INTRODUCTION

The number of people forced or choosing to leave their home countries has increased dramatically over the past decade, reaching a record high of 70.8 million refugees and 258 million migrants (UNHCR, 2016, 2019; United Nations, 2017). Migration has become one of the greatest concerns of European citizens (CBS, 2019; European Social Survey, 2016; International Organization for Migration, 2018). While some people are willing to welcome refugees and migrants, others are reluctant to accept them as residents, negative attitudes towards refugees and migrants persist, and migration is frequently the topic of conflictual public debates (European Social Survey, 2017).

The diversity of responses towards refugees and migrants suggests that the public debate may be polarized. Polarization can briefly be described as the presence of separated groups in society with opposing attitudes (DiMaggio et al., 1996; Jung et al., 2019). Polarization may have both positive and negative outcomes on societies; it can encourage social change by stimulating discussion, political engagement, and protest (Abramowitz & Saunders, 2008; McGarty et al., 2009), but it can also undermine social cohesion by increasing the avoidance of conflicting opinions and information, the stigmatization of (minority) groups, and segregation in society (Frimer et al., 2017; McCoy et al., 2018; Moulaert et al., 2003), which may further increase attitudinal polarization. Given its potential serious impact on citizens in societies, it is important to understand the extent of attitudinal polarization within societies and the psychological factors that may explain it.

Although previous research investigated attitudes towards refugees and migrants (for a review, see Esses et al., 2017), to the best
of our knowledge, there is no comprehensive understanding of the extent of attitudinal polarization in society and the psychological factors that may explain it. Therefore, we developed and tested an integrated model of attitudinal polarization in society within the context of migration. To explain polarization in attitudes towards refugees and migrants, we organized factors indicated by the social psychological literature along three dimensions: (1) the individual and social self; (2) perceptions and experience regarding refugees and migrants; and (3) the societal context. Using data from a representative sample of the Dutch population, we first examined whether and to what extent Dutch society is polarized in its attitudes towards refugees and migrants. Second, we tested our model and investigated who may hold polarized attitudes and what psychological factors might be associated with these attitudes.

### 1.1 Polarization in Dutch society

Historically, the Netherlands has been known as a tolerant, welcoming country for minorities. For example, in the 17th century, the Netherlands was a popular asylum for religious refugees due to its relatively high religious tolerance (Carol & Koopmans, 2013); more recently, in 2001, it became the first country to legalize same-sex marriage (CNN, 2001). The Netherlands has also been known for its multicultural migration policies and its focus on its culturally specific groups (e.g., Vasta, 2007). However, the Netherlands is currently one of a few European countries to have cut back on its established multicultural policy in favour of a stronger focus on assimilation (Banting & Kymlicka, 2013). After the increase in migration in 2015, Dutch citizens increasingly voiced concerns about this issue and criticized the government’s implementation of migration policies (Postmes et al., 2017; SCP, 2016). Many Dutch people nowadays believe differences in opinions on societal issues are increasing and experience growing pressure to choose sides in the migration debate (SCP, 2019). A recent representative survey showed that although a majority of Dutch citizens believe that refugees should be granted asylum, a majority is also concerned about the consequences of such a step (Kuppens et al., 2020). Given these changes, we wondered what attitudes people in the Netherlands currently hold towards refugees and migrants.

Although a popular topic of discussion, polarization is often not well defined, and when it is defined, these definitions differ according to discipline (e.g., Jung et al., 2019). In the current research, we focus on attitudinal polarization in society and define polarization as the existence of separated groups in society, which are divided and disagree in terms of their attitudes towards refugees and migrants (for a similar approach, see Bauer, 2019; DiMaggio et al., 1996; Maher et al., 2020; McCoy et al., 2018). If there is no polarization, all individuals fall into one group; while disagreement may exist, it is not possible to identify structural groups showing increased attitudinal coherence with some individuals while simultaneously showing increased distance from others (Bauer, 2019). If there is maximum polarization, all individuals can be divided into one of two groups with attitudes at the opposite ends of the attitudinal scale. When evaluating and assessing polarization and its role in society, it is important to consider not only the presence of separated, structural groups, but also the meaning of the distances between attitudinal groups and the degree of their disagreement (Bauer, 2019). Importantly, polarization can be both a state and a process over time (DiMaggio et al., 1996); in the current research, we focus on polarization as a state.

Polarization in society is a complex phenomenon that may not be fully captured by a single observation. Therefore, similar to previous research on polarization (e.g., DiMaggio et al., 1996), we have taken a multivariate approach and assessed attitudes towards refugees, migrants, and migration in general. Although previous research has indicated that host-society members do hold differentiated attitudes towards specific refugee or migrant groups and on specific migration policy issues, there also is evidence that these attitudes are strongly correlated, thereby providing justification for the current approach in which attitudes towards refugees, migrants, and migration are measured as a general pattern (e.g., see Lee & Fiske, 2006; Postmes et al., 2017; Verkuyten, 2004).

### 1.2 An integrated three-dimensional model of polarization in attitudes towards refugees and migrants

Polarization in society is a social phenomenon that operates at different levels (individual, group, and societal) and may be explained by a range of different factors. To further our understanding of polarized attitudes towards refugees and migrants, we consider it useful to approach this phenomenon as an intergroup process, and we propose a model of attitudinal polarization in which we integrate and organize different lines of literature into three dimensions. Our model specifically applies to polarization in society regarding attitudes towards an outgroup (or outgroups), whereby the current research focuses on the intergroup relationship between host-society members and refugees and migrants. As nationality or cultural background is an important way in which people categorize themselves and others (Bain et al., 2009; Prentice & Miller, 2007), we assume that members of the host-society (perhaps unknowingly or unintentionally) tend to see themselves as ingroup members, and refugees and migrants as outgroup members. Within this intergroup relation, we suggest that there are three important dimensions at play that may help explain attitudinal polarization (see Figure 1). Below, we discuss each dimension and identify specific factors within these dimensions, based on previous literature.

### 1.3 The individual and social self

Individual characteristics and group affiliations are considered important factors in attitudinal polarization. The related question is: How am I and my group doing? People’s perceptions of themselves and the groups they belong to may influence how they relate to
and evaluate others. How people perceive their own position and that of their ingroup in society can influence how accepting they are of outgroups, and especially of refugees and migrants (Esses et al., 2001). In particular, perceptions of how secure their social position is may influence the extent to which other groups are valued or perceived as threatening. For example, host-society members may view refugees and migrants as competing for resources such as welfare and employment opportunities, thereby affecting their attitudes towards these groups negatively (Allport et al., 1954; Esses et al., 2001). Building on previous research, we examined three factors pertaining to the individual and social self that might explain who holds polarized attitudes towards refugees and migrants: (1) education level, (2) political orientation, (3) income and perceived relative deprivation.

First, several studies linked education to refugee and migrant attitudes (Borgonovi, 2012; Easterbrook et al., 2016). Across Europe, lower education levels were found to be associated with more prejudice, xenophobia, and negative attitudes towards migration (Hainmueller & Hiscox, 2007; Hello et al., 2002). Education may be a source of social status (van Noord et al., 2019); therefore, less-educated people may experience their position in society as less secure and may experience more competition with newcomers. We therefore hypothesized that less-educated people would be more likely to have anti-refugee and anti-migrant attitudes, whereas more highly educated people would be more likely to have pro-refugee and pro-migrant attitudes (Hypothesis 1a).

Second, political orientation may be linked to intergroup relations in society. Left- versus right-wing orientations represent an ideological division in terms of two core factors: tradition and acceptance of inequality (Jost et al., 2003; Verkuyten et al., 2016). Individuals with a right-wing orientation tend to value conservation, maintenance of the status quo, and patriotism, and to accept greater inequality. Individuals with a left-wing orientation tend to value equality, tolerance, and egalitarianism, and to embrace socio-cultural change (Jost, 2017; Piurko et al., 2011); consequently, they are more likely to accept refugees and migrants (Davidov et al., 2008). We therefore hypothesized that people with more right-wing political views would be more likely to have anti-refugee and anti-migrant attitudes, whereas people who were more left-wing would be more likely to hold pro-refugee and pro-migrant attitudes (Hypothesis 1b).

Third, earlier research found that people with higher incomes may have more positive attitudes towards refugees and migrants than people with lower incomes (e.g., Burns & Gimpel, 2000). However, other research suggests that the subjective experience of economic hardship rather than objective measures of income is especially relevant in attitudes towards outgroups (Fetzer, 2000; Walker & Smith, 2002). The subjective experience of being more deprived than others is called relative deprivation (Guimond & Dambrun, 2002). Note, our focus here is on personal relative deprivation. People who think they are relatively deprived believe that they are worse off in society and do not benefit economically as much as others may be more inclined to experience competition for resources. Accordingly, we hypothesized that people who feel more deprived would be more likely to have anti-refugee and anti-migrant attitudes, whereas people who feel less deprived would be more likely to be pro-refugee and anti-migrant attitudes (Hypothesis 1c).

1.4 | Perceptions and experience regarding refugees and migrants

We consider people’s perceptions and experience regarding refugees and migrants and the related question What are “they” like? is an important second dimension in explaining attitudinal polarization. People tend to believe that nationality or cultural backgrounds represent a foundational fixed core that makes group members what they are (Prentice & Miller, 2007). From this perspective, national or cultural categories are viewed as real biological phenomena and are among the most essentialized categorizations (Haslam et al., 2000; Rothbart & Taylor, 1992). As a result, people tend to overestimate similarities within and differences between cultural groups (Yzerbyt et al., 2001).

When two cultures are believed to differ to a large extent, people perceive a large cultural distance (Babiker et al., 1980). The concept of cultural distance, as defined by Triandis (1994), includes several characteristics such as differences in religion, family, mother tongue, and values. For example, French host-society members perceiving more cultural distance from migrants (with respect to religion, family, etc., based on Triandis’s definition), showed higher levels of prejudice toward migrants (Mahfud et al., 2015, 2018). Similarly, among Dutch host-society members a larger perceived cultural distance (PCD) in cultural values was associated with more negative outgroup attitudes towards different refugee and migrant groups (Albada et al., 2021). When refugees and migrants are believed to
differ considerably from the host-society, host-society members may come to believe that refugees and migrants threaten and undermine their culture (Velasco González et al., 2008). Although related, PCD differs conceptually from symbolic threat, as it is solely about perceiving differences with no particular valence attached. Symbolic threat, on the other hand, indicates the extent to which people feel threatened by differences between groups and thus conceptually represents a negative valence.

During the recent influx of refugees into Europe, many came from countries with a Muslim majority (UNHCR, 2016, 2019; United Nations, 2017). At the same time, Islamophobia, a particular form of prejudice and racism against Muslims and Islam, has grown in Europe (Croucher & Cronn-Mills, 2011; SETA, 2017). Islamophobia and negativity towards Muslim communities tend to target “Islamic culture” (Brunneau et al., 2018). This is also the case in the Netherlands, where the majority of Dutch citizens are opposed to Muslim practices (Adelman & Verkuyten, 2020). Importantly, not all refugees and migrants are Muslim, but people nonetheless often infer such a link (e.g., Pedersen et al., 2006; Wike et al., 2016). We therefore hypothesized that people who perceive more cultural distance from Islam would be more likely to have anti-refugee and anti-migrant attitudes, whereas people who perceived less cultural distance from Islam would be more likely to be pro-refugee and pro-migrant (Hypothesis 2a).

Contact experience with refugees and migrants may offer additional insights into why host-society members may have polarized attitudes. Contact experience can enhance knowledge about outgroups and increase empathy and perspective-taking, thereby improving attitudes towards outgroups (Dahl et al., 2019). However, intergroup contact does not lead to more positive outgroup attitudes per se. Positive and meaningful contact, such as friendships, is likely to improve outgroup attitudes (Allport et al., 1954; Pettigrew & Tropp, 2008); however, it is unclear how often host-society members have such contact (e.g., Dixon et al., 2005). We thus assessed the frequency of contact that host-society members have with refugees and migrants. We hypothesized that people with little or no contact would be more likely to have anti-refugee and anti-migrant attitudes, whereas people with more frequent contact would be more likely to have pro-refugee and pro-migrant attitudes (Hypothesis 2b).

1.5 | The societal context

The intergroup relationship between host-society members and refugees and migrants does not take place in a vacuum. Societal context is therefore the third dimension, we argue, that plays a role in attitudinal polarization, as the (perceived) state of society may act as a catalyst for attitudes towards refugees and migrants (Esses et al., 2005). Here, the relevant questions are: How is society doing? How capable is it of dealing with refugees and migrants? We focused on societal discontent as an indicator of the societal context. Societal discontent is defined as a collective global evaluation that society is not doing well, and as the belief that most people judge society negatively (Steenvoorden, 2015). Interestingly, although people in European countries report high levels of wellbeing, they may at the same time endorse pessimistic outlooks on society; thus, societal context should be considered as a separate dimension in attitudinal polarization (van der Bles et al., 2015). The evaluation that society is not doing well may spread to a negative evaluation of the government’s functioning, including the belief that the government and society are incapable of properly dealing with migration. Previous research in the Netherlands has indeed linked societal discontent to concerns about migration policies (Kuppens et al., 2020; Postmes et al., 2017). We therefore hypothesized that people who experience more societal discontent would be more likely to have anti-refugee and anti-migrant attitudes, whereas people who experience less societal discontent would be more likely to be pro-refugee and pro-migrant (Hypothesis 3).

2 | THE CURRENT RESEARCH

In the current research, we first investigated whether and to what extent Dutch society is polarized in its attitudes towards refugees and migrants. Second, we investigated the links between three dimensions with polarized attitudes towards refugees and migrants. More precisely, for the dimension “individual and social self”, we investigated how education level, political orientation, income and personal relative deprivation were linked to polarized attitudes. For the dimension “perceptions and experience regarding refugees and migrants”, we examined PCD from Islam and contact experience. For the societal context dimension, finally, we researched the role of societal discontent. This two-step approach aimed to increase our understanding of who holds polarized attitudes and what psychological factors may be associated with attitudinal polarization in society. We tested our hypotheses in a survey among a large-scale representative sample of the Dutch population.

3 | METHOD

3.1 | Participants and procedure

After the increased influx of refugees in 2015, Stay Human (a collaboration of over 50 organizations) investigated the host society’s attitudes regarding migration in the Netherlands by conducting a national survey. The survey was filled in by 2,000 Dutch participants, recruited from an online participant pool (Ipsos iSay panel, ISO-certified) in June 2017 by Ipsos (an international research company). As we focused on the perspective of Dutch host-society members evaluating refugees and migrants, we excluded 84 participants who were not born in the Netherlands. As the questionnaire included questions about PCD from Islam, we further excluded 19 Muslim participants.

The final sample (N = 1897) was representative of the Dutch adult population in terms of age (M = 48.57, SD = 16.69, range: 18–88 years), gender (50.8% female), and education levels (32.8% lower,
The Netherlands and divides society into opinions and beliefs that have a migrant background (at least one parent born outside the Netherlands), most of whom came from Europe (59.1%), followed by Asia (23.5%), South America (12.2%), Africa (3.5%), and North America (1.7%). About half of the participants (55.1%) were not religious. This is consistent with the 49% reported by the Dutch Central Bureau of Statistics (CBS, 2018c). Of the religious people, most categorized themselves as Roman Catholic (22.1%), followed by Protestant (11.3%), Dutch Reformed (5.7%), and other (5.7%). The mean political orientation lay around the midpoint of the scale (M = 4.09, SD = 1.24, range: 1–7). Both sides of the political spectrum were well represented; 30.8% were on the political right, 42.3% in between, and 26.9% on the left. Most of the participants were employed full-time (30.9%), followed by part-time (19.7%), retired (19%), unemployed (8.4%), homemakers (8.1%), students (6.5%), entrepreneurs (3.7%), and in between jobs (3.5%). Participants gave their informed consent at the start of the study and were debriefed, thanked, and financially compensated at the end.

3.2 | Measures

We classified items into scales by carefully inspecting them and selecting those that would fit theoretical definitions based on the relevant literature (see online Appendix for all items used). The scales ranged from 1 (totally disagree) to 5 (totally agree), unless otherwise indicated. To avoid forced choices, participants were given the opportunity to respond with ‘I do not know’ or “not relevant”; these responses were coded as missing data. The proportion of these responses was below 10% across items, which is similar to the percentage of missing values if people are not forced to answer each item and is an acceptable proportion of missing data (DeRouvray & Couper, 2002; Newman, 2014).

3.2.1 | Polarization in attitudes towards refugees and migrants

To investigate whether and to what extent people were polarized in their attitudes towards refugees and migrants, we included three different aspects. First, participants indicated on one item their general negative view of migration on a scale from 1 (very positive) to 5 (very negative). Second, we assessed acceptance of refugees with five items (example item “People must be able to flee to countries, including the Netherlands, to escape from war or persecution”). Higher values indicated more acceptance towards refugees. The scale including all five items showed a high reliability (α = 0.86). Third, we measured perceived consequences of migration with seven items, in which higher values indicated more negative perceived consequences of migration (example item “Immigration is bad for the Netherlands and divides society into opinions and beliefs that are strongly opposed to each other”). Three of the seven items were positively framed and were reverse coded. The scale showed a good reliability (α = 0.79).

3.2.2 | The individual and social self dimension

To capture the dimension of the individual and social self, participants indicated their educational background, political orientation, income, and perceived relative deprivation. They reported their highest completed level of education, which we coded into lower, medium, and higher education using the standards of the Dutch Central Bureau for Statistics (CBS, 2018b), which corresponds to the International Standard Classification of Education (ISCED) developed by UNESCO (see online Appendix). Participants also rated their political orientation on a scale from 1 (very left) to 7 (very right). To measure income level, participants were asked whether their gross household income per year was below, at, or above the Dutch average (with reference numbers in euros illustrating the response categories).

We measured personal relative deprivation with two items, in line with Guimond and Dambrun (2002) (“For someone like me, it is becoming more difficult to succeed in the Netherlands” and “I am benefiting personally from the growth in the Dutch economy (reversed”). Higher values indicated more relative deprivation. The two items correlated significantly and were combined (r = 0.40, p < .01). In social psychology, relative deprivation is often approached as a group-level variable. However, these two items were formulated on a more individual level, therefore we refer to it as personal relative deprivation.

3.2.3 | Perceptions and experience regarding refugees and migrants dimension

We measured perceived cultural distance (PCD) from Islam with two items (“Islam and Dutch society are not compatible with each other” and “Most Muslims have similar values to me (reversed”). Higher values indicated greater PCD. The two items correlated and were combined (r = 0.59, p < .01). For frequency of contact, participants indicated how often they had had contact with refugees from the Middle East, Africa, and other regions, and with migrants from Turkey, Morocco, and Eastern Europe, on a scale from 1 (never), 2 (less than once a year), 3 (once or a few times a year), 4 (once or a few times a month), to 5 (every week or more often). We combined the six items into one mean score to indicate frequency of contact with refugees and migrants.

3.2.4 | The societal context dimension

We measured societal discontent (Steenvoorden, 2015; van der Bles et al., 2015) with two items (“In general, did Dutch society improve, stay the same or worsen over the past year?”, “In general, did the
Dutch economy improve, stay the same or worsen over the past year?`). The scale ranged from 1 (improved) to 2 (about the same) and 3 (worsened). The two items correlated significantly and were combined ($r = 0.41, p < .01$).

### 3.3 Analytic strategy to investigate polarization

To examine whether and to what extent Dutch society is polarized in its attitudes towards refugees and migrants, we conducted a latent profile analysis (LPA) in R software using tidyLPA (R Development Core Team, 2010; Rosenberg et al., 2019). LPA is a type of classification analysis that tests whether relatively homogeneous groups (profiles) can be identified based on observed values (Oberski, 2016). It tests whether structural groups exist in the data, whereby individuals show coherence with some individuals while simultaneously showing discrepancy towards others. It is therefore an excellent assessment of polarization, as we and other researchers have defined it (e.g., Bauer, 2019; DiMaggio et al., 1996). Where no structural groups could be identified, this suggests that there is no polarization. Where structural groups are identified, this suggests there is evidence of polarization in society. For the LPA, we included the attitudinal polarization variables, which were as follows: a negative view of migration, acceptance of refugees, and consequences of migration. This analysis could only be computed for participants with no missing data. Thus, the sample size for this analysis was $N = 1645$. Little's test suggested that the incomplete cases that could not be included due to missingness were completely at random (MCAR). Furthermore, the distributions and the characteristics of people with missingness were similar to people with no missingness (see Supporting Information for details).

In LPA, a range of models with an increasing number of profiles are tested, making it a data-driven method. First, Bayesian information criterion (BIC) and Akaike information criteria (AIC) indicate the fit of the model, with the lowest numbers indicating the best fit (Norusis, 2011). Second, the entropy statistic indicates how well the model can divide participants into different profiles without overlap in or exclusion from profiles. Low entropy indicates that one participant can be classified into more than one profile. Entropy scores of 0.80 and higher are considered appropriate. Next, the bootstrap likelihood ratio test (BLRT) tests whether models with one additional profile outperform the previous model. Finally, to further validate the assessment of polarization and investigate the extent of polarization, we conducted a multivariate analysis of variance (MANOVA) to test differences between identified profiles and their effect sizes in order to evaluate the meaning of the profiles and the extent of their disagreement (Burns & Burns, 2008; Everitt et al., 2011).

### 4 RESULTS

#### 4.1 Empirical test of polarization

The LPA showed that a model with four profiles best fitted the data; it had the lowest BIC and AIC, and a significant BLRT (see Table 1). It also had an entropy level of 1.00, which indicated that all participants included in the analysis fitted into a profile and could only be fitted into one profile. Next, to further examine the different groups and the extent of polarization, we conducted a one-way MANOVA on the LPA variables. See Table 2 for the descriptive statistics of the groups and Table 3 for the MANOVA statistics. All four groups significantly differed between all variables included in the LPA and the effect sizes ranged between $\eta^2 = 0.40$ and $\eta^2 = 0.99$, which can be considered large (Steyn & Ellis, 2009).

There were two substantial groups at the extreme ends of the spectrum. First, one group (16.5%) consisted of individuals with clear anti-refugee and anti-migrant attitudes. This group had a very negative view of migration, had little acceptance of refugees, and perceived negative consequences of refugees and migrants for society. Second, at the opposite end of the spectrum, there was another group (18.7%) with clear pro-refugee and anti-migrant attitudes. This group had a positive view of migration, showed acceptance for refugees, and perceived positive consequences of migration for Dutch society. The majority of people (64.8%) were in the middle of the attitude spectrum. Interestingly, however, the middle was divided. First, there was a group (31.8%) that we labelled critical. While individuals in this group had a generally negative view of migration, they were neutral about accepting refugees into the Netherlands and they tended to believe that migration had somewhat negative consequences for society. Although this group did not take an extremely negative stance, it did consider refugees and migrants as a critical issue that may create societal problems. The second group (33%) in

| Profiles # | AIC     | BIC     | Entropy | BLRT    | Group sizes |
|------------|---------|---------|---------|---------|-------------|
| 2          | 10,543.20 | 10,613.48 | 0.62    | 79.85** | 1,330, 315   |
| 3          | 10,498.60 | 10,590.49 | 0.66    | 52.61** | 450, 908, 287|
| 4          | 8,050.49  | 8,164.01 | 1.00    | 2,456.14** | 308, 523, 543, 271 |
| 5          | 8,058.97  | 8,194.11 | 0.86    | -0.48   | 308, 102, 523, 441, 271 |

**Note:** Inspection of the best type of model revealed that a model allowing for varying means while holding variance and covariance equal fitted the data best (method "EEE").

**p < .01.**
the middle could be described as lenient. This group had a neutral view towards migration, leaning towards acceptance of refugees. Furthermore, this group was relatively undecided regarding the consequences of migration for society. Although this group could not be described as positive, its members seemed to display some level of tolerance towards refugees and migrants. All in all, these results confirmed that Dutch society is polarized in its attitudes towards refugees and migrants as we found clearly separated structural groups, two of which were at opposite ends of the spectrum and two in the middle which were divided, suggesting disagreement across all four groups.

4.2 The three-dimensional model of attitudinal polarization

Second, to understand who has polarized attitudes and what was associated with these attitudes, we tested our integrated three-dimensional model in order to understand polarization. To test how the dimensions (and its factors) were linked to the four polarized groups outlined above, we conducted a hierarchical ordinal logistic regression (OLR). OLR tests the likelihood of belonging to a “higher” group (more pro-refugee and pro-migrant, when the regression coefficients are positive) or “lower” group (more anti-refugee and anti-migrant, when the regression coefficients are negative), based on the independent variables. This allowed us to test whether specific factors of the three dimensions could explain polarized group membership. In Step 1, we tested the factors in the first dimension of the individual and social self. In Step 2, we included the factors in the second dimension of perceptions and experience regarding refugees and migrants. Next, in Step 3 we added the factor of the third dimension of the societal context. In OLR, the unique effects of one variable are calculated while controlling for all other variables in the analysis. The continuous variables were standardized for this analysis to improve interpretation.

To assess whether the three dimensions could uniquely help to explain polarization, we computed Nagelkerke’s pseudo $R^2 (R^2_B)$ and $-2 \log$-likelihood ($-2LL$) of each step. Pseudo $R^2_B$ indicates the amount of variance explained by the independent variables regarding the differences between the groups and thus provide the effect size of the model. $R^2_B$ ranges between 0 and 1 while taking the sample size into account (Nagelkerke, 1991). In addition, $-2LL$ compares the model without the variables (intercept-only model) against the model including the variables to test whether the fit improved, with larger values indicating poorer models (NCRM, 2011).

Means, standard deviations, and correlations can be found in Tables 4 and 5. The results of the hierarchical OLR are reported in Table 6. Step 1 of the hierarchical OLR, testing the dimension of the individual and social self, was significant [$\chi^2 (4) = 404.35, p < .001$]
and explained a substantial proportion of polarization in attitudes towards refugees and migrants ($R^2_N = 0.24$). Furthermore, the $-2LL$ of the model (1,217.88) was significantly lower than the $-2LL$ of the intercept-only model (1622.22, $p < .001$). Education, political orientation, and personal relative deprivation were significant predictors of polarization in attitudes, whereas income was not. People with a lower level of education, a more right-wing orientation, and who experienced more relative deprivation were more likely to have anti-refugee and anti-migrant attitudes, whereas people who had higher education levels, a more left-wing political orientation, and who experienced less relative deprivation were more likely to hold pro-refugee and pro-migrant attitudes (confirming Hypotheses 1a–c).

Step 2, testing the dimension of perceptions and experience regarding refugees and migrants, was also significant [$\chi^2 (6) = 727.51$, $p < .001$]. Moreover, the $-2LL$ of the model (3,079.72) was significantly lower than the $-2LL$ of the intercept-only model (3,807.23, $p < .001$). A comparison of $R^2_N$ from Step 1 ($R^2_N = 0.25$) to Step 2 ($R^2_N = 0.41$) revealed a substantial increase. PCD from Islam and contact experiences significantly added to the explanations of polarization in attitudes (confirming Hypotheses 2a–b). People who perceived greater cultural distance from Islam and had fewer contact experiences with refugees and migrants were more likely to have anti-refugee and anti-migrant attitudes. Conversely, people who perceived less cultural distance from Islam and had more contacts were more likely to be pro-refugee and pro-migrant. However, it
should be noted that the effects for contact were small and the majority of participants had few or no contact experiences. Moreover, education was only marginally significant in this step \( (p = .065) \).

**TABLE 6** Hierarchical ordinal logistic regression model of attitudinal polarization

| Step 1: Individual and Social Self | Log Odds \( \beta \) | SE | Odds ratios [IC] | \( p \) |
|-----------------------------------|------------------|------|-----------------|------|
| Income                           | 0.02             | 0.11 | 1.02 [0.82 – 1.26] | .865 |
| Education                        | 0.33             | 0.10 | 1.39 [1.13 – 1.70] | .001 |
| Political orientation            | -0.74            | 0.05 | 0.48 [0.43 – 0.53] | <.001 |
| Relative deprivation             | -0.55            | 0.05 | 0.58 [0.52 – 0.64] | <.001 |

**Step 2: Refugees and Migrants**

| Income                           | 0.09             | 0.12 | 1.10 [0.88 – 1.37] | .422 |
| Education                        | 0.20             | 0.11 | 1.22 [0.99 – 1.51] | .065 |
| Political orientation            | -0.43            | 0.06 | 0.65 [0.58 – 0.73] | <.001 |
| Relative deprivation             | -0.34            | 0.05 | 0.71 [0.64 – 0.58] | <.001 |
| PCD from Islam                   | -1.08            | 0.06 | 0.34 [0.30 – 0.38] | <.001 |
| Frequency contact                | 0.11             | 0.05 | 1.11 [1.01 – 1.22] | .029 |

**Step 3: Societal Context**

| Income                           | 0.04             | 0.12 | 1.05 [0.83 – 1.31] | .714 |
| Education                        | 0.21             | 0.11 | 1.24 [1.00 – 1.54] | .055 |
| Political orientation            | -0.42            | 0.06 | 0.67 [0.59 – 0.73] | <.001 |
| Relative deprivation             | -0.28            | 0.06 | 0.76 [0.67 – 0.85] | <.001 |
| PCD from Islam                   | -1.04            | 0.06 | 0.35 [0.31 – 0.40] | <.001 |
| Frequency contact                | 0.10             | 0.05 | 1.11 [1.00 – 1.22] | .049 |
| Societal discontent              | -0.20            | 0.06 | 0.82 [0.73 – 0.91] | <.001 |

Note: The continuous variables in this analysis were standardized. Income and Education are dummy variables with the lower categories as the referent group. PCD is an abbreviation for perceived cultural distance.

**TABLE 7** Differences between LPA groups on the continues dimension variables

|                     | \( df \) | \( F \) | \( p \) | \( \eta^2 \) | Sig. group differences** |
|---------------------|---------|--------|-------|------------|-------------------------|
| Overall effect      | 15, 1,456 | 53.45  | <.001 | 0.15       |                         |
| Political orientation | 3, 1,460 | 79.67  | <.001 | 0.14       | A > B > C > D           |
| Relative deprivation| 3, 1,460 | 56.00  | <.001 | 0.10       | A > B > C > D           |
| PCD from Islam      | 3, 1,460 | 240.11 | <.001 | 0.33       | A > B > C > D           |
| Frequency contact   | 3, 1,460 | 18.46  | <.001 | 0.04       | A B C < D               |
| Societal discontent | 3, 1,460 | 42.42  | <.001 | 0.08       | A > B > C > D           |

Note: MANOVA test based on Wilks’ Lambda. In the post hoc analyses Bonferroni corrections were used.

**p < .01. PCD is an abbreviation for perceived cultural distance. The effect sizes were between small and medium, except for PCD Islam which is considered large (Steyn & Ellis, 2009).**

Step 3 of the analysis, testing the dimension of the societal context, was also significant \( (\chi^2 (7) = 707.63, p < .001) \). The \(-2LL\) of the model (3,136.08) was significantly lower than the \(-2LL\) of the intercept-only model (33,843.71, \( p < .001 \)). As expected, societal discontent significantly added to explaining polarization in attitudes towards refugees and migrants (Hypothesis 3). People who were unhappy about Dutch society were more likely to have anti-refugee and anti-migrant attitudes, whereas people who thought that Dutch society has been improving were more likely to hold pro-refugee and pro-migrant attitudes. However, a comparison of \( \eta^2 \ nk \) from Step 2 (\( \eta^2 nk = 0.41 \)) with Step 3 (\( \eta^2 nk = 0.41 \)) showed no increase, suggesting that the added effect to the overall model was limited. Education and contact were marginally significant in this step \( (p = .055 \) and .049, respectively).

To test the strength of association of each factor with polarization, we examined the odds ratios (OR), which tell us how much the odds that a person will move to a higher group if there is one unit increase in the independent variable increase or decrease (see Step 3, Table 6). An odds ratio > 1 indicates that the factor is associated with the odds of belonging to a higher group. An odds ratio < 1 indicates that the factor predicts that individuals are more likely to belong to a lower group. An odds ratio of 1 indicates that the factor is not associated with polarized group membership. For example, someone who scores “2” on PCD from Islam is more than half as likely (OR = 0.35) to have pro-refugee and pro-migrant attitudes than someone who scores “1”. Conversely, someone who scores “1” on PCD from Islam is about twice as likely to be pro-refugee and pro-migrant than someone who scores “2”.

Interestingly, the ORs and the log odds showed that PCD from Islam was a particularly important indicator of polarization. Finally, using a MANOVA for the continuous variables, we found significant differences for all factors (see Table 7). Again, the differences for PCD from Islam were especially noticeable; all groups differed from each other and the effect size of the differences was \( \eta^2 = 0.33 \), which can be considered large. In contrast, effect sizes of the differences for the other factors ranged between \( \eta^2 = 0.04 \) and \( \eta^2 = 0.14 \), which are small to moderate effects. Closer inspection of the means of the two middle groups showed that they scored fairly similarly on the factors, except for PCD from Islam (with a difference
of more than half a scale point). Thus, PCD from Islam was the main factor that explained why critical and lenient people differed from each other.

5 | DISCUSSION

The goal of the current research was to investigate whether and to what extent Dutch society is polarized in its attitudes towards refugees and migrants. Second, we aimed to understand who has polarized attitudes and what psychological factors may be associated with polarization by testing an integrated three-dimensional model. Using a large representative sample of the Dutch population, our findings suggested that Dutch society is polarized in its attitudes towards refugees and migrants. We found two substantial polarized groups at opposite ends of the spectrum, with attitudes that were either clearly anti- (16.5%) or pro- (18.7%) refugees and migrants. The majority of people fell in the middle of the spectrum. However, the middle group was not a single neutral group but instead was divided into two groups, one critical (31.8%) and one lenient (33%). Moreover, the three dimensions of the integrated model (the individual and social self, perceptions and experience regarding refugees and migrants, and the societal context) all played a unique role in understanding polarized attitudes in society. These results are discussed in more detail below.

5.1 | Theoretical and practical implications

The current research was based on previous research and theorizing on intergroup relations, with a specific focus on refugees and migrants and on attitudinal polarization in society. We have added to this literature in several meaningful ways. First, the current results suggest that Dutch society is polarized in its attitudes towards migration. Although some scholars focus on the distributions of attitude variables and the size of their tails to assess polarization, we followed previous research and opted for an operationalization of polarization as the presence of clear structural groups that are in disagreement with each other (e.g., Bauer, 2019; DiMaggio et al., 1996; see Supporting Information for the distributions of the attitudinal polarization variables). Interestingly, through this approach we found that besides two groups at the more extreme ends of the attitude scales, the middle was also clearly divided into two separate groups, neither of which could be clearly described as neutral. The critical group seemed to lean towards negative attitudes and the lenient group resembled the critical group more than it did the pro-refugee and pro-migrant group. This finding might have been missed if we had used a distributional approach to polarization.

The absence of one large, neutral group may be a cause for concern considering that people with stronger attitudes are less likely to change their attitudes, even in light of substantial evidence to the contrary (Holland et al., 2002; Leeper, 2014). Currently, there seems to be a trend in Western societies in which people decreasingly interact with individuals having opposing opinions (Frimer et al., 2017; McCoy et al., 2018). Other research demonstrated that brief group discussions with like-minded individuals makes people more confident in their beliefs and stereotypes of outgroups and stimulates norms to engage in discrimination (Myers & Bishop, 1970; Smith & Postmes, 2011). Altogether, this may in turn create a type of polarization that could have detrimental effects on social harmony as well as on the target groups (refugees and migrants) of the polarized debate (Lelkes, 2016). Yet, stating that society is polarized warrants some caution, as this may suggest a social norm of choosing sides, a pressure that many Dutch people already feel (SCP, 2019).

Our findings are in line with other findings from the Netherlands. The results of a national survey conducted in the Netherlands over a two-year period (2017–2019) also showed that a majority of people were concerned about the impact of refugees and migrants (Kuppens et al., 2020; Postmes et al., 2017). Importantly, although only a minority were against offering temporary asylum to refugees and seemed to be driven by xenophobic motives, a majority also tended to be critical and concerned about the integration of refugees and migrants and the consequences that this may have on Dutch cultural identity (Kuppens et al., 2020). Research on attitudes towards Muslims and their cultural practices also found four distinct groups in Dutch society (Adelman & Verkuyten, 2020), with two groups that either generally disliked or liked Muslims and their practices at opposite ends of the spectrum. The middle was divided into one group that was intolerant towards some Muslim practices, and another that was intolerant towards most Muslim practices, without necessarily displaying prejudice.

In addition, the current research suggests that polarization is a complex phenomenon. Although many psychological factors previously identified in the literature may explain and predict who has polarized attitudes, we have added to earlier literature by organizing these into three dimensions that all uniquely add to our understanding of polarized attitudes towards refugees and migrants in society, and which all have their own theoretical and practical implications in the context of attitudes towards migration in Western society.

5.1.1 | The individual and social self dimension

Regarding the dimension of the individual and social self, we found that people who were less educated, more right-wing, and who experienced more relative deprivation were more likely to have anti-refugee and anti-migrant attitudes. Conversely, people who were more highly educated, more left-wing, and who experienced less relative deprivation were more likely to hold pro-refugee and pro-migrant attitudes (supporting Hypotheses 1a–c). These findings provide insights into who may have polarized attitudes. For example, since people who are more right-wing are more focused on tradition, conservation, and authoritarianism, they may see migrants and refugees as a challenge to their own position in society and, therefore, be more likely to take an anti-migration stance (Canetti et al., 2016; Esses & Jackson, 2008).

Note that when factors from the other dimensions were added to the model, education was only marginally significant, with a small OR.
POLARIZATION IN ATTITUDES TOWARDS REFUGEES AND MIGRANTS IN THE NETHERLANDS

5.1.2 | Perceptions and experience regarding refugees and migrants dimension

The findings of the current research suggest that people who perceive a large cultural distance from Islam and who had less frequent contact with refugees and migrants were more likely to have anti-refugee and anti-migrant attitudes. Conversely, people who perceived less cultural distance from Islam and had more frequent contact were more likely to hold pro-refugee and pro-migrant attitudes (supporting Hypotheses 2a–b). Interestingly, PCD from Islam played an especially important role in explaining attitudinal polarization in the migration debate. PCD from Islam was particularly insightful in understanding why people in the middle took either a critical or a lenient stance, as this was the only factor in which these groups differed considerably (the critical group tended to agree that the two cultures differed, whereas the lenient group was neutral, close to the midpoint of the scale). Although objectively incorrect, people tend to assume that most refugees and migrants are Muslim (Wike et al., 2016). For example, people overestimate the number of Muslims in the Netherlands; although 5% are Muslim, people on average estimate the number to be 20% and annual numbers of recorded incidents of Islamophobia, such as hate crimes, are rising (e.g., CBS, 2018c; Ipsos, 2018; Vellenga, 2018). Although more research should investigate and validate our findings, the perceptions and misperceptions of refugees and migrants could be a starting point for interventions as people's perceptions of the culture of outgroups often do not match objective indicators of the respective culture (e.g., Bierwiczczek & Waldzus, 2016; Suanet & van de Vijver, 2009). Previous research suggests that perceptions of cultural distance in social values in particular (which focus on how to behave and to treat others in society) are linked to negative migrant attitudes (Albada et al., 2021). When host-society members perceived migrants as endorsing social values (focus on relationships and society) to a lesser extent than the host-society, they were less supportive of migrant policies, less tolerant, and more negative toward migrants. This finding was consistent across migrant groups (Syrian, Moroccan, and Polish), including migrants from Muslim-majority countries. Thus, perceptions of social values may be a relevant focal point for interventions.

We also found an association between frequency of contact and polarized attitudes, although it was small and only marginally significant. Note, however, that in the current research, people had almost no contact with refugees and migrants. Other research recently conducted in the Netherlands has suggested potential beneficial effects of intergroup contact. More precisely, Dutch residents living close to asylum centres were generally positive (or at least not negative) towards refugees and asylum centres (Kuppens et al., 2020). Research also suggests that contact needs to be positive and meaningful (such as friendship) in order to substantially improve attitudes towards outgroups and this may not have been the type of contact people had in the current context (e.g., De Coninck et al., 2020; Pettigrew & Tropp, 2008).

5.1.3 | The societal context dimension

Finally, and as expected, the societal context in which the intergroup relationship between Dutch host-society members, refugees, and migrants is embedded is related to attitudes towards migrants and refugees (Hypothesis 3). More precisely, people who experienced more societal discontent were more likely to hold anti-refugee and anti-migrant attitudes, whereas people who experienced less societal discontent were more likely to be pro-refugee and pro-migrant. However, the effect size was small. The current findings fit previous research showing that collective ideas of how society is doing are linked to attitudes towards refugees and migrants (van der Bles et al., 2015). Discontent about the government’s functioning is strongly linked to discontent about the implementation of migration policies in the Netherlands (Kuppens et al., 2020). Even when people are not necessarily opposed to refugees and migrants, they might adopt a critical stance due to a lack of trust in the capabilities of government or society.
Designing interventions or giving straightforward advice to practitioners is beyond the scope of the present research. However, it is important to note that—in all three dimensions—perceptions seemed to be key to understanding the polarization of attitudes towards refugees and migrants. Yet the consequences of such perceptions are real; people may express their attitudes or even reject refugees and migrants because of their beliefs and perceptions. By proposing a three-dimensional model that integrates different lines of literature on intergroup relations, attitudes towards refugees and migrants, and attitudinal polarization in society, we aim to offer some guidance for practitioners, policymakers, and researchers to focus on perceptions of the self and of ingroups, outgroups, and societal context in addressing attitudinal polarization towards migration.

5.1.4 | Limitations and future research

Below, we explain the three main shortcomings of the current research and suggest future research avenues that may address unanswerable questions regarding polarized attitudes towards migrants and refugees. First, it is important to note that we studied polarization by approaching attitudes towards refugees, migrants, and migration in a general terms. Although this approach led to valuable insights about polarization in the debate on refugees and migrants, it does not do justice to the fact that these groups, in reality, comprise many different ethnic, cultural, and religious groups. For example, recent research (e.g., Kuppens et al., 2020) has shown that people tend to be more accepting of refugees than of “economic migrants”. Thus, future research should differentiate between different refugee and migrant groups.

Second, due to the correlational nature of the data, we cannot draw any causal conclusions. Some results could plausibly suggest that perceptions of relative deprivation might lead to more polarized attitudes. Longitudinal research is needed to be able to draw any causal inferences about what causes polarization, and to identify the underlying processes that may trigger polarization. In the current research, we did not assess threat. However, previous research suggests that: (1) some people may be more prone to experience outgroup threat when they feel uncertain or lack resources (see our first dimension of the individual and social self; e.g., Esses et al., 2001), (2) certain (perceived) characteristics of outgroups are experienced as threatening (see our second dimension of perceptions and experiences regarding refugees and migrants; e.g., Esses et al., 2013), and (3) some characteristics of people’s social environment or societal context are associated with increased outgroup threat (see our third dimension of the societal context; e.g., Ho et al., 2020; Meuleman et al., 2020). Future research could offer important insights in these potentially underlying processes.

Third, the current results may be specific to the Dutch context and not directly generalizable to other nations. Attitudes towards refugees and migrants differ across countries (European Social Survey, 2016), and the polarized groups we found in the current study may not be replicated in other societies. For example, attitudes towards refugees and migrants tend to be more negative in Eastern Europe than in Western Europe (European Social Survey, 2016). Our theoretical assumptions about why people may hold positive or more negative attitudes towards refugees and migrants is based on theorizing that has been tested in different cultural settings. We hope that future research will test the framework in other countries.

6 | CONCLUSIONS

To conclude, Dutch society seems to be polarized with respect to attitudes towards refugees and migrants, with two substantial groups at opposing ends of the attitude spectrum (anti and pro) and two distinct groups in the middle, who are either critical or lenient towards refugees and migrants. Around half of the respondents took a more negative stance (anti-refugee and migrant and critical), a substantial group was lenient, and only one group (less than 20% of the respondents) could be identified as clearly pro-refugee and pro-migrant. These results have clear societal relevance, as refugees and migrants facing negative attitudes may also experience social discrimination. In fact, refugees and migrants are clearly disadvantaged in the labour market (Dumont et al., 2016), and suffer significantly more (mental) healthcare issues than members of the host-society (Davies et al., 2006). We hope that our integrated three-dimensional model will inspire future research to develop a better understanding of polarization in society, its complexity, and possible ways to intervene.

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CONFLICT OF INTERESTS

The authors declare that they had no conflicts of interests with respect to their authorship or the publication of this article.

ETHICAL STATEMENT

The research for the current article was in accordance to the ethical guidelines of the Declaration of Helsinki, the National Ethics Council of Social and Behavioral Sciences, and the APA.

DATA AVAILABILITY STATEMENT

The data used in the current research will not be made public as the authors do not have legal ownership of the data. Stay Human and the Dutch Council for Refugees/VluchtelingenWerk Nederland
Explaining the breakdown of ethnic relations: Why neighbors kill (pp. 223–243). Blackwell.

Esses, V. M., Jackson, L. M., Dovidio, J. F., & Hodson, G. (2005). Instrumental relations among groups: Group competition, conflict, and prejudice. In J. F. Dovidio, P. Glick & L.A. Rudman (Eds.), On the nature of prejudice: Fifty years after Allport (pp. 227–243). Wiley.

Esses, V. M., Mediano, S., & Lawson, A. S. (2013). Uncertainty, threat, and the role of the media in promoting the dehumanization of immigrants and refugees. *Journal of Social Issues, 69*(3), 518–536. https://doi.org/10.1111/josi.12027

European Social Survey (2016). Attitudes towards Immigration and their antecedents: Topline results from round 7 of the European Social Survey. https://www.europeansocialsurvey.org/docs/findings/ESS7_toplines_issue_7_immigration.pdf

European Social Survey (2017). Attitudes towards immigration in Europe: Myths and realities. https://www.europeansocialsurvey.org/docs/findings/E_HANDOUT_FINAL.pdf

Everitt, B. S., Landau, S., Leese, M., & Stahl, D. (2011). Cluster analysis (5th Ed.). Wiley.

Fetzer, J. S. (2000). Economic self-interest or cultural marginality? Anti-immigration sentiment and nativist political movements in France, Germany and the USA. *Journal of Ethnic and Migration Studies, 26*(1), 5–23. https://doi.org/10.1080/1369183001155615

Frimer, J. A., Skitka, L. J., & Motyl, M. (2017). Liberals and conservatives are similarly motivated to avoid exposure to one another’s opinions. *Journal of Experimental Social Psychology, 72*, 1–12. https://doi.org/10.1016/j.jesp.2017.04.003

Guimond, S., & Dambrun, M. (2002). When prosperity breeds intergroup hostility: The effects of relative deprivation and relative gratification on prejudice. *Personality and Social Psychology Bulletin, 28*(7), 900–912. https://doi.org/10.1177/01467202028007004

Hainmueller, J., & Hiscox, M. J. (2007). Educated preferences: The effects of relative deprivation and relative gratification on prejudice. *Journal of Experimental Social Psychology, 43*(3), 339–375. https://doi.org/10.1016/j.jesp.2006.05.005

Jetten, J. (2019). The wealth paradox: Prosperity and opposition to immigration. *European Journal of Social Psychology, 49*, 1097–1113. https://doi.org/10.1002/ejsp.2552

Jetten, J., Mols, F., & Postmes, T. (2015). Relative deprivation and relative wealth enhances anti-immigrant sentiments: The V-curve re-examined. *PLoS One, 10*(10), e0139156. https://doi.org/10.1371/journal.pone.0139156

Jost, J. T. (2017). Ideological asymmetries and the essence of political psychology. *Political Psychology, 38*, 167–208. https://doi.org/10.1111/pops.12407

Jost, J. T., Glaser, J., Kruglanski, A. W., & Sulloway, F. J. (2003). Political conservatism as motivated social cognition. *Psychological Bulletin, 129*(3), 339–375. https://doi.org/10.1037/0033-2909.129.3.339

Jung, J., Grim, P., Singer, D. J., Bramson, A., Berger, W. J., Holman, B., & Kovaka, K. (2019). A multidisciplinary understanding of polarization. *American Psychologist, 74*(3), 301–314. https://doi.org/10.1037/amp0000450

Kuppens, T., Gootjes, F., Boendermaker, M., Gordijn, E. H., & Postmes, T. T. (2020). Ongenoegen, migratie, gastvrijheid en maatschappelijke onrust. Rijksuniversiteit Groningen. https://www.wocd.nl/onderzoeksdatabase/2742-monitor-onvrede-en-angst-migratiestromen.aspx

Lee, T. L., & Fiske, S. T. (2006). Not an outgroup, not yet an ingroup: Immigrants in the stereotype content model. *International Journal of Intercultural Relations, 30*(6), 751–768. https://doi.org/10.1016/j.ijintrel.2006.06.005

Leeper, T. J. (2014). The informational basis for mass polarization. *Public Opinion Quarterly, 78*(1), 27–46. https://doi.org/10.1093/poq/nft045

Leik, Y. (2016). Mass polarization: Manifestations and measurements. *Public Opinion Quarterly, 80*(S1), 392–410. https://doi.org/10.1093/poq/nfw005

Maher, P. J., MacCarron, P., & Quayle, M. (2020). Mapping public health responses with attitude networks: The emergence of opinion-based groups in the UK’s early COVID-19 response phase. *British Journal of Social Psychology, 59*(3), 641–652. https://doi.org/10.1111/bjosp.12396

Mafhud, Y., Badea, C., & N’gila, A. (2015). Cultural distance and prejudice against immigrants: The role of integration models. *Revue Internationale de Psychologie Sociale, 22*(2), 53–79.

Mafhud, Y., Badea, C., Verkuyten, M., & Reynolds, K. (2018). Multiculturalism and attitudes toward immigrants: The impact of perceived cultural distance. *Journal of Cross-Cultural Psychology, 49*(6), 945–958. https://doi.org/10.1177/0022022117730828

Major, B., Blodorn, A., & Major Blascovich, G. (2018). The threat of increasing diversity: Why many White Americans support Trump in the 2016 presidential election. *Group Processes and Intergroup Relations, 21*(6), 931–940. https://doi.org/10.1177/1368430216677304

McGarty, C., Bluc, A. M., Thomas, E. F., & Bongiorno, R. (2009). Collective action as the material expression of opinion-based group membership. *Journal of Social Issues, 65*(4), 839–857. https://doi.org/10.1111/j.1540-4560.2009.01627.x

Meuleman, B., Abts, K., Schmidt, P., Pettigrew, T. F., & Davidov, E. (2020). Economic conditions, group relative deprivation and ethnic threat perceptions: A cross-national perspective. *Journal of Ethnic and Migration Studies, 46*(3), 593–611. https://doi.org/10.1080/1369884302167730

McCoy, J., Rahman, T., & Sommer, M. (2018). Polarization and the global crisis of democracy: Common patterns, dynamics, and pernicious consequences for democratic politics. *American Behavioral Scientist, 62*(1), 16–42. https://doi.org/10.1177/0002764217759576

Mccarty, C., Bluc, A. M., Thomas, E. F., & Bongiorno, R. (2009). Collective action as the material expression of opinion-based group membership. *Journal of Social Issues, 65*(4), 839–857. https://doi.org/10.1111/j.1540-4560.2009.01627.x

Meuleman, B., Abts, K., Schmidt, P., Pettigrew, T. F., & Davidov, E. (2020). Economic conditions, group relative deprivation and ethnic threat perceptions: A cross-national perspective. *Journal of Ethnic and Migration Studies, 46*(3), 593–611. https://doi.org/10.1080/1369884302167730

Mols, F., & Jetten, J. (2014). No guts, no glory: How framing the collective past paves the way for anti-immigrant sentiments. *International Journal of Intercultural Relations, 43*, 74–86. https://doi.org/10.1016/j.ijintrel.2014.08.014

Moulaert, F., Rodriguez, A., & Swyngedouw, E. (2003). The globalized city: Economic restructuring and social polarization in European cities. Oxford University Press.

Myers, D. G., & Bishop, G. D. (1970). Discussion effects on racial attitudes. *Science, 169*(3947), 778–779. https://doi.org/10.1126/science.169.3947.778
Nagelkerke, N. J. D. (1991). A note on the general definition of the coefficient of determination. Biometrika, 78(3), 691–692. https://doi.org/10.1093/biomet/78.3.691

National Centre for Research Methods (NCRM) (2011). Module 5: Ordinal regression. http://www.restore.ac.uk/srme/www/fac/soc/ieaur ope.com/repor ts/2017- repor ts/Do we view social categories as natural kinds? In G. R. Semin & K. Fiedler (Eds.), Relative deprivation: Specification, development, and integration. Cambridge University Press.

Oberski, D. L. (2016). Mixture models: Latent profile and latent class analysis. In J. Robertson & M. Kaptein (Eds.), Modern statistical methods for HCI: A modern look at data analysis for HCI research. Springer. https://doi.org/10.1007/978-3-319-26633-6_12

Pedersen, A., Watt, S., & Hanser, S. (2006). The role of false beliefs in the community’s and the federal government’s attitudes toward Australian asylum seekers. Australian Journal of Social Issues, 41(1), 105–124. https://doi.org/10.1017/prp.2017.5

Pettigrew, T. F., & Tropp, L. R. (2006). How does intergroup contact reduce prejudice? Meta-analytic tests of three mediators. European Journal of Social Psychology, 38(6), 922–934. https://doi.org/10.1002/ ejsp.504

Piurko, Y., Schwartz, S. S., & Davidov, E. (2011). Basic personal values and the meaning of left-right political orientations in 20 countries. Political Psychology, 32, 537–561. https://doi.org/10.1111/j.1467-9221.2011.00828.x

Postmes, T., Gordijn, E., Kuppens, T., Gootjes, F., & Albada, K. (2017). Draagvlak migratiebeleid. Wetenschappelijk Onderzoek- en Documentatiecentrum (WODC): University of Groningen. https://www.wodc.nl/onderzoeksdatabase/2807-draagvlak-migratiebest romen.aspx

Prentice, D. A., & Miller, D. T. (2007). Psychological essentialism of human categories. Current Directions in Psychological Science, 16(4), 202–206. https://doi.org/10.1111/j.1467-8721.2007.00504.x

R Development Core Team (2010). R: A Language and Environment for Statistical Computing. R Foundation for Statistical Computing.

Riek, B. M., Mania, E. W., & Gaertner, S. L. (2006). Intergroup threat and outgroup attitudes: A meta-analytic review. Personality and Social Psychology Review, 10(4), 336–353. https://doi.org/10.1207/s1532 7957pspr10 04_4

Rosenberg, J. M., van Lissa, C. J., Beymer, P. N., Anderson, D. J., Schell, M. J., & Schmidt, J. A. (2019). tidyLPA: Easily carry out latent profile analysis (LPA) using open-source or commercial software [R package].

Rothbart, M., & Taylor, M. (1992). Category labels and social reality: Do we view social categories as natural kinds? In G. R. Semin & K. Fiedler (Eds.), Language, interaction and social cognition (p. 11–36). Sage Publications.

SETA (2017). European Islamophobia report. http://www.islamophob ia.eu/europe/reports/2017-reports/

Smith, L. G., & Postmes, T. (2011). The power of talk: Developing discriminatory group norms through discussion. British Journal of Social Psychology, 50(2), 193–215. https://doi.org/10.1348/014466610X 504805

Steyn, H. S., & Ellis, S. M. (2009). Estimating an effect size in one-way multivariate analysis of variance (MANOVA). Multivariate Behavioral Research, 44(1), 106–129. https://doi.org/10.1080/0027317080 2620238

Tajfel, H., & Turner, J. C. (1979). An integrative theory of intergroup conflict. In W. G. Austin & S. Worchel (Eds.), The social psychology of intergroup relations (pp. 33–47). Brooks/Cole.

Triandis, H. C. (1994). Culture and social behavior. McGraw-Hill Book Company.

UNHCR (2016). Global trends: Forced displacement in 2015. https://s3.amazonaws.com/unhchrsharedmedia/2016/2016-06-20-global-trends/201606-14-Global-Trends-2015.pdf

UNHCR (2019). Are refugee numbers the highest ever? https://www.unhcr.org/blogs/statistics-refugee-numbers-highest-ever/

United Nations (2017). International Migration Report 2017. Department of Economic and Social Affairs. https://www.un.org/en/developmen t/desa/population/migration/publications/migrationreport/docs/MigrationReport2017_Highlights.pdf

Van der Bles, A. M., Postmes, T., & Meijer, R. R. (2015). Understanding collective discontents: A psychological approach to measuring zeitgeist. PLoS One, 10(6), e0130100. https://doi.org/10.1371/journ al.pone.0130100

Van Noord, J., Spruyt, B., Kuppens, T., & Spears, R. (2019). Education-based status in comparative perspective: The legitimation of education as a basis for social stratification. Social Forces, 1, 28. https://doi.org/10.1093/sf/socz012

Vasta, E. (2007). From ethnic minorities to ethnic majority policy: Multiculturalism and the shift to assimilationism in the Netherlands. Ethnic and Racial Studies, 30(5), 713–740. https://doi.org/10.1080/01419870701491770

Vellenga, S. (2018). Anti-Semitism and Islamophobia in the Netherlands: Concepts, developments, and backdrops. Journal of Contemporary Religion, 33(2), 175–192. https://doi.org/10.1080/13537 903.2018.1469257

Walker, I., & Smith, H. J. (2002). Relative deprivation: Specification, development, and integration. Cambridge University Press.

Walker, I., Smith, H. J. (2002). Relative deprivation: Specification, development, and integration. Cambridge University Press.

Wike, R., Stokes, B., & Simmons, K. (2016). Europeans fear wave of refugees will mean more terror ism, fewer jobs. http://www.pewglobal.org/2016/07/11/europeansfear-wave-of-refugees-will-mean-more-terrorism-fewer-jobs/

Yzerbyt, V., Cornelle, O., & Estrada, C. (2001). The interplay of subjective essentialism and entitativity in the formation of stereotypes. Personality and Social Psychology Review, 5(2), 141–155. https://doi.org/10.1207/s15327957PSPR0502_5

SUPPORTING INFORMATION

Additional supporting information may be found online in the Supporting Information section.
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APPENDIX

ITEMS
All items ranged from a scale from 1 (totally disagree) to 5 (totally agree) unless otherwise indicated.

ATTITUdINAL POLARIZATION VARIABLES

Negative view of migration
Higher ratings indicated a more negative view on migrations. The scale ranged from 1 (very positive) to 5 (very negative).

• Do you think that immigration had a positive or negative impact on the Netherlands?

Acceptance of refugees
Higher ratings indicated more acceptance of refugees and refugee shelters in the Netherlands.

• We must close our borders completely for refugees—we cannot accept any more at the moment. (reversed)
• People must be able to flee to countries, including the Netherlands, to escape from war or persecution.
• We have to accept refugees in the Netherlands because it is part of our country’s culture and history to welcome people who flee war and violence.
• The Netherlands has the economic and financial resources to welcome refugees, and therefore has an obligation to do so.
• For decades, people with different backgrounds and with different beliefs have come to the Netherlands. But as long as they work hard, learn the language and contribute to society, there is room for them here.

Perceived consequences of migration
Higher values indicated more negative perceived consequences of migration.

• Immigration is good for Dutch cultural life and makes the Netherlands a livelier and more exciting place to live. (reversed)
• Immigration is bad for the Netherlands and divides society into opinions and beliefs that are strongly opposed to each other.
• Refugees who come to the Netherlands these days ensure that the Netherlands is more open to new ideas and cultures. (reversed)
• Immigration is good for the Dutch economy and provides new skills, new opportunities and stimulates success. (reversed)
• Immigrants in the Netherlands have made it more difficult for Dutch people to find employment.
• Immigrants claim benefits and social benefits, even though they do not contribute.
• Immigrants are given priority over our own Dutch population when it comes to social benefits, housing, or use of public facilities.

THE INDIVIDUAL AND SOCIAL SELF DIMENsION VARIABLES

Education
• What is your highest completed degree of education?

1. Universitair-doctor of master/HBO/postdoctoraal. (recoded as high)
2. HBO of universitair: kandidaats/bachelor. (recoded as high)
3. HAVO of VWO (afgerond)/HBS/MMS. (recoded as mid)
4. MBO niveau 2, 3, 4 of MBO oude stijl (voor 1998). (recoded as mid)
5. MAVO/HAVO of VWO onderbouw / ULO/MULO/VMBO TL of GL/Special Onderwijs. (recoded as low)
6. LBO/VBO/VMBO kader of beroepssgericht/MBO 1. (recoded as low)
7. Geen opleiding/basisonderwijs. (recoded as low)
8. Otherwise, namely: …………….. (recoded into low, mid or high depending on the answer)

Political orientation
Scale ranged from 1 (very left) to 7 (very right).

• In terms of your political beliefs, where would you classify yourself?

Income
• Nowadays people often use the term modal income. Modal means that you earn between 28,500 and 34,000 euros a year, including holiday pay. Which of the following situations is most applicable to your household income?

1. Below average (less than 28,500 euros gross per year)
2. Modal (between 28,500 and 34,000 euros gross per year)
3. Above average (more than 34,000 euros gross per year)

Personal relative deprivation
Higher ratings indicated higher experience of personal relative deprivation.

• For someone like me it is becoming more difficult to be successful in the Netherlands.
• I am benefiting personally from the growth in the Dutch economy. (reversed)
PERCEPTIONS AND EXPERIENCE REGARDING REFUGEES AND MIGRANTS DIMENSION VARIABLES

PCD from Islam
Higher values indicated more PCD from Islam.

- Most Muslims have similar values as I have. (reversed)
- The Islam and the Dutch society are not compatible with each other.

Frequency contact
Higher values indicated more contact experiences. The scale ranged from 1 (never), 2 (less than once a year), 3 (once or a few times a year), 4 (once or a few times a month), to 5 (every week or more often).

- How often do you have personal contact with people from the following groups?
  1. Immigrants from Turkey
  2. Immigrants from Morocco
  3. Immigrants from Eastern Europe
  4. Refugees from the Middle East (Syria, Iraq, etc.)
  5. Refugees from African countries (Ethiopia, Somalia, etc.)
  6. Refugees from other regions

THE SOCIETAL CONTEXT DIMENSION VARIABLE

Societal discontent
Higher ratings indicated more societal discontent. The scale ranged from 1 (improved) to 3 (worsened).

- In general, did Dutch society improve, stay the same or worsen over the past year?
- In general, did the Dutch economy improve, stay the same or worsen over the past year?