

ORIGINAL ARTICLE

The Influence of News Media on Stereotypic Attitudes Toward Immigrants in a Political Campaign

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This study investigates media effects on stereotypic attitudes toward immigrants in a political campaign that dealt with the naturalization of immigrants. By combining a content analysis of the campaign coverage with a 2-wave panel survey, the study found that negative news portrayals of immigrants increased stereotypic attitudes in the public in the course of the campaign. Additionally, the frequent exposure to positive news portrayals of immigrants reduced the activation of negative outgroup attitudes. However, these findings are contingent on people's issue-specific knowledge. Only people with low to moderate knowledge were influenced by negative and positive news stories about immigrants in the campaign. Well-informed people were resistant to the effects of positive and news portrayals of immigrants.

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Previous research has shown that public opinion toward ethnic minorities is negatively biased. For instance, the public in Western countries harbors negative attitudes toward these groups and favors policy programs intended to restrict immigration (Citrin & Sides, 2008; Pettigrew, Wagner, & Christ, 2007). Scholars consider news coverage of minorities as an important cause of these attitudes (Mastro, 2009; Oliver, Ramasubramanian, & Kim, 2007). For example, content analyses of news have convincingly demonstrated that minorities are portrayed in negative roles and are associated with negative issues, such as crime or terrorism (Dixon & Linz, 2000; Entman & Rojecki, 2000; ter Wal, 2002). These portrayals, in turn, can induce negative racial attitudes in the audience. Experiments have shown that negative depictions of minorities can activate stereotypic attitudes in the audience (Dixon & Azocar, 2007; Domke, 2001; Gilliam & Iyengar, 2000; Power, Murphy, & Coover, 1996). Survey studies also indicate that news exposure is related to biased perceptions (Armstrong, Neuendorf, & Brentar, 1992) and attitudes toward ethnic minorities (Dixon, 2008a, 2008b; Vergeer, Lubbers, & Scheepers, 2000).

However, three caveats apply to the conclusions that can be drawn from previous surveys. First, some studies relied on student samples (Armstrong et al., 1992; Busselle

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& Crandall, 2002) that do not warrant generalization to other more heterogeneous populations (Henry, 2008).¹ Most other studies (Dixon, 2008a, 2008b; Gilliam & Iyengar, 2000) were conducted in the United States. Very few surveys were conducted outside the United States, and it is therefore difficult to generalize these findings to other countries. Second, most studies to date have relied on cross-sectional surveys (but, see Vergeer et al., 2000). Extant research cannot, therefore, address the issue of causality directly. The only longitudinal study shows only a cross-sectional effect, that is, readers of a newspaper that portrays immigrants negatively perceive minorities as more threatening than the readers of other newspapers (Vergeer et al., 2000). However, in this study exposure to racially biased news did not increase perceived threat over time. Finally, the third shortcoming refers to whether the impact of racially biased news on attitudes is contingent on audience predispositions. However, some experiments clearly suggest that people's motivation and cognitive capacity to process racially biased news are important moderators of stereotype activation and application (Blair & Banaji, 1996; Bodenhausen, Macrae, & Sherman, 1999).

This study builds on previous research and extends it in four ways. First, the study investigates media effects on prejudice toward immigrants in a panel survey with a representative sample. Panel data allow the researcher to test media effects in a heterogeneous sample and to disentangle the causal order of variables. Second, the present research studies the impact of news media on stereotypic attitudes in the context of a campaign that deals with an immigration issue. It is assumed that, in contrast to everyday news, media effects on anti-immigrant attitudes are more likely to occur in a campaign context that explicitly deals with immigration policy (Hurwitz & Peffley, 2005; Valentino, 1999). Third, previous surveys relied on media exposure measures to predict people's attitudes toward minorities. However, exposure functioned as a proxy of the media content that people were presumably exposed to when watching a certain program or reading a particular newspaper. In contrast to exposure measures, we use media content obtained from a content analysis concurrently conducted with the panel survey. Put simply, stereotypic attitudes are regressed on the news content that people were exposed to. Finally, this study tests whether media effects on racial attitudes are contingent on people's knowledge.

Experimental evidence of media effects on racial attitudes

So far, numerous studies have shown that stereotyping is a core element of news reporting on minorities. For instance, U.S. television promotes a negative image of ethnic minorities that are typically portrayed as being poor, criminal, or violent subjects (Dixon & Linz, 2000; Entman & Rojecki, 2000; Gilliam & Iyengar, 2000). Similar findings have been obtained in Europe (ter Wal, 2002). Given that media coverage of ethnic minorities is overwhelmingly negatively biased, exposure to these sources of information is likely to perpetuate stereotypic attitudes toward ethnic minorities. This assumption is supported by both experimental and survey evidence.

Most studies assume that the racial bias in the news automatically primes stereotypic beliefs and attitudes (Dixon, 2008a; Domke, 2001; Gilliam & Iyengar,

2000; Power et al., 1996). In this context, priming refers to the activation of stereotypic cognitions in the mind of recipients in response to biased news stories about ethnic minorities. Specifically, social identity theory and self-categorization theory suggest that news portrayals of ethnic minorities automatically elicit a categorization process in which recipients perceive themselves as members of an ingroup that is dissimilar to minorities as an outgroup (Dovidio & Gaertner, 1993; Tajfel & Turner, 1986). When group identity increases in salience, individuals perceive ingroup members more favorably than outgroup members. The result of this categorization is a positive perception of the ingroup and a comparatively negative perception of outgroup members (Tajfel & Turner, 1986).

This categorization process is contingent on the salience of situational triggers. Such triggers may be subtle cues in the news, such as words with a racial connotation, such as “inner-city” (Domke, 2001; Hurwitz & Peffley, 2005) or mug shots of members of racial minorities (Dixon & Maddox, 2005; Gilliam & Iyengar, 2000). In addition, negative depictions of minorities also function as triggers of stereotype and prejudice activation. For example, by categorizing criminals as exemplars of ethnic minorities news reports arouse stereotypes, that is, negatively biased thoughts about minorities. Once stereotypes have been activated by news stories these negative beliefs are more accessible for subsequent judgments as activation spreads through the cognitive network of individuals (Higgins, 1996). As a result, the enhanced accessibility of stereotypes is likely to influence viewers’ attitudes toward ethnic minorities (Domke, 2001; Gilliam & Iyengar, 2000). Thus, the priming of negativity due to a racial news bias can activate and perpetuate negative outgroup attitudes. For instance, Gilliam and Iyengar (2000) exposed participants to a crime story in which the perpetrator was Black, White, or unidentified. A control group saw a broadcast without any suspects. The exposure to a Black relative to a White, or an unidentified criminal activated racial stereotypes and increased support for a punitive criminal justice policy (Gilliam & Iyengar, 2000). Other experiments reveal that racial news cues bias causal attributions (Power et al., 1996), policy opinions (Domke, 2001), and the standards by which political candidates are judged (Valentino, 1999).

Theories of impression formation hold that stereotypes are activated automatically (Blair & Banaji, 1996; Bodenhausen et al., 1999). However, application of stereotypes in judgment formation may be subject to the control by some perceivers or in some circumstances. Thus, when expressing opinions individuals can control, correct, or suppress stereotypes. The extent to which individuals exert this control depends on their capacity and motivation to do so (Bodenhausen et al., 1999). To control the judgmental influence stereotypes individuals must be able and have the motivation to monitor the activation of these automatic thoughts and to counter these responses. Knowledge is an important variable that can moderate the effects of racially biased news on stereotypic attitudes (e.g. Pettigrew et al., 1997). Persuasion research also shows that issue knowledge increases critical processing of information that is related to that issue (Biek, Wood, & Chaiken, 1996; Wood, Kallgren, & Preisler, 1985).

The activation of stereotypes is the default reaction of individuals in response to biased depictions of minorities. Poorly informed individuals are more likely to rely on stereotypes when forming judgments about social groups than are more knowledgeable individuals. First, less well-informed people are less cognitively flexible or motivated to arrive at an accurate judgment about ethnic minorities. Therefore, they are less likely to notice their own stereotypic reactions and are less inclined to correct or discount prejudicial thoughts (Blair & Banaji, 1996; Bodenhausen et al., 1999). In addition, poorly informed people may also perceive ethnic minorities as a threat because they may be competitors on the labor or housing market (Pettigrew et al., 1997). As a consequence, less well-informed people may perceive members of ethnic minorities as more threatening. Given that the automatic stereotypic reaction to ethnic minorities in a news story fits into their worldview they are more likely to rely on such stereotypic attitudes when they form a judgment about them. This view is supported by an experiment demonstrating that less knowledgeable individuals are more susceptible to racial priming effects than well-informed people (Huber & Lapinski, 2006). Research also suggests that high knowledge correlates with higher background knowledge about minorities and increases the motivation to critically think about immigration issues and to form individuating impressions of minorities (Blair & Banaji, 1996; Bodenhausen et al., 1999; Pettigrew et al., 1997). Thus, even if biased portrayals automatically activate stereotypes in well-informed people, these individuals are more likely to control, correct, or suppress stereotypic thoughts and prejudicial attitudes.

In sum, prior research clearly indicates that portrayals of racial minorities in the news media increase stereotypic attitudes in the audience and that this effect is moderated by political knowledge. However, several caveats attach to previous research. On the one hand, most studies have relied on student samples (but see Gilliam & Iyengar, 2000). Thus, we do not know whether experimental effects generalize to recipients from other populations that may or may not be exposed to racially biased news. On the other hand, experiments so far have revealed only short-term effects. Although some authors argue that racially biased reporting might enhance the chronic accessibility of racial stereotypes (e.g., Domke, 2001), previous experiments did not test this assumption directly. Findings from surveys provide complementary evidence with respect to media effects on stereotypic attitudes toward ethnic minorities.

Survey evidence of media effects on racial attitudes

To date, only a few studies have investigated the effect of media use on racial perceptions and attitudes in the field (Armstrong et al., 1992; Busselle & Crandall, 2002; Dixon, 2008a, 2008b; Vergeer et al., 2000). For example, frequent TV news viewers attributed African Americans' failure to achieve higher status to a lack of motivation (Busselle & Crandall, 2002). Additionally, sitcom and drama viewing were related to positive perceptions of African Americans such that this group was perceived as better educated than they really are. Finally, frequent exposure to local TV and network news increased preference for punitive crime policies (Gilliam &

Iyengar, 2000) and stereotype endorsement (Dixon, 2008a). The only longitudinal survey study performed to date found that people exposed to a newspaper that portrayed ethnic minorities negatively perceived this group as less threatening than people exposed to other newspapers (Vergeer et al., 2000). However, the authors found only a cross-sectional relation between newspaper exposure and perceived threat, but no association over time.

In sum, the findings from the United States suggest that TV news in particular is likely to activate racial stereotypes. Vergeer et al. (2000) also suggest that negative news portrayals can activate stereotypic attitudes toward ethnic minorities. In the long run, so their argument, uniformly negative news about minorities can make stereotypes chronically accessible and cultivate fear of ethnic groups (see also Schemer, 2012). However, the cross-sectional nature of prior observational studies limits such conclusions. Thus, in these studies the causal order of variables cannot be resolved. Therefore, cross-sectional media effects studies are likely to erroneously specify stereotype-induced exposure to certain programs as media effects of such content. The only panel study undertaken to date failed to find an effect of news exposure on stereotypic attitudes over time. In addition, prior survey research fails to consider that knowledge can moderate the effects of news exposure. Thus, the findings from laboratory research have not been replicated in surveys.

This study addresses these shortcomings and pursues four aims. First, the study investigates media effects on stereotypic attitudes by relying on data from a panel survey in a representative sample. Panel data enable us to test media effects in a heterogeneous sample and to disentangle the causal order of variables. Second, the survey studies the effect of news on stereotypic attitudes in the context of a campaign. In contrast to extant research that considered noncampaign contexts, we expect a campaign that deals explicitly with immigration to be more dynamic. This dynamic is likely to produce variability in people's attitudes toward minorities. Notably, political actors make use of racial cues in campaigns to mobilize voters and influence their judgments. Playing the race card is a common strategy to mobilize voters in elections (Boomgarden & Vliegenthart, 2007; Hurwitz & Peffley, 2005; Valentino, 1999). Third, in order to demonstrate media effects the study relies on media content that news users are exposed to instead of measures of media exposure as a predictor of racial attitudes. Prior research suggests that it is not exposure per se that elicits stereotypes, but the specific news diet that people consume (Vergeer et al., 2000). Therefore, content analysis data are matched with panel survey data on the individual level. Fourth, in addition to examining the main effects of news on stereotypic attitudes this study examines whether such influences are contingent on people's knowledge.

Media effects on stereotypic attitudes in the naturalization campaign

The campaign under investigation deals with the naturalization of immigrants in Switzerland. Given the high rate of immigrants in Switzerland, the public considers immigration to be one of the most important issues on the agenda and has an extremely negative attitude toward immigrants (Schneider, 2008). The

present campaign dealt with the popular initiative for democratic naturalizations of the populist right. Naturalization procedures vary considerably in different municipalities. They can be based on decisions by a general assembly of local citizens, local parliaments or administrations, or even by popular votes. In some municipalities, applicants were rejected without justification. Therefore, the Federal Court decided that the rejection of naturalization requests required a justification. The court specified that a justification was not possible in a direct-democratic vote. The populist right reacted by launching its popular initiative. They considered the court decision as a paternalistic act against the will of the Swiss people and claimed that the people should have the right to decide about the naturalization procedure. In addition, they warned against mass naturalizations and naturalization of criminals. The opponents countered the populist initiative by emphasizing that fair naturalization procedures in accordance with the rule of law needed to be guaranteed and that discriminatory decisions should be ruled out. The initiative was rejected by a majority of 63.6% of the voters on June 1, 2008.

Hypotheses

In line with previous research, the present study maintains that negative portrayals of immigrants in the news are likely to activate and increase negative stereotypic attitudes toward that group (Domke, 2001; Gilliam & Iyengar, 2000). The campaign in favor of democratic naturalizations depicted immigrants as a social problem. Specifically, the populist right painted a dangerous scenario that masses of immigrants and criminals in particular would swamp Switzerland. They further warned that Swiss people would lose control over the influx of immigrants. This argumentation depicted immigrants unfavorably as a threat to the security and the culture of the Swiss population. Thus, this argumentation clearly involves a distinction between immigrants as an outgroup and the Swiss people as the ingroup. Frequent exposure to this ingroup–outgroup discourse is likely to constantly activate viewers' social identity as a member of the ingroup that is distinct from that of the outgroup (Tajfel & Turner, 1986; Turner, 1982). This categorization alone is sufficient to produce negative outgroup attitudes. In addition, repeated exposure to negative portrayals of immigrants may lead to a chronic accessibility of negative attitudes toward immigrants (Dixon, 2008a). The more often people are exposed to negative exemplars the more easily stereotypic attitudes are activated (Higgins, 1996). It is therefore assumed that frequent exposure to negative portrayals of immigrants in news reports increases stereotypic attitudes toward immigrants (H1).

Although on average news coverage of ethnic minorities may have a negative bias, the valence of such stories varies. For instance, content analyses found that ethnic groups are portrayed more negatively in tabloids than in the broadsheet or regional press (van Dijk, 2000; Vergeer et al., 2000). In addition, newspaper coverage provides more background information than TV news, and the race of suspects is less likely to be stated in newspaper crime stories than on television news (Entman & Rojecki, 2000, p. 90). Prior research demonstrates that exposure to background information, less

negative reports, or positive news about minorities reduces bias in racial perceptions and attitudes (Dixon, 2008a; Mastro & Tukachinsky, 2011; Power et al., 1996; Vergeer et al., 2000). In the campaign under investigation the opponents of initiative emphasized universalistic principles and portrayed immigrants as human beings that should receive fair treatment. Accordingly, naturalizations at the ballot box would violate human rights and the rule of law. This argumentation is likely to undercut social categorization processes and stereotype activation. The reason is that this discourse makes a superordinate social identity salient to which immigrants and the Swiss belong. Increasing the salience of a superordinate social identity has been shown to reduce stereotypic thinking and negative outgroup attitudes (Gaertner & Dovidio, 2000; Richardson, 2005). This emphasis on fairness and universalism provided the audience with individuating information and background knowledge that is likely to reduce prejudice. In line with this reasoning, it is assumed that exposure to positive portrayals of immigrants in the news decreases stereotypic attitudes toward immigrants (H2).

These media effects are assumed to be moderated by people's knowledge. Better informed people are more motivated and better able to evaluate incoming information against their previously stored information or experiences than their less well-informed counterparts (Biek et al., 1996; Wood et al., 1985). They have more background knowledge about ethnic minorities and are more motivated to think critically about immigration issues (Blair & Banaji, 1996; Bodenhausen et al., 1999; Pettigrew et al., 1997). Therefore, well-informed individuals are less likely to rely on stereotypes when judging ethnic minorities. Instead, they are more inclined to form individuating impressions of immigrants. In sum, knowledgeable individuals are less dependent on mediated experiences in their judgment formation compared to people low in knowledge. Put differently, knowledgeable individuals might even be resistant to either positive or negative news about immigrants (Biek et al., 1996). Therefore, it is assumed in a third hypothesis that the impact of positive and negative portrayals of immigrants in the news is weaker for well-informed people and stronger for less well-informed people (H3).

Method

Content analysis of news media

For the content analysis, a total of 947 news articles were coded between March 1 and May 31, 2008. The most important national newspapers and television news shows in the German- and the French-speaking part of the country were selected.² The basic level of the content analysis was the argument expressed by a political actor or a journalist. An argument is defined as the verbalization of a point of view in which a claim is expressed with a certain evaluation. In sum, 4496 arguments were coded by 10 trained coders (see Schemer, Wirth, & Matthes, 2012).³

Survey method

A two-wave panel survey by means of computer-assisted telephone interviews was conducted. The first wave took place between April 7 and April 25, 2008

($N = 1251$). The second interview followed the referendum, that is, after June 1, 2008 ($N = 999$). The sample was recruited applying a random-quota procedure and is representative in terms of sex (51.3% female), age ($M = 48.5$, $SD = 16.8$), and residence. However, young people and people with lower educational qualifications are slightly underrepresented in the second wave.

Measures

The central dependent variable was stereotypic attitudes of respondents. Core elements of stereotypic attitudes are prejudicial beliefs that ethnic minorities receive undeserved benefits or violate traditional values (Gilliam & Iyengar, 2000; Pettigrew, 1998). In line with this view, respondents were asked whether they agreed with three statements that tapped the notion of stereotypic attitudes and prejudice toward immigrants, for example, "It's really a matter of some people just not trying hard enough; if immigrants would only try harder they could be just as well off as Swiss people" (1 = *do not agree at all* to 5 = *fully agree*). The responses were averaged to form a "stereotypic attitudes" index (Cronbach's $\alpha = .75$ in the first wave, $\alpha = .76$ in the second).

As independent variables, first, news media use was assessed in the first panel wave to allow the content analytic data to be matched to the survey data. More precisely, interviewees were asked to name their favorite newspapers and TV broadcasts in order to get campaign information. The answers to these questions were then used to match content analytic and survey data (see the following section). Knowledge as the moderator was assessed with questions about the proposal in favor of democratic naturalizations. Specifically, three items asked whether the proposal had the following specific aims: People should decide about naturalizations, courts should not overrule naturalization decisions, and municipalities should decide themselves which authority is responsible for naturalizations. Correct answers were coded as 1, incorrect answers and don't knows were coded as 0. Summing up the answers to the items produced an issue-specific knowledge score. With a Kuder Richardson 20 coefficient of reliability of .65 the knowledge measure was deemed sufficiently reliable.⁴ As control variables, demographics (age, sex, and education) and ideology (left-right self-positioning ranging from 1 = *left* to 10 = *right*).

To check for panel attrition, time 1 scores for interviewees who were reinterviewed were compared with the scores for participants who dropped out. This comparison shows that older people and heavy newspaper readers are slightly overrepresented in the second wave. However, matched and unmatched participants did not differ with respect to ideology or stereotypic attitudes in wave 1. Thus, the subsequent results are not affected by panel attrition.

Matching of content analysis and panel data

The content analysis and the panel data were matched on the individual level. Specifically, participants were assigned values representing the frequency with which they received positive and negative news about immigrants. This matching was based on the specific media use patterns reported in the survey. For example, let

us assume that between the first and the second interview a TV news show aired a negative story about immigrants and a newspaper article portrayed ethnic minorities positively. The TV show is coded -1 and the newspaper story $+1$ in the content analysis. A respondent who only watches the TV news show is assigned a value of -1 for exposure to the negative content. A recipient of the TV show and the newspaper story is assigned a value of -1 for the exposure to the negative content and a value of 1 for the exposure to the positive content. Previous studies successfully applied similar procedures (e.g. Elenbaas & de Vreese, 2008). The main advantage is that stereotypic attitudes can be regressed on the news content. Thus, the effects of news content are not confounded with the effects of media use.

Results

Results of the content analysis

Considering the relative frequency of the arguments expressed in the campaign news, Table 1 indicates that the most important argument in the campaign overall was the central argument of the opponents. More than half of the arguments against the proposal in the news emphasized the universalistic rule of law that should apply in naturalization procedures. The second most important con argument in the news stated that discriminatory decisions should be avoided. In contrast, the most important argument of the supporters of democratic naturalizations in the news claimed that the Swiss people should have the final say in naturalization procedures. Other arguments in the news referred to the prevention of mass naturalizations, naturalization of criminals, and legal aspects of the popular initiative.

Thus, the discourse was structured along two opposing lines of argumentation. The populist right portrayed immigrants in a negative light and promoted the idea that immigrants would swamp Switzerland. In order to maintain public safety and order the Swiss people should have the final say in naturalization procedures. The opponents appealed to universalistic principles, such as norms of fairness and the rule of law, and warned against anti-immigrant discrimination. For the subsequent analyses, the pro arguments were summed up to form a “negative news portrayals of immigrants” index as immigrants were mainly portrayed in a negative light. The con arguments were summed up to form a “positive news portrayals of immigrants” index as this argumentation views immigrants as victims and human beings and holders of human rights that cannot be overruled by popular votes. These content analytic indices are then matched to the survey data and serve as independent variables in the effects analyses.

Results of the media effects analysis

Before proceeding to the hypotheses test a look at the change of stereotypic attitudes over time facilitates the understanding of the following findings. On average, the means of prejudicial attitudes toward immigrants decreased between the first ($M = 3.06$, $SD = 1.09$) and the second panel wave ($M = 2.82$, $SD = 1.06$). This

Table 1 Relative Frequency of Pro and Con Arguments in News Media Reporting

Arguments	Percentage relative to all arguments
People should have final say	18.1
Prevent mass naturalizations	8.8
Democratic naturalizations not appealable	8.1
Delinquent immigrants	5.1
Other pro arguments	1.5
Total pro arguments	41.6
Rule of law	30.3
No arbitrary decisions discriminating applicants	13.9
Attacks against proponents	7.9
Current naturalization practice sufficient	3.1
Other con arguments	3.2
Total con arguments	58.4

significant reduction suggests that stereotypic attitudes toward immigrants decreased in the campaign, $t(996) = 8.75$, $p < .01$. For the test of the hypotheses, the analyses proceed as follows. In a first regression model stereotypic attitudes toward immigrants in the second panel wave are regressed on the covariates (demographics, ideology, and knowledge). Model 1 in Table 2 indicates that male, less educated, and right-wing respondents exhibit more stereotypic attitudes toward immigrants. Age and knowledge are not related to the attitudes toward immigrants. The second model also includes the lagged dependent variable. The results show that attitude change is only predicted by ideology. No other covariates influence the change of stereotypic attitudes. The significant effect of the lagged dependent variable indicates a high amount of stability in attitudes over time.

In the third model, the effects of negative and positive news portrayals of immigrants are entered to test the hypotheses. H1 stated that the frequency of exposure to news reports promoting a negative image of immigrants should increase stereotypic attitudes. The results in Table 2 are consistent with this assumption. The higher the exposure to news stories that favored democratic naturalizations and depicted immigrants as a problem, the higher the increase in negative attitudes toward immigrants. Thus, repeated exposure to negative news images of immigrants increased prejudice toward the social group that was in the focus of the campaign. This effect occurred although news stories favoring the naturalization proposal were outnumbered by the coverage against the proposal. This means that although there was, on average, a decrease in stereotypes over time, this trend was countered by the arguments wielded by the proponents of democratic naturalizations in the news.

In the second hypothesis, heavy exposure to positive news portrayals of immigrants was assumed to decrease the stereotypic attitudes. The results support this assumption. The more positive news about immigrants people received, the more negative outgroup attitudes decreased. Thus, frequent exposure to positive portrayals

Table 2 Stepwise Multiple Regression Analyses: Media Effects on Stereotypic Attitudes (Unstandardized Regression Coefficients and *SE* in Parentheses)

Independent Variables	Model 1 <i>b</i> (<i>SE</i>)	Model 2 <i>b</i> (<i>SE</i>)	Model 3 <i>b</i> (<i>SE</i>)	Model 4 <i>b</i> (<i>SE</i>)
Intercept	3.130 (.181)**	2.642 (.134)**	2.676 (.136)**	2.679 (.135)**
Step 1: Covariates ΔR^2	.210**	.199**	.199**	.199**
Sex (male = 1)	.139 (.065)*	.063 (.048)	.065 (.048)	.065 (.048)
Age	.003 (.002)	.001 (.001)	.001 (.001)	.001 (.001)
Education	-.313 (.062)**	-.029 (.047)	-.003 (.047)	-.001 (.047)
Ideology (left-right)	.175 (.015)**	.047 (.012)**	.048 (.012)**	.045 (.012)**
Knowledge	.046 (.039)	.005 (.029)	.009 (.028)	.008 (.028)
Step 2: Lagged dep. Variable ΔR^2		.366**	.366**	.366**
Stereotypic attitudes t1		.665 (.027)**	.654 (.027)**	.659 (.027)**
Step 3: media effects ΔR^2			.020**	.025**
Negative news portrayals			.004 (.001)*	.005 (.001)**
Positive news portrayals			-.005 (.002)**	-.005 (.001)**
Negative news \times knowledge				-.004 (.001)*
Positive news \times knowledge				.003 (.001)*
Total R^2	.210**	.565**	.585**	.590**

* $p < .05$. ** $p < .01$.

of immigrants and appeals to universalistic values reduced stereotypic attitudes toward immigrants. In sum, both hypotheses received support. However, the interpretation of these average effects largely depends on the nature of the interaction effect that was hypothesized in the third hypothesis.

The third hypothesis stated that the impact of negative and positive news portrayals of immigrants should be stronger for less well-informed people and weaker for well-informed people. This knowledge moderation was analyzed by entering interaction terms of knowledge with the pro and con arguments, respectively (last column of Table 2). Both interactions are significant and indicate that the effects of positive and negative news coverage of immigrants on stereotypic attitudes depend on people's knowledge. The effects were probed and plotted in Figures 1 and 2 (Hayes & Matthes, 2009). Figure 1 indicates that negative news portrayals of immigrants increase the stereotypic attitudes of less and moderately knowledgeable people, but fail to influence highly informed individuals. This finding qualifies the previous results. Frequent exposure to negative news about immigrants does not affect all audience members equally. Knowledgeable individuals are resistant to the negative news bias while less well and moderately informed people respond with more prejudicial

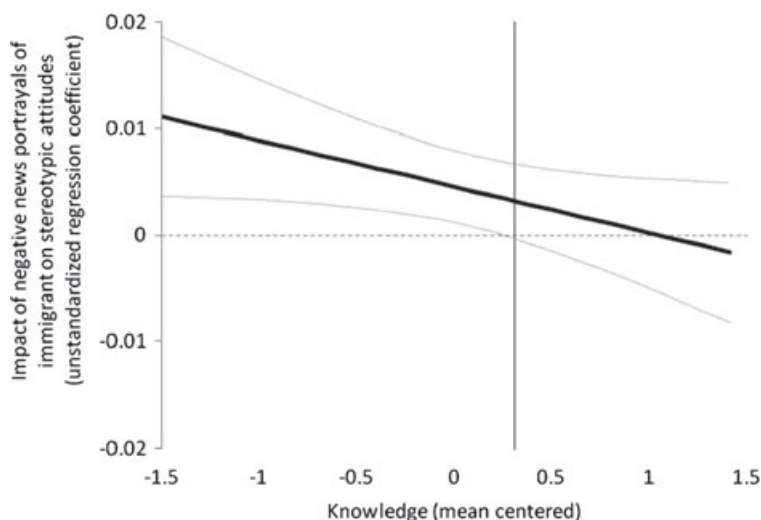


Figure 1 The impact of exposure to negative news portrayals of immigrants on stereotypic attitudes as a function of knowledge. *Note:* vertical lines represent the region of significance, that is, regression coefficients left of the vertical line are significantly different from zero.

attitudes to the exposure to such news stories. In addition, the impact of positive news portrayals of immigrants on stereotypic attitudes varies as a function of issue-specific knowledge (see, Figure 2). Frequent exposure to positive news depictions of immigrants decreases prejudice for low and moderately knowledgeable people. Highly knowledgeable individuals are not affected by positive news portrayals of

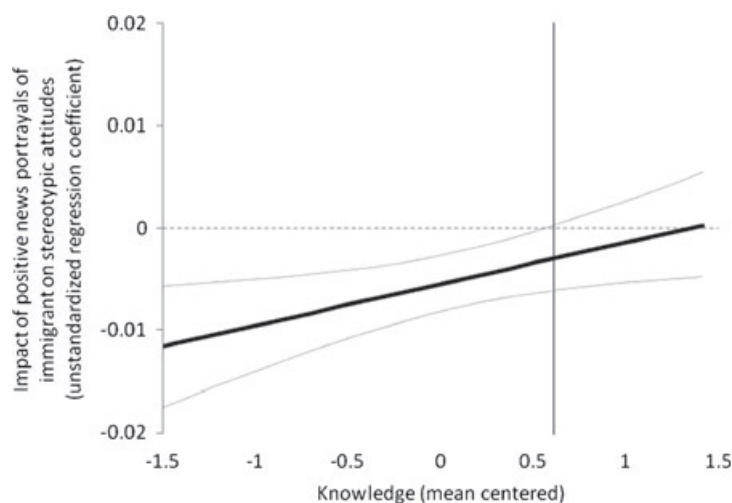


Figure 2 The impact of the exposure to positive news portrayals of immigrants on stereotypic attitudes as a function of knowledge.

immigrants. This result qualifies the results of the third model. In sum, these findings lend support to the hypothesis that the effects on negative and positive news portrayals of immigrants depend on people's knowledge. The more people know about the proposal, the higher their resistance to the influence of news about immigrants on their attitudes toward immigrants. However, frequent exposure to positive news portrayals of immigrants decreased stereotypic attitudes while negative news increased stereotypic attitudes of people with low to moderate issue-specific knowledge.

Discussion

This study demonstrates that news about immigrants in a campaign influences stereotypic attitudes in the public. Specifically, frequent exposure to negative news depictions of immigrants in the naturalization campaign increased negative outgroup attitudes. This result is consistent with prior surveys (Armstrong et al., 1992; Dixon, 2008b; Vergeer et al., 2000) and experiments (Dixon & Azocar, 2007; Igartua & Cheng, 2009) that showed exposure to news that promotes a negative image of ethnic minorities to have a negative impact on attitudes toward these groups. Additionally, this study not only found that negative news increased stereotypic attitudes over time, but also that positive news depictions of immigrants attenuated prejudicial attitudes. Specifically, the positive portrayals of immigrants as contributing to the Swiss society paired with the appeal that immigrants should receive fair treatment in accordance with universalistic principles reduced stereotypic attitudes. On the one hand, this argumentation may have provided people with individuating information that contrasted with populist propaganda and was likely to undercut stereotypic attitudes. Similar effects have been obtained in studies showing that counterstereotypic information reduces stereotypes and the application of such beliefs in judgment formation (Igartua & Cheng, 2009; Mastro & Tukachinsky, 2011; Power et al., 1996). On the other hand, appeals to universalistic values may have made salient a superordinate social identity that encompasses both immigrants and the Swiss people. A salient superordinate identity is likely to undercut stereotypes and prejudicial attitudes (Gaertner & Dovidio, 2000; Richardson, 2005).

However, the impact of news portrayals on the activation and reduction of stereotypic attitudes is not universal. Issue-specific knowledge plays a crucial role in the media effect on outgroup attitudes. Attitudes of people with low to moderate levels of issue-specific knowledge were affected by negative and positive news about immigrants. Well-informed individuals were not influenced by these news presentations. Similar to experimental findings (Biek et al., 1996; Wood et al., 1985), the present research shows that high issue-specific knowledge increases the resistance to the influence of positive and negative news about immigrants. Experiments have also found that knowledgeable individuals have more background information about minorities and are motivated to think critically about incoming information about immigrants. Therefore, their judgments are less dependent on campaign news about immigrants as contextual cues as compared to less well-informed people (Blair &

Banaji, 1996). In contrast, less well-informed individuals rely more on stereotypes when forming judgments about groups and depend on campaign information when forming outgroup judgments. Therefore, they are more susceptible to positive and negative news portrayals of immigrants (Huber & Lapinski, 2006). This finding therefore clearly extends prior studies on news media effects on racial attitudes.

In addition, the present research goes beyond prior surveys because it shows that news portrayals of immigrants affect people's attitudes over time. Prior studies found only cross-sectional evidence for media effects on outgroup attitudes (Armstrong et al., 1992; Dixon, 2008a; Vergeer et al., 2000). Owing to the quasi-experimental nature of the panel study outgroup attitudes were predicted by the news content to which survey participants were most likely to be exposed given their reported media diet. This strongly suggests the causal order of the variables. Thus, the news stories received before the interview influenced the prejudicial attitudes reported in the subsequent wave. Unlike prior research that found only cross-sectional evidence the present results underscore the causality of media effects. In other words, frequent exposure to negative (positive) news about immigrants increases (decreases) negative outgroup attitudes over time.

However, the effects of positive and negative news portrayals of immigrants on prejudicial attitudes can be considered as very small, Cohen's $f^2 = .02$. This effect is in the range found by prior surveys (Dixon, 2008b) and experiments (Dixon & Azocar, 2007). This small effect size may be mainly due to the design of this study. The effects that were obtained represent influences that survived a period of 8 weeks. This long interval between panel waves may have masked an originally stronger true effect. Therefore, future research should look more closely at what amount of news coverage about minorities produces what effect on attitudes in what period of time. Another account for explaining the small effect size may be that social desirability in responding to the anti-immigrant attitude items produced a downward bias in the association between frequency of news exposure and attitudes.

While this study provided important insights into the study of media effects on stereotypic attitudes in campaigns, some limitations have to be acknowledged. These shortcomings refer to the specific context on the one hand and the methodology on the other hand. In particular, due to the specific nature of the campaign under investigation generalizations to other contexts is a complicated issue. The present campaign explicitly dealt with an immigration issue. The use of negative portrayals of immigrants may therefore have been more salient than in election or nonelection contexts. However, studies in the U.S. national elections dealing with a multitude of issues found that racial cues were important ingredients of campaigns and increased the activation of stereotypes (Hurwitz & Peffley, 2005; Valentino, 1999). In addition, prior research was mostly fielded in nonelection contexts and found effects consistent with the present data. Thus, the campaign context does not necessarily limit the generalization of findings.

Another caveat is the assumption that the media content matched to the survey data represents the news that participants were exposed to. On the one hand, this news

content may represent only a reduced amount of the messages that people received through different communication channels. This study considered only television and newspaper information. Other sources, such as direct or interpersonal communication were neglected. Therefore, the findings may underestimate real campaign effects. On the other hand, the media impact variables that were used as predictors may also overestimate real effects. The matching procedure assumes that survey participants are regularly exposed to TV or newspaper news. For instance, users of daily newspapers must have been exposed to the newspaper every day. This assumption overlooks the fact that news users may be less assiduous in their news consumption than the matching procedure implies. This source of variation was not sufficiently considered.

These limitations notwithstanding, the study shows that biased news stories have the power to perpetuate or attenuate negative outgroup attitudes in society. The media effect on outgroup attitudes may also have consequences for peoples' judgments about politics and candidates. Previous studies demonstrated that racial news cues influence the standards by which candidates (Valentino, 1999) and policy programs are judged (Schemer et al., 2012; Domke, 2001). In the short run, playing the race card may be a successful way of mobilizing voters. In the long run, however, political actors accept that such strategies cultivate negative attitudes toward minorities. These attitudes, in turn, are likely to affect people's p for restrictive immigration policies and can jeopardize minority rights in society (Koopmans, 1996). The emergence of such consequences is counterbalanced by news media information that promotes positive images of ethnic minorities. Given the societal importance of immigration and integration, future research should devote more attention to the interplay of the effects of positive and negative news portrayals of minorities on stereotypic attitudes in the public.

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Notes

- 1 For instance, a comparison of cross-sectional survey shows that student samples produce stronger effects of news exposure on stereotypic beliefs than nonstudent samples. Busselle and Crandall (2002) found portions of explained variance in stereotypes due to news exposure ranging from 6 to 21% (Armstrong et al. 1992: 3–8%). Explained variance in studies that used more heterogeneous samples was lower with R^2 s ranging from 3 to 4% (Dixon, 2008a, 2008b). Therefore, as Henry (2008) puts it, researchers should not be discouraged to use student samples. However, scholars should also include nonstudent samples in order to check whether and under what conditions findings from nonstudent samples generalize to more heterogeneous populations.
- 2 Specifically, the following news sources were coded: Tagesschau, Arena, Le journal, SF Rundschau, Infrarouge, Blick, Sonntagsblick, Neue Zürcher Zeitung, 20 Minuten/Minutes, Tagesanzeiger, Sonntagszeitung, Aargauer Zeitung, Basler Zeitung,

- Berner Zeitung, Neue Luzerner Zeitung, Südostschweiz, St. Galler Tagblatt, Le Matin, Le Temps, Tribune de Genève, 24 heures, L'Hebdo, Punkt CH, Sonntag (AZ).
- 3 The reliability of the coding is .61 (Cohen's κ). For the analysis, the specific codes for the arguments were summarized to broader categories (i.e. pro and contra arguments). These superordinate categories were less prone to error and produced a perfect reliability.
 - 4 The construct validity of issue-specific knowledge was tested in a logistic item response theory model in which the individual knowledge items are the indicators of a latent knowledge factor. This confirmatory test relying on maximum likelihood estimation with robust standard errors resulted in a perfect model fit, $\chi^2(1) = 1.12, p = .28$. Thus, the knowledge items are reliable indicators of a single latent construct that reflects the notion of issue-specific knowledge. Additional analyses show that knowledge is positively related to education, $r(1000) = .11, p < .01$, and the frequency of exposure to negative, $r = .11, p < .01$, and positive news stories about immigrants, $r = .09, p < .05$. Thus, knowledgeable individuals were more likely to receive more positive and negative news about immigrants. Furthermore, men ($M = 1.70, SD = .85$) have more issue-specific knowledge than women ($M = 1.47, SD = .85, t(998) = 4.17, p < .01$). Finally, knowledge was not associated with age, $r(1000) = .04$ or ideology, $r(979) = .04$.

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