

Consequences and Corrections of Misperceptions in Intergroup Relations

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Dissertation submitted in partial fulfillment of
the requirements for the degree of Doctor
of Philosophy in the Department of
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2019

ABSTRACT

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Abstract

In an age witnessing the coinciding of increasing connectedness facilitated by the advent of the internet and social media and growing mobility due to technological efficiency gains and rising economic prosperity, optimistic observers might expect to find accompanying increases in societal harmony and mutual understanding among social groups. In contrast to such an optimistic vision, contemporary societies are experiencing expanding polarization between political and societal groups and a widening appeal of exclusionary ideas that had marked more contentious times. The scholarly literature has developed a number of economic and individual psychological explanations for this divergence of the idealized and observed path of contemporary societies, but at root the phenomenon derives from collective identities of “us” and “them” which are based on perceptions of in- and outgroups. Such perceptions are subject to well-studied biases that tend to elevate the ingroup and debase the outgroup.

While such biased perceptions and their connection to intergroup relations are well understood in relation to racial minority-majority relations, this is not the case for the increasingly important relations between native- and foreign-born populations. Similarly, for relations among political subgroups in a given society such misperceptions have been well documented, but the most efficacious strategy to tackle such misperceptions remains an open debate. Specifically, scholars debate in how far

misperceptions that fulfill social-psychological functions of affirming individuals' group memberships can be overcome with corrective information or whether such attempts lead individuals to retreat into their groups' corner. With prior evidence for both predictions, the literature lacks a clear understanding of the scope conditions occasioning either reaction. The studies in this dissertation set out to address these gaps providing evidence from representative cross-national surveys and experimental work at the intersection of perceptions, immigration, and intergroup relations.

Chapter 2 investigates the role of misperceptions in shaping the relations between the native- and foreign-born population, asking first whether such misperceptions extend beyond innumeracy and how such misperceptions affect the native-born population's attitudes toward immigration. Descriptive analyses of the native-born population of ten European countries reveal widespread misperceptions about migrants' motives. In multilevel models, these misperceptions predict threat perceptions and concern about immigration as well as anti-immigration policy preferences and voting behavior. Chapter 3 departs from the existence of group-based misperceptions and examines the conditions under which such misperceptions are amenable to corrective information or conversely liable to deteriorate when challenged by such information. In an online experiment designed to approximate real world exposure to counter-attitudinal information, I manipulate the level of perceived choice in exposure and engagement with such information participants have. Results are

suggestive for the role of choice in moderating the effect of corrective information on misperceptions and support the theorized mechanism of counter-arguing for backfire effects, in that extreme conservatives prompted to reflect on counter-attitudinal information more strongly endorse misperceptions.

In sum, this dissertation provides evidence that misperceptions about outgroups extend to the perceptions of immigrants where they are associated with broader anti-immigration attitudes and behavior. Such immigration related misperceptions are generally amenable to corrective information except for those individuals who strongly identify with a group whose status depends on the misperception, in which case attempts to correct the misperceptions carry the risk of backfiring.

Dedication

For Jasmin.

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Acknowledgements

This dissertation would not have been possible without the generosity and helpfulness of a great number of people, first and foremost among which is my advisor Chris Bail. Thank you, Chris, for showing up at just the right moment to keep me from getting lost in my own head, for providing me with all the guidance and support I asked for, and even more guidance and support I did not even know I needed. Your mentorship was not only crucial in helping me grow as an academic but will always serve as the example I will strive to imitate. Thank you, Chris. I am also deeply indebted to my dissertation committee, Kieran Healy, Martin Ruef, Lynn Smith-Lovin, and Steve Vaisey for indulging my risk-averse tendencies while encouraging me to go outside my comfort zone in my academic endeavors. Your advice will always be in the back of my mind as I continue to develop my academic self. Throughout my time at Duke, I have also greatly benefitted from the intellectual home I have found in the Worldview Lab (formerly Culture Club), Social Psychology Workshop, DNAC Lab, and the Duke Polarization Lab and would like to thank all their members for creating inspiring and supportive communities. My time at Duke would have been much poorer also without my fellow graduate students in the department, in particular everyone constituting the pig in the python and my co-advisees, Marcus Mann and Taylor Brown. I want to thank my colleague and friend Achim Edelman who has been an invaluable resource in navigating ever new academic waters and question. I would also like to thank Harald

Wenzel, Peter Fischer, Sonja Schillings, and Tobias Scholz for their confidence in my potential as a scholar before I even really knew what that meant.

Finally, I want to thank my family and friends who have contributed more to my development as a sociologist than they might know. Mom and dad, thank you for showing me the importance of not just looking at my own problems but society at large, and instilling in me a desire to improve things. I am not certain yet that being a sociologist is the best way to go about this, but I promise I will continue trying. Sascha, Abhi, Marcus, Stefan, and Frank, thank you for your friendship, being there to talk about serious and light things, and always prompting me to be a bit more idealistic than seems reasonable. And most of all, I want to thank my wife Jasmin. You continue to inspire me with your grit and ability to get things done, and never fail to put a smile on my face. I will never be able to repay everything you have sacrificed for me and us, but I will use every opportunity I get to try. I love you very much. Thank you.

1. Introduction

This dissertation takes impetus from the growing rifts within societies across the globe that pit different groups against one another and threaten these societies' abilities to tackle the problems they face internally, externally, and as a collective of societies more broadly. While such rifts are hardly new, and some might regard their comparative absence around the turn of the millennium as a historical anomaly or a mere veneer masking the basic issues around which these divisions now coalesce, their emergence in an age that experiences unprecedented connectedness and exchange between people thanks to technological and economic advances is at a minimum surprising. Beyond posing an intellectual puzzle, these divisions threaten the stability of the societies that experience them and present an increasing obstacle to the necessary coordinated efforts to address challenges that face all societies across the globe—from changing climatic conditions, extinctions of broad swaths of animal and plant life, to resource exhaustion of our shared planet.

Since finding solutions to these momentous challenges will require the collective effort of most if not all individuals, groups, and societies, this dissertation aims to contribute to our understanding of where these rifts originate and how we might reduce them. While there are clear and easy to point out material bases for many of these divisions, this dissertation takes an ideational focus instead departing from the notion that divisions between groups at root derive from collective identities of “us” and

“them” which are based on perceptions of the in- and outgroup. The studies comprising this dissertation take this idea of the perceptual basis of intergroup divisions and apply it to legally and politically defined groups with an overarching substantive focus on immigration. The combined contribution of the papers is an expanded understanding of how perceptual biases shape contemporary divisions between established members and newcomers to societies and the conditions under which the misperceptions arising from these biases and perpetuating intergroup divisions are amenable or resistant to correction.

Chapter 2, “Imagined Threats? How misperceptions about the motives of immigrants shape anti-immigration attitudes and behavior”, traces the central role of perceptions back to Herbert Blumer’s original formulation of group threat theory and makes the case for an analytic focus on perceptions of group position in the study of anti-immigration attitudes. Drawing together research from political science, social psychology, and cultural sociology, the paper develops the concept of misperceptions about immigrants’ motives as a key predictor of group threat and consequently anti-immigration attitudes and behavior. Using unique cross-national survey data containing native respondents’ perceived and immigrants’ reported motives, I show that in the aggregate perceptions deviate markedly from reality across ten European countries. In a set of multilevel models, individual level measures of motive misperceptions significantly predict measures of anti-immigrant prejudice and exclusionary policy

preferences and voting behavior. These findings highlight the perceptual basis of anti-immigration attitudes and, in particular, the role of misperceptions about the outgroup in this particular instance of intergroup relations.

Chapter 3, “Assessing the Scope Conditions and Mechanism of Backfire Effects”, departs from the existence of group-based misperceptions and examines the conditions under which such misperceptions are amenable to corrective information or conversely liable to deteriorate when challenged by such information. In an online experiment designed to approximate real world exposure to counter-attitudinal information, I manipulate the level of perceived choice in exposure and engagement with such information participants have. In line with one thread of prior research, corrective information does reduce misperceptions in most instances for most participants. Results further are suggestive for the role of choice in moderating the effect of corrective information on misperceptions, such that incidental exposure should be effective at countering misperception. In line with another thread of research, the results support the theorized mechanism of counter-arguing for backfire effects, in that extreme conservatives prompted to reflect on counter-attitudinal information more strongly endorse misperceptions. This suggests that while backfire effects have been hard to induce reliably in laboratory settings, the contemporary social media environment might produce such effects regularly among the most extreme ideologues.

In sum, this dissertation highlights the role played by misperceptions about outgroups in sustaining societal divisions and the risk of exacerbating such misperceptions through naïve interventions intended to counter misperceptions. While it appears that the higher potential for connection between people facilitated through social media has the potential to lower such misperceptions, the current technological setup that supercharges individuals' abilities to avoid such connection and counter-argue any unwelcome information undermines this potential. Probing the conditions under which exposure to outgroups and counter-attitudinal information does have beneficial effects will enable us to identify the necessary design changes to realize this potential.

2. Imagined Threats? How misperceptions about the motives of immigrants shape anti-immigration attitudes and behavior

2.1 Introduction

The recent influx of migrants and asylum seekers into the European Union raises the specter of rising anti-immigration attitudes (Pettigrew 1998; Semyonov, Raijman, and Gorodzeisky 2006). Such attitudes have important implications for societal cohesion and economic integration (Fussell 2014; van Tubergen, Maas, and Flap 2004) and their close connection to nationalism make them a key determinant in the populist rights' rise across the continent (Bonikowski and DiMaggio 2016; Rydgren 2008). Anti-immigration attitudes can also engender a vicious cycle by reducing support for social and immigration policies whose weakness in turn contributes to immigrants' dependency validating the initial attitudes (Fox 2004, 2010; Koopmans, Michalowski, and Waibel 2012; Schmidt-Catran and Spies 2016). Finally, these attitudes form a fertile ground for violence against minorities (Bobo and Fox 2003; Olzak 1992; Pettigrew 1998). Given these far-reaching outcomes associated with anti-immigration attitudes, a large literature in sociology and political science has investigated the antecedents of these attitudes (Ceobanu and Escandell 2010; Hainmueller and Hopkins 2014).

A major strand of the social science literature on anti-immigration attitudes and their consequences draws on group threat theory (Alba, Rumbaut, and Marotz 2005; Blumer 1958; Quillian 1995; Semyonov et al. 2006). While Blumer (1958) originally

formulated the theory to describe racial prejudice in the United States, Blalock (1967) generalized the theory to majority-minority relations more broadly. To operationalize group threat theory's key concern with the subordinate group's position vis-à-vis the dominant group, scholars of anti-immigration attitudes frequently leverage the size of the immigrant population (e.g. Quillian 1995; Schlueter and Davidov 2013; Schneider 2008). In this article, I argue that focusing on group size alone overlooks Blumer's original emphasis on perceptions of minority groups—and specifically whether or not such groups are viewed as challenging the status of the majority group. While recent studies employ perceptions of the immigrant group size (Semyonov, Rajjman, and Gorodzeisky 2008; Sides and Citrin 2007), these do not necessarily capture how natives think about immigrants' position either. *More important than what natives think about the group's quantity, I argue, is how they think about the immigrant group's quality.* Such concerns about quality express themselves in contestations of deservingness (Bloemraad, Silva, and Voss 2016; Helbling and Kriesi 2014), which at root revolve around what motivates immigrants to move to their host country. While such motives can be ambiguous, misperceptions of motives present a consistent signal of perceived immigrant group quality since they capture attribution biases (McGlothlin and Killen 2006, 2010; Pettigrew 1979). To date, however, we lack any investigation of the association between misperceptions about the motives of immigrants and anti-immigration attitudes.

To develop a theory of misperceptions and anti-immigration attitudes, I draw upon the emerging literature at the intersection of cultural sociology and immigration (Bail 2008; Levitt 2005; Voyer 2013; Wimmer and Soehl 2014) and recent research on motives and biases in attribution (Campbell 1996; McGlothlin and Killen 2006, 2010; Vaisey 2009). This chapter is organized as follows: first, I provide a brief overview of group threat theory and detail Blumer's original emphasis on perception as a mechanism of inter-group animus. Second, I describe the role of motives in determining natives' perceptions of the immigrant group and the importance of misperceptions about motives with reference to motivated reasoning and attribution biases. Then, I introduce the data for this study which uniquely contain migration motive perceptions for natives and immigrants in ten European Union countries. On the basis of these data, I develop a measure of misperceptions and show that they are widespread in the population of the ten countries. Next, I present the results of multiple hierarchical regression models showing that misperceptions are associated with anti-immigration attitudes and voting for radical right parties. Finally, I discuss these results and their implications for research at the intersection of cultural sociology and immigration and theories of intergroup relations more broadly.

2.2 Theory

2.2.1 Group threat theory

Group threat theory was first developed by Blumer (1958) as a conceptual framework explaining racial prejudice in the Jim Crow era and later extended by Blalock (1967) to apply to inter-group relations more broadly. Whereas prominent theories of prejudice in the early 20th century examined the individual level, Blumer argued that race prejudice was a group level phenomenon arising from the coexistence of two racial groups. According to Blumer, the identification with one racial group and assignment of others to another racial group inevitable leads to a normative definition of the relationship between these two groups. The accompanying “sense of social position [...] provides the basis for race prejudice” (Blumer 1958:3). This sense of position brings about racial prejudice when (1) the in-group is perceived as superior, (2) the out-group is seen as inherently different from the in-group, (3) there are perceived dominions of the in-group, and (4) the out-group is seen to encroach on these. In short, prejudice arises from the discrepancy between the normative ideas about and the perceived reality of the relationship between a subordinate and a dominant group. Instead of focusing on individual level predispositions for prejudice as previous theories had suggested, Blumer emphasized the collective nature of race prejudice and shifted the focus toward intergroup relations.

Other scholars picked up this focus but used objective measures of intergroup relations to proxy the perceptions Blumer emphasized. For example, Blalock empirically examined racial prejudice predictions in the association between non-white population size and various measures of discrimination in Southern counties (1957) and non-Southern Standard Metropolitan Areas (1956) using the 1950 Census. These studies yielded mixed results highlighting the variable nature as well as the influence of contextual factors such as the mean income of the majority group and the visibility of the minority in generating group threat. With these insights, Blalock (1967) set out to expand the theoretical scope of group threat beyond race relations in the United States to minority group relations more generally. In his discussion of anti-minority prejudice and discrimination, he distinguishes two threat mechanisms: competition and power threat. For both mechanisms, minority group size is positively related to perceptions of competition or threat which in turn is positively related to discrimination. While he theorizes slightly different non-linear functional forms for both mechanisms, Blalock maintains that their co-appearance might make them hard to distinguish analytically.

2.2.2 Group threat and anti-immigration prejudice

When Quillian (1995) introduced group threat theory to the study of immigration attitudes in Europe, he acknowledged these distinct theorized mechanisms but did not attempt to distinguish them, not least due data limitations. More importantly, he operationalizes the predictors of anti-immigrant prejudice as the interaction of the

population proportion of immigrants and a GDP-based measure of the country's economic condition—in stark contrast to the perceptual root Blumer theorizes. In the twelve European countries analyzed, he finds evidence for the group size hypothesis that larger immigrant communities are associated with higher levels of anti-immigrant prejudice. While later studies provided further support for the applicability of the group size hypothesis to the case of anti-immigrant sentiment in Europe (Semyonov et al. 2006), other scholars have raised concerns both about the flattening of the theory and the predicting threat from immigrant group size.

A key concern regarding this operationalization is that it is inadequate to capture perceptions of threat due to the uneven distribution of immigrants across regions (Logan, Zhang, and Alba 2002) and the consequential potential for unrepresentative group members to rise to represent all immigrants through media coverage (Blinder and Allen 2016). These concerns appear to be warranted. Hjerm (2007) criticizes the theoretical flattening represented by the group size hypothesis and shows that in a broader set of 22 countries there is no evidence of a relationship between the proportion of foreign-born and anti-immigrant sentiment. In a recent meta-analysis of the group size hypothesis, the majority of results from 50 studies did not find an association between immigrant group size and prejudice while the direction of the associations found was inconclusive (Pottie-Sherman and Wilkes 2017). Finally, in reviewing the immigration attitudes literature employing multinational surveys, Ceobanu and

Escandell (2010) conclude that the literature's fixation on competitive threat appears unwarranted. In response to these doubts about the direct association between immigrant group size and group threat, scholars started reintroducing perceptions to the study of immigration attitudes.

2.2.3 Perceptions and group threat theory

In a key study, Semyonov et al. (2008) used data from the 2002 European Social Survey to test the association between the official and perceived size of immigrants in a country and perceptions of immigrants' negative impact on the country. They found that the association between official proportions and perceptions of negative impact disappeared when controlling for perceived immigrant group size. This aligns with Pottie-Sherman and Wilkes' (2017) finding that the most consistent associations between group size and anti-immigrant prejudice derive from a perceptual operationalization of group size and Herda's (2013) insight that perceptions of the size of the immigrant population that deviate from official numbers are more consequential for exclusionary immigration policy preferences than official estimates of the group's size. A potential explanation for the primacy of perceived over actual immigrant group size is that residents of both the United States and European countries regularly overestimate immigrant group sizes (Citrin and Sides 2008; Herda 2010).

These studies reintroduce an important detail of group threat theory as originally outlined by Blumer—perception. In the original formulation, prejudice is triggered by

perceived challenges to the majority's normative sense of group position from the subordinate group and this "is not a mere reflection of the objective relations between racial groups" (Blumer 1958:5). While perceptions of the immigrant group size capture this challenge better than objective proportions, strict numerical estimates cannot represent the normative dimension crucial to evaluations of the minority's position. Without additional perceptions about the subordinate group such as who constitutes the group or what they are up to in their destination country, the perceived size remains a distal predictor of prejudice at best.¹ For this, the fourth condition outlined by Blumer is essential; "a fear and suspicion that the subordinate [group] harbors designs on the prerogatives of the dominant [group]" (Blumer 1958:4). For the dominant group to harbor such a fear or suspicion about the subordinate group, they need to develop an understanding of their actions and intentions, in other words, immigrants' motives which this paper focuses on.

2.2.4 Motives of immigrants

The explanation of action is at the heart of sociology as a discipline as Weber's introduction of motives as a basic sociological term attests to (cf. Weber (1914) in Calhoun et al. 2012). The subjective nature of the concept of motives and the trend toward formulating the law-like relationships Weber tried to avoid, led sociologists to

¹ Comparative size estimates might capture this normative dimension (Sides and Citrin 2007).

abandon the study of motives in the latter half of the 20th century. Fortunately, recent scholarship in cultural sociology has reintroduced the concept as a legitimate subject of study (Campbell 1996; Vaisey 2009). For the literature on immigration attitudes, the concept holds considerable promise through the study of perceived motives of immigrants.

As research investigating variations in attitudes towards different groups of immigrants revealed, there are marked preferences for immigrants from rich over those from poor countries (Gorodzeisky 2011), for skilled over unskilled immigrants (Hainmueller and Hiscox 2010), as well as preferences along racial and ethnic dimensions (Bessudnov 2016; Ford 2011). These differences in attitudes towards distinct immigrant groups appear to be rooted in prejudices against these groups (Helbling and Kriesi 2014) and such prejudices often incorporate aspects about that group's motivations such as being lazy or unpatriotic (Pager and Shepherd 2008). While the focus of this study are perceptions of immigrants in general in line with the concept of group-focused enmity (Heitmeyer 2005; Wagner, Christ, and Pettigrew 2008; Zick, Pettigrew, and Wagner 2008), these variations in attitudes towards subgroups suggest that what the native population perceives to be the motives of immigrants is a crucial explanatory factor for their attitudes about immigration.

2.2.5 Misperceptions of motives

Studying perceived motives for immigration and their association with anti-immigration attitudes, then, is a corrective step for the application of group threat theory in the immigration attitudes literature. Given the subjective and ambiguous nature of motives evidenced in the concept's eventful trajectory in cultural sociology, this corrective step requires a conceptualization of motives that consistently assesses the theory's crucial normative dimension. Such a conceptualization can make use of the well-established tendency to misjudge what motivated observed behavior (Gilbert and Malone 1995; Pettigrew 1979). These misperceptions of motives are akin to the previously mentioned population innumeracy (Alba et al. 2005; Citrin and Sides 2008; Herda 2010; Sides and Citrin 2007) but derive their consistent predictive quality from the known bias along racial and ethnic lines which predisposes majority individuals to more readily attribute negative motives to minorities (McGlothlin and Killen 2006, 2010). That is, since there is evidence of misattribution of motives and such misattributions have a consistent negative bias for minorities, misperceptions of the motives of immigrants should be a consistent predictor of anti-immigrant attitudes.

Whereas much of the literature on immigration innumeracy and misperceptions operates under the assumption that such factually incorrect beliefs are naïve, uninformed guesses that can be corrected with appropriate information (Alba et al. 2005; Blinder 2015; Sides and Citrin 2007; but see Hopkins, Sides, and Citrin 2019), this paper

follows Flynn, Nyhan, and Reifler's definition of "misperceptions as factual beliefs that are false or contradict the best available evidence in the public domain" (2017:130). This conceptualization of misperceptions sees them as an outcome of directionally motivated reasoning—describing information processing aimed at arriving at a certain outcome rather than a dispassionate processing (Kunda 1990). Rather than uninformed guesses amenable to change through education, such misperceptions and associated attitudes are resistant to change; as recent research documents for the case of immigrant population innumeracy (Grigorieff, Roth, and Ubfal 2018; Hopkins et al. 2019). This durability of misperceptions also highlights the concept's link to the attitude strength literature (Petty and Krosnick 1995), suggesting that misperceptions might be related to issues individuals deem important and that they should be predictive of behavior which Appendix H explores in more detail.

Drawing together the research on motive attribution for minorities and the conceptualization of misperceptions as the result of directionally motivated reasoning suggests, that motive misperceptions tend to support exclusionary attitudes. That is, misperceptions about migration motives in the aggregate predict anti-immigration attitudes. The focus on this general trend and the formal argument claiming a link between misperceptions and anti-immigration attitudes in general requires special emphasis given the potential for a related but distinct substantive interpretation.

This alternative argument might distinguish between legitimate and illegitimate motives a priori and then predict anti-immigration attitudes from this classification. A gut-level plausibility of this substantive argument notwithstanding, its predictions are far less clear-cut. This is because motives might be regarded as differentially legitimate for different groups based on race or legal status (Brader, Valentino, and Suhay 2008; Wright, Levy, and Citrin 2016) and because the perceived legitimacy can vary over time and space (Crawley, Drinkwater, and Kauser 2013). Additionally, varying associations with motives render their legitimacy ambiguous, such as considering the financial strain of supporting asylum seekers or the economic contributions of migrant workers. In contrast, the formal argument proposed in this study has an unambiguous prediction which is supported by findings about the link between familiarity and anti-immigration attitudes. This prediction is that misperceptions about motives in aggregate are associated with anti-immigration attitudes. Since misperceptions are a correlate of lacking familiarity, this prediction aligns with research finding that familiarity with immigrants is linked to lower anti-immigration attitudes (Fussell 2014; Schmidt-Catran and Spies 2016; Schneider 2008).

In sum, the study of anti-immigration attitudes from the theoretical perspective of group threat theory needs to prioritize perceptions over objective relationships between groups. While perceptions of group size are a potential proxy for this relationship between the dominant and subordinate group, they do not capture the

crucial normative dimension of this relationship Blumer theorized. Misperceptions of motives do capture this dimension via the bias in motive attribution to minority groups. This leads to the formal prediction that, in aggregate, misperceptions of motives are positively associated with anti-immigration attitudes and thus studying these misperceptions provides a crucial corrective for the literature.

2.3 Hypotheses

This paper addresses two questions about misperceptions about immigrant motives and their relation to immigrant attitudes. First, are there misperceptions about immigrant's motives, what are they, and how do these misperceptions vary between countries. Based on the limited available evidence that Blinder (2015) has compiled for the United Kingdom and the social-psychological literature on motive attribution (McGlothlin and Killen 2006, 2010; Pettigrew 1979), I expect the motives natives perceive as important to deviate from those that immigrants report at the aggregate level. More specifically, while natives perceive work and education to be less important than reported by immigrants, the opposite holds for asylum and family unity. These two hypotheses guide the first route of inquiry:

- H1: There are significant discrepancies between the motives for migrating that immigrants report and those the native-born population perceives at the aggregate level.

H2: The native-born population overestimates the importance of asylum and family unity and underestimates the work and education motive for immigration.

The second analytical task this paper addresses is whether misperceptions about migration motives are associated with anti-immigration attitudes. Given the positive association between overestimation of the immigrant population and immigration prejudice (Herda 2010, 2013, 2015) and the bias in motive attribution for minorities (McGlothlin and Killen 2006, 2010), misperceptions about migrant's motives should be positively related to anti-immigration attitudes. This connection between misperceptions and anti-immigration attitudes should materialize as a positive association between misperceptions and anti-immigrant prejudice, exclusionary policy preferences, and immigration concerns. As a strong negative attitude, misperceptions should also be a positive predictor of radical right voting.

H3: The stronger the misperceptions about migration motives are that respondents hold, the higher will be their anti-immigrant prejudice.

H4: Besides anti-immigrant prejudice, these misperceptions are positively associated with anti-immigration attitudes more broadly.

H5: A behavioral correlate of motive misperceptions is radical right voting, which is positively associated with misperceptions.

The following section introduces the data and discusses the operationalization of the key variables that form the basis for the analyses presented thereafter.

2.4 Data and Methods

Answering the research questions outlined above requires data on what motivates immigrants as well as what natives perceive to be migration motives. The Transatlantic Trends Survey 2014 (TTS) (Stelzenmueller, Invernizzi, and Eichenberg 2014) is the first cross-national survey gathering such data and Appendix A provides detailed information regarding the survey design and data quality. The analyses presented here use data from the ten countries for which comparable data across the full range of relevant outcomes is available in the TTS: France, Germany, Greece, Italy, the Netherlands, Poland, Portugal, Spain, Sweden, and the United Kingdom.²

2.4.1 Measuring migration motive misperceptions

The key variables included in the TTS which allow the empirical examination of migration motives and misperceptions come from two questions:

² Models reported in Appendix D show that results are robust to including all thirteen countries.

In your opinion, what do you think is the most common reason for immigrants (from other countries) to come to [COUNTRY]?

And what do you think is the second most common reason?

The five response categories for the two questions were: “To be united with family members”, “to seek asylum”, “to seek social benefits”, “to work”, and “to study”, with a sixth category coded “None of the above” if respondents spontaneously offered another response or ruled out all five options. Since both native and foreign-born respondents answered these questions, the data provide a baseline of the reasons reported by immigrants in the sample that can be used as the “best available evidence” (Flynn et al. 2017:130) against which misperceptions of natives can be quantified. That is, for the study at hand I treat responses to these questions by immigrants—those who reported that they were born in another country than the one they were interviewed in—as primarily expressions of personal motivations instead of perceptions of others’ motives. This approach takes justification from the literature identifying motive misattributions, which also shows that experience with the situational and contextual constraints for a given action allows more accurate motive attribution (Gilbert and Malone 1995; Hirschfeld 2013), and plausibility checks against published results and official statistics reported in the Appendix B.

2.4.1.1 Aggregate-level misperceptions

While the available evidence from Great Britain suggests that perceived migration reasons deviate from official statistics (Blinder 2015), it is not clear whether self-reported motives and perceived motives do so nor whether such discrepancies exist in other countries. Therefore, Figure 1 presents point estimates and confidence intervals for the proportion of immigrants, represented by grey triangles, and natives, represented by black circles, mentioning each of six response categories as first or second most common reason for immigrants to come to their country.

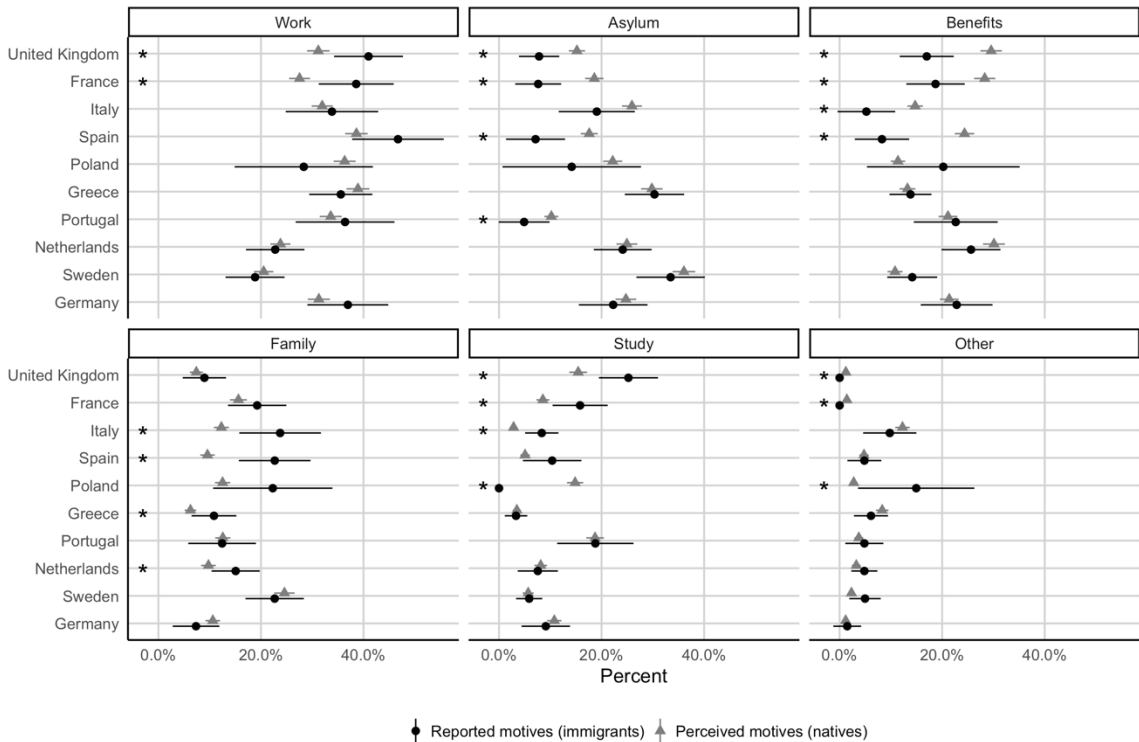


Figure 1: Point estimates and 95% confidence intervals of the proportion of immigrants reporting and natives perceiving each of six migration motives as most or second most common by country. * p < .05 (two-tailed test) The figure clearly

illustrates that in the aggregate motives reported by immigrants and perceived by natives deviate in each of the ten countries—to varying degrees—thus providing evidence for Hypothesis 1. The four most commonly misperceived motives in the aggregate are the family, asylum, social benefits, and education motive. While natives in Spain, Italy, the Netherlands and Greece underestimate how important family unity is as a motivation for immigrants to come to their country, those in France, Spain, the United Kingdom, and Portugal overestimate the importance of the asylum motive. An important observation is that, while natives in France, Spain, Italy, and the United Kingdom overestimate the importance of the social benefits motive, this is notably not because immigrants do not report it as a motive. Out of the ten countries covered, two countries show no statistically significant differences in the aggregated perceived and reported motives with the remaining eight countries exhibit between one and five statistically significant differences. Overall, the figure provides robust evidence for Hypothesis 1, there are a number of significant differences between the migration motives natives perceive as important versus those immigrants themselves stress.

The results regarding Hypothesis 2, on the other hand, are more mixed. While natives' perceptions overemphasize the asylum motive, in those countries where perceptions and reports diverge regarding the family unity motive, natives underestimate its importance. On the flip side, the work and study motive are indeed more important for immigrants than natives reckon in all countries where these diverge

significantly except for Poland. On the whole, Hypothesis 2 is accurate about which motives natives perceive as less important than immigrants report them to be—work and study—and to a lesser degree about natives’ perceptions overemphasizing certain motives—asylum.

2.4.1.2 Individual-level misperceptions

Measuring motive misperceptions at the individual level is less straightforward given the ordinal level of measurement. In essence, the key predictor constructed here measures the correspondence between each native’s vector of perceived motives and every foreign-born respondent in their country sample on a range of -1 (no misperception) to 1 (absolute misperception). Appendix C describes and motivates this measure in detail. The violin plots in Figure 2 illustrate the distribution of this measure in each country with plot width representing the proportion of natives at each level of misperception and horizontal marks for the first, second, and third quartile. While the discrepancies in aggregate perceived and reported motives do not directly translate into widespread individual-level misperceptions, at least a quarter of natives in every country had medium to high levels of misperceptions providing further evidence for Hypothesis 1.

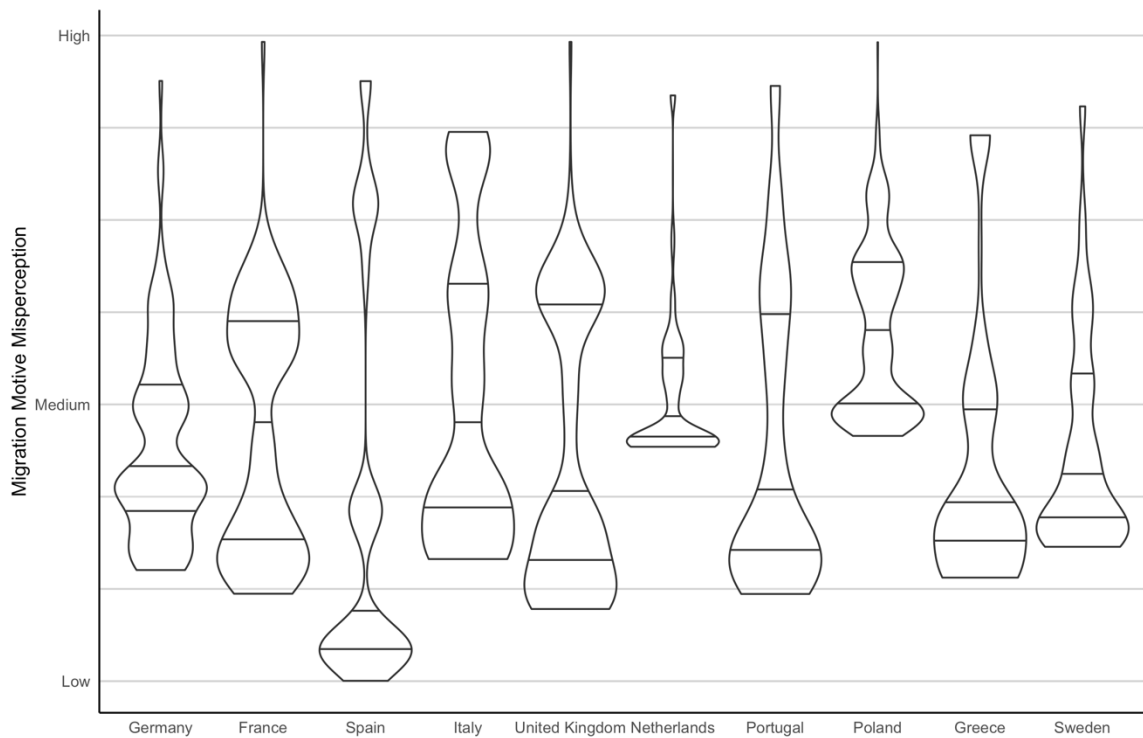


Figure 2: Violin plots for the distribution of migration motive misperceptions of native respondents by country with 25th, 50th, and 75th quantile.

2.4.2 Outcomes, controls, and descriptive statistics

Besides information on the perceived most common and second most common reason for immigration, I derive five outcome measures and a set of relevant controls from the TTS. Table 1 provides descriptive statistics for the key predictor, the outcomes modelled, and the controls used weighted to represent the country level demographic composition and the relative size of each country.

Table 1: Descriptive Statistics for Anti-Immigration Outcomes, Migration Perceptions, and Relevant Covariates

	Mean	SD	Min	Max	N
<i>Demographics</i>					
Female	0.48	0.50	0	1	10,000
Age	48.81	17.78	18	96	9,937
<i>Highest Education Completed</i>					
Primary	0.40	0.49	0	1	9,678
Secondary	0.30	0.46	0	1	9,678
Postsecondary	0.29	0.45	0	1	9,678
<i>Foreign Exposure and Background</i>					
Immigrant parents	0.13	0.33	0	1	9,974
Foreign friend	0.59	0.49	0	1	9,945
Lived abroad	0.06	0.24	0	1	9,935
<i>Occupational and Economic Situation</i>					
Working	0.54	0.50	0	1	9,820
Not in labor force	0.39	0.49	0	1	9,820
Unemployed	0.07	0.25	0	1	9,820
Affected by economic crisis	1.67	0.98	0	3	9,904
<i>Political Covariates</i>					
Left-right	3.88	1.33	1	7	8,797
Voted	0.65	0.48	0	1	9,887
Voted radical right	0.09	0.28	0	1	6,684
<i>Anti-Immigration Attitudes</i>					
Too many foreign-born	1.99	0.75	1	3	9,503
Restrict refugees	2.20	0.78	1	3	9,377
Worried intra-EU migration	0.44	0.50	0	1	9,820
Worried migration into EU	0.57	0.49	0	1	9,800
<i>Misperceptions</i>					
Migration motive misperceptions	-0.07	0.38	-0.75	0.98	9,030

Note: Data weighted for demographics and relative country size. All variables are dummy variables except for Age (in years), Affected by economic crisis (1 "Not really affected", 2 "Somewhat affected", or 3 "Greatly affected"), Left-right political orientation (1 "Extreme left", 4 "Center", 7 "Extreme right"), Too many foreign-born (1 "Not many", 2 "A lot but not too many", 3 "Too many"), Restrict refugees (Refugee policies: 1

“Should be less restrictive”, 2 “Are about right”, 3 “Should be more restrictive”).
Source: Stelzenmueller et al. (2014)

There is some inconsistency in how the literature on anti-immigration attitudes drawing on group threat theory operationalizes the theory’s key concepts (Ceobanu and Escandell 2010; Pottie-Sherman and Wilkes 2017). This manuscript uses respondent’s opinion of the size of the foreign-born population from “Not many” to “Too many” as an indicator of anti-immigrant prejudice following the literature’s origins (Quillian 1995). Additional anti-immigration attitude outcomes are preferring stricter refugee policies and being worried about migration within and into the EU. Voting for a radical right party is a measure of whether respondents indicated having voted for one of a set of 13 parties clearly identifiable as radical right in the recent EU parliament elections.³

Key controls include standard demographic predictors used throughout the immigration attitudes literature such as age, gender, and highest education completed (Semyonov et al. 2006, 2008; Wilkes, Guppy, and Farris 2008) as well as whether a respondent comes from a family with migration background or has had exposure to different cultural contexts or people from such contexts (McLaren 2003; Sides and Citrin 2007; Stephan and Stephan 2000). Two economic controls taken from the data are employment status—measured as two dummy variables for not being in the labor force or looking for work—and personal or family’s affectedness by the current economic crisis

³ Appendix F discusses concerns regarding the temporal order and the representation of such parties in the European Parliament, and provides test of the results’ sensitivity to the time lag.

(Ford 2011; Semyonov et al. 2006, 2008). Finally, the controls include the conventional seven-point self-placement scale for political orientation ranging from extreme left (1) to extreme right (7) (Rustenbach 2010; Semyonov et al. 2006, 2008).

The key outcome indicator for anti-immigrant prejudice appears to occupy a fairly solid ground in the sample with more than a quarter of respondents opining that the population of foreign-born residents in their country is too large. This variable is constructed from two alternative formulations of the question:

How do you feel about the number of people living in [COUNTRY] who were not born in that country? Are there too many, a lot but not too many, or not many?

The split ballot either introduced the question by stating

As you may know, according to official estimates, around [XX]% of the [COUNTRY] population was born in another country; or

Generally speaking, how do you feel about the number of people living in [COUNTRY] who were not born in that country?

Two other variables tapping broader anti-immigration attitudes further attest to how widely shared such opinions are, with almost 45% being worried about migration to their country from other European Union (EU) countries and more than 55% being worried about immigration from outside the EU.

The modelling approach takes into account the nested nature of the data with individuals nested in countries and the significant between country variation in both the level of migrant motive misperceptions and anti-immigrant prejudice. Comparing the model fit of an empty fixed effects model to an empty model with random country-level intercepts reveals a significant reduction in deviance for predicting prejudice ($\Delta D = 198.21, df = 1, p < .001$). Therefore, the analyses use hierarchical models (Raudenbush and Bryk 2002) with all models estimated as mixed effects models with random intercepts for survey country. All analyses are limited to respondents born in the country of the interview and use data imputed data following the multiple imputation, then deletion strategy (von Hippel 2007). Results are robust to other modelling strategies.

2.5 Results

While the descriptive visualizations illustrate the existence of substantive variation in perceived migration motives and migration motive misperceptions, they cannot answer the question whether this variation is associated with anti-immigrant prejudice and anti-immigration attitudes more broadly. To this end, I estimated two sets of mixed effects models predicting anti-immigrant prejudice operationalized as

perceiving the foreign-born population as too large, and four additional attitudinal and behavioral measures of anti-immigration attitudes respectively. This section presents and interprets these models.

Table 2: Standardized coefficients from linear mixed effects models predicting anti-immigrant prejudice from (1) demographics, foreign exposure, political and economic covariates and (2) migration motive misperceptions.

	(1)	(2)
<i>Individual level variables</i>		
Female	-0.05**	-0.05*
Age	0.03**	0.03**
Secondary	-0.19***	-0.17***
Postsecondary	-0.36***	-0.33***
Immigrant parents	-0.19***	-0.18***
Foreign friend	-0.17***	-0.15***
Lived abroad	-0.10	-0.12
Left-right	0.13***	0.12***
Not in labor force	-0.03	-0.03
Unemployed	-0.05	-0.05
Affected by economic crisis	0.09***	0.08***
Motive misperceptions		0.11***
Constant	0.53***	0.50***
<i>Variance components</i>		
Country	0.05	0.06
Residual	0.83	0.82
<i>Observations</i>		
Country	10	10
Individual	9,300	9,300
<i>Goodness of fit</i>		
Log likelihood	-14,697.09	-14,634.52
AIC	29,424.18	29,301.05
BIC	29,531.25	29,415.25

Note: Standardized coefficients. All models control for split ballot question. Omitted reference categories: Primary education and working.

* $p < .05$; ** $p < .01$; *** $p < .001$ (two-tailed tests).

Table 2 presents standardized coefficients for two linear mixed effects models. Model 1 in Table 2 constitutes the baseline model predicting anti-immigrant prejudice from demographics, foreign exposure, and political and economic covariates. The model largely aligns with the existing evidence in the literature which uses some form of evaluative, normative perception of the immigrant group size as an outcome (Quillian 1995; Schlueter and Davidov 2013; Wagner et al. 2006). That is, age is a significant positive predictor, education a significant negative predictor, and generalized economic distress—to what degree respondent's family was affected by the recent economic crisis—positively associated with anti-immigrant prejudice. While evidence for the association of gender and prejudice in this literature is mixed, there is a significant negative association between being female and perceiving the immigrant group as too large in the data analyzed. Political ideology and two of three measures of foreign exposure are also statistically significant predictors and similarly align with the existing literature (McLaren 2003; Semyonov et al. 2006, 2008; Sides and Citrin 2007). Individuals with more exposure to foreign individuals have lower predicted levels of prejudice as do individuals further to the left on the ideological spectrum. In sum, this model provides a convenient plausibility check of the data and the results line up neatly with previous research.

Model 2 in Table 2 tests Hypothesis 3 by adding the measure for migration motive misperceptions as a predictor of anti-immigrant prejudice. This model significantly improves model fit over model (1) ($\Delta_D = 125.13$, $df = 1$, $p < .001$) highlighting the association between misperceptions of immigrants' motives and prejudice. The inclusion of misperceptions attenuates the coefficients of the majority of Model 1 predictors suggesting that some of the associations between education, foreign exposure, and political ideology and prejudice operate through reduced or increased misperceptions respectively. Comparing the magnitude of the misperceptions coefficient ($\beta = .11$, $p < .001$) to the remaining predictors reveals that ideology and misperceptions are almost equally important and the predicted reduction in level of prejudice for going from the highest level of misperceptions to the mean level is about equal to the reduction of going from primary education only to having completed postsecondary education. Overall, this model provides robust evidence for Hypothesis 3 stating that migration motive misperceptions and anti-immigrant prejudice are positively associated.

Table 3 provides a comprehensive test of Hypotheses 4 and 5 presenting four models that predict preferences for more restrictive refugee policies, concern about migration into the EU, concern about migration within the EU, and voting behavior for a radical right party during the 2014 European Parliament elections. Given the different levels of measurement of the outcomes, coefficients for the first model are standardized

linear mixed effects model coefficients and for the second through fourth model are odds ratios from generalized mixed effects models with binary outcomes. For each of the four models and outcomes, migration motive misperceptions are significant positive predictors. While a standard deviation increase in migration motive misperceptions is associated with a .11 standard deviation increase in preferring stricter refugee policies, in the case of voting for a radical right party, a one standard deviation increase is associated with an increase of more than 40% in the odds of voting for such a party among those who voted. On the whole, Table 3 provides support for Hypothesis 4 that migration motive misperceptions are not only associated with anti-immigrant prejudice but with anti-immigrant attitudes—such as exclusionary attitudes and concerns about immigration—more broadly. It further provides evidence that such misperceptions have behavioral correlates in the form of voting behavior as well. Misperceptions about immigrants’ motives, then, are not simply another attitudinal correlate of anti-immigration attitudes but are closely linked to how people think about policies and exercise their political power.

Table 3: Standardized coefficients from mixed effects models predicting (1) preference for more restrictive refugee policies, (2) concern about migration into and (3) within the EU, and (4) radical right voting.

	(1)	(2)	(3)	(4)
<i>Individual level variables</i>				
Female	0.02	1.04	0.90*	1.63***
Age	0.01	1.10***	1.02	0.85**
Secondary	-0.11***	0.87*	0.69***	0.95

Postsecondary	-0.28***	0.63***	0.50***	0.33***
Immigrant parents	-0.12**	0.81*	0.76**	0.57*
Foreign friend	-0.19***	0.65***	0.72***	0.89
Lived abroad	-0.13	0.67	0.64	0.81
Left-right	0.15***	1.41***	1.25***	1.85***
Not in labor force	-0.13***	0.88*	0.84**	0.60***
Unemployed	0.01	1.11	1.20	1.27
Affected by economic crisis	0.05***	1.22***	1.24***	1.11
Motive misperceptions	0.11***	1.30***	1.21***	1.43***
Constant	0.31***	2.11**	1.42	0.05***
<i>Variance components</i>				
Country	0.06	0.48	0.36	3.02
Residual	0.89			
<i>Observations</i>				
Country	10	10	10	10
Individual	8,714	9,126	9,139	6,364
<i>Goodness of fit</i>				
Log likelihood	-14,062.59	-5,147.55	-5201.461	-1,352.04
AIC	28,155.17	10,323.11	10,430.92	2,732.08
BIC	28,261.26	10,422.78	10,530.60	2,826.69

Note: Standardized coefficients. Model 3 linear mixed effect model, models 4-6 show odds ratios from generalized mixed effects model with binary outcomes. Omitted reference categories: Primary education and working.

* $p < .05$; ** $p < .01$; *** $p < .001$ (two-tailed tests).

2.6 Discussion and Conclusion

With Europe as the destination for broad migration movements, anti-immigration attitudes are again on the rise raising serious concerns about issues from their reception and economic integration (Fussell 2014; van Tubergen et al. 2004) to potential violent backlashes (Bobo and Fox 2003; Pettigrew 1998). The vast literatures in sociology and political science investigating these attitudes (Ceobanu and Escandell

2010; Hainmueller and Hopkins 2014) rely heavily on group threat theory to explain the emergence of this animus (Blalock, Jr. 1967; Blumer 1958). Whereas initial applications tested a simple group size hypothesis—anti-immigrant prejudice increases as the immigrant group grows—this prediction has not proven robust (Hjerm 2007; Pottier-Sherman and Wilkes 2017). Subsequent studies reintroduced the key perceptible mechanism theorized in the original formulation of group threat theory predicting prejudice from perceived instead of actual immigrant population sizes (Herda 2013; Semyonov et al. 2008; Sides and Citrin 2007).

While this is an important corrective, even perceived group size in itself does not necessarily predict anti-immigrant prejudice or whether people believe that immigrants are “bringing drugs [, are] bringing crime [, are] rapists [, a]nd some [. . .] are good people” (Burns 2015). To refocus the study of immigration attitudes on the central role Blumer (1958) and Blalock (1967) attributed to perceptions, this paper drew on the recently rehabilitated concept of motive (Campbell 1996; Vaisey 2009) to study what natives believe drives immigration to their country and, in particular, how the inevitable misperceptions bound up in the process of attributing motives predict anti-immigration attitudes (McGlothlin and Killen 2006, 2010; Pettigrew 1979).

The analyses presented provide evidence for the hypothesis that misperceptions of the motives of immigrants are closely linked to anti-immigrant prejudice. The magnitude of the association between these misperceptions and prejudice rivals those of

important established predictors such as political ideology or education (Semyonov et al. 2006, 2008; Sides and Citrin 2007; Wilkes et al. 2008). In addition to heightened prejudice, those with higher misperceptions also exhibit higher levels of anti-immigration attitudes more broadly. In looking at the political correlates of migrant motive misperceptions, those who misperceive more also favor stricter refugee policies which highlights how even categories of foreign-born residents with clearly defined official meanings are subject to ambiguity in the public eye (OECD 2015). Finally, these misperceptions appear to carry weight not only for attitudes but for political behavior as well, given that higher levels of misperceptions are strong predictors for voting for radical right parties.

From a standpoint of motivated reasoning, this is a logical consequence because it is usually these parties that endorse anti-immigration policies and oppose the European Union with its open borders and free movement of people, two concerns particularly common among those with misperceptions about migration motives. This suggests one important avenue for further study of migration motive misperceptions. Given the established link between radical right parties and anti-immigration attitudes (Rydgren 2008), future research should investigate if misperceptions derive from the commonly misleading claims about immigrants these parties make or whether the parties only capitalize on already existing misperceptions of immigrant motives. Such misperceptions could alternatively arise from a lopsided portrayal of immigrants in the

media. Since the media attention to immigration is also associated with anti-immigration attitudes (Boomgaarden and Vliegenthart 2009; Schlueter and Davidov 2013) and some evidence suggest that media portrayals of immigrants coincide with public perceptions (Blinder and Allen 2016), future studies should examine the role of news and social media in shaping misperceptions about immigrants' motives.

While the results presented above are very suggestive, they should be considered in light of the limitations of the data. First, the construction of the migration motive baseline against which misperceptions are quantified, while plausible given external benchmarks reported in Appendix B, is not perfect. Instead of being asked for their own motives for coming to the survey country, foreign-born respondents were asked what they think are the most common reasons like all other respondents. Future studies of immigrants could establish such a baseline or large-scale surveys could tailor the question to respondents' immigration background. Second, given the cross-sectional nature of the data the estimated associations cannot be interpreted as causal. In fact, from the perspective of directionally motivated reasoning (Flynn et al. 2017; Kunda 1990), it would seem possible that individuals first perceive an excess of immigrants and justify this feeling by imputing motives they perceive as illegitimate. This possibility suggests a potential experimental approach to testing reverse causality by priming the growth of the immigrant population and contrasting motive misperceptions with a

control group (Abascal 2015). If prejudice drives misperceptions, individuals in the priming condition should exhibit stronger misperceptions.

With these caveats in mind, this paper contributes to the voluminous literature exploring the sources of contention in intergroup relations with a specific focus on anti-immigration attitudes. Like many studies in this literature, it departs from Blumer's key insights inspiring group threat theory that at the root of anti-minority prejudice lies an understanding of the subordinate group's position vis-à-vis the dominant group. In contrast to most of these studies, the paper goes to the evaluative, normative root of this understanding that informs whether the minority is perceived to be challenging the majority's status. It does this by leveraging the concept of motives and insights about biased motive attribution, showing that the motives natives attribute to immigrants oftentimes diverge from immigrants' actual motives, and that these misperceptions are important predictors of anti-immigrant prejudice, broader anti-immigration attitudes, and voting for radical right parties.

3. Assessing the Mechanism and Scope Conditions of Backfire Effects

3.1 Introduction

The idea that perceptions of the world have real world consequences is so well established in sociology that it has its own eponymous theorem, the Thomas theorem (Merton 1995). This basic insight has in recent years inserted itself forcefully into the public awareness with the reemergence of diseases believed to be eradicated and violent acts committed against public officials regarded as illegitimate. Shocking incidences such as these are often rooted in misperceptions like the belief that vaccinations cause autism or that the Weimar Republic and its laws persist today. Despite the majority of misperceptions being much more benign, academics, private industry, and even governments have identified the correction of such misperceptions as a key challenge for contemporary societies. A broad literature, spearheaded by social psychologists and political scientists, has developed to take on this challenge finding promising correction approaches but also identifying potential obstacles to corrections (Bail, Argyle, et al. 2018; Flynn et al. 2017; Guess and Coppock 2018; Hill 2017; Lewandowsky et al. 2012; Nyhan and Reifler 2015; Thorson 2016).

Among these obstacles, the so-called “backfire effects” have been arguably the most disconcerting to scholars because they highlight the possibility that efforts to correct misperceptions carry the potential to reinforce them instead (Nyhan and Reifler 2010, 2015). The prevalence of these backfire effects is the concern of an ongoing debate

which is unlikely to be resolved without addressing some gaps in the literature first (Guess and Coppock 2018; Wood and Porter 2018). First, while the underlying mechanism has been theorized to originate in motivated reasoning there is to this date no test of whether “counter-arguing”—engaging critically with disconfirming information resulting in a preponderance of arguments against these information—in fact contributes to backfire effects. Second, while the studies identifying backfire effects were carefully designed to exhibit high external validity, social dissonance theory suggests that individuals might process disconfirming information less critically in their day to day lives, where they perceive to be in control of the information they encounter, than in these experiments (Freedman and Steinbruner 1964; Himmelfarb and Arazi 1974). This study aims to contribute to a better understanding of the mechanisms and the scope conditions of backfire effects.

In the following, I detail the theoretical motivation for this study outlining the current state of the literature on backfire effects and how social dissonance theory, the elaboration likelihood model, and social identity theory can help fill some of the gaps. Second, I present the study design and discuss how I manipulate perceived choice and prompt counter-arguing to delineate the scope conditions and mechanism of backfire effects. Third, I present the results of these experiments and discuss to what degree they support the hypotheses counter-arguing is a sufficient mechanism for backfire effects whereas perceived control amplifies the influence of correcting information. Finally, I

discuss implications of these findings for scholars of misperceptions and other stakeholders interested in combatting misperceptions

3.2 Theory

3.2.1 The sociological importance of perceptions

Perceptions of reality have a strong influence on how people feel, think about issues, and behave. This idea that perceptions of reality are an even stronger predictor of behaviors and attitudes than the objective basis for these perceptions is also known as the Thomas theorem, which states: “If men perceive things to be real, they are real in their consequences” (Thomas and Thomas 1928:572). While this theorem is plausible on its face, there is also substantial correlational evidence showing that perceptions of the racial and ethnic composition of the United States predict attitudes toward minorities (Alba et al. 2005), communities that see Muslims as terrorist have higher likelihoods of controversies around and attacks on mosques (Bail, Merhout, and Ding 2018), and beliefs about the causes of poverty are associated with affect toward the poor (Cozzarelli, Wilkinson, and Tagler 2001). Beyond these correlational findings, recent experimental scholarship has provided further support for the causal relationship between perceptions and attitudes and behavior (Abascal 2015; Correll, Benard, and Paik 2007; Pager 2003). This evidence comes in part from studies of the job market that have shown that job candidates presented as mothers were evaluated as less competent and offered lower starting salaries (Correll et al. 2007) while candidates presented as

African American or having a criminal background experienced lower callback rates (Pager 2003). Other research looking at perceptions of the demographic makeup of the United States population found that perceiving a shift in the ethnic and racial makeup of the population caused shifts in racial identification as well as increasing ingroup bias among the majority (Abascal 2015).

The key point about these findings highlighting individuals' reliance on perceptions to form attitudes and inform behavior is that these perceptions are at best loosely coupled to the objective reality. Particularly on complex or abstract issues such as the demographic composition of a country's population, the composition of a political outgroup, or the origins and motives of immigrants, research has shown widespread misperceptions (Ahler and Sood 2018; Alba et al. 2005; Blinder 2015; Herda 2015). While many of these misperceptions might not be consequential in the daily lives of individuals or collectives, there are at least two issues where these consequences can be momentous and accordingly have received substantial attention: healthcare and politics.

In regards to misperceptions in the political sphere, such disconnect between objective reality and perceptions informing political behavior is particularly problematic since the democratic system sustaining all Western societies is based on the assumption that citizens are well-informed and base their votes on accurate perceptions of reality (Nyhan and Reifler 2010). This philosophical ideal of the rational, informed voter and its clash with the empirical reality of widespread misperceptions has given rise to a large

literature studying the extent, the antecedents, and consequences of such misperceptions (Alba et al. 2005; Blinder 2015; Flynn et al. 2017; Herda 2010, 2013, 2015; Landy, Guay, and Marghetis 2017; Sides and Citrin 2007). This literature has found evidence that online information and social media might be a contributing factor to misperceptions since it supercharges the human tendency toward selective exposure avoiding counter-attitudinal information (Bakshy, Messing, and Adamic 2015; Barberá et al. 2015; Frimer, Skitka, and Motyl 2017; Iyengar and Hahn 2009; Ruiz and Bell 2014) and facilitates the spread of misinformation such as the purported risks of vaccination (Chiou and Tucker 2018). On the other hand, there is evidence that suggests that the basis for, at least some, misperception phenomena lie in more rudimentary functioning of human cognition (Landy et al. 2017).

Whatever the causes of misperceptions may be, the fact that they can have consequential impacts on the functioning of our political system has made the correction of such misperceptions key subject of study in political science, communication, and social psychology (Guess and Coppock 2018; Margolin, Hannak, and Weber 2018; Nieminen and Rapeli 2018; Nyhan and Reifler 2010; Peter and Koch 2016; Siero and Doosje 1993; Thorson 2016; Wood and Porter 2018). In part due to the practical applications, this literature has focused intensely on the efficacy of corrective statements and their effect on individuals' endorsement of misstatements. While a number of studies attest to the usefulness of this gold standard of journalistic practice in

combatting misperceptions, there is an important part of the literature that finds that such efforts might be inconsequential or even counterproductive (Hart and Nisbet 2012; Holman and Lay 2018; Nyhan and Reifler 2010; Thorson 2016). These so-called backfire effects have emerged in multiple studies investigating approaches to counter misperception and polarization, and appear to be rooted in well-known social psychological processes (Bail, Argyle, et al. 2018; Berinsky 2017; Hart and Nisbet 2012; Holman and Lay 2018; Nyhan et al. 2014; Nyhan, Reifler, and Ubel 2013; Nyhan and Reifler 2010; Peter and Koch 2016; Schaffner and Roche 2016).

3.2.2 Social-psychological bases of backfire effects

Extant research has linked the predictions that disconfirming information should lead to believe change and findings of resistance to corrections and backfire effects to two broad social psychological literature. On the one hand, cognitive dissonance theory suggests that individuals encountering information that is discrepant with prior beliefs experience cognitive dissonance (Festinger 1957). This dissonance exposes individuals to strain which they aim to resolve by updating their beliefs in a manner that aligns them with the new information. These updated beliefs do not necessarily align perfectly with the new information since they also incorporate prior information, but they are in general suggested to follow a Bayesian ideal always updating in line with not in opposition to the new information (Hill 2017). On the other hand, social identity theory suggests that some beliefs are more central to individuals' identities and that such

central beliefs are more resistant to change (Tajfel 1978). This suggests that discrepant information relating to beliefs that play a pivotal role for individuals' identities should produce less or no believe updating, and that corrections that challenge such central beliefs face an uphill battle.

A potential explanation for why corrective information challenging beliefs central to individuals' identities might engender lower or no levels of updating is that such information triggers a specific type of information processing. While individuals process all information with a specific goal in mind such as accuracy or arriving at a desired outcome (Kunda 1990) information related to central beliefs tends to trigger directionally motivated reasoning that aims to reaffirm the central beliefs. Such identity protective cognition can operate through various routes but broadly involves discounting dissonant information, pursuing information affirming prior beliefs, and evaluating belief-aligned information as more credible or relevant (Kahan 2017; Kahan et al. 2012; Taber and Lodge 2006). If cognitive dissonance theory and social identity theory suggest that discordant information faces more resistance when it relates to identity-relevant beliefs, directionally motivated reasoning and identity protective cognition suggest that individuals who more strongly identify with a given identity will resist such information more strongly.

The two-tracks of directionally motivated reasoning to processing information are paralleled by dual-process theories of cognition and the elaboration likelihood model

(DiMaggio 1997; O’Keefe 2008; Petty and Cacioppo 1986). As DiMaggio (1997) describes, research on cognition has identified a continuum of cognitive processes with two polar ends he labels “automatic cognition” (269) and “deliberative cognition” (271). The former is the default mode of information processing due to its efficiency and relies on uncritical application of available knowledge structures, without particular attention to coherence between information and existing structures. Deliberative cognition, on the other hand, is reflective and critical drawing out connections between and focusing on coherence among mental structures. Due to its inefficiency, individuals only fall back on deliberative cognition when their attention is drawn to an issue, when there is strong external motivation, or when there are striking inconsistencies between new information and available schemata. Information challenging identity-related beliefs is likely to push individuals toward more deliberate processing, but absent external motivation and focus on the issue automatic cognition is likely to prevail.

In addition to delineating these two tracks of information processing, the elaboration likelihood model (ELM) describes how persuasion operates in each track (O’Keefe 2008; Petty and Cacioppo 1986). In ELM’s analogue to DiMaggio’s automatic cognition, the peripheral route, aspects unrelated to the information itself such as the credibility or attractiveness of the information source determine persuasiveness. Conversely, when individuals engage with the encountered information in depth, processing it through the central route, the valence of issue-relevant thoughts predicts

persuasion. This valence depends on both argument quality and alignment of the argument with prior beliefs, with strong, congruous information leading to more positive thoughts and thus more likely to persuasion. According to ELM, the processing route or the degree of elaboration increases as the personal relevance of the issue increase and as external distraction decreases.

3.2.3 When should we expect corrections of misperceptions to backfire?

Drawing together the various social psychological models of information processing outlined above, it seems that corrections of most misperceptions should be successful in leading most people to update their misperceived beliefs. That is for most issues that are unrelated to individuals' central beliefs, there should be no indication of resistance to corrections. Similarly, for those issue related to central beliefs, we might expect to find some resistance to updating these beliefs, but the strength of this resistance is likely not noticeable unless the beliefs are tied to a strongly held identity. Finally, even if the correction relates to a central belief that is tied to a strongly held identity, the broad tendencies toward using cognitive shortcuts to information processing—be they automatic cognition or peripheral route processing—suggests that resistance to updating is sufficiently rare. If such resistance to updating is rare, outright backfire effects should be even rarer.

This rarity of resistance to belief updating and the backfire affect resonates with a few recent studies that have investigated both phenomena in the context of U.S. political

environment (Guess and Coppock 2018; Hill 2017; Wood and Porter 2018). In one study, Guess and Coppock (2018) test for backfire effects to corrective information regarding three politically divisive issues: gun control, minimum wage, and the death penalty. While they find some treatment heterogeneity along theoretically important dimensions such as personal issue importance and ideology, the results reveal no backfire effects robust to adjustment for multiple comparison. Similarly, Wood and Porter (2018) investigated the effect of corrections of misleading statements by politicians testing how different issues, mundane realism, complexity, and participant pool moderate corrective effects. Across 52 different corrected misstatements, the results reveal heterogeneity in updating beliefs with more resistance to co-ideologue corrections but no instance of backfire. Finally, Hill (2017) provides a comprehensive benchmark of political belief updating showing that when individuals are incentivized for accuracy, there is only limited evidence of ideological bias and otherwise broad support for Bayesian learning.

Given this broad evidence of the general efficacy of corrections in reducing political misperceptions and lack of robust evidence for the existence of backfire effects, it seems worthwhile to review the theorized mechanism underlying backfire effects to review. This is especially pertinent given the theoretically outlined rarity of backfire effects which suggests that only studies providing for this mechanism can reasonably be expected to find evidence of the effect. The pivotal studies finding backfire effects have explained them as a result of an in-depth engagement with the counter-attitudinal

information during which individuals come up with arguments countering the unwelcome information, i.e. counter-argue it (Lodge and Taber 2000; Nyhan and Reifler 2010). Such counter-arguing, they suggest, provide the individual with additional arguments supporting the initial position and thus strengthening the resolve with which it is endorsed.

Despite the crucial importance of the mechanism to backfire effects, to date, only one study has attempted to test the role of counter-arguing in inducing backfire effects. Wood and Porter (2018) assess perceptions of the tightness of the connection between the misstatements and corrections they study, this connection should affect either the motivation or the opportunity to counter-argue. While they fail to find an association between the misstatement-correction proximity and corrective effects, a peripheral design choice by Holman and Lay (2018) provides what appears to a more direct assessment of the counter-arguing mechanism. While not intended as a test of the mechanism, their use of attention check questions for participants in the treatment condition but not in the control condition prompts participants to engage with the corrections they provide in more detail. In their analyses then, they do find some evidence that Republican participants in the treatment condition believe in more election myths than in the control condition. This suggests that prompting participants to engage or elaborate on the corrections they encounter can be leveraged to induce counter-arguing, and doing so provides a more direct assessment of the key mechanism.

3.2.4 Backfire effects outside the laboratory

Despite the theoretical rarity of backfire effects and the evidence of the broad efficacy of corrective statements in laboratory settings, another concern remains regarding the external validity of these findings and their implications for real-world fact checking (Nieminen and Rapeli 2018). These concerns result from the presentation of the results as authoritative given that participants are exposed to them in a (virtual) lab setting, their parents disconnect from fact-checking practice by separating the presentation of corrections from the presentation of misstatements, and crucially the absence of participants' involvement in being exposed to the information. A test of the effect of corrective information that is not only internally but also externally valid as a measure of the efficacy of fact checking in people's daily lives therefore needs to present the experimental stimuli in a realistic format, e.g. as a news article that contains both the misstatement and correction, and needs to provide individuals with a sense of choice in the information they encounter.

The latter, sense of choice, is crucial given that individuals are exposed to ideologically cross-cutting information online in settings not primarily focused on politics (Wojcieszak and Mutz 2009). Reactions to corrective information under such incidental exposure likely differ from those to exposure to such information in experimental settings, where participants might be more alert and skeptical of any information encountered while at the same time information might be perceived as more

authoritative coming from researchers. As Arceneaux, Johnson, and Cyderman (2013) show, when given the choice to consume politically opinionated news there is opinion polarization among individuals deciding to consume this content. Similarly, the sense of choice is a pivotal element of the experience of pragmatic agency and the phenomenological experience of the self (Hitlin and Elder 2007; Steele 1988), producing positive emotions which reaffirm the self (Cohen, Aronson, and Steele 2000; Correll, Spencer, and Zanna 2004) and should make individuals more receptive to counter-attitudinal information. Given the evidence the available evidence that individuals hold misperceptions less strongly under self-affirmation (Nyhan and Reifler 2018) and conversely exhibit a greater likelihood of accepting incorrect information under recall of lack of control (Nyhan and Zeitzoff 2018), experimental control of the sense of choice in information exposure is a crucial aspect to arrive at externally valid insights about the effect of corrective information on misperceptions.

These theoretical considerations suggest that research investigating the existence and prevalence of backfire effects to corrective information needs to pay closer attention to the theorized mechanism underlying such effects and examine the moderating role of perceived choice in information exposure to allow reliable inferences from (virtual) laboratory results about the effects of fact checking in journalistic work. This paper aims to address both of these questions testing a set of hypotheses outlined in the following section.

3.3 Hypotheses

The key hypotheses informing the analyses of this paper were preregistered prior to data analysis on the Open Science Framework (Merhout 2018). The first two hypotheses build off of the idea that perceived choice affects how individuals approach new information they encounter and thus moderates the effects of corrective information, such that under perceived choice individuals are more open to counter-attitudinal information. These hypotheses are:

H1A: Individuals who perceive to have control about exposure to counter-attitudinal, partisan information are more likely to be persuaded.

H1B: Individuals who perceive to have control about exposure to counter-attitudinal, partisan information are less likely to experience backfire effects.

A second set of hypotheses derives from the dual process theories of cognition, the theoretical predictions of the elaboration likelihood model, and the theorized mechanism underlying backfire effects. These hypotheses capture the idea that engagement with the content of counter-attitudinal information moderates the effect of corrective information on misperceptions, such that it either prompts counter-arguing and backfire effects as theorized in the backfire effect literature or a processing through

the central route and higher levels of persuasion as predicted by the elaboration likelihood model.

H2A: Individuals are more likely to experience backfire effects when they are asked to engage with counter-attitudinal, partisan information.

H2B: Individuals are more likely to be persuaded by counter-attitudinal, partisan information when they are asked to engage with it.

A final hypothesis was not preregistered but derives from the theoretical propositions of social identity theory and cognitive dissonance theory and reflects empirical findings in the backfire literature. This hypothesis formalizes the prediction that only beliefs that are central to individuals' identities will produce cognitive dissonance and the strength of this dissonance will depend on the strength of connection to that particular identity. In earlier studies of the backfire effect, this theoretical prediction manifested in the strength of partisanship or ideological identification moderating the effect of counter-attitudinal information on misperceptions such that those more strongly identifying with the challenged identity more likely to or more strongly experiencing backfire effects.

H3: Strength of ideological identification will moderate the effect of counter-attitudinal information on misperceptions, such that those most strongly identifying with the challenged ideological position will exhibit the strongest backfire effect.

To test these two sets of key hypotheses as well as the additional hypothesis about the moderating effects of political ideology, this paper presents results from an online experiment. The following section gives details on the experimental design and sample for the study.

3.4 Data and Methods

3.4.1 Sample and Data

This study is based on an online experiment fielded through TurkPrime on Amazon's Mechanical Turk (MTurk) Platform in October 2018 to a sample of 1326 MTurk workers (Litman, Robinson, and Abberbock 2017). The study instrument consisted of a brief survey querying participants' basic demographic characteristics, political affiliation and ideology, and opinions on immigration, followed by two survey experiments and concluding attention checks. The experiment this manuscript reports on presented participants with a synthetic online social media feed, asked them to read a synthesized but factual news article, then prompted them to write about the article or

their social media use, and queried them about their position on a factual statement rephrasing the President's misstatement quoted in the article they had read.⁴

Whereas the original studies finding backfire effects used samples drawn from a student population (Nyhan and Reifler 2010; Taber and Lodge 2006), this study follows the more recent investigations of the effect of corrective information on misperceptions using an online opt-in sample from MTurk (Guess and Coppock 2018; Wood and Porter 2018). While neither sampling strategy provides samples that are representative of the United States population, recent research has demonstrated the viability of MTurk samples for experimental research and that samples drawn from the platform capture more variation among important demographic and political covariates than in-person lab samples (Berinsky, Huber, and Lenz 2012).

Instead of opting for a convenience sampling strategy of MTurk workers, the study used TurkPrime's screening criteria to quota sample for two criteria. First, the sample was generated from separate instances recruiting equal numbers of participants from each of the nine Census Bureau divisions: New England, Mid-Atlantic, East North Central, West North Central, South Atlantic, East South Central, West South Central, Mountain and Pacific. These instances were additionally subdivided such that one third of sample slots in each division were reserved for MTurk workers identifying as

⁴ The survey instrument is attached as Appendix I.

Republican. Both screeners drew on the respective information contained in TurkPrime's database which is constructed and validated using all studies fielded through the TurkPrime interface. Since all of this information is still based on self-reports, manual review of the open-ended responses in conjunction with demographic responses identified 31 respondents, or about 2.5% of the sample, who provided non-sensical responses or did not follow prompts. The analyses do not use these cases.

3.4.2 Experimental Setup

The experiment used a fully-crossed factorial design with three experimental factors and assigned participants with equal probabilities to each of the eight experimental conditions. The first experimental manipulation was a basic prompt for backfire effects, the second manipulated the perceived control about information exposure, and the final manipulation was intended to prompt counter-arguing.

3.4.2.1 Manipulating corrective information

The news article quotes statements by the US President to reporters regarding the separation of parents and children at the US Southern border, in which he attests to his displeasure with the situation but also his inability to change it. The article was attributed to either the Associated Press or Reuters to present it as originating from a non-partisan source and to prevent any confounding source inferences by participants (Iyengar and Hahn 2009). Following the original example by Nyhan and Reifler (2010), the article that participants in the correction treatment condition read contained an

additional paragraph, as illustrated in Figure 3, correcting the statement regarding the president’s inability to end family separation by quoting an authoritative source, a former commissioner of the Immigration and Naturalization Services.

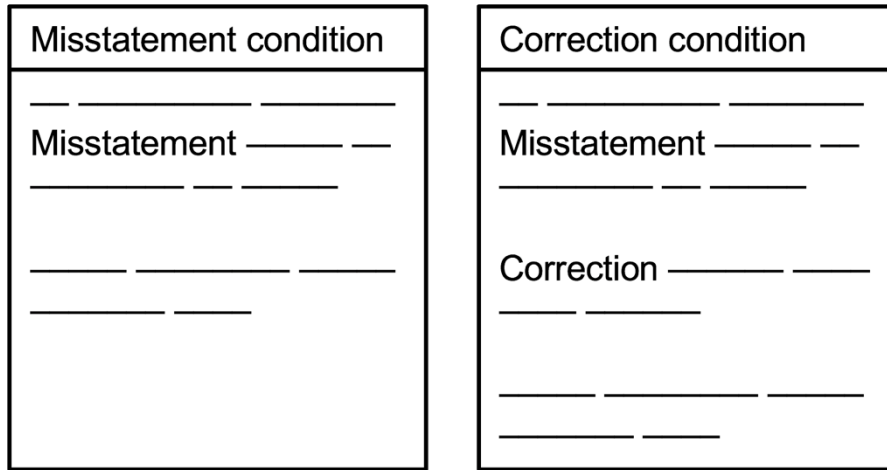


Figure 3: Diagram of basic backfire experiment. Treatment condition (right) contains added paragraph correcting exclusively presented misstatement in control condition (left).

3.4.2.2 Manipulating perceived choice

To manipulate the degree of perceived choice in exposure to disconfirming information, participants were presented with one of two versions of an emulated Facebook feed following the schematic in Figure 4. Facebook feeds are particularly suited for the research questions at hand since the platform is one of the main source of cross-cutting exposure in the contemporary media landscape (Anspach 2017; Bakshy et al. 2015; Gentzkow and Shapiro 2011) and other research has successfully tested corrections to misinformation on the platform (Bode and Vraga 2015). These feeds either showed a headline and a one sentence summary of a news article with the prompt to

“Please read the following article” (CONTROL) or two headlines and with a one sentence summary each with the prompt to “Please choose one of the following articles to read” (TREATMENT). Headlines and summaries were counterbalanced to avoid confounding with the treatments (Ecker et al. 2014). All participants, independent of assignment and article choice, were given the same article to read.

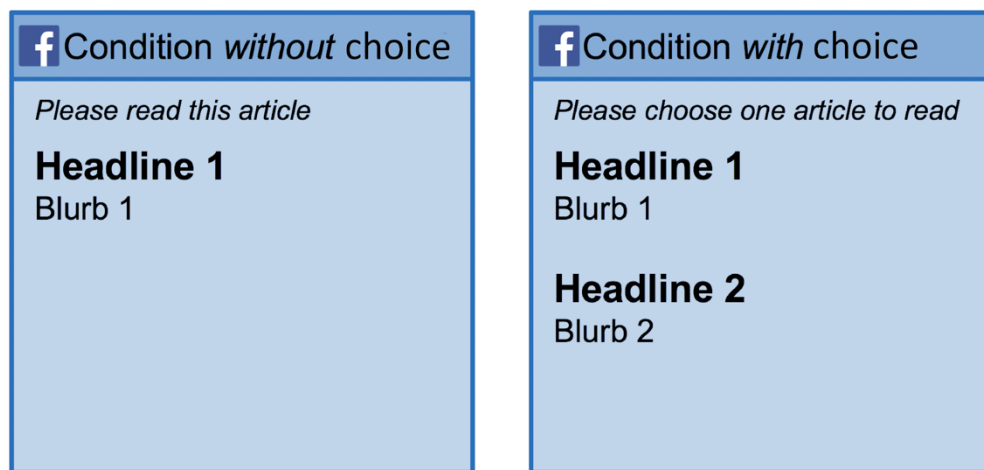


Figure 4: Diagram of perceived choice experiment. Treatment condition (right) contains two headlines and blurbs and prompt to choose on whereas control condition (left) only contains one headline and blurb with prompt to read the presented article.

3.4.2.3 Manipulating engagement with information

The final experimental manipulation occurred after participants had read the news article and aimed at testing the hypothesized counter-arguing mechanism. Before participants advanced to the factual statement drawn from the article, they were either asked to write at least 80 characters on how they use social media (CONTROL) or write at least 80 characters on the issue the news article discussed and their thoughts on the

arguments it presented (TREATMENT). The survey instrument closed by asking for the location referenced in the article as well as the source of the article as attention checks.

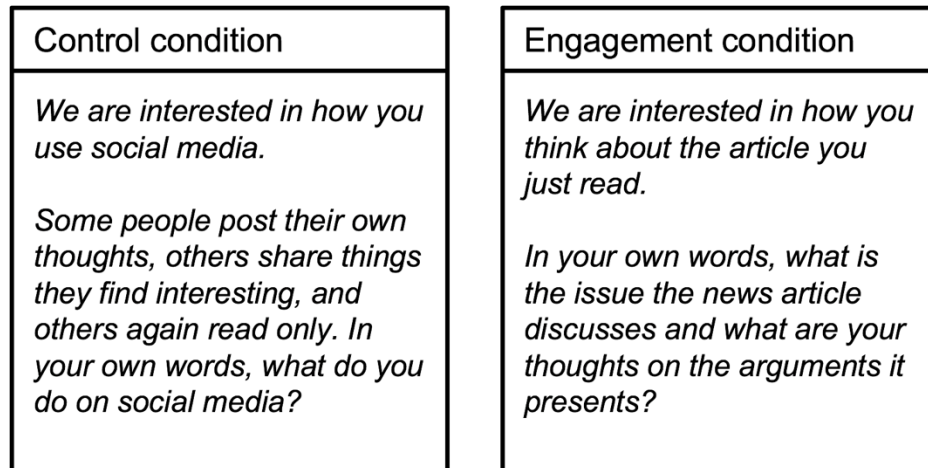


Figure 5: Diagram of engagement experiment. Treatment condition (right) prompts participants to state the issue the article discussed and their position on it whereas the control condition (left) prompts participants to write about their use of social media.

3.4.3 Measuring Misperceptions

I assess misperceptions in line with the original work by Nyhan and Reifler (2010), as well as the studies building off of that paper to investigate the effect of corrective information on misperceptions (Guess and Coppock 2018; Wood and Porter 2018). Specifically, respondents answered the following question on a five-point Likert scale from “Agree strongly” to “Disagree strongly”.

Next, we would like to know what you think about some statements that have recently circulated in the media. Please indicate whether you agree strongly,

agree somewhat, neither agree nor disagree, disagree somewhat, strongly disagree with the following statement:

The separation of children from their parents at the southern border of the United States happens because of a law which can only be changed by congressional action with Democrats cooperating with Republicans.

Given that the separation of immigrant children from their parents at the Southern U.S. border resulted from a policy decision by the administration to criminally prosecute unauthorized border crossing, agreement with this statement indicates a misperception about the root of this practice. The measure of misperceptions used as a dependent variable throughout the paper leverages this by reverse-coding participants' responses to this question to create an indicator of misperceptions ranging from 1 to 5, with higher values indicating higher levels of misperception.

3.4.4 Predictors and Moderators

The analyses testing the effect of corrective information on misperceptions use two key predictors and two moderators, in addition to one measure of participant's attentiveness. A binary indicator measures whether participants saw the news article without or with corrective information. Political ideology was assessed using a seven-point self-placement scale taken from the American National Elections Study with response categories "Extremely liberal", "Liberal", "Slightly liberal", "Moderate /

middle of the road”, “Slightly conservative”, “Conservative”, “Extremely Conservative”.

Two variants code this variable as either continuous and centered ranging from -3 (Extremely liberal) to 3 (Extremely conservative) or nominal—although theoretically ordered—using “Extremely liberal” as the response category. The two key moderating variables assessing perceived choice and engagement with the news article are binary indicators taking on 1 for participants who received the respective treatment. Finally, a summative attention score ranging from 0 to 2 measures if respondents correctly identified the source of and the location given in the news article they read.

3.5 Results

3.5.1 Effect of Correction on Misperception Linearly

A first set of basic analyses aimed to replicate the key finding from Nyhan and Reifler’s (2010) original analysis that corrective information has no effect on misperceptions in the aggregate but does have a significant interaction with political ideology as a continuous variable, such that corrections prompt more conservative individuals do endorse misperceptions more strongly. As Table 4 shows, rather than having no effect in aggregate and only a positive interactive effect with ideology, the corrective information significantly reduces misperceptions across the board and has a significant negative interaction with ideology.

Table 4: Coefficients from ordinary least squares models predicting misperceptions

	Model 1	Model 2
Correction	-.344*** (.074)	-.348*** (.074)
Ideology	.344*** (.021)	.391*** (.029)
Correction * ideology		-.097* (.042)
Constant	3.084*** (.052)	3.087*** (.052)
R2	.194	.198
Adjusted R2	.193	.196
N	1173	1173

Note: * $p < .05$; ** $p < .01$; *** $p < .001$ (two-tailed tests).

While these results clearly align better with the follow up research finding no evidence of backfire effects than with the original study, Figure 6 below visualizes the interaction effect to help with the notoriously difficult interpretation of interaction effects (Brambor, Clark, and Golder 2006; Mize 2019). The figure plots point estimates and 95% confidence intervals of the average marginal effect of corrections on misperception across ideology, clearly showing that the corrective effect becomes stronger as the ideological position becomes more conservative in clear contradiction to the backfire hypothesis. Rather than backfiring in response to the corrective information challenging their ideological position, more conservative respondents appear to correct their position more than their liberal counterparts.

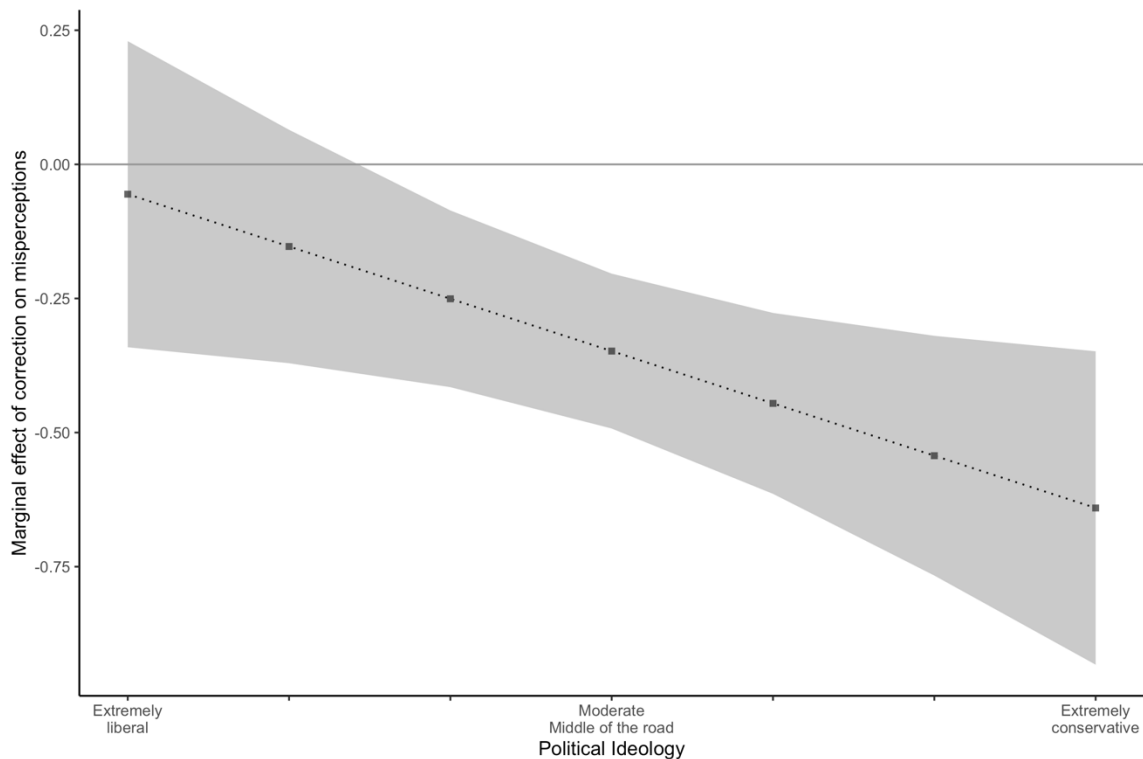


Figure 6: Marginal effect of correction on misperceptions across ideology (linearly)

These larger marginal effects for more conservative respondents can partially be traced back to the fact that the mean level of misperceptions increases with more conservative ideological positions as Figure 7 illustrates. Since respondents on the conservative end of the ideological spectrum exhibit a higher likelihood of agreeing with the misstatement than respondents on the liberal end, i.e. exhibit higher levels of misperceptions on average, they have more room and reason to correct their position.

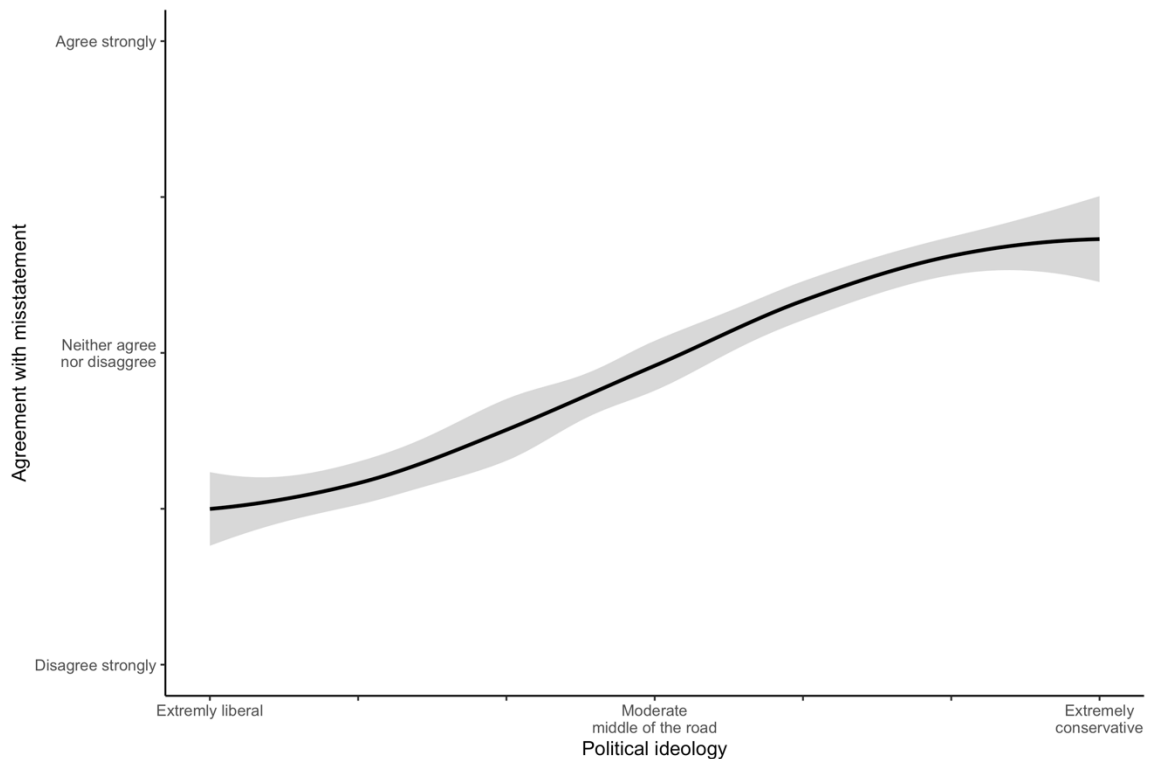


Figure 7: Moving average of level of agreement with misstatement by political ideology

While Nyhan and Reifler (2010) and some of the follow up studies (Wood and Porter 2018) treat ideology and its interaction with corrective information as continuous, there is some evidence in other follow up work that this might not be appropriate. As Guess and Coppock (2018) show, the effect of corrective information about the deterrent efficacy of the death penalty does not appear to be linear from liberals, to moderates, to conservatives (cf. *ibid* Table 14). To test for such non-linearity, I estimated another model with six separate predictors for ideology using “Extremely liberal” as the reference category. Despite the substantial increase in complexity in this model, adding

ten coefficient estimates, an ANOVA test of the linear versus the nominal model of ideology finds that the more complex model fits the data significantly better ($p < .05$).

3.5.2 Effect of Correction on Misperception Nominally

Figure 8 presents average marginal effects for corrective information derived from the more complex model treating ideology as nominal. In line with the estimates from the linear model, the effects are non-significant but largely in the expected direction for liberal respondents of any stripe, i.e. reducing misperceptions. Similarly, among moderates and conservatives the effect of corrective information is significant ($p < .001$) and reduces the predicted misperceptions. In contrast to the linear model, however, the marginal effects of corrections for respondents identifying as “Slightly conservative” is in the expected direction but only marginally significant ($p = .057$). Most strikingly, among “Extremely conservative” participants, the correction effect is close to zero and not statistically significant, i.e. among these participants those who read a correction of the misstatement exhibited misperceptions that were just as strong as those who only read the misstatement.

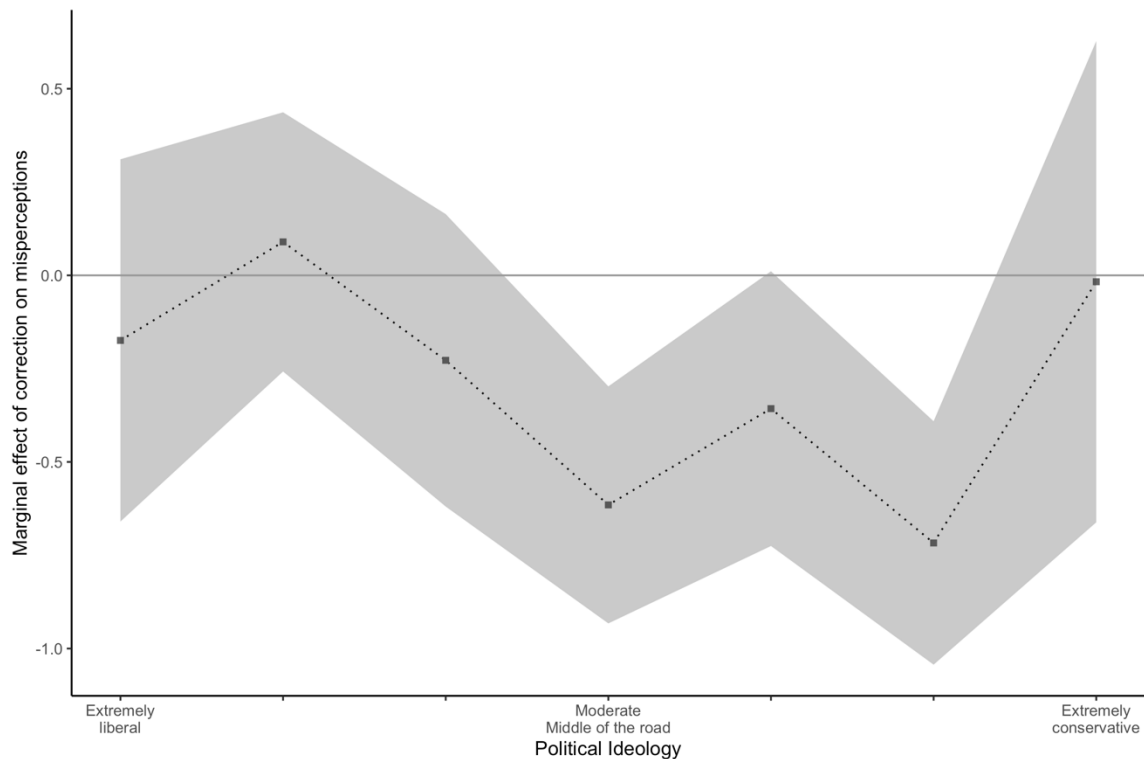


Figure 8: Marginal effect of correction on misperceptions across ideology (nominally)

3.5.3 Effect of correction on misperception by perceived choice

The analyses presented so far aimed highlighted the connections between this study and the work it is building off of, showing that in aggregate the data align more closely with the follow up studies to Nyhan and Reifler (2010) than with a blanket backfire effect to corrective information challenging political identifications. To assess whether these associations are robust across the different experimental conditions designed to test the key hypotheses, the subsequent sections follow the advice by Mize (2019) and visualize the average marginal effects across conditions and present analyses of second differences. These analyses test whether the effects of corrective information at

each level of ideological leaning exhibit statistically significant difference between respondents assigned to different experimental conditions.

Figure 9 and Table 5 present results from these analyses for the perceived choice manipulation testing Hypotheses 1A and 1B. The point estimates and 95% confidence intervals of the average marginal effect of corrections on misperception in Figure 9 suggest a more consistent corrective effect across ideology for most respondents. Whereas the pattern in the left panel presenting estimates for participants in the condition without perceived choice largely reflects the pattern observed among the aggregate estimates in Figure 8, the right panel representing the perceived choice condition shows effects in the expected, correct direction for all levels of ideological identification from “Slightly liberal” to more “Extremely conservative”. All of these estimates are statistically significant except for “Slightly liberal” ($p = .052$) and for “Extremely conservative” ($p = .544$).

This visual pattern suggests that perceived choice does moderate the effect of corrective information on misperceptions at different levels of ideological identification and thus provides tentative evidence for hypothesis H1A that individuals who perceive to have control about exposure to counter-attitudinal, partisan information are more likely to be persuaded. Given that none of the average marginal effects in the baseline condition without perceived choice represents a significant backfire effect, these results do not provide support for hypothesis H1B that individuals are less likely to experience

backfire effects when they perceive to have choice in being exposed to counter-attitudinal, partisan information.

To assess whether the visual impression of support for H1A is accurate we need to test the second differences between the estimates from the models. The third column in Table 5 presents estimates for these second difference revealing that none of them reach conventional levels of statistical significance except for “Extremely liberal”. This means while the corrective effects among those in the perceived choice condition appear to be more consistently corrective, we cannot reject the null hypothesis that the difference between these estimates and the estimates from the condition without perceived choice is zero.

The only second difference attaining statistical significance is the one for “Extremely liberal” which is actually in the opposite direction of all other differences. This means that the difference in misperceptions between individuals at this level of ideological identification who read the correction and those who only read the misstatement, was higher if they were in the perceived choice condition than if they were in the condition without perceived choice. In sum, these results do not provide consistent evidence for either hypothesis H1A or H1B, meaning that perceived choice as it was operationalized in this experiment does not appear to be a consistent moderator of the effect of corrective information on misperceptions. This result is similarly supported by an analysis of variance of the constitutive coefficients of the choice model

in which none of the choice estimates attain statistical significance and by the omnibus test of a less complex model excluding the choice factor against the model testing the moderating effect of choice which does not reject that the less complex model is a better fit ($p = 0.351$).

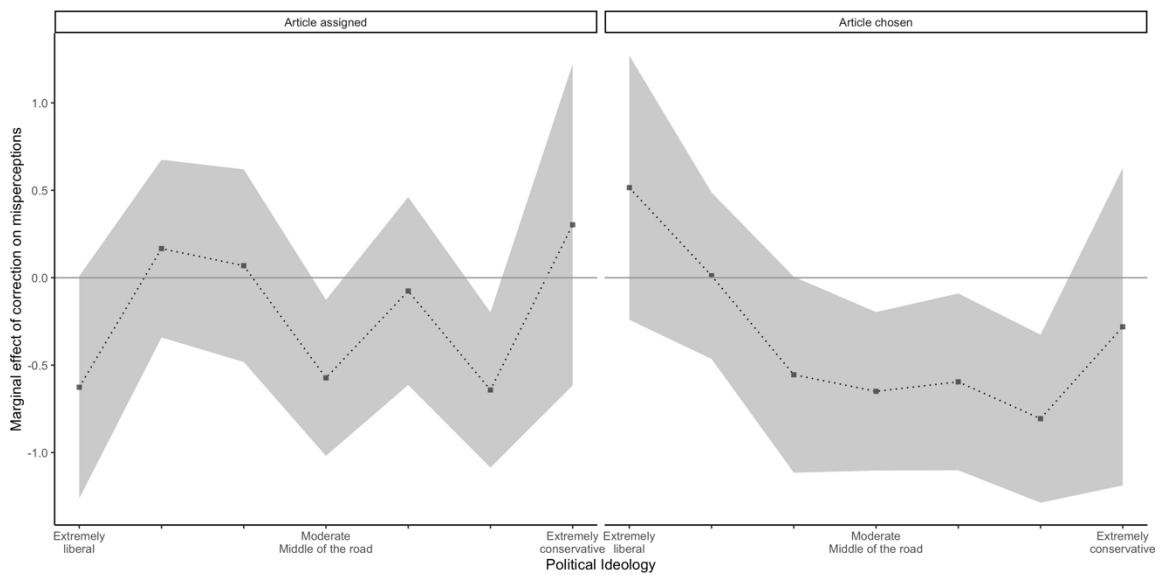


Figure 9: Marginal effect of correction on misperceptions across ideology by perceived choice

Table 5: Results for how misperceptions are associated with correction and choice by ideology: tests of average marginal effects (AMEs) and second differences

	AME _{no choice}	AME _{choice}	Second Difference
<i>Political Ideology</i>			
Extremely liberal	-0.626 (0.324)	0.515 (0.385)	1.142* (0.503)
Liberal	0.167 (0.259)	0.012 (0.243)	-0.155 (0.355)
Slightly liberal	0.069 (0.281)	-0.555 (0.285)	-0.624 (0.400)
Moderate / middle of the road	-0.573* (0.227)	-0.650** (0.231)	-0.077 (0.324)

Slightly conservative	-0.076 (0.274)	-0.596* (0.258)	-0.520 (0.376)
Conservative	-0.642** (0.226)	-0.806** (0.245)	-0.164 (0.333)
Extremely conservative	0.303 (0.468)	-0.281 (0.462)	-0.584 (0.658)

Note: * $p < .05$; ** $p < .01$; *** $p < .001$ (two-tailed tests).

3.5.4 Effect of correction on misperception by engagement condition

Figure 10 and Table 6 present results from analyses for the engagement manipulation testing Hypotheses 2A and 2B. The left panel plots point estimates and 95% confidence intervals for the effect of corrective information on misperceptions across ideology in the control condition, i.e. for respondents who wrote about their social media use. The right panel shows the same estimates for the engagement condition where participants were prompted to reflect and write about the news article they had read. In the control condition, the pattern of the estimates suggests a close to monotonous decrease in the effect of corrections going from the liberal to the conservative end of the ideological spectrum. With the exception of the effect estimate for “Conservatives”, however, none of these effects attain statistical significance.

Contrasting this to the pattern in the right panel reveals a striking difference at the ideological extremes in the engagement condition. While the effect is in the direction consistent with a corrective effect and statistically significant for “Moderates”, “Slightly conservatives”, and “Conservatives”, it is in the opposite direction for “Extremely conservatives” ($p = 0.059$) and in the corrective direction for “Extremely liberals” ($p <$

0.05). In the engagement condition then, the effect of corrective information reverses direction for those with the most extreme ideological identifications. This provides qualified support for hypothesis H2A for “Extremely conservatives” that engaging with counter-attitudinal, partisan information will increase the likelihood of experience backfire effects. At the same time, H2B which stated that individuals are more likely to be persuaded by counter-attitudinal, partisan information when they are asked to engage with it, receives support from the results among less strongly identified conservatives.

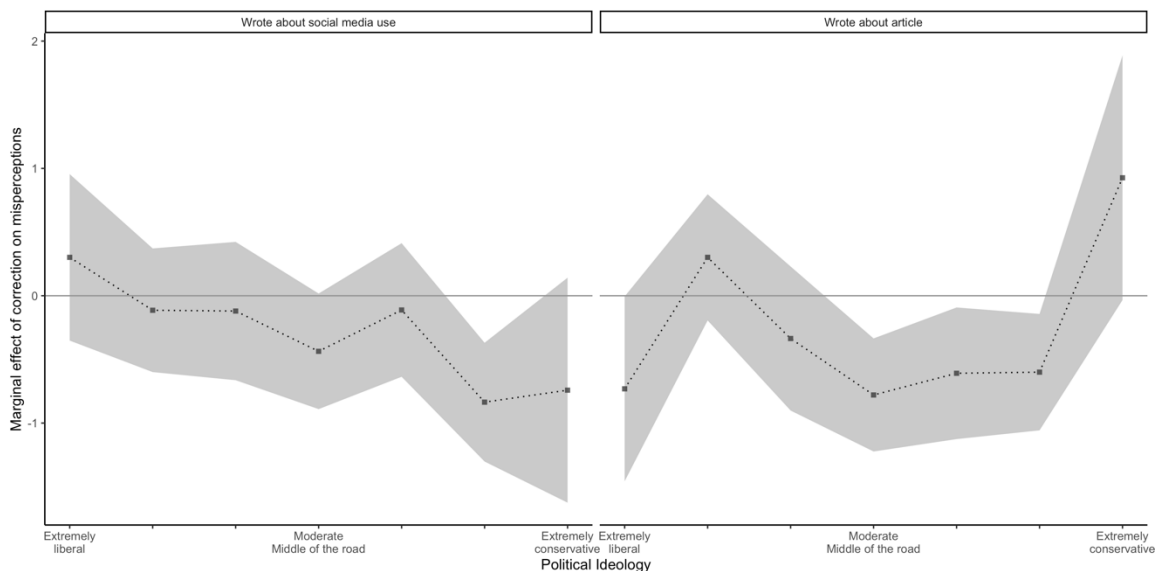


Figure 10: Marginal effect of correction on misperceptions across ideology by engagement condition

To adjudicate whether the results in the engagement experiment support the persuasion or backfire hypothesis, I again calculate the average marginal effects at each ideological level and estimate the difference of the effects between conditions. Table 6

presents these second difference estimates for the engagement experiment. While none of the second differences of for the effects at the liberal to conservative ideological identifications is statistically significant, the estimates support the visual pattern observed for extreme ideologues in Figure 10. For both, “Extreme liberals” and “Extreme conservatives” the difference in effects between engagement and control condition is statistically significant at the $p < .05$ level. The direction of these differences is in line with the respective ideological leaning meaning the “Extreme liberals” correct significantly more in the engagement condition whereas the “Extreme conservatives” correct significantly less. The magnitude of the effect of corrective information for “Extreme conservatives” in the engagement condition is so large that those reading the correction are predicted to endorse the misstatement more strongly than those who did not read the correction, i.e. for the most conservatively identified individuals the correction backfires when they are prompted to engage with it. This supports the backfire hypothesis H2A over the persuasion hypothesis H2B and provides evidence for H3 that the strength of identification with the challenged ideological position is positively associated with the magnitude of the observed backfire effect.

Table 6: Results for how misperceptions are associated with correction and elaboration by ideology: tests of average marginal effects (AMEs) and second differences

	$AME_{no\ engagement}$	$AME_{engagement}$	Second Difference
<i>Political Ideology</i>			
Extremely liberal	0.301	- 0.731*	-1.033*

	(0.333)	(0.370)	(0.498)
Liberal	-0.114	0.301	0.415
	(0.247)	0.252	(0.353)
Slightly liberal	-0.120	-0.336	-0.216
	(0.277)	(0.288)	(0.400)
Moderate / middle of the road	-0.436	-0.779**	-0.343
	(0.231)	(0.226)	(0.324)
Slightly conservative	-0.112	-0.609*	-0.497
	(0.267)	(0.263)	(0.375)
Conservative	-0.836***	-0.600*	0.236
	(0.238)	(0.233)	(0.333)
Extremely conservative	-0.742	0.926	1.668*
	(0.450)	(0.489)	(0.665)

Note: * $p < .05$; ** $p < .01$; *** $p < .001$ (two-tailed tests).

3.5.5 Effect of correction on misperception by attention score

Given that the results only reveal a backfire effect for the most strongly conservative individuals in the engagement correction rather than for conservatives of all stripes as in Nyhan and Reifler (2010), there might be some concern that this result is a due to random variation rather than a reliable signal for a backfire effect. To provide a plausibility check that these results are not due to noise and another test of hypothesis H3, Figure 11 visualizes the average marginal effect of corrective information in the engagement condition across conservative ideology by attention score. If the observed backfire effect is a consequence of reading counter-attitudinal information and counter-arguing this information, the effect should be stronger for individuals that pay more attention since these individuals are more likely to receive and process the information. As the figure shows, at every level of conservative ideology the effect of corrective information is less negative, i.e. less corrective, for participants who score higher on the

attention score. That is, in the engagement condition, conservatives who paid more attention were more likely to endorse the misstatement more strongly and in consequence experience backfire effects. The pattern of increasingly positive effects of corrections, i.e. increases in misperceptions, with increasing strength of conservative identification provides further support for hypothesis H3.

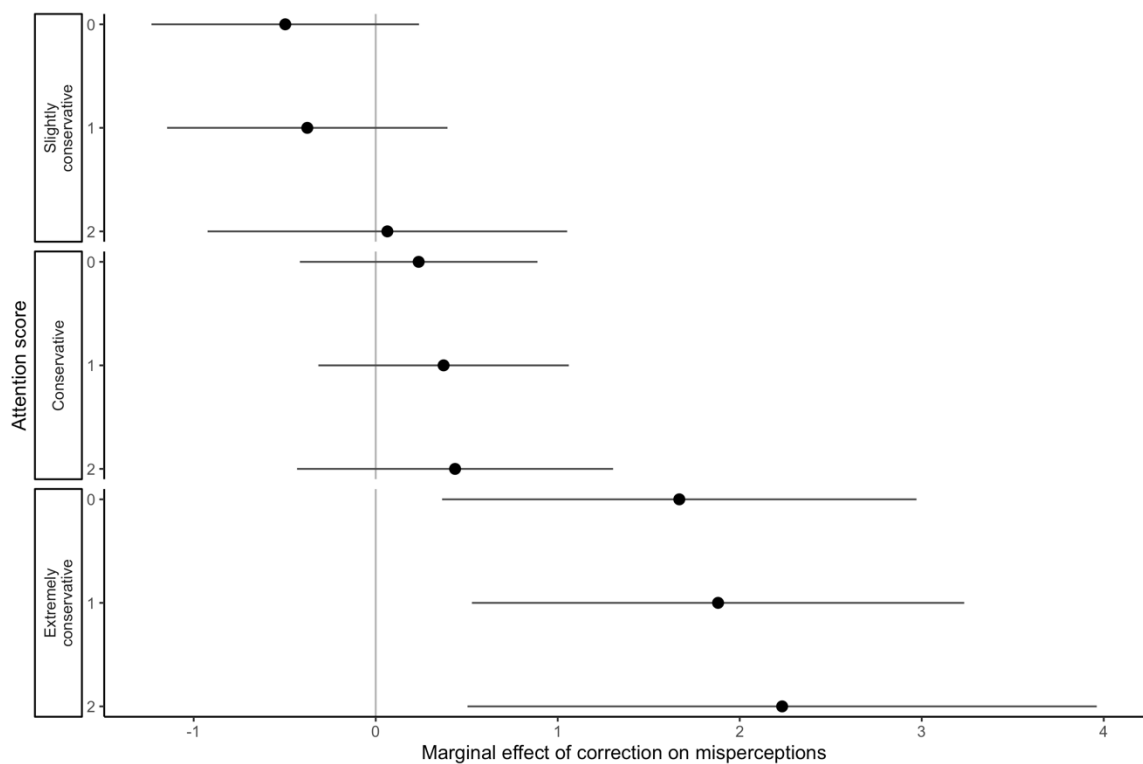


Figure 11: Marginal effect of correction on misperceptions for conservatives in engagement condition by attention score

3.6 Discussion

The efficacy of corrective information to reduce misperceptions about ideologically tainted-issues depends on the context in which individuals encounter these information and the degree to which they engage with it. Individuals who perceive to

have choice about the information they encounter appear to more readily accept corrective information than if they are simply presented with this information, as is the norm in experimental research. However, this moderating effect of choice, as operationalized in this study, does not hold up to statistical analyses. The moderating role of engagement with corrective information on the other hand is both observable and statistically significant. Strongly ideologically identified individuals are prone to process corrective information in line with their ideological leaning. This directionally motivated information processing leads them to more strongly endorse ideologically congruent misperceptions when they engage with the corrective information, in line with backfire effect's theorized mechanism of counter-arguing.

These results suggest that the fact that individuals have different degrees of choice or control when they are exposed to corrective information or fact checks in their daily lives than when they are presented with such information in a (virtual) laboratory setting, does not necessarily render such experimental results uninformative about the real world effects of corrective interventions. Despite these apparent null effects of choice in this study, there might still be real world situations in which choice does affect the processing of counter-attitudinal information. While this experiment and the literature it engages with can speak to incidental exposure to fact checks in general information consumption, earlier studies of the moderating role of choice suggest that the efficacy of fact-checking websites such as Politifact or Snopes might be contingent on

individuals knowingly seeking out counter-attitudinal information (Cohen, Terry, and Jones 1959; Himmelfarb and Arazi 1974). In such cases, where individuals chose to not only consume any information but information that explicitly contradicts their beliefs, choice and the self-affirmation involved in choosing might render corrective information more efficacious.

Engagement with counter-attitudinal information seems more consequential as a moderator of the effect of corrective information on misperceptions, providing suggestive evidence that counter-arguing might in fact be a driver of backfire effects in response to such information. “Extremely conservative” identifying participants who read a correction to a misstatement aligned with their ideological position agreed with the misstatement more strongly when they were prompted to reflect on the information than their counterparts who read the correction and wrote about something else. While this relationship did not hold for less strongly identified conservatives across the board, there is evidence that a similar process affected them as well but was suppressed by low levels of attention. These results are in line with expectations from social identity theory and identity protective cognition which predicts that the importance of a given identity is positively associated with the effort expended to defend it. In terms of the elaboration likelihood model, these results suggest that processing counter-attitudinal information through the central route does not necessarily lead to higher levels of persuasion but can result in the opposite effect if the information is at odds with a strongly held identity.

An interesting parallel that future research might explore is how counter-arguing relates to the justificatory role of culture (Vaisey 2009). Both counter-arguing and culture as justification represent deliberate forms of cognition that are rare due to their inefficiency. Given that such justifications are only loosely coupled to action, i.e. are not predictive of behavior, it seems worthwhile to explore whether observed backfire effects do in fact translate into behavior aligned with more ideologically extreme positions. While previous research has found evidence for backfire effects extending to behavioral intentions about vaccination (Nyhan et al. 2014; Nyhan and Reifler 2015), it is not clear whether these expressed intentions do translate into behavior. A potential route to test for behavioral consequences of backfire effects might be real-stakes, behavioral experiments like those used by Abascal (2015).

On the whole, these results provide a potential explanation for why the replications of Nyhan and Reifler's (2010) study have by and large failed to produce evidence for the existence of backfire effects (Guess and Coppock 2018; Wood and Porter 2018). The counter-arguing process is a demanding, effortful strategy to cope with challenging information which not all individuals are motivated or equipped to engage in and which is in most instance inferior to simply glossing over the challenge (Zaller 1992). As Wood and Porter (2018) point out, the original sample of college students was likely much better equipped to engage in this process than a sample drawn from MTurk or the general population. Similarly, it seems plausible that individuals identifying as

conservative in a predominantly liberal higher education environment are more dedicated to that identity and more motivated to defend it. This is compounded by variations in distraction between online versus lab experiments. Considering that attention appears to be crucial to process the implications of identity-challenging information, online experiments face higher hurdles to elicit backfire effects.

In addition to these considerations, two critical aspects about the communication arena demand further consideration and investigation to make the literature on backfire effects more compelling and relevant to encounters of counter-attitudinal information. First, what is the role of the opportunity for feedback in the emergence of backfire effects? Research to date has only investigated the phenomenon in response one-shot, one-way communication. When individuals engage in counter-arguing under an online article and receive pushback or generally engage in a debate of the merits of the information they encounter, does backfiring still occur? If counter-arguing is primarily about asserting identity rather than about weighing pro and contra arguments, there should still be backfire effects. Second, given that a lot of crucial information exposure now occurs in online arenas with audiences weighing every move, what is the role of performativity in eliciting counter-arguing and backfiring. If identity assertion is at the root of both processes, experimental approaches that assess them in the absence of such audiences might underestimate the prevalence of the backfire phenomenon.

3.7 Conclusion

In the face of coordinated online disinformation campaigns and the reemergence of diseases thought to be eradicated, scholars, private industry, and political practitioners have started strengthening efforts to study and fight beliefs diverging from scientific consensus and publicly available evidence (Chiou and Tucker 2018; Flynn et al. 2017; Guilbeault, Becker, and Centola 2018; Holman and Lay 2018; Nyhan et al. 2014; Nyhan and Reifler 2018; Peter and Koch 2016; Wood and Porter 2018). While the potential of such misperceptions to affect action detrimental to the individual and society writ-large is well understood, the research studying how to best counter these beliefs without factual basis has yet to produce a more settled body of knowledge. A vexing problem in this endeavor is that simply reiterating rumors can increase their credibility (Berinsky 2017) and, even more troublingly, attempting correct misleading statements circulating in public discourse can conversely strengthen people's beliefs in them (Nyhan and Reifler 2010).

These so called backfire effects have drawn a lot of attention appearing in some form or another in beliefs about the Iraq War and the effects of tax cuts (Nyhan and Reifler 2010), the efficacy of new medical tests (Peter and Koch 2016), the healthcare reform (Berinsky 2017), and the unemployment rate (Schaffner and Roche 2016). At the same time, large-scale studies attempting to outline theoretically conducive conditions for backfire effects (Guess and Coppock 2018) and investigating its prevalence across a

broad range of issues (Hill 2017; Wood and Porter 2018) have failed to find the evidence for the phenomenon suggesting it might at best be much rarer than generally believed. While the controlled nature of these experiments deviates from the choice that people have to engage with information in their daily lives, this variation does not appear to detract from the informative value of these studies about real world corrective interventions. However, the discrepancy between the studies finding backfire effects and those that do not might be explained by uncontrolled variation in how much individuals engage with the counter-attitudinal information, which provides an opportunity for counter-arguing the suggested mechanism underlying backfire effects.

To more thoroughly assess the prevalence of backfire effects then, scholars need to examine the process of counter-arguing more closely. One crucial aspects in this regard appears to be whether two-way communication precludes backfiring as a consequence of counter-arguing, given that in such communication counter-arguments are not unassailable but can be challenged. Moreover, given the apparent role of counter-arguing as means to reassert a strongly held identity, future research should attempt to study the performativity of counter-arguing in a public forum such as most contemporary online platform

4. Conclusion

The studies comprising this dissertation have sought to demonstrate the perceptual basis of intergroup divisions that appear to increasingly characterize societies across the globe and that pit different groups against each other. While the specific focus of the study was on relations between native- and foreign-born and Democratic- and Republican-identified subpopulations, the underlying sociological and social-psychological process are likely to generalize to other instances of in- and outgroups and with certain limitations to situations with multiple groups vying for status and recognition. The broad insights these studies have generated is that, first, in situations with a dominant in- and a subordinate outgroup attitudes toward the outgroup among the ingroup are shaped by perceptions of the outgroup which are likely to be biased. These misperceptions tend to be negative and, accordingly, associated with increased group threat and exclusionary attitudes. Second, corrective information that challenges misperceptions can in most cases lower misperceptions even when they are associated with the ingroup, except for the most extremely identifying individuals among whom counter-arguing this information can result in backfire effects.

As I show in Chapter 2, native-born residents of many European countries—and as shown in Appendix D in the United States—hold misperceptions about what motivates immigrants to come to their country. Such misperceptions at least in part indicate unfamiliarity with immigrants and in line with general attribution biases tend

to be negative leading them to be associated with perceived threat from immigrants, preferences for exclusionary policies, and voting for radical right parties. As immigration becomes a phenomenon more Western societies are encountering, it remains to be seen whether misperceptions and anti-immigration attitudes decline as contact increases. If history and cross-country comparisons are any indication, this development will largely depend on the structural opportunities for contact particularly through shared state institutions such as the educational system. When these institutions can overcome self-segregation due to homophily they produce conditions conducive to reducing misperceptions and the associated rift between native- and foreign-born subpopulations.

Such in-person exposure is likely more powerful in reducing misperceptions than the media exposure to corrective information studied in Chapter 3. At the same time, the experimental evidence reported in that study suggests that, even in the context of two-party competition as in the United States, misperceptions around group-based identities are not completely resistant to corrections. In fact, the results from the experiment testing whether Americans buy into a misrepresentation of fact by the President when it is corrected, or fact-checked, in a news report evidence that generally only the most strongly party-identified are not affected by corrective, counter-attitudinal information. Backfire effects to such corrective information can be induced among the same individuals when they engage with the information, but at least in the laboratory

setting individuals appear avoid this cognitively tasking way of processing information. Considering the implications of these findings for journalistic fact checking in the real world, it would seem that the practice does have the potential to dispel misperceptions when it comes to individuals' attention incidentally. It seems questionable, however, how regularly that potential is realized given general selective media consumption practices and the increasing partisan alignment of the news environment.

In sum, this dissertation highlights the role played by misperceptions about outgroups in sustaining societal divisions and the risk of exacerbating such misperceptions through naïve interventions intended to counter misperceptions. While it appears that the higher potential for connection between people facilitated through social media has the potential to lower such misperceptions, the current technological setup that supercharges individuals' abilities to avoid such connection and counter-argue any unwelcome information undermines this potential. The results then encourage us to keep probing the conditions under which exposure to outgroups and counter-attitudinal information does have beneficial effects, to enable us to identify the necessary design changes to realize this potential.

Appendix A. Transatlantic Trends Survey, data quality and availability

The data underlying the analyses presented in Chapter 2 are part of the Transatlantic Trends Survey series which was conducted annually between 2003 and 2014 by the German Marshall Fund of the United States and the Compagnia di San Paolo. All of the data are publicly available through the Inter-University Consortium for Political and Social Research (ICPSR). Principal investigators for the 2014 survey, which is listed under id ICPSR 36138, were Constanze Stelzenmueller, German Marshall Fund, Pierangelo Isernia, University of Siena, and Richard Eichenberg, Tufts University.

The survey design used two different interview modes with respondents in the majority of countries being administered computer-assisted telephone interviews (France, Germany, Greece, Italy, the Netherlands, Portugal, Spain, Sweden, the United Kingdom, the United States) and the remainder face-to-face interviews (Poland, Russia, and Turkey). Accordingly, the study universe varies slightly between countries; for France, Greece, Italy, The Netherlands, Portugal, Spain, Sweden, and the United States, it is the adult population (aged 18 years and over), with access to land-line or mobile telephone; for Germany and the United Kingdom, it is the adult population (aged 18 years and over), with access to land-line only; and for Poland, Russia, and Turkey, it is the adult population (aged 18 years and over).

The response rate for all countries is 9% with a range from 4% in France, the Netherlands, and the United Kingdom to 50% in Turkey. Table 7 describes the numbers of valid responses, refusals, and the response rate per country.

Table 7: Number of valid responses, refusals, and response rate in the Transatlantic Trends Survey 2014

Country	Valid (a)	Refusals (b)	Response rate (a/(a+b))
Germany	1,000	5,091	0.16
France	1,000	21,891	0.04
Spain	1,000	6,893	0.13
Italy	1,000	10,264	0.09
United Kingdom	1,000	23,558	0.04
Netherlands	1,000	23,701	0.04
Portugal	1,000	3,367	0.23
Poland	1,000	1,503	0.40
Greece	1,000	13,440	0.07
Sweden	1,000	19,542	0.05
Russia	1,500	1,547	0.49
Turkey	1,007	1,001	0.50
USA	1,003	2,756	0.27
Total	13,510	134,554	0.09

The data include a number of different weights constructed in three stages, the first two of which account for selection probability dependent on the eligible number of individuals in the household and the dual sampling frame of landline and cell phone numbers. Third stages weights which are based on these first stage weights account for country size in addition to weighting respondents according to their age and gender interlock, region, end of education, and race in the US. All analyses in the main text use

third stage weights for the European countries (W_EUR10). While the theoretical mechanism linking misperception of immigration motives to perceived group threat should be operational in all thirteen countries covered by TTS, variations in the administered questionnaires preclude the combined analysis of all thirteen countries. For the two outcomes where the same questions were administered across all countries, regarding the perceived size of the immigrant population and refugee policy preferences, results are robust to the inclusion of Russia, Turkey, and the US (see Tables 9 and 10).

Appendix B. Plausibility checks of immigrants' reported motives

The manuscript uses and theoretically motivates using immigrants' responses to the most important motive for immigrating question as an approximate self-report. While it is theoretically plausible that immigrants would draw on their own experiences to answer what they believe motivates immigrants more generally, I compare this measure against two baselines to ascertain whether it can sensibly be used as a measure of immigrants' actual motives for migrating. First, the measure's distribution for the United Kingdom to the one reported by Blinder (2015) reveals the same pattern of the study and work motive being underestimated whereas natives overestimate the importance of asylum motive. Beyond this general pattern, however, this comparison can only serve as a first plausibility check given that Blinder's respondents only had four response categories and were not directed or restricted in how many to choose out of these four. Therefore, I conducted another plausibility check and verified the distribution of immigrants' motives against results from a 2014 European Labour Force Survey (LFS) ad hoc module (Eurostat 2014) that compiled migration reasons for foreign-born individuals aged 15 to 64 years in all European countries covered by the Transatlantic Trends Survey except the Netherlands. Despite the LFS only capturing five categories—excluding social benefits— sampling from a slightly different age group, and asking for just one instead of two reasons, the correlation between the two

distributions is .3 or higher in all but two countries. Accordingly, using foreign-born individuals' responses as the objective baseline for misperceptions seems defensible.

Appendix C. Measuring individual-level motive misperceptions

Calculating the individual-level misperceptions, is not straight forward given that they need to be computed on the basis of two questions with the same six nominal response categories. While it is possible to translate the six response categories into a vector of length six for each respondent with the respective weights 0 not mentioned, 1 second most common reason, and 2 most common reason, calculating the Pearson correlation from these vectors would be misleading because of the ordinal level of measurement for this coding. Instead, I estimate the average polychoric correlation (Olsson 1979) between each native respondent's motive vector and the vector of every foreign-born respondent in their respective country sample. This creates a measure of accordance between each native respondent's perception and the baseline.

Table 8 provides a comparison of the Pearson correlation r and the polychoric correlation ϱ between one hypothetical native-born respondent N and seven hypothetical immigrants I_1, I_2, \dots, I_7 . As we should expect, for the case that both respondents mention the same motives in the same order (N and I_1), r and ϱ both indicate perfect agreement. When we contrast the two measures for the case when the motives but not the order is accurate versus when only one motive is accurate but in the correct hierarchical position, ϱ shows its superiority. Since N is correct about both motives of I_2 , their ϱ is slightly higher compared to I_3 where N is only right about one motive and its position. For the case that only one motive but not its position is correct

(I_4, I_5, I_6), q depends on which motive was accurately perceived and what its hierarchical position in relation to the misperceived motive is. Finally, for the case that both motives are wrong (I_7), q indicates total misperception whereas r does not. Accordingly, q is the more appropriate measure to gauge the accuracy of perceptions of migration motives.

Table 8: Comparison of Pearson correlation r and polychoric correlation q for migration motives

Motive	N_1	I_1	I_2	I_3	I_4	I_5	I_6	I_7
Family	0	0	0	1	1	2	2	0
Asylum	0	0	0	0	0	0	0	2
Benefits	0	0	0	0	0	0	0	1
Work	1	1	2	0	2	0	1	0
Study	2	2	1	2	0	1	0	0
Other	0	0	0	0	0	0	0	0
r		1	0.714	0.714	0.143	0.143	-0.143	-0.429
q		1	0.847	0.800	0.252	0.252	-0.133	-0.995

Note: The polychoric correlation coefficient is a generalization of the tetrachoric correlation coefficient for dichotomous data and provides unbiased estimates of the correlation between ordinal variables with more than two categories under the assumption that they are based on latent, bivariate normally distributed variables (Olsson 1979). N_1 and I_1 through I_7 are a hypothetical native and immigrants respectively with their vectors of perceived or reported motives. The vectors contain the hypothetical respondent's most important reason (2), second most important reason (1), and all not mentioned potential reasons (0).

I operationalize the theoretical concept of interest—migration motive misperceptions—as the additive inverse of the mean polychoric correlation. For every native-born respondent, I calculate the degree of misperceptions M as follows:

$$M_{ij} = \frac{\sum_1^{N_j} \rho(V_{ij}, I_{kj})}{N_j} \quad (1)$$

where M_{ij} is the degree of misperceptions for respondent i in country j , V_{ij} is that respondent's vector of perceived immigration motives, I_{kj} is the vector of reported immigration motives for an immigrant in country j , ρ is the polychoric correlation between the two, and N_j is the number of immigrants in the sample for country j . This measure has a theoretical range from 1 to -1 with the former signifying absolute misperception and the latter perfectly accurate perception of migration motives.

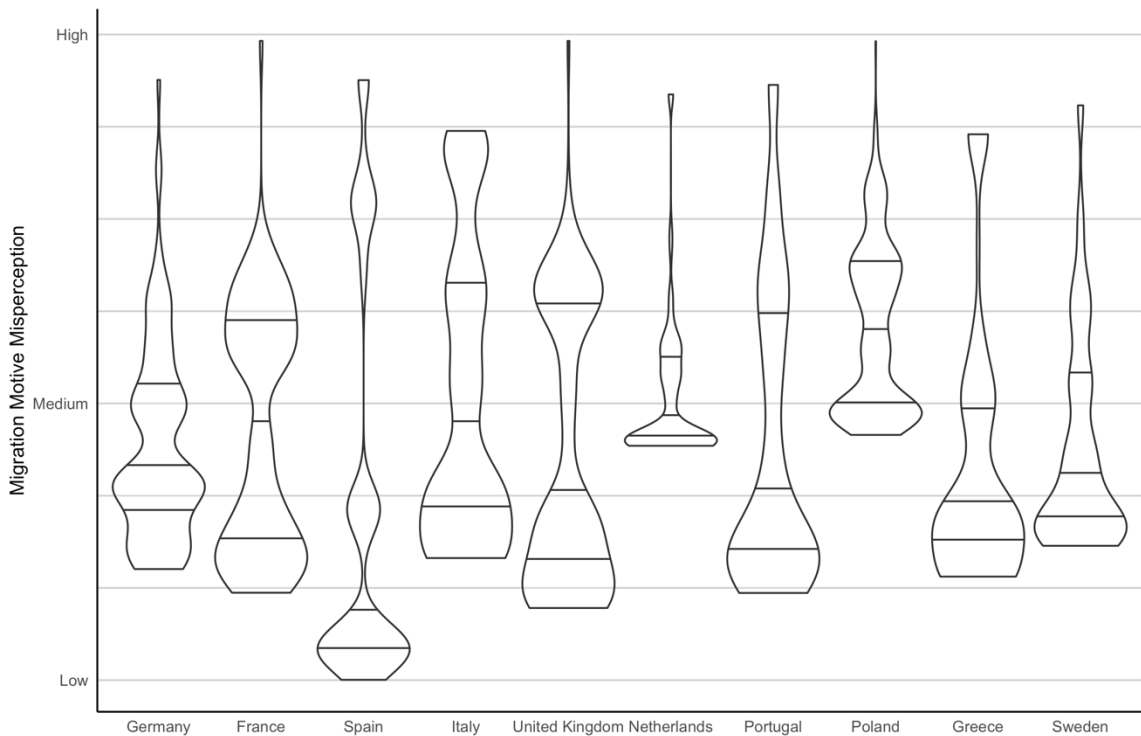


Figure 12: Reproduction of Figure 1 from the Main Manuscript. Violin plots for the distribution of migration motive misperceptions of native respondents by country with 25th, 50th, and 75th quantile.

Figure 12 illustrates the distributions of misperceptions of native respondents by country. The violin plots show the range of misperceptions in each country, the width represents the proportion of observations at each level of misperception, and the black horizontal lines mark the 25th, 50th, and 75th quantile. As an illustrative example on how to read the figure, if respondent N from Table 8 came from a country with immigrants I₅ and I₆ that respondent would be right at the medium level of misperceptions. The respondent would place above the medium misperceptions mark instead if immigrant I₇ would be among the immigrants in that country too or below if any one of immigrants I₁, I₂, ..., I₄ was among them.

The figure shows that in each country except for Poland, more than half of all native respondents scored on average somewhat above the theoretical midpoint of misperceptions for the motives of immigrants coming to their country. Importantly, the aggregate distributions of perceived and reported motives in Figure 1 do not directly translate to individual misperceptions as the comparison of Poland and the Netherlands to France illustrates. Whereas the former two exhibit fewer statistically significant differences between reported and perceived motives in the aggregate, almost half of native French respondents had lower misperceptions than any of their counterparts in the Netherlands or Poland.

This discrepancy between aggregate and individual level misperceptions can partially be attributed to the fact that both in France and the United Kingdom the

distribution is markedly bimodal. For both countries, one mode is in the low to medium range and another one in the medium to high range, suggesting that there might be two distinct segments of the population that are holding well-informed or mistaken perceptions of migrants' motives. Another striking observation is that Poland and the Netherlands exhibit the smallest range of misperceptions which suggest that native residents of these two countries are largely equally accurate or inaccurate in their perceptions of motives of immigrants to their respective country. On the whole, Figure 12 provides further evidence for Hypothesis 1 showing that at least a quarter of native respondents in every country had medium to high levels of misperception and the tail of the distribution of misperceptions in every country reached substantially farther into high than into low levels of misperception.

Alternative operationalizations of migration motive misperceptions

Instead of using an aggregate measure of the correspondence between immigrants' reported and natives' perceived motives, it could also be plausible to operationalize misperceptions as the interactions between the reported motives in the aggregate, i.e. at the country level, and perceived motives for each native respondent, i.e. at the individual level. Two reasons make this alternative operationalization less suitable to answer the question at hand of how misperceptions of motives are related to anti-immigrant attitudes and behavior.

First, the formal argument linking misperceptions to anti-immigrant attitudes suggests that misperceptions in general are predictive of anti-immigrant attitudes rather than specific perceived motives that deviate from the actual motives of immigrants. Since the focus is on this general quality of misperceptions, operationalizing them as interactions between individual-level perceived motives and country-level reported motives would add unnecessary complexity while not actually allowing to quantify the degree of misperceptions. That is, the operationalization of misperceptions used allows to easily contrast those with low or high levels of misperceptions whereas using interactions between perceived and reported motives would require additional steps to attempt this basic comparison.

Second, the current operationalization is a substantially more parsimonious approach to measuring misperceptions than including all 144 interaction terms corresponding to the six response categories for two questions for each perceived and reported reasons, in addition to the main effects. Adding this level of complexity does not seem to be warranted for the basic first step of assessing the relevance misperceptions about immigration motives to anti-immigrant attitudes. Nonetheless, future studies might leverage this potential analytical depth to determine if there are specific patterns of motive misperceptions linked to anti-immigration attitudes that are characteristic for each of the countries in the Transatlantic Trends Data.

Appendix D. Robustness Checks

Country specification

The decision to focus on the ten European Union countries excludes data from Russia, Turkey, and the United States while using data from Poland which only includes nine foreign born respondents. Given that the theoretical mechanism linking motive misperceptions to group threat should also be operational in Russia, Turkey, and the United States, Tables 9 and 10 present models A3 fit to all complete cases from all thirteen countries. Since the political orientation question was asked based on a juxtaposition of liberal and conservative rather than left and right in the US, these questions cannot be directly compared and the predictor was dropped from the model. The finding that misperceptions are significantly associated with assessing the foreign-born population as too large is robust with this specification fit to the complete data.

Similarly, model A4 in both tables shows that dropping data from Poland which only include a limited number of foreign-born respondents does not affect this finding. Conveniently, this also provides a test for survey mode effects given that Poland is the only country out of the ten European Union countries in the data where surveys were administered face-to-face and not over the phone. The robustness of the estimates in these models suggests that such mode effects are not driving the main finding.

Table 9: Standardized coefficients from linear mixed effects models predicting anti-immigrant prejudice with different country specifications for (A1 & A2) all ten

**European countries, (A3) all thirteen countries in the Transatlantic Trends Survey,
and (A4) all European countries without Poland.**

	(A1)	(A2)	(A3)	(A4)
<i>Individual level variables</i>				
Female	-0.05**	-0.05*	-0.04*	-0.07**
Age	0.03*	0.02	0.05***	0.03**
Secondary	-0.20***	-0.18***	-0.11***	-0.17***
Postsecondary	-0.38***	-0.35***	-0.25***	-0.35***
Immigrant parents	-0.18***	-0.17***	-0.13***	-0.16***
Foreign friend	-0.15***	-0.14***	-0.12***	-0.14***
Lived abroad	-0.20***	-0.20***	-0.15***	-0.19***
Left-right	0.14***	0.13***		0.14***
Not in labor force	-0.02	-0.02	-0.04	-0.02
Unemployed	-0.10*	-0.08	-0.05	-0.04
Affected by economic crisis	0.08***	0.08***	0.10***	0.07***
Motive misperceptions		0.12***	0.11***	0.12***
Constant	0.53***	0.50***	0.43***	0.51***
<i>Observations</i>				
Country	10	10	13	9
Individual	7,260	7,260	10,050	6,746
<i>Goodness of fit</i>				
Log likelihood	-11,430.09	-11,416.84	-14,769.98	-10,622.51
AIC	22,890.18	22,865.69	29,569.96	21,277.02
BIC	22,993.53	22,975.93	29,678.19	21,386.09

Note: Standardized coefficients. All models control for split ballot question. Omitted reference categories: Primary education and working.

* $p < .05$; ** $p < .01$; *** $p < .001$ (two-tailed tests).

Table 10: Standardized coefficients from linear mixed effects models predicting preference for more restrictive refugee policies with different country specifications for (A1 & A2) all ten European countries, (A3) all thirteen countries in the Transatlantic Trends Survey, and (A4) all European countries without Poland.

	(A1)	(A2)	(A3)	(A4)
<i>Individual level variables</i>				
Female	0.02	0.01	0.02	0.02
Age	-0.001	-0.01	0.03**	-0.01
Secondary	-0.13***	-0.11***	-0.08**	-0.11***
Postsecondary	-0.32***	-0.29***	-0.18***	-0.30***

Immigrant parents	-0.13**	-0.13**	-0.11**	-0.12**
Foreign friend	-0.20***	-0.18***	-0.17***	-0.19***
Lived abroad	-0.16**	-0.18***	-0.15***	-0.16**
Left-right	0.18***	0.17***		0.19***
Not in labor force	-0.13***	-0.13***	-0.08***	-0.15***
Unemployed	-0.02	-0.04	-0.04	-0.05
Affected by economic crisis	0.05***	0.05***	0.08***	0.06***
Motive misperceptions		0.10***	0.10***	0.11***
Constant	0.34***	0.32***	0.23***	0.34***
<i>Observations</i>				
Country	10	10	13	9
Individual	7,299	7,173	10,814	6,674
<i>Goodness of fit</i>				
Log likelihood	-11,864.72	-11,604.07	-16,232.62	-10,828.01
AIC	23,757.44	23,238.13	32,493.25	21,686.01
BIC	23,853.97	23,341.30	32,595.29	21,788.10

Note: Standardized coefficients. All models control for split ballot question. Omitted reference categories: Primary education and working.

* $p < .05$; ** $p < .01$; *** $p < .001$ (two-tailed tests).

Country Fixed Effects

While the random effects models account for unobserved variation between countries, it might be interesting to explicitly model these differences using fixed effects models. As Table 11 shows, the key association is robust to such a model specification.

Table 11: Linear mixed effects (A1) and fixed effects (A2) model predicting anti-immigrant prejudice.

	(A1)	(A2)
Individual level variables		
Female	-0.054*	-0.054*
Age	0.023	0.022
Secondary	-0.177***	-0.177***
Postsecondary	-0.346***	-0.347***
Immigrant parents	-0.169**	-0.169**
Foreign friend	-0.139***	-0.140***
Lived abroad	-0.196**	-0.197***

Left-right	0.132***	0.132***
Not in labor force	-0.019	-0.019
Unemployed	-0.080	-0.081
Affected by economic crisis	0.076***	0.075***
Motive misperceptions	0.117***	0.118***
Germany		-0.028
Greece		0.278***
Italy		-0.026
Netherlands		-0.044
Poland		-0.559***
Portugal		0.192**
Spain		0.031
Sweden		-0.025
United Kingdom		0.382***
Constant	0.498***	0.480***
Observations		
Country	10	10
Individual	7,260	7,260
Goodness of fit		
Log likelihood	-11,377.200	
AIC	22,786.400	
BIC	22,896.640	
R ²		0.160
Adjusted R ²		0.158

Note: Standardized coefficients. All models control for split ballot question. Omitted reference categories: Primary education, working, and France.

* $p < .05$; ** $p < .01$; *** $p < .001$ (two-tailed tests).

Coefficient bias due to small number of clusters

Given the small number of level 2 clusters in the random effects models, there is potential concern that the estimated coefficients are upwardly biased while the standard errors might be biased in the opposite direction. Reestimating models (1) and (2) from Table 2 from Chapter 2 with a restricted maximum likelihood estimator and applying a Kenward-Roger adjustment, as suggested by one reviewer, reveals a significant F-test (p

< .001). This provides evidence that the larger model (2) including the predictor for motive misperceptions fits the data better than the smaller model (1) and, accordingly, that the conclusions drawn in the main manuscript are not biased due to the small number of countries in the data.

Appendix E. Immigrant representation

Large scale national samples tend to have low representation of foreign-born respondents. As Table 12 shows, this is not the case for Transatlantic Trends Survey which has on average 70 such respondents per country with the number per country roughly tracking the share of the population that was born in another country.

Table 12: Number of immigrant respondents in the Transatlantic Trends Survey and immigrants as a share of the population in ten European countries in 2014

Country	Number of Immigrant Respondents (TTS)	Population Share of Immigrants (LFS)
Germany	76	12.1
France	67	11.7
Spain	58	12.8
Italy	39	9.4
United Kingdom	95	12.5
Netherlands	84	11.6
Portugal	87	8.2
Poland	9	1.6
Greece	87	11.6
Sweden	96	15.9

Appendix F. Radical right parties, their representation in the EU parliament, and election and survey timing

While there might be concern regarding the representation of the radical right in the European Parliament election given their oftentimes EU-critical position, enough of such parties are represented to form two distinct political groups in the parliament (Europe of Freedom and Direct Democracy including AfD (Germany), Sweden Democrats, and UKIP MEPs, and Europe of Nations and Freedom including National Front, Northern League, and PVV (Netherlands), MEPs) and their seat share is well above 10%.

The parties distinctly present in the Transatlantic Trends Survey data and coded as radical right are National Front (France), AfD and REP, DVU, NPD (Germany), Popular Orthodoxy, Golden Dawn, and Independent Greeks (Greece), Northern League and La Destra (Italy), PVV (Netherlands), Noweij Prawicy and Ruch Narodowy (Poland), Sverigedemokraterna (Sweden), and UKIP (United Kingdom).

Sensitivity Check for Time Lag Between Election and Survey

Regarding the timing, while the election (May 22 to 25, 2014) occurred before the survey (June 2 to 26, 2014) there was at most a month between the two which, in combination the high level of political communication prior to the elections, suggests that changes in motive perceptions and political preferences should be marginal. A sensitivity check restricting the sample to only those responses within one week from the election, i.e. before June 9, reveals that the key relationship is substantively the same

in this more stringent time frame suggesting that changes in people's responses over time do not account for the observed association.

Table 13: Responses within one week of 2014 European Union parliament election

Country	Number
Germany	330
France	696
Spain	246
Italy	341
United Kingdom	404
Netherlands	46
Portugal	504
Poland	80
Greece	2
Sweden	199

Table 14: Standardized coefficients from generalized mixed effects models with binary outcome predicting radical right voting among all respondents (A1) and respondents within one week of 2014 European Union parliament election.

	(A1)	(A2)
Individual level variables		
Female	0.60***	0.55**
Age	-0.16*	-0.28**
Secondary	0.00	-0.151
Postsecondary	-1.07***	-0.99***
Immigrant parents	-0.69**	-0.61
Foreign friend	-0.07	-0.20
Lived abroad	-0.36	-0.41
Left-right	0.72***	0.68***
Not in labor force	-0.57***	-0.29
Unemployed	0.21	0.94**
Affected by economic crisis	0.10	-0.19*
Motive misperceptions	0.38***	0.31**
Constant	-3.12***	-3.16***
Observations		
Country	10	10

Individual	5,368	1,695
Goodness of fit		
Log likelihood	-1,100.75	-504.07
AIC	2,229.50	1,036.14
BIC	2,321.73	1,112.23

Note: Standardized coefficients. Omitted reference categories: Primary education and working.

*p < .05; **p < .01; ***p < .001 (two-tailed tests).

Appendix G. Representativeness of immigrants in the Transatlantic Trends Survey

One concern regarding immigrants who respond to surveys is that they might be well integrated and thus a poor representation of the overall population of immigrants in a given country. The nature of this concern means that it can only marginally be addressed by using robust sampling and data gathering processes. Nonetheless, using well-known and standardized survey data as a baseline constitutes the only way to assess issues of the representativeness of the sample of immigrants. Therefore, Tables 15 through 18 present gender, age, education, and employment distributions for the immigrant respondents as well as baseline data from Eurostat showing that the immigrant respondents in the TTS are by and large a good representation of the immigrant population in the ten countries analyzed.

Table 15: Proportion of female respondents among immigrant respondents in the Transatlantic Trends Survey 2014 and the European Labor Force Survey 2014

Country	TTS	LFS
Germany	66.5	50.8
France	55.1	51.6
Spain	55	50.6
Italy	69.9	54.4
United Kingdom	57.3	52.4
Netherlands	48.6	52.3
Portugal	57.4	53
Poland	57.6	58.5
Greece	57	53.6
Sweden	55.7	51.2

Table 16: Comparison of the age distribution of immigrant respondents in the Transatlantic Trends Survey 2014 and the European Labor Force Survey 2014

Age Group	Germany		France		Spain		Italy		United Kingdom	
	TTS	LFS	TTS	LFS	TTS	LFS	TTS	LFS	TTS	LFS
18–24	0.5		7.2	6.6	12	10	3	9.9	12.5	9.9
25–34	25.9		22.4	15.4	25.2	24.8	22	24.6	33.8	27.9
35–44	16.5		9.6	18.5	20.1	28.6	21.6	28.7	23.6	23.3
45–54	29		14.9	18.8	19.7	19	32.5	21.1	12.3	15.4
55–64	6.6		26.3	18.2	5.3	9.3	11.9	9.7	8.8	10.7
65+	21.5		19.6	22.5	15.9	8.2	9	5.9	5.8	12.7
NA					1.8				3.3	

Age Group	Netherlands		Portugal		Poland		Greece		Sweden	
	TTS	LFS	TTS	LFS	TTS	LFS	TTS	LFS	TTS	LFS
18–24	14.3	8.9	0	9.8	0	4.1	12.7	9.7	4.3	8.8
25–34	28.1	20.8	21.6	19.4	0	6.3	14.5	21.2	15.9	22.5
35–44	9.5	23	37.9	32.9	8.4	5.7	37.6	28.2	16.4	20.6
45–54	23.5	20.5	17.9	19.6	27.9	3.4	18.8	19.9	25.6	18.1
55–64	12.1	13.8	9.4	10.6	0	5.2	7.5	11.4	12.1	13.7
65+	11.5	12.9	12.1	7.8	63.6	75.3	8.9	9.6	25.7	16.4
NA	1		1.1							

Table 17: Comparison of the education distribution of immigrant respondents in the Transatlantic Trends Survey 2014 and the European Labor Force Survey 2014.

Education Level	Germany		France		Spain		Italy		United Kingdom	
	TTS	LFS	TTS	LFS	TTS	LFS	TTS	LFS	TTS	LFS
Primary	43.3	33.6	26.8	35.7	25.4	42	31	46.4	12.5	18.8
Secondary	21.3	45.3	5.1	32.6	50.6	31.9	41.7	41.9	17.2	33.8
Post-Secondary	35	21.2	61.5	30.7	24	25.3	27.3	11.7	69.2	45.3
NA	0.5		6.7			0.9			1.2	2.2

Education Level	Netherlands		Portugal		Poland		Greece		Sweden	
	TTS	LFS	TTS	LFS	TTS	LFS	TTS	LFS	TTS	LFS
Primary										
Secondary										
Post-Secondary										
NA										

Primary	19.6	44.7	40.1	69.6	8.6	14.2	44.7	12	26.8
Secondary	40.6	32.9	32.7	30.4	51	55.7	41.9	29.9	32
Post-Secondary	35.3	22.5	27.2	0	40.4	30.2	13.4	56.1	38.2
NA	4.5							2	2.9

Table 18: Comparison of the employment status distribution of immigrant respondents in the Transatlantic Trends Survey 2014 and the European Labor Force Survey 2014.

Employment Status	Germany		France		Spain		Italy		United Kingdom	
	TTS	LFS	TTS	LFS	TTS	LFS	TTS	LFS	TTS	LFS
Employed	67.9	67.7	44	58	53.8	52.3	59	59.1	67.6	69.3
Inactive	32.1	26	41.9	32.1	31.7	21.8	29.5	30	23	25.3
Unemployed	0	6.3	7.8	9.9	14.5	26	11.5	10.9	6.3	5.3
NA			6.3						3.1	

Employment Status	Netherlands		Portugal		Poland		Greece		Sweden	
	TTS	LFS	TTS	LFS	TTS	LFS	TTS	LFS	TTS	LFS
Employed	51.8		58	66.8	18.9	64.3	45.1	50.3	65.6	65.4
Inactive	30.5		18.6	19.8	63.6	26.4	34.9	22.7	32.3	23.5
Unemployed	12.5		23.3	13.4	17.5	9.2	20	26.9	1.2	11.1
NA	5.2								0.9	

Appendix H. Migration motive misperceptions as strong negative attitudes

While not strictly within the scope of the manuscript, one reviewer pointed out the link between misperceptions and the strength of attitudes literature (Petty and Krosnick 1995). The TTS data allow to test one prediction from that literature which is that strong attitudes are linked to issues of personal importance. Table 19 tests this prediction with two models, first (A2) regressing misperceptions on all controls from the manuscript and a binary indicator for whether respondents mentioned immigration as the most important issue facing their country at the moment. Another model (A3) uses the most important issue indicator as the outcome and predicts it using all controls and the misperception measure. In each model, the association between misperceptions and mentioning immigration as the most important issue is statistically significant ($p < .001$) and among the two largest coefficients by absolute magnitude. Accordingly, the connection between misperceptions and the attitude strength literature is a promising avenue for further exploration.

Table 19: Standardized coefficients from linear mixed effects models predicting migration motive misperceptions (A1 & A2) and general linear mixed effects model with binary outcome predicting mentioning immigration as the most important issue (A3).

	(A1)	(A2)	(A3)
<i>Individual level variables</i>			
Female	-0.02	-0.01	0.23*
Age	0.03**	0.03*	0.00
Secondary	-0.19***	-0.18***	-0.28*

Postsecondary	-0.25***	-0.23***	-0.92***
Immigrant parents	-0.10*	-0.10*	0.10
Foreign friend	-0.12***	-0.12***	0.03
Lived abroad	-0.00	0.01	-0.40
Left-right	0.11***	0.10***	0.40***
Not in labor force	0.02	0.03	-0.34**
Unemployed	-0.13**	-0.12*	-0.75*
Affected by economic crisis	0.06***	0.06***	-0.07
Immigration most important		0.39***	
Motive misperceptions			0.47***
Constant	0.23*	0.19	-2.80***
<i>Observations</i>			
Country	10	10	13
Individual	7,460	7,460	7,460
<i>Goodness of fit</i>			
Log likelihood	-12,050.89	-12,005.01	-1,703.33
AIC	24,129.77	24,040.01	3,434.67
BIC	24,226.61	24,143.77	3,531.51

Note: Standardized coefficients. Omitted reference categories: Primary education and working.

* $p < .05$; ** $p < .01$; *** $p < .001$ (two-tailed tests).

Appendix I. Online Survey Experiment Instrument

INTRO TO Q1-Q13: Thank you for participating in this study. First, we would like to ask you a few questions about yourself.

Q1: What is your year of birth?

Q2: What is the highest level of school you have completed or the highest degree you have received?

1. Less than high school degree
2. High school graduate (high school diploma or equivalent including GED)
3. Some college but no degree
4. Associate degree in college (2-year)
5. Bachelor's degree in college (4-year)
6. Master's degree
7. Doctoral degree
8. Professional degree (JD, MD)

Q3: Are you Spanish, Hispanic, or Latino or none of these?

1. Yes
2. No, none of these

Q4: Choose one or more races that you consider yourself to be:

1. White
2. Asian
3. Black or African American
4. Native Hawaiian or Pacific Islander
5. American Indian or Alaska Native
6. Other: [ENTER HERE]

Q5: Are you male or female?

1. Male

2. Female

Q6: Thinking back over the last year, what was your family's annual income?

1. Less than \$10,000
2. \$10,000 - \$19,999
3. \$20,000 - \$29,999
4. \$30,000 - \$39,999
5. \$40,000 - \$49,999
6. \$50,000 - \$59,999
7. \$60,000 - \$69,999
8. \$70,000 - \$79,999
9. \$80,000 - \$99,999
10. \$100,000 - \$119,999
11. \$120,000 - \$149,999
12. \$150,000 or more

Q7: What is your ZIP code?

Q8: Do you think the number of immigrants from foreign countries who are permitted to come to the United States to live should be...

- 1 Increased a lot
- 2 Increased a little
- 3 Left the same
- 4 Decreased a little
- 5 Decreased a lot

Q9: We would like to know your feelings toward *immigrants* using something we call the feeling thermometer. Ratings between 50° and 100° mean that you feel favorable and warm toward them. Ratings between 0° and 50° mean that you don't feel favorable toward them and that you don't care too much for it. You would rate the group at the 50° mark if you don't feel particularly warm or cold toward them.

Please enter a whole number that ranges from 0 to 100: _____

Q10: Generally speaking, do you think of yourself as a ...?

1. Independent
2. Republican
3. Democrat
4. Other
5. No Preference

Q11A: [If Q10: 1, 4, OR 5.] Do you think of yourself as closer to the Republican or the Democratic party?

1. Republican
2. Democratic

Q11b: [If Q10: 2 OR 3.] Would you call yourself a strong [REPUBLICAN/DEMOCRAT] or a not very strong [REPUBLICAN/DEMOCRAT]?

1. Strong
2. Not very strong

Q12: Here is a seven-point scale on which the political views that people might hold are arranged from extremely liberal to extremely conservative. Where would you place yourself on this scale?

1. Extremely liberal
2. Liberal
3. Slightly liberal
4. Moderate / middle of the road
5. Slightly conservative
6. Conservative
7. Extremely Conservative

Q13: [If Q12: 4.] If you had to choose, would you consider yourself a liberal or a conservative?

1. Liberal
2. Conservative
3. Moderate

INTRO TO EXPERIMENTAL MANIPULATION I: Now we will show you some news headlines you might encounter on social media.

CONTROL: Please read the following article.

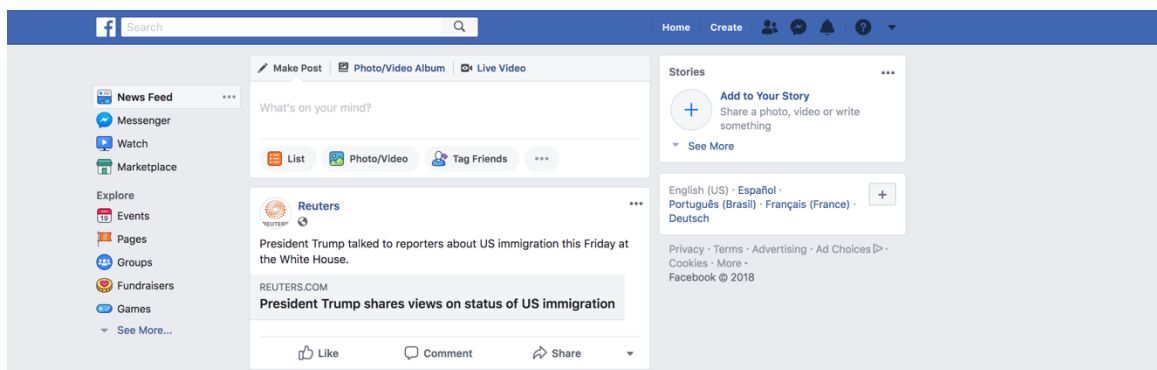


Figure 13: Example of news headline presented in control condition.

CONTROL: Please choose one of the following articles to read.

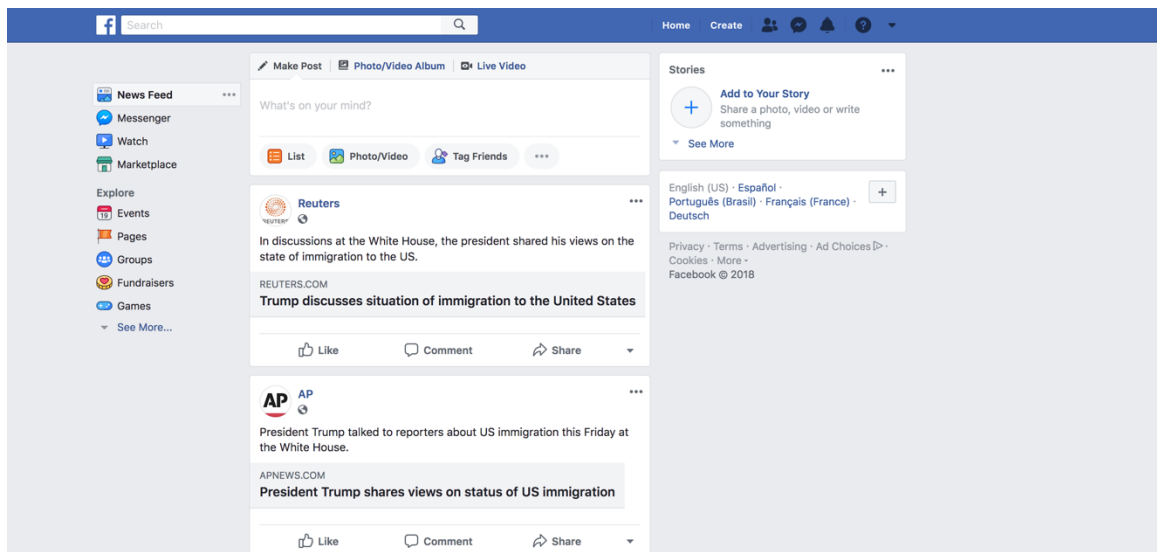


Figure 14: Example of news headlines presented in treatment condition

NEWS ARTICLES WITH EXPERIMENTAL MANIPULATION II:

Washington, DC, June 16, 2018 (AP)—President Trump continued pushing for a change to the country’s immigration laws while talking to reporters this Friday. Speaking with media representatives on the White House’s North Lawn, the president maintained that laws passed by Democrats were forcing his administration against his personal preferences to separate children from their parents if they crossed the US border, and that Republican votes alone would not be sufficient to change the provisions. Asked whether he had the powers to end the family separation policy, Trump negated the option responding: “You can’t do it through an executive order.”

[CORRECTION] While Trump turned his attention to gang violence in his weekly address today, a former commissioner of the Immigration and Naturalization Service clarified that there is in fact no law requiring the separation of immigrant children and parents at the border. Rather, Doris Meissner explained in talking with NPR, there is a court settlement placing restrictions on detention settings and timing for children. The implementation of this settlement lies in the sole discretion of the administration. In deciding to criminally prosecute border crossings as a part of its zero-tolerance policy, the Trump administration created the conditions for family separations and could just as easily reverse them.

Immigration policy is bound to take backstage over the next few days as Trump is scheduled to meet with European leaders and address the public at a meeting of the National Space Council.

Trump discusses situation of immigration to the United States



Washington, DC, June 16, 2018 (AP)—President Trump continued pushing for a change to the country's immigration laws while talking to reporters this Friday. Speaking with media representatives on the White House's North Lawn, the president maintained that laws passed by Democrats were forcing his administration against his personal preferences to separate children from their parents if they crossed the US border, and that Republican votes alone would not be sufficient to change the provisions. Asked whether he had the powers to end the family separation policy, Trump negated the option responding: "You can't do it through an executive order."

While Trump turned his attention to gang violence in his weekly address today, a former commissioner of the Immigration and Naturalization Service clarified that there is in fact no law requiring the separation of immigrant children and parents at the border. Rather, Doris Meissner explained in talking with NPR, there is a court settlement placing restrictions on detention settings and timing for children. The implementation of this settlement lies in the sole discretion of the administration. In deciding to criminally prosecute border crossings as a part of its zero-tolerance policy, the Trump administration created the conditions for family separations and could just as easily reverse them.

Immigration policy is bound to take backstage over the next few days as Trump is scheduled to meet with European leaders and address the public at a meeting of the National Space Council.

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Figure 15: Example of news article with correction attributed to the Associated Press

JUNE 16, 2018

Trump discusses situation of immigration to the United States



Washington, DC (Reuters) - President Trump continued pushing for a change to the country's immigration laws while talking to reporters this Friday. Speaking with media representatives on the White House's North Lawn, the president maintained that laws passed by Democrats were forcing his administration against his personal preferences to separate children from their parents if they crossed the US border, and that Republican votes alone would not be sufficient to change the provisions. Asked whether he had the powers to end the family separation policy, Trump negated the option responding: "You can't do it through an executive order."

Immigration policy is bound to take backstage over the next few days as Trump is scheduled to meet with European leaders and address the public at a meeting of the National Space Council.

Our Standards: The Thomson Reuters Trust Principles.

Figure 16: Example of news article without correction attributed to the Reuters

EXPERIMENTAL MANIPULATION III:

TREATMENT:

INTRO: We are interested in how you think about the article you just read.

Q14T: In your own words, what is the issue the news article discusses and what are your thoughts on the arguments it presents? (Write 80 characters or more.)

CONTROL:

INTRO: We are interested in how you use social media.

Q14C: Some people post their own thoughts, others share things they find interesting, and others again only read. In your own words, what do you do on social media? (Write 80 characters or more.)

INTRO TO Q15: Next, we would like to know what you think about some statements that have recently circulated in the media.

Q15: Please indicate whether you *agree strongly, agree somewhat, neither agree nor disagree, disagree somewhat, strongly disagree* with the following statement:

The separation of children from their parents at the southern border of the United States happens because of a law which can only be changed by congressional action with Democrats cooperating with Republicans.

INTRO TO Q16-Q17 [Attention Checks]: Finally, we would like to ask you three questions about details from the article you read.

Q16: Where did the article say Trump made his remarks?

- 1 Mar-a-Lago, Palm Beach, FL
- 2 White House, Washington, DC
- 3 Florida State Fairgrounds, Tampa, FL
- 4 Trump International Hotel, Washington, DC
- 6 Don't know/don't recall

Q17: What news organization published the article?

- 1 The Washington Post
- 2 Reuters
- 3 The Wall Street Journal
- 4 AP (Associated Press)
- 5 Don't know/don't recall

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Biography

Friedolin Merhout earned a B.A. in North American Studies from Freie Universität Berlin, Germany, (2014) and an M.A. in Sociology from Duke University (2017). He co-authored the following publications: “Examining the Relationship between Ethnic Discrimination and Violent Radicalization in 3,143 U.S. Counties using Internet Search Data” (Science Advances) and “Exposure to Opposing Views can Increase Political Polarization: Evidence from a Large-Scale Field Experiment on Social Media” (Proceedings of the National Academy of Sciences). Friedolin will finish his Ph.D. in Sociology at Duke University in the summer 2019 and start as an Assistant Professor in the Department of Sociology at the University of Copenhagen, Denmark, in the fall.