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Not as innocent as it seems?

The effects of “neutral” messaging on refugee attitudes

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Abstract

Immigration has become one of the most divisive political issues in Europe and around the world. In Germany, Europe’s largest refugee hosting country, public attitudes have reached a low point. Besides increased “real-life” exposure to immigrants, exposure to all sorts of messages centered around immigration and refugees may be behind this worrying trend. While prior research has investigated the effects of specific subjects of the immigration discourse, such as specific frames or statistical information, it remains unclear how “neutral” reporting on refugee migration impacts public attitudes. We fill this gap using data from an original survey experiment conducted in Germany in May 2023. The findings suggest that a sober (neutral) video providing basic background information on Syrian refugees reduces humanitarian concerns for this refugee group, increases the perception of security threats and lowers the willingness to support refugee camps abroad. The results are driven by West German residents. Qualitative data reveals that, although the video is indeed perceived as “neutral”, it triggers security-related associations among West Germans, seemingly eroding concerns for refugees’ wellbeing. Conversely, East Germans, while starting from a slightly more negative base level, more frequently express indifference. Finally, merging our survey data with administrative data on the foreign population in respondents’ counties reveals that larger percentage increases in real-life immigration exposure mitigate the treatment effect.

JEL classifications: A13, D63, D83, J15

Keywords: Migration attitudes, migration discourse, refugees; humanitarianism; threat perceptions; survey experiment

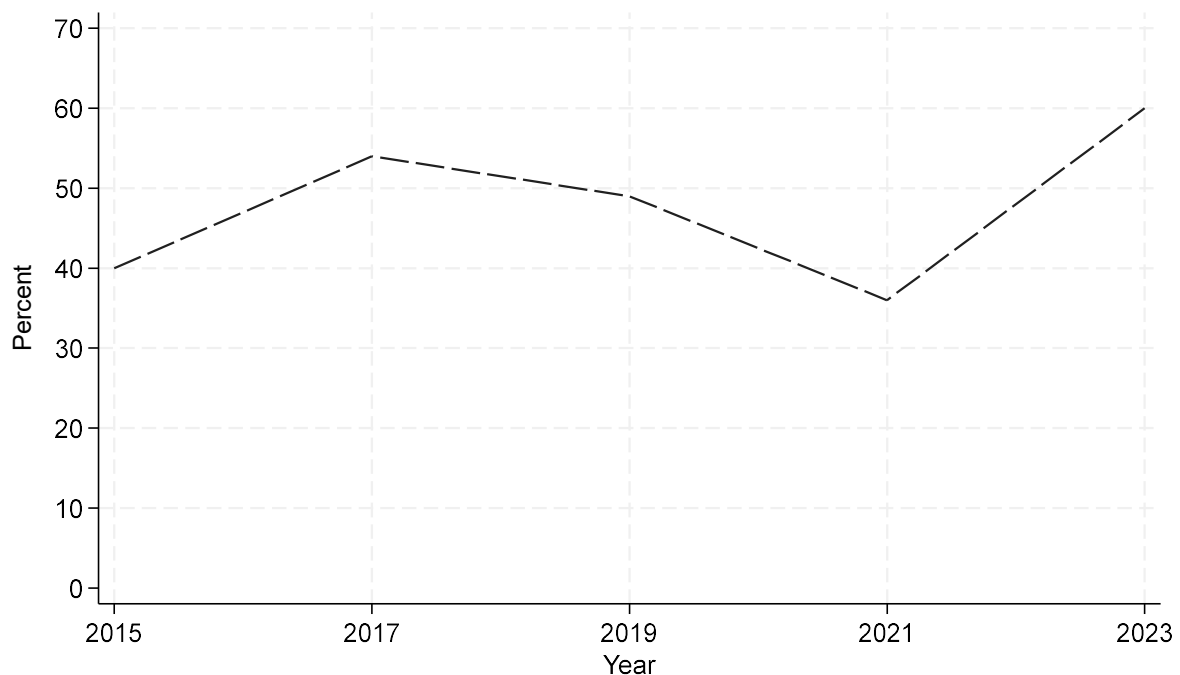
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1) Introduction

In many European countries, the issue of asylum immigration has shaped the political agenda and discourse more than most other issues in recent years. This was accompanied by a rise of far-right groups, such as the AfD party in Germany, which doubled its vote share in the 2025 legislative elections. Exit polls reveal that the voters in Europe's largest refugee destination country perceived "immigration, asylum and integration" as the most important problem (ZDF, n.d.). This is in line with an analysis by Wieland (2024), suggesting that attitudes towards immigration are particularly negative in the aftermath of large inflows of asylum seekers and refugees as was the case in 2015/2016 and 2022/2023. Figure 1 illustrates the substantial fluctuations in the proportion of Germans skeptical of admitting more refugees since 2015. This raises questions about the drivers of attitudes towards (humanitarian) immigration, particularly in times of large-scale influxes.

Figure 1: Percentage of Germans against the admission of more refugees



Source: Authors' illustration based on data from Wieland (2024)

In light of the existing literature, we distinguish between two explanatory approaches: "real-life" exposure as well as messaging exposure. Real-life exposure relates to (changing) characteristics in an individual's environment due to the presence or arrival of immigrants. This includes increased exposure to and opportunities for contact with immigrants as a direct consequence, but may also include more indirect implications such as increased competition

for housing (Unal et al., 2024). Implications of immigration can relate to, for example, a country's economy, cultural life and security situation and are not necessarily negative.² A recent study by Dražanová & Gonnot (2023) points to differences in the relationship between real-life exposure and attitudes depending on how exposure is measured: On the one hand, a larger regional share of migrants is associated with more migration-friendly attitudes. Conversely, short-term *increases* in the share of the foreign-born population tend to fuel resistance. These dynamics can be linked to two lines of argument in the literature revolving either around positive effects of intergroup contact, at least under favorable conditions (Allport, 1954; Pettigrew & Tropp, 2006), or around perceptions of immigration as a threat and unwanted competition for scarce resources (Blalock, 1967; Bobo, 1999; Stephan et al., 2009).

The alternative explanation is based on the insight that immigration attitudes are formed based on perceptions rather than hard facts (Wong, 2007). This suggests that the various messages around immigration that people are exposed to, for example via the public discourse, may also matter for how they think and feel about the topic. Typically, these studies examining messaging effects included specific elements, such as threat or humanitarian frames or information on immigrant numbers, that were intended to sway people's attitudes in one direction or another. However, a lot of messages in the public discourse are not aimed at influencing people's views but rather at, for example, providing basic background information on current or past developments, using a neutral tone. Indeed, calls for a calmer and more objective discourse have become commonplace. However, researchers have so far sidelined the question of how people respond to messaging that is designed to be neutral and sober.

In fact, the literature suggests that messaging can impact people's attitudes not only through its *content* but also by merely increasing the *salience* of the issue. Existing publications have largely translated issue salience into the prevalence of migration coverage in the media and produced somewhat ambiguous results with regard to effects of issue salience. These studies were predominantly based on observational data though, raising a number of endogeneity concerns³ and did not look at refugee and asylum migration in particular. However, this form of migration is especially politically sensitive and research suggests that the formation of

² In particular, economic and cultural effects can also be (perceived as) positive contributions (Maurer et al., 2021).

³ A summary of existing findings and of the challenges to causal identification is discussed in Section 2.

attitudes differs systematically between the contexts of humanitarian migration and other migration forms (Abdelaaty & Steele, 2022; Fraser & Murakami, 2022).

This research is meant to fill this gap by investigating the question of how exposure to a neutrally designed video on refugees impacts humanitarian concerns, threat perceptions and policy preferences towards refugees. This is particularly important to investigate given that some media coverage aims to be as neutral as possible in messaging with the hopes to “only show the facts”. Additionally, researchers and academics are often under the impression that all they need to do is give neutral facts to properly form opinions on migration. We approach this question by means of a survey experiment in Germany, in which we employed a short professionally produced video clip about Syrian refugees in Turkey whose content does not contain any elements to influence attitudes in one way or another. Thanks to follow-up data collection, we can provide additional insights into the cognitive and emotional reactions of respondents, which sheds light on the mechanisms underlying our treatment effects. Finally, we merge our survey data with administrative data on the foreign population in German counties (*Kreise*) to explore interactions between our treatment of exposure to migration messaging with a proxy for real-life migration exposure.

Our results demonstrate that even exposure to a video designed to speak about refugee migration in a calm and neutral way leads to eroding concerns for the wellbeing of Syrian refugees and drives up perceptions of a security threat. Further, we find weak evidence that video exposure reduces willingness to sign a petition to support refugee camps abroad. Our data shows that the increased negativity through treatment exposure is driven by West Germans and less pronounced in counties that experienced large percentage increases in their foreign populations in the years prior to the data collection. Data from a second data collection round confirms that West Germans are more likely to make associations with the security situation in Germany, whereas East Germans appear to be more indifferent when seeing the video. Moreover, it provides evidence that the video was not just intended to be neutral and sober but was also perceived as such and that the impact on attitudes is due to increased salience rather than specific contents in the video.

This research makes various contributions to the literature on migration messaging and migration attitudes. First, our interest in the effect of neutral messaging deviates from existing studies that were mainly centered around framing interventions or the updating of (biased) beliefs. Further, we speak to the limited literature on salience effects to which we add a new

angle by focusing specifically on humanitarian migration, and we advance this literature strand methodologically by providing experimental evidence to complement the existing observational studies. In addition, we provide a deeper understanding of the underlying mechanisms of our intervention through an additional data collection specifically tailored for this purpose. Finally, we further illuminate the interactions between messaging effects and actual migration patterns.

2) Literature review

2.1) Public discourse and migration attitudes in Germany

Generally, refugees are considered somewhat ambivalent figures since they are at the same time associated with vulnerability as well as potential threats. This pattern applies to both public perceptions (Adida et al., 2019; Fraser & Murakami, 2022; Jeannet et al., 2021) and media depictions (Chouliaraki & Stolic, 2017; Maurer et al., 2021; McCann et al., 2023). In 2015, the salience of the immigration topic, particularly of irregular immigration, grew in tandem with the increasing number of asylum seeker arrivals in European countries (Heidenreich et al., 2019; Maurer et al., 2019). Various studies analyzing the European media landscape at the time document the prevalence of different frames for these new arrivals, such as threat or victim frames (Chouliaraki & Stolic, 2017; Greussing & Boomgaarden, 2017; Heidenreich et al., 2019). However, there were changes over time: for example, Chouliaraki et al. (2017, p. 2) state that the sympathetic climate in the summer months of 2015 was “replaced by suspicion and, in some cases, hostility towards refugees and migrants”.

For Germany, the prevalence of a “human interest” frame was relatively widespread and expanding until the late summer of 2015, when it began to decline. Conversely, news coverage linking migrants with crime and terrorism was initially low but increased steeply from autumn 2015 onwards (Heidenreich et al., 2019). In an analysis of six German leading media outlets, both print and television⁴, Maurer et al. (2019) finds that only 2 percent of immigration-related news items made links with criminality in 2015. In January 2016 though, following the New Year Eve events in Cologne, where a large number of harassment incidents occurred, mostly involving suspects with migration backgrounds, this proportion skyrocketed to 26 percent. This also coincided with a tonality change in the coverage of immigrants, which was quite positive in the German media in 2015 but turned much more negative in January 2016 (Maurer et al.,

⁴ The study did not cover all items related to immigration in general, but only those linked to immigration from countries that played a relevant role in the 2015/16 “migration crisis”, such as Syria or Afghanistan.

2019). And while the individual immigrants were portrayed largely positively in 2015, and particularly the vulnerability and need of Syrian refugees was widely recognized (McCann et al., 2023), the large-scale immigration as a more abstract phenomenon was mostly depicted as a challenge rather than an opportunity (Maurer et al., 2019). In line with these developments in the media, Czymara & Schmidt-Catran (2017) revealed a significant decline in the acceptance towards immigrants among Germans between April 2015 and February 2016. This decline was particularly pronounced for immigrants from the Middle East and Africa. At the same time though, they found that the acceptance towards refugees, who were overall regarded as more acceptable, remained high.

The media analysis by Maurer et al. (2019) was extended for the period 2016 to 2020 in a later publication (Maurer et al., 2021). Besides a decline in issue salience, the authors describe a predominantly negative depiction of the topic of migration. This time, the rather negative tone applied to both the phenomenon of asylum immigration as well as to the immigrants themselves. The immigration consequences were portrayed mainly as a threat to Germany, with links to security implications (i.e., crime and terrorism) being much more prevalent than economic or social implications (Maurer et al., 2021).

After Russia started its full-scale invasion of Ukraine in February 2022, causing the displacement of millions of Ukrainians, many of whom migrated to Germany, the “Welcome Culture” in Germany was revived. However, the simultaneity of the influx of approximately one million Ukrainians and surging asylum seeker numbers led to strained resources resulting in, for example, appeals for help from German municipalities (Wieland, 2024). In this context, asylum immigration from outside of Europe became particularly controversial. Studies show that attitudes were more positive towards Ukrainians than non-European refugees, such as Afghans and Somalis (Moise et al., 2024) or Syrians (Dražanová & Geddes, 2023). These studies also show a deterioration of refugee attitudes in the months following Russia’s invasion. Between May/June 2022 and April 2023, the share of German respondents that preferred to admit no or only few Syrian refugees surged by roughly 20 percentage points (Dražanová & Geddes, 2023). This is also in line with the latest data collection of the Bertelsmann Stiftung in October 2024, in which 60 percent of respondents agreed with the statement that Germany could not take in more refugees because it had reached a capacity limit. This proportion was higher than in any of the three preceding waves of data collection (Wieland, 2024).

2.2 Messaging effects on migration attitudes

As outlined, the tone of migration coverage has varied in past years. Yet, to what extent are such changes reflected in people's views towards immigration? A large body of literature has analyzed the effects of how the topic is portrayed. Typically, this research strand looks at the effects of framing migration in a specific way or of conveying specific migration-related information.

For example, a number of studies have found that more negative portrayals of immigrants in the media can lead to a deterioration of immigration attitudes (Agovino et al., 2022; Schemer, 2012; Schneider-Strawczynski & Valette, 2023). Conversely, positive messages have been found to mitigate stereotypes (Schemer, 2012) or decrease the subjective importance of the immigration topic (Carvalho et al., 2024). These observational studies could be corroborated by experimental evidence in some cases: highlighting benefits for host societies (Alesina et al., 2023; Cattaneo & Grieco, 2021; Liu, 2023) or appealing to humanitarian sentiments (Hillenbrand et al., 2024; Newman et al., 2015) led to more positive attitudes among respondents in various country settings. In contrast, experimentally exposing respondents to frames depicting immigrants as some form of threat can increase hostility (Getmansky et al., 2018; Hillenbrand et al., 2024; Lahav & Courtemanche, 2012; Manzoni et al., 2024; Newman et al., 2015).

Another set of studies is tailored towards updating people's – often biased (Alesina et al., 2023) – beliefs by priming them with some empirical facts relating to, for example, the size of migration flows, the composition of the immigrant populations, or economic implications of immigration. Dennison (2022) has summarized this literature strand, concluding that - while the overall picture is mixed - there is at least some potential to improve immigration attitudes, especially when economic aspects are included in the priming.

A few studies have also looked into the effects of variations in the salience of the immigration issue, mostly operationalized as the quantity of overall reporting on immigration. Besides being much more limited in scope, the relevant studies that do exist do not paint a consistent picture. For example, Benesch et al. (2019), using a sophisticated econometric design, found that an increase in immigration-related media coverage in Germany drove up concerns about immigration. Similarly, according to Facchini et al. (2017), reporting on irregular immigration on US TV stations was associated with more negative attitudes. Agovino et al. (2022) find a negative association between the quantity of migration news items and pro-migration attitudes

in a cross-country study, which was, however, confined to the subset of the sample with relatively strong trust in the media. On the other hand, Schneider-Strawczynski & Valette (2023) find a polarization effect stemming from migration-related coverage on French television, but no overall negative effect. Finally, Carvalho et al. (2024) document that a greater number of migration-related news items increases the perceived importance of the topic in seven West-European countries, which, however, does not necessarily imply more negative views. Yet, none of these studies focused specifically on refugee migration, even though the formation of attitudes towards humanitarian immigration differs systematically from the formation of attitudes towards immigration more generally.⁵

In addition, as (Benesch et al., 2019) acknowledge, these observational studies face challenges in terms of causal identification. First, the amount of media coverage is often correlated with real-life events, such as large inflows of migrants (Maurer et al., 2019). The effects of these real-life events may then be conflated with the effects of the increased reporting. Second, there is a risk of reverse causality, meaning that the current state of public opinion may impact the depiction of migration in the media. There is a third caveat: An increase in reporting may be correlated with specific *contents* in the coverage. For example, the large number of reported harassment incidents on New Year's Eve 2015 in Cologne mentioned above, led to a marked uptick in immigration-related reporting as documented by (Maurer et al., 2019). However, the authors point to the fact that also the thematic composition was very different in January 2016 than in the previous months with a drastically increased share of news items linking immigration with crime. It may therefore prove difficult to separate changes of media *salience* from changes in media *contents*.⁶

Studies with experimental designs appear well-suited to remedy these caveats. Yet, in contrast to the literature on messaging content, there is a lack of experimental research underpinning the discussed salience-related findings. The only experimental study in this context we are

⁵ This difference matters for two reasons: First, attitudes towards humanitarian migrants (relative to labor migrants) are more strongly centered around perceptions of (security) threats and humanitarian responsibilities, rather than utility considerations (Abdelaaty & Steele, 2022; Fraser & Murakami, 2022). Moreover, there are often substantial compositional differences in terms of gender, education, etc. between these two groups.

⁶ Benesch et al. (2019) using panel data with an instrumental variable design, make an effort to tackle the first two challenges. Yet, they acknowledge that their instrument - migration-related referendums in Switzerland - is tailored toward a quite specific type of migration that has probably little in common with reporting about humanitarian immigration to Europe or Germany. Further, given the significance of the 2015/16 'migration crisis', the authors themselves raise doubts whether their findings based on data from 2009 to 2014 may still hold after the pivotal years 2015 and 2016.

aware of is by (Alesina et al., 2023), in which the order of an immigration block and a redistribution question block were randomized in a survey questionnaire. The authors find that by asking for opinions on immigration first - and thereby prompting respondents to think about immigration - their preferences for redistribution declined. However, while they measure the effect of an increased salience of immigration, the authors' interest was in understanding redistribution preferences rather than migration attitudes. We are not aware of experimental evidence for salience effects on views towards migration, let alone the immigration of refugees. One reason may be that it is hardly feasible to induce respondents to think about migration without providing any migration-related content. Strictly speaking, the effects found in the Alesina et al. (2023) study could, in theory, also be driven by the content of the respective questionnaire items, even though this is not the authors' interpretation.

We intend to address the identified gaps by means of a survey experiment in which German respondents were primed with a short professionally produced video clip, whose content was designed to provide neutral background information without any specific frames, which distinguishes us from previous studies on messaging content effects. Further, as we will discuss, our treatment effects appear to be driven by the salience rather than the content channel. Therefore, we contribute to the literature on migration salience by providing (1) experimental evidence that (2) has a specific focus on refugee immigration as today's most contentious migration form.

2.3 “Real-life” exposure effects on migration attitudes

Beyond exposure to migration messaging, there is a second form of exposure which pertains to *actual* immigration and its *real-life* consequences, such as increased diversity or competition. A recent study by Dražanová & Gonnot (2023) points to differences in the relationship between immigration and attitudes depending on how immigration is measured. On the one hand, a larger regional share of migrants at a certain point in time is associated with more migration-friendly attitudes. Conversely, short-term *increases* in the share of the foreign-born population tend to fuel hostility. We label these two effects “stock effects” and “flow effects”, respectively. These dynamics can be linked to two lines of argument in the literature: While some scholars point to reduced stereotype levels following intergroup contact, at least under favorable conditions (Allport, 1954; Pettigrew & Tropp, 2006), other theories suggest that immigration is primarily perceived as a threat and unwelcome competition among natives (Blalock, 1967; Bobo, 1999; Stephan et al., 2009). The distinction between the short term, in

which a sense of threat prevails, and the long term, in which the tolerance-enhancing effect of intergroup contact dominates, aligns with the findings by (Putnam, 2007), who famously warned that increased diversity may result in a “hunkering down” effect in the short and medium, but not in the long run.

The literature focusing on exposure specifically to refugee and asylum migration typically looks at the flow rather than the stock of migrants. With respect to asylum migration from the MENA region, which includes asylum-seekers from Syria, some studies documented a causal link between stronger exposure to migration flows and increased hostility towards foreigners (Hangartner et al., 2019) or support for extreme-right parties (Dinas et al., 2019) in Greece. Similarly, in a study from Bavaria in Germany, Stecker & Debus (2019) detected a positive relationship between the establishment of asylum seeker accommodations in the wake of the 2015/16 inflow and an increased support for the right-radical AfD in national elections which was particularly pronounced in rather rural and formerly homogenous regions. In contrast though, studies for Austria (Steinmayr, 2016) and France (Vertier et al., 2023) suggest that the success of far-right parties was more limited in places where refugees were accommodated. However, in both cases this seems to be driven by communities receiving smaller rather than larger numbers of migrants.

Building on the distinction between messaging and real-life exposure, the question of possible interactions arises, where little research has been done. Getmansky et al. (2018) find that the effects of various frames is not moderated by the amount of self-reported exposure of the Turkish respondents to refugees. Conversely, a study from the US found that threat-related messages were less effective in reducing support for refugee resettlement in refugee-dense counties (Ferwerda et al., 2017). We add to this literature by investigating how the effect of neutral messaging may be moderated by respondents’ real-life immigration exposure. Drawing on the above distinction between immigration stocks and flows, we test for the heterogeneity of our treatment effect using both the size of the foreign population (stocks) as well as recent percentage changes of the population size (flows) as moderators.

3) Data and Research Design

Our main data comes from a large online survey experiment that was conducted in May 2023. To improve our understanding of the mechanisms underlying our treatment effects, we complemented the survey experiment data with data from an additional online survey,

conducted in July 2024, which was tailored towards measuring the cognitive and emotional reactions of respondents to the video. We use the responses from 807 participants of the first round of data collection and 327 respondents from the second round. In both cases, we worked together with the survey company *Bilendi*, sampling participants from their Germany panel that were between 18 and 69 years of age at the time of survey participation. To ensure comparability with the wider German population, quotas were set for gender, age and the geographical distribution across states. The share of married respondents in our sample is 45 percent (relative to a national average of 41 percent), the proportion of respondents with a university degree is slightly above the national average (26 percent relative to 21 percent), whereas people with a migration background are somewhat underrepresented (14 percent relative to 24 percent). In terms of political orientation, the average respondent is just left of the center (2.9 on a 1-5 scale) and has a trust level slightly below the middle category (2.6 on a 1-5 scale). Both statistics are fairly similar to those from the 10th wave of the European Social Survey (ESS).⁷

In addition, we merged the respondents' counties (*Kreise*) of residence with administrative data on the foreign population in each county.⁸ The respective data sets are made accessible by Germany's Central Register of Foreigners (AZR). In particular, we use the data from 2014, i.e. the year before the onset of the "migration crisis" and 2022. The AZR data refers to the foreign population at the end of the respective year such that the large-scale influx of Ukrainians in 2022 is reflected in our data. The 2022 data also represents the most recent account of Germany's foreign population before our first round of data collection in May 2023.⁹

Both online surveys began with a section in which we asked for the (informed) consent of the participants. We then collected information on the participants' sociodemographics, particularly on their gender, age, place of residence, educational background, employment status, income and migration background. Besides sociodemographics, the surveys included

⁷ The corresponding values for Germany in the ESS are 4.3 for political orientation and 4.7 for social trust on scales from 0 to 10. In both our survey and the ESS lower values for political orientation represent more left-leaning ideologies. The national statistics for marital status, education and migration background were taken from the German Federal Statistical Office (Destatis).

⁸ We decided to use the data on the foreign population more broadly rather than specifically on humanitarian migrants as the relevant theories relating to intergroup contact (Allport, 1954) and threat perceptions (Green et al., 1998; Stephan et al., 2009) relate to increases of ethnic diversity more broadly rather than through a specific group of migrants. Moreover, the migration status of people is not observable for the host population and there are migrant groups who are difficult to classify (e.g. migrants whose asylum applications have been rejected).

⁹ A more detailed explanation on how the steps we took to create the foreign population variables is available in Appendix C.

questions relating to respondents' political ideology, social trust levels, and - in the case of the first survey - their humanitarian orientation.

The treatment video runs for 48 seconds and begins with a definition of who is a refugee. It states that refugees strive for finding safety in other countries and mentions that the Civil War in Syria led to many people fleeing the country with a majority of them residing in Turkey. The geographical distribution of the refugee population across Turkey is briefly illustrated with a map, before the video ends on the note that some refugees found their own accommodations, whereas others live in refugee camps. Respondents could not simply skip the page with the video as the option to proceed to the next page was enabled only after 50 seconds. An English translation of the exact wording along with a link to the original video is provided in Appendix D. The control group received an entirely unrelated video of similar length.¹⁰ Randomization into one of the two experimental groups was successful as the balance table in Appendix E documents.

We label our treatment video as “neutrally designed” to convey that the content of the video did not include any elements intended to sway attitudes in one direction or another. Specifically, the video was careful to not include forms of issue-framing (e.g., humanitarian or threat frames) or belief updating (e.g., through the provision of relevant statistical facts). Further, the people visible in the video are merely indicated by silhouettes to prevent that recognizable facial features enhance empathy (Azevedo et al., 2021). In addition, there is no mention of Germany as a possible destination country. That said, we acknowledge that there is probably no form of messaging that is entirely neutral. However, our research interest is to understand the impact of messages that are *intended* to speak neutrally about the topic without influencing opinions. This aligns, for example, with the principles of objectivity and impartiality to which the public broadcasting providers such as ARD and ZDF – the market leaders of German television (AGF, n.d.) – are held. To assess the extent to which the video was also *perceived* as neutral, we complemented the initial data collection with a second collection round with a specific focus on people's associations and emotions when watching the video. As we discuss below, we find evidence that the style of the video was perceived as “sober” and that our treatment effects did not stem from information conveyed in its content.

¹⁰ The topic of the control group's video was related to weather forecasting. An English translation and the weblink are included in Appendix D too.

In the first round of data collection, participants watched either the treatment or the control video, after which they answered questions about their humanitarian concerns – i.e., concerns for the well-being of Syrian refugees in Turkey – and their perceptions of threat regarding a (hypothetical) migration of these refugees to Germany. Specifically, we asked respondents to what extent they were concerned about the refugees’ safety, material well-being, health, and future prospects (*humanitarian concerns*) on a scale from 1 (not at all concerned) to 5 (very concerned). The threat perception items assessed fears related to labor market competition, welfare state implications, security risks, and cultural compatibility between refugees and natives (*threat perceptions*), using a 5-point scale as well. Additionally, respondents expressed their policy preferences by indicating their support (or lack thereof) for a policy petition. One petition advocated for increased financial support for refugee camps hosting Syrians in Turkey (*camps petition*), while the other called for the admission of Syrians from Turkey to Germany (*admission petition*). The inclusion of such high-stakes questions helps to elicit the true opinions of survey respondents, particularly in contexts where certain responses may be seen as more (or less) socially desirable (Stantcheva, 2023).

In the second round, we aimed at understanding the associations respondents made while watching the video using an open-ended question. We also asked them to fill out a matrix with 32 emotions, covering anger, disgust, fear, anxiety, sadness, desire, relaxation, and happiness items. Specifically, we requested them to indicate the extent to which they experienced these emotions while watching the video on a 7-point Likert scale. The order of the associations question and the emotional scale were randomized to address potential order effects. English translations of the questionnaires are printed in Appendix A and Appendix B, respectively. The original German versions can be made available upon request.

This data is used to empirically test the effects of our video treatment on respondents’ attitudes towards refugees. Specifically, our empirical approach follows this OLS regression equation:

$$y_i = \beta_0 + \beta_1 Video_i + \beta_2 Video_i * Immigration_c + \beta_3 Immigration_c + \beta_4 X_i + \lambda_s + u_i$$

In this equation, y_i represents the refugee attitudes of respondent i pertaining to humanitarian concerns, threat perceptions, and policy preferences. The variable $Video_i$ stands for the respondents’ treatment status, i.e. exposure to the treatment or the control video, whereas $Immigration_c$ captures the extent of respondents’ real-life immigration exposure depending on the county of residence c . This is either measured as a stock variable, i.e. the share of foreign

citizens in 2022, or as a flow variable, i.e. the percentage increase in the foreign population between 2014 and 2022. X_i is a vector with individual-level control variables, comprising measures of the respondents' gender, age, income, education, political orientation and social trust. Finally, λ_s is a dummy variable for the respondents' state of residence s .

4) Results

We proceed with the presentation of our results as follows: First, we show the effects of our treatment on humanitarian concerns, threat perceptions and policy preferences of respondents and discuss the heterogeneity between East and West Germany. Regression tables in the main text include a set of control variables, whereas the regression results without controls can be found in Appendix G. Second, we shed light on the channels underlying our treatment effects by analyzing our data on the associations and emotions respondents reported when watching the video. Finally, we investigate whether and how the treatment effects are moderated by respondents' real-life immigration exposure (tables in Appendix H).

4.1 Analysis of the main treatment effects

The levels of the four types of humanitarian concerns we observed were, on average, all close to the middle category of three, with concerns for safety and material wellbeing slightly below and concerns for health and future prospects just above three. The average values of threat perceptions show slightly more variation. In particular, perceived job threat is less pronounced than welfare, security and cultural threat perceptions, which aligns with earlier research (Dražanová et al., 2024; Hainmueller & Hopkins, 2014). Support for the camps and the admission petitions amount to 25 percent and 23 percent, respectively. This is small compared to earlier research (Azevedo et al., 2021), which may have to do with the specific context in which the data was collected.¹¹ Comparing treatment and control group, we observe that the average levels of humanitarian concern are at least slightly greater in the control relative to the treatment group across all four concern types. Similarly, control group respondents show slightly lower averages for our threat perception measures and a greater willingness to sign the

¹¹ The combination of large numbers of Ukrainian refugees and increased asylum immigration to Germany resulted in a widespread feeling of being overwhelmed and in preferences for reduced refugee immigration (Wieland, 2024).

camps petition.¹² This indicates that refugee attitudes were, on average, more positive in the control vis-à-vis the treatment group.

This impression is confirmed in our regression analysis. Table 1 summarizes the effects of exposure to the treatment video on respondents' humanitarian concerns for the refugees. We consistently find a negative effect of similar size on all four dimensions of humanitarian concerns.¹³ This suggests that exposure to a video, designed to speak about refugee migration neutrally, leads to a significant erosion in compassion towards the respective refugee group.

Table 1: Treatment effects on humanitarian concerns

	Safety	Material	Health	Future
Treatment	-0.369*** [0.099]	-0.354*** [0.099]	-0.341*** [0.105]	-0.298*** [0.106]
Control mean	2.974	3.170	3.264	3.253
Observations	620	624	624	620
R-squared	0.172	0.194	0.175	0.185

Notes: Controls include gender, age, marital status, university education, income, being unemployed, being Muslim, migration background, overseas experience, humanitarian orientation, political orientation, social trust, state (*Bundesland*) of residence. Standard errors in brackets. Significance levels: * $p < .1$, ** $p < .05$, *** $p < .01$.

The treatment effects on respondents' threat perceptions are summarized in Table 2. Our data suggests that perceptions of job, welfare and cultural threat are unaffected by our treatment. However, we identify a positive effect on respondents' perceptions of refugees as a security risk. Security concerns have been found to be particularly important in shaping refugee attitudes (Lahav & Courtemanche, 2012; Landmann et al., 2019). While past research studying messaging effects on immigration-related fears included specific threat-related elements in the treatments, we demonstrate that messaging can amplify security threat perceptions even though the messaging *content* makes no connections to security risks.

¹² The propensity to sign the admission petition is virtually identical across both groups.

¹³ The effect size of our treatment amounts to roughly one fourth of the standard deviation of the outcome variables.

Table 2: Treatment effects on threat perceptions

	Jobs	Welfare	Security	Culture
Treatment	0.076	0.007	0.195**	0.117
	[0.085]	[0.085]	[0.085]	[0.081]
Control mean	2.481	3.393	3.259	3.452
Observations	642	642	642	642
R-squared	0.173	0.255	0.297	0.212

Notes: Controls include gender, age, marital status, university education, income, being unemployed, being Muslim, migration background, overseas experience, humanitarian orientation, political orientation, social trust, state (*Bundesland*) of residence. Standard errors in brackets. Significance levels: * $p < .1$, ** $p < .05$, *** $p < .01$.

Finally, we are interested in whether the treatment also translates into differences in people's policy preferences, specifically in people's willingness to sign a petition either to support Syrians in Turkish refugee camps or for admitting Syrians from Turkey. Table 3 reveals that we did not find significant effects on these behavioral outcomes, at least not at the conventional 5 percent significance level. Our point estimate of a 7.6 percentage point reduction in respondents' willingness to sign the petition for camps support is, however, meaningful in size and significant at the 10 percent level. This is in line with other findings suggesting that changing perceptions is more easily achieved than policy preferences (Jørgensen & Osmundsen, 2022).

Table 3: Treatment effects on policy preferences

	Camps	Admission
Treatment	-0.076*	-0.008
	[0.046]	[0.047]
Control mean	0.292	0.232
Observations	319	323
R-squared	0.262	0.202

Notes: Controls include gender, age, marital status, university education, income, being unemployed, being Muslim, migration background, overseas experience, humanitarian orientation, political orientation, social trust, state (*Bundesland*) of residence. Standard errors in brackets. Significance levels: * $p < .1$, ** $p < .05$, *** $p < .01$.

4.2 Heterogeneity of treatment effects between East and West

Overall, the treatment effects appear quite similar across a wide range of socioeconomic characteristics, such as respondents' gender, education, political and humanitarian orientation or social trust levels. However, we find interesting geographical variations. For example, we identify significant differences in how East and West German residents respond to the

treatment (Table 4). While East Germans show, on average, slightly lower levels of humanitarian concerns than West Germans in the control group¹⁴, there is no decline in East Germans' humanitarian concerns following our treatment. In other words, the negative overall effect of our treatment is driven by the reactions of West rather than East German respondents.

Table 4: Treatment effects on humanitarian concerns – by East vs. West

	Safety	Material	Health	Future
Treatment	-0.445*** [0.107]	-0.415*** [0.108]	-0.397*** [0.114]	-0.399*** [0.115]
Treatment*East	0.685** [0.288]	0.544* [0.292]	0.624** [0.306]	0.670** [0.314]
East	-0.353* [0.212]	-0.341 [0.217]	-0.368 [0.226]	-0.323 [0.231]
Control mean	2.974	3.170	3.264	3.253
Observations	592	596	596	592
R-squared	0.159	0.179	0.170	0.172

Notes: Controls include gender, age, marital status, university education, income, being unemployed, being Muslim, migration background, overseas experience, humanitarian orientation, political orientation, social trust. Standard errors in brackets. Significance levels: * $p < .1$, ** $p < .05$, *** $p < .01$.

Similarly, with respect to respondents' security threat perception, we again find evidence that it is the West Germans who are responsible for the treatment effect. Even though the interaction term is not significant here¹⁵, when computing the treatment effects separately, the coefficient for the East German subsample is virtually zero. This contrasts with the much larger and significantly positive effect among West Germans (Table 5).

Table 5: Treatment effects on threat perceptions – by East vs. West

	Jobs	Welfare	Security	Culture
Treatment	0.079 [0.092]	-0.024 [0.092]	0.220** [0.092]	0.131 [0.088]

¹⁴ These differences are not statistically significant though.

¹⁵ The lack of significance may also be due to the relatively small number of East Germans in the sample.

Treatment*East	-0.090 [0.244]	-0.006 [0.245]	-0.233 [0.244]	-0.194 [0.235]
East	0.022 [0.176]	0.112 [0.177]	0.101 [0.177]	0.110 [0.170]
Control mean	2.481	3.393	3.259	3.452
Observations	613	613	613	613
R-squared	0.170	0.246	0.294	0.197

Notes: Controls include gender, age, marital status, university education, income, being unemployed, being Muslim, migration background, overseas experience, humanitarian orientation, political orientation, social trust. Standard errors in brackets. Significance levels: * $p < .1$, ** $p < .05$, *** $p < .01$.

Turning to the petition questions, we find, once more, that the video treatment reduces support for on-site assistance among West Germans, whereas the coefficient for East Germans is positive, albeit insignificant. We do not detect significant effects or differences with respect to admission preferences.

Table 6: Treatment effects on policy preferences – by East vs. West

	Camps	Admission
Treatment	-0.108** [0.050]	-0.029 [0.050]
Treatment*East	0.298** [0.139]	0.113 [0.138]
East	-0.200* [0.113]	-0.122 [0.087]
Control mean	0.292	0.232
Observations	306	307
R-squared	0.215	0.160

Notes: Controls include gender, age, marital status, university education, income, being unemployed, being Muslim, migration background, overseas experience, humanitarian orientation, political orientation, social trust. Standard errors in brackets. Significance levels: * $p < .1$, ** $p < .05$, *** $p < .01$.

4.3 In-depth analysis of associations and emotions

We have provided a comprehensive picture of the effects of “neutral” refugee migration messaging on various forms of refugee attitudes and analyzed the extent to which the effects differ between residents of East and West Germany. To understand better why and how our treatment affects people’s views, we followed up with a second round of data collection in which we asked respondents explicitly what the video made them think of (associations question) and which emotions they experienced when watching it (emotions question). While all 327 responses on the emotional experiences were analyzed, we removed responses to the associations question from 29 participants due to insufficient quality.

The emotion with the highest average was “sad”, followed by “worry” and “grief” ranked third. While “sad” and “grief” likely express some form of empathy with the refugees, “worry” could be linked either with concerns for the refugees or concerns for oneself or for Germany as an important host country of Syrian refugees (even though this was not explicitly mentioned). Indeed, disaggregating this emotion by subgroups, we find that average values are highest among those on the very left (4.21) and those on the very right (4.19) of the political spectrum, whereas the lowest average is found for people identifying as centrist (3.52). We interpret this as suggestive evidence that respondents’ worry was directed at different groups of people.

The emotions can be linked to a large number of empathetic statements people made answering the associations question. Among these responses, we found 242 quotations distributed across 186 responses that included some kind of a “pro-refugee” message. By far the most common statements were linked to a recognition of the adversity the refugees had to cope with and/or an expression of sympathy, with 64 percent of the pro-refugee items entailing such a message. Other relatively common types of pro-refugee statements were characterized by a change of perspectives (19 percent), i.e. when respondents put themselves in the shoes of the refugees, or by a positive attitude towards support for refugees (14 percent).

On the other hand, quotations entailing some kind of anti-refugee message were also quite frequent (161 quotations), yet these were spread across only 88 respondents. In contrast to the pro-refugee category, there is no clearly dominating theme among the anti-refugee statements. That said, more than 17 percent of these quotations showed a link to the theme of security and crime, making this the most common negative association. These quotations range from responses with a rather understanding tone, maintaining, for example, that the refugees’

challenging living conditions made them more prone to delinquency, to labeling refugees as “murderers, thieves, rapists”¹⁶ (no. 48). Another relatively common group of statements doubted the legitimacy of the motives of the migrants (14 percent), e.g. arguing that they were moving rather for economic than humanitarian reasons or demanding harsher admission and return policies (12 percent). With regards to further threat perceptions, statements regarding economic threat were entailed in 10 percent of anti-refugee statements, whereas culture-related fears were hardly mentioned (1 percent).

These anti-refugee remarks can be linked with another set of emotions with relatively high averages, such as “rage”, “mad”, and “anger”.¹⁷ Respondents’ associations reveal that these emotions are in part directed at refugees, in particular at “those who exploit the help” (no.39). In other instances though, these anger items were apparently linked with a disapproval of the Syrian Civil War or wars in general.¹⁸

Taken together, our data suggests that reporting pro-refugee – relative to anti-refugee – associations and emotions is more widespread. At the same time, data from the survey experiment indicated somewhat higher averages for threat perceptions vis-à-vis humanitarian concerns. One reason may be that social desirability effects are particularly strong when asking respondents specifically for their associations and emotions when watching the video. Moreover, it is common for both sentiments to co-exist within the same individual, even though one perception may be more pronounced than the other (Jeannet et al., 2021). In line with that, 30 responses included expressions of ambivalence. For example, one respondent speaks of “mixed feelings, concerns for the security of my country, for of my future and those of my children, as well as empathy with the Syrian population” (no. 70). This illustrates the attempt to balance the two dominant ‘logics’, a humanitarian assistance and a national interest ‘logic’, that typically govern the formation of attitudes towards humanitarian migration (Jeannet et al., 2021). The fact that the security issue ranks first among the anti-refugee statements and that other forms of threat perception were much less common, backs our finding that exposure to the treatment video amplifies the perception of security related fears.

¹⁶ Since the data collection was conducted in German, all quotations have been translated into English by the authors.

¹⁷ They ranked fifth, sixth, and seventh, respectively.

¹⁸ Overall, the condemnation of wars and warmongers was mentioned in 74 responses, making it one of the most frequent themes in participants’ responses.

Besides our overall results, the different reactions among East and West Germans stood out. An analysis particularly of the anti-refugee associations between these groups provides some insights:¹⁹ First, almost all of the references to security implications were made by West Germans, making it the clear frontrunner with a share of almost 20 percent of anti-refugee quotations in this sub-group. In line with this finding, all of the fear and anxiety emotions that we measured were, on average, higher among West than East Germans. The difference is particularly pronounced for “Dread” (*Angst*), where it is also statistically significant at the 10 percent level despite the modest sample size.

Conversely, among East Germans, indifference towards the refugees is the most common anti-refugee item. For example, one respondent writes “Far away - only concerns me to a limited extent, actually not my problem, I can’t and don’t want to help with that” (no. 26). This is corroborated by differences among relaxation-related emotions that East and West Germans reported. The average for East Germans is higher among all four of the respective emotions (easy-going, chilled out, calm, and relaxation). For the “chilled out”-item, the difference is especially large and significant at the 5 percent level.

In summary, the data suggests that East Germans are more likely to be unmoved when watching the video, which could explain the lack of a treatment effect in this part of the sample. In contrast, video exposure is more likely to drive up security fears among respondents from West Germany, which is exactly what we found in our regression analysis. Given that the West German subsample is also responsible for the observed erosion of humanitarian concerns following our treatment, it seems likely that the increased concerns about one’s own security or the security of one’s co-citizens comes at the cost of concerns for more distant others. This pattern has been discussed in the Intergroup Threat Theory, according to which increased feelings of threat may cause the erosion of empathy towards outgroup members, whereas empathy towards ingroup members may be amplified (Stephan et al., 2009).

Finally, our follow-up data also sheds some light on whether specific aspects of the video’s content are responsible for the observed impact on respondents, or whether the treatment effects are more likely to be based on salience manipulation. Several remarks made by respondents suggest that the video was not only *intended* to be neutral but that this is also how it was *perceived*. For example, one respondent wrote “I took it as an informational video that, for me,

¹⁹ Data from respondents from Berlin are excluded for this analysis as they could not be clearly assigned to either camp.

contained neither new or surprising facts, nor did it evoke any noteworthy emotional response” (no. 235). Another saw it as “a sober, calm video without sensationalism or polemics”. The term “sober” (*sachlich*) was also highlighted by three other respondents as well. Multiple respondents mentioned explicitly that there was nothing new they learnt from the video, as illustrated in this quote: “It didn’t convey anything new, just what’s already known from the news.” Among those who reported having learned something through the video, the majority referred to the importance of Turkey as a host country for Syrians, which has no evident link to our attitude variables. In addition, the average scores for the emotions questions were all below the middle category, suggesting that the video did not evoke strong emotional reactions of any kind. Overall, our data makes it seem unlikely that it was the content of the video that impacted the attitudes of respondents.

4.4 Interactions between treatment and real-life immigration exposure

We have shown that reactions to the treatment differ between the eastern and western regions of the country. In this subsection, we take a closer look at the role of people’s place of residence by adopting a more fine-grained approach, focusing on how real-life exposure to immigration moderates these reactions. To this end, we have merged our survey experiment data with administrative data on the foreign population by county (*Kreise*) for the years 2014 and 2022. Theory suggests that living in a more or less diverse environment affects people’s immigration attitudes, yet, it is ambivalent with regards to the direction of this effect (see Section 2).

As pointed out by Dražanová & Gonnot (2023), exposure to immigration can be operationalized in two different ways, either capturing immigrant stocks, measured by the share of the foreign population at a specific point in time, or immigration flows, i.e. the *change* in the foreign population share in a specific time period. In our data, there is a strong negative correlation²⁰ between those two because places with high levels of diversity in 2022 were usually quite diverse in the baseline year of 2014 already. Therefore, the percentage increase in these counties has been lower than in initially more homogenous counties, where even modest inflows of foreign citizens resulted in relatively high percentage increases in the foreign population.

The data shows that diversity has gone up in all German counties, without exception, with a median increase of 63 percent. The foreign population share in 2022 is correlated with slightly

²⁰ The correlation coefficient is -0.67.

more positive refugee attitudes, yet most coefficients are very close to 0. We find roughly the opposite when replacing the foreign population share by the percentage change of this share between 2014 and 2022. While this (weak) pattern aligns with the work by Dražanová & Gonnot (2023), we do not claim these associations to be causal since the (changes in the) distribution of the foreign population is likely to be correlated with confounding factors.

Therefore, our key interest in the real-life exposure variables is their role in moderating the treatment effects. We begin by looking at the interactions of our treatment with the immigrant stocks in 2022 (Tables A6-A8, Appendix H). By and large, our results suggest that refugee attitudes are more negatively affected by the neutral messaging if respondents live in more diverse environments. The evidence is strongest for the outcomes of perceived welfare and security threat as well as for the camps petition, where the interaction terms are significant at the 5 percent level.

When proxying real-life exposure by immigration flows (Tables A9-A11, Appendix H), we find that the overall negative effect of our treatment on humanitarian concerns is significantly *mitigated* by increased real-life exposure. This holds for all dimensions of humanitarian concerns, camp support and, although only significant at the 10 percent significance level, for perceived security threat. In summary, we find opposing effects depending on how real-life exposure is measured, which is not surprising given the strong negative correlation between the two variables. We offer a discussion of these results below.

An empirical challenge is the strong correlation between the real-life exposure measures and the East-West divide²¹. While the foreign population shares are, on average, higher in West Germany, the percentage increases in the foreign population were more pronounced in East German counties as the following numbers make clear. In 2022, the median immigrant share was 17 percent in West Germany, relative to only 7 percent in the East. However, the median percentage increase in Western counties was “only” 52 percent which is dwarfed by the 176 percent surge in East Germany.

To disentangle the effects of real-life exposure and this East-West divide, we repeat the above exercise while excluding East German respondents (Tables A12-A17, Appendix H).²²

²¹ The correlation coefficient for the East dummy and immigrant stock (immigration flow) exposure amounts to -0.47 (0.76).

²² We refrain from running a separate analysis using only our East German subsample given the much smaller number of observations.

Regardless of our proxy choice, we find that real-life exposure remains a significant moderator for the effects on security threat perceptions.²³ However, for the humanitarian concerns and camp petition outcomes, the interaction terms are no longer significant.

Discussion & Conclusions

In the face of crumbling support for refugee protection, many experts have blamed a largely negative migration discourse as an important driver of this worrying trend. This argument rests on the assumption that a calmer and more objective discussion of the issue would mitigate people's increasing opposition to asylum immigration. However, despite a wealth of studies on migration messaging, the existing literature lacks research aimed at understanding the effects of "neutral" messaging on the topic of refugee migration.

We fill this gap by investigating the effect of exposing Germans to a "neutrally" designed video on Syrian refugees on a set of attitudes towards this refugee group. Our results indicate that the treatment leads to reduced humanitarian concerns for the refugees as well as to an increase in security threat perception. While admission preferences are not affected, the neutral messaging is associated with a lower willingness to support refugee camps in Turkey. Complementary data provides suggestive evidence that the treatment effects are not linked to specific contents of the video, but are rather the result of a salience effect, i.e. of just making people think about the topic of refugee migration and triggering certain emotions and associations.

We demonstrated that the treatment effects are driven by the West German subsample, rather than their East German co-citizens. This seems to be because West Germans are more likely to make associations with negative security implications when watching the video, whereas East Germans react with a larger extent of indifference. The heightened fear for one's own safety or the safety of one's fellow citizens may crowd out concerns for the refugees' wellbeing.

In addition, we interacted our video exposure treatment with respondents' exposure to immigrant stocks and immigration flows in their counties. We find the treatment effects are stronger in counties characterized by a) a larger share of foreign citizens and b) a smaller percentage increase of the foreign population since 2014.²⁴ Given the strong (negative) correlation of these two variables, it is difficult to identify which forces are actually moderating

²³ In addition, the interaction between immigrant stocks and our treatment is also significant for the perceived welfare threat outcome.

²⁴ However, as we showed, this is in part due to a correlation with Germany's East-West divide.

the treatment effects. In light of the so-called Defended Neighborhood Hypothesis (Green et al., 1998), we find it plausible that the increase in diversity in previously homogeneous communities triggered particularly strong resistance. Our analysis shows that, while overall diversity levels in East Germany remain significantly lower than in West Germany, the median East German county has experienced a 176 percent increase in its foreign population share relative to the baseline in only eight years. Such a sharp rise – despite the lower absolute levels – may have provoked particularly strong resistance among East Germans, resulting in more entrenched attitudes. As a result, respondents from these counties may be less receptive to our intervention. This interpretation is further supported by voting patterns, as the anti-immigration AfD party has garnered nearly twice as much support in East Germany compared to the West in the 2025 national elections. Future studies could try to disentangle the role of exposure to immigrant stocks vs. immigration flows more thoroughly. Our work demonstrates the importance of choosing either stock or flow variables of migration, which is why this choice should be made deliberately.

In terms of limitations, our study was conducted in a specific context. It is therefore unclear whether our results would hold for other host societies and whether respondents would have made the same associations if they had been surveyed at a different point in time. Both discourse exposure as well as real-life exposure prior to the experiment may have shaped respondents' associations given a strong media focus on security-related implications of immigration (Maurer et al., 2021) as well as an overrepresentation of refugees and asylum seekers among criminal suspects (Bundeskriminalamt, 2023). Finally, it is possible that a different design of the treatment, for example featuring another refugee group, would have caused different results. Future research could look into these variations.

This research stresses that not only a negative immigration discourse has the potential to worsen attitudes towards refugees but even messaging that has been carefully designed to present the topic neutrally may have this effect. Does this mean that political and media actors should pursue an “avoidance strategy”? While it may be wise to question how prominently to place the topic in communication campaigns, the election campaign prior to Germany's 2025 elections highlights the limits of such an approach: Despite the centrist parties' attempts to focus the campaign discourse on economic issues, attention shifted to the topic of asylum immigration following three killing incidents between December 2024 and February 2025, in which migrants who sought protection in the country were the prime suspects (Angeli, 2025).

Moreover, if voters get the impression that a topic is purposely being avoided, such a strategy may even backfire. A more promising strategy, though challenging, involves improving migration management. If effective, this could ease citizens' concerns and help overcome the perception of a "migration crisis". As a result, media coverage would naturally decrease, and the remaining coverage may be more positive, diluting the link between immigration and negative associations.

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Appendix

Appendix A: Questionnaire of survey experiment

In the following the English translation of the online questionnaire is printed. The survey in the original German can be made available upon request. We report the answer options in italic below. They are separated by semicolons.

Q1.1 Welcome!

You will be asked to take part in a survey. This survey is conducted by researchers from Maastricht University. All the information you get in this survey is verified.

There are no right or wrong answers. We are interested in knowing your personal views about yourself and the world. The survey covers society-related questions that also concern the role of the state and politics.

Participation is voluntary. You can refuse to participate in this survey. If you start the survey, you can leave the study at any time, in which case you will not receive any financial compensation. Apart from the time you spend completing the survey (10-12 minutes), there is no cost to you. You still have the option of withdrawing your consent after completing the survey by contacting Prof. Dr. Melissa Siegel (melissa.siegel@maastrichtuniversity.nl).

Your study-related information will be treated confidentially. This study has been approved by the Ethics Review Committee of Inner City Faculties (ERCIC) at Maastricht University. The collection of data is confidential. Data analysis and reporting are anonymous. Your data will be kept separate from your Bilendi identification number.

Upon completion of the study, you will receive financial compensation for your time. This is done in accordance with Bilendi's guidelines.

If you have any questions or comments about this survey, please contact Prof. Dr. Melissa Siegel. At the end of the survey, you will have the opportunity to give us feedback on your experience.

Declaration of consent

I agree that my data will be used for scientific purposes.

I had sufficient time to decide if I wanted to participate in the study. I know that participation in the study is voluntary, and I know that I can choose to cancel the survey and withdraw my consent at any time. I do not have to give reasons for such a decision. In this case, I will not receive any financial compensation.

I had the opportunity to connect with Prof. Dr. Melissa Siegel, a researcher involved in this study, and ask questions. I am aware that the data is stored anonymously and therefore only published anonymously.

I agree to participate

Yes; No

Q2.1 The Survey

During the survey, you will be asked to watch a short video. For this, you will need working speakers or headphones. The information contained in the video is genuine and comes from

one or more publicly available and verified sources. The survey will take about 10-12 minutes to complete.

Your financial compensation

After completing the survey, you will receive financial compensation for your time. The survey is considered complete once you reach the last page thanking you for participating. You will not receive any compensation if you cancel the survey early, but you can do so at any time.

Q3.1 How would you identify yourself?

Man; Woman; Non-binary / third gender; Prefer to self-describe; Prefer not to say

Q3.2 What is your age in years?

Younger than 18; 18-27; 28-37; 38-47; 48-57; 58-69; Older than 69, Prefer not to say

Q4.1 In which state do you live?

List of all German states (Bundesländer); Other; Prefer not to say

Q4.2 In which German county do you live?

List of all German counties (Landkreise); Other; Prefer not to say

Q5.1 What is your highest educational degree? If you are currently still in education, select the highest degree you have already earned.

No formal education; Completion of primary school; Completion of Hauptschule or Realschule; Fachabitur or Abitur; Bachelor's degree; Master's degree or Diplom; Doctoral degree; Other; Prefer not to say

Q5.2 How would you describe your current employment status?

Employed (full-time or part-time; Self-employed/freelance; unemployed, jobseeker; unemployed, no jobseeker; Retired; In full-time education; Other, Prefer not to say

Q5.3 What is your approximate annual household income after deduction of taxes and social security contributions? Please select the appropriate category.

11,999 or less; 12,000-19,999; 20,000-26,999; 27,000-33,999; 34,000-40,999; 41,000-49,999; 50,000-59,999; 60,000-74,999; 75,000-99,999; 100,000 or more; Prefer not to say

Q5.4 What is their religious affiliation?

Christianity, Roman Catholic; Christianity, Protestant; Other Christian Church; Islam, Judaism; Hinduism; Buddhism; No religious affiliation; Other; Prefer not to say

Q6.1 Many people use the terms "left" and "right" to denote different political views. When you think about your own political views, how would you rank those views on that scale?

Left, Center-left; Center; Center-right, Right, Prefer not to say

Q6.2 Generally speaking, would you say that most people can be trusted, or that you can't be too careful in dealing with people?

1 You can't be too careful; 2; 3; 4; 5 Most people can be trusted; Prefer not to say

Q7.1 Please indicate to which extent you agree with the following statements

Strongly disagree; Somewhat disagree; Neither agree, nor disagree; Somewhat agree, Strongly agree

- One should always find ways to help others less fortunate than oneself
- A person should always be concerned about the well-being of others
- It is best not to get too involved in taking care of other people's needs
- People tend to pay more attention to the well-being of others than they should

Q8.1 Please watch the following approximately one-minute video **carefully and** in its entirety, and also make sure that the **sound** is working well.

Q14.1 A large number of Syrians are living in refugee camps in Turkey. When you think about their situation, how concerned are you about...

Not at all concerned; A bit concerned; Somewhat concerned; Quite concerned; Very concerned

- their safety?
- their provision with basic material goods?
- their health situation?
- their prospects for the future?

Q14.2 Please indicate how you agree with the following statements. If Syrians from Turkish refugee camps were to come to Germany to live here...

Strongly disagree; Somewhat disagree; Neither agree, nor disagree; Somewhat agree; Strongly agree

- they would take jobs away from the German population
- they would, in the long run, benefit more from the welfare state than they contribute
- the security situation in Germany would deteriorate
- their values and beliefs would be at odds with those of the Germans

Q15.1 Do you think the German government should increase financial support for Turkish refugee camps?

Definitely not; Rather not; Maybe; Rather yes; Definitely

Q16.1 Would you be in favor of Germany taking in Syrians from Turkish refugee camps?

Definitely not; Rather not; Maybe; Rather yes; Definitely

Q16.2 Would you be in favour of your hometown providing housing for Syrians from Turkish refugee camps?

Definitely not; Rather not; Maybe; Rather yes; Definitely

Q16.3 Would you be willing to privately accommodate Syrians from Turkish refugee camps for a few days?

Definitely not; Rather not; Maybe; Rather yes; Definitely

Q17.1 You can become politically active by signing a petition. We will send the petition to the Commissioner of the Federal Government for Migration, Refugees, and Integration. Your

name will not be mentioned. Instead, we report how many participants in our study supported the respective petitions.

Would you like to sign the petition below?

I would like to sign a petition calling for more financial support from the German government for Turkey's refugee camps.; I do not want to sign this petition.

Q18.1 You can become politically active by signing a petition. We will send the petition to the Federal Government Commissioner for Migration, Refugees and Integration. Your name will not be mentioned. Instead, we report how many participants in our study supported the respective petitions.

Would you like to sign the petition below?

I would like to sign a petition calling for the admission of Syrians from Turkish refugee camps to Germany.; I do not want to sign this petition.

Q19.1 As a participant in this survey, you will be provided with **an additional euro**. You can choose how much of this amount you want to keep for yourself or how much you want to donate to one of the following organizations. 1) You can donate up to 50 cents to a certified international **non-governmental organization (NGO) A that works to improve living conditions in Turkish refugee camps**. 2) You can donate up to 50 cents to another certified international **non-governmental organization (NGO) B that is committed to hosting Syrians from Turkish refugee camps in Germany**. Please indicate how many cents you would like to donate to the respective organization. Note that you can donate a maximum of 50 cents per organization. The amounts will be allocated to you or the named organizations once the data collection process has been completed. We will inform you of the names of the organizations once you have completed the survey. How many cents would you like to donate at a time?

Organization A: *No donation; 5 cents; 10 cents; 15 cents; 20 cents; 25 cents; 30 cents; 35 cents; 40 cents; 45 cents; 50 cents*

Organization B: *No donation; 5 cents; 10 cents; 15 cents; 20 cents; 25 cents; 30 cents; 35 cents; 40 cents; 45 cents; 50 cents*

Q20.1 What is your relationship status?

Single, never been married; In a relationship, not married; Married, remarried; Divorced, Single; Widowed, single; Other; Prefer not to say

Q20.2 Were you born in Germany?

Yes, No, Prefer not to say

Q20.3 In which country were you born?

Q20.4 Was your mother born in Germany?

Yes, No, Prefer not to say

Q20.5 In which country was your mother born?

Q20.6 Was your father born in Germany?

Yes, No, Prefer not to say

Q20.7 In which country was your father born?

Q20.8 Have you ever lived in another country for at least six consecutive months?
Yes, No, Prefer not to say

Q20.9 In which country(s) have you lived?

Q21.1 You are now reaching the end of the survey. As announced, we would like to inform you to which organizations the donations will be forwarded to:

Organization A: Médecins Sans Frontières / Organization B: Amnesty International

You now have the opportunity to give feedback on this survey.

Please note that we do not accept hateful and hurtful messages and will contact Bilendi if necessary.

Thank you very much.

Appendix B: Questionnaire of the follow-up data collection

In the following the English translation of the questionnaire of the second data collection round is printed. Again, the survey in the original German can be made available upon request.

Q1.1 Welcome!

You will be asked to take part in a survey. This survey is conducted by researchers from Maastricht University. All the information you get in this survey is verified.

There are no right or wrong answers. We are interested in knowing your personal views about yourself and the world.

There are no right or wrong answers. We are interested in hearing your personal views on society-related issues. For this purpose, you will also be asked at one point to write a short text of a few sentences.

Participation is voluntary. You can refuse to participate in this survey. If you start the survey, you can leave the study at any time, in which case you will not receive any financial compensation. Apart from the time you spend completing the survey (10-12 minutes), there is no cost to you. You still have the option of withdrawing your consent after completing the survey by contacting Prof. Dr. Melissa Siegel (melissa.siegel@maastrichtuniversity.nl).

Your study-related information will be treated confidentially. This study has been approved by the Ethics Review Committee of Inner City Faculties (ERCIC) at Maastricht University. The collection of data is confidential. Data analysis and reporting are anonymous. Your data will be kept separate from your Bilendi identification number.

After completing the study, you will receive financial compensation for your time. This is done in accordance with Bilendi's guidelines.

If you have any questions or comments about this survey, please contact Prof. Dr. Melissa Siegel. At the end of the survey, you will have the opportunity to give us feedback on your experience.

Declaration of consent

I agree that my data will be used for scientific purposes.

I had sufficient time to decide if I wanted to participate in the study. I know that participation in the study is voluntary, and I know that I can choose to cancel the survey and withdraw my consent at any time. I do not have to give reasons for such a decision. In this case, I will not receive any financial compensation.

I had the opportunity to connect with Prof. Dr. Melissa Siegel, a researcher involved in this study, and ask questions.

I am aware that the data is stored anonymously and therefore only published anonymously.

I agree to participate

Yes; No

Q2.1 The Survey

During the survey, you will be asked to watch a short video. For this, you will need working speakers or headphones. The information contained in the video is genuine and comes from one or more publicly available and verified sources. The survey will take about 10-12 minutes to complete.

Your financial compensation

After completing the survey, you will receive financial compensation for your time. The survey is considered complete once you reach the last page thanking you for participating. You will not receive any compensation if you cancel the survey early, but you can do so at any time.

Q3.1 How would you identify yourself?

Man; Woman; Non-binary / third gender; Prefer to self-describe; Prefer not to say

Q3.2 What is your age in years?

Younger than 18; 18-27; 28-37; 38-47; 48-57; 58-69; Older than 69; Prefer not to say

Q4.1 In which state do you live?

List of all German states (Bundesländer); Other; Prefer not to say

Q4.2 In which German county do you live?

List of all German counties (Landkreise); Other; Prefer not to say

Q5.1 What is your relationship status?

Single, never been married; In a relationship, not married; Married, remarried; Divorced, Single; Widowed, single; Other; Prefer not to say

Q5.2 What is your highest educational degree? If you are currently still in education, select the highest degree you have already earned.

No formal education; Completion of primary school; Completion of Hauptschule or Realschule; Fachabitur or Abitur; Completion of vocational training; Bachelor's degree; Master's degree or Diplom; Doctoral degree; Other; Prefer not to say

Q5.3 How would you describe your current employment status?

Employed (full-time or part-time); Self-employed/freelance; unemployed, jobseeker; unemployed, no jobseeker; Retired; In full-time education; Other; Prefer not to say

Q5.4 What is your approximate annual household income after deduction of taxes and social security contributions? Please select the appropriate category.

11,999 or less; 12,000-19,999; 20,000-26,999; 27,000-33,999; 34,000-40,999; 41,000-49,999; 50,000-59,999; 60,000-74,999; 75,000-99,999; 100,000 or more; Prefer not to say

Q5.5 What is your religious affiliation?

Christianity, Roman Catholic; Christianity, Protestant; Other Christian Church; Islam, Judaism; Hinduism; Buddhism; No religious affiliation; Other; Prefer not to say

Q6.1 Please watch the following one-minute video **carefully** and **in its entirety**.

Q7.1 Please select those statements that are true according to the video just shown. Note that you can also select **more than one statement**.

According to the UNHCR definition, the term refugee includes people fleeing natural disasters; After the outbreak of the Syrian civil war, many people fled from Syria to Turkey; Syrian refugees in Turkey often live near the Syrian-Turkish border or in the greater Istanbul area; All Syrian refugees in Turkey live in refugee camps.

Q7.2 What did you have to think about when watching the video? Please describe your thoughts in a few sentences.

Q8.1 How strongly did you perceive the following emotions while watching the video?

Not at all; A little; Somewhat; Moderately; Quite a bit; Very much; Extremely

- Anger
- Wanting
- Dread
- Sad
- Easygoing
- Grossed out
- Happy
- Terror
- Rage
- Grief
- Nausea
- Anxiety
- Chilled out
- Desire
- Nervous
- Lonely
- Scared
- Mad
- Satisfaction
- Sickened
- Empty
- Craving
- Panic
- Longing
- Calm
- Fear
- Relaxation
- Revulsion
- Worry
- Enjoyment
- Pissed off
- Liking

Q8.2 Do you think that the topic of refugees and migration receives too much or too little attention in the media?

Far too little, Rather too little, Just right, Rather too much, Clearly too much

Q9.1 Do you have a migration background?

Yes, No, Prefer not to say

Q9.2 Many people use the terms "left" and "right" to denote different political views. When you think about your own political views, how would you rank those views on that scale?

Left, Center-left; Center; Center-right, Right, Prefer not to say

Q9.3 Generally speaking, would you say that most people can be trusted, or that you can't be too careful in dealing with people?

1 You can't be too careful; 2; 3; 4; 5 Most people can be trusted; Prefer not to say

Q10.1 You are now reaching the end of the survey. You have the opportunity to give feedback on this survey.

Please note that we do not accept hateful and hurtful messages and will contact Bilendi if necessary.

Thank you very much.

Appendix C: Creation of foreign population variables

To create the foreign population data, we had to account for a few particularities. For the state of Saarland, foreign population data are available only at the state rather than the county level, necessitating the use of state-level statistics. However, the Saarland is Germany's second smallest state with only one million inhabitants. Further, to harmonize counties across the two time periods (2014 and 2022), we merged the foreign and the overall population numbers of Göttingen and Osterode in 2014 as the two counties were merged in 2016 and the 2022 data no longer distinguish between the two. Finally, our survey questionnaire included only the option Rostock rather than separate options for the counties Rostock – Rural County (*Landkreis*) and Rostock – Independent City (*kreisfreie Stadt*). Therefore, the administrative data for these two counties were merged.

Our stock variable is defined as the ratio of a county's foreign population to its total population, representing the share of foreign citizens. To compute the percentage increase, we calculated the difference in the share of foreigners between 2022 and 2014 and divided this difference by the 2014 share. For example, if a county's share of foreigners increased from 0.10 in 2014 to 0.20 in 2022, this would represent a percentage increase of $((0.20 - 0.10) / 0.10) * 100 = 100$ percent.

Appendix D: Treatment and control videos

Treatment Video:

According to the UN Refugee Agency, UNHCR, refugees are people who have fled war, violence, conflict or persecution and have crossed an international border to find safety in another country. Following the onset of the Civil War in Syria, large parts of the population have fled the country. Today, the majority of Syrian refugees reside in Turkey. Large populations of Syrians can be found particularly in Turkish provinces bordering Syria, but also in the metropolitan area of Istanbul. While some found a place to stay by themselves, others reside in refugee camps.

Weblink: <https://www.youtube.com/watch?v=2cD9oLXSW6o>

Control Video:

The forecasts of the German Weather Service are based on the data of a global measurement and observation network. Everywhere, measurements are constantly being taken: wind direction and wind speed, air pressure, temperature, and much more. Worldwide, there are more than 11,000 official ground stations. Since 70 percent of the Earth is covered with water, the measurement network nevertheless has large gaps. That is why weather buoys, merchant ships, and commercial aircraft send additional data. All around the globe, 1,400 weather balloons rise into the atmosphere every day. Added to this are the data from more than a dozen weather satellites.

Weblink: <https://www.youtube.com/watch?v=aXPLOd7m5q8>

Appendix E: Balance Test

Table A1: Balance test across experimental conditions

	Treatment
Female	0.039 [0.042]
Age	0.004 [0.015]
Married	0.031 [0.046]
University Education	0.016 [0.050]
Income	0.003 [0.009]
Unemployed	0.006 [0.149]
Muslim	-0.077 [0.106]
Migration Background	0.000 [0.064]
Overseas Experience	-0.046 [0.058]
Humanitarian Orientation	-0.009 [0.008]
Political Orientation	-0.013 [0.024]
Social Trust	-0.004 [0.020]
East Germany	0.007 [0.059]
Constant	0.633*** [0.167]
Observations	613
R-squared	0.007

Standard errors in brackets. * $p < .1$, ** $p < .05$, *** $p < .01$.

Appendix F: Descriptive Results

Table A2: Mean values of refugee attitudes by experimental condition

Outcome variable	Control group	Treatment group
Safety Concern	2.97	2.60
Material Concern	3.17	2.80
Health Concern	3.26	2.92
Future Concern	3.25	3.01
Jobs Threat	2.48	2.60
Welfare Threat	3.39	3.40
Security Threat	3.26	3.40
Cultural Threat	3.45	3.55
Camps Petition	0.29	0.21
Admission Petition	0.23	0.23

Appendix G: Main effects without controls

Table A3: Treatment effects on humanitarian concerns – no controls

	Safety	Material	Health	Future
Treatment	-0.371*** [0.093]	-0.369*** [0.096]	-0.340*** [0.100]	-0.240** [0.101]
Control mean	2.974	3.170	3.264	3.253
Observations	769	774	777	771
R-squared	0.020	0.019	0.015	0.007

Standard errors in brackets. * $p < .1$, ** $p < .05$, *** $p < .01$

Table A4: Treatment effects on threat perceptions – no controls

	Jobs	Welfare	Security	Culture
Treatment	0.121 [0.080]	0.010 [0.083]	0.136 [0.086]	0.103 [0.078]
Control mean	2.481	3.393	3.259	3.452
Observations	807	807	807	807
R-squared	0.003	0.000	0.003	0.002

Standard errors in brackets. * $p < .1$, ** $p < .05$, *** $p < .01$

Table A5: Treatment effects on policy preferences – no controls

	Camps	Admission
Treatment	-0.084* [0.043]	-0.002 [0.042]
Control mean	0.292	0.232
Observations	404	403
R-squared	0.009	0.000

Standard errors in brackets. * $p < .1$, ** $p < .05$, *** $p < .01$

Appendix H: Treatment effects moderated by real-life immigration exposure

Table A6: Treatment effects on humanitarian concerns – by immigrant stocks

	Safety	Material	Health	Future
Treatment	-0.053 [0.251]	0.092 [0.251]	0.142 [0.265]	0.160 [0.269]
Treatment*Stocks	-1.891 [1.371]	-2.573* [1.376]	-2.793* [1.450]	-2.687* [1.474]
Immigrant Stocks	0.340 [1.136]	0.736 [1.141]	1.295 [1.203]	1.097 [1.219]
Control mean	2.974	3.170	3.264	3.253
Observations	611	614	614	610
R-squared	0.177	0.199	0.180	0.189

Notes: Controls include gender, age, marital status, university education, income, being unemployed, being Muslim, migration background, overseas experience, humanitarian orientation, political orientation, social trust, state (*Bundesland*) of residence. Standard errors in brackets. Significance levels: * $p < .1$, ** $p < .05$, *** $p < .01$.

Table A7: Treatment effects on threat perceptions – by immigrant stocks

	Jobs	Welfare	Security	Culture
Treatment	-0.127 [0.217]	-0.448** [0.217]	-0.411* [0.215]	-0.153 [0.207]
Treatment*Stocks	1.280 [1.190]	2.798** [1.192]	3.651*** [1.182]	1.675 [1.135]
Immigrant Stocks	-1.354 [0.987]	-1.357 [0.989]	-2.592*** [0.981]	-1.032 [0.942]
Control mean	2.481	3.393	3.259	3.452
Observations	631	631	631	631
R-squared	0.177	0.266	0.314	0.222

Notes: Controls include gender, age, marital status, university education, income, being unemployed, being Muslim, migration background, overseas experience, humanitarian orientation, political orientation, social trust, state (*Bundesland*) of residence. Standard errors in brackets. Significance levels: * $p < .1$, ** $p < .05$, *** $p < .01$.

Table A8: Treatment effects on policy preferences – by immigrant stocks

	Camps	Admission
Treatment	0.195* [0.115]	0.130 [0.121]
Treatment*Stocks	-1.657*** [0.633]	-0.834 [0.662]
Immigrant Stocks	1.234** [0.535]	0.786 [0.535]
Control mean	0.292	0.232
Observations	316	315
R-squared	0.289	0.208

Notes: Controls include gender, age, marital status, university education, income, being unemployed, being Muslim, migration background, overseas experience, humanitarian orientation, political orientation, social trust, state (*Bundesland*) of residence. Standard errors in brackets. Significance levels: * $p < .1$, ** $p < .05$, *** $p < .01$.

Table A9: Treatment effects on humanitarian concerns – by immigration flows

	Safety	Material	Health	Future
Treatment	-0.703*** [0.180]	-0.686*** [0.180]	-0.660*** [0.191]	-0.690*** [0.193]
Treatment*Flows	0.441** [0.198]	0.459** [0.199]	0.440** [0.210]	0.527** [0.213]
Immigration Flows	-0.196 [0.187]	-0.197 [0.185]	-0.208 [0.195]	-0.335* [0.198]
Control mean	2.974	3.170	3.264	3.253
Observations	611	614	614	610
R-squared	0.180	0.201	0.181	0.194

Notes: Controls include gender, age, marital status, university education, income, being unemployed, being Muslim, migration background, overseas experience, humanitarian orientation, political orientation, social trust, state (*Bundesland*) of residence. Standard errors in brackets. Significance levels: * $p < .1$, ** $p < .05$, *** $p < .01$.

Table A10: Treatment effects on threat perceptions – by immigration flows

	Jobs	Welfare	Security	Culture
Treatment	0.185 [0.155]	0.184 [0.156]	0.443*** [0.155]	0.261* [0.148]
Treatment*Flows	-0.127 [0.170]	-0.215 [0.170]	-0.315* [0.169]	-0.175 [0.162]
Immigration Flows	0.069 [0.160]	0.172 [0.161]	0.241 [0.160]	0.064 [0.153]
Control mean	2.481	3.393	3.259	3.452
Observations	631	631	631	631
R-squared	0.175	0.261	0.307	0.220

Notes: Controls include gender, age, marital status, university education, income, being unemployed, being Muslim, migration background, overseas experience, humanitarian orientation, political orientation, social trust, state (*Bundesland*) of residence. Standard errors in brackets. Significance levels: * $p < .1$, ** $p < .05$, *** $p < .01$.

Table A11: Treatment effects on policy preferences – by immigration flows

	Camps	Admission
Treatment	-0.300*** [0.081]	-0.101 [0.090]
Treatment*Flows	0.288*** [0.089]	0.118 [0.101]
Immigration Flows	-0.114 [0.086]	-0.075 [0.088]
Control mean	0.292	0.232
Observations	316	315
R-squared	0.296	0.206

Notes: Controls include gender, age, marital status, university education, income, being unemployed, being Muslim, migration background, overseas experience, humanitarian orientation, political orientation, social trust, state (*Bundesland*) of residence. Standard errors in brackets. Significance levels: * $p < .1$, ** $p < .05$, *** $p < .01$.

Table A12: Treatment effects on humanitarian concerns – by immigrant stocks (West only)

	Safety	Material	Health	Future
Treatment	-0.567*	-0.240	-0.249	-0.192
	[0.307]	[0.312]	[0.330]	[0.327]
Treatment*Stocks	0.719	-0.845	-0.764	-1.072
	[1.611]	[1.643]	[1.733]	[1.722]
Immigrant Stocks	-0.489	0.273	0.677	0.535
	[1.237]	[1.263]	[1.334]	[1.321]
Control mean	2.974	3.170	3.264	3.253
Observations	501	504	503	502
R-squared	0.173	0.177	0.171	0.193

Notes: Controls include gender, age, marital status, university education, income, being unemployed, being Muslim, migration background, overseas experience, humanitarian orientation, political orientation, social trust, state (*Bundesland*) of residence. Standard errors in brackets. Significance levels: * $p < .1$, ** $p < .05$, *** $p < .01$.

Table A13: Treatment effects on threat perceptions – by immigrant stocks (West only)

	Jobs	Welfare	Security	Culture
Treatment	-0.284	-0.522*	-0.541**	-0.131
	[0.267]	[0.266]	[0.263]	[0.253]
Treatment*Stocks	2.147	2.886**	4.293***	1.600
	[1.408]	[1.401]	[1.382]	[1.332]
Immigrant Stocks	-1.390	-1.541	-2.965***	-1.252
	[1.083]	[1.078]	[1.063]	[1.025]
Control mean	2.481	3.393	3.259	3.452
Observations	515	515	515	515
R-squared	0.184	0.258	0.326	0.221

Notes: Controls include gender, age, marital status, university education, income, being unemployed, being Muslim, migration background, overseas experience, humanitarian orientation, political orientation, social trust, state (*Bundesland*) of residence. Standard errors in brackets. Significance levels: * $p < .1$, ** $p < .05$, *** $p < .01$.

Table A14: Treatment effects on policy preferences – by immigrant stocks (West only)

	Camps	Admission
Treatment	0.029 [0.142]	0.069 [0.145]
Treatment*Stocks	-0.857 [0.746]	-0.614 [0.758]
Immigrant Stocks	0.913 [0.584]	0.884 [0.575]
Control mean	0.292	0.232
Observations	261	254
R-squared	0.303	0.208

Notes: Controls include gender, age, marital status, university education, income, being unemployed, being Muslim, migration background, overseas experience, humanitarian orientation, political orientation, social trust, state (*Bundesland*) of residence. Standard errors in brackets. Significance levels: * $p < .1$, ** $p < .05$, *** $p < .01$.

Table A15: Treatment effects on humanitarian concerns – by immigration flows (West only)

	Safety	Material	Health	Future
Treatment	-0.531** [0.233]	-0.663*** [0.236]	-0.538** [0.250]	-0.646*** [0.248]
Treatment*Flows	0.150 [0.342]	0.452 [0.345]	0.255 [0.364]	0.436 [0.361]
Immigration Flows	-0.217 [0.256]	-0.252 [0.253]	-0.081 [0.268]	-0.150 [0.265]
Control mean	2.974	3.170	3.264	3.253
Observations	501	504	503	502
R-squared	0.173	0.179	0.172	0.195

Notes: Controls include gender, age, marital status, university education, income, being unemployed, being Muslim, migration background, overseas experience, humanitarian orientation, political orientation, social trust, state (*Bundesland*) of residence. Standard errors in brackets. Significance levels: * $p < .1$, ** $p < .05$, *** $p < .01$.

Table A16: Treatment effects on threat perceptions – by immigration flows (West only)

	Jobs (1)	Welfare (2)	Security (3)	Culture (4)
Treatment	0.313 [0.201]	0.234 [0.200]	0.706*** [0.198]	0.237 [0.190]
Treatment*Flows	-0.360 [0.295]	-0.407 [0.294]	-0.806*** [0.291]	-0.143 [0.279]
Immigration Flows	0.078 [0.217]	0.110 [0.216]	0.380* [0.214]	-0.168 [0.205]
Control mean	2.481	3.393	3.259	3.452
Observations	515	515	515	515
R-squared	0.183	0.255	0.322	0.222

Notes: Controls include gender, age, marital status, university education, income, being unemployed, being Muslim, migration background, overseas experience, humanitarian orientation, political orientation, social trust, state (*Bundesland*) of residence. Standard errors in brackets. Significance levels: * $p < .1$, ** $p < .05$, *** $p < .01$.

Table A17: Treatment effects on policy preferences – by immigration flows (West only)

	Camps	Admission
Treatment	-0.179* [0.105]	-0.138 [0.114]
Treatment*Flows	0.093 [0.153]	0.164 [0.170]
Immigration Flows	0.026 [0.125]	-0.088 [0.109]
Control mean	0.292	0.232
Observations	261	254
R-squared	0.299	0.203

Notes: Controls include gender, age, marital status, university education, income, being unemployed, being Muslim, migration background, overseas experience, humanitarian orientation, political orientation, social trust, state (*Bundesland*) of residence. Standard errors in brackets. Significance levels: * $p < .1$, ** $p < .05$, *** $p < .01$.

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