empathic concern but not perspective taking also uniquely associated with attitudes and behavior).

Comparative Analyses

In exploratory analyses, we sought to compare results across the countries we sampled. We note that our ability to systematically conduct comparisons across the countries we examined was limited in certain ways that should be kept in mind. For example, the demographics of the samples (despite their large size and relative representativeness) were not identical, we had a limited number of identical items across countries, and we collected the Czech data at a later point in time relative to the other three countries.

In comparing across countries, we examined the measures of interest that were shared across all four samples: blatant dehumanization, prejudice, and a measure of behavior (signing of a pro-refugee petition). We used univariate ANOVAs with t-tests to examine differences between groups, with a Bonferroni-corrected p-value of .0083 to determine significance (i.e., dividing the .05 threshold by six to account for our six comparison tests). For the ordinal petition outcome measure, we used Kruskal-Wallis H test with Mann-Whitney U tests for pairwise comparisons (also using the same Bonferroni-corrected p-value threshold). The pattern of results was clear, and strikingly similar for all measures: For blatant dehumanization, an analysis of variance revealed significant differences across nation, $F(3,3928) = 179.7$, $p < .001$, partial $\eta^2 = .12$. Pairwise comparisons showed that dehumanization of Muslim refugees was higher among Czechs ($M = 38.79$, $SD = 31.20$) than Hungarians ($M = 25.98$, $SD = 31.38$; $p < .001$), and higher among participants from both of these groups than Spaniards ($M = $

15.77, SD = 26.05; ps < .001) and Greeks (M = 16.08, SD = 24.65; ps < .001).

Interestingly, levels of dehumanization were comparable for Spaniards and Greeks (p = .81).

For prejudice, there was also a significant main effect of country (F(3,3915) = 265.8, p < .001, partial η^2 = .17). We observed significantly higher levels of prejudice among Czechs (M = 57.20, SD = 32.03) than Hungarians (M = 40.42, SD = 36.77; p < .001), and higher levels of prejudice among both these groups than our samples of Spaniards (M = 26.81, SD = 32.54; p < .001) or Greeks (M = 23.53, SD = 30.78; ps < .001); levels of prejudice reported by Spaniards and Greeks were again similar (p = .023).

As with dehumanization and prejudice, we observed significant differences in petition signing across nations (χ^2(3,3770) = 610.3, p < .001, ω = 9.93). Czechs and Hungarians showed a statistically equivalent (Z = 2.0, p = .049) average tendency to sign the petition in opposition to refugee aid (Czechs: M = -.22, SD = .70; Hungarians: M = -.13, SD = .81); this was significantly different (Zs > 12.0, ps <.001) from the strong average tendency among Spaniards (M = .44, SD = .74) and Greeks (M = .43, SD = .770) to sign in *favor* of refugee aid among (Spaniards and Greeks again did not differ significantly from one another; Z = .03, p = .98).

Finally, we compared the correlation between blatant dehumanization and petition signing across nations using a Fisher r-to-z transformation, again with a Bonferroni corrected p-value of .0083. We found that the correlation between dehumanization and petition signing was similar for people in the Czech Republic (r = -.39, p < .001) and Hungary (r = -.42, p < .001; Z = .68, p = .50). These correlations were significantly higher in both countries than among Greeks (r = -.29, p < .001; Zs > 2.7, ps < .0083), but

not among Spaniards, after correcting for multiple comparisons ($r = -.33$, $p < .001$; $Zs >$ 1.6, $ps < .10$). Correlations between dehumanization and petition signing were similar for Spaniards and Greeks ($Z = .98$, $p = .33$).

In sum, Czechs and Hungarians displayed greater mean levels of dehumanization, prejudice, and anti-refugee behaviors than Spaniards and Greeks. Moreover, the *link* among Czechs and Hungarians between dehumanizing and signing hostile petitions was more pronounced than among Greeks. Our samples of Spaniards and Greeks did not differ from one another on any of these metrics. Our sample of Czechs indicated even more dehumanization and prejudice towards Muslim refugees than our sample of Hungarians, but the fact that the Czech data were collected at a later date than the Hungarian data make it difficult to ascertain whether this reflects a true difference between these two populations, or suggestive evidence in favor of the idea that xenophobic attitudes may have continued to rise in Eastern Europe (and perhaps elsewhere) since the peak of the refugee crisis.

Finally, we note that we collected data from one further large ($N = 1,160$), representative European sample in Denmark in January, 2015 – approximately 9 months prior to the samples from Hungary, Spain and Greece. Because our survey in Denmark asked about 'Muslims' and not 'Muslim refugees', we did not include it in the main text or in our main analyses, but we include these data in our supplemental materials (see Tables S8 and S9). We note that the level of dehumanization of Muslims was quite high in this Northern European country, with Muslims rated 23 points lower than Scandinavians – significantly less than the level of Muslim dehumanization in the Czech

sample (Muslim dehumanization ~36 points; *p* < .001) and similar to the samples in

Spain and Greece (Muslim dehumanization ~20 points; *p*s > .05).

General Discussion

The backdrop of this research was one of the most dramatic cases of human mass

migration witnessed in modern times, with millions of individuals, mostly Muslim,

fleeing the atrocities of war to seek refuge in Europe. Perhaps predictably given its scope,

this migration led (and continues to lead) to tensions within the European countries

affected by the migration. In this study, we examined the impact on the acceptance or

rejection of Muslim refugees of one of the constructs that has been at the forefront of the

rhetoric emanating from the 'refugee crisis': blatant dehumanization.

Using large samples in four European countries (Czech Republic, Spain, Greece,

and Hungary), we found that Muslim refugees were blatantly dehumanized (and

disliked), a finding suggesting that the overtly dehumanizing views that Muslims face in

the U.S. (Kteily et al., 2015; Kteily & Bruneau, 2017) extend to a range of European

countries, and also impact the refugees among their ranks. Beyond examining mean

levels, we were interested in exploring whether blatant dehumanization was associated

with anti-refugee policy support and anti-refugee behavior. Consistent with our

predictions, we found that the degree of blatant dehumanization of Muslim refugees was

uniquely associated with resistance to refugee settlement, support for anti-refugee

policies, and a greater tendency to sign petitions opposing aid to refugees. Importantly,

this was true despite the inclusion of a rigorous set of controls, including political

conservatism, prejudice, and trait empathic concern and perspective taking (as well as

demographic variables).

Our findings make a number of important contributions. Although some prior work has considered the role of the subtle dehumanization (i.e., infrahumanization) of Muslim refugees on anti-refugee attitudes (e.g., Esses et al., 2013; Leyens et al., 2007), we focused here on blatant dehumanization, an explicit and overt form of dehumanization that tends to be more strongly associated than subtle dehumanization with aggressive attitudes and behavior (see Kteily & Bruneau, 2017). Indeed, we observed here that blatant dehumanization was significantly more strongly correlated than infrahumanization with all attitudes and behavior. Our work also extends the small body of work on blatant dehumanization of refugees (e.g., Esses et al., 2008) by assessing the link between blatant dehumanization and actual anti-refugee behavior and by collecting data from large, relatively representative community samples across several nations in the midst of an acute refugee 'crisis'.

In examining the role of blatant dehumanization, we also controlled here for trait empathic concern and perspective taking, factors not previously taken into account when assessing blatant dehumanization's association with intergroup outcomes. We reasoned that trait empathy might be especially relevant in the context of the refugee crisis, particularly given the heartrending images that circulated of refugees drowning as they made the treacherous journey to the shores of Europe. Of note, trait empathic concern was indeed associated with lower levels of blatant dehumanization of refugees, and often uniquely predicted less anti-refugee hostility (including predicting behavior in all three countries— Hungary, Greece, and Spain— in which it was assessed). At the same time, it was clear that the effects of blatant dehumanization were not redundant with either trait empathic concern or perspective taking (with the latter typically not associated with

outcomes). Nevertheless, whereas we focused here on trait empathy (consistent with its

recognized role in predicting altruism, including in intergroup contexts; e.g., Batson,

Chang, Orr, & Rowland, 2002) others have examined the relationship between subtle

dehumanization and state empathy (e.g., Andrighetto et al., 2014; Čehajić, Brown, &

González, 2009), suggesting that dehumanization can in fact predict hostile attitudes in

part by reducing state empathy for targets. Future work should consider how blatant

dehumanization is associated with state as well as trait empathy.

Another important feature of our work is its contribution to advancing the

theoretical differentiation between blatant dehumanization and prejudice. Although prior

work on blatant dehumanization has controlled for prejudice in examining

dehumanization's predictive validity (Jardina & Piston, 2016; Kteily et al., 2015, 2016;

Kteily & Bruneau, 2017), as we also did here, previous research has not considered how

the patterns for blatant dehumanization and prejudice might differ from one another

across a set of targets (but see e.g., Vaes & Paladino, 2010, for such an investigation with

subtle dehumanization). Consistent with the well-established phenomenon of ingroup

favoritism (e.g., Tajfel & Turner, 1979), we observed that individuals in each of the four

nations we investigated expressed significant levels of prejudice towards all outgroups,

often by large margins. At the same time, we found that Spaniards and Greeks each

dehumanized their own group relative to two outgroups (Spain: Swedes, Germans;

Greece: Swedes, French), and Hungarians and Czechs did not dehumanize at least one

outgroup.

These results demonstrate that even when individuals prefer their group to all

others, they may not necessarily perceive it to be the paragon of humanity, perhaps

because they view other groups as higher on elements central to full humanity like cognitive sophistication, refinement, or rationality (Haslam, 2006). Although some prior work suggests that targets sometimes subtly or implicitly dehumanize their group relative to higher status outgroups (Capozza, Andrighetto, Di Bernardo & Falvo, 2012; Iatridis, 2013; but see Paladino & Vaes, 2009; Vaes & Paladino, 2010; Leyens et al., 2001), the results reported here are notable in that they suggest that individuals sometimes consciously and explicitly rate their group lower on humanity than other outgroups, even on a measure as overt as blatant dehumanization (see Bastian & Haslam, 2010, 2011, for examples of self-dehumanization in the interpersonal sphere).

Further highlighting the distinction between blatant dehumanization and prejudice: for example, although Germans were typically attributed among the highest levels of humanity, they were frequently the target of relatively high levels of prejudice. Indeed, in Spain, Greece, and the Czech Republic, Germans were rated right around the ingroup on humanity but between 20-35 points lower with a feeling thermometer measure of prejudice. Interestingly, this distinction did not extend to all high-status groups. For example, all groups reported low prejudice and low dehumanization towards Swedes, high prejudice and high dehumanization of some low status groups (e.g., Muslims, Roma), and low prejudice and high dehumanization for other low status targets (e.g., Africans). Future work should systematically consider the array of factors that predict when prejudice and blatant dehumanization do or do not align, likely including dimensions such as groups' relative economic, scientific, and political status, as well as the specific history of relations between groups (see Bruneau & Kteily, in press).

With respect to the association between blatant dehumanization and prejudice, it should be noted that prejudice also played an important role in parallel to dehumanization in predicting anti-refugee outcomes— indeed, feeling thermometer ratings were uniquely associated with all outcome measures across all samples, and were in several cases the (numerically) strongest predictor. Although our pattern of results adds to existing behavioral (Kteily et al., 2015; Kteily et al., 2016; Kteily & Bruneau, 2017) and neural (Bruneau, Kteily, Jacoby, & Saxe, *in review*) evidence indicating that blatant dehumanization judgments are distinct from judgments of dislike, it will be important for future work to better identify the reasons for their independent contributions to outcomes. For example, it is possible that blatant dehumanization of refugees predicts a desire to exclude them because it is associated with viewing them as threatening 'savages' posing a danger to the ingroup or incapable dependents unlikely to contribute to advancing the host society, whereas dislike of refugees may separately be associated with a desire for social distance from them or a greater tendency to punish the disliked outgroup for perceived transgressions, even if they are not necessarily seen as less human.

Our work also raises some new and interesting questions about cross-national differences in blatant dehumanization and anti-refugee attitudes. The fact that we fielded similar surveys about anti-refugee attitudes across four large European nations at a similar (and important) point in time allowed us to explore differences across them, although it is important to keep in mind the limitations of these comparisons. Specifically, we note that (a) the Czech sample was collected about 1.5 years after those in Hungary, Spain and Greece, making it difficult to determine whether differences for this sample relative to the others were due specifically to the context or to the time of

assessment, and (b) although larger and more representative than typical in psychological

research (Henrich, Heine, & Norenzayan, 2010), our samples were not probability

samples of the respective nations, and were not perfectly matched to one another. For

example, the Czech sample approximated the national distributions across age, gender

and education, whereas in Hungary, Spain and Greece, representativeness was

approximated across age, gender and geographical region. Furthermore, we note that the

Greek data included a higher proportion of women (although, importantly, gender did not

predict the two measures we compared across samples—dehumanization of refugees and

the petition to support refugee funding).

Bearing these caveats in mind, the differences between Hungary and the Czech

Republic on the one hand, and Spain and Greece, on the other, were striking. Greeks and

Spaniards rated Muslim refugees approximately 15 points lower than the ingroup on the

Ascent dehumanization scale, and approximately 25 points lower on the feeling

thermometer. For Hungarians, dehumanization and prejudice levels were significantly

higher, with Muslims refugees rated 26 points lower than Hungarians on the

dehumanization scale, and 40 points lower on the prejudice measure. Czech respondents

indicated still more negative perceptions, rating Muslim refugees a full 39 points lower

than their own group on the Ascent scale, and 57 points lower than their group on

prejudice. To place these results in context, it is worth noting that the levels of

dehumanization of Muslim refugees among Czech respondents is similar to that observed

among an online community sample of Americans collected on Amazon's Mechanical

Turk rating the violent extremist group ISIS in 2015 (~ 37 points; Kteily et al., 2015), and

large community samples of Israelis ($N = 521$) and Palestinians in the West Bank ($N =$

354) rating one another during the 2014 Gaza war (~ 35-37 points; Bruneau & Kteily, 2017). This places the dehumanization of Muslim refugees in the Czech Republic among the highest levels of blatant dehumanization observed towards any target group to date using the 'Ascent' measure.

Given prior cross-country survey research (Strabac & Listhaug, 2008; Davidov, Meulemann, Schwartz, & Schmidt, 2014; Schlueter, Meuleman, & Davidov, 2012), the finding that the samples in the Eastern European countries reported the most negative perceptions is relatively unsurprising. Most striking, given this extant research, is the relative tolerance of Muslim refugees among Greeks. Previous cross-natinoal research from a number of sources indicates that, prior to the refugee crisis, hostility towards immigrants and Muslims was as high in Greece (or higher) than in Hungary and the Czech Republic, and that Spain was far more tolerant. For example, data from the 1999–2000 wave of the European Values Study showed that over 21% of Greeks were unwilling to have Muslims as neighbors, compared to 15% of Czechs and 11% of Spaniards (Strabac & Listhaug, 2008), and attitudes towards immigration on the 2008-2009 European Social Survey were worse among Greeks than any of the other 23 countries assayed (including Hungary and the Czech Republic; Davidov, Meulemann, Schwartz, & Schmidt, 2014). In the research reported here, however, Greeks—like Spaniards, and in contrast to Hungarians and Czechs— were more likely to sign petitions to increase aid to Muslim refugees than decrease it and generally exhibited attitudes towards refugees as favorable as those seen in Spain. Moreover, the association between dehumanization and anti-refugee behavior in Greece was slightly weaker than that in Hungary and the Czech Republic.

Although we can only speculate here, we see a few possibilities that could

account for this (potential) shift in Greece that are worth exploring further. For example,

it may be that the stances taken and relatively generous integration policies implemented

in recent years by the government in Greece (Psaropoulos, 2016) helped to establish a

norm of humanitarianism and tolerance that shaped attitudes towards Muslim refugees

(Schlueter et al., 2012; Kinder and Sanders, 1990; Sniderman and Theriault, 1999). The

contrast to the hostile rhetoric and restrictive policies implemented by leading politicians

in Czech Republic and Hungary (which erected a fence designed to keep Muslim

refugees out of their country) is notable. Alternatively (or additionally), it is possible that

the direct and indirect intergroup contact provided by their particular proximity to the

refugee crisis may have positively impacted Greeks' attitudes towards Muslim refugees,

consistent with prior research showing an association between positive intergroup contact

and both lower prejudice (Pettigrew & Tropp, 2006) and lower (subtle) dehumanization

(Capozza, Trifiletti, Vezzali, & Favara, 2013). Indeed, it is notable that Spain— a country

that has consistently shown relatively tolerant attitudes towards immigration— scores

higher in estimates of cultural diversity than the Czech Republic or Hungary, which are

both relatively homogenous societies (Gören, 2013). Of course, future research will have

to determine which (if any) of these possibilities best explain these patterns.

In addition to the limitations already noted, it is important to recognize that the

data reported here are correlational, thereby providing little insight into causal

relationships. For example, we show here that blatant dehumanization is uniquely

associated with anti-refugee attitudes and behavior. On the one hand, it is possible that

dehumanization *causes* anti-refugee attitudes and behavior. On the other, it is also

plausible that dehumanization could be applied after the fact to help justify anti-refugee policy support (see also Castano & Giner-Sorolla, 2006). Of course, reciprocal effects are also possible. Future research should employ experimental and/or longitudinal research to better disentangle these possibilities.

Conclusion

Across 4 countries in Europe examined in the backdrop of the refugee 'crisis', we consistently observed that blatant dehumanization was uniquely associated with anti-refugee attitudes and behavior. In exploratory comparisons, the degree of blatant dehumanization and its association with hostile attitudes and behavior was found to be particularly high in our Eastern European samples, where contact with refugees is low and anti-refugee rhetoric by political elites relatively prominent. Given the noted potential for those on the receiving end of overt dehumanization to respond with dehumanization and hostility of their own (Kteily & Bruneau, 2017), and in light of recent violent incidents across a number of European countries, more work is urgently needed to better understand and address the dehumanization at the root of intergroup conflict.

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Table 1. Mean and relative blatant dehumanization and prejudice in Study 1 (Czech Republic) assessed using the Ascent scale and Feeling Thermometer. Diff. score = Czech Ascent/Feeling Thermometer rating – [target group] Ascent/Feeling Thermometer rating.

Target	Mean Ascent ratings (SD)	Quartiles (25, 50, 75)	Diff. score
Dehumanization			
Czechs	90.4 (16.0)	87, 99, 100	--
Germans	90.0 (18.3)	89, 100, 100	.5
Slovaks	87.2 (19.4)	80, 97, 100	3.2***
Americans	86.4 (20.7)	80, 97, 100	4.0***
Jews	84.1 (22.8)	76, 95, 100	6.3***
Christians	83.5 (22.2)	73, 92, 100	7.0***
Hungarians	81.3 (23.9)	70, 90, 100	9.1***
Russians	78.6 (24.2)	70, 85, 100	11.8***
Muslims	54.1 (33.3)	22, 59, 83	36.3***
Muslim Refugees	**53.0 (32.5)**	**23, 55, 80**	**37.5***
Roma	51.5 (32.7)	20, 51, 80	38.7***
Prejudice			
Czechs	82.6 (20.0)	75, 75, 100	--
Slovaks	74.6 (21.8)	50, 75, 100	8.0***
Christians	64.5 (22.6)	50, 75, 75	18.1***
Germans	58.1 (21.8)	50, 50, 75	24.6***
Americans	57.9 (20.7)	50, 50, 75	24.8***
Jews	57.4 (20.2)	50, 50, 75	25.2***
Hungarians	55.9 (19.9)	50, 50, 75	26.7***
Russians	47.3 (22.6)	25, 50, 50	35.3***
Muslim Refugees	**26.2 (22.9)**	**0, 25, 50**	**56.3***
Roma	25.6 (21.4)	0, 25, 50	56.8***
Muslims	23.9 (23.2)	0, 25, 50	58.7***

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Table 2. Simultaneous regressions: blatant dehumanization predicting outgroup attitudes and behavior in Study 1 (Czech Republic). Gender coding: 0 = male, 1 = female. Note: petition outcome measures computed with ordinal regressions; all others with ordinary least squares regression.

	Anti-Refugee Policies Support $R^2 = .36$			Asylum Support $R^2 = .23$			Sign Anti-Refugee Petition Pseudo $R^2 = .22$		Sign Pro-Refugee Petition Pseudo $R^2 = .12$	
	β	*B*	*B* 95% CI	β	*B*	*B* 95% CI	*B*	*B* 95% CI	*B*	*B* 95% CI
Blatant Dehumanization	.33***	.010	.009, .012	-.30***	-.012	-.014, -.010	.021***	.017, .026	-.010***	-.014, -.006
Prejudice	.34***	.011	.009, .012	-.24***	-.009	-.011, -.007	.012***	.008, .017	-.012***	-.016, -.008
Age	.11***	.008	.005, .011	-.01	-.001	-.005, .003	.004	-.004, .012	.012**	.004, .020
Gender	.01	.020	-.068, .108	-.15***	-.359	-.479, -.240	.029	-.198, .255	.171	-.051, .394

*$p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 3. Mean and relative blatant dehumanization and prejudice in Study 2 (Hungary) assessed using the Ascent scale and Feeling Thermometer. Diff. score = Hungarian Ascent/Feeling Thermometer rating – [target group] Ascent/Feeling Thermometer rating.

Target	Mean (SD)	Quartiles (25, 50, 75)	Diff. Score
Dehumanization			
Hungarians	84.9 (18.7)	80,90,100	--
Germans	84.9 (19.6)	80,90,100	0.0
French	81.8 (22.2)	70,90,100	3.2***
Transylvanians	81.2 (21.9)	70,90,100	3.8***
Jewish people	79.2 (24.8)	70,90,100	5.8***
Slovaks	77.6 (24.6)	60,80,100	7.3***
Muslim refugees	**59.0 (35.1)**	**30,60,100**	**26.0***
Roma	57.4 (35.3)	30,60,100	27.6***
Prejudice			
Hungarians	76.2 (22.7)	60,80,100	--
Transylvanians	68.7 (24.3)	50,70,90	7.5***
Germans	62.3 (22.2)	50,60,80	13.9***
French	55.6 (24.5)	40,50,70	20.6***
Jewish people	55.5 (26.3)	40,50,80	20.7***
Slovaks	53.4 (23.3)	40,50,70	22.8***
Roma	37.7 (26.3)	20,40,50	38.5***
Muslim refugees	**35.8 (26.9)**	**10,30,50**	**40.4***

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 4. Simultaneous regressions: perceived humanity and empathy towards ingroup and outgroup predict attitudes and behavior in Study 2 (Hungary). Gender coding: 0 = male, 1 = female. Note: petition outcome measures computed with ordinal regressions; all others with ordinary least squares regression.

	Social Distance R^2 = .49			Response to Injustice R^2 = .32			Anti-Refugee Policies Support R^2 = .57			# Granted Asylum (log) R^2 = .43			Sign Pro-Refugee Petition Pseudo R^2 = .41	
	β	*B*	*B* 95% CI	β	*B*	*B* 95% CI	β	*B*	*B* 95% CI	β	*B*	*B* 95% CI	*B*	*B* 95% CI
Blatant Dehum	.22***	.021	.013, .029	-.21***	-.021	-.031, -.012	.20***	.019	.012, .026	-.23***	-.029	-.041, -.017	-.010*	-.018, -.002
Prejudice	.45***	.036	.029, .044	-.17**	-.148	-.024, -.006	.47***	.038	.031, .044	-.42***	-.046	-.057, -.036	-.021***	-.029, -.014
Trait EC	-.05	-.305	-.802, .192	.23***	1.57	.970, 2.17	-.11**	-.738	-1.19, -.290	.09*	.821	.111, 1.53	.934***	.447, 1.42
Trait PT	-.06	-.434	-.966, .097	-.03	-.208	-.848, .433	-.03	-.212	-.692, .267	-.01	-.133	-.893, .627	-.526*	-1.04, -.013
Age	.08*	.017	.003, .032	.17***	.041	.023, .058	-.05	-.012	-.025, .001	-.03	-.008	-.029, .013	.019**	.005, .033
Gender	.05	.300	-.094, .694	.07	.416	-.059, .890	.02	.138	-.218, .493	.00	-.006	-.569, .557	.543**	.163, .922
Conserv.	-.12**	-.161	-.060, -.262	-.10*	-.147	-.269, -.026	.14***	.183	.092, .274	-.07	-.127	-.271, .017	-.292***	-.399, -.186

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 5. Mean and relative blatant dehumanization and prejudice in Study 3 (Spain) assessed using the Ascent scale and Feeling Thermometer. Diff. score = Spanish Ascent/Feeling Thermometer rating – [target group] Ascent/Feeling Thermometer rating.

Target	Mean Ascent ratings (SD)	Quartiles (25, 50, 75)	Diff. score
Dehumanization			
Spanish	85.6 (22.0)	78, 96, 100	--
Swedes	90.1 (19.7)	90, 100, 100	-4.5***
Germans	89.0 (20.6)	88, 100, 100	-3.3***
French	86.5 (22.2)	81, 97, 100	-.8
Americans	86.0 (22.6)	80, 98, 100	-.3
Christians	76.5 (28.6)	61, 88, 100	9.2***
Turks	72.4 (29.7)	51, 80, 100	13.1***
Muslim refugees	**70.3 (31.3)**	**50, 79, 100**	**15.3***
Africans	70.2 (30.9)	49, 78, 100	15.4***
Roma	66.5 (33.0)	44, 75, 100	19.1***
Muslims	64.6 (34.2)	38, 72, 100	20.9***
Prejudice			
Spanish	76.4 (21.1)	60, 80, 90	--
Swedes	60.5 (21.3)	50, 60, 80	15.8***
Christians	58.5 (24.6)	50, 60, 80	17.8***
Americans	57.4 (21.8)	50, 50, 70	18.9***
Africans	55.2 (22.8)	40, 50, 70	21.1***
Germans	54.5 (23.2)	40, 50, 70	21.9***
French	53.9 (23.6)	40, 50, 70	22.5***
Muslim refugees	**49.5 (26.1)**	**30, 50, 70**	**26.8***
Turks	46.5 (22.9)	30, 50, 60	29.9***
Roma	40.5 (25.8)	20, 40, 60	35.8***
Muslims	39.9 (25.2)	20, 40, 50	36.5***

Table 6. Simultaneous regressions: blatant dehumanization and trait empathy predicting outgroup attitudes and behavior in Study 3 (Spain). Gender coding: 0 = male, 1 = female. Note: petition outcome measures computed with ordinal regressions; all others with ordinary least squares regression.

	Anti-Refugee Policies Support R^2= .37			# Granted Asylum (log) R^2= .07			Sign Pro-Refugee Petition Pseudo R^2= .21	
	β	B	B 95% CI	β	B	B 95% CI	B	B 95% CI
Blatant Dehumanization	.18***	.174	.119, .229	-.09*	-.013	-.023, -.003	-.016***	-.022, -.010
Prejudice	.30***	2.23	1.79, 2.68	-.16***	-.178	-.258, -.099	-.009***	-.014, -.005
Trait Empathic Concern	-.12***	-7.05	-10.4, -3.72	.02	.190	-.402, .782	.930***	.561, 1.30
Trait Perspective Taking	-.11***	-7.34	-11.1, -3.59	.01	.125	-.541, .792	.123	-.281, .527
Age	-.03	-.066	-.172, 0.40	.09**	.028	.009, .047	.018**	.006, .030
Gender	.01	.390	-2.18, 2.96	-.09**	-.641	-1.10, -.185	-.004	-.283, .274
Conservatism	.22***	2.12	1.61, 2.64	-.03	-.037	-.129, .055	-.133***	-.188, -.077

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

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Table 7. Mean and relative blatant dehumanization and prejudice in Study 4 (Greece) assessed using the Ascent scale and Feeling Thermometer. Diff. score = Greek Ascent/Feeling Thermometer rating – [target group] Ascent/Feeling Thermometer rating.

Target	Mean (SD)	Quartiles (25, 50, 75)	Diff. Score
Dehumanization			
Greeks	88.2 (17.1)	81, 95, 100	--
Swedes	91.6 (14.6)	89, 98, 100	-3.3***
French	90.2 (15.0)	81, 96, 100	-1.9***
Americans	88.3 (18.0)	82, 96, 100	-0.1
Germans	86.9 (20.3)	88, 100, 100	1.3*
Christians	85.9 (19.6)	79, 95, 100	2.3***
Turks	73.2 (26.8)	55, 80, 100	15.0***
Muslim refugees	**72.2 (27.7)**	**53, 80, 99**	**16.1***
Africans	71.3 (26.7)	52, 78, 97	17.0***
Muslims	67.8 (30.0)	49, 76, 96	20.4***
Roma	62.5 (32.3)	38, 69, 94	25.8***
Prejudice			
Greeks	86.2 (17.2)	80,90,100	--
Christians	79.9 (21.1)	70, 90, 100	6.4***
French	72.4 (21.3)	50, 80, 90	13.9***
Swedes	69.5 (22.5)	50, 70, 90	16.7***
Africans	67.9 (22.6)	50, 70, 90	18.3***
Americans	67.3 (22.9)	50, 70, 90	19.0***
Muslim refugees	**62.7 (27.6)**	**50, 60, 90**	**23.5***
Turks	54.0 (29.1)	30, 50, 80	32.2***
Germans	53.3 (29.1)	30, 50, 80	32.9***
Muslims	52.8 (28.8)	30, 50, 80	33.4***
Roma	47.5 (29.0)	30, 50, 70	38.7***

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

Table 8. Simultaneous regressions: blatant dehumanization and prejudice predicting outgroup attitudes and behavior in Study 4 (Greece). Gender coding: 0 = male, 1 = female. Note: petition outcome measures computed with ordinal regressions; all others with ordinary least squares regression.

	Anti-Refugee Policies Support $R^2 = .39$			# Granted Asylum (log) $R^2 = .10$			Sign Pro-Refugee Petition Pseudo $R^2 = .25$	
	β	B	B 95% CI	β	B	B 95% CI	B	B 95% CI
Blatant Dehumanization	.11***	.095	.044, .147	-.11**	-.016	-.027, -.006	-.006[†]	-.013, .000
Prejudice	.37***	.255	2.12, 2.99	-.18***	-.021	-.296, -.119	-.023***	-.028, -.017
Trait Empathic Concern	-.18***	-9.53	-12.7, -6.39	-.03	-.300	-.944, .344	.773***	.373, 1.17
Trait Perspective Taking	.00	-.072	-2.64, 2.79	.01	.109	-.450, .667	.201	-.151, .553
Age	.06*	.118	.010, .225	.01	.005	-.017, .027	.004	-.009, .018
Gender	.01	.354	-1.99, 2.70	-.13***	-.980	-1.46, -.502	-.018	-.316, .280
Conservatism	.22***	2.53	1.89, 3.16	-.06	-.109	-.239, .020	-.158***	-.242, -.076

† *p* < .10, * *p* < 0.05, ** *p* < 0.01, *** *p* < 0.001