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The Priming of Arab-Israeli Stereotypes: How News Stories May Enhance or Inhibit Audience Stereotypes

By Erika Johnson¹

Abstract

The goal of this study was to understand how news stories about Arab and Israeli women prime stereotypes in Americans, extending research on priming and ethnic media representation. A 2 (female target ethnicity: Arab and Israeli) x 3 (depiction type: prototypical, non-prototypical, and control) x 3 (multiple messages) mixed factorial design was conducted to examine how depiction and ethnicity in news story stimuli would interact with stereotype activation and accuracy (N = 107). Results showed that participants exhibited higher stereotyping after reading prototypical stories about Arab women and after they were not primed by stories. Also, participants who read non-prototypical news stories about Arab women showed reduced stereotyping.

Keywords: Priming, Media Stereotyping, Media Effects, Journalism

Introduction

News stories can shape collective identities and help groups' causes and social movements. For example, the way social movements and the news media interact in the news space is important because analysis of these players may reveal how the news media conveys political or government authority (Garragee & Roefs, 2004). Future scholarship needs to include research on how the news media and social movements create frames that influence how people interpret events (Garragee & Roefs, 2004). This study aims to uncover how changes in the characteristics used to depict social groups in news media coverage can affect the public's stereotyping of two politically and socially relevant groups: Israeli and Arab women.

Almost half of Americans believe Muslims in the U.S. are anti-American, perhaps due to recent political and/or terrorist events in the U.S. and in European countries (Pew Research Center, 2017). Pew research shows that most of what Americans know about Muslims, a religious group associated with the Arab identity, comes from the news media (Pew Research Center, 2010). Given this finding, news on political events and changes since the Arab Spring, prosocial campaigns such as Women2Drive, and the 2016 U.S. presidential election could shape perceptions about Arab women, specifically. However, most research on priming stereotypes focuses on other racial and ethnic groups in American society, even though the Arab-American population has increased nearly 50% since 2000 (Brown, Guskin, & Mitchell, 2012). Much US research on media depictions and the effects of those depictions of underrepresented groups has focused on Latinos, Blacks, Asian Americans, and Native Americans in media because they have been defined as the four

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largest US minority groups (Mastro, 2009). Since there is a gap in research in terms of research on perceptions of Arab women or Arab Americans, it is worthwhile to study what kinds of stereotype information is elicited about Arab women after exposure to news media.

Extant research on media coverage of Arab women found that women have been portrayed as passive victims, misguided political participants, and terrorists (Falah, 2005; Nacos, 2005). News media coverage like this can prime and reinforce stereotypes of Arab women. For example, some research shows that rhetoric following 9/11 from the executive branch employed stereotypical words and imagery to portray Arabs. Merskin (2004) found that President George W. Bush's speeches characterized Arabs as evil, animalistic enemies of the US. Following these depictions, news coverage after 9/11 emphasized that Arab-Americans face the challenge of overcoming stereotyping and discrimination (Weston, 2003). Research has also found that the 9/11 event made the Arab American group more visible and defined in American society ("Race and Arab Americans," 2008). The Trump administration offers similar rhetoric, yet to be analyzed in terms of his tenure as president.

In addition to the increase in the Arab-American population, a Pew Forum study showing that the US has increasingly more citizens who identify with the nation of Israel (Pew Research Center, 2012). Therefore, studying perceptions of Israelis in general is relevant. It is also understood that Americans have a limited understanding of modern Israel (Israel Institute, 2013). Perception of hostility between Arabs and Israelis may be a primary viewpoint, for instance.

Regarding coverage of women, existing literature on Israeli women's representations in the media show they are marginalized. Lahav (2010) found that Israeli women were concealed as major figures and framed merely as immobilized civilians in the midst of the Second Lebanon War. They were also portrayed as victimized caregivers, dependent on male figures. Inequality of Jewish women in the state of Israel is attributed to 20th century anti-Semitic discourse that points to Jewish men as weak and even effeminate (Gluzman, 2007). Israeli journalistic coverage has reflected societal misrepresentation and mistreatment of Israeli women as early as the 1970s. Specifically, a study of news coverage of the Six Day War in Israel show that traditional gender roles were sustained in the news coverage before and after the war (Lachover, 2009). This news coverage pattern occurred despite the fact that women were covered in non-stereotypical ways during the war (e.g., women as volunteers, soldiers, and actors in the war effort) (Lachover, 2009).

Given evidence that both Israeli and Arab women have experienced inequality in news coverage and in society, this study examines how typical and atypical depictions of Israeli and Arab women in news media coverage may activate stereotypes. It looks at how news consumers stereotype pictures of women in responses to words regarding the ethnic groups covered in stereotypical and non-stereotypical news stories. The findings of this study will help both academics and journalists understand how the media may impact unintended consequences in the audience stereotyping these groups. The section that follows is a review of the previous research.

Literature Review

Priming

Priming is an empirical theory that explains how a stimulus influences attitudes and behaviors (Roskos-Ewoldsen, Roskos-Ewoldsen, & Carpentier, 2009). McLeod, Kosicki, and McLeod (2009) write that priming happens when a mental concept is activated, or brought forth in working memory, by exposure to a mediated message. Thus, if an individual is affected by a prime, the likelihood that the same concept will be thought of again increases. This network of

memory and mental representation of concepts within this network is called schema (Roskos-Ewoldsen et al., 2009).

Schema

Conceptually, schema are relevant to cognitive processing stereotypes. Scholarship demonstrates how news articles that frame people in stories can affect how concepts are represented in the mind's schema (Entman, 2010; Grimes & Drechel, 1996; Macrae & Bodenhausen, 2001). For example, Entman (2010) and Grimes and Drechel assert that schema allow the mind to digest and organize new information. Entman (2010) notes that cultural resonance is unique to framing; frames trigger elements of schema formed from past experiences in the mind to connect certain attributes to issues in society. Grimes and Drechsel (1996) explain that schema are cognitive structures that determine perceptual outcomes, creating meaning and organizing information.

Schema, or networks of mental representations of concepts, are related to stereotyping. Macrae and Bodenhausen (2001) echo the position that schema lessen the cognitive load on the mind when it faces new information about people, events, and experiences, maintaining that people use schema automatically because it is easier for the human mind to take in information via categorical thinking. In concurrence with Macrae and Bodenhausen (2001), Huntsinger, Sinclair, Dunn, and Clore (2010) posit that people use schema and stereotypes as “cognitive shortcuts” to navigate through the complex human environment. Whether priming representations of Arab and Israeli women impact schema has not yet been examined in the research.

Arab Representation and Cultural Stereotypes

While “Arab” is not a census-defined racial group and it is not a clear category in US census data, it has been defined socially and culturally (Humes, Jones, & Ramirez, 2011; “U.S. Census Outreach,” 2012). In this study, Arab women are understood as women identifying with or hailing from the League of Arab States (“Profile: Arab League,” 2011). The European Forum of Muslim Women similarly defines the prototypical Arab woman from the 22 Arab states, as defined in Western literature: “imprisoned behind a veil of powerlessness, oppressed by their patriarch society and strict religion or on the other hand, belly dancers or the exotic images of women in the harem” (Aburwein, 2012, p. 2). While Islam is a religion, the Arab ethnic identity subset is one that has been stereotyped in the pages of American and European literature and in other mass media (Aburwein, 2012). The non-prototypical Arab woman is one who is free and empowered and acts against male oppression; she is the opposite from what has been portrayed in media. Arab women have been immortalized in American film as erotic, exotic, submissive, and even demonic since the 1960s (Shaheen, 2007). However, after 9/11, Arab women have been largely left out of American film in these negative roles and have not even been portrayed as terrorists on screen (Shaheen, 2007).

Studies on news coverage suggest that journalists cast Arabs and Arab women as the movies did before: the enigmatic “others” in American society (Oh, 2008). For example, Oh (2008) found that after 9/11 there were increases in certain types of anti-Arab news coverage. Arabs were portrayed as lazier, more unproductive and more aggressive after 9/11. Conversely, Weston (2003) found that Arabs were characterized as victims in daily news coverage after 9/11. It was also found that newspaper coverage of Arab-Americans focused on the group's struggle to overcome discrimination and stereotyping (Weston, 2003).

Scholarship from political science and gender studies also has analyzed the social construction and representation of Arab women, in particular. For example, Saigol (2008) explains how in wartime, women are constructed by the social environment as inferior to men and are taught to be weak from a young age. Arab women have also been framed in the literature as innocent, but responsible, “mothers of the nation” during wartime (Khatib, 2006, p. 81). Additionally, the veil or headscarf, critiqued as a non-Western or non-Caucasian (Hirschmann, 1997), has served as a visual signifier of the Arab/Muslim woman (Ahmed, 1992; Hoodfar, 2001).

Oh (2008) indicates that more research is needed on representation of Arabs and Arab Americans in U.S. news media coverage. Therefore, this research builds upon research on Arab representation (particularly of women) and also contributes to priming research.

Israeli Representation and Cultural Stereotypes

The “Israeli” identity is also not a category on the U.S. Census survey on origin, as the “White” category refers to European, Middle Eastern, and North African origins (Humes, et al., 2011). However, for this study, Israeli identity was studied as a non-Muslim identity connected to association with or citizenship of the nation state of Israel.

Exploring coverage of Israeli women is also a burgeoning area of research (Gluzman, 2007; Lahav, 2010; Levin, 2011). For instance, qualitative research has shown that journalistic coverage of conflicts involving Israel and other nations in the last few decades have exposed gender inequalities in Israel (Lahav, 2010). As indicated in the introduction, Israeli women have received negative coverage: characterizations show them to be concealed, immobilized, mistreated, misrepresented, and stuck in traditional gender roles (Galily, Cohen, & Levy, 2011; Lachover, 2009; Lahav, 2010).

Racial Stereotypes

Although priming stereotypes have received less investigation than priming violence or political preferences, the concept is not new. Lippmann (1922) ushered in the notion that people use stereotypes to simplify their understanding of a complex reality. Devine (1989) and Devine and Monteith (1999) maintain that stereotypes exist in the knowledge structures of Americans and that stereotypes as shared knowledge can be automatically activated and applied to evaluations of racial and ethnic groups when participants are exposed to racial or ethnic group representatives. This exposure and resulting activation is priming.

This is in consonance with extensive research on the media priming of stereotypes accorded to Black Americans. Participants are often impacted by racial exemplars as primes in experimental settings (Brown Givens & Monahan, 2005; Dalisay & Tan, 2009). There has been less of a focus on studying ethnic groups that may be less salient than the Black/White binary to the American public (with Dalisay & Tan, 2009 and others as exceptions). Specifically, priming of Black and White stereotypes in crime news stories has received much attention (Dixon & Azocar, 2007; Dovidio et al., 1986; Leshner, 2006; Mastro, Lapinski, Kopacz, & Ben-Morawitz, 2009). These studies supported the notion that stereotypical coverage of Blacks increases negative stereotyping and attitudes. For example, Leshner (2006) found that dehumanizing depictions of Black crime suspects prime or activate negative stereotyping of the Black racial group.

A study on priming stereotypes of Arab and Israeli women can fill a gap in the literature because studying these groups has not been a research focus. Literature on stereotypes and

prototypes further provides foundation for this priming study, as uncovering how media coverage of these groups may strengthen stereotyping is the aim of this study. Prototypes in primes have the power to form and strengthen stereotypes.

Prototypes and Stereotyping

Prototype-based processing is based upon the notion that people have averaged conceptions of groups or categories in their minds about racial and ethnic groups (Cantor & Mischel, 1979; Homa, Rhoads, & Chambliss, 1979). In other words, people see representations as typical or atypical. Rosch (1978) argues that people tend to define categories by perceptions of prototypical experiences that they view as most representative of the category at hand. This process occurs out of a need to increase category distinctiveness and flexibility (Rosch, 1978).

Mastro and Tukachinsky (2011) argue that when participants are exposed to a prototype or prototypical experience, stereotypes are activated for making judgments. It is understood that there is not a determination or weighing process, but rather an activation of schemas and associations.

Response Latency and Stereotyping

Response latencies can indicate whether prototypes are triggering stereotyping. Fazio et al. (1995) used response latencies to measure automatic activation of stereotypes as a minimally reactive means to measure how strongly stereotypes, as knowledge structures, exist in the mind. If structures or knowledge are more strongly connected in the mind, responses are faster. For example, participants in Dovidio et al. (1986) demonstrated in response latencies that cultural stereotypes of Black people as negative were stronger than cultural stereotypes of White people as negative.

The use of response latency as a measure to determine automatic activation in Dovidio et al. (1986) has been validated by others, such as Fazio et al. (1995), Bargh and Chartrand (1999), and Rosch (1978). The assertions about the effects of prototypes on processing and categorization (Rosch, 1978) inform the following hypotheses. Similar arguments were posed by Dovidio et al. (1986) and Leshner (2006). They expected that faster response times would be elicited in negative depictions of outgroup identities or targets in stimulus materials. Concerning Arab and Israeli groups, it was assumed that Arab prototypes would be perceived as a part of the “outgroup” more than Israeli prototypes, since Israeli targets are understood as predominantly white or Caucasian. H1 also assumes that faster response latency symbolizes stronger stereotype activation, or the association between a stereotype in the mind and the prototype represented in the media stimulus. The following is hypothesized and asked based upon the notion that stronger stereotype activation corresponds to quicker responses in the response latency task (Dovidio, Tyler, & Evans, 1986; Fazio et al., 1995; Leshner, 2006):

H1. Participants will have the strongest stereotype activation, or will respond quickest in response latency tasks to prototypical descriptors of Arab women versus to non-prototypical Arab and Israeli depictions from print news story primes.

RQ1. Will there be an interaction between depiction (prototypical, non-prototypical, and control) and ethnicity (Arab vs. Israeli) on the amount of

time it takes to confirm or deny words as being descriptive of these ethnicities (quicker responses meaning stronger stereotype activation)?

Explicit Stereotyping

While the literature indicates that automatic response more coherently describes stereotype activation (i.e. Devine, 1989), McRae and Bodenhausen (2001) argue that the process of category activation that occurs during person perception may not be exclusively automatic, due to individual difference and a limited capacity to automatically process information. The first hypothesis is concerned with implicit stereotypes or measures of stereotypes, but explicit stereotypes can give scholars a fuller understanding of automatic and controlled processing in stimulus evaluation. Implicit stereotypes are understood as those that individuals hold below their level of consciousness or awareness (Fazio & Olson, 2003). Conversely, explicit stereotypes are types of attitudes for which individuals have some awareness or prior conscious appraisal (Fazio & Olson, 2003).

Many priming studies on stereotyping have been concerned with deliberate or conscious control of attitude expression (Brown Givens & Monahan, 2005; Dalisay & Tan, 2009; Mastro et al., 2009; Mastro & Tukachinsky, 2011). In other words, participants were asked to self-report their stereotypic attitudes. Studies have also specifically tested explicit stereotypes for Arab and Israeli groups, finding connections between implicit and explicit stereotyping and sensitivity to specific events and stimuli in results (Alhabash & Wise, 2012, 2014; Benyamini, 1981).

Given this literature on the necessity of assessing self-reported stereotyping, the accuracy of cultural stereotyping (explicit stereotyping) was also examined. Here, “hit rate” refers to the amount of accurate “yes” answers to stereotypical target words in regards to photos featured in news story primes and target words are descriptors used in a response latency task that are stereotypical of Arab and Israeli groups:

H2. Participants will respond with greater stereotype accuracy (with more “yes” answers, or higher hit rate) to target words for Arab photos than for Israeli photos; cultural stereotype accuracy (hit rate, or the number of accurate responses - “yes” responses - for target words) will be higher for Arab photos than for Israeli photos in the response latency task.

Method

Design

This study employed a 2 (ethnicity: Arab and Israeli) x 3 (depiction type: prototypical, non-prototypical, and control) x 3 (multiple messages) mixed-factorial experimental design. The control group was included to test whether the news story primes had any effect at all on stereotyping. The experiment was conducted in a research lab over a period of one week. Each session lasted approximately 20 minutes. Participants were shown stories about Arab and Israeli women accompanied by photos of women from those ethnic groups, who visually represented the subjects in each of the stories. They then saw and responded to 20 descriptors referring to each woman featured.

Independent Variables

Depiction type and target ethnicity were manipulated as independent variables. Depiction type refers to how prototypical the written news coverage is of an ethnic group. It was expressed as condition: prototypical, non-prototypical, and control (no depiction). Prototypical was considered synonymous with stereotypical/stereotype consistent (Mastro & Tukachinsky, 2011; Leshner, 2006). Ethnicity referred to the mediated prototype's ethnic identification. Ethnicity in this study was manipulated by using pretested photos of Arab and Israeli women in stimuli.

Dependent Variables

Stereotype activation and accuracy were the dependent variables of interest in the research. Stereotype activation was measured by response latency, as faster response latency indicates stronger stereotype activation (Dovidio et al., 1986). Response latency is the time it took participants to judge cultural stereotypical words as descriptive of women subjects that appeared in news stories. The faster the responses, the closer the concepts are represented in stereotypic representations. This study utilized response latency by asking all participants to evaluate words in regards to Arab and Israeli women appearing in news story primes.

Given literature on the need to assess self-reported stereotyping, the accuracy of cultural stereotyping, or explicit stereotyping, was also measured. It was assumed that more "yes" responses to target words (presented after photos from news stories were shown to participants) in response latency tasks following news exposure would indicate greater stereotyping (i.e. accuracy of held cultural stereotypes) (Devine, 1989; Devine & Monteith, 1999; Leshner, et al., 2010). Stereotype accuracy was measured by "yes" and "no" responses in response latency tasks after exposure to news primes.

Specifically, explicit stereotyping was measured as hit rate, or the number of "yes" responses to target words (words that were rated as most descriptive of groups in pretesting). This measurement follows the logic that a "yes" to a target word is an accurate response, whereas a "no" to a target word is inaccurate since target words are, theoretically, reflective of cultural stereotypes (Leshner, et al., 2010; Rosch, 1975).

Participants

Using G*Power software, a power analysis was calculated for the ANOVA: repeated measures, within-between interaction statistical test, with effect size (d) = .25, correlation among repeated measures = .1, power = .8, 3 groups, and 2 measures (representing Arab and Israeli ethnicities). This reflected a needed total sample size of $N = 75$, meaning that 25 participants would be required per condition under these parameters. This was achieved.

Participants were openly recruited from two courses at a large Midwestern university and received extra credit for their participation ($N = 107$). The average age of participants was 19.32 ($SD = 1.57$) and participants were mostly female (78.5%). Most participants were White reflecting 81.3% of the sample ($n = 87$).

Pretesting

In a pretest, participants from a graduate level course ($n = 12$) rated 12 short news stories on a 7-point scale measuring its prototypical qualities for both Arab and Israeli women (1 = Non-stereotypical of Arab women or Non-stereotypical of Israeli women and 7 = Stereotypical of Arab women or Stereotypical of Israeli women). Stories rated least and most stereotypical of the groups were chosen.

To choose photos of women for stories, students also rated a series of photos from Alhabash and Wise (2012) on attractiveness, valence (positive or negative), and arousal. Three photos from each ethnicity rated lower than 5 and higher than 3 (1 = Attractive, Positive, or Arousing and 7 = Not at all attractive, Negative, or Not at all arousing) were selected since they fell in the middle of the scales on these three dimensions.

Additionally, two pretests were used to collect words to be used in response latency tasks. First, a group of participants from a graduate course ($n = 12$) listed their top 10 positive and top 10 negative attributes of Arab and Israeli women groups (Mastro & Tukachinsky, 2011). In a second pretest, a different group of student respondents recruited from an undergraduate class ($n = 12$) rated the degree to which attributes listed about Arab ($n = 114$) and Israeli women ($n = 115$) in the first pretest were held by the general population on a scale item (1 = Not at all and 7 = Very much). All words (without repeats) generated in pretest 1 were included in pretest 2 ($n = 192$).

Ten target words and 10 foil words were generated for Arab and Israeli groups in word ratings in the second pretest. The 20 stereotypical descriptors targets for Arabs and Israelis were words that received highest ratings on average. The 20 foils were words that had the lowest average ratings for the two groups. Target and foil descriptors for both groups had a statistically significant difference in paired samples t-tests.

Stimulus Materials

Twelve print news stories (word count $M = 162.25$, $SD = 32.08$) were shown in two of three conditions (six prototypical stories of Arab and Israeli women and six non-prototypical stories of Arab and Israeli women). A headshot photo of an Arab or Israeli woman accompanied the stories. The photos of Arab women were differentiated because all women in the photos wore headscarves. Stories were adapted from National Public Radio online and The New York Times online in January and February of 2012. Multiple stories were shown to maximize both treatment and message variance (Thorson, Wicks, & Leshner, 2012).

Procedure

Student participants were randomly assigned to one of the three conditions presented on MediaLab software (Jarvis, 2008). Participants first saw a screen that told them to read the news stories and answer questions. They then completed a response latency trial. In the trial, respondents evaluated a photo of President Obama as a familiar target and responded to 12 true and false descriptive words (e.g., 'Christian' was a target word and 'Muslim' was a foil). They were instructed that this was a trial and were told to evaluate whether the words were "a good way" of describing the person in the photo.

Two groups who were shown six randomized stories and the control group then proceeded through the same latency tasks. After reading instructions about the task, a participant would see the photo that had just appeared in the news story prior to the task for 2,000 milliseconds (ms). Ten foils and 10 target words then appeared individually at random without replacement for 3000 ms each, eliciting "yes" or "no" responses from participants. Respondents clicked "yes" or "no" choices on shift keys (hitting left - "yes" - or right - "no" - shift keys) on keyboards accurate to +/- 1 millisecond (ms) in response to the target and foils appearing after a photo in each task.

Participants were timed out after 3000 ms if they did not respond, making respondents move on to another descriptor. Latencies were computed starting with the appearance of each word to the hit of a left shift ('yes') or the hit of a right shift ('no'). All participants reported gender, race, and age last. Participants were then debriefed and awarded extra credit.

Data Examination

One hundred and thirty-four latency responses for targets were missing, making 97.91% of the data available for analysis. One hundred and forty responses were missing for the hit rate data, making 97.82% of hit rate data available for analysis. Ten responses were under 200 ms (.16% of total valid responses, $N = 6,286$). There were 522 responses over 1800 ms (8.30% of total valid responses). Thus, 8.46% of responses (outliers) were recoded; those under 200 ms were recoded as 200 ms and those over 1800 ms were recoded as 1800 ms (Bub, Masson, & Cree, 2008; Colombo & Zevin, 2009; Lee, 2006).

Findings

A 2 (ethnicity) x 3 (depiction) x 3 (multiple messages) repeated measures ANOVA was run on response latency data to examine Hypothesis 1, Research Question 1, and Hypothesis 2.

H1 predicted that students who read prototypical Arab stories would have the strongest stereotype activation. RQ1 also asked if ethnicity and depiction in news stories would impact stereotype activation. No significance was found for an Ethnicity x Depiction interaction for response times in the repeated measures ANOVA $F(2, 102) = .43, p = .65, \text{power} = .10, \eta_p^2 = .01$. Both H1 and RQ1 were unsupported.

Regarding H1, predicting that reading prototypical Arab stories would result in strongest stereotype activation, the data show that the prototypical Arab targets received the slowest response times ($M = 1103.10, SD = 203.04$). In fact, Arab targets across depiction conditions ($M_{\text{protoArab}} = 1103.10, SD = 203.04; M_{\text{non-protoArab}} = 1093.17, SD = 197.19; M_{\text{controlArab}} = 985.01, SD = 144.58$) had slower response latency data than Israeli targets ($M_{\text{protoIsraeli}} = 1066.61, SD = 184.68; M_{\text{non-protoIsraeli}} = 1073.99, SD = 184.69; M_{\text{controlIsraeli}} = 974.46, SD = 162.58$). The fastest responses were for Israeli targets in the control condition, in which participants were not exposed to news stories as primes. Due to non-significant results and this descriptive data, it cannot be concluded that participants responded quickest to prototypical depictions of Arab women versus other depictions. Stereotype activation was not strongest for prototypical depictions of Arab women.

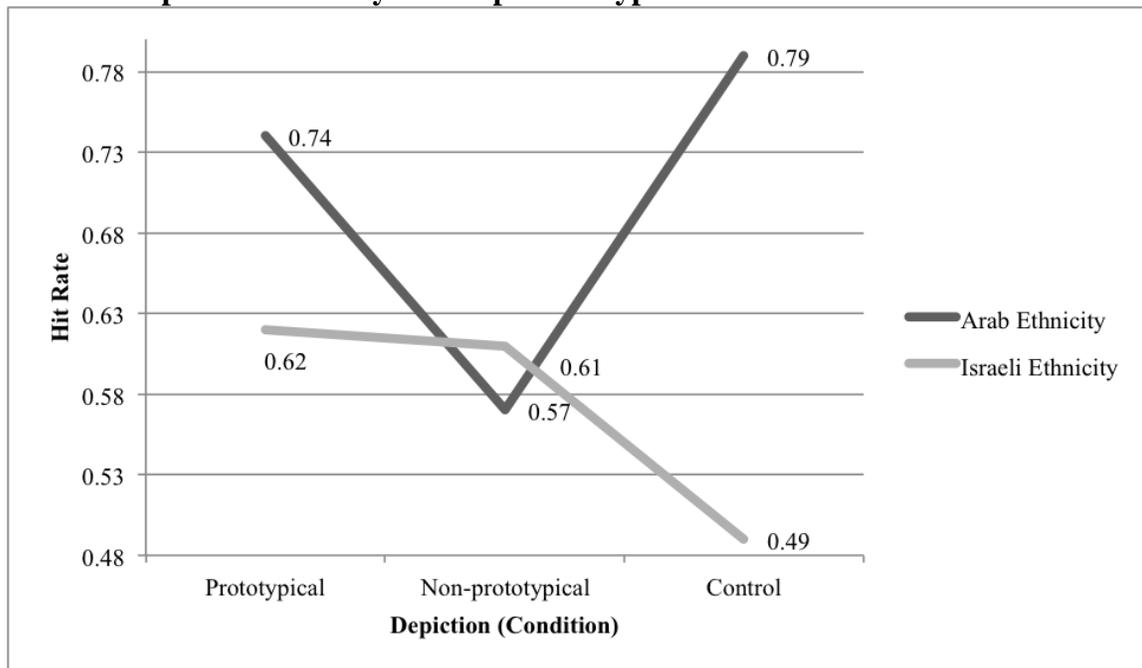
There was also no main effect for ethnicity on stereotype activation. A main effect for ethnicity approached significance in a repeated measures ANOVA on latency data $F(1, 102) = 3.43, p = .07, \text{power} = .45, \eta_p^2 = .03$. However, responses to Arab target words were slower ($M = 1059.11, SD = 189.11$) than responses to Israeli target words ($M = 1037.09, SD = 188.93$), suggesting stronger stereotyping (or stereotype activation) of Israeli subjects in news stories.

H2 predicted that participants would have greater cultural stereotype accuracy, or explicit stereotyping, after reading stories with Arab photos. That is, Arab subjects in story primes were predicted to have higher hit rates (the number of accurate responses—“yes” answers—for target words) than Israeli subjects. A repeated measures ANOVA showed an interaction between ethnicity and condition and a main effect for ethnicity on the hit rate data.

Supporting H2, an interaction between ethnicity and condition (Ethnicity x Depiction) was found in the repeated measures ANOVA with $F(2, 102) = 16.01, p < .01$ and $\text{power} = 1.0, \eta_p^2 = .24$. The hit rate for Arabs ($M_{\text{protoArab}} = .74, SD = .15; M_{\text{non-protoArab}} = .57, SD = .25; M_{\text{controlArab}} = .79, SD = .17$) was higher in the prototypical and control conditions than for Israelis ($M_{\text{protoIsraeli}} = .62, SD = .19; M_{\text{non-protoIsraeli}} = .61, SD = .18; M_{\text{controlIsraeli}} = .49, SD = .27$). However, Israeli women ($M_{\text{non-protoIsraeli}} = .61, SD = .18$) received a higher hit rate in the non-prototypical condition than Arab women ($M_{\text{non-protoArab}} = .57, SD = .25$). Generally, the data for this interaction showed that participants stereotyped Arab women more when shown prototypical stimuli and when not primed

in the control condition (see Figure 1). The non-prototypical primes prevented participants from accurately stereotyping Arab women.

Figure 1. The Impact of Ethnicity and Depiction Type on Hit Rate



The main effect for ethnicity also supports H2, in that hit rate was significantly higher for Arab pictures ($M_{Arab} = .70$, $SD = .22$; $M_{Israeli} = .58$, $SD = .23$) with $F(1, 102) = 25.68$, $p < .01$ and power = 1.00, $\eta_p^2 = .20$. Therefore, participants responded with more stereotyping to photos of Arab women versus Israeli women. The news stories presumably influenced more accurate stereotyping and stereotype activation for Arab women.

Discussion

The results have many implications for journalism and media effects scholars. First, regarding H1, stereotype activation was not stronger after reading prototypical Arab stories. This shows that there was no difference between implicit stereotyping of Arab and Israeli women. This could have happened because of the simple nature of the manipulation. In future studies, scholars could enhance the manipulations by priming participants with TV news stories about these groups or by showing more images representing the groups to test for differences in stereotyping.

This result could have also occurred because the stereotypes are not differentiated to a great degree among these groups in American culture. Stereotypes are considered to be simplified categories that are automatically triggered or primed by stimuli (Mackie et al., 1996; Rosch, 1978). However, if stereotypes are not automatically triggered (or activated) by stimuli, Devine (1989) and Devine and Monteith (1999) suggest that the stereotypes may not exist in the knowledge structures of the participants or that the knowledge is not, in fact, shared. The experiment for these groups or related groups (i.e. white women could be used as a comparison group) should be adapted or replicated to further test whether response times would be significantly different

between ethnicities (or even races), as to see whether stereotypes for other groups exist and can thus be activated by stimuli, in terms of yielding a significant result.

Despite the findings of H1, the results supported H2 in that participants had greater cultural stereotype accuracy (more “yes” answers to target words) after reading stories about Arab women. Arab photos received a significantly higher hit rate for the target words (positive and negative words describing the group). Arab photos also got higher hit rates in the prototypical conditions and control conditions, but lower hit rates than Israeli photos in the non-prototypical condition.

The data also showed that non-prototypical depictions made for less stereotyping toward Arab women. The prototypical and control conditions yielded more stereotyping. So, for Arab women, stereotyping occurred in participants who did not read the news stories and in participants who read the prototypical stories. For Israeli women, participants stereotyped less in the control condition without having read the stories, compared to when they were exposed to the prototypical and non-prototypical news stories (or depictions).

This suggests that non-stereotypical stories reduced explicit stereotyping of Arab women. Thus, the primes may have attenuated cultural stereotype accessibility and activation. Explicit stereotyping still describes stereotype activation, even as it does not show stereotype strength like response latency (McRae & Bodenhausen, 2001). McRae and Bodenhausen (2001) state that category activation during person perception may not be exclusively automatic, due to individual difference and a limited capacity to automatically process information (McRae & Bodenhausen, 2001). This finding communicates an important practical implication—that non-stereotypical/non-prototypical news coverage can prevent or reduce the strengthening, and certainly the accuracy or activation, of cultural stereotypes. This kind of coverage may even have the power to weaken stereotypes about Arab women, since hit rates were lower when participants read non-stereotypical stories.

For Israeli women, the news stories may not have been as successful at preventing stereotyping, since hit rates were higher when participants were exposed to news primes. The news primes may have distracted participants, since the mean hit rate was significantly lower for the control group than for participants who saw prototypical and non-prototypical stories. News story complexity may have also led to cognitive overload or task difficulty. Similarly, switching voice in radio messages can lead to overload (Potter, 2000).

The stories may have also been responsible for creating knowledge structures, under the assumption that stereotypes of Israeli women may not have been as culturally learned or as strong as stereotypes of Arab women. Non-prototypical stories about Arab women could have plausibly changed knowledge structures, whereas both non-prototypical and prototypical stories about Israeli women may have created new explicit stereotypes for participants.

Another key point about H2 was that there was less stereotyping toward Israeli women in the control group that had not been primed. It is possible that since Israeli photos in the control condition were not identified as photos of Israelis, that participants may have perceived the photo primes in the response latency tasks as prototypes of White American women. The lack of identifying information for these photos as primes in the control condition may have caused less stereotype activation.

Applicability to Practice

The finding that participants had greater cultural stereotype accuracy after reading stories about Arab women is applicable to the practice of journalism and strategic communication.

Specifically, the news media may be influential in reinforcing stereotype accuracy or may even be responsible for changing or creating stereotypes. While significant results showed that participants explicitly stereotyped more against Arab women than Israeli women, it was also found that non-stereotypical coverage reduces stereotyping of Arab women. Since these results show that non-typical coverage can reduce stereotyping towards Arab women, journalists and public relations practitioners may conclude that stories can change knowledge in the US about Arab women.

Limitations

Even as the findings show the potential power of the news media, this study cannot stand alone as a case for the power of media. Research should continue to examine how explicit and implicit measurements of stereotyping may show that cultural stereotypes are strengthened or made more accurate due to media primes. For example, future research could examine the effects of different media forms (i.e. visual, audio, or other mediums and medium combinations) on other racial, ethnic, or gender groups.

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