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Exposure to Muslims in Media and Support for Public Policies Harming Muslims

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Abstract

Few studies have empirically examined how media stereotypes of Muslims influence Americans' support for public policies exclusively harming Muslims. Across three studies, we tested the short-term and long-term effects of news portraying Muslims as terrorists on Americans' support for public policies harming Muslims domestically and internationally. Study 1 revealed that exposure to news portraying Muslims as terrorists is positively associated with support for military action in Muslim countries. Study 2 revealed that exposure to news portraying Muslims as terrorists is positively associated with support for public policies that harm Muslims domestically and internationally; this effect was fully mediated by perceptions of Muslims as aggressive. Experimental results from Study 3 revealed that exposing participants to negative Muslim media footage, relative to neutral or no-video footage, increased perceptions of Muslims as aggressive, increased support for harsh civil restrictions of Muslim Americans, and increased support for military action in Muslim countries. Exposure to positive Muslim footage yielded opposite results. We discuss the importance of media in exacerbating aggressive attitudes and public policies in the context of intergroup relations.

Keywords

media effects, Muslims, terrorism, stereotypes, public policy

> Because they are violent, because they threaten us, and they are threatening, they bring up desert stuff to our world.
>
> —Bill Maher on Anderson Cooper, May 5, 2010

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The above statement about Muslims was made by Bill Maher in response to Anderson Cooper's question regarding why Westerners are afraid to criticize Islam. Along with Maher, several recent news commentators, political entities, and media experts have debated the potential association of Islam with violence. Similarly, data from public opinion surveys throughout the world suggest that many non-Muslims associate Islam and Muslims with violence (e.g., Pew Research Center, 2013; Sides & Gross, 2013), and they support harsh civil restrictions for Muslims (e.g., The Brookings Institution, 2011; Nisbet, Ostman, & Shanahan, 2009). In addition, Muslims are frequently linked with violence, terrorism, and aggression across media outlets, including cable news (e.g., Dixon & Williams, 2015), newspapers (e.g., Nacos & Torres-Reyna, 2007; Powell, 2011), television and movies (e.g., Alsultany, 2012; Shaheen, 2009), web animations and flash-based games (e.g., Van Buren, 2006), and traditional video games (e.g., Dill, Gentile, Richter, & Dill, 2005; Šisler, 2008). Importantly, several studies have revealed the significant role of media in creating negative attitudes toward Muslims (e.g., Das, Bushman, Bezemer, Kerkhof, & Vermeulen, 2009; Kalkan, Layman, & Uslaner, 2009; Nisbet et al., 2009; Saleem & Anderson, 2013). However, few studies have gone beyond assessing media effects on evaluative attitudes, to examine if media stereotypes of Muslims can influence support for public policies that are specifically intended to *harm* members of this group.

The present investigation examines the extent to which media stereotypes of Muslims as terrorists influence Americans' support for public policies that are intended to harm Muslims in the short and long term. This research expands prior research examining the effects of media stereotypes on policy support in at least four ways. First, we examine support for policies (military action, civil restrictions) that are explicitly intended to harm Muslims rather than policies that passively harm an outgroup (e.g., affirmative action[1]) or are race-neutral.[2] Moreover, support for the latter policies is implicitly associated with certain groups (e.g., African Americans); however, the policies do not explicitly and exclusively target members of one outgroup. The policies that we examine in the present study are *explicitly* and *exclusively* harming Muslims. This is an important distinction because support for intentionally harmful policies is a clear representative of outgroup harm, which is best predicted by perceptions of the outgroup as aggressive and/or angry (Brewer, 2001, 2010). Thus, the second contribution of this manuscript is to examine the extent to which Americans' perceptions of Muslims as being aggressive mediate the link between media stereotypes and support for policies harming Muslims. Third, we use both correlational and experimental designs to test the short- and long-term effects of media stereotypes on policy support. Fourth, we experimentally examine how counterstereotypic representations of Muslims can reduce aggressive perceptions and in turn support for harmful policies.

Media Representations of Muslims as Terrorists

The fact that minorities are underrepresented or negatively represented in American media is well established (for reviews, see Behm-Morawitz & Ortiz, 2013; Tukachinsky,

Mastro, & Yarchi, 2015). Indeed, this is especially the case with media portrayals of Muslims, Arabs, and people from Middle East,[3] who are largely represented as violent, evil terrorists across American media outlets (e.g., AlSultany, 2012; Dill et al., 2005; Dixon & Williams, 2015; Nacos & Torres-Reyna, 2007; Powell, 2011; Shaheen, 2009). Exposure to media stereotypes of Muslims and Arabs influences negative attitudes toward these groups (e.g., Das et al., 2009; Kalkan et al., 2009; Nisbet et al., 2009; Saleem & Anderson, 2013). In fact, the influence of media on Americans' attitudes toward Muslims is stronger than that of other informational sources (Kalkan et al., 2009). Research further reveals that the association between terrorism and Muslims/Arabs is so strong that terrorism cues implicitly activate anti-Muslim and anti-Arab bias (e.g., Park, Felix, & Lee, 2007; Saleem & Anderson, 2013). For example, studies reveal that even terrorism cues without direct Muslim/Arab references increase implicit bias toward Muslims/Arabs (Saleem & Anderson, 2013).[4]

The implicit association of terrorism with Muslims/Arabs is parallel to the way in which Americans associate crime with African Americans (e.g., Gilens, 1996; Valentino, 1999). For example, studies reveal that exposure to news coverage of crime automatically activates negative stereotypes of African Americans (e.g., Dixon & Azocar, 2007; Gilliam & Iyengar, 2000; Valentino, 1999). Similarly, exposure to African American, relative to White, criminal suspects increases support for punitive policies, including the death penalty and three-strikes legislation (Gilliam & Iyengar, 2000; Gilliam, Valentino, & Beckmann, 2002). Thus, the association between crime and African Americans is chronically accessible in the minds of most Americans due to frequent past activation via media exposure and other sources of cultural stereotypes. In the next section, we use the theoretical framework of social-cognitive theories to understand how media stereotypes form and strengthen such chronic associations and in turn influence race-related policies.

Theoretical Basis Underlying Media Stereotype Effects

The media's influence on attitudes and behaviors toward outgroups can be understood through social-cognitive theories, which highlight the role of priming processes in the short term and learning processes in the long term (e.g., Anderson & Bushman, 2002; Bandura, 1977; Huesmann, 1998). These theories suggest that our memories, thoughts, and decisions are based on complex associative networks of nodes representing cognitions and emotions. One's experience (direct and vicarious) influences development of links and associations between concepts. Concepts that are frequently activated simultaneously become interconnected over time, forming highly accessible schemas. Schemas ultimately influence perceptions, guide interpretations, and influence behaviors. In the context of media stereotypes, media depictions of outgroups can activate certain kinds of associations in the short term (through priming processes), and with repeated exposure can lead to long-term changes in schemas (through learning processes). Indeed, prior studies have established both short- and long-term effects of media stereotypes on negative attitudes toward outgroup members (e.g., Dixon, 2006; Dixon & Azocar, 2007; Ramasubramanian, 2011).

Media depictions of outgroups in a positive light, however, support positive attitudes toward those groups (e.g., Bodenhausen, Schwarz, Bless, & Waenke, 1995; Mastro & Tukachinsky, 2012; Power, Murphy, & Coover, 1996; Ramasubramanian, 2007, 2011, 2015). Exposure to counterstereotypic exemplars increases sympathy and reduces attribution of causal responsibility to outgroup members (Bodenhausen et al., 1995; Power et al., 1996). Research further suggests that counterstereotypic depictions that exemplify constructive prototypes of the outgroup are most effective in reducing negative attitudes toward outgroups (Mastro & Tukachinsky, 2012). However, most studies examining counterstereotypic media effects have not included a neutral depiction (i.e., depictions of the outgroup in neither a stereotypic nor a counterstereotypic manner). This is problematic for two reasons. First, the lack of a neutral condition makes it unclear whether the observed effects result from the stereotypic or the counterstereotypic media. Second, neutral media depictions of minority characters are more common than stereotypic depictions (e.g., Tukachinsky et al., 2015). We address this limitation in Study 3 by including a stereotypic, neutral, and counterstereotypic depiction.

Support From Existing Research

The above-outlined theoretical predictions are consistent with studies examining the association between media stereotypes and a range of race-based policies. For example, correlational evidence suggests that Whites' recollection of negative media portrayals of African Americans is significantly associated with negative stereotypes of African Americans and reduced support for affirmative action policies (Mastro & Kopacz, 2006; Tan, Fujioka, & Tan, 2000). Of course, the correlational nature of these studies warrants caution concerning their causal interpretations. Ramasubramanian (2011) used an experimental design to show that White participants primed with stereotypic images of African American celebrities, relative to participants primed with counterstereotypic images, displayed more stereotypic beliefs and prejudicial feelings and were less likely to support affirmative action policies. However, the use of images rather than visual media, the lack of a neutral condition, and the policy topic (reduced support for a nonspecific helpful policy for all minorities, rather than increased support for a specific harmful policy) limit the relevance of the observed effects to our key questions.

Beyond affirmative action, several correlational and experimental studies have documented the link between media stereotypes of African Americans and support for punitive policies such as the death penalty and three-strikes law (e.g., Dixon, 2006; Dixon & Azocar, 2007; Gilliam & Iyengar, 2000; Gilliam et al., 2002). These studies reveal that exposure to crime news (especially crime perpetrated by African Americans) increases negative attitudes toward African Americans and support for punitive policies. It is important to note that the punitive policies examined to date do not explicitly state that they are targeting African Americans exclusively; however, due to increased incarceration rates of African Americans, they inevitably harm mostly African Americans.

More recently, scholars have documented that exposure to immigration news activates majority members' threat perceptions and negative stereotypes of immigrants, which subsequently influence support of immigration-related policies (e.g., Fujioka, 2011; Igartua & Cheng, 2009; Seate & Mastro, 2015). Seate and Mastro (2015) extended prior research, which mostly focused on stereotypic beliefs, by highlighting the role of negative emotions (especially contempt) in understanding the association between media stereotypes and race-related policies. Although news depictions of immigration threat did not directly influence active (i.e., English-only law support) or passive (i.e., information sharing) harm, it did affect behaviors indirectly through contempt.

Extending Current Research: Aggressive Perceptions and Harmful Policies

This review of existing research reveals that media stereotypes of minority groups can influence both negative attitudes and emotions, which in turn influence support for race-related policies. In the current article, we build upon this work by examining support for policies that explicitly and exclusively harm Muslims as a specific outgroup. The policies we examine concern participants' support for aggressive actions (military action, civil restrictions) that specifically and exclusively target *Muslims*. Support for such policies is a clear representation of intentional outgroup harm, which research suggests is most strongly motivated by a desire to harm the outgroup, regardless of any benefit for one's ingroup (Brewer, 2001, 2010).

Briefly, social-psychological research differentiates intergroup behaviors motivated by ingroup love from those motivated by outgroup antagonism (Brewer, 2001, 2010; McCauley & Moskalenko, 2011). Reviews of studies indicate that most forms of intergroup bias, including the tendency to allocate more resources to an ingroup rather than outgroup member, occur with the primary motivation to benefit the ingroup rather than harm the outgroup (see Greenwald & Pettigrew, 2014, for a review). This is not to suggest that such behaviors do not passively harm outgroup members, but rather that the primary motivation behind such behaviors is not to harm the outgroup. Motivation to harm the outgroup as an end in itself is often predicted by perceptions of the outgroup as threatening and aggressive (Brewer, 2001, 2010). Indeed, studies reveal that threatening outgroups arouse aggressive cognitions and emotions which ultimately lead to aggressive behaviors toward outgroup members (Stephan & Stephan, 2000). We suggest that viewers are especially likely to hold such aggressive perceptions when exposed to media depictions of an outgroup in a violent context.

Mediated Depictions of Violent Outgroups

Although any stereotypic media depiction can increase negative outgroup attitudes (Mastro, 2009), media depictions of a group as violent and threatening are especially damaging to beliefs about that group. Such depictions may not only influence global negative attitudes but also perceptions of that group as violent, aggressive, and threatening (e.g., Anderson & Carnagey, 2004; Prot et al., 2015; Saleem & Anderson, 2013). Specific to the

present study, exposure to media in which Muslims are depicted as terrorists is likely to activate perceptions of Muslims as threatening and aggressive. As suggested above, these aggressive perceptions, relative to global attitudes, are especially likely to influence behaviors representative of outgroup harm. This is because aggressive perceptions activate related aggressive cognitions such as hostile expectations and aggressive norms, as well as aggressive feelings such as hostility and anger, which subsequently increase the likelihood of aggressive behaviors (e.g., Anderson & Bushman, 2002). Supporting these predictions, research suggests that perceptions of Muslims as *aggressive* predict public policy decisions relating to War on Terror *better* than more general attitudes assessing competence of Muslims, ethnocentrism, and authoritarianism (Sides & Gross, 2013).

Overview of the Present Studies

Taken together, existing theory and empirical evidence suggest that exposure to media depictions of Muslims in a violent context should influence aggressive perceptions and in turn support for policies that harm Muslims. We test these predictions across three studies: two correlational and one experimental, to better understand the short- and long-term effects of media stereotypes of Muslims. Furthermore, given the importance of ingroup identification and social dominance orientation (SDO) in predicting outgroup harm (e.g., Brewer, 2001; Kteily, Bruneau, Waytz, & Cotterill, 2015), we included these individual difference variables to better understand the *unique* effects of media stereotypes of Muslims on policies harming Muslims. Indeed, several scholars have criticized past media stereotype effects studies that do not account for important variables known to associate with intergroup biases in general (e.g., Mastro & Seate, 2012).

Study 1

The goal of Study 1 was to examine if media stereotypes of Muslims as terrorists influence support for public policies that are intended to harm Muslims in an international context. We expected that exposure to news depicting Muslims as terrorists would be positively associated with support for military actions in Muslim countries. A number of alternative theoretically relevant variables were included as controls to examine the *unique* effects of media stereotypes of Muslims as terrorists. First, an assessment of exposure to media violence was included, because previous research suggests that exposure to media violence can influence aggression in general (see Prot et al., 2015, for review) and intergroup bias (Greitemeyer, 2014), even if it does not include outgroup characters. Second, we assessed individual differences in SDO, because it is theoretically associated with increased perceptions of outgroup threat and outgroup harm (Kteily et al., 2015). Finally, we controlled for important demographic variables, including age, sex, and political orientation, all of which are associated with aggression or intergroup bias (e.g., Archer, 2004; Nisbet et al., 2009; Radvansky, Copeland, & von Hippel, 2010).

Hypothesis 1: Exposure to media stereotypes of Muslims as terrorists will be positively associated with support for military action in Muslim countries after controlling for theoretically relevant variables.

Study 1 Method

Participants

719 American college students (47% male, M_{age} = 19.44 years, SD = 0.50) completed computer-based surveys in exchange for course credit; 317 in a laboratory, 402 online.[5] None of the participants self-identified as Muslims.[6]

Measures

Entertainment media violence exposure (EMV). EMV was assessed using a modified version of the General Media Habits Questionnaire (Anderson & Dill, 2000). Participants listed five of their favorite television shows and video games and rated (a) frequency of use for each title (10 items, rated on a scale from 1 = *rarely* to 7 = *often*) and (b) how often characters physically attack each other for each title (10 items, rated on a scale from 1 = *rarely* to 7 = *often*). To calculate EMV exposure, ratings of physical violence for each title were multiplied by the corresponding amount of time spent watching or playing, and averaged for all 10 listed favorite media (M = 3.10; SD = 0.62; α = .65).

Exposure to news portraying Muslims as terrorists. Participants indicated their agreement with six statements (e.g., How often have you seen news stories about terrorism perpetrated by Muslims?) on a 1 (*never*) to 6 (*almost every day*) scale (M = 3.14; SD = 1.03; α = .92).

Support for military action in Muslim countries. Participants indicated their agreement with nine statements (e.g., I would support the use of U.S. military to reduce the influence of Islam on other countries) on a 1 (*strongly disagree*) to 5 (*strongly agree*) scale (M = 2.82; SD = 0.87; α = .86; Henry, Sidanius, Levin, & Pratto, 2005).

SDO. Participants indicated their agreement with 16 statements (e.g., Some groups of people are more worthy than others) on a 1 (*strongly disagree*) to 5 (*strongly agree*) scale (M = 3.87; SD = 0.72; α = .91; Pratto, Sidanius, Stallworth, & Malle, 1994).

Demographics. Participants reported their gender, age, race, political orientation (1 = *strongly liberal*; 7 = *strongly conservative*), and religious affiliation.

Results and Discussion

Preliminary Analyses

Data were screened for accuracy, missing values, and outliers. Four cases were excluded because they had missing values for more than 80% of the items. Main analyses were conducted on the remaining 715 participants.

Table 1. Zero-Order Correlations Between Main Measures in Study 1 (N = 715).

	1	2	3	4	5	6	7
1. Exposure to entertainment media violence	—						
2. Exposure to news portraying Muslims as terrorists	.14***	—					
3. Support for military action in Muslim countries	.03	.15***	—				
4. Social dominance orientation	.11***	.05	.44***	—			
5. Participant sex	.48***	.22***	.08*	.19***	—		
6. Participant age	.10***	.21***	.03	−.05	.14***	—	
7. Political orientation	−.04	−.03	.42***	.29***	.08*	−.06	—

Note. Sex (0 = female; 1 = male); political orientation (1 = *strongly liberal*; 7 = *strongly conservative*).
*p < .05. **p < .01. ***p < .001.

Main Analysis

Zero-order correlations between variables are shown in Table 1. Structural equation modeling with full-information maximum-likelihood estimation was conducted in MPlus 6.1. Next, a destructive testing approach (Anderson & Dill, 2000) was used to assess the strength of the relationship between terrorism news exposure and support for military action in Muslim countries. In this approach, one determines whether a specific predicted relation exists. If so, one next attempts to break the relationship by adding relevant competitor variables. If including a number of *theoretically relevant* covariates fails to break the relationship, then the target link gains strong empirical support. Thus, the destructive testing approach provides an opportunity for testing and ruling out alternative hypotheses. We tested a model of the effects of exposure to news portraying Muslims as terrorists on support for military action in Muslim countries (Figure 1). Five theoretically relevant competitor variables (relevant because of prior empirical and/or theoretical work) were entered as covariates: EMV, SDO, sex, age, and political orientation. Adequate model fit was obtained (χ^2 = 50.19, df = 15, p < .01; Tucker-Lewis index [TLI] = 0.96; comparative fit index [CFI] = 0.97; root mean square error of approximation [RMSEA] = 0.06, 90% confidence interval [CI] = [0.04, 0.08]). Not surprisingly, conservatives were much more supportive of military action in Muslim countries than liberals (β = .44, p < .01).[7]

More importantly, exposure to news portraying Muslims as terrorists was positively associated with support for military action in Muslim countries (β = .16, p < .01), even after controlling for theoretically relevant variables. Interestingly, exposure to entertainment media violence was not significantly associated with support for military action, either in the zero-order correlation (r = .03) or in the path model (β = .04, p > .05). These findings support Hypothesis 1 and suggest that exposure to media stereotypes of Muslims as terrorists, but not general entertainment media violence, significantly relates to support for military action in predominantly Muslim countries.[8]

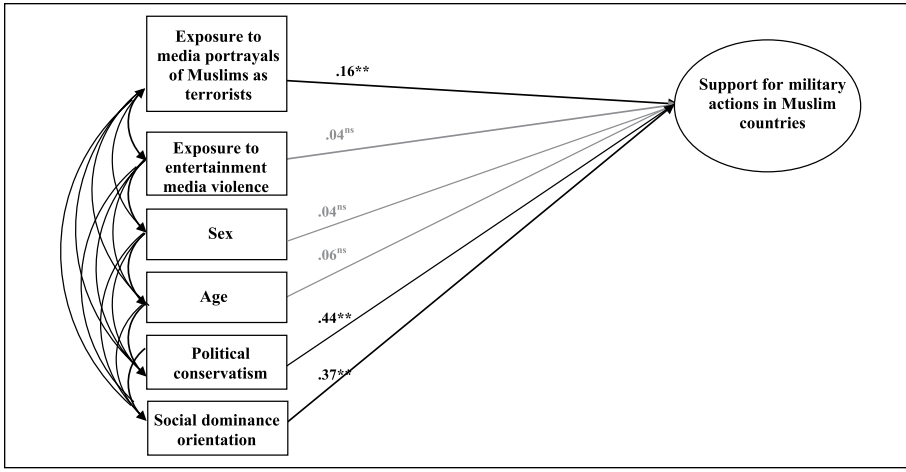


Figure 1. Effect of exposure to news media portrayals of Muslims as terrorists on support for military action in Muslim countries, after controlling for demographic and theoretically associated variables, Study 1.
Note. $\chi^2 = 50.19$, $df = 15$, $p < .01$; TLI = 0.96; CFI = 0.97; RMSEA = 0.06; 90% CI = [0.04, 0.08]. Standardized coefficients are shown. CI = confidence interval; TLI = Tucker-Lewis index; CFI = comparative fit index; RMSEA = root mean square error of approximation.
$^*p < .05$. $^{**}p < .01$.

Study 2

Study 2 was conducted to explore the underlying psychological mechanism explaining the effect of media stereotypes of Muslims on support for policies harming Muslims. As stated earlier, media depictions of an outgroup in a violent context increase perceptions of that outgroup as aggressive (Saleem & Anderson, 2013) and ultimately increase the likelihood of aggressive actions against members of that group (Sides & Gross, 2013). Indeed, perceptions of an outgroup as aggressive are better predictors of aggressive actions against outgroups compared with more general negative attitudes of the outgroup (Sides & Gross, 2013). Thus, we expected media depictions of Muslims as terrorists to activate perceptions of Muslims as aggressive, and to thereby increase support for harmful policies toward them. In Study 2, we examined support for policies that harm Muslim Americans, specifically support for civil restrictions for this group. Though there is some evidence that thinking of outgroups within a superordinate identity (e.g., American) reduces outgroup prejudice (see work on Common Ingroup Identity Model; Gaertner & Dovidio, 2000), research suggests that Americans' attitudes toward Muslim Americans are not significantly different than their attitudes toward Muslims living abroad (Sides & Gross, 2013).

As in Study 1, we controlled for important theoretically relevant variables in order to understand the *unique* effects of exposure to media stereotypes of Muslims on the outcomes assessed. First, prior literature suggests that ingroup identification is an important moderator in understanding intergroup biases; highly identified ingroup

members are more likely to perceive outgroups as threatening, relative to those low on ingroup identification (Brewer, 2001). In the context of American-Muslim relations, ingroup identification (American identity) significantly and positively predicts prejudice against Muslims (Jia, Karpen, & Hirt, 2011). Therefore, we assessed and controlled for ingroup identification in the present study. Second, explicit measurements of stereotypes and prejudice are known to be influenced by concerns for social desirability (Hewstone, Rubin, & Willis, 2002). Given that both the outcomes in the present study are assessed using explicit measures, we controlled for individual differences in social desirability. Finally, as in Study 1, we controlled for age, sex, and political orientation—all of which are associated with aggressive and prejudicial responses.

Hypothesis 2A: Exposure to news portraying Muslims as terrorists will be positively associated with support for civil restrictions for Muslim Americans after controlling for theoretically relevant variables.
Hypothesis 2B: The above relationship will be mediated by perceptions of Muslims as aggressive.

Method

Participants

Two hundred participants were recruited from Amazon Mturk in return for monetary compensation (88 male, 112 female, M_{age} = 36.74 years, SD = 12.78).

Measures

Exposure to news portraying Muslims as terrorists. Due to time constraints, a shortened four-item version of the Terrorism News scale used in Study 1 was utilized (M = 3.60; SD = 1.06; α = .92).

Ingroup identification. Participants responded to four statements (e.g., I feel strong ties with fellow Americans) on a 1 (*do not agree at all*) to 7 (*agree completely*) rating scale (Doosje, Ellemers, & Spears, 1995; M = 5.52, SD = 1.38; α = .93).

Social desirability scale. Participants indicated whether each of the 11 statements (e.g., I'm always willing to admit it when I make a mistake) was true/false in describing them (Reynolds, 1982). Items indicating social desirability were summed (M = 5.02, SD = 3.06; α = .81).

Perceptions of Muslims as aggressive. Five items measuring perceptions of Muslims as aggressive were adapted from Pratto et al. (1994). Participants rated their agreement with statements (e.g., Muslims are dangerous, Muslims are violent) on a scale from 1 (*strongly disagree*) to 5 (*strongly agree; M* = 2.44, SD = 1.05; α = .90).

Support for civil restrictions for Muslim Americans. Participants indicated their agreement on seven statements (e.g., Muslim Americans should not be allowed to vote; Muslim

Table 2. Zero-Order Correlations Between Main Measures in Study 2 (N = 200).

	1	2	3	4	5	6	7	8
1. Exposure to news portraying Muslims as terrorists	—							
2. Ingroup identification	.24**	—						
3. Social desirability	−.18*	.13	—					
4. Perceptions of Muslims as aggressive	.35***	.25***	−.08	—				
5. Support for civil restrictions for Muslim Americans	.32***	.28***	.03	.81***	—			
6. Participant sex	−.07	−.07	−.16*	.04	−.04	—		
7. Participant age	.24**	.19**	.03	.12	.18*	−.25***	—	
8. Political orientation	.21**	.16*	.05	.36***	.28***	.04	.11	—

Note. Sex (0 = female; 1 = male); political orientation (1 = *strongly liberal*; 7 = *strongly conservative*).
*p < .05. **p < .01. ***p < .001.

Americans should have to do annual security clearance checks with government agencies) using a 1 (*strongly disagree*) to 6 (*strongly agree*) scale (M = 1.99, SD = 1.01; α = .92).

Results and Discussion

Main Analysis

Zero-order correlations are shown in Table 2. Structural equation modeling with full-information maximum-likelihood estimation was conducted in MPlus 6.1. As in Study 1, conservative political orientation and exposure to news portraying Muslims as terrorists were positively related to perceptions of Muslims as aggressive and support for civil restrictions for Muslim Americans. In addition, ingroup identification was positively associated with both outcomes, but social desirability was not.

We tested a mediation model of the effects of news portraying Muslims as terrorists on support for civil restrictions for Muslim Americans with perceptions of Muslims as aggressive as a mediator (Figure 2). Political conservatism, ingroup identification, social desirability, age, and sex were entered as covariates. Adequate model fit was obtained (χ^2 = 72.70, df = 37, p < .01; TLI = 0.96, CFI = 0.97, RMSEA = 0.07, 90% CI = [0.05, 0.09]). Both political conservatism and ingroup identification were positively associated with support for civil restrictions for Muslim Americans. These effects were fully mediated by perceptions of Muslims as aggressive (standardized indirect effects of 0.23 and 0.16, respectively, ps < .01). More importantly, exposure to news portraying Muslims as terrorists was positively and significantly associated with support for civil restrictions for Muslim Americans. This effect was fully mediated by perceptions of Muslims as aggressive (standardized indirect effect of 0.23, p < .01).

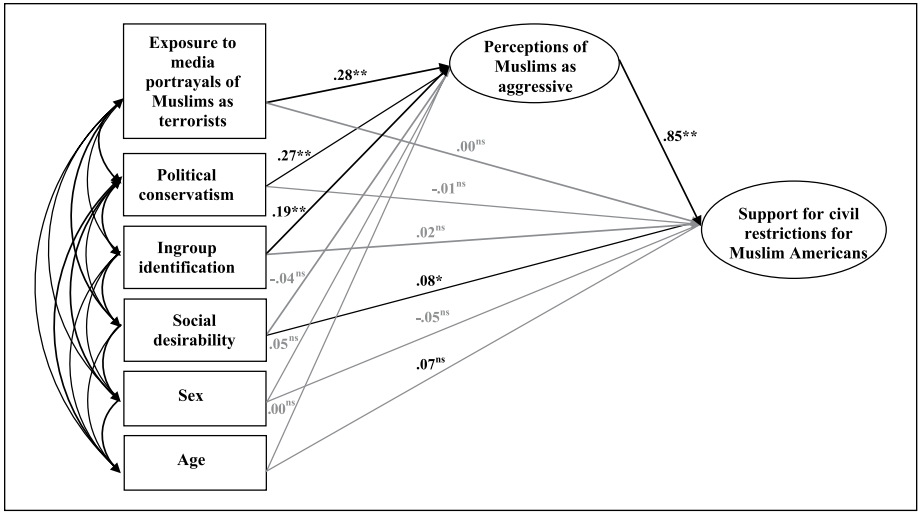


Figure 2. Effect of exposure to media portrayals of Muslims as terrorists on support for civil restrictions for Muslim Americans, mediated by perceptions of Muslims as aggressive, Study 2.
Note. $\chi^2 = 72.70$, $df = 37$, $p < .01$; TLI = 0.96, CFI = 0.97, RMSEA = 0.07, 90% CI = [0.05, 0.09]. Standardized coefficients are shown. CI = confidence interval; TLI = Tucker-Lewis index; CFI = comparative fit index; RMSEA = root mean square error of approximation.
*$p < .05$. **$p < .01$.

Overall, results supported Hypotheses 2A and 2B. Specifically, exposure to news portraying Muslims as terrorists predicted support for a policy harming Muslim Americans and appeared to do so by affecting perceptions of Muslims as aggressive. These effects remained significant after controlling for several theoretically relevant variables, demonstrating their robustness. This study extends the generalizability of Study 1 results by including participants from Amazon Mturk, who on average are older and more diverse in their demographic characteristics than college students (Buhrmester, Kwang, & Gosling, 2011).

Study 3

Study 3 experimentally tested the short-term effects of Muslim media depictions on perceptions of Muslims as aggressive and on support for policies harming Muslims. Specifically, we tested the effects of stereotypic, neutral, and counterstereotypic Muslim news portrayals. The news videos were expected to prime different schemas about Muslims, and thereby temporarily influence perceptions of Muslims as aggressive and support for policies harming Muslims. A no-video condition was included to observe attitudes at baseline and to assess the extent to which stereotypic, neutral, and counterstereotypic videos can move these baseline attitudes. Past research suggests that counterstereotypic depictions of minority characters reduce negative attitudes

compared with stereotypic depictions and to control conditions (e.g., Mastro & Tukachinsky, 2012; Ramasubramanian, 2007, 2011, 2015). However, no studies to our knowledge have compared neutral (i.e., outgroup represented neither negatively nor positively) media depictions of minority characters with stereotypic and counterstereotypic depictions. We expected the participants in the stereotypic video condition to display the most aggressive perceptions of and actions against Muslims, followed by participants in the no-video, neutral video, and counterstereotypic video conditions.[9]

Past exposure to news portraying Muslims as terrorists was measured to examine if it moderates the priming effect of the videos on the outcomes of interest. On the one hand, priming effects of terrorism news exposure might be especially strong for individuals who are regularly exposed to terrorism news based on theoretical propositions of chronic accessibility (e.g., Devine, 1989). On the other hand, priming manipulations can temporarily override individual difference effects in accordance with the activated schema (e.g., Bargh, Lombardi, & Higgins, 1988). Indeed, past studies assessing long-term exposure of media stereotypes in the context of priming manipulations find evidence for both possibilities (e.g., Dixon, 2006; Dixon & Azocar, 2007; Saleem & Anderson, 2013). As in Study 2, social desirability, ingroup identification, sex, age, and political orientation were statistically controlled.

Hypothesis 3A: Participants in the stereotypic video condition will be most likely to perceive Muslims as aggressive and to support policies harming Muslims, followed by participants in the no-video, neutral video, and counterstereotypic video conditions.

Hypothesis 3B: The relationship between the experimental conditions and support for policies harming Muslims will be mediated by perceptions of Muslims as aggressive.

Method

Participants

Two participant sampling procedures were used to test the generalizability of our results: (a) subject pool at a large Midwestern university ($n = 232$) and (b) Amazon Mturk ($n = 171$). Three participants reported technical problems with the stimulus videos, and thus were excluded from data analysis. The remaining 400 participants (51% male) completed the study online through Qualtrics.com.[10] Overall, participants in Amazon Mturk were older and more racially diverse than participants in the subject pool, consistent with previous research (Buhrmester et al., 2011). Participants were randomly assigned to one of the three news video conditions or to a no-video condition.

News Clips

Participants in the three video conditions watched two irrelevant news clips,[11] followed by the main experimental news clip about Muslims. All videos were of approximately the same length (~2-3 minutes) and of the same production quality (YouTube). The

stereotypic news clip discussed the 2007 attempted terror attack on Fort Dix; it aired on CBS on May 9, 2007. Specifically, the news clip stated that six Muslim men who had planned to attack Fort Dix with the goal of killing as many soldiers as possible were captured. These men were prepared to die in the name of Jihad and had considered attacking other military bases. The neutral news clip discussed the football practice schedule change due to Ramadan in a Dearborn, MI high school, aired on ABC on August 17, 2010. The news clip stated that the high school administrators had decided to delay football practices to accommodate the Muslim students who were fasting from sunrise to sunset during the month of Ramadan. The video included a brief interview with a Muslim male student who expressed his relief and happiness with the administration's decision. The counterstereotypic news clip discussed Muslims volunteering in the Detroit, MI area during Christmas and aired on ABC on December 25, 2010.[12] The news clip included a brief statement from the local Imam who emphasized the importance of the Muslim community coming together to help their fellow citizens during Christmas.

Measures

Prior to the experimental manipulation, exposure to news portraying Muslims as terrorists, social desirability, ingroup identification, and demographic variables were assessed using the same items as in Study 2. After the experimental manipulation, perceptions of Muslims as aggressive, support for civil restrictions for Muslim Americans, and support for military action in Muslim countries were assessed using the items from Studies 1 and 2.

Video clip evaluation. Participants who watched a video indicated the extent to which each video was boring-exciting; negative-positive; and unimportant-important using a 1 to 5 semantic differential rating scale. Participants' valence ratings for the videos served as a manipulation check, whereas the other ratings were included to understand whether the videos were equivalent on important dimensions. As would be expected, participants in the counterstereotypic video condition rated the video more positively ($M = 4.65$) than participants in the neutral ($M = 3.86$) or stereotypic ($M = 1.93$) video conditions. All three conditions were significantly different from each other, Fs > 40.00, ps < .001. There was no significant difference in how interesting the counterstereotypic, neutral, or stereotypic videos were rated, Fs < 1.00, ps > .10. This is important as previous studies suggest that perhaps the reason why negative, relative to positive, media images are more powerful in influencing attitudes is because negative content increases arousal and is more memorable than positive content (Soroka & McAdams, 2015; Tan et al., 2000). The neutral video ($M = 3.58$) was rated as less important than the counterstereotypic ($M = 4.06$) and stereotypic ($M = 4.18$) video conditions, $F(1, 295) = 11.33$, $p < .001$. The latter two were not significantly different from each other.[13]

Procedure

Participants completed an online informed consent form and were told that the purpose of the present study was to understand the relationship between media exposure and

Table 3. Zero-Order Correlations Between Main Measures in Study 3 (N = 399-400).

	1	2	3	4	5	6	7	8	9
1. Exposure to news portraying Muslims as terrorists	.92								
2. Perceptions of Muslims as aggressive	.37***	.90							
3. Support for civil restrictions for Muslim Americans	.29***	.74***	.91						
4. Support for military action in Muslim countries	.21***	.46***	.55***	.88					
5. Sex	.07	.05	−.07	.06	—				
6. Age	.22***	.17**	.10*	−.03	−.04	—			
7. Political orientation	.12*	.26***	.24***	.37***	.06	−.15**	—		
8. Social desirability	−.11*	−.07	−.04	−.02	−.12*	−.12*	.04	.82	
9. Ingroup identification	.09	.11*	.19***	.43***	−.15**	−.11*	.26***	.10*	.93

Note. Alphas on the diagonal. Sex (0 = female; 1 = male); political orientation (1 = *strongly liberal*; 7 = *strongly conservative*).
*p < .05. **p < .01. ***p < .001.

public opinion. Participants first answered pre-experimental questions assessing demographic information, social desirability, ingroup identification, and their exposure to terrorism news, climate change news, and healthy nutrition news. The latter two were added to reduce suspicion and were asked in the same format as our standard exposure to terrorism news questions. Next, participants in the video conditions watched two irrelevant videos in a counterbalanced order. Next, they were randomly assigned to watch a stereotypic (n = 105), counterstereotypic (n = 100), or neutral (n = 94) news clip about Muslims. Participants rated how positive, exciting, and important each video was. Subsequently, all participants completed post-experimental measures of perceptions of Muslims, support for civil restrictions for Muslim Americans, and support for military action in Muslim countries. Finally, participants were thanked and fully debriefed. Participants in the baseline (no-video) condition (n = 101) did not watch any videos.

Results and Discussion

Preliminary Analyses

Table 3 displays zero-order correlations among the measured variables and coefficient alphas for the multiple-item scales. Preliminary analyses revealed that older participants were more likely to perceive Muslims as aggressive and support civil restrictions compared with younger ones, and political conservatives scored higher than liberals on all outcome variables. Thus, these three demographic variables were included as covariates in all main analyses.

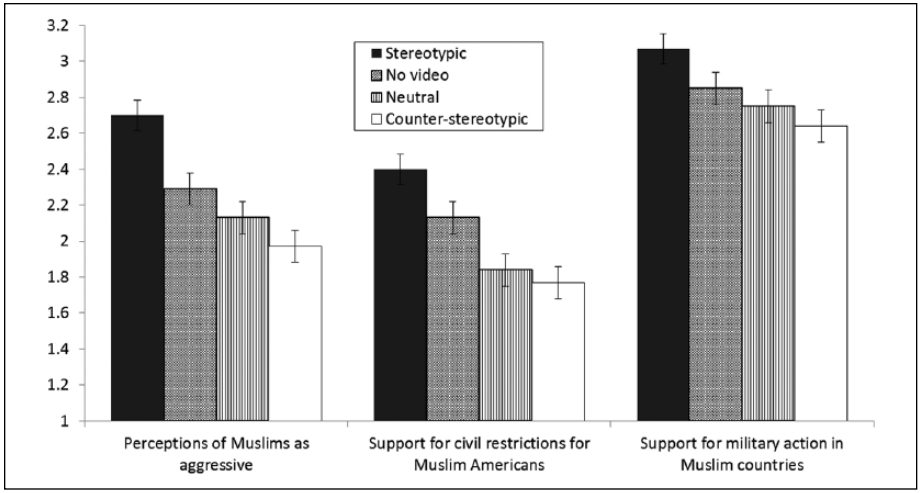


Figure 3. Study 3 means for the effect of condition on perceptions of Muslims as aggressive, support for civil restrictions for Muslim Americans, and support for military action in Muslim countries.

Note. Error bars display standard errors. For support for civil restrictions, the scale ranged from 1 (*strongly disagree*) to 6 (*strongly agree*). For the other two dependent variables, the scale ranged from 1(*strongly disagree*) to 5 (*strongly agree*).

Interactions between the experimental manipulation and each of the pre-experimental measures were tested for all three dependent variables. Only the political orientation × condition interaction term was significant in any of the analyses. Thus, the other terms were excluded from main analyses.

Main Analyses

Perceptions of Muslims as aggressive. A two-way ANCOVA (Experimental Condition × Political Orientation[14]) was conducted, with sex, age, social desirability, ingroup identification, and exposure to terrorism news as covariates. Results revealed a significant main effect of experimental condition on perceptions, $F(3, 387) = 11.39$, $p < .001$, $\eta_p^2 = 0.03$. The means (Figure 3) were consistent with our hypothesized pattern; the specific contrast testing this model (linear contrast from stereotypic (+3) to no-video (+1) to neutral (−1) to counterstereotypic (−3)) accounted for 84% of the between-condition variance, $F(1, 387) = 28.83$, $p < .001$, $\eta_p^2 = 0.07$. Furthermore, deviation from the predicted pattern of means was nonsignificant, $F(2, 387) < 2.00$, $p > .10$. Participants in the stereotypic video condition were the most likely to perceive Muslims as aggressive, followed by participants in the no-video, neutral, and counterstereotypic conditions (*M*s = 2.70, 2.29, 2.13, 1.97, respectively).[15]

In addition to these experimental results, long-term exposure to terrorism news was positively associated with perceptions of Muslims as aggressive, $F(1, 387) = 39.64$,

$p < .001$, $b = 0.31$; $d = 0.64$, $\eta_p^2 = 0.09$. This is a conceptual replication of our earlier correlational findings. Participant age and political orientation also yielded significant main effects, Fs(1, 387) = 9.45, 23.01; ps < .01; ds = 0.31, 0.49; η_p^2s = 0.02, 0.06. Older ($b = 0.16$) and more conservative ($b = 0.24$) participants were more likely to perceive Muslims as aggressive. None of the other effects were significant, including the Condition × Political Orientation interaction. In other words, the effect of the news clip manipulation generalized across these individual differences.

Civil restrictions for Muslim Americans. A similar ANCOVA revealed a significant main effect for experimental condition on support for civil restrictions for Muslim Americans, $F(3, 387) = 11.94$, $p < .001$, $\eta_p^2 = 0.03$. The means (Figure 3) were consistent with the hypothesized pattern, and the predicted linear contrast accounted for 93% of the between-condition variance, $F(1, 387) = 33.25$, $p < .001$, $\eta_p^2 = 0.08$. Furthermore, deviation from the predicted pattern was nonsignificant, $F(2, 387) < 2.00$, $p > .10$. Participants in the stereotypic video condition were the most likely to support civil restrictions for Muslim Americans, followed by participants in the no-video, neutral, and counterstereotypic conditions (Ms = 2.40, 2.13, 1.84, 1.77, respectively).

Once again, long-term exposure to terrorism news was positively associated with support for civil restrictions, $F(1, 387) = 21.19$, $p < .001$, $b = 0.20$; $d = 0.47$, $\eta_p^2 = 0.05$. This also replicates our earlier correlational findings. Participant age and political orientation also yielded significant effects, Fs(1, 387) = 5.08, 15.06; ps < .05; ds = 0.23, 0.39, η_p^2s = 0.01, 0.04. Similar to their effects on perceptions, older ($b = 0.10$) and more conservative ($b = 0.17$) participants reported greater support for civil restrictions for Muslim Americans.

In addition, political orientation significantly interacted with experimental condition, $F(3, 387) = 2.83$, $p < .05$ (see Figure 4). Conservative, relative to liberal, participants were more likely to show support for civil restrictions for Muslim Americans in the stereotypic, no-video, and neutral conditions (bs = 0.24, 0.28, 0.34, respectively, ps < .01); however, political orientation had no effect in the counterstereotypic video condition ($b = 0.01$, $p > .20$). In other words, the counterstereotypic media portrayal of Muslims was the most effective in reducing support for public policies targeting Muslim Americans for politically conservative participants. None of the other effects were significant.

Military action against Muslim countries. The ANCOVA revealed a significant main effect of condition on support for military action in Muslim countries, $F(3, 386) = 6.84$, $p < .01$, $\eta_p^2 = 0.02$. The means (Figure 3) were consistent with the hypothesized pattern, and the linear contrast testing this model accounted for 87% of the between-condition variance, $F(1, 386) = 17.91$, $p < .001$, $\eta_p^2 = 0.04$. Deviation from the predicted pattern was nonsignificant, $F(2, 386) < 2$, $p > .10$. Participants in the stereotypic video condition were the most likely to support military action against Muslim countries, followed by participants in the no-video, neutral, and counterstereotypic conditions (Ms = 3.07, 2.85, 2.75, 2.64, respectively).

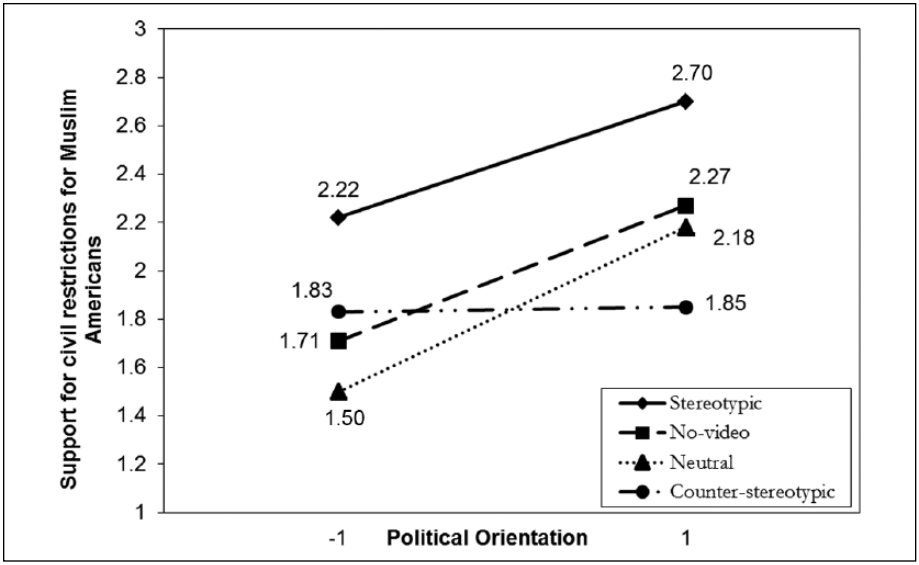


Figure 4. Support for civil restrictions for Muslim Americans as a function of experimental condition and political orientation in Study 3.
Note. Political orientation (1 = *strongly liberal*; 7 = *strongly conservative*) shown at ±1 standard deviation.

As with the other two dependent variables, long-term exposure to terrorism news was positively associated with support for military action, $F(1, 386) = 9.12$, $p < .01$, $b = 0.11$; $d = 0.31$, $\eta_p^2 = 0.02$. Similar to the other outcomes, this replication supports the long-term effects of terrorism news exposure on support for public policies that harm Muslims. Finally, conservative participants were more likely to support military action in Muslim countries than were liberals, $F(1, 386) = 28.67$, $p < .001$, $b = 0.20$; $d = 0.55$, $\eta_p^2 = 0.07$. None of the other effects were significant.

Mediation Analyses

Perceptions of Muslims as aggressive mediating support for civil restrictions. To test the mediating role of perceptions in understanding the effects of the video conditions on support for civil restrictions, we used the Hayes and Preacher (2014) method. The video conditions were dummy coded and compared with the no-video condition. We statistically controlled for ingroup identification, social desirability, participant age, sex, political orientation, and long-term exposure to news portraying Muslims as terrorists. Perceptions of Muslims as aggressive significantly mediated the effect of the stereotypic video (95% CI = [0.06, 0.41]) and the counterstereotypic video (95% CI = [−0.39, −0.03]), relative to the no-video condition, on support for civil restrictions for Muslim Americans (Figure 5).[16]

There was a significant negative effect of the counterstereotypic and neutral video conditions, relative to the no-video condition, on support for civil restrictions for

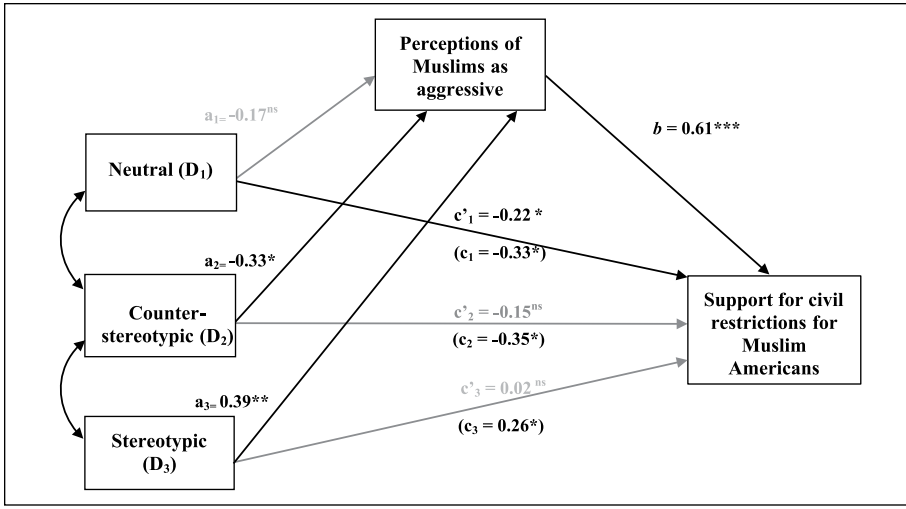


Figure 5. Mediation model testing the effect of the video, relative to no-video, conditions on perceptions of Muslims as aggressive (standardized) and support for civil restrictions for Muslim Americans controlling for ingroup identification, social desirability, participant age, sex, political orientation, and long-term exposure to terrorism news.
Note. Estimated model coefficients are shown. ns = nonsignificant.
*p < .05. **p < .01. ***p < .001.

Muslim Americans (bs = −0.35, −0.33; ts(390) = −2.74, −2.56; ps < .05). Conversely, there was a positive effect of the stereotypic video, relative to the no-video, condition on support for civil restrictions for Muslim Americans (b = 0.26, t(390) = 2.11, p < .05). Importantly, the effects of the stereotypic and counterstereotypic video conditions (relative to no-video) became nonsignificant once the effect of aggressive perception was accounted for (bs = 0.02, −0.15; ts(389) = 0.25, −1.59; ps > .10, respectively), suggesting full mediation. In sum, the causal effects of the video manipulation on support for civil restrictions for Muslim Americans were mediated by their effects on perceptions of Muslims as aggressive.

Perceptions of Muslims as aggressive mediating support for military actions. We used the same method to test the mediating role of perceptions on support for military action in Muslim countries. Perceptions of Muslims as aggressive significantly mediated the effect of stereotypic video (95% CI = [0.03, 0.20]) and counterstereotypic video (95% CI = [−0.17, −0.02]), relative to no-video, conditions on support for military action in Muslim countries (Figure 6).[17]

There was a positive effect of the stereotypic video, relative to the no-video, condition on support for military action in Muslim countries, b = 0.21, t(389) = 2.04, p < .05. Conversely, there was a negative effect of the counterstereotypic video, relative to the no-video, condition on support for military action in Muslim countries, b = −0.22, t(389) = −2.06, p < .05. The neutral video, relative to no-video, condition was not

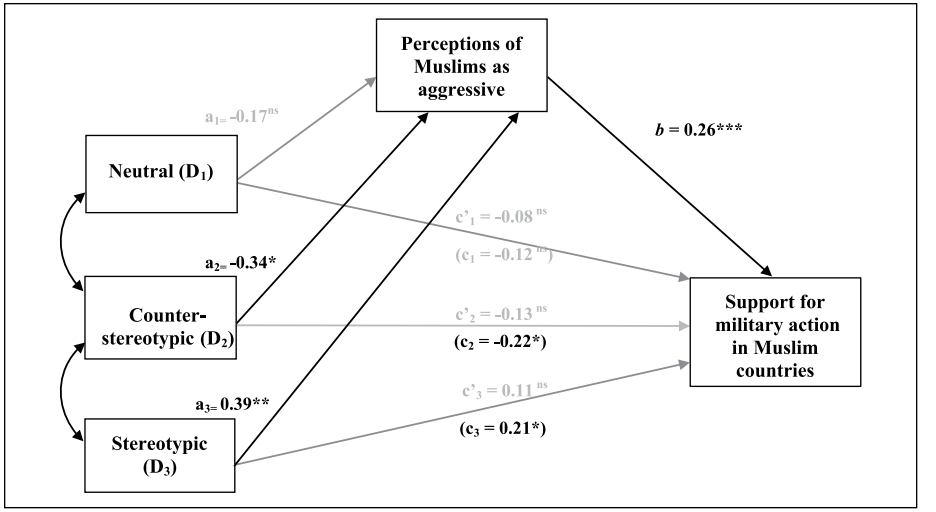


Figure 6. Mediation model testing the effect of the video, relative to no-video, conditions on perceptions of Muslims as aggressive (standardized) and support for military action in Muslim countries controlling for ingroup identification, social desirability, participant age, sex, political orientation, and long-term exposure to terrorism news.
Note. Estimated model coefficients are shown. ns = nonsignificant.
*$p < .05$. **$p < .01$. ***$p < .001$.

significant, $b = -0.12$, $t(389) = -1.12$, $p > .10$. Again, the effect of the stereotypic and counterstereotypic video conditions became nonsignificant with perceptions of Muslims as aggressive in the model (bs = 0.11. −0.13; ts(389) = 1.11, −1.30; ps > .10), suggesting full mediation. As with the civil restrictions outcome variable, the causal effects of the videos on support for military actions in Muslim countries were mediated by their effects on perceptions of Muslims as aggressive.

Overall, these results support Hypotheses 3A and 3B. Specifically, brief exposure to stereotypic or counterstereotypic news media footage of Muslims induced changes in participants' perceptions of Muslims as aggressive; these changes led to subsequent changes in support for policies harming Muslims domestically and internationally. The experimental design of Study 3 improves upon previous studies that utilized a correlational design, allowing stronger causal conclusions. In addition, this study used videos to test the effects of positive and negative media images of Muslims, rather than relying on pictures of famous outgroup celebrities (e.g., Ramasubramanian, 2011). Finally, unlike previous studies, the present study included both a baseline no-video and a neutral video condition, thereby providing stronger and clearer tests of the effects of stereotypic and counterstereotypic video conditions on outgroup attitudes.

General Discussion

Across one experimental and two correlational studies, we tested the short-term and long-term effects of media stereotypes of Muslims as terrorists on Americans'

perceptions of Muslims as aggressive and on their support for policies that harm Muslims. Study 1 revealed that exposure to news portraying Muslims as terrorists is significantly associated with support for military action in Muslim countries. Importantly, this effect was independent of exposure to entertainment media violence in general; instead, it was specific to media portrayals of Muslims as terrorists. In addition, this effect was observed even after controlling for several theoretically relevant variables. Study 2 extended these results by exploring the effects of exposure to Muslims as terrorists on Americans' support for civil restrictions for Muslim Americans. This effect was found to be fully mediated by perceptions of Muslims as aggressive. Again, this effect remained statistically significant even after controlling for important theoretically relevant variables. Finally, the experimental results from Study 3 revealed that short-term exposure to news portraying Muslims as terrorists increased support for policies harming Muslims internationally and domestically. Exposure to counterstereotypic portrayals of Muslims, on the other hand, reduced support for these policies. These effects were fully mediated by perceptions of Muslims as aggressive. Importantly, the short-term experimental manipulation and the long-term exposure to terrorism news yielded main effects, rather than interactive effects. Finally, a significant interaction between political orientation and experimental condition suggested that the effect of counterstereotypic Muslim news on lowered support for civil restrictions for Muslim Americans was strongest for political conservatives.

This work has several theoretical and methodological strengths. Theoretically speaking, this work extends previous research on media stereotypes and race-related policies by examining support for policies that explicitly and exclusively harm Muslims. Most studies to date have examined policies that are implicitly associated with certain groups but are not exclusively harming one *specific* group (e.g., welfare, three-strikes law, death penalty). The policies we examined asked participants about their support for aggressive actions exclusively targeting Muslims. Such aggressive actions are representative of outgroup harm in which aggression against an outgroup is an end to itself. Consistent with theoretical predictions, support for such policies was predicted by perceptions of Muslims as aggressive. Our findings illustrate the process through which media depictions of an outgroup as violent influence aggressive actions against members of that group.

Methodologically speaking, the present work addresses the limitations of past studies in several ways. The majority of previous research exploring the effects of media stereotypes and public policies targeting outgroups has been correlational in design or did not included appropriate control conditions (i.e., lack of control condition or neutral depiction). In addition, the majority of past studies exploring the effects of media stereotypes on support for race-related policies used student samples. Although it is important to understand the extent to which students' public policy decisions are influenced by media depictions, research suggests that college-aged students are less likely to be interested in and involved in politics compared with older adults (Plutzer, 2002). Finally, much of past work has not controlled for important theoretically relevant variables known to be associated with outgroup attitudes (Mastro & Seate, 2012).

The present work addressed these limitations by exploring long-term and short-term effects of the media stereotypes on support for policies harming Muslims using correlational and experimental designs. In addition, the inclusion of neutral and no-video conditions in Study 3 provides a cleaner test of the extent to which stereotypic and counterstereotypic media depictions influence attitudes and public policy decisions targeting outgroups. Importantly, we included both college-aged and adult participants, providing evidence for the generalizability of these results. Finally, in all three studies, we included important theoretically relevant variables known to be associated with the outcomes assessed in order to explore the unique effects of media stereotypes on the outcomes assessed.

Importantly, in Study 3 overall exposure to terrorism news yielded a significant main effect on the outcomes assessed but did not significantly interact with the priming manipulations. This is consistent with the results of other studies (e.g., Saleem & Anderson, 2013), which suggest that chronic exposure to media stereotypes need not necessarily interact with priming manipulations as primes can temporarily activate cognitive constructs consistent with the primes for all individuals (Bargh et al., 1988).

We did observe somewhat inconsistent effects of the moderating role of political orientation across the three studies. Specifically, political orientation did not significantly moderate the effects of exposure to terrorism news and the outcomes assessed in Studies 1 and 2 (see supplemental materials) but did significantly interact with the priming manipulation in Study 3. Given the prevalence of negative Muslim stereotypes in American media, it is possible that in the long term, media stereotypes of Muslims influence negative attitudes toward Muslims for individuals across the political spectrum. However, in a short-term priming context, stereotypic media depictions of Muslims are more likely to activate negative attitudes toward Muslims for political conservatives, relative to liberals, due to the strength of their cognitive association of Muslims with terrorism. Of course, this is a post-hoc explanation, and future studies are needed to better shed light on the potential inconsistencies of political orientation as a moderator in understanding the relationship between media stereotypes of Muslims and attitudes toward Muslims across long-term and short-term contexts.

The present work is also important as few studies have empirically tested the relationship between media stereotypes of Muslims and Americans' attitudes and public policy decisions relevant to Muslims. The media's role in understanding Americans' attitudes toward Muslims is especially important when considering (a) the number and amount of time Americans are exposed to news media (Pew Research Center, 2010), (b) the overwhelmingly negative representation of Muslims in the news media (Dixon & Williams, 2015; Nacos & Torres-Reyna, 2007; Powell, 2011), (c) the fact that most Americans rely on news media as their primary source of information about Muslims (Nisbet et al., 2009), (d) that media's role in influencing negative attitudes toward Muslims is more important than other sources (Kalkan et al., 2009), (e) that most Americans do not have direct contact with Muslims in their daily lives (Jung, 2012), and (f) that media stereotypes are especially detrimental for infrequently encountered groups (Zillmann, 2002). Thus, even the small media effect sizes observed in these studies can influence societal-level policies targeting Muslims domestically and

internationally. Indeed, one of the most alarming findings observed in these studies is that non-Muslim Americans are supporting civil restrictions for American *citizens* of Muslim faith because of their exposure to the media depictions of Muslims as terrorists. Beyond international contexts, these perceptions and action tendencies are likely to have negative effects on domestic intergroup relations between Muslim and non-Muslim American citizens.

Despite these concerns, the present work suggests that media could play an important role in countering such anti-Muslim attitudes. Specifically, more balanced news coverage of Muslims, in the United States as well as worldwide, would reduce the perception that Muslims are necessarily violent (see Bacha, 2011, for a similar discussion). Findings from Study 3 reveal that even a brief counterstereotypic news clip can reduce perceptions of Muslims as aggressive and reduce support for public policies targeting Muslims, at least temporarily. These results are consistent with previous studies that found exposure to brief counterstereotypic media portrayals of outgroups can reduce stereotypes and prejudice (e.g., Bodenhausen et al., 1995; Mastro & Tukachinsky, 2012; Power et al., 1996; Ramasubramanian, 2007, 2011, 2015). Though the primed effects of the counterstereotypic news clip may be short term, repeated exposure to such media portrayals has the potential to lead to long-term changes in schemas involving outgroups, as suggested by social-cognitive theories. Furthermore, these message-based interventions can be combined with individual-based approaches such as media literacy programs (e.g., Ramasubramanian, 2007) in order to better combat the prevalence of media stereotypes of Muslims in American media.

Several limitations of the present study deserve consideration. First, the correlational nature of Studies 1 and 2 limits the strength of causal conclusions that can be drawn. Obviously, there are both practical and ethical reasons why one cannot experimentally manipulate news media stories over a long period of time to test whether such news stories cause systematic changes in stereotypes, violent behaviors, and policies targeting Muslims. An alternative might be to longitudinally examine a large sample of participants, including their media consumption, over a multi-year period. In the meantime, testing theoretically derived hypotheses and plausible alternative hypotheses via cross-sectional methods and via brief ethically feasible experimental studies will have to suffice.

A second limitation concerns the measure of entertainment media violence used in Study 1. Recall that variable assessed habitual exposure to violent entertainment media in general. Although this variable was conceived of as a competitor to the news media hypothesis in Study 1, a different version of it could be additionally informative. For example, a much more specific measure of exposure to anti-Muslim entertainment violence might also contribute to perceptions of Muslims as especially aggressive. Indeed, many modern films, TV shows, and video games have Arabs and Muslims as the primary enemy and portray them as terrorists and generally evil (e.g., Alsultany, 2012; Dill et al., 2005; Shaheen, 2009). And of course, recent experimental studies have shown that such media depictions do increase negative attitudes toward members of these groups (Saleem & Anderson, 2013). To date, there are no cross-sectional or longitudinal studies that have measured violence towards outgroups in entertainment

and news media and outcome variables in a more detailed way needed to test such specific media violence effects.

A third limitation concerns the videos used in Study 3. Although we assessed the extent to which these videos are boring-exciting and unimportant-important, it is possible that they varied on other important dimensions such as arousal, typicality, and positive and negative emotions. It is important to select videos that are equivalent on a host of important dimensions known to influence aggressive responses and attitudes toward outgroups. Future studies should extend these results by including several different videos representing stereotypic, neutral, and counterstereotypic media depictions of Muslims that are equivalent on other important dimensions to provide evidence for external validity and overall generalizability of these results.

Overall, the present work extends the previous literature on media stereotypes and public policies in theoretically and methodologically important ways. Specifically, results from the present set of studies suggest that long-term and short-term exposure to media stereotypes of Muslims as terrorists increases perceptions of Muslims as aggressive, which in turn increases support for policies that harm Muslims domestically and internationally. By improving our understanding of the processes underlying such media-based stereotype effects and of the extent (and limits) of such effects, media scholars and society at large may ultimately be in a better position to reduce such harmful effects at multiple levels of violence, not only within a particular society but also between nations.

Declaration of Conflicting Interests

The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

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Notes

1. Research suggests that Whites' lack of support for affirmative action is not motivated by intentions to harm African Americans but rather concerns for one's ingroup (Lowery, Unzueta, Knowles, & Goff, 2006).
2. Policies such as crime and welfare are inherently race-neutral as they affect all society members, but support for them is heavily influenced by racial attitudes due to their implicit association with certain groups (Gilens, 1996).
3. Although these identities are distinct, Americans often confound them as one identity, and their attitudes toward these different groups are remarkably similar (Kteily, Bruneau, Waytz, & Cotterill, 2015).
4. Some scholars suggest that the presence of violence in media is enough to influence negative attitudes toward outgroups due to increased arousal and the strong cognitive association

between violence and some outgroups (e.g., Greitemeyer, 2014). However, results from Saleem and Anderson (2013, Experiment 2) reveal that heightened anti-Arab bias after playing terrorism-themed video games is a result of the terrorism cues and not simply due to the presence of violence in these games. Nevertheless, exposure to entertainment media violence was assessed in Study 1 to better understand whether the effects of terrorism news exposure on policy decisions targeting Muslims are due to terrorism or violence cues.

5. No significant differences were found between participants who completed the study online versus offline in terms of media habits, attitudes toward Muslims, or demographic characteristics.
6. None of the participants self-identified as Muslims in any of the subsequent studies.
7. The potential moderating role of political orientation was explored in an alternative analysis. Political orientation did not significantly moderate the relationship between exposure to terrorism news and the outcomes assessed in Studies 1 and 2. These analyses are included in Appendices 1 and 2 of the supplemental materials.
8. Of course, it is still possible that repeated exposure to specific types of entertainment media violence could have an independent influence. For example, high exposure to entertainment media that portray Muslims as terrorists would theoretically have a greater impact on Muslim stereotypes than would high exposure to violent media in general. This is a hypothesis that needs further testing in new research.
9. Because most Americans are exposed mostly to negative news stories about Muslims, we thought that the neutral news video condition might have a slightly positive effect, relative to the no-video condition.
10. Demographic characteristics of both samples are displayed in Appendix 4 of the supplemental materials.
11. The irrelevant news clips about climate change and the recent change in national healthy nutrition suggestions were included to reduce suspicion.
12. All news clips were from national news stories. The university sample was not from Michigan, so the news stories were not personally relevant for either sample.
13. Including participants' ratings of how important the videos were as covariates in the final model did not significantly change overall results. See Appendix 3 of the supplemental materials for additional details.
14. Political orientation was treated as a continuous linear variable.
15. Specific contrasts comparing the different conditions are included in Appendix 6 of the supplemental materials.
16. Detailed explanation of this analysis can be found in Appendix 5 of the supplemental materials.
17. Detailed explanation of this analysis can be found in Appendix 5 of the supplemental materials.

Supplementary Material

Supplementary material is available for this article online.

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