

Risk Propensity, News Frames and Immigration Attitudes

ANITA GOTTLOB
HAJO BOOMGAARDEN
University of Vienna, Austria

Migration has become increasingly discussed as intangible and uncontrollable and hence as a risk to receiving societies. In the past years, strong public concern and negative attitudes toward immigration have been seen across European countries. The mass media are oftentimes suggested to contribute to such concerns. But mediated risks of immigration do not affect all citizens to an equal extent. This study considers the relationship between information about migration as found in mass media and immigration attitudes as a function of individuals' risk propensity. Our results suggest that tangible risk frames have an effect on immigration attitudes, while abstract risks do not. Tangible risks are statistically not likely to be personally experienced by most people. Yet, they are often framed as having the potential to negatively impact a person's community or well-being. Risk propensity played no role in moderating such effects.

Keywords: immigration attitudes, risk propensity, framing effects, issue attributes

In many European countries, immigration tends to be perceived as a threat or creates feelings of insecurity (Beutin, Canoy, Horvath, & Hubert, 2007; Meltzer et al., 2018; Pellegrini, De Cristofaro, Salvati, Giacomantonio, & Leone, 2021). For example, in 2019, immigration was seen as one of the most important issues in the EU; over a third of Europeans ranked it as their most important concern (Standard Eurobarometer 91, 2019). Albeit strong public concern, most people will have little direct experience with immigrants and perceive migration primarily as discussed in the media (McLaren, Boomgaarden, & Vliegthart, 2018; Sniderman, Hagendoorn, & Prior, 2004). Yet, immigration is a controversial topic of continuous debate in news media, social media, and political and public discourse (De Rosa, Bocci, Bonito, & Salvati, 2021; Engesser, Ernst, Esser, & Büchel, 2017). Immigrants are often depicted and perceived as potential criminals or as presenting a competition with respect to national resources or job markets (De Rosa et al., 2021; Di Cicco & Sensales, 2019; Engesser et al., 2017). In particular, the right-wing section of the press in the United Kingdom was found in recent years to be "unique" in the aggressive and hostile reporting on refugees and migrants (Berry, Garcia-Blanco, & Moore, 2016).

When immigration is portrayed in the media and political discourse as a matter of (in)security, it creates feelings of uncertainty that, in turn, can lead to exclusionary attitudes of individuals toward members

Anita Gottlob: agottlob@gmail.com

Hajo Boomgaarden: hajo.boomgaarden@univie.ac.at

Date submitted: 2021-01-26

Copyright © 2022 (Anita Gottlob and Hajo Boomgaarden). Licensed under the Creative Commons Attribution Non-commercial No Derivatives (by-nc-nd). Available at <http://ijoc.org>.

of outgroups (Vallejo-Martín, Canto, San Martín García, & Perles Novas, 2021) and lead to negative attitudes toward immigration (Caricati, 2018; Lecheler, Matthes, & Boomgaarden, 2019; Panichella & Ambrosini, 2018). But does it matter what type of issue is emphasized in the media when immigration is framed as posing a risk to the host society? And would these frames affect people who are prone to taking more risks differently than those who are more risk averse?

This study analyses the effects of frames that portray immigration as a risk to host societies on immigration attitudes, as well as the possible role of participants' risk propensity in moderating these effects. Furthermore, the study explores whether frames portraying immigration as posing a risk have a different effect depending on whether they discuss "abstract" issues (e.g., culture, religion) versus "tangible" issues (e.g., housing, schooling, safety). We based our research on the following considerations: First, existing literature shows a connection between threat perception, uncertainty reduction, and anti-immigration attitudes, as explained by social identity theory (Gründl & Aichholzer, 2020; Heiss & Matthes, 2020). Different strands of literature that aim to explain drivers of hostility toward immigration commonly focus on the concept of threat. Other studies have explored related concepts as predictors of anti-immigrant attitudes such as social exclusion and interpersonal trust (Pellegrini et al., 2021) that explain why certain individuals might be less willing to overcome the (perceived) unpredictability and uncertainty related to hosting immigrants (Pellegrini et al., 2021). In this study, we take a slightly different turn than prior research by focusing on the concept of risk (which includes the concept of threat). Contrary to the concept of threat, the term risk refers mainly, but not exclusively to negative issues (Rohrmann, 2008) and is thus particularly useful as it allows to best operationalize frames that might enhance perceptions of uncertainty *and* threat over immigration (a.k.a., "risk frames"). Even though there is a wealth of research on the framing and perception of risk, these studies chiefly focus on the perception of actual potential hazards or to issues related to the environment or health. In framing studies, the concept of risk is rarely analyzed in relation to the topic of immigration.

Second, empirical evidence suggests that individuals are not equally susceptible to the same frames (Kam & Simas, 2010). So far in the social sciences, risk propensity (or orientation) has been studied in the context of electoral decisions (Tomz & Van Houweling, 2009), policy preferences, political participation (Kam & Simas, 2010), and right-wing populist appeals (Steenbergen & Siczek, 2017). Some also included anti-immigration as a variable of interest. For example, Steenbergen and Siczek (2017) provide empirical evidence that suggests individuals' risk propensity plays a significant role in shaping beliefs about immigration as well as predicting the likelihood to embrace populism (Steenbergen & Sisczek, 2017). However, to our knowledge, no studies thus far have specifically analyzed risk propensity as individual-level factors as either a predictor or a moderating variable for anti-immigration attitudes.

This study tries to address this gap in the literature by bridging the gap between theories of perceived threat, framing effect studies, and risk propensity. Based on the above, we pose the following research questions: (1) Do different risk frames within the general topic of immigration affect attitudes about immigration, and (2) are such effects moderated by individuals' risk propensity? We address these questions by utilizing an experimental design, consisting of a pretest to measure risk propensity—a stimulus with three different experimental conditions—followed by a questionnaire on anti-immigration sentiment.

The experiment was carried out online and completed by a random sample of participants living in the United Kingdom from an online access panel.

Theoretical Framework

The Concept of Risk

Throughout this research, the concept of threat perception was also included as one dimension of the broader concept of risk. Threat perception is, in a narrow sense, defined as the "anticipation of danger." Risk, in contrast, is the measure of a potential impact of danger, with varying perceptions (Garland, 2008), (i.e., "danger is real, but risk is socially constructed"; Douglas, 1992, p. 689). While threat specifically relates to a potential action likely to cause damage, risk is rooted in uncertainty and relates to the estimate of the potential impact of danger (Garland, 2008; Rohrmann, 2008). Thus, risk represents the mere possibility of danger (Rohrmann, 2008) or the probabilistic calculation of loss versus gain, involved in decision-making processes.

Seminal research in equivalence framing has focused on the framing of hazard, risk, or similar concepts, such as the effects of gain versus loss framing (Kahneman & Tversky, 1979). Most of these studies, however, focus on issues relating to health: recent studies on issue-framing explore the role of emotions and the way in which information is processed, and its effect on how individuals perceive risk or form judgments (Nabi et al., 2020). Others focus on issue-framing effects on emotional reactions such as fear or worry in the context of the COVID-19 pandemic (Hameleers, 2021; Vacondio, Priolo, Dickert, & Bonini, 2021).

Attitudes Toward Immigration and Their Drivers: From Distal to Proximate Factors

The sources of prejudice against immigration are multidimensional and can have significant repercussions on a societal level ranging from public hostility and hate crimes to restrictive immigration policies (Barisione, 2020). Some theories suggest that the drivers of individual attitudes toward immigration are in essence a "cost-benefit analysis" (Espenshade & Hemstead, 1996). These theories are based on "rational interest" explanations for anti-immigration attitudes, wherein individuals are thought to evaluate perceived or objective material (i.e., economic resources) and immaterial (i.e., security) "cost" versus "benefits" that might be relevant to themselves or their community (Citrin, Green, Muste, & Wong, 1997, as cited in Markaki & de Longhi, 2013).

Other theories focus on social-psychological explanations related to perceived threats. Overall, literature in this field differentiates between "microlevel" factors such as individual characteristics (i.e., gender, education, political orientation; Salvati, Carone, De Cristofaro, Giacomantonio, & Baiocco, 2020) and/or "macrolevel" factors such as the size of the immigrant population or the economic conditions of regions (Markaki & Longhi, 2013). As of 2021, the findings on latter factors are mixed, and the association between macrolevel factors such as immigrant population size or regional economic conditions are inconclusive (Caricati, 2018; Markaki & Longhi, 2013; Salvati et al., 2020). Research found that in Australia, people who were male, less educated, more nationalistic, and more conservative tended to have increased

negative attitudes to immigration and that demographic factors were more weakly correlated to negative immigration attitudes than ideological ones (Anderson & Ferguson, 2018).

This is corroborated by a report on the drivers of immigration across 17 EU countries, stating that, in general, distal effects such as microlevel predictors are more stable predictors of immigration attitudes compared with proximal effects, which include macrolevel predictors such as "economic competition, neighborhood, contact," and "media influence" (Dennison & Dazanova, 2018). However, researchers also agree that the media (a "situational trigger") and political communication can still have a considerable influence on immigration attitudes. Panichella and Ambrosini (2018) describe the mass media as a "mesolevel" factor in that the information managed by mass media provides individuals with the means to create "certain images of immigrants" (p. 395). Their findings suggest that while real contacts with immigration decrease hostility toward immigration, news content portraying immigration as a threat to society tends to have the opposite effect (Panichella & Ambrosini, 2018). Crucially, then, these factors are often interrelated in the sense that media messages can be expected to have varying effects on individuals who have differing human values (Dennison & Drazanova, 2018, p. 6).

Threat Perception as a Driver of Immigration Attitudes

Studies also found that negative immigration-related news can increase perceived group threat (Schlueter & Davidov, 2013) and that the mere perception of threat can generate negative behavioral intentions (i.e., intentions to discrimination against foreigners; Stephan & Stephan, 2017). Therefore, threat perceptions have real consequences, regardless of whether these perceptions are accurate (Sides & Citrin, 2007; Ward & Masgoret, 2008). Perceived threat from immigrants is a strong predictor of negative emotions and hostility toward immigration (Caricati, 2018; Salvati et al., 2020). Research on threat perception as a factor in affecting opposition toward immigration differentiates between perceived "symbolic" and "realistic" threats. The former includes concerns stemming from competition over resources in areas such as the job market, education, health care, and physical safety (Vallejo-Martín et al., 2021). The latter includes concerns about differences that could threaten a group or an individual's worldview (i.e., values, beliefs, and norms; Esses, Medianu, & Lawson, 2013; Salvati et al., 2020; Vallejo-Martín et al., 2021). Both were linked to other individual-level factors, such as negative emotions and conservative ideologies, and to predicting prejudices toward immigration (Caricati, Mancini, & Marletta, 2017; Salvati et al., 2020; Vallejo-Martín et al., 2021).

Furthermore, social identity-theory suggests that situational factors, such as uncertainty about national identity, can trigger exclusion toward "outgroups" (i.e., intolerance of otherness, group centrism, and derogation of outgroups; Federico, Hunt, & Fisher, 2013). Similarly, a recent study by Gründl and Aichholzer (2020) found an association between uncertainty avoidance and voting for right-wing populist parties. Right-wing populist parties are known to instrumentalize group-based identities by "strategically nurturing perceived threats attributed to immigrants" (Heiss & Matthes, 2020, p. 305). These parties use anti-immigration discourse in different channels and formats to frame immigration as a threat to the host society and, at the same time, promise their voters to protect them from these risks (Gründl & Aichholzer, 2020; Steenbergen & Sisceck, 2017). With the rise of digital media platforms, political actors can therefore exploit these complex discourses on immigration to influence public opinion on either rejecting or supporting immigration policies, depending on their agenda (DeBono, 2019; DeRosa, Bocci, Bonito, & Salvati 2021).

Frames and Immigration Attitudes

Frames involve the selection and emphasis of words, expressions, and/or images to highlight certain aspects of an issue over others (Igartua & Cheng, 2009; Lecheler, Bos, & Vliegenthart, 2015). Frames are considered to have an effect by suggesting a specific interpretation of the respective issue to the reader (Bos, Lecheler, Mewafi, & Vliegenthart, 2016). In this study, we focus on issue frames that can be understood as the discussion of a particular issue in which some information is emphasized, to highlight particular considerations over others (Chong & Druckman, 2007). Frames in news media are known to influence the interpretation of an issue, public opinions, and attitudes toward issues (Lecheler & De Vreese, 2019). Boeynaems, Burgers, and Konijn (2021) explain that in Italy, "Typical anti-immigration rhetoric used by right-wing populist parties (RWPPs) presents immigrants as outsiders who are framed as a threat to the populists' idealized nation" (p. 1). These types of frames can then have a strong persuasive effect on political opinion or evoke negative emotions on immigration (Boeynaems et al., 2021).

The most frequently reoccurring frames across European news (e.g., Hungary, the United Kingdom, or Italy) emphasize on possible (mostly negative) consequences on immigration relating to security, criminality, economy, or culture (Eberl et al., 2018; Greussing & Boomgaarden, 2017). Empirical evidence suggests that tangible aspects of immigration, such as economy, education, and security, evoke increased reaction and public concern in comparison to more abstract aspects (e.g., governmental decisions; Sniderman et al., 2004). Congruently, McLaren and colleagues (2018) found that media coverage of issues of unobtrusive nature but with potentially concrete consequences for the public are more prone to raise public concern on immigration than unobtrusive but abstract issues. This was also found in other research (see Soroka, 2002) and aligns with Zucker's (1978) obtrusiveness theory. The latter states that the more direct experience an individual has on an issue (e.g., inflation)—the more observable an issue is in real life (i.e., obtrusive)—the less influence media coverage of this issue will have on the individual's opinion formation. Several studies on issue framing effects explore how alternate frames affect individuals' different emotional reactions to certain topics, which, in turn, can mediate the framing of content and behavioral effects (Druckman & McDermot, 2008; Hameleers, 2021; Nabi et al., 2020).

Risk Propensity as a Moderator of Framing Effects

While framing effects do matter, scholars have pointed out that not all individuals are equally vulnerable to framing effects, depending on various factors (Kam & Simas, 2010). A recent study shows that the persuasive effects of figurative frames in anti-immigration rhetoric are mediated by individual differences and linked to personal values or preexisting conceptions (Boeynaems et al., 2021; Müller et al., 2017). The persuasive effects of anti-immigration rhetoric will therefore affect voters differently (Müller et al., 2017). Individual orientations and personality traits of media users that exist before the exposure to certain news frames matters for framing effects (De Vreese & Boomgaarden, 2003; Scheufele, 2000). For example, Schuck and De Vreese (2006) found that levels of knowledge have an impact on susceptibility to risk framing.

Finally, Kam and Simas (2010) empirically verified that risk acceptance undercuts susceptibility to framing effects across successive framing scenarios. They also found that an individual's level of risk

acceptance affects their initial response to a given frame. Their results suggest that risk orientations also undercut susceptibility to framing effects across multiple framing scenarios (Kam & Simas, 2010).

The Present Study and Hypotheses

Considering the above theories and arguments, this study considers the relationship between differential frames about migration and immigration attitudes as a function of individuals' risk propensity. In the context of this study, "risk frames" are defined as any frame that portrays immigration as a risk to the host society. Research shows that strong public concern of the issue of immigration is measured even when people will have little or no direct experience with the respective issues about immigration that are discussed in the media (McLaren et al., 2018; Sniderman et al., 2004). Since most of the population will not experience close contact to immigrants on a day-to-day basis, immigration can be considered as an "unobtrusive" issue, and frames on immigration should thus be open to media influence (Soroka, 2002; Zucker, 1978). In this analysis, we expect that:

H1: Exposure to texts on immigration containing risk frames is negatively associated with immigration attitudes.

Media emphasis on unobtrusive but potentially tangible issues within the theme of immigration was found to influence public concern about immigration in the United Kingdom more than abstract frames (McLaren et al., 2018). More specifically, tangible issues are conveyed as having consequences to a community—housing and, generally, infrastructure—whereas abstract issues relate to issues with nonimmediate consequences such as changing of social values and norms (Gottlob & Boomgaarden, 2019). Hence, we expect that:

H2: Tangible risk framing of immigration will have a stronger negative association with immigration attitudes than abstract risk framing.

Finally, previous findings demonstrate that not all individuals are likely to be impacted similarly by the same frames, but that the degree of the effect is contingent upon a set of individual-level characteristics (De Vreese & Lecheler, 2012; Druckman, 2001; Kam & Simas, 2010). We thus postulate that risk propensity might play a significant role in moderating framing effects on immigration attitudes and formulate our third hypothesis:

H3: The effects of risk frames on immigration attitudes are moderated by individual risk propensity.

We expect risk-averse individuals might be more prone to be affected by risk frames on immigration. We base this expectation on research that has found risk propensity to be associated to right-wing voting (Steenbergen & Sizeck, 2017) as well as recent findings by Gründl and Aicholzer (2020) that uncertainty avoidance may lead people to vote for right-wing populist parties that promise their voters. These findings suggest that people who see immigration as a risk, either as a competition or a threat to their in-group, are more likely to develop prejudice or hostility toward immigration.

Risk attitude or risk propensity is understood in social-psychology as a personality trait and describes a person's position on the sequence from risk aversion to risk seeking (Weber, Blais, & Betz, 2002). Risk attitudes tend to be domain specific and can vary depending on social, physical, financial, or health domain (Weber et al., 2002). Therefore, we also explored the hypotheses in the context of different risk-propensity dimensions.

Data and Methods

Study Design

Participants first responded to questions about demographics (age, gender, education, etc.) and their risk propensity and were then randomly exposed to one of four texts (three treatment conditions and one control). The effects of the exposure to the different stimulus texts were measured using a postquestionnaire, which also included items measuring several covariates that might intervene with anti-immigration attitudes (Pellegrini et al., 2021).

Data

The data for this study come from an online survey drawing on a sample of adults registered as panel respondents (age 18–74) of $N = 504$. The sample comes from "Survey Sampling International," and quotas were set to ensure the sample to be representative of the U.K. population with regards to age, gender, and education. The data were collected between December 19 and February 21 and fielded in the United Kingdom. Five hundred participants initiated the questionnaire, and we retained only the ones that responded to all questions, excluding those who skipped questions. Table 1 shows details about participants' main demographic characteristics.

Table 1. Demographic Sample's Characteristics (N = 202).

	<i>n</i>	%
Gender		
Male	103	49%
Female	99	51%
Age		
18–24	27	13%
24–35	36	17%
35–44	36	17%
45–54	35	17%
55–64	61	30%
65–74	7	3.5%
Nationality		
United Kingdom	194	96%
Other	8	4%
Education		
Below GCSE	6	3%
GCSE	40	19%
A-level or equivalent	22	10%
Some vocational or technical training	9	4%
Completed vocational or technical training	29	14%
University (undergrad)	71	35%
Postgraduate	20	10%
Doctorate	5	2.5%

Measures

For information on the main statistics of the measures listed below, see Table 3 in the “preliminary analysis section.”

Risk Propensity was measured with 20 items on a five-point Likert scale, based on the Domain-Specific Risk-Taking Scale for Adult Populations (DOSPERS) scale developed by Weber and colleagues (2002). The DOSPERT scale is a multi-item psychometric scale that measures individual risk propensity. The items assess risk propensity across five content domains known to affect risk behavior and perception: the ethical, financial, health/safety, social, and recreational domains (Weber et al., 2002). The respondents rated the likelihood on a scale from 1 to 5 of engaging in domain specific-risky activities such as “Lending a friend an amount of money equivalent to one month’s income” (financial domain) or “Taking a medical drug that has a high likelihood of negative side effects” (Health) or “Forging somebody’s signature” (ethical). We created a variable containing the merged scored of all subdimensions, resulting in a variable assessing risk propensity overall that we named “Risk General.” The Cronbach’s alpha for the overall items of the general risk attitudes scale (alpha = 0.91) was good. Furthermore, we created

variable with mean scores for each subdimension. The internal consistency for and the respective subscales ranged from satisfactory to good, respectively, for the items measuring the health risk dimension scale (alpha = 0.71), social risk dimension scale (alpha = 0.68), recreational risk dimension scale (alpha = 0.73), ethical risk dimension scale (alpha = 0.91), and financial risk dimension scale (alpha = 0.84). The scale has been used in many settings and populations for validation, where adequate internal consistency reliability estimates and moderate test-retest reliability estimates were reported (Weber et al., 2002; Harrison, Young, Butow, Salkeld, & Solomon, 2005).

Attitudes toward migration was measured with seven items on a five-point Likert scale. We asked participants to indicate how much they agree or disagree on questions such as: "Immigrants should adopt our culture" or "Immigrants are a threat to our way of life." Lower values represented negative overall immigration attitudes, whereas higher values were coded as positive immigration attitudes. The immigration attitudes scale had good internal consistency (alpha = 0.85). The questions were designed based on the European Social Survey (Heath et al., 2014), the International Social Survey Programme (2015), and the Eurobarometer "trend files" on "Attitudes Towards Immigration" that showcase a collection of questions on Immigration attitudes from several Eurobarometers (<https://www.gesis.org/en/eurobarometer-data-service/search-data-access/eb-trends-trend-files/list-of-trends/immigrants>). For more information on these measures, see Table 2 in the "preliminary analysis section."

Covariates account for other possible factors that might impact immigration attitudes. Along with the demographic variables gender, age, nationality, and education (see Table 1 for more information), we also controlled for political interest, voting, and political orientation.

Political interest was measured with one item ("how interested would you say you are in politics?"), where on a five-point Likert scale, 0 was coded for no political interest to 5 for very interested.

Voting was measured with one item ("if there was a general election tomorrow, which party would you vote?") where answers available included all the current main parties in the United Kingdom at the time of the study from left to right. The answers were then encoded and recoded into values from left to right (where 1 was right wing, 2 was left wing, and 3 was other).

Political orientation included four items (i.e., "The State intervenes too much in our lives"; "Nowadays there is too much tolerance"; "Free competition is the best guarantee for economic prosperity") which were answered on a five-point Likert-scale. This was then recoded into a variable with merged scores, representing political orientation from left/liberal on the lower end, to right/authoritarian on the higher end (from 1 to 5). Initially, our political orientation variable consisted of eight items; however, because of low reliability of the eight items, we dropped half of the items after further analyses. Perry and colleagues (2004) indicate that, for a scale with a few items, reliability can be said to be acceptable at a Cronbach's alpha between .5 and .7. The Cronbach's alpha for the four items in the political orientation scale was moderate, but still acceptable (alpha = 0.56). Because of the low item number, we also report that the mean inter-item correlation was in the recommended range between .2 and .4 for the set of items included in the scale (Piedmont, 2014). The items were based on the Eurobarometer (EB) questions on Political, Economic and Social Beliefs available on GESIS (<https://www.gesis.org/en/eurobarometer-data-service/search-data->

access/eb-trends-trend-files/list-of-trends/political-beliefs), as well as literature reviews on authoritarianism and political conservatism measures (Jost, Glaser, Kruglanski, & Sulloway, 2003).

Stimulus Material

To assess whether risk frames on immigration have an impact on immigration attitudes and whether there is a difference between abstract and tangible frames, the participants in this study were randomly exposed to one of three possible fictional texts in the experimental conditions, and one random neutral text unrelated to immigration in the control condition. The three experimental conditions resembled real-life news items; they were based on real articles in British tabloid newspapers that fit the criteria. The fictional texts were written in the same style and tone, and included phrasings and words characteristic of common frames that portray immigration as a potential risk to the host society (DeRosa, 2021; Eberl et al., 2018; Gottlob & Boomgaarden, 2019). Within these experimental conditions, a first text framed immigration as a risk to the host society "in general" without focusing on specific issues, a second text focused on tangible issues, and a third on abstract issues. The first general condition was the "basic" experimental condition. It included a paragraph elaborating on exaggerated immigration statistics in terms of immigrants "entering" the country. This paragraph was then also used as a first introductory paragraph for the tangible and abstract treatment texts, which each included additional paragraphs focusing on different aspects: the tangible treatment focused on the "negative" impact of immigration on concrete issues such as housing, schooling, and public infrastructure and, the abstract risk treatment focused on values, cultural, and religious practices (see Table 2). In all items, the valence was negative.

Table 2. Overview of Experimental Conditions (Examples).

Treatment group	Subgroup	Example of message (all fictional)
General risk frame	• Illegality	"The number of suspected illegal immigrants trying to enter Britain is at record levels . . ."
	• "Masses" entering the country	"over 80.000 were apprehended last year . . ." "border control has been working full-time to detect over 10.000 clandestine arrivals or failed asylum seekers who won't depart."
Tangible risk frame	• Infrastructure	"Smith is also urging the government to not underestimate the massive impact of immigration on the civic infrastructure."
	• Housing	
	• Schooling	"In general, too little has been done to support under pressure schools, hospitals and housing in areas hit by new arrivals," Smith says."
	• Demographic change in the community	"Catherine Yale, director of the social and community integration charity urged: 'unless we act rapidly our communities are in danger of becoming segregated places.'"
Abstract risk frame	• Cultural values	"Smith is also urging the government to not underestimate the anxieties of the public that voice legitimate concerns, as too little has been done to make sure that migrants adapt to our culture."
	• Religion	"As a recent report of the BIMR (British Institute of Migration Research) reveals today, it is a major concern among the general public that immigrants learn our language and share our values."
	• Ideology	"Catherine Yale, a director of the social and community integration charity urged: 'Unless we act urgently our country is in danger of becoming a place of divided values.'"
	• Cultural divide	

Results

We performed linear multiple regression calculations to test the research hypotheses. Five models were estimated to test for effects of the four different treatment frames as well as the moderating effect of risk attitudes (and its subdimensions) on the dependent variable (immigration attitudes). Table 3 shows descriptive statistics and correlations among the main variables for models 1–5. Preliminary tests showed that there was no issue of multicollinearity among the predictor variables in any of the models (the mean variance inflation factor for each model ranged from 1.14 to 1.58). A post hoc power analysis shows that all models had an observed power of .99 (based on sample size and *R*-squared at a probability level of .05)

Table 3. Correlations Among all Main Variables Included in Models.

Variables	1	2	3	4	5	6	7	8	9
1. Education	1								
2. Age con.	-0.156*	1							
3. Gender	0.025	0.187**	1						
4. Political orient.	0.165*	-0.039	0.000	1.000					
5. Voting	-0.035	0.168**	0.237*	0.170*	1				
6. Political interest	-0.025	0.231**	0.088	0.023	-0.008	1			
7. Nationality	-0.096	0.111	-0.098	0.051	0.001	0.053	1		
8. Risk general	-0.006	0.405**	0.047	0.154*	0.017	0.051	0.071	1	
9. Immigration attitude	0.294**	-0.159*	0.082	0.256**	0.181*	0.062	0.069	0.053	1
<i>M</i>	-	-	-	2.82	-	3.03	-	3.60	2.95
<i>SD</i>	-	-	-	0.52	-	1.01	-	.736	.806
Skewness	-	-	-	-	-	-	-	.009	.010
Kurtosis	-	-	-	-	-	-	-	.503	.544

** $p < 0.01$, * $p < 0.1$

Table 4 shows the linear multiple regression calculations for testing the effects of the overall stimuli (treatment frames) as well four different treatment frames along with the moderating effect of risk attitudes (and its subdimensions) on immigration attitudes.

The first model (Model 1 on Table 4) tested for hypothesis (H1), which stated that texts on immigration containing risk frames to be negatively associated with immigration attitudes.

The second model (Model 2 on Table 4) tested for the second hypothesis (H2), which stated that tangible risk framing of immigration will have a more significant negative association to immigration attitudes than abstract risk framing. The third model tested the second hypothesis by taking account of the different risk-propensity subdimensions.

Table 5 shows models 5, 6, and 7, which tested the third hypothesis, stating that (H3) the effects of risk frames on immigration attitudes are moderated by individual risk propensity. Models 5–7 thus explore

the interaction effects between risk propensity and the different framing conditions (tangible, abstract, general) on the DV.

Overall, our results (see Table 2) show that out of the three treatment frames, only the tangible frame had a strong significant main effect on immigration attitudes in all regression models. Further, neither risk attitude, subdimension, nor risk attitudes in general seem to have a moderating effect on the relationship between stimuli and immigration attitudes.

The first model of Table 4 shows a regression model calculating the effect of all treatments combined (tangible, abstract, and general risk frame versus control group) and risk attitudes on immigration attitudes as well as controlling for demographic covariates (age, education and gender, and nationality), political orientation, and additionally political interest and voting in a two-step process. The analysis yields that the stimuli overall have a significant effect ($\beta = -.120$, $t(202) = 2.68$, $p = .008$ with an adjusted R^2 of 0.23). In the same model, no significant effect was found for the risk attitude variable "risk general" ($\beta = -.048$, $t(202) = -.63$, ns).

Model 2 (Table 4) shows a regression model calculating the effect of treatment and risk attitudes on immigration attitudes, as well as controlling for demographic covariates, political interest, and voting. The analysis shows that the abstract frame ($\beta = -.148$, $t(202) = -1.02$, ns) and general frame ($\beta = -.220$, $t(202) = -1.55$, ns) had no significant effect on immigration attitudes; however, the tangible frame had a significant effect on immigration attitudes ($\beta = -0.422$, $t(202) = -2.98$, $p = .003$) as compared with the control group. The adjusted R^2 was 0.23.

Similarly, model 3 (Table 4) shows a regression model calculating the effect of treatments and the risk attitude subdimensions. In this model, we also found that the tangible risk frame had an effect on immigration attitudes ($\beta = -0.444$, $t(202) = -3.10$, $p = 0.002$), whereas neither the other treatments nor the risk attitude dimensions had any effect.

Subsequent models (Table 5) include an interaction between risk-taking attitudes (MV) and the treatment frames (IV) to test for the moderating role of risk taking on the relationship between the risk frames and immigration attitudes. There was no significant interaction between either of the risk-attitude scores (Table 5) while the tangible frame remained to have a significant negative effect.

Table 4. Regression Models 1-3.

DV: Immigration attitudes	(1)	(2)	(3)
	All treatments together	Treatment dummies	Dummies + Separate risk
	+ controls	+ controls	dimensions
Predictors:	<i>b/se</i>	<i>b/se</i>	<i>b/se</i>
Stimuli	.120***		
	(.045)		
Risk General	-.048	-.060	
	(.076)	(.077)	
Gender	.056	.065	.070

	(.104)	(.105)	(.105)
Education	.1***	.099***	.094***
	(.028)	(.027)	(.040)
Age	-.03	-.040	-.044
	(.040)	(.040)	(.040)
Nationality control	.388	.370	.311
	(.260)	(.260)	(.267)
Voting control	.182**	.174**	.177**
	(.078)	(.079)	(.079)
Political interest control	.0135	.007	.013
	(.048)	(.048)	(.048)
Political orientation control	.503***	.505***	.507***
	(.098)	(.098)	(.099)
Tangible frame		-.422***	-.444***
		(.142)	(.143)
Abstract frame		-.148	-.152
		(.146)	(.147)
General frame		-.220	-.245*
		(.142)	(.145)
Risk Financial dimension			-.060
			(.074)
Risk Recreational dim.			-.050
			(.068)
Risk Health dim.			-.054
			(.077)
Risk Ethical dim.			.121
			(.075)
Risk Social dim.			-.026
			(.080)
_cons	-.247	-.846	-.852
	(.546)	(.532)	(.548)
Observations	202	202	202
R-squared	.268	.276	.289

Note. Standard errors are in parentheses, *** $p < .01$, ** $p < .05$, * $p < .1$.

Table 5. Interaction Models 4–6.

DV: Immigration attitude	(4)	(5)	(6)
	Tangible int.	Abstract int.	General int.
Predictors	<i>b/se</i>	<i>b/se</i>	<i>b/se</i>
Risk general (centered)	–.058 (.086)	.032 (.083)	–.123 (.090)
Tangible frame	–.423*** (.142)	–.424*** (.142)	–.418*** (.141)
Abstract frame	–.149 (.147)	–.127 (–.148)	–.130 (.146)
General frame	–.220 (.142)	–.223 (.142)	–.209 (.142)
Tangible*risk general	.005 (.166)		
Abstract*risk general		–.149 (.175)	
General* risk general			.198 (.141)
Gender	.065 (.105)	.065 (.105)	.081 (.105)
Education	.099*** (.027)	.099*** (.027)	.103*** (.027)
Age	–.039 (.040)	–.038 (.040)	–.037 (.039)
Nationality	.370 (.262)	.371 (.261)	.380 (.261)
Voting	.175** (.079)	.174** (.079)	.174*** (.078)
Political interest	.007 (.048)	.005 (.048)	.005 (.047)
Political Orientation	.505*** (.048)	.505*** (.098)	.511*** (.098)
_cons	.631 (.521)	–.638 (.520)	–.551 (.552)
Observations	202	202	202
R-squared	.27	.27	.28

Note. Standard errors are in parentheses, *** $p < .01$, ** $p < .05$, * $p < .1$.

Discussion and Conclusion

This study aimed to complement research and literature on the link between media effects, personality traits, and immigration attitudes. Consistently with previous research, we show that tangible risk frames have a significant effect on immigration attitudes, while the same effect was not observed for abstract frames. This supports our first hypothesis that tangible risk framing of immigration has a stronger effect on immigration attitudes than abstract risk framing. In our multiple regression model, we found that on average, all risk frames together are associated with the dependent variable measuring anti-immigration attitudes. However, in a second model that examined the effect of each treatment variable separately, we could see that only text containing the tangible risk frames was significantly associated to immigration attitudes. Based on our findings, we can thus argue that there is a potential for media frames to impact concern on immigration, and that this potential further depends on which risk attribute—abstract or tangible—of a frame is highlighted. This confirms our first hypothesis (H1): Tangible risk framing of immigration will have a stronger effect on immigration attitudes than abstract risk framing. However, we did not find any significant results with regard to the moderating effects of risk attitudes. We thus have to reject our second hypothesis stating that negative framing effects on immigration attitudes are moderated by individual risk propensity.

In model 2 (Table 4), we observed that exclusively, the experimental group subjected to tangible issue frames—which are not statistically likely to be personally experienced by most people but are framed as having the potential to negatively impact a person’s community or well-being—had a negative effect on immigration attitudes. Tangible threats, like unobtrusive but tangible issues, are the ones that are unlikely to be experienced directly by most of the population yet perceived as having potential consequences for the population as a whole. Here, the strands of research share congruent findings in that unobtrusive but tangible issues in the media are likely to have a stronger effect on opinion formation than simply obtrusive issues and unobtrusive abstract issues (McLaren et al., 2018; Soroka, 2002, Zucker, 1978). Moreover, Boeynaems and colleagues (2021) show that some anti-immigration frames are more persuasive than others and that they are moderated by individual differences.

We hypothesized in this study that risk-averse individuals might be more prone to be affected by risk frames on immigration, yet our findings indicate that this trait has no effect on how the effect of uncertainty frames overall. Thus, our findings are on this level, inconclusive with previous research, wherein risk propensity has been linked to having a significant effect on immigration attitudes (Steenberg & Sizcek, 2017).

This could be because of several factors. In the first place, our design did not allow for implicit measures of risk propensity. One of the limitations of this study is about the operationalization of risk attitudes. Previous studies have tested measuring risk propensity with a questionnaire that might have led to a less-accurate self-evaluation of one’s own risk personality than implicit measures. Specifically, we used a psychometric scale based on Weber and colleagues’ (2002) domain-specific risk-attitude scale. Further, previous studies have also tested for risk-averse versus risk-taking behavior via implicit measures. Given online survey designs and because we did not perform the experiment in a laboratory setting, we have used explicit measures to test for risk-averse versus risk-taking behavior. In this case, the self-assessment scale

allowed for a straightforward operationalization, as all questionnaires included 1–7 answer possibilities. We designed our scale in such a way to increase reliability to the highest possible extent. According to Kam and Simas (2010), a considerable shortcoming in most studies in political science is that they use one single item rather than a scale to measure risk propensity. To increase reliability and capture domain-specific risk-propensity traits, we used a multi-item psychometric scale assessing risk attitudes in five content domains (as developed by Weber et al., 2002). This allows for better reliability as well as capturing domain-specific risk propensity. Finally, another possible reason for not finding any moderating effects of risk propensity could be that risk orientations have previously been linked to determining people's susceptibility to framing effects (Kam & Simas, 2010).

It is also somewhat surprising that the "general risk frame" and abstract risk frames had no significant effect on immigration attitudes in none of the models. In all treatments, immigration was portrayed as a potential major issue of security and designed to create feelings of uncertainty. Different strands of research on anti-immigration attitudes suggest that issues that can be classified as "symbolic" or abstract, such as the ones about national identity or conforming to values that are important factors—even if less impactful than tangible ones—when it comes to concern about an out-group (Vallejo-Martín et al., 2021).

A possible explanation for these findings could be because of temporality: Uncertainty on tangible issues such as housing, schooling, and infrastructure inherently conveys the feeling that these issues could have immediate consequences. In contrast, issues on national identity or cultural values are not only more unintelligible but also, by nature, imply a possible change that might happen over a much longer period. Perhaps, then, abstract issues and symbolic threats do have an effect over a longer period but are not perceived as posing an immediate personal or general risk. It would thus be interesting for further research to study the effects of these frames on risk over time.

In conclusion, our results speak to role of frame attributes in media effects as well as to literature on threat perception and immigration attitudes. Negative attitudes toward immigration have been linked to populist support (Steenbergen & Sisceck, 2017) and selective exposure to right-wing populist content online (Heiss & Matthes, 2020). Indeed, immigration is one of the most important matters on right-wing populist and far-right agenda. As mentioned above, the rise of social media amplifies these parties' discourses on immigration (DeRosa, 2021; Heiss & Matthes, 2020). As Lauren McLaren (2010) pointed out, fears related to immigration are likely to lead citizens to contemplate who is to blame for the situation and ultimately to distrust governing institutions and politicians (McLaren, 2010, p. 7). The consequences of such dissatisfaction, for instance, may lead to increased voter support for populist and radical challenger parties from the left and the right (Foa & Mounk, 2017, 2018). Beyond the claim to "re-establish the power of the people," the latter also comes with opposition to immigration, European integration, and cultural liberalism (Dennison & Zerka, 2019). Numerous studies have confirmed that perceived threat and discriminatory behaviors toward immigrants can be reduced by promoting natives' interactions and contact with immigrants (McLaren, 2003; Salvati et al., 2020). Panichella and Ambrosini (2018) argue that mass media represent "abstract" contact with immigration, which lacks actual interactions has the opposing effect of real contact with immigrants. Future research could investigate whether online interactions with immigrants (for

example, on social media) might have a positive effect on immigration attitudes and whether these effects mediate or moderate the ones of negative frames.

References

- Anderson, J., & Ferguson, R. (2018). Demographic and ideological correlates of negative attitudes towards asylum seekers: A meta-analytic review. *Australian Journal of Psychology, 70*(1), 18–29. doi:10.1111/ajpy.12162
- Barisione, M. (2020). When ethnic prejudice is political: An experiment in beliefs and hostility toward immigrant out-groups in Italy. *Italian Political Science Review/Rivista Italiana di Scienza Politica, 50*(2), 213–234. doi:10.1017/ipo.2019.28
- Beutin, R., Canoy, M., Horvath, A., & Hubert, A. (2007). Reassessing the link between public perception and migration policy. *European Journal of Migration & Law, 9*, 389–418. doi:10.1163/138836407X250472
- Berry, M., Garcia-Blanco, I., & Moore, K. (2016). *Press coverage of the refugee and migrant crisis in the EU: A content analysis of five European countries*. UNHCR. Retrieved from <http://orca.cf.ac.uk/id/eprint/87078>
- Bos, L., Lecheler, S., Mewafi, M., & Vliegenthart, R. (2016). It's the frame that matters: Immigrant integration and media framing effects in the Netherlands. *International Journal of Intercultural Relations, 55*, 97–108. doi:10.1016/j.ijintrel.2016.10.002
- Boeynaems, A., Burgers, C., & Konijn, E. A. (2021). When figurative frames decrease political persuasion: The case of right-wing anti-immigration rhetoric. *Discourse Processes, 58*(3), 193–212. doi:10.1080/0163853X.2020.1851121
- Caricati, L. (2018). Perceived threat mediates the relationship between national identification and support for immigrant exclusion: A cross-national test of Intergroup Threat Theory. *International Journal of Intercultural Relations, 66*, 41–51. doi:10.1016/j.ijintrel.2018.06.005
- Caricati, L., Mancini, T., & Marletta, G. (2017). The role of ingroup threat and conservative ideologies on prejudice against immigrants in two samples of Italian adults. *The Journal of Social Psychology, 157*(1), 86–97. doi:10.1080/00224545.2016.1176552
- Chong, D., & Druckman, J. (2007). Framing public opinion in competitive democracies. *American Political Science Review, 101*(4), 637–655. doi:10.1017/S0003055407070554

- Citrin, J., Green, D. P., Muste, C., & Wong, C. (1997). Public opinion toward immigration reform: The role of economic motivations. *The Journal of Politics*, 59(3), 858–881. doi:10.2307/2998640
- DeBono, D., (2019). Plastic hospitality: The empty signifier at the EU's Mediterranean border. *Migration Studies*, 7(3), 340–361. <https://doi.org/10.1093/migration/mnz015>
- De Vreese, C., & Boomgaarden, H. (2003). Valenced news frames and public support for the EU. *Communications*, 28(4), 361–381. doi:10.1515/comm.2003.024
- De Vreese, C. H., & Lecheler, S. (2012). News framing research: An overview and new development. In A. H. A. Semetko & M. Scamell (Eds.), *The SAGE handbook of political communication* (pp. 292–306). London, UK: SAGE Publications.
- De Rosa, A. S., Bocci, E., Bonito, M., & Salvati, M. (2021). Twitter as social media arena for polarised social representations about the (im) migration: The controversial discourse in the Italian and international political frame. *Migration Studies*, 9(3), 1167–1194. <https://doi.org/10.1093/migration/mnab001>
- Dennison, J., & Drazanova, L. (2018). Public attitudes on migration: Rethinking how people perceive migration: An analysis of existing opinion polls in the Euro-Mediterranean region (Technical report). European University Institute. Retrieved from <https://cadmus.eui.eu//handle/1814/62348>
- Dennison, S., & Zerka, P. (2019). The 2019 European election: How anti-Europeans plan to wreck Europe and what can be done to stop it. *European Council on Foreign Relations*. Retrieved from https://ecfr.eu/special/the_2019_european_election/
- Douglas, M. (1992). *Risk and blame: Essays in cultural theory*. London, UK: Routledge.
- Druckman, J. N. (2001). On the limits of framing effects: Who can frame? *Journal of Politics*, 63(4), 1041–1066. doi:10.1111/0022-3816.00100
- Druckman, J. N., & McDermott, R. (2008). Emotion and the framing of risky choice. *Political Behaviour*, 30, 297–321. doi:10.1007/s11109-008-9056-y
- Eberl, J. M., Meltzer, C. E., Heidenreich, T., Herrero, B., Theorin, N., Lind, F., ... Strömbäck, J. (2018). The European media discourse on immigration and its effects: A literature review. *Annals of the International Communication Association*, 42(3), 207–223. doi:10.1080/23808985.2018.1497452
- Engesser, S., Ernst, N., Esser, F., & Büchel, F. (2017). Populism and social media: How politicians spread a fragmented ideology. *Information, Communication & Society*, 20(8), 1109–1126. doi:10.1080/1369118X.2016.1207697

- Esses, V. M., Medianu, S., & Lawson, A. S. (2013). Uncertainty, threat, and the role of the media in promoting the dehumanization of immigrants and refugees. *Journal of Social Issues, 69*(3), 518–536. doi:10.1111/josi.12027
- Espenshade, T. J., & Hempstead, K. (1996). Contemporary american attitudes toward U.S. immigration. *International Migration Review, 30*(2), 535–570. <https://doi.org/10.1177/019791839603000207>
- Federico, C. M., Hunt, C. V., & Fisher, E. L. (2013). Uncertainty and status-based asymmetries in the distinction between the “good” us and the “bad” them: Evidence that group status strengthens the relationship between the need for cognitive closure and extremity in intergroup differentiation. *Journal of Social Issues, 69*(3), 473–494. doi:10.1111/josi.12025
- Foa, R. S., & Mounk, Y. (2017). The signs of deconsolidation. *Journal of Democracy, 28*(1), 5–15. doi:10.1353/jod.2017.0000
- Garland, D. (2008). On the concept of moral panic. *Crime, Media, Culture, 4*(1), 9–30. doi:10.1177/1741659007087270
- Gottlob, A., & Boomgaarden, H. (2019). The 2015 refugee crisis, uncertainty and the media: Representations of refugees, asylum seekers and immigrants in Austrian and French media. *Communications: The European Journal of Communication Research, 45*(s1), 841–863. doi:10.1515/commun-2019-2077
- Greussing, E., & Boomgaarden, H. G. (2017). Shifting the refugee narrative? An automated frame analysis of Europe’s 2015 refugee crisis. *Journal of Ethnic and Migration Studies, 43*(11), 1749–1774. <https://doi.org/10.1080/1369183X.2017.1282813>
- Hameleers, M. (2021). Prospect theory in times of a pandemic: The effects of gain versus loss framing on risky choices and emotional responses during the 2020 Coronavirus outbreak—evidence from the U.S. and the Netherlands. *Mass Communication and Society, 24*(4), 479–499. doi:10.1080/15205436.2020.1870144
- Harrison, J. D., Young, J. M., Butow, P., Salkeld, G., & Solomon, M. J. (2005). Is it worth the risk? A systematic review of instruments that measure risk propensity for use in the health setting. *Social Science & Medicine, 60*(6), 1385–1396. doi:10.1016/j.socscimed.2004.07.006
- Gründl, J., & Aichholzer, J. (2020). Support for the populist radical right: Between uncertainty avoidance and risky choice. *Political Psychology, 41*(4), 641–659. doi:10.1111/pops.12643
- Heiss, R., & Matthes, J. (2020). Stuck in a nativist spiral: Content, selection, and effects of right-wing populists’ communication on Facebook. *Political Communication, 37*(3), 303–328. doi:10.1080/10584609.2019.1661890

- Heath, A., Schmidt, P., Green, E. G., Ramos, A., Davidov, E., & Ford, R. (2014). Attitudes towards immigration and their antecedents (Research report). London, UK: European Social Survey. doi:10.5167/uzh-93716
- Igartua, J. J., & Cheng, L. (2009). Moderating effect of group cue while processing news on immigration: Is the framing effect a heuristic process? *Journal of Communication*, 59(4), 726–749. doi:10.1111/j.1460-2466.2009.01454.x
- Plecitá, K., Lund, C., Andersen, H., Shamshiri-Petersen, D., Anderson, J., Anderson, M., . . . Hout, M. (2015). *International Social Survey Programme: National Identity III-ISSP 2013. GESIS data archive, Cologne. ZA5950 Data file Version 2.0.0*. <https://doi.org/10.4232/1.12312>
- Jost, J. T., Glaser, J., Kruglanski, A. W., & Sulloway, F. J. (2003). Political conservatism as motivated social cognition. *Psychological Bulletin*, 129(3), 339–375. doi:10.1037/0033-2909.129.3.339
- Kahneman, D., & Tversky, A. (1979). Prospect theory: An analysis of decision under risk. *Econometrica*, 47(2), 263–291. <https://doi.org/10.2307/1914185>
- Kam, C. D., & Simas, E. N. (2010). Risk orientations and policy frames. *The Journal of Politics*, 72(2), 381–396. doi:10.1017/S0022381609990806
- Lecheler, S., & De Vreese, C. H. (2019). *News framing effects: Theory and practice*. Oxfordshire, UK: Taylor & Francis. doi:10.4324/9781315208077
- Lecheler, S., Bos, L., & Vliegenthart, R. (2015). The mediating role of emotions: News framing effects on opinions about immigration. *Journalism & Mass Communication Quarterly*, 92(4), 812–838. doi:10.1177/1077699015596338
- Lecheler, S., Matthes, J., & Boomgaarden, H. (2019). Setting the agenda for research on media and migration: State-of-the-art and directions for future research. *Mass Communication and Society*, 22(6), 691–707. doi:10.1080/15205436.2019.1688059
- Markaki, Y., & Longhi, S. (2013). What determines attitudes to immigration in European countries? An analysis at the regional level. *Migration Studies*, 1(3), 311–337. doi:10.1093/migration/mnt015
- McLaren, L. M. (2003). Anti-immigrant prejudice in Europe: Contact, threat perception, and preferences for the exclusion of migrants. *Social Forces*, 81(3), 909–936. <https://doi.org/10.1353/sof.2003.0038>
- McLaren, L. M. (2010). *Cause for concern? The impact of immigration on political trust*. London, UK: Policy Network.

- McLaren, L., Boomgaarden, H., & Vliegenthart, R. (2018). News coverage and public concern about immigration in Britain. *International Journal of Public Opinion Research*, 30(2), 173–193. doi:10.1093/ijpor/edw033
- Meltzer, C. E., Eberl, J. M., Theorin, N., Lind, F., Schemer, C., Boomgaarden, H. G., . . . Heidenreich, T. (2018). *Perceptions of the impact of immigration and attitudes towards free movement within the EU: A cross-national study* (REMINDER Project working paper). Retrieved from https://scholar.google.com/scholar?hl=en&as_sdt=0%2C5&q=Meltzer%2C+C.+E.%2C+Eberl%2C+J.+M.%2C+Theorin%2C+N.%2C+Lind%2C+F.%2C+Schemer%2C+C.%2C+Boomgaarden%2C+H.+G.%2C+...+%26+Heidenreich%2C+T.+%282018%29.+Perceptions+of+the+impact+of+immigration+and+attitudes+towards+free+movement+within+the+EU%3A+A+cross-national+study.+URL%3A+https%3A%2F%2Fec.europa.eu%2Fresearch%2Fparticipants%2Fdocuments%2FdownloadPublic%3FdocumentIds%3D080166e5ba453a74%26appId%3DPPGMS&btnG
- Müller, P., Schemer, C., Wettstein, M., Schulz, A., Wirz, D. S., Engesser, S., & Wirth, W. (2017). The polarizing impact of news coverage on populist attitudes in the public. *Journal of Communication*, 67(6), 968–992. <https://doi.org/10.1111/jcom.12337>
- Nabi, R. L., Walter, N., Oshidary, N., Endacott, C. G., Love-Nichols, J., Lew, Z. J., & Aune, A. (2020). Can emotions capture the elusive gain-loss framing effect? A meta-analysis. *Communication Research*, 47(8), 1107–1130. doi:10.1177/0093650219861256
- Panichella, N., & Ambrosini, M. (2018). Between fears, contacts and family dynamics: The anti-immigrant attitudes in Italy. *Journal of International Migration and Integration*, 19(2), 391–411. doi:10.1007/s12134-018-0536-6
- Pellegrini, V., De Cristofaro, V., Salvati, M., Giacomantonio, M., & Leone, L. (2021). Social exclusion and anti-immigration attitudes in Europe: The mediating role of interpersonal trust. *Social Indicators Research*, 155(2), 697–724. doi:10.1007/s11205-021-02618-6
- Perry Hinton, D., Hinton, P. R., McMurray, I., & Brownlow, C. (2004). *SPSS explained*. London, UK: Routledge.
- Piedmont R. L. (2014). Inter-item correlations. In A. C. Michalos (Ed.), *Encyclopedia of quality of life and well-being research* (pp. 3303–3304). Dordrecht, The Netherlands: Springer. <https://doi.org/10.1007/978-94-007-0753-5>
- Rohrman, B. (2008, June). Risk perception, risk attitude, risk communication, risk management: A conceptual appraisal. *Presented at the 15th International Emergency Management Society (TIEMS)* (pp. 1–10). Prague, Czech Republic: TIEMS Annual Conference. Retrieved from <https://tiems.info/index.php/our-archives/2008-reports>

- Salvati, M., Carone, N., De Cristofaro, V., Giacomantonio, M., & Baiocco, R. (2020). Support for discriminatory behaviours against immigrants in Italy: Perceived threat and positive beliefs mediate the effect of contact with immigrants. *International Journal of Psychology, 55*(4), 543–552. doi:10.1002/ijop.12638
- Scheufele, D. A. (2000). Agenda-setting, priming, and framing revisited: Another look at cognitive effects of political communication. *Mass Communication & Society, 3*(2–3), 297–316. doi:10.1207/S15327825MCS0323_07
- Schlueter, E., & Davidov, E. (2013). Contextual sources of perceived group threat: Negative immigration-related news reports, immigrant group size and their interaction, Spain 1996–2007. *European Sociological Review, 29*(2), 179–191. <https://doi.org/10.1093/esr/jcr054+>
- Schuck, A. R. T., & De Vreese, C. H. (2006). Between risk and opportunity: News framing and its effects on public support for EU enlargement. *European Journal of Communication, 21*(1), 5–32. doi:10.1177/0267323106060987
- Sides, J., & Citrin, J. (2007). European opinion about immigration: The role of identities, interests and information. *British Journal of Political Science, 37*(3), 477–504. doi:10.1017/S0007123407000257
- Sniderman, P. M., Hagendoorn, L., & Prior, M. (2004). Predisposing factors and situational triggers: Exclusionary reactions to immigrant minorities. *American Political Science Review, 98*(1), 35–49. doi:10.1017/s000305540400098x
- Soroka, S. N. (2002). Issue attributes and agenda-setting by media, the public, and policymakers in Canada. *International Journal of Public Opinion Research, 14*(3), 264–285. doi:10.1093/ijpor/14.3.264
- Standard Eurobarometer 91. (2019). Public opinion in the European Union. *European Commission, Directorate-General for Communication*. Retrieved from <https://ec.europa.eu/commfrontoffice/publicopinion/index.cfm/survey/getsurveydetail/instruments/standard/surveyky/2253>
- Stephan, W. G., & Stephan, C. W. (2017). Intergroup threat theory. In Y. Y. Kim (Ed.), *The international encyclopedia of intercultural communication*. Hoboken, NJ: John Wiley & Sons. doi:10.1002/9781118783665.ieicc0162
- Steenbergen, M. R., & Siczek, T. (2017). Better the devil you know? Risk-taking, globalization and populism in Great Britain. *European Union Politics, 18*(1), 119–136. doi:10.1177/1465116516681858

Tomz, M., & Van Houweling, R. P. (2009). The electoral implications of candidate ambiguity. *American Political Science Review*, 103(1), 83–98. doi:10.1017/S0003055409090066

Vacondio, M., Priolo, G., Dickert, S., & Bonini, N. (2021). Worry, perceived threat and media communication as predictors of self-protective behaviors during the COVID-19 outbreak in Europe. *Frontiers in Psychology*, 12, 231–240. doi:10.3389/fpsyg.2021.577992

Vallejo-Martín, M., Canto, J. M., San Martín García, J. E., & Perles Novas, F. (2021). Prejudice towards immigrants: The importance of social context, ideological postulates, and perception of outgroup threat. *Sustainability*, 13(9), 1–14. doi:10.3390/su13094993

Ward, C., & Masgoret, A. M. (2008). Attitudes toward immigrants, immigration, and multiculturalism in New Zealand: A social psychological analysis. *International Migration Review*, 42(1), 227–248. doi:10.1111/j.1747-7379.2007.00119.x

Weber, E. U., Blais, A. R., & Betz, N. E. (2002). A domain-specific risk-attitude scale: Measuring risk perceptions and risk behaviors. *Journal of Behavioral Decision Making*, 15(4), 263–290. doi:10.1002/bdm.414

Zucker, H. G. (1978). The variable nature of news media influence. *Annals of the International Communication Association*, 2(1), 225–240.