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How Reel Middle Easterners' Portrayals Cultivate Stereotypical Beliefs and Policy Support

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ABSTRACT

There is limited empirical research examining cultivation theory's proposition that first-order estimates influence second-order attitudes. In two studies, we examine how Middle Easterners are portrayed on entertainment television and how these portrayals cultivate stereotypical beliefs and policy support. A content analysis in Study 1 finds that nearly half of Middle Eastern characters on entertainment television are portrayed as supporting terrorism. A survey in Study 2 finds that watching television programs averaging two or more Middle Eastern terrorist characters per episode is associated with individuals' estimations that a higher percentage of Middle Easterners are associated with terrorism in the real world. This first-order cultivation effect was found to be a mediating mechanism between entertainment media exposure and support for restrictive immigration and naturalization policies. We discuss the importance of examining entertainment television representations of racial/ethnic minorities and their implications for attitudes and policy support relevant to the depicted groups.

Americans' attitudes toward Middle Easterners, Arabs, and Muslims have consistently been unfavorable since 9/11. Indeed, on a recent feeling thermometer measuring warmth toward various social groups, Muslims scored the lowest (Pew Research Center, 2017b). Other data show that Americans

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support the surveillance of Arabs (Panagopoulos, 2006) and are unsupportive of accepting Middle Eastern refugees (The Middle East Institute, 2017). These negative attitudes further manifest themselves in public policy decisions relevant to members of these groups. For instance, in 2017 then-President Trump implemented executive order 13769, widely known as the "Muslim ban," which restricted travel from several Middle Eastern and predominantly Muslim countries (Hurley, 2018).

Much of what Americans know about Arabs, Middle Easterners, and Muslims is not based on direct contact but rather through how these groups are depicted in the media (Smith, 2013). The majority of these depictions are negative and are in the context of terrorism and violence (Ahmed & Matthes, 2017; Dixon & Williams, 2015). However, media depictions are clearly at odds with real-world data, which reveals that in the U.S., only 6% of terrorism suspects are Muslim (FBI, 2006). Yet, Muslim terrorist attacks in the U.S. received 357% more news coverage than other terrorist attacks (Kearns et al., 2019). The current research examines this inter-reality divergence and how it influences stereotypical beliefs and policy support relevant to Middle Easterners.

Using the theoretical framework of cultivation theory, the present studies contribute to this investigation through a quantitative content analysis (Study 1) focused on portrayals of Middle Eastern characters in television entertainment. In Study 2, we directly test propositions of cultivation theory by pairing our content analysis with survey results to examine how these portrayals cultivate both stereotypical beliefs and policy support. The current research provides a theoretical extension of past work in two important ways. First, the current project explores entertainment portrayals rather than news media, which has been the focus of most existing content analyses on Muslims and Middle Easterners (Dixon & Williams, 2015; Trevino et al., 2010). In the context of this research, cultivation theory can be used to explain how long-term viewing of Middle Easterners as terrorists on entertainment television is likely to influence stereotypical beliefs specific to this group.

Second, the present research examines how first-order-cultivated beliefs related to Middle Easterners mediate the relationship between entertainment television exposure and second-order attitudes pertinent to this group (e.g., policy support). Cultivation effects are thought to come as first-order, which are viewer estimates of the prevalence of specific constructs, and second-order, which are viewer attitudes and beliefs (Shrum et al., 2004). Existing research has specified the need for data that further examines the conceptual relationship between first- and second-order effects (Coenen & Van den Bulck, 2016a; Morgan et al., 2014). In specific situations, real-world estimates (first-order effects) that are prevalent or commonly held might be influential at affecting related beliefs (second-order

effects). Study 2 provides a theoretical test of the connection between first- and second-order effects by investigating how entertainment television exposure might not only be cultivating group-based estimates related to Middle Easterners but also how these estimates might have implications as an underlying mechanism for harmful policy support.

Arabs, Middle Easterners, and Muslims

Much of the existing social science research on Arabs, Middle Easterners, and Muslims suffers from conflating these groups (Amer & Bagasra, 2013). Middle Easterners are defined as people who originate from the Middle East geographic region, Arabs as those from countries whose primary language is Arabic, and Muslims as followers of Islam (Abi-Hashem, 2013). Despite these differences, and although some research suggests that people may evaluate Muslim targets more negatively than Arab ones in certain contexts (Calfano et al., 2020), Americans' attitudes toward these groups are found to be similar and unfavorable (Kteily et al., 2015). One commonality is how all three are represented in media and the effects of these depictions on individuals' attitudes toward these groups, as discussed in detail below. For our purposes, we will examine relevant research on all three of these groups; however, our focus is on Middle Easterners.

How media representations influence attitudes toward depicted groups

A recent meta-analysis spanning 345 studies involving Muslims since 2000 found that research most commonly examines themes such as terrorism and violence (Ahmed & Matthes, 2017). This association is pervasive across media genres and platforms, as Arabs, Middle Easterners, and Muslims are often stereotyped in the news (Dixon & Williams, 2015), reality television (Alsultany, 2016), and movies (Shaheen, 2003). For example, in a quantitative content analysis of television cable and network news, Dixon and Williams (2015) find that Muslims are significantly overrepresented as terrorists (81%) on television news compared to real-life occurrences (6%) in the U.S. The events of 9/11, as well as the framing of media coverage, arguably played a significant role in how the public thinks about this group. Indeed, Muslims became much more visible in the news and the media generally in the months after 9/11 (Nacos & Torres-Reyna, 2003). In addition to increased visibility, other research found that Muslims were portrayed more negatively in newspapers after the events of 9/11 as compared to before (Trevino et al., 2010). To evaluate the long-term effects of 9/11 on representations of this group and to extend the comparison of portrayals to entertainment television, we make the following hypothesis.

H1: Middle Eastern characters in entertainment television will be portrayed more often in the context of terrorism in the five years after 2001 as compared to the five years before 2001.

Qualitative research finds that Arabs are described as a cultural "other" and that Hollywood often distorts Arab portrayals by making them look threatening (Shaheen, 2003). Shaheen found that across more than 900 films, Arabs were overwhelmingly portrayed stereotypically (e.g., evil, villains, enemies), and only 5% of portrayals depicted them as more fully realized, humanized characters. Still, no quantitative research has examined Middle Eastern portrayals in fictional entertainment television (for a data brief, see Yuen et al., 2018). These portrayals are not inconsequential, as viewers tend to rely on the information provided by media depictions to form attitudes. Dependence on media, as opposed to in-person social contact, is associated with increasing levels of anti-Muslim prejudice (Ahmed, 2017). Reliance on the media for information about Muslims (as opposed to contact) can also increase negative attitudes and support for harmful policies toward this group in the long term (Saleem et al., 2016). How media, specifically entertainment media, affect our perceptions and attitudes is outlined in detail within the cultivation theory framework.

The majority of quantitative research examining how Muslims are portrayed in American media has focused on news, not entertainment. The imbalance in research between fictional entertainment and news has not gone unnoticed by media effects and political communication scholars alike. Researchers have argued that the distinction between news and entertainment media in terms of political relevance is not only artificial and without merit but also unhelpful in determining what types of media are relevant to political beliefs and behaviors (Delli Carpini, 2014). One such perspective underlying the relevance of fictional entertainment media to political attitudes is cultivation theory (Gerbner et al., 1978). This theory posits that consuming fictional entertainment television is uniquely powerful and instrumental in informing social reality judgments (Potter, 2014).

Cultivation theory comprises three sites of analysis: institutional process analysis, which examines how media institutions function to produce content; message system analysis, which examines the content of media messages; and cultivation analysis, which examines how those messages influence judgments of social reality (Gerbner et al., 2002). In the context of racial or ethnic minorities, reliance on stereotyped television content for information about these groups can be problematic and lead to biased attitudes (Tukachinsky et al., 2015). Indeed, for heavy television viewers, cultivation theory proposes that these portrayals might be particularly influential at cultivating long-term and cumulative attitudes that adversely bleed into real life.

To summarize, Middle Easterners are commonly depicted as terrorists in the media (Ahmed & Matthes, 2017). Based on the propositions of cultivation theory, regular exposure to these stereotyped portrayals is likely to influence related attitudes. However, little quantitative information is available on the scope of Middle Eastern depictions in entertainment television. To inform our cultivation analysis in study 2, we first conduct a message system analysis to understand how this group is depicted concerning terrorism. We propose the following research question for Study 1:

RQ: How often will Middle Eastern characters be portrayed in the context of terrorism in entertainment television?

Study 1 method

Sample criteria and selection

This analysis focuses on characters who are perceived to originate from the Middle Eastern geographic region. All coded variables and definitions and the decision to focus on Middle Eastern characters rather than Arab or Muslim characters were based on consultation with an expert on the topic of Middle Eastern media portrayals as well as concerns about the accuracy of coding the latter categories (see information A1 in the appendix for further details). For instance, visual categorization solely based on religious affiliation (i.e., Muslim) is likely to lead to inaccuracies. Muslims belong to various racial and ethnic groups (Shaheen, 2003), live in countries all over the world (Pew Research Center, 2017a), speak different languages (Pew Research Center, 2017a), and may or may not choose to display visual cues reflecting their religious identities publicly (e.g., hijab/kufi).

Second, using Arabs as a category would yield characters that speak in Arabic. This categorization would exclude individuals and countries where the most common language is not Arabic (e.g., Afghanistan, Iran). Though these individuals and countries would not be categorized as Arabs, they are strongly associated with stereotypes pertaining to Muslims and have to face the political consequences of such stereotypes. By focusing on Middle Eastern characters, we attempted to overcome many of the limitations described above while still capturing the mediated themes associated with individuals in this region.

We drew the sample for this study from the top 19 fictional entertainment shows airing on broadcast television in a given year, according to Nielsen across 19 years between 1996 and 2014 (roughly 320 television shows). For further information on the decision to analyze broadcast television see information A2 in the appendix. We chose the 1996–2014 period to provide five

years of data from before 9/11. Our 19-year time span ended in 2014, as when we started to plan and acquire the media (e.g., DVDs and streaming services) used in this content analysis, this was the latest Nielsen data available to the authors. As we were only interested in fictional television, we excluded non-fictional television that made Nielsen ratings. A small number of shows were commercially unavailable for some years and were thus not coded.

Once a list of shows was compiled, approximately three hours from each show in each year was randomly selected using the equal probability of selection method (EPSEM). This resulted in a total corpus of approximately 960 hours. This equates to roughly four episodes for shows that are generally one hour long on television and eight episodes for shows that are generally 30 minutes long on television. As no commercials were included in these television shows, run times for 30-minute shows ranged from 22–24 minutes, and run times for 60-minute shows ranged from 40 to 44 minutes.

Coding and reliability

Four trained student research assistants worked as coders in this study: two White women, one Black woman, and one White man. After roughly 25 hours of training, 10% of our total sample was randomly assigned to all coders for reliability purposes. These shows were included in the final sample and analyses. Krippendorf's α calculated using the ReCal program (Freelon, 2013) was used as a measure of reliability for this study. Krippendorf's α coefficients reached acceptable levels of reliability, ranging from .70 to .76.

Characters

Only characters that were determined by coders to be Middle Eastern were included in these analyses (see details below); thus, only episodes with Middle Eastern characters were coded for character information. Additionally, reoccurring characters were coded uniquely in each episode they were portrayed.

Middle Eastern characters. The first characters were coded on whether they were Middle Eastern. We define this as follows: " … Does the character themselves or another character state they are from the Middle East or is the character apparently Middle Eastern based on physical features (e.g., clothing, skin tone), name (e.g., Ahmad, Ali, Muhammad, etc.), or treatment by others (character feels like others treat them stereotypically)" (see information A3 in the appendix for further details). The reliability of this variable was α = .70, which corresponds to a similar level of agreement for this group found in other research (Dixon & Williams,

2015). In the episodes coded, Middle Eastern characters were found to be depicted in both terrorism and non-terrorism related roles.

Relationship with terrorism. We drew from previous terrorism research (Merari, 1993) and tried to differentiate it from other forms of violence. We defined terrorism as having three elements: "(1) the use of violence; (2) political objectives and; (3) the intention of sowing fear in a target population" (Merari, 1993, para. 9). Examples included: character explicitly stated they are a terrorist, it is implied character is a terrorist based on actions or designation as a terrorist by a government agency, commits some type of terrorist act, or engages in some type of sympathizing with terrorists. Notably, this coding of terrorism captures both explicit and more implied portrayals of terrorism. Reliability was $\alpha = .76$, which is consistent with ratings achieved for this concept in other work (Dixon & Williams, 2015).

Study 1 results

Middle Eastern characters

During our 19-year time span (1996–2014), 153 characters were identified and coded as being Middle Eastern. This included Middle Eastern characters present in 73 television episodes across 22 different shows. These characters were found in every year except 1996, 1998–2000, and 2003. Characters were unlikely to be found before 2001, with only three characters out of the 153 total characters depicted earlier this year.

Terrorism across timeline and pre/post-9/11

Our research question asked how often Middle Eastern characters would be portrayed in the context of terrorism. Of the 153 Middle Eastern characters we found across our 19-year span, 70 characters (45.8%) were shown connected to terrorism in some way. This highlights that many, but not a majority of, Middle Eastern characters were depicted in the context of terrorism. These 70 terrorist characters were found across 13 unique shows of various genres on all the major broadcast networks (ABC, CBS, NBC, and FOX); see Tables A1–A3 in the appendix.

To ensure an equal comparison in the number of years for each time period, H1 posited that Middle Eastern characters would be more likely to be portrayed in the context of terrorism in the five years after 2001 as compared to the five years before 2001. Although not significant, Middle Easterners were more likely to be depicted in relation to terrorism in the five years after 9/11 (27 terrorist portrayals:48 total portrayals) compared to the five years before 9/11 (0:3), χ^2 (1, $N = 51$) = 3.59, $p = .058$. This results

in an average of 5.40 Middle Eastern terrorist characters per year between 2002 and 2006 and an average of 0 from 1996 to 2000. For a comparison of the five years before 9/11 to all the years after 9/11, see analysis A1 in the appendix. The fact that no terrorist portrayals were found in any year before 2001 and that only three total Middle Eastern portrayals were visible in these five years (compared to 48 from 2002 to 2006) reflects how this group was underrepresented within American entertainment media. To further examine terrorism portrayals after 2001, we examined how many characters were present in the context of terrorism by year (see Figure A1 in the appendix). Results showed that 2005 was the year with the most terrorist characters (N = 21) and that years 2002, 2003, and 2008 had the lowest (N = 0). Altogether, this finding points to a lack of both terrorist portrayals pre-2001 and Middle Eastern portrayals generally.

Study 1 discussion and Study 2 overview

Little quantitative evidence exists about the scope of Middle Eastern portrayals on entertainment television. Consequently, Study 1 provides a message system analysis of how often Middle Easterners are portrayed in the context of terrorism on entertainment television. Compared to real-world statistics (FBI, 2006) our results show that the association between terrorism and Middle Easterners on entertainment television is grossly distorted. However, the findings of Study 1 do not allow us to draw any conclusions about how this misrepresentation might influence viewer attitudes. Study 2 addresses this by examining how participant exposure to various shows identified in Study 1 cultivates both first- and second-order outcomes. To increase the likelihood that participants were familiar with the television shows in question, Study 2 examines shows we identified from the last five years of Study 1 (2010–2014) that depict Middle Eastern characters. These criteria yielded a total of 11 television shows, all of which naturally fit into one of the four exposure categories based on the average number of Middle Eastern terrorists per episode: 0, between 0 and 1, 1, or 2 + terrorists per episode. Informed by the results of Study 1 and these exposure categories, we discuss the following literature and hypotheses for Study 2.

Study 2

Given that Middle Easterners are stereotypically associated with terrorism and violence, these depictions in fictional television entertainment may be as influential as news portrayals at cultivating political beliefs and behaviors that harm members of this group. Indeed, for some marginalized groups (Latinx and Black people) the number and valence of entertainment

television portrayals cultivates bias toward these groups among White Americans (Tukachinsky et al., 2015). Other research finds that an exposure "threshold" exists for how influential media stereotypes are at affecting explicit viewer attitudes about a depicted group (Arendt, 2013). Following a Gaussian distribution, this study showed that exposure to between 0–4 and 8 stereotyped news articles did not influence attitudes, yet exposure to 6 articles did. More recent studies propose that exposure to *two* stereotype primes activates implicit stereotypes and subsequent selection of biased news and prejudicial attitudes (Kroon et al., 2020). Of interest, no significant results were found for exposure to four stereotype primes. Together, this research highlights that when individuals are exposed to a varying level of mediated racial/ethnic stereotypes, it is likely to influence attitudes in line with the negative portrayal. Germane to the present study, the quantity in which Middle Easterners are represented as terrorists on entertainment television (e.g., 0 characters per episode, 1 character, 2+ characters, etc.) is likely to affect whether individuals report reality estimates associated with depicted media stereotypes.

For Middle Easterners, it is difficult to ignore the commonalities in depictions found in previous quantitative analyses of news content (Dixon & Williams, 2015), our Study 1 message system analysis, and qualitative analyses of media content (Said, 1978; Shaheen, 2003). Gerbner et al. (2002) referred to such a pervasive signature consistent across media texts as "the 'master text' composed of the enduring, resilient, and residual core that is left over when all the particular individual and program-specific differences cancel each other out" (p. 48). Specific to this project, media may vary in the *degree* to which they narrowly portray Middle Eastern characters as terrorists and negatively in general. This is especially important to consider given the distortion (Dixon & Williams, 2015; FBI, 2006) and extreme focus of Middle Easterners as terrorists in media (Kearns et al., 2019) compared to the real world. Indeed, such depictions may constitute a dominant and commonly recurring signature that could cultivate individuals to overestimate this groups' association with terrorism.

Additionally, the cultivation effect of Middle Easterners as terrorists is also likely to influence other relevant beliefs. For example, anxiety toward immigration and refugee status for Middle Easterners is common in the U.S. (Hurley, 2018). In recent years, anxiety about refugees has been couched in a concern that terrorists could be hiding among them. Consequently, the concepts of "terrorism" and "Middle Eastern refugee" are often conflated and thought to be highly similar by the public (Abbas, 2019). Because of this stereotype, individuals may associate an increase in refugees with a higher possibility of terrorism. In other words, exposure to

terrorism may activate related schemas such as immigrant or refugee and cause the public to overestimate their presence.

As previous research indicates (Arendt, 2013; Kroon et al., 2020; Tukachinsky et al., 2015), exposure to a varying number of negative racial/ethnic representations is likely to influence subsequent related attitudes. Because the more television an individual consumes, the more theoretically likely they are to view portrayals that are distorted from reality; overall television consumption should have an influence as proposed by cultivation theory (Gerbner et al., 1978). We hypothesize that exposure to a greater number of depictions of Middle Easterners as terrorists will be more likely to cultivate beliefs. This is because watching television shows that have a higher number of Middle Eastern terrorists per episode raises the likelihood that individuals will be exposed to these biased depictions while watching the shows, and thus impacted by the stereotype. Altogether, reported exposure to a higher number of shows that *also* have more Middle Eastern terrorist portrayals on average is likely to be the most influential at cultivating attitudes related to this group. Based on our content analysis from TV shows in the last five years of Study 1, the highest exposure category we identified was 2+ terrorists on average per episode. Considering the literature and results of the Study 1 message system analysis, we make the following hypotheses for Study 2.

H2: Overall television consumption will be positively associated with higher estimates of Middle Easterners as terrorists in real life and of total refugees who enter the U.S. each year.

H3: Informed by Study 1 results, we expect that participants who self-report greater exposure to shows that include two or more Middle Eastern terrorists per episode on average will estimate that a higher percentage of Middle Easterners are terrorists in real life.

H4: Participants who self-report greater exposure to shows that include two or more Middle Eastern terrorists per episode on average will estimate a higher number of total refugees who enter the U.S. every year.

In summary, when minorities are shown in stereotypical ways, this often results in harmful social reality judgments of the group. Although we argue that exposure to Middle Eastern terrorists in entertainment television will cultivate negative real-world estimates of this group, these first-order judgments might also be a psychological mechanism that is influential at affecting relevant second-order attitudes (i.e., policy support). This is important, as recent cultivation research has highlighted the need to

understand the underlying mechanisms that might further explain this theory (Shrum et al., 2011; Tian & Yoo, 2020).

Underlying mechanisms and their effect on attitudes and policy support

Models of cultivation have established that first-order effects are memory-based and that second-order effects are online or formed when information is viewed (Shrum et al., 2011). Although, as Shrum (2004) notes, "On the other hand, the proposition that all second-order judgments are made online is clearly false" (p. 339). Importantly, if second-order attitudes are exclusively formed in an online process, they would not be influenced by memory-based estimates. As proposed by Shrum (1995, 2001, 2009) cognitive processing plays an important role in cultivation theory and how viewers form social reality judgments. For example, Shrum (2009) notes that the use of heuristics when searching memory for information plays a key role in cultivation. Further, research examining second-order effects has found situations in which these attitudes are formed through memory rather than exclusively by online judgments. For example, Coenen and Van den Bulck (2016a) find that second-order attitudes are processed online when individuals are high in need to evaluate (NTE) intentions and through memory when they are low in NTE. This finding supports the argument that further theoretical consideration should be given to situations where second-order effects might be formed or influenced by memory. Although some research has examined the underlying mechanisms of cultivation (Schnauber & Meltzer, 2016; Shrum et al., 2011; Tian & Yoo, 2020), an explanation of the psychological underpinnings that explain this theory is incomplete, especially for second-order cultivation effects (Coenen & Van den Bulck, 2016a).

Specifically, the assumption that memory-based estimates are entirely unrelated to second-order effects needs to be addressed further (Coenen & Van den Bulck, 2016a; Morgan et al., 2014). Although whether first-order estimates influence second-order attitudes might be situational depending on the topic, one area where this relationship could be especially important is media related to race/ethnicity. Because of how pervasive and influential media stereotypes are, second-order attitudes that are contextually related to bias might be more likely to have some levels or aspects of memory construction (e.g., the recalled stereotypes). Given that the use of heuristics is important in both the cognitive processing of cultivation effects (Shrum, 2009), and in the topic of race/ethnicity, this could make the influence of memory especially critical for this context. In other words, racial/ethnic stereotypes are so ingrained both explicitly and implicitly in our consciousness that some amount of memory recall or cognitive processing is

inevitable. This could exert an immense influence on second-order judgments, especially when the judgments are related to a prevalent stereotype. Indeed, some evidence has found that first-order diversity perceptions are a mediator for second-order attitudes toward ethnic minorities (Hermann et al., 2020).

Applying this process to Middle Easterners, this group is regularly depicted and stereotyped in the context of terrorism by the media. Because of this, the association between Middle Eastern individuals and terrorism is common for many Americans (Pew Research Center, 2017b). Heavy exposure to this representation is likely to cultivate an overestimation that Middle Easterners are associated with terrorism in real life. If people store this biased perception in their memory, then conceptually, they are likely to recall or cognitively process this stereotype when constructing judgments related to this group. For example, first-order estimates of associating terrorism with Middle Easterners might theoretically influence policy support relevant to this and other related groups for whom the same schema and associations are activated.

While most research examining politics and media tends to focus on the news, there is potential for fictional entertainment television to have a similar impact on attitudes and policy support (Mutz & Nir, 2010). As the average viewer most likely spends more hours a week watching fictional entertainment television than television news (TiVo, 2019), the socializing information they receive about specific minority groups is more likely to come from entertainment. The effects of entertainment television on attitudes and policy support are not negligible: studies show that entertainment television can affect policy attitudes related to welfare spending (Gierzynski, 2018), and reproductive rights (Swigger, 2017). In the context of the present research, if watching entertainment television influences negative estimates about Middle Easterners (e.g., association with terrorism), these estimates might subsequently affect support for policies (e.g., immigration and naturalization) currently relevant to this group (Hurley, 2018). Considering this and informed by Study 1, we hypothesize the following for Study 2.

H5a and b: Real-world terrorist estimates will mediate the relationship between exposure to entertainment television shows with two or more terrorist portrayals and support for policies relevant to Middle Easterners —immigration (H5a) and naturalization (H5b).

H6a and b: Refugee estimates will mediate the relationship between exposure to entertainment television shows with two or more terrorist portrayals and support for policies relevant to Middle Easterners—immigration (H6a) and naturalization (H6b).

By grounding our Study 2 survey measures in a message system analysis (Study 1), we have crucial information about the actual content participants watch (i.e., how often Middle Eastern terrorists were present on *specific* television programs). Additionally, our survey allows us to both measure actual media exposure and ask more nuanced, specific, and targeted attitude-based and policy questions that are not available with secondary data like the ANES (e.g., Tukachinsky et al., 2015). Together, these two factors provide a methodologically stronger and more direct test of cultivation in the context of race/ethnicity and entertainment television.

Study 2 method

In this study, we asked participants about their exposure to shows selected from Study 1 that were coded as having Middle Eastern characters present in the last 5 years of our timeline (2010–2014; 11 shows total). Cultivation is considered to be a long-term process; thus, we asked participants about their exposure to shows identified from over a five-year period. Additionally, selecting shows from this timeframe increases the chances that our participants, including the younger ones, might be familiar with or have seen the shows. This study was approved by the Institutional Review Board at the University of Michigan on 1/24/2019.

Participants

A sample of White U.S. adults was recruited through Qualtrics, excluding any participants who self-identified as Muslim, Arab, or Middle Eastern. Of the 305 participants analyzed, 153 self-identified as female and 152 as male, and the mean age was 47.01 (SD = 14.85). The majority of participants reported they identify as political independents (N = 132, 43.3%), followed by Republicans (N = 101, 29.6%) and Democrats (N = 72, 23.6%).

Measures

See Table A4 in the appendix for descriptive statistics and correlations of key measures.

Real-world terrorist estimate

To test first-order cultivation effects, participants were asked to estimate "What percent of Middle Easterners do you think are involved with terrorism in some way" on a sliding scale ranging from 0% to 100%.

Real-world refugee estimate

To test first-order cultivation effects, participants were asked to estimate "How many refugees enter the United States every year" on a sliding scale ranging from 0 to 100,000.

Attitudes toward immigration policy

Participants responded to 17 items (Bae, 2016; e.g., "People from foreign countries should be encouraged to live in the United States") on a scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*), with higher scores indicating support for inclusive immigration policy ($\alpha = .87$).

Attitudes toward naturalization policy

Participants responded to six items (Aydin et al., 2014; e.g., "I think it is all right that the requirements for naturalization are difficult") on a scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*), with higher scores indicating support for a restrictive naturalization policy ($\alpha = .75$).

Exposure to Middle Eastern terrorist characters in entertainment media

Considering Study 1, each of the 11 shows identified as having Middle Eastern characters in the last five years was found to clearly fit into one of the four categories. This decision was based on the average number of Middle Eastern terrorist characters per episode, having categories that had roughly the same number of television shows, and avoiding categories with a single show. These categories included 0 terrorist portrayals on average (3 shows), between 0 and 1 terrorist portrayals per episode (3 shows), 1 terrorist portrayal per episode (2 shows), and 2 or more terrorists per episode (3 shows) (see information A4 in the appendix for further details). Participants were asked if they watch (coded 1) or do not watch (coded 0) each of the shows. While not without its limitations, this measure of media exposure is similar to the program list technique, which is shown to be a more reliable and effective strategy than asking about exposure frequency or duration for measuring media exposure and how it affects attitudes (Dilliplane et al., 2013). Based on their self-reported exposure, they received a score of 0, 1, 2, or 3 (or 0, 1, 2 for the 1 terrorist category) for each category. For example, if a participant reported watching all three shows in a category, they received a score of 3.

Overall television exposure

Participants reported an average number of hours per day they typically watch television across all platforms on a sliding scale ranging from 0 to 12 hours.

Control variables

As contact with outgroups influences attitudes toward them (Allport, 1954), contact was assessed with two items indexed together ($r = .78$). Respondent

sex, income, education, and conservatism were also controlled for, in line with prior work (Tukachinsky et al., 2015).

Study 2 results

All analyses below control for participant demographics and contact with Middle Easterners. For an analysis of common method variance (Coenen & Van den Bulck, 2016b), see analysis A2 in the appendix.

Overall television exposure

We first examined how overall television exposure affects attitudes and beliefs of Middle Easterners. Two linear regressions were used with overall television exposure as the predictor. Results showed a significant positive relationship between television exposure and real-world terrorist estimates, $b = 1.75$, $SE = .46$, $p < .001$. No significant results were found for real-world refugee estimates, $p = .16$; thus, H2 was partially supported.

First-order cultivation effects

H3 and H4 posited that greater exposure to shows that, on average, depicted more Middle Eastern terrorists (i.e., two or more terrorist portrayals per episode) would be related to higher percent estimates of Middle Easterners being associated with terrorism in real life (H3) and higher estimates of how many refugees enter the U.S. every year (H4). Using a linear regression in which the scores for all four show categories were entered as predictors, we find a significant positive relationship between watching shows depicting two or more terrorists and real-world terrorist estimates of Middle Easterners, $b = 5.45$, $SE = 1.96$, $p = .006$ (for the full model, see Table A5 in the appendix). This indicates that as participants reported greater exposure to shows that have two or more Middle Eastern terrorists, they estimate that a higher percentage of this group's members are associated with terrorism in the real world, supporting H3. Indeed, a one-unit increase in the number of shows participants reported watching that have 2+ Middle Eastern terrorists is associated with an increase of 5.45 percentage points in estimates that this group's members are associated with terrorism in the real world. There was no effect of watching shows with fewer Middle Eastern terrorists, ps > .44.

For refugee estimates, we find a significant positive relationship between self-reported exposure to shows averaging two or more Middle Eastern terrorists and estimates of the number of refugees who enter the U.S. every year, $b = 6349.32$, $SE = 2319.53$, $p = .007$ (for the full model, see Table A6 in the appendix). This indicates that when participants watch

more shows with two or more terrorist portrayals, they estimate that more refugees are entering the U.S. every year, supporting H4. A one-unit increase in the number of shows participants reported watching that have 2+ Middle Eastern characters involved in terrorism is associated with an estimated increase of 6,349 refugees entering the U.S. every year. There was no effect of watching shows with fewer Middle Eastern terrorists, *p*s > .38.

Tests of mediation

To this point, we have established that exposure to entertainment television shows with two or more Middle Eastern terrorists cultivates first-order effects. We were also interested in how these first-order estimates might act as a mediating mechanism between television exposure and second-order effects relevant to Middle Easterners. Using the PROCESS macro Model 4 (Hayes & Preacher, 2014), we conducted parallel mediation to test how real-world terrorist and refugee estimates mediate the relationship between watching entertainment shows that include two or more terrorists on policy support for immigration and naturalization (see Figure 1 (a) and (b), respectively).

Results show that the real-world terrorist estimate is a significant mediator for immigration policy, $b = -.03$, $SE = .01$, 95% CI [−.06, −.01] and naturalization policy, $b = .03$, $SE = .01$, 95% CI [.01, .05], finding support for H5a and H5b. However, we did not find that refugee estimates are a significant mediator for either immigration 95% CI [−.02, .00] or naturalization 95% CI [−.00, .02], failing to find support for H6a and H6b. Notably, for the terrorist estimates mediator, these results show a negative relationship (*less support*) for inclusive immigration policy and a positive relationship (*more support*) for a stricter naturalization policy. These results demonstrate that stereotypically cultivated real-world estimates of this group, while harmful on their own, can also work as mediating mechanisms and have implications for policy support.

Discussion

Previous content analyses and research on Middle Eastern and Muslim individuals in the media have overwhelmingly shown that this group is portrayed negatively (Dixon & Williams, 2015). This is significant, considering these representations, often concerning terrorism, have effects on individuals' real-world attitudes and behaviors toward this group (Saleem et al., 2016). Accordingly, a message system analysis in Study 1 analyzed Middle Eastern portrayals in the context of terrorism across 19 years of fictional entertainment shows. Study 2 assessed the application of cultivation theory by investigating how self-reported exposure to television shows

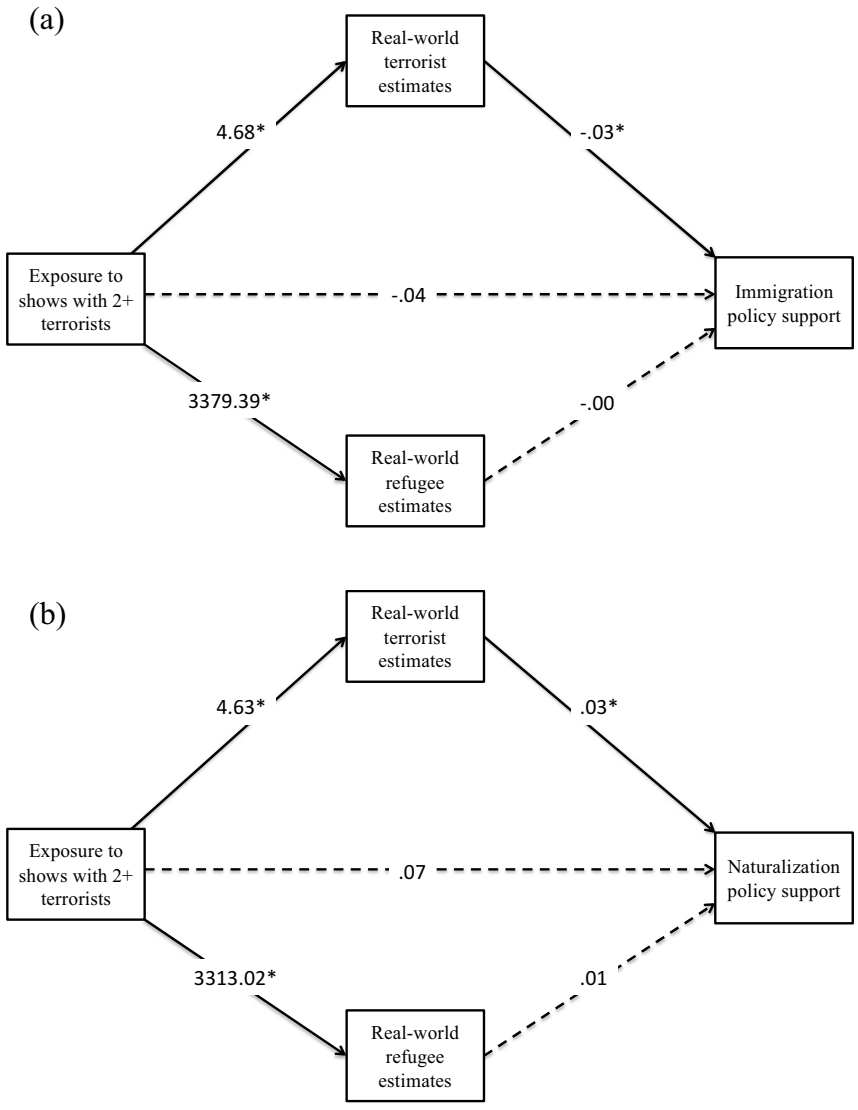


Figure 1. Hypothesized model testing the indirect effect of exposure to shows with 2+ terrorists on immigration (Figure 1(a)) and naturalization (Figure 1(b)) policy support through real-world terrorist and real-world refugee estimates.

Note: Solid lines indicate significant and dotted lines indicate non-significant paths. For the effect of terrorist media exposure on the policy support variables, the direct effect is displayed. This analysis was run with 5,000 bootstrap samples for bias corrected confidence intervals. The entries are unstandardized b's. Figure 1(a) (N = 299), Figure 1(b) (N = 301).

identified in Study 1 is directly associated with first-order social reality estimates and indirectly with second-order support for relevant policies.

Undoubtedly, Middle Easterners made up a very small portion of total characters present on television within our Study 1 corpus. However, the fact that we still find cultivation relationships in Study 2 highlights how pervasive and harmful the terrorist stereotype is. Further, our content analysis revealed that only three Middle Eastern portrayals were found from 1996 to 2000, with none of these portrayals (i.e., 0/3) in relation to terrorism. From 2002 to 2006, 48 total Middle Eastern portrayals were observed, with 27 in the context of terrorism. Altogether, from 2001 to 2014 (across 14 years), 70 characters (i.e., 70/150) were linked to terrorism. This highlights a few important points about how the events of 9/11 are related to depictions of Middle Easterners in entertainment media.

First, these results show that before the events of 9/11, Middle Eastern characters were not portrayed as often on fictional television. Thus, pre-9/11, the low quantity of Middle Eastern media representation likely contributed to the invisibility of this group within the larger American society. Post-9/11, however, there was a dramatic increase in the number of media depictions of Middle Eastern characters, a sizable portion of whom were concerned about terrorism. This increase in quantity, along with the negative valence of media representations, not only enhanced Americans' reliance on media as a source of information about this group but also has perpetuated hostile attitudes toward Middle Easterners.

Study 2 addressed this point by examining self-reported exposure to shows identified in Study 1. We found that exposure to programs with two or more terrorist portrayals was associated with higher estimates of Middle Easterners as terrorists and how many refugees enter the U.S. Given that cultivation research is typically correlational and uses cross-sectional methods, these results should not be mistaken for evidence of causation. However, as proposed by cultivation theory (Gerbner et al., 1978), our findings are suggestive of entertainment television directly influencing first-order effects.

As recent research has discussed the need to examine the underlying mechanisms that explain the cultivation process, we examined how first-order social reality estimates might mediate the relationship between self-reported media exposure and harmful policy support. Results revealed that a higher estimate of Middle Easterners as terrorists in real life is an apparent mediating mechanism between entertainment television exposure and prohibitive immigration and naturalization policy attitudes. Indeed, we found that participants reported less support for inclusive immigration policy and reported more support for the U.S. adopting a more restrictive naturalization policy. This finding is meaningful for Middle Easterners since policy decisions related to immigration and naturalization about

this group are commonplace (Hurley, 2018). However, we did not find that refugee estimates are a significant mediator. For this group, the association with refugee status is likely not as pervasive as terrorism, meaning refugee estimates might not be a powerful enough mechanism. We discuss the following theoretical implications of these results.

Implications

First, we find evidence of a mediating relationship between first-order and second-order outcomes. Past researchers have hypothesized this link (Hawkins & Pingree, 1990), but because the data did not provide confirmation, it has led to an implicit assumption that second-order attitudes are formed exclusively online and not through memory (Coenen & Van den Bulck, 2016a). While we acknowledge that the relationship between first- and second-order variables might not occur in all cultivation situations, theoretically and evidently, our results suggest that it can exist in the context of race/ethnicity. The possible role of heuristics in cognitive processing for both cultivation (L. J. Shrum, 1995; L. Shrum, 2001; L. J. Shrum, 2009) and attitudes about race/ethnicity play an important role in this situation. This is critical as it provides an understudied and conceptual link between media and first-order/second-order variables. As Middle Easterners are not the only racial/ethnic group that experiences pervasive stereotyping in the media (Dixon & Williams, 2015), a similar relationship might exist for other groups. However, this is a question for future research to explore. Overall, this study provides needed information about the underlying mechanisms that affect the relationship between media consumption, depictions, and how they cultivate negative attitudes toward racial/ethnic groups.

Generally, in the context of cultivation, this data shows that continued further research examining the underlying mechanisms of this theory is needed. Rather than considering processing models of first-order and second-order variables to be mostly uniform, it might be beneficial to consider both situational and contextual factors that likely influence the relationship between these different outcomes. Future research should explore in what situations first-order effects mediate second-order effects and how this relationship translates to other topics and areas within cultivation outside of race/ethnicity.

Second, our results show that the number of terrorist portrayals in a television show might lead to different responses. For example, in the present research, results were found for shows that, on average, had two or more terrorist portrayals per episode. Consumption of television shows that had zero, less than one, or exactly one terrorist character on average was typically not enough self-reported exposure in our study to evidence

a significant relationship with negative attitudes. This is important as it indicates a level of exposure for entertainment media where viewer's real-world attitudes start to be significantly affected by mediated portrayals of this group. Arendt (2013) argues that a media stereotype threshold exists and that exposure below and above the threshold might result in attitudes that do not reflect the stereotyped content. While the concept of a threshold has not previously been directly applied to cultivation theory, our findings provide an interesting starting point for future research to connect these two possibly interrelated applications of how to explain the influence of stereotypes in media.

Finally, our results have important practical implications for those who create media content. Indeed, the first site of cultivation theory (institutional process analysis) is concerned with how media institutions produce content (Gerbner et al., 2002). While not the focus of this paper, our data are theoretically relevant to this macro-level approach. For content creators, these findings can provide practical knowledge of when the fictional entertainment media they create might contribute to attitudes that are especially biased and detrimental, especially in the context of terrorism. While any depiction of a negative stereotype can be harmful, identifying situations and television shows that might be *most* harmful (e.g., more than two terrorists per episode) could provide applied guidance on the media that will likely impact the public most. This is not to suggest that Middle Easterners or other marginalized groups should never be portrayed negatively; however, attention should be paid to how pervasive certain negative depictions are and the potential harm to these groups.

Limitations

The present research has important limitations that warrant attention. First, the shows in this study provide just a small snapshot of television that might be cultivating attitudes. This excludes news programs such as the national news, 20/20, cable news such as CNN, and streaming services like HBO and Netflix. Future research should attempt to synthesize a variety of television genres and platforms to provide a more nuanced understanding. Additionally, this research only content analyzed and examined survey results about Middle Eastern terrorism. This approach was taken for a few reasons. First, Middle Easterners receive more media coverage in the context of terrorism as compared to other groups (Kearns et al., 2019). Second, because the main goal of this research was to examine how Middle Eastern terrorist portrayals would cultivate attitudes relevant to this group specifically, terrorist portrayals of other groups would be outside the scope of this study. Although Middle Easterners might be the group that is most regularly associated with terrorism in the media, they are by no means the

only ones. Some research has examined how exposure to non-Middle Eastern terrorists can influence attitudes (Saleem & Anderson, 2013). Future research should examine how other groups are portrayed concerning terrorism and how these representations affect attitudes. As specified above, the focus of Study 1 was on terrorism. However, Middle Eastern characters might be depicted in various unfavorable ways (e.g., as a cultural other). These unfavorable characteristics could influence negative attitudes in similar ways as terrorism. An additional topic for future research is exploring inter-reality comparisons (Dixon & Williams, 2015) between terrorism in the real world and in entertainment television. However, making such inter-reality comparisons would require more frequent (i.e., yearly) and reliable information on the demographics of terrorism suspects.

In Study 2, we asked participants about their exposure to various television shows using a binary yes or no viewing option. This decision was made because recall of media exposure (e.g., frequency and duration) is historically problematic (Dilliplane et al., 2013). As Dilliplane et al. (2013) discuss, the program list technique is a more reliable way to measure exposure to media. Additionally, as we included multiple shows in each Middle Eastern terrorist viewing category, it allows us to identify participants who have greater or lesser exposure to these portrayals. However, this strategy provides less information relevant to long-term viewing than more discrete measures of viewing frequency (e.g., how many times per week/month) or duration (e.g., number of hours). Since we did not measure an element of time viewing (e.g., viewing frequency or duration), this is a limitation of our study. Altogether, future research should explore ways to account for viewing habits more precisely and to investigate long-term viewing more concretely. Finally, this research employed a cross-sectional design, commonly used in cultivation research, to examine our hypotheses in Study 2. Due to this design, we are unable to make long-term, causal claims about the relationship between these variables. For further discussion of the methodological considerations of studying cultivation, see information A5 in the appendix.

Conclusion

Overall, this study makes significant theoretical contributions to research focused on media portrayals, cultivated attitudes, and policy support for one of the most stereotyped U.S. minority groups, Middle Easterners. A content analysis, paired with survey results, finds that when participants consume entertainment television shows that, on average, have a higher number of Middle Eastern terrorist portrayals (e.g., two or more), they report more negative real-world estimates of this group. Additionally, one of these estimates (real-world terrorist estimate) was found to be

a mediating mechanism between self-reported entertainment television exposure and policy support related to immigration and naturalization. Theoretically, our findings are necessary for understanding the different mechanisms that might explain how stereotypical Middle Eastern portrayals in the "reel world" might not only cultivate perceptions about this group but might have implications for potentially harmful and restrictive policies in the "real world."

Disclosure statement

No potential conflict of interest was reported by the author(s).

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References

Abbas, M. S. (2019). Conflating the Muslim refugee and the terror suspect: Responses to the Syrian refugee "crisis" in Brexit Britain. *Ethnic and Racial Studies*, *42*, 2450–2469. https://doi.org/10.1080/01419870.2019.1588339

Abi-Hashem, N. (2013). Arab Americans. *The Encyclopedia of Cross-Cultural Psychology*, *1*(14), 85–88. https://doi.org/10.1002/9781118339893.wbeccp031

Ahmed, S. (2017). News media, movies, and anti-Muslim prejudice: Investigating the role of social contact. *Asian Journal of Communication*, *27*(5), 536–553. https://doi.org/10.1080/01292986.2017.1339720

Ahmed, S., & Matthes, J. (2017). Media representation of Muslims and Islam from 2000 to 2015: A meta-analysis. *International Communication Gazette*, *79*(3), 219–244. https://doi.org/10.1177/1748048516656305

Allport, G. W. (1954). *The nature of prejudice*. Addison-Wesley.

Alsultany, E. (2016). The cultural politics of Islam in U.S. reality television. *Communication, Culture & Critique*, *9*(4), 595–613. https://doi.org/10.1111/cccr.12121

Amer, M. M., & Bagasra, A. (2013). Psychological research with Muslim Americans in the age of Islamophobia: Trends, challenges, and recommendations. *American Psychologist*, *68*(3), 134–144. https://doi.org/10.1037/a0032167

Arendt, F. (2013). Dose-dependent media priming effects of stereotypic newspaper articles on implicit and explicit stereotypes. *Journal of Communication*, *63*(5), 830–851. https://doi.org/10.1111/jcom.12056

Aydin, N., Krueger, J. I., Frey, D., Kastenmüller, A., & Fischer, P. (2014). Social exclusion and xenophobia: Intolerant attitudes toward ethnic and religious minorities. *Group Processes & Intergroup Relations*, *17*(3), 371–387. https://doi.org/10.1177/1368430213510569

Bae, M. (2016). The effects of anonymity on computer-mediated communication: The case of independent versus interdependent self-construal influence. *Computers in HumanBehavior*, *55*, 300–309. https://doi.org/10.1016/j.chb.2015.09.026

Calfano, B. R., Lajevardi, N., & Michelson, M. R. (2020). Evaluating resistance toward Muslim American political integration. *Politics and Religion*, *14*(2), 512–525. https://doi.org/10.1017/S1755048320000668

Coenen, L., & Van den Bulck, J. (2016a). Cultivating the opinionated: The need to evaluate moderates the relationship between crime drama viewing and scary world evaluations. *Human Communication Research*, *42*(3), 421–440. https://doi.org/10.1111/hcre.12080

Coenen, L., & Van den Bulck, J. (2016b). The bricklayer effect: How accounting for method bias affects first-order cultivation relationships. *Mass Communication & Society*, *19*(6), 782–799. https://doi.org/10.1080/15205436.2016.1167915

Delli Carpini, M. X. (2014). The political effects of entertainment media. In K. Kenski & K. H. Jamieson (Eds.), *Oxford Handbook of political communication*. Oxford, UK: Oxford University Press. https://doi.org/10.1093/oxfordhb/9780199793471.013.30

Dilliplane, S., Goldman, S. K., & Mutz, D. C. (2013). Televised exposure to politics: New measures for a fragmented media environment. *American Journal of Political Science*, *57*(1), 236–248. https://doi.org/10.1111/j.1540-5907.2012.00600.x

Dixon, T., & Williams, C. (2015). The changing misrepresentation of race and crime on network and cable news. *Journal of Communication*, *65*(1), 24–39. https://doi.org/10.1111/jcom.12133

FBI. (2006). *Terrorism 2002–2005*. http://www.fbi.gov/stats-services/

Freelon, D. (2013). ReCal OIR: Ordinal, interval, and ratio intercoder reliability as a web service. *International Journal of Internet Science*, *8*(1), 10–16.

Gerbner, G., Gross, L., Jackson-Beeck, M., Jeffries-Fox, S., & Signorielli, N. (1978). Cultural indicators: Violence profile No. 9. *Journal of Communication*, *28*(3), 176–207. https://doi.org/10.1111/j.1460-2466.1978.tb01646.x

Gerbner, G., Gross, L., Morgan, M., & Signorelli, S. (2002). Growing up with television: Cultivation processes. *Media Effects. Advances in Theory and Research*, *2*(1), 43–68. https://doi.org/10.4324/9780203877111-9

Gierzynski, A. (2018). *The political effects of entertainment media: How fictional worlds affect real world political perspectives*. Lexington Books.

Hawkins, R. P., & Pingree, S.(1990). Divergent psychological processes in constructing social reality from mass media content. In N. Signorielli & M. Morgan (Eds.), *Cultivation Analysis* (pp. 35–50). Newbury Park, CA: Sage.

Hayes, A. F., & Preacher, K. J. (2014). Statistical mediation analysis with a multicategorical independent variable. *British Journal of Mathematical and Statistical Psychology*, *67*(3), 451–470. https://doi.org/10.1111/bmsp.12028

Hermann, E., Eisend, M., & Bayón, T. (2020). Facebook and the cultivation of ethnic diversity perceptions and attitudes. *Internet Research*, *30*(4), 1123–1141. https://doi.org/10.1108/INTR-10-2019-0423

Hurley, L. (2018). *U.S. top court upholds Trump travel ban targeting Muslim-majority nations*. https://www.reuters.com/article/us-usa-court-immigration/u-s-top-court-backs-trump-on-travel-ban-targeting-muslim-majority-nations-idUSKBN1JM1U9

Kearns, E. M., Betus, A. E., & Lemieux, A. F. (2019). Why do some terrorist attacks receive more media attention than others? *Justice Quarterly*, *36*(6), 985–1022. https://doi.org/10.1080/07418825.2018.1524507

Kroon, A. C., van der Meer, T. G. L. A., & Mastro, D. (2020). Confirming bias without knowing? Automatic pathways between media exposure and selectivity. *Communication Research*, *48*(2), 180–202. https://doi.org/10.1177/0093650220905948

Kteily, N., Bruneau, E., Waytz, A., & Cotterill, S. (2015). The ascent of man: Theoretical and empirical evidence for blatant dehumanization. *Journal of Personality and SocialPsychology*, *109*(5), 901–931. https://doi.org/10.1037/pspp0000048

Merari, A. (1993). Terrorism as a strategy of insurgency. *Terrorism and Political Violence*, *5*(4), 213–251. https://doi.org/10.1080/09546559308427227

Middle East Institute. (2017). *Poll: American attitudes on middle east policies*. https://www.mei.edu/publications/poll-american-attitudes-middle-east-policies

Morgan, M., Shanahan, J., & Signorielli, N. (2014). Cultivation theory in the twenty-first century. In R. S. Fortner & P. M. Fackler (Eds.), *The Handbook of media and mass communication theory* (pp. 480–497). John Wiley & Sons.

Mutz, D., & Nir, L. (2010). Not necessarily the news: Does fictional television influence real-world policy preferences? *Mass Communication and Society*, *13*(2), 196–217. https://doi.org/10.1080/15205430902813856

Nacos, B. L., & Torres-Reyna, O. (2003). Framing Muslim-Americans before and after 9/11. In P. Norris, M. Kern & M. R. Just (Eds.), *Framing Terrorism: The News Media, the Government, and the Public* (pp. 133–158). New York: Routledge.

Panagopoulos, C. (2006). The polls–trends. *Public Opinion Quarterly*, *70*(4), 608–624. https://doi.org/10.1093/poq/nfl029

Pew Research Center. (2017a, January 31). *World's Muslim population more widespread than you might think*. http://www.pewresearch.org/fact-tank/2017/01/31/worlds-muslim-population-more-widespread-than-you-might-think/

Pew Research Center. (2017b, July 26). *How the U.S. general public views Muslims and Islam*. https://www.pewforum.org/2017/07/26/how-the-u-s-general-public-views-muslims-and-islam/

Potter, W. J. (2014). A critical analysis of cultivation theory. *Journal of Communication*, *64*(6), 1015–1036. https://doi.org/10.1111/jcom.12128

Said, E. W. (1978). *Orientalism*. Pantheon Books.

Saleem, M., & Anderson, C. A. (2013). Arabs as terrorists: Effects of stereotypes within violent contexts on attitudes, perceptions, and affect. *Psychology of Violence*, *3*(1), 84–99. https://doi.org/10.1037/a0030038.supp

Saleem, M., Yang, G. S., & Ramasubramanian, S. (2016). Reliance on direct and mediated contact and public policies supporting outgroup harm. *Journal of Communication*, *66*(4), 604–624. https://doi.org/10.1111/jcom.12234

Schnauber, A., & Meltzer, C. E. (2016). On the distinction and interrelation between first- and second-order judgments in cultivation research. *Communications: The European Journal of Communication Research*, *41*(2), 121–143. https://doi.org/10.1515/commun-2016-0004

Shaheen, J. (2003). Reel bad Arabs: How Hollywood vilifies a people. *The ANNALS of the American Academy of Political and Social Science*, *588*(1), 171–193. https://doi.org/10.1177/0002716203588001011

Shrum, L. J. (1995). Assessing the social influence of television: A social cognition perspective on cultivation effects. *Communication Research*, *22*(4), 402. https://doi.org/10.1177/009365095022004002

Shrum, L. (2001). Processing strategy moderates the cultivation effect. *Human Communication Research*, *27*(1). https://doi.org/10.1093/hcr/27.1.94

Shrum, L. J. (2004). The cognitive processes underlying cultivation effects are a function of whether the judgments are on-line or memory-based. *Communications: The European Journal of Communication Research*, *29*(3), 327–344. https://doi.org/10.1515/comm.2004.021

Shrum, L. J. (2009). Media consumption and perceptions of social reality: Effects and underlying processes. In J. Bryant & M. B. Oliver (Eds.), *Media effects: Advances in theory and research* (3rd ed., pp. 50–73). New York, NY: Routledge.

Shrum, L. J., Burroughs, J. E., & Rindfleisch, A. (2004). A process model of consumer cultivation: The role of television is a function of the type of judgment. In L. J. Shrum (Ed.), *The psychology of entertainment media: Blurring the lines between entertainment and persuasion* (pp. 177–191). Mahwah, NJ: Lawrence Erlbaum.

Shrum, L. J., Lee, J., Burroughs, J. E., & Rindfleisch, A. (2011). An online process model of second-order cultivation effects: How television cultivates materialism and its consequences for life satisfaction. *Human Communication Research*, *37*(1), 34–57. https://doi.org/10.1111/j.1468-2958.2010.01392.x

Smith, C. (2013). Anti-Islamic sentiment and media framing during the 9/11 decade. *Journal of Religion and Society*, *1*, 1–15.

Swigger, N. (2017). The effect of gender norms in sitcoms on support for access to abortion and contraception. *American Politics Research*, *45*(1), 109–127. https://doi.org/10.1177/1532673X16651615

Tian, Y., & Yoo, J. H. (2020). Medical drama viewing and medical trust: A moderated mediation approach. *Health Communication*, *35*(1), 46–55. https://doi.org/10.1080/10410236.2018.1536959

TiVo. (2019). *Video trends report Q2 2019*. https://dm4.tivo.com/l/43592/2019-07-23/bjqxfb

Trevino, M., Kanso, A. M., & Nelson, R. A. (2010). Islam through editorial lenses: How American elite newspapers portrayed Muslims before and after September 11, 2001. *Journal of Arab & Muslim Media Research*, *3*(1), 3–17. https://doi.org/10.1386/jammr.3.1-2.3_1

Tukachinsky, R., Mastro, D., & Yarchi, M. (2015). Documenting portrayals of race/ethnicity on primetime television over a 20-year Span and their association with national-level racial/ethnic attitudes. *Journal of Social Issues*, *71*(1), 17–38. https://doi.org/10.1111/josi.12094

Yuen, N. W., Chin, C. B., Deo, M. E., DuCros, F. M., Lee, J. J.-H., & Milman, N. (2018). *Terrorists & tyrants: Middle Eastern and North African (MENA) actors in prime time & streaming television*. MENA Arts Advocacy Coalition.