

**Tone matters: Effects of exposure to positive and negative tone of television news stories on anti-immigrant attitudes and carry-over effects to uninvolved immigrant groups**

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**Abstract**

The current experimental study ( $N = 546$ ) compares the effect of exposure to a television news story with a positive and negative tone on anti-immigrant attitudes and carry-over effects to uninvolved immigrant groups. Results reveal that exposure to a *negatively* valenced news story about North African immigrants increased negative attitudes toward that same group. Importantly, however, we find carry-over effects of exposure to a *positively* valenced news story about North African immigrants to attitudes toward uninvolved immigrant groups. Together these findings show that the effect of exposure to television news tone has more ramifications than previously thought, and that the impact of exposure to a positive or negative news story differs for direct effects vis-à-vis carry-over effects.

*Keywords:* experiments, television news, anti-immigration attitudes, media tone, threat perceptions, carry-over effect.

## **Tone matters: Effects of exposure to positive and negative tone of television news stories on anti-immigrant attitudes and carry-over effects to uninvolved immigrant groups**

Scholarship in political communication highlights the importance of news tone; the general valence of news, in shaping public opinion (Balmas & Sheaffer, 2010; Hopmann, Vliegenthart, De Vreese, & Albaek, 2010; Kim & McCombs, 2007; Sniderman & Theriault, 2004; Young & Soroka, 2012). Similarly, the literature attributes a central role to the impact of tone in news stories about immigrants and is expected to guide individuals' anti-immigrant attitudes. In a news environment dominated by negative messages about immigrants, unidirectional information is omnipresent and easily accessible (Zaller, 1992) and gives rise to hostile attitudes in society (Boomgaarden & Vliegenthart, 2009; Schemer, 2014). Following theory-building on news tone, studies empirically show that exposure to a valenced news story about an outgroup provokes attitudinal consequences in the dominant direction of the news story (Balmas & Sheaffer, 2010; Boomgaarden & Vliegenthart, 2009; Schemer, 2014; Van Klingereren, Boomgaarden, Vliegenthart, & De Vreese, 2015). So far, however, two relevant questions on to the impact of news tone remain largely unanswered.

First, the asymmetry bias theory (Ju, 2008; Soroka, 2006; Soroka & McAdams, 2015) asserts that negative information, due to a variety of social psychological processes, has a more profound impact on attitudes than positive information. However, this assumption has usually been advanced in terms of the economy or hard politics, but has not often been put to a strict empirical test when assessing anti-immigrant attitudes. The bulk of prior studies have generally only assessed the impact of negative news stories (Mastro, Lapinski, Kopacz, & Behm-Morawitz, 2009; Schlueter & Davidov, 2013), or have relied on cross-sectional or aggregate-level panel data (Schemer, 2014; Van Klingereren et al., 2015), which—while self-evidently insightful—do not permit for conclusive causal inferences or are less well-suited to disentangle the distinct influence of exposure to positively and negatively-valenced news stories. Hence,

the current experiment is designed to compare the effects of exposure to positively and negatively valenced news stories on anti-immigrant attitudes.

Second, an additional strand in the literature which has remained underexplored while assessing news media, are the potential carry-over effects of news tone featuring one outgroup to other, uninvolved outgroups (Bouman, van Zomeren, & Otten, 2014, 2015). The vast majority of prior media studies has primarily assessed the impact of news tone on attitudes toward one outgroup (i.e. the group that was depicted in the news), thereby overlooking that positively or negatively valenced messages about one specific outgroup may also have consequences for the evaluation of outgroups which were not featured in the original news story. Indeed, this is already a well-documented finding in social psychology where studies have demonstrated that the prejudice-reducing effects of contact with one specific outgroup generalized to uninvolved outgroups as well (Pettigrew, 2009)—especially among outgroups that are perceived as similar with regard to ethnicity or social status (Harwood, Paolini, Joyce, Rubin, & Arroyo, 2011; Hindriks, Verkuyten, & Coenders, 2014; Tausch et al., 2010). Exposure to outgroups in news media can be considered an indirect, parasocial form of contact (Schiappa, Gregg, & Hewes, 2005). It has been shown that individuals rely heavily on news portrayals of outgroups especially by lack of direct contact experiences (Holtzman, 2004), but the question remains whether similar processes are at work for the formation of anti-immigrant attitudes following exposure to valenced news.

To fill these two voids in the literature, the current study, relying on evidence from Flanders (i.e. the Dutch-speaking Northern region of Belgium), aims to contribute to the understanding of the impact of the tone of news stories. More specifically, we examine the effects of exposure to positive and negative tone in television news stories featuring individuals from North African descent who have immigrated to Flanders and who are now the most salient immigrant group (further abbreviated to North African immigrants). Herewith, we conduct an

experiment ( $N = 546$ ) to examine the impact of exposure to positively or negatively valenced news on attitudes toward North African immigrants and carry-over effects to other uninvolved immigrant groups. To test potential carry-over effects of news tone, we included the three most salient immigrant groups in the Flemish context--apart from North African immigrants--namely Eastern European, Sub-Saharan African and Middle Eastern immigrants.

### **The role of news tone**

A substantial body of literature in political communication emphasizes the crucial role of news tone in the formation of social and political attitudes (Balmas & Sheaffer, 2010; Hopmann et al., 2010; Kim & McCombs, 2007; Sniderman & Theriault, 2004; Young & Soroka, 2012). Today, a well-documented finding in Western-European democracies is that public opinion toward immigrants is heavily negatively biased (Ceobanu & Escandell, 2010). Perceptions of intergroup threat, i.e. the perception that the presence of immigrant groups poses a threat to the cultural, economic or physical well-being of one's own ingroup, are widespread in television news (van der Linden & Jacobs, 2016). It is important to note that even though perceptions of immigrants' clashing cultural values, (lack of) economic potential, or criminal activity may not be accurate, these perceptions of threat do have real consequences for intergroup relations (Stephan, Ybarra, & Rios Morrison, 2009).

News media have, amongst other relevant factors, been theorized as one of the main determinants of intergroup relations (Atwell Seate & Mastro, 2016). Particularly news tone, defined as the 'positive or negative valence' of news coverage, is considered relevant in this regard (Bleich et al., 2015). Tone of news stories is considered a vital aspect of news, because it provides an evaluative component of messages and information (Sheaffer, 2007). This relates closely to Zaller's public opinion model (1992) which asserts that uni-directional information flows, i.e. heavily positively or negatively biased news, steers the direction of public opinion.

News, in this model, is conceptualized as an information flow that can be biased in a specific direction for a given issue or, in the set-up of this study, group. For example, if the news environment on a specific immigrant group is predominantly negative, this is considered a one-sided information flow.

Zaller's (1992) Receive-Accept-Sample model (RAS) describes how exposure to biased information can guide dynamics in attitude formation (Van Klingeren et al., 2015; Zaller, 1992). First, individuals receive information about a specific issue or group via news exposure and subsequently either disregard or accept these messages by sampling from the accepted information. In this way, news content offers the basis for individuals to sample their information in the process of attitude formation. Following this line of reasoning, individuals' attitudes about immigrants are the product of, among other things, various evaluative considerations promoted in news content. Hence, systematical bias in news content about immigrants and immigration conditions the importance individuals attach to certain evaluative considerations, consequently impacting their attitudes. Therefore, if immigrants tend to be predominantly depicted in a negative fashion, these negative narratives are readily available in citizens' minds (Zaller, 1992), which has the potential to reinforce or activate negative attitudes toward immigrants in society (Boomgaarden and Vliegenthart, 2009; Schemer, 2014). Similarly, the reverse is anticipated to apply for news stories about immigrants with a positive tone.

While the argument about the importance of the tone of news stories elaborated above may strike as simple logic, this assumption is not as straightforward as it seems when assessing the role of news in attitude formation toward immigrants. Prior results have been mixed in this regard, as some studies have suggested that news tone does not matter, instead emphasizing that mere exposure to news featuring immigrants has the possibility to foster anti-immigrant attitudes, irrespective of the tone (Hopkins, Tran, & Williamson, 2014; Vliegenthart &

Boomgaarden, 2007). Furthermore, most studies have focused on negative tone, whereas the impact of positive tone remains underexplored. Moreover, studies simultaneously testing the consequences of both negative and positive tone of news about immigrants in an experimental manner are scarce as past research efforts have been primarily aimed at investigating the impact of negative news at the aggregate level or via cross-sectional or panel studies (Schlueter & Davidov, 2013; but see Van Klingeren et al., 2015; Schemer, 2014). Adopting an experimental approach, we aim to complement these prior studies by examining more closely the causal effects of exposure to a news item featuring North African immigrants with a positive or negative tone. In line with the majority of prior studies emphasizing the importance of news tone, we formulate the following hypothesis:

‘Direct effects of negative and positive news tone’ hypothesis (H1):

H1a: Exposure to a news story about North African immigrants with a negative tone increases negative attitudes toward North African immigrants.

H1b: Exposure to a news story about North African immigrants with a positive tone decreases negative attitudes toward North African immigrants.

### **Positive versus negative news tone**

A nuance in the argument about the importance of news tone is the asymmetry bias theory advanced by Soroka (2006), which posits that individuals are more susceptible to negative news than positive news. This relates to the so-called negativity bias that refers to the well-documented phenomenon that negative news tends to be more widespread than positive news. News value theory states that negativity is a key criterion influencing newsworthiness (Galtung & Ruge, 1965; Harcup & O’Neill, 2001). Studies on immigrant portrayals have found that news content tends to be dominantly negative in nature, focusing on threats (Atwell Seate & Mastro, 2016; van der Linden & Jacobs, 2016). Research, largely based upon accounts of

economic news, has suggested that a negatively valenced piece of information is perceived more attractive, important and newsworthy than positively valenced news (Ju, 2008; Sherif & Sherif, 1967), even when containing identical information (Ju, 2008; Soroka & McAdams, 2015; Soroka, 2006; Trussler & Soroka, 2014). The basic premise is that individuals tend to be more responsive to negative news. Two psychological processes are mainly held responsible for this phenomenon (overview in Soroka, 2006). First, negative news may be more salient and persuasive as this type of information typically is more 'risky' or 'dangerous' in nature, capturing human attention and alerting primordial survival skills (Ju, 2008; Lang, Bradley, & Cuthbert, 1997). Second, prospect theory states that individuals will more strongly respond to losses than gains (Kahneman & Tversky, 1979; Schuck & De Vreese, 2009). By consequence, individuals should be more easily triggered by negative messages, focusing on threats and problems, than by positive messages about immigrants. The current study aims to address this question by disentangling the relative impact of exposure to positive and negative news stories about immigrants on anti-immigrant attitudes. Therefore, H2 reads as follows:

'Asymmetry bias for direct effects of news tone' hypothesis (H2): Exposure to a news story about North African immigrants with a negative tone has a larger impact on attitudes toward North African immigrants compared to a news story with a positive tone.

### **Carry-over effects of news tone**

A recent finding in literature on attitudinal effects of news media, but an established phenomenon in intergroup contact research is the secondary transfer effect (STE), which is defined as the extent to which contact with a member of a primary outgroup may generalize to members of a secondary outgroup not involved in the original contact situation (Pettigrew, 2009). Hence, the secondary transfer effect shows that attitudes based on intergroup experiences with one outgroup generalize to attitudes toward uninvolved outgroups as well, which has received support in various contexts (Bowman & Griffin, 2012; Brylka, Jasinskaja-

Lahti, & Mähönen, 2016; Harwood et al., 2011; Lolliot et al., 2012; Pettigrew, 2009; Schmid et al., 2012; Schmid, Hewstone, & Tausch, 2014; Tausch et al., 2010; Van Laar, Levin, Sinclair, & Sidanius, 2005). Moreover, STEs have been particularly well-established for secondary outgroups which are perceived similar to the primary outgroup one entered into contact with. The underlying explanation for this finding is that outgroups are perceived to greatly converge in terms of their outgroup characteristics or attributed features, rendering these type of carry-over effects more likely (Harwood et al., 2011; Hindriks et al., 2014; Tausch et al., 2010).

Two recent studies by Bouman, Van Zomeren and Otten (2014, 2015) suggest that similar STE processes are also relevant for the impact of news media messages on attitudes. News media are one of the chief sources for individuals to gather information about immigrants, especially by lack of direct contact experiences with immigrant groups (Fujioka, 1999; Graves, 1999). The parasocial contact hypothesis (Schiappa et al., 2005) asserts that exposure to news about outgroups may function as a substitute or extension of real-world contact experiences. Hence, it is only a recent notion that exposure to a negatively or positively-valenced news story on one outgroup may affect attitudes toward outgroups which were not featured in the news story. Bouman et al. (2014, 2015) have found experimental evidence that exposure to a newspaper story involving a distant threat (i.e. the consequences of Turkey's supposedly weak economy and diverging cultural values for the Netherlands if Turkey would be admitted to the European Union, or that Greece posed a threat to the European and Dutch economy during the economic crisis) spreads to attitudes toward immigrant groups in the domestic context. To the best of our knowledge, however, there is no research that has investigated the extent to which exposure to both positive and negative tone in television news about a specific outgroup affects attitudes toward the depicted outgroup as well as other outgroups in a given society. In sum, whereas the STE literature as described in intergroup contact research has focused on the generalization of *decreased* negative attitudes toward uninvolved outgroups, Bouman et al.



(2014, 2015) have focused on STEs of *increased* negative attitudes toward uninvolved outgroups. Notwithstanding their contributions, it is not clear whether the same patterns are at play for both positive and negative tone in news and which tone is prevalent for direct effects vis-à-vis carry-over effects for negative intergroup attitudes. Following previous literature, we make the following predictions:

‘Carry-over effects of negative and positive news tone’ hypothesis (H3):

H3a: exposure to a news story about North African immigrants with a negative tone will increase negative attitudes toward uninvolved immigrant groups.

H3b: exposure to a news story about North African immigrants with a positive tone will decrease negative attitudes toward uninvolved immigrant groups.

Traditionally, prior studies assessing the STE have tested positive contact effects, while recently studies have expanded insights by considering carry-over effects of negative contact experiences as well. In this regard, Shook, Fazio, & Richard Eiser (2007) have stressed that the impact of negative experiences should have the strongest transfer potential, due to negative information being weighted more heavily than positive information. This is also in line with the asymmetry bias theory as elaborated above (Soroka, 2006). However, the relative strength of carry-over effects of exposure to news stories with a positive and negative tone has attracted almost no scholarly attention so far. Hence, building on these prior insights emphasizing the primacy of negative information, we therefore formulate our final hypothesis:

‘Asymmetry bias for carry-over effects of news tone’ hypothesis (H4): Exposure to a news story about North African immigrants with a negative tone has a larger impact on attitudes toward uninvolved immigrants compared to a news story with a positive tone.

## **Method**

### **Context**

To shed light on the impact of news tone on attitudes toward North African immigrants and carry-over effects to uninvolved immigrant groups, we use evidence from Flanders. Four immigrant groups are particularly salient in Flanders' current ethnic composition, namely individuals of North African, Eastern European, Middle Eastern and Sub-Saharan African descent. Each of these groups have their own specific immigration background, and their presence in the Flemish society is the product of distinct processes, such as colonization and struggle for independence (Sub-Saharan African immigrants), labor migration and family reunification (North African immigrants), EU enlargement (Eastern European immigrants), and political instability and conflict (Middle Eastern immigrants) (Martiniello, Rea, Timmerman, & Wets, 2010; OECD, 2015). Overall, North Africans present the largest and most polarizing group in Flanders.

### **Participants and design**

546 participants took part in the experimental study (384 men, 162 women;  $M_{\text{age}} = 52.81$ ,  $SD_{\text{age}} = 14.99$ ). Participants were recruited via the M<sup>2</sup>P internet panel of the University of Antwerp that consists of respondents previously recruited to participate in an elections survey. Using random assignment, participants were allocated to an independent measures design with two experimental conditions (i.e. a television news item reporting on 50 years of immigration from North Africa with a positive or a negative tone) and a control condition (i.e. a news item on homeopathy).

## **Procedure**

The respondents participated via an online link accompanied with a cover story about the functioning of the human memory. The introduction mentioned: “welcome to this study about the workings of the human memory. You will be asked to watch two news stories from VRT News about different topics. We kindly ask you to pay attention to the news stories, as afterwards we will ask you a few questions about the content.” After the demographic variables, participants were presented with a television news item that contained either the positive or negative tone manipulation or a control condition. The manipulations were constructed from real high-quality video footage from prime-time newscasts, which was edited in a professional studio to improve the news story’s realism. Both experimental conditions featured news items that reported on a combination of economic, cultural and religious issues regarding North African immigrants in Flanders. An existing and recent news intro by a well-known Belgian news anchor entitled “50 years of immigration from North Africa” was used. This intro concerned the arrival of North African workers in Belgium and reported on recent numbers mentioning that now 400,000 individuals from Moroccan descent are living in Belgium. After the intro, general footage of ethnic diversity on the streets in Belgium was shown with a voice-over stating that North African immigration to Belgium is still increasing and has even reached a historical peak. The voice-over was recorded by an experienced journalist who works for the newscast of which the footage was used and is thus a familiar voice for most participants. The two news items were equal in length and all audiovisual content was kept identical over the two conditions, except for one infographic (i.e. identical to one which is used in real newscasts) which contained the manipulation. Depending on the condition, the table contained either multiple positively or negatively valenced statements on the state of affairs regarding North African immigration to Flanders based on an ostensibly real research report supposedly commissioned by the regional Flemish government. For the

negative tone condition, the statements were about cultural (“Due to cultural and religious differences a large majority of North African immigrants experience difficulties with their integration in Flanders.”), economic (“Because of high unemployment levels a large majority is dependent upon financial support by the government, which puts the welfare of Flanders under pressure. Moreover, the over-supply of cheap workers leads to a decrease of salaries, and to an increase of competition on the labor market”), and criminal issues (“The presence of North African immigrants is accompanied by an increase in crime levels.”). For the positive tone condition, the statements were about cultural (“The integration of North African immigrants in Flanders is going well; North African immigrants increasingly identify with Flanders and they are familiar with the language. North African immigrants regularly enter into contact with Flemings and maintain close friendship ties.”), economic (“Migration from North Africa also yields economic advantages and contributes to welfare in Flanders.”) and general benefits and advantages of North African immigration (“The presence of North African immigrants is found to be an enrichment and expectations are that this successful trend will be continued in the future.”). The manipulation closed with a general conclusion by the journalist emphasizing either the positive or negative consequences of fifty years of North African immigration. The manipulation check--assessed immediately after the manipulation--was designed to examine if participants correctly perceived the positive or negative valence of the news item about North African immigrants. After the manipulation check, participants were asked about their attitudes (i.e. the dependent variables), followed by a memory test. Participants were told that “before we proceed to the memory test, you will be asked about a variety of societal topics”. Hence, these attitudinal measures were not introduced as part of the memory test, but rather presented as a filler or distracter before the participants continued to the memory test. Hence, a clear distinction was made between the attitudinal measures and the memory questions. In a final question, respondents were asked what they thought was the

purpose of the study; the large majority of participants (91.6%) was unable to name the true goal of the study. Hence, there are no indications in the results that participants' interpretation of the goal of the study would have influenced the outcomes.<sup>1</sup> Afterwards, participants were thanked for their participation and thoroughly debriefed.

## **Variables**

To map out the multifaceted prejudices that may exist toward North African immigrants and other immigrant groups, we included perceptions of intergroup threats, economic success, cultural differences and criminal behavior, and overall outgroup ratings.

**Intergroup threat.** Intergroup threat was measured on a 7-point Likert scale (1 = *strongly disagree*, 7 = *strongly agree*). The items were divided into three subscales; cultural threat (eight items, e.g. "North Africans should learn to conform to the rules and norms as soon as possible after they arrive in Belgium", "The social values and beliefs of North Africans are not compatible with those of most Belgian citizens",  $\alpha = .90$ ), economic threat (six items, e.g. "North Africans take Belgian jobs", "North Africans threaten the quality of the Belgian social-security system",  $\alpha = .90$ ), and safety threat (three items, e.g. "North Africans made Belgium more unsafe",  $\alpha = .89$ ).

**Perceptions.** Since it has been shown that overestimation of economic, cultural and criminal problems among immigrants often is the expression of a negative attitude (Hooghe & de Vroome, 2015; Schneider, 2008), participants were asked to estimate "How many out of

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<sup>1</sup> However, despite our efforts, a few participants were aware of the true purpose of the study: 46 respondents, or 8.4%, correctly guessed that the true purpose of the experiment was to investigate the impact of valenced news stories on attitudes toward immigrants. We re-ran the analysis with and without this group of participants to evaluate whether results remain the same. Findings show almost perfect stability in the results, except for economic threat which fell just outside of the .05 significance range,  $F(2, 487) = 2.62, p = .074$ . In the results section, we report on the results with all participants as excluding them yielded largely same results. Findings for economic threat should thus be interpreted with caution.

100 North African immigrants [receives unemployment benefits/has trouble integrating/has a criminal background]?” on a scale from 0 to 100 percent.

**Outgroup ratings.** Participants were asked to indicate how negative or positive they felt toward their own ingroup (i.e. Flemish people), as well as the three other main immigrant groups in Flanders from Eastern Europe, Sub-Saharan Africa, and the Middle East (0 = *extremely negative*, 100 = *extremely positive*).

**Covariates.** In line with prior evidence, we included covariates which are anticipated to be important alternative predictors of anti-immigrant attitudes (Ceobanu & Escandell, 2010): sex (1 = *male*, 2 = *female*), age (in years), education (1 = *no diploma*, 5 = *university diploma*), frequency of intergroup contact with North African immigrants (“How often do you have contact with someone from North African descent?”, 1 = *never*, 7 = *daily*), and frequency of television news consumption (“On average, how many hours per day do you watch news or information programs?”, 1 = *not at all*, 8 = *more than three hours per day*).

## Results

### Manipulation checks

It was tested whether both experimental manipulations were indeed perceived as more negative or positive than the control condition (i.e. “How negative or positive did you find the news coverage about individuals of North-African origin in the news fragment?”, scale from 0 = *very negative*, 100 = *very positive*). A one-way analysis of covariance (ANCOVA) including the covariates sex, age, education level, intergroup contact, and television news consumption revealed a main effect,  $F(2, 533) = 216.32, p < .001, \eta_p^2 = .45$ . Sidak-corrected post hoc comparisons revealed that the negative condition ( $M = 40.75, SD = 22.69$ ) was perceived as being significantly more negative than the control condition ( $M = 51.53, SD = 20.62, p < .001$ ),

while the positive condition was perceived as significantly more positive ( $M = 82.17$ ,  $SD = 17.31$ ,  $p < .001$ ). Hence, the manipulation check confirms that the manipulation was effective.

### **The role of news tone for direct effects**

The expectations were that exposure to a negative news story about North African immigrants increased negative attitudes (H1a), whereas exposure to a positive news story decreased negative attitudes toward North African immigrants (H1b), but we expected the impact of exposure to a negative news story to be larger (H2).

**Intergroup threat.** After including the covariates, multivariate analysis of covariance (MANCOVA) revealed significant main effects for the tone of the news story on economic threat,  $F(2, 533) = 3.69$ ,  $p = .026$ ,  $\eta_p^2 = .01$ , and safety threat,  $F(2, 533) = 6.99$ ,  $p = .001$ ,  $\eta_p^2 = .03$ . There were no significant results for cultural threat,  $F = 2.06$ . Sidak-corrected post hoc comparisons revealed that negative tone significantly increased economic threat ( $M = 3.66$ ,  $SD = 1.40$ ) as compared to positive tone ( $M = 3.48$ ,  $SD = 1.44$ ,  $p = .021$ ). Negative tone also significantly increased safety threat ( $M = 4.07$ ,  $SD = 1.52$ ) as compared to positive tone ( $M = 3.55$ ,  $SD = 1.57$ ,  $p = .005$ ) and the control condition ( $M = 3.52$ ,  $SD = 1.69$ ,  $p = .004$ ).

**Perceptions of cultural, economic and criminal issues.** After including the covariates, MANCOVA revealed significant main effects for the tone of the news story on the perceived percentage of North African immigrants who receive unemployment benefits,  $F(2, 533) = 5.10$ ,  $p = .006$ ,  $\eta_p^2 = .02$ , and who are having trouble to integrate into society,  $F(2, 533) = 10.32$ ,  $p < .001$ ,  $\eta_p^2 = .04$ . There were no significant results for the perceived percentage of North African immigrants who have a criminal background,  $F = 1.33$ . Sidak-corrected post hoc comparisons revealed that negative tone significantly increased the perceived percentage of North African immigrants on unemployment benefits ( $M = 39.02$ ,  $SD = 21.77$ ) as compared to positive tone ( $M = 32.32$ ,  $SD = 20.22$ ,  $p = .009$ ) and the control condition ( $M = 33.33$ ,  $SD =$

21.42,  $p = .043$ ). In addition, negative tone significantly increased the perceived percentage of North African immigrants having trouble integrating ( $M = 50.08$ ,  $SD = 24.05$ ) as compared to positive tone ( $M = 38.43$ ,  $SD = 25.15$ ,  $p < .001$ ).

Findings for intergroup threat and perceptions of North African immigrants were largely supportive of H1a and H2, while H1b is rejected: Negative tone in television news significantly increased safety and economic threat from North African immigrants as well as significantly increased perceived percentages of North African immigrants that were on employment benefits and had trouble integrating (Figure 1 and 2 provide an overview of the direct effects of news tone on intergroup threats and perceptions of cultural, economic, and criminal issues).

[Figure 1]

[Figure 2]

### **The role of news tone for carry-over effects**

Negative news tone thus matters when assessing the direct impact of television news stories about North African immigrants on attitudes toward North African immigrants. In a next step, we evaluate whether we can find evidence of carry-over effects of exposure to a positively or negatively valenced story about North African immigrants to attitudes toward uninvolved immigrant groups (H3a and H3b), and whether the impact of negative tone is larger (H4).

**Outgroup ratings.** After including the covariates, MANCOVA revealed a series of significant main effects: The tone of the news story about North African immigrants also had an effect on ratings of Eastern European immigrants,  $F(2, 529) = 5.54$ ,  $p = .004$ ,  $\eta_p^2 = .02$ , Sub-Saharan Africa immigrants,  $F(2, 529) = 6.09$ ,  $p = .002$ ,  $\eta_p^2 = .02$ , and Middle Eastern immigrants,  $F(2, 529) = 5.06$ ,  $p = .007$ ,  $\eta_p^2 = .02$ . There were no significant results for a negative evaluation of the ingroup,  $F = 1.61$ . Sidak-corrected post hoc comparisons revealed a



consistent pattern of the effect of tone in television news on outgroup ratings across the three uninvolved immigrant groups. First, positive tone in a news story about North African immigrants significantly increased the rating of Eastern European immigrants ( $M = 54.78$ ,  $SD = 21.05$ ) as compared to negative tone ( $M = 48.29$ ,  $SD = 20.45$ ,  $p = .007$ ) and the control condition ( $M = 49.21$ ,  $SD = 19.88$ ,  $p = .028$ ). Second, positive tone in a news story about North African immigrants significantly increased the rating of Sub-Saharan African immigrants ( $M = 59.67$ ,  $SD = 19.59$ ) as compared to the control condition ( $M = 52.34$ ,  $SD = 20.89$ ,  $p = .002$ ). Last, positive tone in a news story about North African immigrants significantly increased the rating of Middle Eastern immigrants ( $M = 57.58$ ,  $SD = 21.59$ ) as compared to negative tone ( $M = 51.22$ ,  $SD = 21.82$ ,  $p = .017$ ) and the control condition ( $M = 51.30$ ,  $SD = 20.66$ ,  $p = .023$ ).

The results for outgroup ratings, displayed in Figure 3, consistently showed that positive tone in television news about North African immigrants led to more positive ratings of uninvolved immigrant groups (i.e. individuals from Eastern European, Sub-Saharan African and Middle Eastern descent), thereby confirming H3b, but rejecting H3a and H4. There are no significant results for an increase in negative attitudes when comparing the negative tone condition to the control condition.

[Figure 3]

## **Discussion**

The aim of the current research was to assess the impact of exposure to a television news story with a positive or negative tone on negative intergroup attitudes toward North African immigrants and carry-over effects to other uninvolved immigrant groups. As such, both direct and carry-over effects of positive and negative news tone were evaluated in an experiment.

Studies have demonstrated that the positive or negative tone of news stories about immigrant groups shapes attitudes in the dominant direction of the specific message (Boomgaarden & Vliegenthart, 2009; Hopmann et al., 2010; Sheafer, 2007; Zaller, 1992), while the asymmetry bias theory (Ju, 2008; Soroka, 2006) emphasizes the relative supremacy of negative information over positive messages. For the direct effects at least, our results support the asymmetry bias theory (Ju, 2008; Soroka & McAdams, 2015; Sherif & Sherif, 1967) as exposure to a negative news story about North African immigrants had a larger impact on negative attitudes toward North African immigrants, the immigrant group featured in the news item. Our experimental findings, comparing positive and negative news tone, demonstrate that negative news tone is decisive and yields stronger group-specific attitudinal effects than positively valenced news. From prior research, we indeed know that negative news and threat is prevalent in news stories about North African immigrants (van der Linden & Jacobs, 2016). This is in line with news value theories stating that negativity and conflict are key features of news stories as they prove to be successful in triggering human attention and stirring emotions (Galtung & Ruge, 1965; Harcup & O'Neil, 2001). Hence, it may not be surprising that news content that is negative in nature, with a dominant focus on problems and challenges, is more salient. Threatening messages about a specific outgroup, especially when in line with prevailing stereotypes in society, can thus be easily activated and making individuals more responsive to this type of information.

However, our most innovative finding is that the effect of news tone was reversed for carry-over effects: Exposure to a positive news story about North African immigrants yielded stronger carry-over effects on attitudes toward uninvolved immigrant groups. In other words, our findings show that particularly positive parasocial contact with a particular immigrant group has a prejudice-reducing effect on other outgroups as well. Herewith, we extend prior findings on secondary transfer effects in contact research by showing that similar mechanisms

are at work for the generalization of attitudes based on news media (Pettigrew, 2009; Pettigrew & Tropp, 2011; Schmid et al., 2014). In fact, the mechanism for carry-over effects of positively valenced news is quite similar to STEs, which have also primarily established generalization effects for positive contact (Pettigrew, 2009). This points to the well-documented tendency to homogenize outgroups by applying information about one immigrant group to other immigrant groups as well. However, as shown by our findings, this tendency differs for positive and negative information which points to the contingency of the mechanism behind the impact of news tone. It appears that negative tone primarily deepens intergroup attitudes, whereas positive tone broadens intergroup attitudes. On a speculative note, the differential findings for positive and negative tone for direct and carry-over effects may be explained by processes of outgroup typicality. Paolini, Harwood, and Rubin (2010) find that especially negative experiences, or in our case information, cause higher group membership salience than positive experiences. This may explain why negatively valenced news stories had a group-specific effect by increasing negative attitudes to the immigrant group depicted in the news story, but positively valenced news stories generalized well to other uninvolved immigrant groups. Still, because the current study was designed to identify carry-over effects of news tone and did not focus specifically on the motivational underpinnings, further research is needed to test this suggestion.

A limitation of the current study is that we only focus here on positive versus negative tone, whereas stories may also have a mixed tone in which both negative and positive elements are being emphasized. An avenue for future research is to expand the experimental conditions with a mixed condition as well to assess the net outcomes of exposure to two contradictory pieces of information. In addition, in response to recent studies focusing on the duration of media effects (Lecheler & De Vreese, 2011), future studies may diversify the current experiment by including various time-frames which would allow to disentangle the persistence

of effects of news tone. Moreover, future studies may want to dig deeper into the way carry-over effects of news tone differ by considering a more expansive set of outgroups. We would expect that the carry-over effects would occur for other immigrants group as well. Possibly, similar to STE effects following intergroup contact (Harwood et al., 2011; Hindriks et al., 2014; Pettigrew, 2009; Shook et al., 2007), especially outgroups that are perceived to be similar in terms of outgroup characteristics are subject to these type of carry-over effects. Hence, this could suggest that there are some characteristics of North African immigrants that are very similar to those of Sub-Saharan African, Eastern European or Middle Eastern immigrants. These four groups are amongst the most salient immigrant groups in Flanders, although particularly North African immigrant are considered a polarizing group, especially given the fact that often they have a Muslim background. In line with literature on outgroup similarity, this may suggest that particular outgroups are perceived to be more converging in terms of their outgroup characteristics than others. Moreover, we encourage future studies to assess the impact of news media in relationship to direct contact experiences: While it is unlikely that parasocial contact (through exposure to television messages about immigrants) can replace or is more influential than direct face-to-face contact, it may be worthwhile to assess whether both forms of contact reinforce each other. This study only assess news media while controlling for direct face-to-face contact, but theories on resonance suggest that direct contact exacerbates parasocial contact. A final limitation concerns the use of a cover story in which we asked respondents to closely pay attention to the news story which was introduced as a memory test. This may have caused the participants to view the news item more attentively than they normally would have done when viewing news in a more natural setting.

All in all, however, we believe the current study has increased our understanding of the impact of positive and negative news tone on anti-immigrant attitudes by adding the insight that effects of exposure to news tone of a given outgroup has even wider implications than

previously documented as they carry-over to uninvolved immigrant groups as well. In conclusion, it seems that the effects of positive and negative tone in television news stories on anti-immigrant attitudes is a multifaceted phenomenon; our study has undertaken an important first step in disentangling the complex workings of tone.

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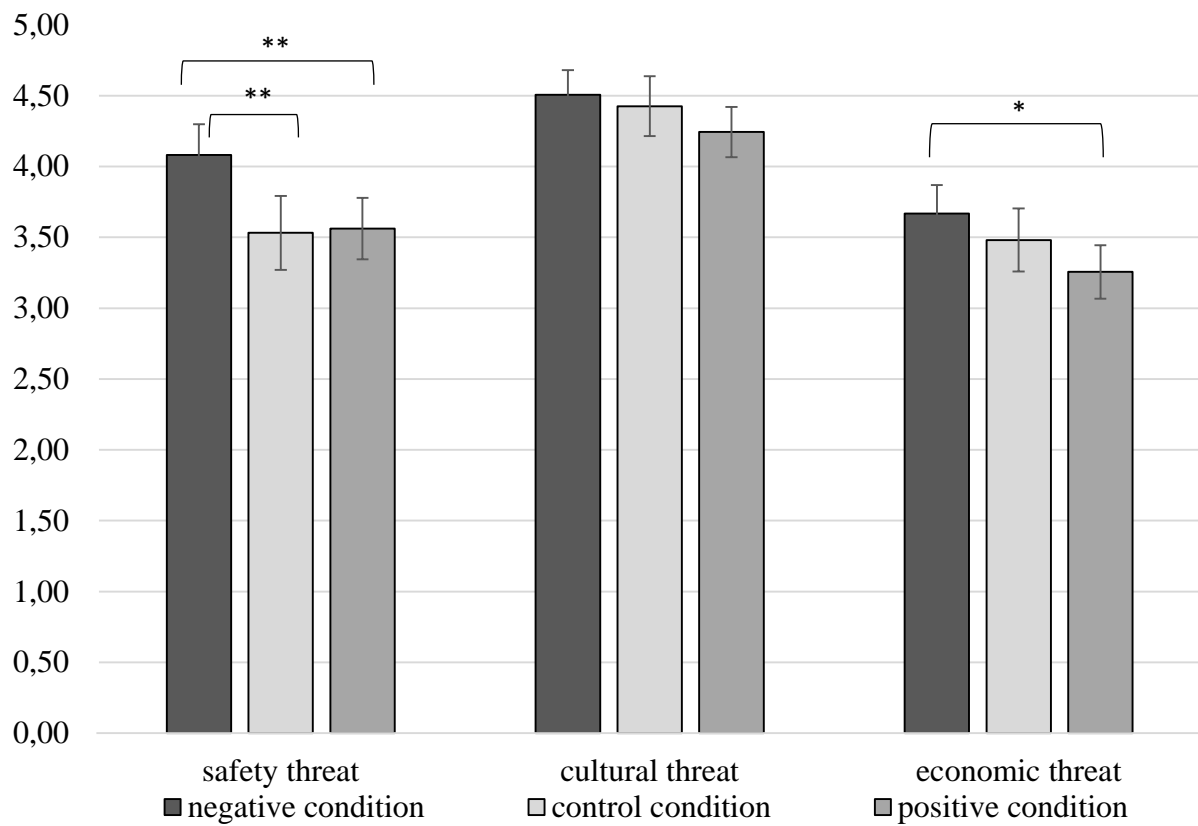


FIGURE 1. The impact of negative or positive tone in television news on intergroup threats toward North African immigrants. Sign.: \*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$ . N = 546.

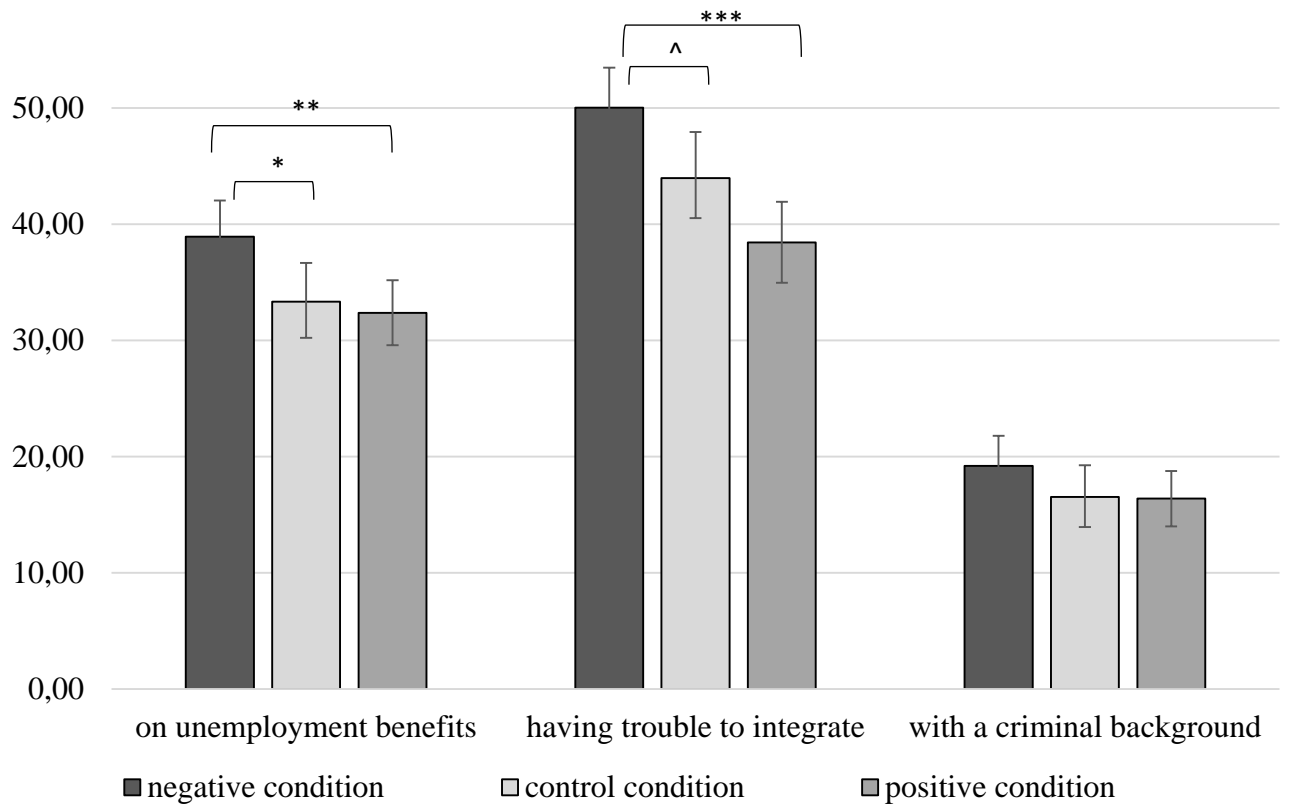


FIGURE 2. The impact of negative or positive tone in television news on perceived percentages of North African immigrants who receive unemployment benefits, are having trouble to integrate into society, or have a criminal background. Sign.: \*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$ ., ^  $p = .074$ . N = 546.

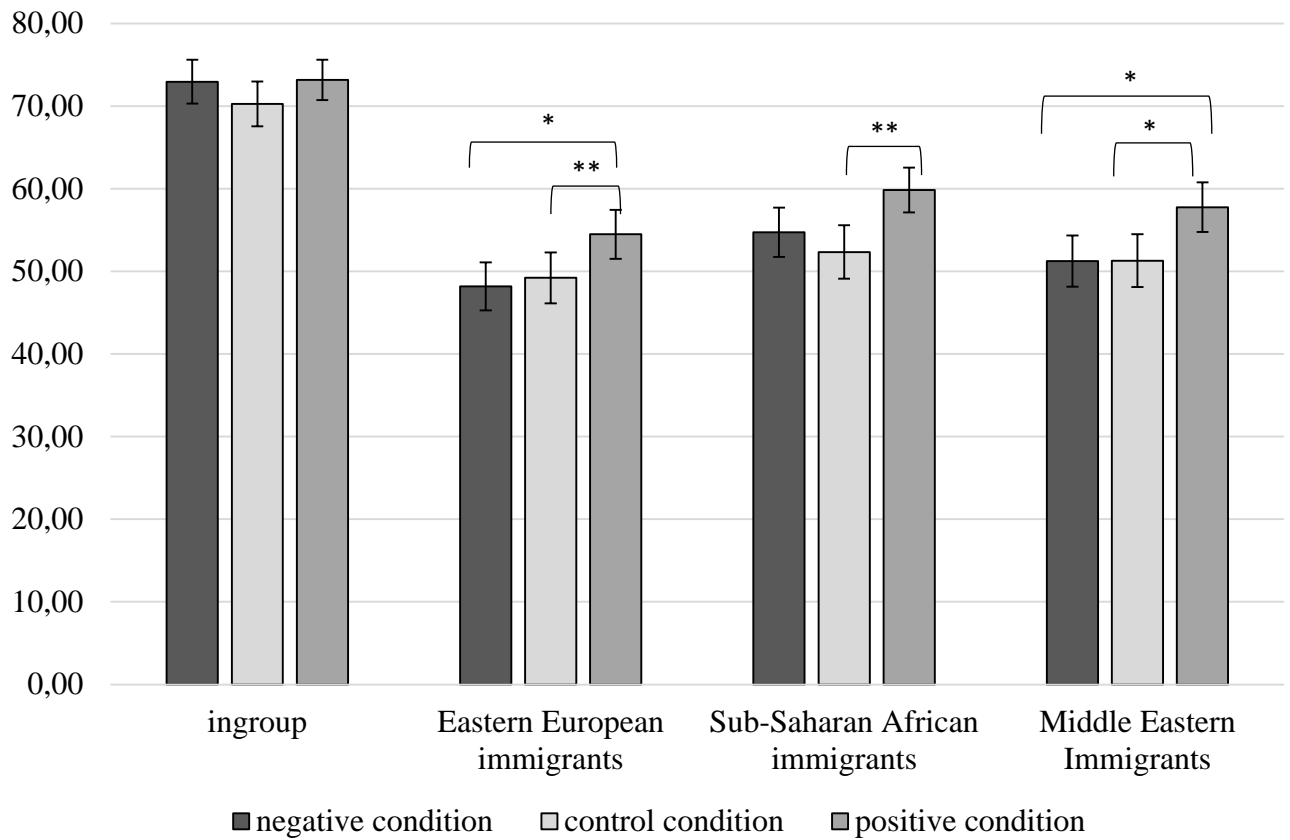


FIGURE 3. Carry-over effects of negative or positive tone in a news item about North African immigrants on ratings of the ingroup and other (uninvolved) outgroups. Sign.: \*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$ .  $N = 546$ .

Online appendix A. *Voice-over experimental design translated in English.*

[Introduction by news anchor: close-up of news anchor]

‘Tomorrow it will be exactly 50 years ago that Belgium signed an agreement with Morocco about the recruitment of guest workers, the beginning of the migration flows to our country. A few months later a similar agreement was signed with Turkey. Nowadays, approximately 400 000 citizens from Moroccan origin and 150 000 citizens from Turkish origin live in Belgium. Today and the next days, we devote attention to those 50 years of migration.’

[Footage ethnic diversity on streets in Belgium]

‘Belgium has become more colorful. In 2014 almost 65 000 migrants moved to Belgium, the highest amount in our history. Most migrants in Belgium are from North African descent. But what is the balance of 50 years of migration? A study commissioned by the Flemish government. Research bureau IPSOS conducted research in Flanders on the presence of citizens from North African origin. We present some societal trends and facts.’

[Experimental manipulations: Footage of table]

[negative tone condition]

‘Due to cultural and religious differences a large majority of North African immigrants experience difficulties with their integration in Flanders. Because of high unemployment levels a large majority is dependent upon financial support by the government, which puts the welfare of Flanders under pressure. Moreover, the over-supply of cheap workers leads to a decrease of salaries, and to an increase of competition on the labor market. Furthermore, the presence of North African immigrants is accompanied by an increase in crime levels.’

[positive tone condition]

‘The integration of North African immigrants in Flanders is going well; North African immigrants increasingly identify with Flanders and they are familiar with the language. North African immigrants regularly enter into contact with Flemings and maintain close friendships. Migration from North Africa also yields economic advantages and contributes to welfare in Flanders. The presence of North African immigrants is found to be an enrichment and expectations are that this successful trend will be continued in the future.’

[Concluding statement: Footage of ethnic diversity on the streets in Belgium]

[negative tone condition]

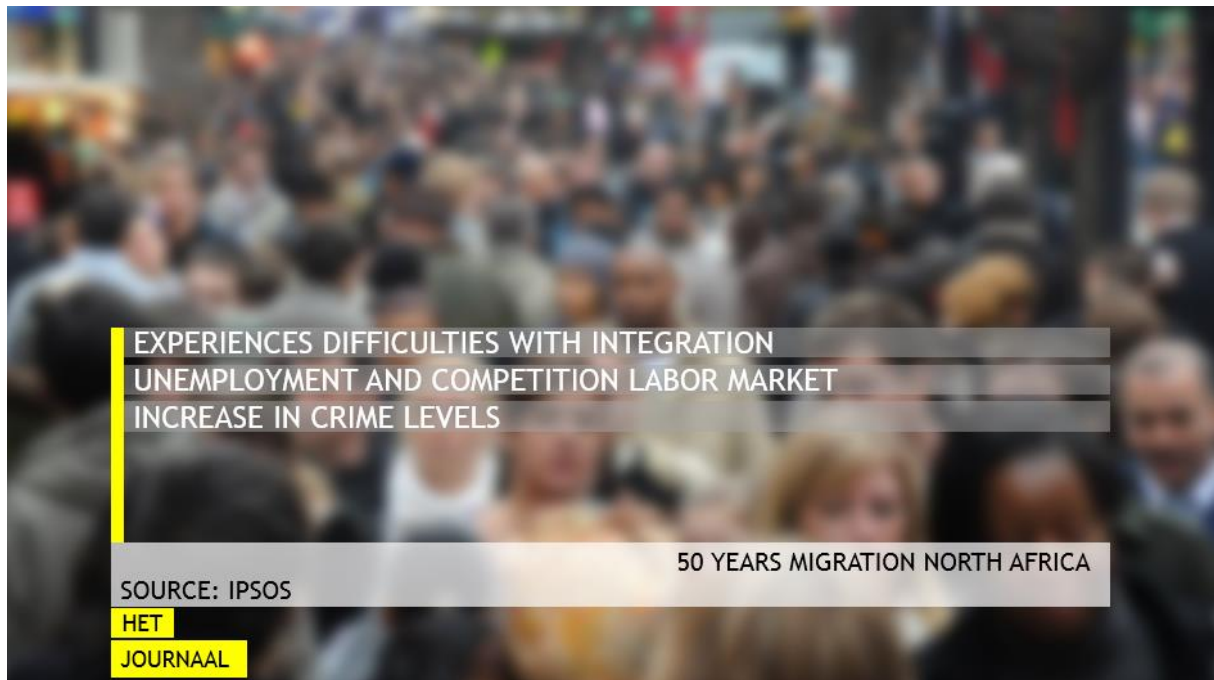
‘The researchers conclude that the balance of 50 years migration from North Africa is rather negative, and warn for the large cultural and religious tensions, the consequences for the economy, and the safety in Flanders.’

[positive tone condition]

‘The researchers conclude that the balance of 50 years migration from North Africa is rather positive, and stress the added value of immigrants from North Africa for Flanders.’



Online appendix B. *Screenshot of table containing the manipulation used in the current research (translated from Dutch to English).*



*Screenshot original Flemish television news lay-out.*

