PRIMING THE REFLEXIVE CANVAS OF THE MIND IN A THEM/US REALITY
A STUDY OF PRIMING ETHNIC STEREOTYPES IN THE NEWS: RESPONSES TO
FEMALE ARAB AND ISRAELI PROTOTYPES

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PRIMING THE REFLEXIVE CANVAS OF THE MIND IN A THEM/US REALITY
A STUDY OF PRIMING ETHNIC STEREOTYPES IN THE NEWS: RESPONSES TO FEMALE ARAB AND ISRAELI PROTOTYPES

presented by Erika Johnson,

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and hereby certify that, in their opinion, it is worthy of acceptance.

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DEDICATION

Thank you Mom, Dad, Lucas, and Grandpa for your encouragement and support. I am grateful that you taught me to be curious and told me that women can do anything.

I am also grateful for the educators at American University, where I earned my Bachelor’s degree. My undergraduate instructors inspired me to engage in critical thinking and to consider the plight of the international community.
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ABSTRACT

Present research shows that there is no study examining media representation of Arab women and Israeli women as a prime causing stereotype activation in Americans. The goal of this study was to understand how news stories about Arab and Israeli women prime stereotypes in American college students. A 2 (female target ethnicity: Arab and Israeli) x 3 (depiction type: prototypical, non-prototypical, and control) x 3 (multiple messages) study design was conducted to examine how depiction and ethnicity in news story stimuli interacts with evaluations of college-aged participants (N = 107). Results showed that participants exhibited higher stereotyping after reading prototypical stories about Arab women and after they were not primed by stories. Lower stereotyping after participants read non-prototypical stories about Arab women implies that non-stereotypical news coverage can reduce stereotyping. A final major significant finding was that Arab stories were seen as more credible than Israeli stories.
Chapter 1
Introduction

A proliferation of discourse on perceptions of Middle Eastern women has gained attention in the popular press and in entertainment media, such as film. The film *Persepolis* by filmmaker Marjane Satrapi is a good example. *Persepolis* (2008) features the story of Satrapi’s experiences in the 1979 Iranian cultural revolution. While her story is compelling, the East/West binary emerges as a cultural theme in other media as well. For example, in an essay, Satrapi (2006) argues that the “East” is a constructed or mythical category that has been shaped by discourses of power in the Middle East: “The East. That word, I think, is the key to all myths. Where is it, this legendary East of our fantasies and dreams and hatreds?” (p. 21). Satrapi’s outlook on representation as an Iranian graphic novelist and filmmaker questions ideas of construction behind “East” and “West” is also reflected in other media efforts for gender reforms in the Middle East.

The East/West binary also appears in recent film to forward the causes of political movements. Academic literature demonstrates how films forward the interests of political movements (Lakshmi, 1995; Maingard, 1995) or create a collective identity in a subculture or group (Gamson, 1996). However, films have more specifically been used for women’s movements in different regions of the world, such as Iran, where “women’s films” were used to fight gender reform in the post-revolutionary era in the late 20th century (Zeydabadi-Nejad, 2010). In this context, women’s films erupted from “feminist consciousness raising” (also called CR) coined by the US Women’s Liberation Movement in the 1960s (Zeydabadi-Nejad, p. 105). Today, non-profit organizations,
nongovernmental organizations, and film production companies are similarly using film to create a universal front against gender inequality (especially by targeting a more “Western” audience), such as Women Make Movies, Women in Film, AYAMM, and Spring Box Films.

News, as another type of media, can also serve to shape collective identities and help causes and movements. For example, Garragee and Roefs (2004) explain that the way that movements or causes and the news media interact in the news space is important to examine in future research because analysis may reveal how the news media relates to political or government authority. Analysis of power issues in news coverage shows how other parties, such as cause organizations or everyday people, are characterized in the news (Garragee & Roefs, 2004). Garragee and Roefs also note that considering how power is represented or conveyed in media may mediate how the media interacts with various authorities and sources in news coverage. They argue that future scholarship needs to include research on how the news media and social movements create frames that can impact publics as the framing process influences how people interpret events. While this literature is more focused on the framing process and how it can impact causes, this is also relevant to the study of priming stereotypes of Arab women.

An understanding of how media representations impact audiences would aid the causes of organizations and individuals pushing for women’s rights in the Arab World. Here, Arab women are understood as women identifying with or hailing from the League of Arab States, including Algeria, Bahrain, Comoros, Djibouti, Egypt, Iraq, Jordan, Kuwait, Lebanon, Libya, Mauritania, Morocco, Oman, Palestine, Qatar, Saudi Arabia, Somalia, Sudan, Syria, Tunisia, UAE, and Yemen (“Profile: Arab League,” 2011).
Issues of representation emerge in news coverage, which can have a great impact on understanding of Arab or Middle Eastern women. For example, recent news on the Arab Spring and campaigns such as Women2Drive has many visual components, much like films on women’s struggles. News articles are capable of shaping perceptions about Arab women, just like films. For example, an article from *The New Yorker* on the Women2Drive campaign in Saudi Arabia features many videos of women from the campaign’s YouTube website. According to the article, women joining the campaign were protesting by driving to act against the Saudi law that prohibits women from driving and documenting their efforts on YouTube (Henig, 2011). A similar article on NPR shows women in chadors getting into taxis in Riyadh, a more typical scene for Arab women in Saudi Arabia (“Campaign protests,” 2011).

Another area that has garnered the attention of the news media is the political participation of women in the Middle East and Arab World, in terms of tenure in political office in recent years. This demonstrates that media can shape understanding of Arab women in many different roles and settings. The United Nations (i.e. the Database on Gender and the Empowerment of Women in the Arab Region) and other influential organizations have researched political participation of Arab women. IDEA (International Institute for Democracy and Electoral Assistance) has also recently published articles on women’s political participation in the region. Sabbagh (2005) posits that despite apparent gender inequality in Arab nation states and in the Middle East in general, Arab women have managed to gain agency, though limited, in the public sphere. Arab women have some representation in legislatures in the Arab World, but female representation is still the lowest in the world. This is even true in Israel’s
legislature, the Knesset. Hanin Zoabi is the only Arab woman Knesset member, representing the Balad (National Democratic Assembly) party (The State of Israel). She was also the first woman to be elected for an Arab party in the Knesset and is fervently against Israeli policies and stances on the treatment of Israel’s treatment of Palestinian citizens (Cook, 2009). In media coverage, Zoabi has been portrayed as aggressive since June of 2010, when she was arrested for being aboard the Mavi Marmara ship meant to break Israel’s blockade on the Gaza Strip (Mitnick, 2010). In the summer of 2011, Zoabi was even suspended from parliament debates for her participation in this strike on the blockade (Azulay, 2011).

Even though these examples make it clear that representation of Arab women is a timely and important issue, most research on priming stereotypes focuses on typical racial groups in American society. “Arab” is not a census racial group and it is not a clear category in census data (Humes, Jones, & Ramirez, 2011; “U.S. Census Outreach,” 2012). Much research on media depictions of certain groups has focused on Latino Americans, Black Americans, Asian Americans, and Native Americans in media, because they have been defined as the four largest minority groups in the U.S. (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. News media coverage is visual and coverage of events (i.e. Women2Drive) and people (i.e. Haneen Zoabi) can prime and reinforce stereotypes of Arab women.

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). Existing literature also shows that Israeli women are marginalized and that media coverage reflects this marginalization. Lahav (2010) studied the Israeli news coverage of women in the Second Lebanon War in 2006 and found that Israeli women were concealed as major figures and framed merely as immobilized civilians in the midst of war. They were also portrayed as victimized caregivers and dependent on male figures. Inequality of Jewish women in the state of Israel has been speculated to be derived from 20th century anti-Semitic discourse on Jewish men: that Jewish men are weak and even effeminate (Alboim-Dror, 2001; Boyarin, 1997; Gluzman, 2007; Kamir, 2004). Scholars have argued that gender issues in Israel have stemmed from Zionistic efforts to reshape the Jewish man as masculine and assertive in Israeli society, despite the fact that women must serve in the military (Sasson-Levi, 2007). There is also evidence that Israeli women in the military have dealt with sexual harassment and unequal treatment (Levin, 2011). However, Gavriely-Nuri, Lahav, and Topol (2008) argue that Israeli journalistic coverage has reflected societal mistreatment of Israeli women as early as the 1970s in coverage of the 1973 Yom Kippur War against Egypt and Syria. Thus, Israeli women have experienced inequality and could be viewed by U.S. news consumers as similar to Arab women, who have also experienced inequality.

This study examines how different types of depictions of Israeli and Arab women in news media activate stereotypes in American college students. The title of this thesis introduces the notion that scholars do not fully understand how media may impact the human mind to conceive or create stereotypes, as it is understood that the mind engages in automatic information intake processes to stereotype groups in society (Bargh & Chartrand, 1999; Mackie, Hamilton, Susskind, & Rosselli, 1996; Rosch, 1978). The
literature review in the next section locates the place of this scholarship in present work in journalism and mass communication research and research on stereotype activation and categorization. The review indicates that this kind of research fills a gap in media scholarship.
This study draws from priming literature to examine priming effects of news stories about prototypical and non-prototypical Arab and Israeli women. This literature review covers priming, framing, and agenda-setting theories, how priming theory has been used in media effects research, major areas of priming research, and how existing priming literature applies and relates to this research. The literature review also covers scholarship generally linked to how stereotyping has been defined in psychology, such as literature on identification, categorization, cultural stereotypes, and prototypes.

**Priming**

Priming is the effect of a stimulus on reactions to another or a following stimulus (Roskos-Ewoldsen, Roskos-Ewoldsen, & Carpentier, 2009). Thus, a stimulus that causes attitudes and behaviors is a prime. It is important to note that priming is an empirical theory; operationalization of the theory has been drawn from cognitive psychology and social psychology, where effects of recency and intensity of primes have been measured in experimental settings (Roskos-Ewoldsen et al. 2009). McLeod, Kosicki, & McLeod (2009) consider Iyengar and Kinder (1987) the work that first used priming as a theoretical framework for media effects, or more specifically, the effects of television. McLeod et al. define priming as it relates to media and message impact, writing that priming happens when a mental concept is activated by a mediated message; if an individual is affected by a prime, the likelihood that the concept will be thought of again increases. According to Iyengar and Kinder (1987), the primary assumption of priming is
that when individuals evaluate a target, such as a political candidate, they do not think of everything they may know about the target, but instead consider accessible parts of memory that have been recently activated. Beyond thought activation, Iyengar and Kinder also hint at the ability of media to drive behavior, but in a political context. They explain that television news, as a mediator of salient messages, primes only certain parts of civics, and thus can guide people’s political decisions and judgments.

Accessibility and selective attention emerge as two major assumptions of priming theory. Again, Iyengar and Kinder (1987) stress the notion of information accessibility writing that people’s judgments of political figures, such as the president, depend on only specific, primed parts of someone’s knowledge. Another key premise of priming theory is that individuals exposed to media have selective attention as people only attend to specific parts of events, people, or groups featured in the news or in other mediated messages (Iyengar & Kinder, 1987). Media priming can lead to attitude formation and even behavioral activation. For instance, the early application of priming theory to media effects in the 1980s also made connections to violent behavioral outcomes in the literature and observational learning phenomena. Berkowitz and Rogers (1986), another early work introducing the impact of media’s ability to prime behavioral outcomes, write that mediated messages can activate thoughts in the minds that trigger viewers to engage in aggressive behavior, even when exposed to fictional portrayals of violence.

**Priming and relation to other frameworks.** McCombs, Shaw, and Weaver (1997) particularly define priming theory as *cognitive* priming theory, occurring when mediated messages activate knowledge and make it applicable to such messages. The perspective of cognitive priming was originally founded in Fiske and Taylor (1991). This
definition emphasizes applicability, which is conceptually an outcome of framing, rather than agenda-setting; agenda-setting results in accessibility of issues in memory (Scheufele, 2000). Cognitive priming theory is defined by its effects, in that the effects are reflective of the context of exposure to media and more importantly, long-term memory’s impact of the intake of new information. That is, the mind’s interaction and processing of new information is inherently affected by past experience (i.e. stereotypes and related thoughts already in the mind). This understanding of priming is also reflective of the outlook in McCombs et al. (1997) that priming assumes that stimulus features activate pre-existing structures in the mind, which skew perceptions and interpretations of new information.

McCombs et al. (1997) connect agenda-setting to priming effects and priming has also been more recently considered as the impact of agenda-setting (Scheufele, 2000). Scheufele (2000) stresses accessibility outcomes of priming, explaining that primes make concepts or topics more accessible in memory (a known effect of agenda-setting). Agenda-setting is theorized to raise the accessibility or attention to an issue (Tewksbury & Scheufele, 2009). Scheufele (2000) indicates that studies concerned with empirically testing priming effects look at priming effects as agenda-setting outcomes, examining agenda-setting as a variable or cause of priming effects.

Since priming is understood in the literature to make stereotypes and/or attitudes activated, it has been confused with agenda-setting, as well as second level agenda setting (framing). Framing is understood as the process by which exposure to news makes elements such as images and headlines applicable to an issue (Tewksbury & Scheufele, 2009). Specifically, Tewksbury and Scheufele (2009) note that the primary effects of
framing include cognitive response that is reflective of issue interpretation among mediated message audiences, and not reflective of attitude changes (p. 20). Entman (2010) explains that cultural resonance is unique to framing; frames trigger elements of schemas formed from past experiences in the mind to connect certain attributes to issues in society.

Tewksbury and Scheufele (2009) and Entman (2003) explain framing as a process by which journalists present certain issues in the news with selected images and words to emphasize or promote a certain interpretation. Moreover, framing differs from agenda-setting theory in effects, as agenda-setting occurs when exposure to news raises the accessibility of, or attention to an issue, framing occurs when exposure makes certain elements (such as an image) applicable to an issue (Tewksbury & Scheufele, 2009). While there are network models that explain cognitive processing behind priming, the concept of schemas (more related to applicability than accessibility) is understood in literature as more relevant to categorizing and exemplification (Fiske & Taylor, 1991; McCombs et al., 1997). Contrary to priming theory, network models are more related to violence and political priming and repeated exposure, whereas schema can more accurately represent what is accessed when a person is exposed to a prime that activates stereotypes already formed in the mind (Roskos-Ewoldsen et al., 2009).

Schema

Conceptually, schema are relevant to the process of stereotype formation in the mind, whereas concept accessibility is more relevant to the process of priming civic information or attitudes (i.e. attitudes toward political candidates or issues). Scholarship demonstrates that framing in news can prime activity in the mind’s schema (Entman,
2010; Grimes & Drechel, 1996; Macrae & Bodenhausen, 2001). For example, Entman (2010) and Grimes and Drechel assert that schemas allow the mind to digest and organize new information. Entman (2010) notes that cultural resonance is unique to framing; frames trigger elements of schemas formed from past experiences in the mind to connect certain attributes to issues in society. Grimes and Drechel (1996) explain that schema are cognitive structures that determine perceptual outcomes, creating meaning and organizing information. 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. Macrae and Bodenhausen (2001) also discuss that the taxing nature of information processing leads the human mind to simplify perception through schematic or categorical thinking. There are apparent limits to cognitive processing of information in a complex environment for the human mind and categorical thinking enables people to simplify perception various conditions (Macrae & Bodenhausen). 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.

Conceptions of schema inform this research because it is possible that priming triggers the activation of such schema, or pre-existing stereotypes in the mind, as an economical means to process information about people. Bargh and Chartrand (1999), Devine, Hamilton, and Ostrom (1994), and Leshner (2006) notably support this claim. Leshner (2006) supports the position of Bargh and Chartrand (1999) that stereotypes in
the human mind are automatically activated by stimuli in his work on stereotype activation and automaticity. Devine et al. (1994) also theoretically position schema as a necessary function of the mind in social cognition, defining schema as similar to prototypes in the process of stereotype activation as a function of social cognition. Once the mind categorizes a person after exposure to media, Devine et al. (1994) posit that knowledge taken in during the categorization process becomes a part of the mind’s schema (including self-schemas, person schemas, and role schemas). Other insights on cognition and processing can be taken from other models from psychology (i.e. MODE), even though priming theory is most applicable to this research.

The MODE Model

The Motivation and Opportunities as Determinants (MODE) model also applies to the phenomenon of priming stereotypes (Fazio, 1990). It is a dual process model, described in Fazio and Olson (2003). According to Fazio and Olson, the MODE model poses that attitudes influence people’s thoughts and behaviors both via automatic and controlled (spontaneous versus deliberate) processes. Also, the model assumes that people engage in mixed processing, using both automatic and controlled processes. Automatic processes are explained as immediate activation in response to a stimulus, whereas controlled processes are explained as latent and careful analysis as a response to a stimulus (Fazio & Olson, 2003).

Most relevant to stereotype activation, the MODE model assumes that attitudes form as the result of association between a stimulus or object and an evaluation; this makes the model theoretically close in meaning to priming theory and the schema concept (Goodall, 2011). This is related to schema in that when there is a strong enough
association between an object and an evaluation of the object, people automatically evaluate an object based upon prior memories without any control or deliberation (Goodall, 2011). When strong association exists in memory, according to the MODE model, automatic evaluation ensues (Goodall, 2011).

Even though the MODE model assumes engagement in both deliberate and automatic processes, the literature indicates that automatic response more accurately describes the process of attitude or stereotype activation and creation (i.e. Devine, 1989). Additionally, while the MODE model is tied to priming theory, most scholarship on racial or ethnic stereotyping by media content is conducted using priming theory. Mastro (2009), for instance, indicates that most quantitative research on stereotype influence in mediated messages employs priming theory. In the context of ethnic or racial stereotyping, priming involves information activation processes that determine judgments of racial or ethnic group targets or members (Mastro, 2009). Moreover, results from priming studies on racial stereotypes have shown that exposure to stimuli (even a single exposure) featuring racial or ethnic stereotypes have the ability to influence stereotype evaluations and behaviors (Mastro, 2009). Thus, media hold significant power to influence or reinforce existing stereotypes. A priming meta-analysis (Roskos-Edwoldsen, Klinger, & Roskos-Edwoldsen, 2007), however, does not quite indicate that priming stereotypes is a well-established or thoroughly researched phenomenon. At the time of the meta-analysis publication, there were only 63 published media priming studies (Roskos-Edwoldsen et al., 2007). Therefore, priming as applied to media effects is a relatively new phenomenon in media research, outside of psychology disciplines.
Research also shows that there is a deficit of research on representation of female Arab and Israeli identity in media, which is discussed next.

**Arab and Israeli Representation**

Arab women have been immortalized in American film as erotic, exotic, submissive, and even demonic since the 1960s (Shaheen, 2007). However, after 9/11, Shaheen (2007) argues that Arab women have been largely left out of American film in these negative roles and have not even been portrayed as terrorists on screen. Studies on news coverage suggest that journalists may have taken on film’s previous role of casting Arabs and Arab women as the enigmatic other in American society. Mousa (1987) and Oh (2008) are recent examples of research where scholars found stereotypes of Arabs in news coverage, showing how the news can frame events like 9/11 through coverage. 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, more aggressive, and more so as victims of racial prejudice in post-9/11 coverage.

Scholarship from political science and gender studies also has analyzed the 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. Women have also been framed in the literature as innocent, but responsible “mothers of the nation” during wartime (Khatib, 2006, p. 81). The veil or headscarf is also a prevalent area of debate and contention and has served as a visual signifier of Arab and Muslim women (Ahmed, 1992; Hoodfar, 2001). The veil has also been critiqued as a non-Western or non-Caucasian garment (Hirschmann, 1997).
These findings may reflect or derive from the thesis of Said’s *Orientalism*, in which Said (1978) wrote about how Middle Eastern and Arab culture has been misunderstood and misrepresented in the West and by Western cultures, such as Europeans and Americans. Said’s thesis in *Orientalism* has informed mass media scholarship, particularly content analyses of Arab representation in recent years (i.e. Oh, 2008; Tawil-Souri, 2007). For example, Tawil-Souri (2007) used *Orientalism* to inform analysis of a typical video game where Arabs are framed as an uncivilized and violent enemy.

Also building on Said (1978), in “The Arab Story: The Big One Waiting to be Told,” Khouri (2007) writes that there is an over-emphasis on violence in coverage of Arab men and women in Western news media. Khouri posits that coverage of the Middle East has focused on high emotion and cultural confrontation. He argues that Western outlets have framed the Middle East and Arab people as violent and have inaccurately portrayed the cultural Arab identity:

The prevalent news and imagery convey—and are defined by—emotionalism, exaggerated religiosity, and deep ethnic or religious prejudice, while the underlying human rhythms, prevailing moral norms, and routine cultural and political values of the 300 million or so Arabs are not presented accurately, fully or at all. (p. 10)

This quote fully captures Khouri’s expression of the media’s failing of representing Arab people in the Middle East. Khouri also argues that Western media have portrayed Arab people as extraordinarily socially and politically deviant, even as Arab people share the same values and human qualities as Western audiences.
The findings of Bar-Tal and Labin (2001) confirm the assertions of Khouri on media coverage of Arab people. Bar-Tal and Labin found that after a terrorist attack, Israeli adolescents perceived Palestinians, Jordanians, and Arabs as more violent. Berkowitz (2004) found that the archetype of the female suicide bomber has become emergent in news coverage. He also asserts that Western media and audiences see Palestinian women in particular as mythical and enigmatic figures, taking a more violent role after the first Intifada. In 2002, the first female Palestinian suicide bombing occurred in the midst of the second Intifada, ushering in a new archetype in Israel—women suicide bombers. During the years of the conflict between Israel and Palestine, it has been found that Israelis developed negative stereotypes of Arabs as a group or general category, signaling that there has been no categorical separation between different Arab groups, such as those of different nationalities and religions (Bar-Tal, 1996; Benyamini, 1981; Bizman & Amir, 1982; Hofman, 1972; Rouhana, 1987; Shamir & Sullivan, 1985).

Oh (2008) indicates that more research on perceptions of Arab women will fill a gap in the literature, explaining that there is a disparity in terms of scholarship on Arabs and Arab Americans. Oh posits that there needs to be more research 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 adds to priming research.

Exploring coverage of Israeli women is also a burgeoning area of research (Alboim-Dror, 2001; Boyarin, 1997; Gavriely-Nuri et al., 2008; Gluzman, 2007; Kamir, 2004; Lahav, 2010; Levin, 2011; Sasson-Levi, 2007). For instance, qualitative researchers have shown that journalistic coverage of conflicts involving Israel and other
nations in the last few decades have reflected gender inequalities in Israel (Gavriely-Nuri et al., 2008; Lahav, 2010). The present conflict between Israelis and Palestinians, as well as other Arab nations, makes this study particularly salient. Furthermore, the study of the dichotomy between Israeli and Arab women in regards media representation and stereotypes has been unaddressed by scholars.

In a general sense, Jewish people have been cast as scapegoats for societal problems around the world. This was prevalently seen in World War II, but Jews have been blamed for other events, such as the bombing of the Israeliite Argentinean Mutual Aid Association in 1994. Argentinean news media framed the bombing as a uniquely Jewish problem, for instance (Feldstein & Acosta-Alzuru, 2003). In terms of the American consciousness, scholars have found that Jews have been characterized in media as struggling with rendering a Jewish identity in American culture, but American audiences’ interpretation of Israeli people or Israeli women has received less attention in scholarship (Becker, 2009; Fernheimer, 2008; Gillota, 2010; Moshin, 2007). For instance, Moshin (2007) asserts that American media reflect the tensions Jewish people have in creating personal identity in America as a predominantly Christian culture. However, public opinion polling in the past has shown that prejudiced views towards Jewish Americans still existed in the latter part of the 20th century (Rosenfield, 1982). Polling has reflected that Americans may see Jewish Americans as more loyal to Israel and too powerful in society (Rosenfield, 1982). Also, today, Jewish Americans see anti-Semitism in the U.S. as a societal problem (Cohen, 2010). Thus, literature demonstrates that, like Arabs, Jewish and Israeli people have been cast as enigmatic others in American society and in other contexts.
Despite a breadth of research on the representation and portrayal of Jewish and/or Israeli and Arab people, priming studies concerned with stereotypes have mostly studied groups most prevalent in the US, such as Black or African Americans. The next section of this literature review demonstrates that a study on priming stereotypes of Arab and Israeli women has not been done before among mass media scholars, according to the literature search and review.

**Priming Studies**

Most priming research in mass communication scholarship has been done regarding violence in media and political news coverage, but Roskos-Ewoldsen et al. (2009) note that priming research has recently generally adopted a focus on priming stereotypes, which was the focus of this research. According to these authors, priming affects individuals’ later judgment and behavior related to certain racial or gender groups, as priming can activate and alter schema in the mind on these groups. Roskos-Ewoldsen et al. (2009) specify gender and racial stereotyping as popular areas of research in recent years among scholars concerned with priming and social psychology. Therefore priming theory fits the aims of this research.

Several recent studies have explored the effect of primes on racial stereotyping, showing that participants are often impacted by primes in experimental settings (Abraham & Appiah, 2006; Dalisay & Tan, 2009; Monahan, Shtrulis, & Givens, 2005). Priming studies have also focused on gender stereotyping, often finding that media can prime perceptions of women as sex objects (Mahood, Linz, & Yao, 2006; Stevens Aubrey, Henson, Hopper, & Smith, 2008). The presence of this recent literature on racial/ethnic and gender stereotypes in terms of priming framework shows the relevance
studying perceptions of Arab and Israeli women in media, an under-researched area of
media scholarship (Mastro, 2009). The next part of this literature review covers research
on popular areas of priming studies: political candidates and violence in media. Both of
these areas have been researched in relation to ethnicity or gender and stereotyping.
Stereotyping literature, as related to priming, is also covered, as this literature is most
applicable to research on priming stereotypes of Arab women in the news media.

**Political Candidates**

Political priming is a prevalent area of priming research, as it was the focus of
Iyengar and Kinder’s (1987) seminal work on priming theory; the application of priming
theory to media effects essentially started with testing how news primed opinions on
presidential character and quality (Iyengar & Kinder, 1987). Judgments on the president,
using the priming theoretical framework, are still a primary focus of priming research, as
many scholars have assessed the effects of political priming (political judgments and
evaluations) as a result of news media coverage on the president (Roskos-Edwoldsen et
al., 2009). This focus can also be seen in recent scholarship on media effects (i.e.
Kopacz, 2008; Valentino, 1999).

A large body of recent priming research has been about the effects of ads and
news coverage priming perceptions of political candidates and political attitudes. For
example, Caliendo and McIlwain (2006) and Kopacz (2008) studied candidates in terms
of the effect of race on influence. The priming impact of political advertising has also
been a major focus of research (Carlson, McGloin, & Kowal, 2009; Carlson & Kowal,
2008; Hardy, 2006).
Despite indications that priming is a framework about media effects (i.e. Scheufele, 2000), some scholars have recently used priming as a framework for content analysis on candidates and priming (Balmas & Sheafer, 2009; Boyle, 2004; Caliendo & McIlwain, 2006). However, experimental methods or measuring for priming effects has dominated priming research related to political candidates (Cho, 2003; Ha, 2011; Hansen, 2007; Sei-Hill, Miejeong, & Scheufele, 2010; Snyder & Cistulli, 2006).

Caliendo and McIlwain (2006) and Kopacz (2008) are particularly relevant to the study of priming stereotypes of Arab women as both address how racial cues and racial frames can appear in election coverage. For example, Kopacz (2008) suggested that stereotypical crime news coverage affects perceptions of Black or African American candidates, particularly in terms of how participants perceive them as more prototypical than White candidates. Kopacz used experimental methods, whereas Caliendo and McIlwain did not. Caliendo and McIlwain (2006), in content analysis, found that racial frames in all-Black elections and references to race in biracial elections are common in election news coverage. While this study did not test actual priming effects, it demonstrates that race and ethnicity is an area of interest in different realms of priming research. However, they did not assume that racial references in biracial contests, for instance, could potentially have priming effects on white voters and generate negative perceptions of minority candidates (Caliendo & McIlwain, 2006, p. 64). A small percentage of stories in biracial elections (8%) actually constituted a racial frame where stories mentioned the race of candidates and voters and had candidate photographs showing the race of the candidates in a visual way (Caliendo & McIlwain, 2006).
These results are indicative of the fact that many types of news coverage can prime stereotypes, ranging from political candidates and events, to news on crime and violence. Even with its focus on violent content as a prime, the next section of the literature review is relevant to this research in that it demonstrates that different media forms, in addition to the news media, have been shown to prime attitudes and behaviors related to racial and ethnic stereotyping.

**Priming Violence**

Priming and violent content has been a major area of research, with video game media and television media as main areas of interest to scholars (Roskos-Ewoldsen et al., 2009). Crime news has also been a major focus, but the emphasis has been more on racial attributes of crime news (i.e. Leshner, 2006). For example, Barlett, Bruey, and Harris (2007), Cicchirillo, Mahood, and Appiah (2010), Krcmar and Curtis (2003), Krcmar and Lachlan (2008) are priming studies that have focused on the capability of mediated violence to prime attitudes and even behaviors, especially violent video games.

In terms of gender, as related to this area of priming scholarship, research shows that women can have more strong or directed opinions on mediated violence, showing the importance of analyzing gender in priming stereotypes (Boiarsky & Long, 2003). It has also shown that media and televised violence in particular can trigger expressions of aggression in men (Scharrer, 2001). These findings demonstrate the ability of media to trigger different types of thoughts and attitudes based upon gender and identity.

Cicchirillo, Mahood, and Appiah (2010) and Holbrook and Hill (2005) also researched violent primes in relation to racial and political issues. Cicchirillo et al. (2010), for example, focused on how racial representation in violent video games affected
stereotype associations in undergraduate students, specifically in implicit association tests; participants in conditions featuring more African-American depictions responded faster in IAT tasks testing for stereotype association than participants exposed to less depictions. Holbrook and Hill (2005) is an example of a priming study on the effects of televised crime drama shows on political attitudes, showing that crime is a major theme in terms of priming stimuli and attitudinal effects (triggering both racial and political evaluations or attitudes). Holbrook and Hill found that people who frequently view crime dramas are influenced by crime drama and entertainment media, in terms of their opinion of the president and opinions about crime in the U.S. Their most significant finding was that non-news sources impact political opinions.

Unlike other studies on violence and priming, Holbrook and Hill (2005) exemplifies a convergent research focus on both violence and politics. Again, these are both significant areas of priming research in recent academic literature. It is clear that ethnic or racial identity representation in media is an emerging area of research, even within the popular areas of priming research (politics and violence). As racial stereotyping is a relatively new area of priming research, it is an important segment of media effects research to explore in this study.

**Racial Stereotypes, Gender**

Although priming stereotypes has received less investigation than priming violence and political preferences, automatic stereotype activation reflected in the findings of Cicchirillo et al. (2010), for instance, is not a new concept. Lippmann (1922) ushered in the notion of automaticity of stereotyping in his seminal work, *Public Opinion*, indicating that stereotyping is a means of creating order in a complex human
existence. While Lippmann explains that stereotyping is almost a personal right, beyond simply a means of categorization, the important insight from Lippmann’s early commentary on stereotypes is the indication that people use stereotypes to simplify their understanding of a complex reality. Many scholars have explored this phenomenon from the perspective of automaticity (that stereotypes, as simplified categories, are automatically triggered or primed by stimuli) (i.e. Mackie, et al., 1996; Rosch, 1978).

Roskos-Edwoldsen et al. (2009) write that priming stereotypes is an area of media effects scholarship experiencing significant growth in recent years, as opposed to priming research on politics and violence. They also note that research on gender and racial stereotype priming by media sources is a burgeoning scholarship area (Roskos-Edwoldsen et al.). For instance, literature clearly shows that individual identification with racial or ethnic groups impacts priming effects (i.e. Forehand & Deshpande, 2001; Lee, 2004). This also demonstrates that identification as a key factor in the priming process. In Forehand and Deshpande (2001), the authors found that “ethnic self-awareness” to be connected to priming effects (ethnic self-awareness being a short-lived state experienced after media exposure in which a person is more sensitive to his or her ethnic identity). The researchers used Asian and Caucasian subjects and found that appearances of models in the ads that matched participants’ ethnicities triggered more favorable responses. Primes of spokespeople matching the ethnicity of participants also made participants more likely to describe themselves of identifying with their ethnicity. Lee (2004) also demonstrates that ethnic identification plays a role in how individuals are primed and are susceptible to priming effects, finding that ethnic identification has an influence on how participants respond to primes.
Several recent studies have explored the effect of primes on racial stereotyping, showing that participants are often impacted by racial exemplars as primes in experimental settings (Abraham & Appiah, 2006; Brown Givens & Monahan, 2005; Dalisay & Tan, 2009; Monahan, Shtrulis, & Givens, 2005). For example, Abraham and Appiah (2006) found that images of Black exemplars in online news reports on the three-strikes law and school vouchers primed racial stereotypes about Blacks as a racial category. In particular, images of Blacks made participants more strongly associate Blacks, as a racial category, with the social issues covered in the stories. Dalisay and Tan (2009) saw effects of priming when exposing Caucasian participants to Asian-Americans as a “model minority” group, as participants negatively evaluated African-Americans as a comparison group and positively evaluated Asian-Americans when shown the model minority condition. The “model minority” condition showed Asian Americans in a positive light, in terms of their assimilation into American culture and life, showing scenes of immigration, adoption of a “hard work ethic,” and interviews with successful Asian American businesspeople (Dalisay & Tan, 2009, p. 13).

Also exemplifying the recent influx of research on exemplar effects in terms of stereotyping, Brown Givens and Monahan (2005) looked at how media representation or portrayals of Black women affected judgment in interpersonal contexts. Participants were shown three different video portrayals of African American women (between groups) and then a job interview video featuring a Black or White woman (Brown Givens & Monahan, 2005). In implicit measures, participants more quickly responded to or associated the Black interviewee as negative (i.e. aggressive, sexual, etc.) (Brown Givens & Monahan).
Monahan et al. (2005) had similar findings, except used stereotype consistent and inconsistent values rather than positive and negative values in implicit testing. Like Brown Givens and Monahan (2005), participants were exposed to different video primes (i.e. “mammy,” “jezebel,” or “welfare queen” videos), but then were only exposed to a Black interview scene, featuring a Black woman in a job interview (Monahan et al., 2005). In response latency measures, it was shown that participants more quickly associated the interviewee with stereotype consistent adjectives than with stereotype inconsistent adjectives (Monahan et al., 2005).

While this review shows there is a breadth of research on racial groups and priming, in terms of the appearance of stereotypes in the media or as a manipulation of participants (race in stimuli or participants as independent variables), 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 been a very popular focus of study in recent years (Azocar, Dixon, & Carter, 2003; Dixon & Azocar, 2007; Dixon, Weaver, Jensen, & Hurley, 2005; Dovidio et al., 1986; Leshner, 2006; Mastro, Lapinski, Kopacz, & Ben-Morawitz, 2009; Valentino, 1999). For example, Leshner (2006) found that dehumanizing depictions of Black crime suspects prime or activate stereotypes.

Dovidio et al. (1986) specifically used response latency measures to gauge automatic activation of stereotypes. They found that participants responded more quickly in response latency tasks to negative words in connection to a Black target (responses were faster in the Black target condition than in the White target condition). Thus, the
tasks demonstrated that Black stereotypes were automatically activated in White subjects and that the stereotypes held by test subjects were negative. Since this finding, much research on media priming has confirmed that media coverage can instill negative stereotypes towards minority groups. For instance, Dixon et al. (2005) found that female and Black participants expressed a “mean world” view after media exposure, versus white participants. Even though the authors used priming theory in their approach, the results seem to be reflective of a cultivation vantage. However, it still demonstrates the prevalence of studying Black and White racial groups in news coverage primes as affecting participants.

**Gender.** Recent priming studies have also focused on gender stereotyping, often finding that media can prime perceptions of women as sex objects (Mahood, Linz, & Yao, 2006; Stevens Aubrey, Henson, Hopper, & Smith, 2008). These studies indicate that both men and women are affected by primes featuring women, but perhaps in different ways. Mahood et al. (2006), for example, showed that men were primed to associate women with words describing women as sex objects after playing a sexually explicit video game called *Leisure Suit Larry* (versus men in the control group who did not play the game, but played non-sexual video games, such as the *Sims* and *PacMan II*) in a lexical decision task. Men who played the sexually explicit game also exhibited a greater likelihood to engage in sexual harassment behaviors directed towards women.

Stevens Aubrey, Henson, Hopper, & Smith (2008) demonstrated the potential priming power of media on women’s attitudes towards themselves. Stevens Aubrey et al. (2008) found that college-aged women were affected by being primed by images of women wearing very little clothing (or more body display). They also found that women
with high body surveillance, or high self-consciousness about their bodies, were particularly affected by images where less clothing was worn by models in that they reported greater levels of self-objectification.

These findings further reinforce the importance of studying Arab and Israeli women as groups that are stereotyped in media. In addition to priming literature, scholarship on identification, categorization, cultural stereotypes, and prototypes provides foundation for this priming study on stereotype activation. While priming has been reviewed as a primary framework for this study, these areas of study somewhat outside of media scholarship also greatly inform this research.

**Identification and Categorization**

Identification of participants has been prevalently stressed in priming literature and applies to this research. Ethnic or ingroup identification clearly arises as a variable of interest in media priming studies, as identification with racial groups has been connected to priming outcomes or stereotype activation (Forehand & Deshpande, 2001; Lee, 2004). For instance, ingroup identification has been recently understood as a relevant variable of interest in terms of priming stereotypes and stances towards political candidates and targets (Kopacz, 2008). Findings in the literature demonstrate that ingroup identification determines stereotype responses and attitudes toward political candidates (Mastro & Kopacz, 2006; Oakes, Haslam, & Turner, 1994; Turner, 1999). For example, some have found that identification with white racial ingroups intensifies and strengthens negativity toward Black and Latino targets in experiments (Mastro & Kopacz, 2006; Turner, 1999). Oakes et al. (1994) found that racial identification intensifies intergroup comparison, while Turner (1999) found that greater identification...
as a White voter was connected to stronger positive evaluative responses towards the ingroup. Mastro and Kopacz (2006) found that ingroup and outgroup identification has also been an area of research on stereotyping of Arabs, which is of particular interest to this research (Gaunt, 2011). Gaunt (2011) found that participants were more willing to engage in intergroup contact if there was less perceived conflict between groups and more past contact with outgroup members, with stereotype evaluations as a mediating factor.

The Self-Categorization Theory (SCT) and categorization literature also applies to this research (Mastro, 2003). Originally released in the 1980s by Turner (Turner, 1985, 1987), the SCT is a theory suggests that individuals classify themselves by perceived within-group similarities and between-group differences. Specifically, the SCT posits that between-group comparisons are especially made in terms of judgments against a prototype, exemplar, or “model member” (Mastro, 2003, p. 101). Turner (1985) maintains that through categorization, self-definition is achieved, where the mind places the self and others into group categories. The mind deals with social and personal identity at opposite poles to conceive a person’s self-concept, which converges with that person’s ingroup and diverges from his or her salient outgroup (Turner, 1985, 1987).

This is related to more general findings on categorization as connected to stereotyping and the potential negative outcomes of stereotype knowledge. Mackie et al. (1996) assert that stereotyping is a categorization process through which knowledge about group members is generalized to a whole group as a necessity or vital process of the mind to handle an influx of information. Operario and Fiske (2003) also explicate stereotyping as categorization in which people shape their understanding of stereotypes
and potential personal beliefs around their identity with a social group and differentiation from other groups.

**Stereotypes Versus Attitudes**

Stereotypes and attitudes are conceptually distinct, in that stereotyping is a type of attitude expressed in the evaluation of people, defined by categorization processes. For example, Brewer (2007) defines stereotypes as evaluations based on categorization processing in the human mind’s cognitive processing of ingroups and outgroups in society, usually resulting in favoritism towards ingroups and discrimination towards outgroups. Like Devine (1989), Brewer (2007) separates personal beliefs from stereotypes by defining prejudice as a potential behavioral outcome of stereotype knowledge and categorization. Devine (1989) assesses personal belief expression as a more controlled process, whereas stereotyping and stereotype activation refers more to states of automaticity. These scholars confirm early conceptual definitions of prejudice, such as those of Harding, Proshansky, Kutner, and Chein (1969). Harding et al. (1969) define prejudice as a negative attitude toward a target or group. Devine (1989) further explains the difference between prejudice and stereotyping in her assertions on cultural stereotypes.

**Cultural Stereotypes**

Devine (1989) found that the automatic activation of stereotypes is not contingent upon levels of prejudice in an individual. Thus, Devine (1989) posits that prejudice and stereotyping are conceptually distinct as people in societies are equally aware and know about cultural stereotypes of ethnic and racial groups. This is due to shared and common socialization processes. Therefore, even if an individual does not hold racist or
prejudiced beliefs, he or she still may have cognitive structures or schema in his or her mind about stereotypes connected to a group. Devine even argues that beliefs in an individual make up a separate cognitive structure from stereotypes and that stereotypes can be activated via automatic processing apart from controlled expression of stereotype knowledge or prejudice.

Most important to this study, 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 (or primed).

**Exemplars Versus Prototypes**

Depictions of prototypes and exemplars have been found to influence stereotypes (i.e. Mastro & Tukachinsky). Scholars have suggested that exemplars are conceptually distinct from prototypes in that exemplars are more specific representations of groups in the mind and prototypes occur in the mind as more abstract (Verbeemen, Vanpaemel, Pattyn, Storms, & Verguts, 2007). Specifically, an exemplar is defined as a unit, item, or case delineated by certain characteristics that groups it with other similar units (Zillman, 2006). Zillmann (2006) explains that a smoker is an exemplar of other smokers, for instance. A prototype also has characteristics of a certain group, but a prototype exists as an abstract summary of characteristic features (Rosch, 1978; Verbeemen et al., 2007). Thus, a prototype is not necessarily defined by specific characteristics, but is generally descriptive of characteristics.
In terms of exemplar-based processing, Hintzman (1986) suggests that exemplars are used as points of comparison during the evaluation of stimuli in his exploration of the multiple-trace memory model. That is, when a participant is exposed to a stimulus, he or she is triggered to compare the exemplars to group representative exemplars previously established in the mind. In this exemplar-based processing situation, the participant would then determine which exemplar most matches with the new stimulus, leading to new categorization processing or perceptions of racial or ethnic categories.

Prototype-based processing, on the other hand, is based upon the notion that people have averaged conceptions of groups or categories in their minds about racial and ethnic groups. This approach is championed by Cantor and Mischel (1979) and Homa, Rhoads, and Chambliss (1979). Homa et al. (1979) specifically posit that individuals create conceptualizations of groups based upon averaging of exemplars. Collins and Loftus (1975) also researched the role of prototypes, specifically in relation to priming. Their position is that after prototypes are primed by exposure to stimuli, prototypes are made available for decision-making and judgments. Newer developments in prototype research demonstrates that prototype based processing is highly related to ingroup and outgroup perception and categorization, as McLaren, Bennet, Guttman-Nahir, Kim, and Mackintosh (1995) maintain that prototypes reinforce perceptions of similarity within groups and encourage differentiation and separation between groups, finding that prototypes were easier to classify for participants (who did not identify with any category or group) than exemplars in their study results. Thus, prototypes can serve to maximize difference between racial and ethnic groups in the human mind and to interfere with conceptions of group similarity.
Rosch (1978) is also relevant to the discussion of prototypes and categorization. Rosch (1978) argues that human categorization is derived from two main psychological principles. First, Rosch asserts that category systems function to give the human mind the most amount of information with limited cognitive effort. Rosch also maintains that the human mind makes perceptions in a structured form. Rosch connects these two principles by stating that maximum information taken in with the least amount of cognitive effort (cognitive economy) is contingent upon categories mapping the perceived world as closely as possible (structure in the perceived world) (pp. 28-29). She states that categorization and category systems are delineated by horizontal and vertical dimensions. The horizontal dimension is concerned with category segmentation while the vertical dimension is concerned with category inclusiveness. Category inclusiveness is the dimension upon which levels of items are differentiated (i.e. collie, dog, mammal, animal, and living thing) (Rosch, 1978, p. 30). Segmentation refers to variation within each of these levels (i.e. the differences between dog, cat, car, bus, chair, and sofa) (Rosch, p. 30). Rosch indicates that prototypes arise relative to principles of the horizontal dimension: people tend to define segmented categories by prototypes of prototypical experiences that are most representative of things in the category at hand. This process occurs out of a need to increase category distinctiveness and flexibility (Rosch, 1978, p. 30).

Priming procedures have been known to estimate an average evaluation of exemplars, as related to schema in the mind, rather than an association between a label and a polar emotion (Fazio & Olson, 2003). Mastro and Tukachinsky (2011) echo this perspective, arguing that when participants are exposed to a prototype or prototypical
experience, prototypes in the mind can become activated for making judgments; it is understood that there is not a determination or weighing process, but rather an activation of schemas and associations (stereotypes) is involved.

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 is stronger in the mind, responses are faster. For example, participants in Dovidio et al. (1986) demonstrated in response latencies that their cultural stereotypes of Black people as negative were stronger than stereotypes of White people as negative. Dovidio et al. (1986), a study derived from Rosch (1975), somewhat serves as a model for this experiment, especially in terms of how response latency measures are applied. Dovidio et al. used the words “black,” “white,” and “house” as stimuli and asked if certain traits could ever be true of these categories; this study used media stimuli and then used photos of Arab and Israeli women where Dovidio et al. used words, for instance.

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’s (1999) paper on the automaticity of being human also confirmed that response latency measures are a means to judge automatic elicitation of structures in the mind. This method is additionally supported by the classic literature of Rosch (1978), where Rosch indicates that reaction time to stimuli is a measure of processing speed in regards to judging statements about category membership of prototypes as a processing task. Fiske (1982) supports the notions that evaluation as a reaction is theoretically linked to categorization.
Similar arguments were posed by Dovidio et al. (1986) and Leshner (2006). They expected that faster response times will be elicited in negative depictions of outgroup identities or targets in stimulus materials. It was assumed that Arab prototypes would be perceived as apart of the “outgroup” more than Israeli prototypes, since Israeli and/or Jewish targets are understood as predominantly white or Caucasian (Alhabash, Stepanova, & Bartholow, in progress). This hypothesis 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. Also, an emphasis on prototypes, rather than exemplars is derived from the assertions of Rosch (1978). Again, Rosch (1978) indicates that prototypes are configured because people define categories in their minds by prototypes from prototypical experiences that are most representative of things in the category at hand.

Moreover, scholarship indicates that exposure to prototypes can shift stereotype information in the mind, perhaps more powerfully than exemplars. Scholars have found that prototype processing can be more powerful or effective than exposure to exemplars (Devine & Baker, 1991). This may be because prototype processing is connected to group categorization and categorization of the self and prototypes are understood to have the potential to guide person perception, emotion, and even behavior (Hogg & Hains, 1996). This conceptual understanding of prototypes informed the concepts and operations of this study in that this research assumes that the human mind forms stereotypes through categorization and defines categories by prototypes. Responses to prototypes may reveal how media primes strengthen or weaken stereotypes, showing how
strongly a prototype characterization is connected to respective Arab and Israeli female stereotypes.

Despite the findings that exemplars prime racial stereotypes (Abraham & Appiah, 2006; Brown Givens & Monahan, 2005; Dalisay & Tan, 2009; Monahan, Shtrulis, & Givens, 2005), the assertions about the effects of prototypes on processing and categorization (Rosch, 1978) inform the following hypotheses. These are 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 (where participants’ judgments about words’ representativeness of a person from news story primes are recorded) to descriptors in regards to prototypical depictions 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 women and Israeli women) on the amount of time it takes to confirm or deny words as being descriptive of ethnicities (quicker responses meaning stronger stereotype activation)?

**Explicit Stereotypes**

The first hypothesis is concerned with implicit stereotypes or measures of stereotypes, but explicit stereotypes can give a fuller understanding of automatic and controlled processing in stimulus evaluation. Implicit stereotypes are understood as those that individuals are largely unaware of or are not conscious of (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 (i.e. Abraham & Appiah, 2006; Brown Givens & Monahan, 2005; Dalisay & Tan, 2009; Dixon et al., 2005; Mastro et al., 2009; Mastro & Tukachinsky, 2011). Also, studies have specifically tested explicit stereotypes for Arab and Israeli groups (Alhabash, 2011; Bar-Tal and Labin, 2001; Benyamini, 1981; Kaminsky & Bar-Tal, 1996). Thus, it is worthwhile to study more conscious or appraised stereotypes after exposure to media primes. The theory of priming in relation to categorization and automaticity is falsifiable, in that there are contending positions on the role of automaticity in expression of media effects.

For instance, the MODE model contends that the mind engages in both deliberate and automatic processes (Fazio, 1990). While it was previously argued that the literature indicates that automatic response more coherently describes stereotype activation (i.e. Devine, 1989), explicit expression of stereotypes give this research a point of comparison to automatic response. McRae and Bodenhausen (2001) even 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. Devine’s (1989) thesis that commonly held stereotypes can be activated in most people has been contradicted by studies where stereotype activation was not found in egalitarian or humanitarian individuals (Lepore & Brown, 1997; Wittenbrink et al., 1997). Scholars have also posited that the ability of individuals to engage in executive control influences participants’ responses in implicit tasks (such as the IAT or response
latency) (Chatham, et al., 2011). Executive control is defined as a cognitive control process by which executive functions influence individuals’ goal-directed behaviors; executive functions consist of functions such as changing working memory, managing mental tasks, and halting prepotent response (Chatham et al., 2011; Friedman & Miyake, 2004; Mierke & Klauer, 2001; Miyake et al., 2000).

However, the relationship between implicit and explicit stereotypes is unclear in the literature, as Fazio and Olson (2003) argue that the relationship between the two is contingent upon many factors, including differences in participants. Others have asserted that any correlation between results in implicit and explicit measures depends on motivation and opportunity to deliberate; if these are low, implicit and explicit measures are more likely to correlate (Fazio & Olson, 2003; Koole, Dijksterhuis, & Knippenberg, 2001).

Given this literature, the accuracy of cultural stereotyping will also be examined with the assumption that more yes responses to target words (presented after photos from news stories exposed to participants) in response latency tasks following news exposure indicate greater stereotyping (i.e. accuracy of held cultural stereotypes) (Devine, 1989; Devine & Monteith, 1999; Leshner, et al., 2010; Shapiro, 1994). “Hit rate” refers to the amount of accurate yes answers to stereotypical target words in regards to photos featured in news story primes. Target words are descriptors used in a response latency task that are stereotypical of Arab and Israeli groups. Explicit response serves as a point of comparison to response latency to reveal how an individual more consciously responds to descriptors or engages in conscious appraisal (Fazio & Olson, 2003). Thus:
H2: Participants will respond with greater stereotype accuracy (with more yesses, 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-yesses-for target words) will be higher for Arab photos than for Israeli photos in the response latency task.

H3: There will be a main effect for depiction type on response such that participants in the prototypical condition will have more stereotype activation (faster response times) than the non-prototypical and control conditions.

H4: There be a main effect for depiction type on accuracy of cultural stereotypes (hit rate), showing that cultural stereotype accuracy of participants, as expressed by hit rate (more yesses to descriptive words), are highest for the prototypical condition, versus the non-prototypical and control conditions.

Priming effects may also be contingent on variables related to perceptions (i.e. credibility ratings) of news media.

News Credibility and Priming Stereotypes

Credibility is an important news value to journalists, so it is relevant to this study on print news depictions as primes (Meyer, 1988). Meyer (1988) argues that credibility is a major determinant of newspaper quality and success in the free world. However, there has been a recent influx of criticism towards the Western news media’s coverage of Arab people directed at Western audiences, putting the credibility of the news on groups in the Middle East into question (Khouri, 2007).

The work of Beaudoin and Thorson (2005) confirms that news credibility perceptions are connected to racial or ethnic identity of study participants and figures being covered by Western media outlets in the U.S. For instance, Black participants, in
comparison to non-black participants, perceived news coverage of Black targets as less credible (Beaudoin & Thorson, 2005). Also, in comparison to non-Black participants, Black participants saw news coverage of White targets as more credible (Beaudoin & Thorson, 2005). The current paper assumes that target ethnicity will influence story credibility ratings. That is, if prototypical Arab depictions reflect strongest stereotypes in the mind, they will be seen as most stereotype consistent, believable, and credible. It is assumed that the use of a predominantly White student sample will yield higher credibility scores for an ethnicity (Arab) that is visually dissimilar. While Israeli women may have appeared to be White/Caucasian, Arab women in this experiment appeared in veils in stimuli for visual differentiation. The research proposes the following based on the literature and this information:

**H5:** There also will be an interaction between ethnicity and depiction type on credibility, showing that Arab ethnicity in prototypical depictions will be rated as more credible than Arab ethnicity in the non-prototypical depictions and Israeli ethnicity in prototypical and non-prototypical conditions.

**H6:** There will be a main effect for ethnicity that will show that stories featuring Arab ethnicity will be rated as more credible than stories featuring Israeli ethnicity.

An experimental method, described in the next chapter, will be used for hypothesis testing as it is the most appropriate method for gauging priming effects.

**Method Justification: Experimental Methods and Priming**

A 2 (ethnicity: Arab and Israeli) x 3 (depiction type: prototypical, non-prototypical, and control) x 3 (multiple messages) mixed design experiment was used to measure priming effects in a controlled environment. An experimental method was
appropriate because the research aim is the discovery of whether there is a link between primes and subsequent stereotype activation. Wimmer and Dominick (2006) explain that experimental methods can produce evidence of causality because investigators control the order of variables and stimuli, ensuring that causes come before outcomes or effects. Using the experimental method also enables investigators to control the study (in terms of environment, participants selected for the study, and variables) and allows researchers to replicate past studies (Wimmer & Dominick, 2006). This study does not exactly replicate any single study, but borrows methodology from previous studies (i.e. Dovidio et al., 1986; Leshner, 2006) because the experimental method permits and encourages replication to test for reliability and to test theoretical assumptions confirmed in past research (Wimmer & Dominick, 2006).

Thus far, the premise of priming has been confirmed in scholarship; the existence of priming effects has been established in research (Roskos-Ewoldsen et al. 2009). For example, Bargh and Chartrand (1999) indicate that the ability of humans to engage in conscious control over perceptions and emotions, for instance, is limited because humans inherently engage in non-conscious information processing. Priming research involving implicit and explicit measurement of stereotypes has indicated similar conclusions. For example, research has shown that stereotypes are automatically activated by primes (i.e. Ivory, Oliver, & Maglalang, 2009).

In the work of Iyengar and Kinder (1987), the researchers used experimental methods to find the priming effects of television news coverage in terms of TV news’ ability to set standards for presidential performance and presidential character. They executed multiple experiments to test for priming effects on presidential evaluation and
character. Since priming effects have been tested using experimental methods from the beginning of priming’s application to media effects, any other measure would divert from the tradition of scholarship on priming and media. Furthermore, priming as a mass communication theory was defined as an information processing phenomenon from inception (Iyengar & Kinder, 1987). So, no other method besides experimentation could venture to gauge human processing and judgment.

**Experimental methods and priming Arab and Israeli stereotypes.** Most priming research has been done regarding violence in media and political news coverage, but Roskos-Ewoldsen et al. (2009) note that priming research has recently generally adopted a focus on priming stereotypes, which is the focus of this research. According to these authors, priming affects individuals’ later judgment and behavior related to certain racial or gender groups, as priming can activate and alter schema in the mind on these groups. Roskos-Ewoldsen et al. (2009) specify gender and racial stereotyping as popular areas of research in recent years among scholars concerned with priming and social psychology.

As previously explained, several recent studies have explored the effect of primes on racial stereotyping, showing that participants are often impacted by primes in experimental settings (Abraham & Appiah, 2006; Dalisay & Tan, 2009; Monahan et al., 2005). Priming studies have also focused on gender stereotyping, often finding that media can prime perceptions of women as sex objects (Mahood et al., 2006; Stevens Aubrey et al., 2008). The presence of this recent literature on testing effects of priming racial and gender stereotypes using experimental methods demonstrates the appropriateness of experimental methods to answer the research question. Also, the fact
that participants may be reluctant to report or even consciously appraise their stereotypes indicates that an experimental method is appropriate; this is especially true in this case, because participants experienced a controlled and automatic evaluation process, where positive and negative evaluations were timed.

**General justification for an experimental method.** An experimental method is the most appropriate because it can establish causality and control. Causality can also not be determined in non-experimental settings (Wimmer & Dominick, 2006). Conversely, methods that rely solely on self-report measures or observation, such as surveys, focus groups, or interviews, allow participants to skew their opinions to suit social desirability or social norms and cannot establish causality. A focus group (like observations and interviews), for instance, reverts away from the controlled study of individuals in media and audience research, but instead investigates social interaction and processes (Lunt & Livingstone, 1996). Content, textual, or framing analyses are also not appropriate for this study because they do not measure participant response. Wimmer and Dominick (2006) state that findings from content analyses cannot demonstrate media effects. Instead, this type of analysis measures the media’s coverage of issues (Fahmy, Kelly & Yung, 2007; Littlefield & Quenette, 2007; Wojdynski, 2009; Yusuf & Eckler, 2010). Thus, potential priming effects could only be speculated from this type of research.

The legitimacy of experimental methods in this research can also be supported by literature on the conceptual differences between framing, agenda-setting, and priming. Framing and agenda-setting are studied using content analysis types of methods, whereas priming is studied using experimentation (Entman, 2003; Tewksbury & Scheufele, 2009).
Chapter 3
Method

Study Design

This study tested to see whether depictions of Arab and Israeli women produce priming effects using a 2 (ethnicity: Arab and Israeli) x 3 (depiction type: prototypical, non-prototypical, and control) x 3 (multiple messages) mixed-factorial experimental design. Depiction type was between-subjects and target ethnicity served as a within subjects factor.

Pretests

Pretests were conducted to assess what characteristics are most descriptive (i.e. stereotypical) of Arab and Israeli groups. Since these groups are specific and the stereotypes for both in terms of the American perspective are not completely understood, this sort of testing is necessary.

Pretest 1. A first test was used to collect words to be used in the response latency task, including words that are rated as most stereotypical and least stereotypical (to be used as foils). Qualtrics was used to collect this pilot testing data with a small group of participants from a graduate level quantitative methods course ($n = 12$). Sheatsley (1983), for instance, suggests a lower number for pretesting (i.e. 12-25 participants). Thus, this sample size was appropriate.

First, student participants were recruited before the experiment to list their top ten positive and negative top of mind attributes of Arab and Israeli women ethnic groups (Mastro & Tukachinsky, 2011). Participants were also asked to list ten attributes for Arab
men, Israeli men, Latino men, Latino women, Black men, Black women, White/Caucasian men, and White/Caucasian women so the purpose of the test was not revealed. The participants also rated photos and stories to be used in stimuli. The following paragraphs describe the results.

Selection of target / foil words. When asked to describe Israeli women through word listing, participants generated 115 descriptors; some descriptors had more than one word (i.e. human bomb). Sixteen words/descriptors were listed more than once among the pool of participants. Words that appeared more than once were: religious \( (n = 6) \), Jewish, \( (n = 5) \), Mysterious \( (n = 3) \), quiet \( (n = 3) \), mother \( (n = 3) \), smart \( (n = 3) \), hidden \( (n = 3) \), shy \( (n = 2) \), beautiful \( (n = 2) \), kind \( (n = 2) \), sexy \( (n = 2) \), friendly \( (n = 2) \), family-oriented \( (n = 2) \), obedient \( (n = 2) \), and silent \( (n = 2) \). Seventy-five other descriptors only appeared once.

For Arab women, 114 descriptors were listed. Like words describing Israeli women, some descriptors contained more than one word (i.e. over-clothed or wears black clothing). Eighteen descriptors were listed more than once among the pool of participants. Descriptors that appeared more than once were: religious \( (n = 4) \), quiet \( (n = 4) \), dominated \( (n = 3) \), mysterious \( (n = 3) \), shy \( (n = 2) \), Muslim \( (n = 2) \), abused \( (n = 2) \), uneducated \( (n = 2) \), humble \( (n = 2) \), modest \( (n = 2) \), housewife \( (n = 2) \), covered \( (n = 2) \), obedient \( (n = 2) \), strong \( (n = 2) \), traditional \( (n = 2) \), conservative \( (n = 2) \), slow \( (n = 2) \), and hidden \( (n = 2) \). Eighty-three other descriptors only appeared once.

Shy, religious, hidden, obedient, mysterious, and quiet were words appearing more than once and used to describe both Arab and Israeli women.
Selection of photos. Images used in the news stories came from Alhabash (2011) and Alhabash, Stepanova, and Bartholow (in progress). Alhabash et al. (in progress) validated color photos of male and female Arab and Israeli faces, asking study participants to classify 96 photos as Palestinian or Israeli and asking them to rate male or female targets on attractiveness, valence, and arousal (contact the thesis author for the Alhabash picture set that was chosen from Google images and Corbis.com). The photos are also similar in terms of size and resolution to control for confounds. The six photos (three Arab and three Israeli) constituting the manipulation of female target ethnicity used in this study to accompany the text stories were pretested again for attractiveness, valence, and arousal in a pilot test for stimulus selection (and later in the experiment itself to control for covariates).

To choose three Israeli and three Arab photos, attractiveness, valence, and arousal average ratings were examined and photo data in Excel that was lower than 5 and higher than 3 (1 = Attractive, Positive, or Arousing and 7 = Not at all attractive, Negative, or Not at all arousing) was highlighted for selection, under the logic that photos that were rated closer to the middle of the scale would be better to use than photos that were rated as too attractive or too negative, etc. An example of a photo that was eliminated was one that had an attractiveness rating of 5.08, a valence rating of 3.33, and an arousal rating of 5.92 (i.e. two scores are too high and the scores aren’t similar). In the Israeli and Arab sets, three photos were considered to be neutral and similar in each of these categories. The photos were also examined after ratings were evaluated to see if the photos would logically fit with stereotypical and non-stereotypical stories. For example, two stories called for a younger subject. Results are located in the Appendix.
Selection of stories. News stories \((n = 12)\) used in stimulus materials (which contained short news stories and a headshot photo of an Arab or Israeli woman) were also pretested in terms of whether the stories were prototypical or non-prototypical for female Arab or Israeli groups. Stories about Israeli and Arab targets adapted from National Public Radio online and The New York Times online in January and early February were used in the pretest and subsequently in the main experiment.

The likelihood that the story would appear in a print or online news source was also tested. For each print story, participants rated each story on a 7-point scale measuring its prototypical qualities \((1 = \text{Non-stereotypical of Arab women} \text{ or Non-stereotypical of Israeli women} \text{ and } 7 = \text{Stereotypical of Arab women} \text{ or Stereotypical of Israeli women})\) depending on the story presented and on a scale for likelihood of appearance in the news. Participants responded to “What is the likelihood that this story would appear in a print or online news source?” on a 7-point scale \((1 = \text{Not at all likely} \text{ and } 7 = \text{Very likely})\). Participants were asked about stereotypical qualities, rather than prototypical qualities in the stories, because it was thought that more students would understand the meaning of stereotypical.

All likelihood results for 12 tested stories fell above 4, the midpoint of the 7-point scale used in the pretest. To select stories for the experiment stimuli, stories rated least and most stereotypical of the groups were chosen. To check to see if these sets of stories were significantly different (to validate stereotypical and non-stereotypical groupings of the primes), paired samples \(t\)-tests were run for Israeli stories and for Arab stories.

For Israeli women (using a paired samples \(t\)-test), the story rated highest among non-stereotypical stories (“Where Politics are Complex, Simple Joys at the Beach”) was
compared to the story rated lowest among stereotypical stories (“Israeli Women at War: How Roles are Changing”); \( p = .08 \) was found, \( t(11) = -1.90 \). “Where Politics are Complex” \( (N = 12) \) had a lower mean as a non-stereotypical story \( (M = 2.58, SD = 1.62) \). “Israeli Women at War” \( (N = 12) \) had a higher mean, as a stereotypical story \( (M = 3.75, SD = 2.01) \).

Stories about Arab women were similarly analyzed (using a paired samples \( t \)-test) and found a significance of \( p = .39, t(11) = - .89 \), showing that the story rated highest among low (non-stereotypical stories) (“Saudi Women Shatter the Lingerie Ceiling”) was not significantly different from the story rated lowest among stereotypical stories (“Palestinian Woman Escapes Father’s Dark Captivity”). Although, “Saudi Women” \( (N = 12) \) had a lower mean \( (M = 4.17, SD = 1.85) \) than “Palestinian Woman Escapes” \( (N = 12) \) \( (M = 4.75, SD = 1.77) \).

Despite the lack of significant differences between stories in stereotypical and non-stereotypical groups for each ethnicity, stories with lower scores seemed to follow a non-stereotypical narrative (i.e. stories about powerful women and stories about women in leadership roles) and those with higher scores had stereotypical qualities (i.e. Arab women as victims and the Arab woman’s lack of power in society and Israeli women as victims of harassment, strict religious expectations, and militaristic society) (Ahmed, 1992; Berkowitz, 2004; Hoodfar, 2001; Khatib, 2006; Lahav, 2010; Levin, 2011; Oh, 2008; Rosenfield, 1982; Sasson-Levi, 2007; Shaheen, 2007; Tawil-Souri, 2007). Story data are in the Appendix.

**Pretest 2.** In the second pretest, a different group of student respondents recruited from different class (an undergraduate research methods course) \( (n = 12) \) were asked to
rate the degree to which attributes listed about Arab and Israeli women in the first pretest were held by the general population on a scale item (1 = Not at all and 7 = Very much). Questions about words being descriptive of Black and White women were also included to distract from the main purpose of the questionnaire. This data showed what attributes or stereotypes were most defined as cultural stereotypes for Arab and Israeli women.

Descriptive data were looked at for words that were rated as most held by the population.

Ten target words and 10 foil words were generated for Arab and Israeli groups in word ratings. All words (without repeats) generated in pretest 1 were included in pretest 2 (n = 192). Words appearing more than once were placed at the beginning of the online Qualtrics survey. The 10 stereotypical descriptors for Arabs were words that received higher ratings on average. Likewise, the 10 descriptors used for Israelis consisted of words that had the highest ratings on average. The 20 foils (10 used in tasks corresponding to Arab photos and 10 used in tasks for Israeli photos) were words that had the lowest average ratings for the two groups. Top rated descriptors for Israeli women were: discriminated against, believer, hardworking, devout, religious, daughter, mother, faithful, nationalistic, and tough. Lowest rated words (used as foils) were: slow, human bomb, violent, hateful, uneducated, short, naïve, silent, poor, and brown. Target words for Arab women were similarly the top rated words for the group: modest, religious, under-appreciated, wears head scarf, misunderstood, traditional, covered, maternal, caregiver, and devout. Foils (or lowest rated words) were: cowardly, unmotivated, unintelligent, doctor, uneducated, naïve, slaves, without opinion, without career, and hostile.
It was found that for both groups, target and foil descriptors were significantly different; foils were rated significantly lower in terms of their general population descriptiveness than targets, as anticipated. Paired samples $t$-tests were run to test the difference between the lowest end of targets and the highest rated foils, under the assumption that since these were closest in value difference can be assumed by words that are further away (i.e. words rated higher than the lowest target value and words rated lower than the highest foil). In the paired samples $t$-test for hostile and devout (words rated in regards to Arab women), significance (2-tailed) was found at $t(12) = -2.86, p = .02$. As expected, hostile ($N = 12$) had a lower mean ($M = 3.69, SD = 1.32$) than devout ($N = 12, M = 5.31, SD = 1.25$). In another paired samples test, the difference between tough and brown was also found to be statistically significant with a 2-tailed significance of $t(12) = 3.15, p < .05$. Again, as expected, brown had a lower mean ($N = 12, M = 3.62, SD = 1.56$) than tough ($N = 12, M = 5.15, SD = .69$). With these findings, the highest and lowest rated words could be confidently used as foils and targets in the main experiment. Word ratings data are in the Appendix.

While words for the response latency task could have been drawn from other studies on stereotypic perceptions of Arabs and Israelis (Bar-Tal & Labin, 2001; Benyamini, 1981; Kaminsky & Bar-Tal, 1996), word sets are reflective of Israeli or Middle Eastern perceptions and not necessarily those of Western audiences that made up the sample for this study. For instance, Alhabash (2011) used Bar-Tal and Labin’s word sets for Flanker tasks and reporting of explicit stereotypes (the rating of different characteristics for Israeli and Palestinian groups). There are also some studies where Arab and Israeli groups have self-identified stereotypes, but do not depict stereotypes
held by Americans (i.e. John, Young, Giles, Hofman, 1985). Koslowsky (1973) is an exception, as he assessed stereotypes held by American students of Israeli, Jewish, Japanese, and German groups. However, this is reflective of older attributes, as this study was conducted almost 40 years ago.

**Design and Variables in the Main Study**

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. Depiction type and target ethnicity were manipulated as independent variables, while response latency, hit rate, and credibility ratings were the dependent variables of interest in the research.

**Independent Variables**

**Depiction in stories.** Monahan, Brown Givens, and Shtrulis (2003) define one of their independent variables in this way—stereotype images commonly appearing in society. Here, depiction type refers to how prototypical the written news coverage is of the Arab ethnic group. In this study, depiction type was expressed as condition: prototypical, non-prototypical, and control (no depiction). Prototypical, as a descriptor, is considered synonymous with stereotypical (or stereotype consistent). This delineation is adopted from Mastro and Tukachinsky (2011) and Leshner (2006).

This study used prototype based processing as a basis for this variable definition and variable levels like Mastro and Tukachinsky (2011), as there are no exact or salient depiction poles for Arab or Israeli women (i.e. violent versus non-violent). The literature shows that there are several kinds of depiction trends for these groups (Ahmed, 1992; Berkowitz, 2004; Hoodfar, 2001; Khatib, 2006; Lahav, 2010; Levin, 2011; Oh, 2008;
Rosenfield, 1982; Sasson-Levi, 2007; Shaheen, 2007; Tawil-Souri, 2007). Therefore, literature on depiction was used to determine what types of stories were shown in stimuli.

**Ethnicity in photos.** This refers to the mediated prototype’s ethnic identification. This study seeks to compare Arab and Israeli depictions, as this has emerged as an important comparison in studies on media coverage and evaluations of ethnic groups (Alhabash, 2011; Bar-Tal & Labin, 2001; Berkowitz, 2004; Khouri, 2007). Ethnicity in this study was manipulated by using pretested photos of Arab and Israeli women in stimuli.

**Dependent Variables**

Given the theoretical basis of prototype activation and priming (Fazio & Olson, 2003; Mastro & Tukachinsky, 2011), the priming procedure used by Dovidio et al. (1986) and Leshner (2006) was adapted to measure stereotype activation via response latencies. Explicit stereotypes (i.e. hit rate) were also assessed to explain cultural stereotype accuracy and credibility ratings for each story shown to participants. Demographics and story recall were also collected. A memory task was used to ensure that participants read the stories in the stimuli; if they did not read the stories, priming effects could be assessed properly.

**Stereotype activation.** 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. This was measured in the experiment in a series of six response latency tasks (corresponding to the number of photos used and the number of stories in the prototypical and non-prototypical
In each task, participants saw a picture from the story they had just read and confirmed or denied whether target (stereotypical) and foil (not stereotypical or descriptive) words were descriptive of the person featured in the story. This measure was also more recently applied in the work of Leshner (2006) on stereotype activation elicited by coverage of criminals. Leshner used a response latency task in which he asked participants whether an adjective accurately described or “was a good way” to describe the target in news stories previously shown. This study utilized response latency in a similar way, by asking all participants to evaluate words in regards to Arab and Israeli women featured in news story primes.

**Cultural stereotype accuracy.** This research measured explicit stereotypes in the “yes” and “no” responses in the response latency tasks. 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 the ethnic 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; Shapiro, 1994). All participants responded with hit rates.

**Credibility.** Credibility in this study is understood as a news value influencing news quality and legitimacy in American culture (Meyer, 1988). To assess credibility, participants in prototypical and non-prototypical depiction conditions were asked to rate credibility after exposure to each news story. Credibility was not assessed in the control condition because the participants did not read news stories as primes.
Credibility was measured by three dimensions—fair, informative, and balanced—on a 7-point scale (Leshner, 2006). However, credibility was measured using only fair and informative measures because balance data was lost for an Israeli photo.

For fair (a 7-point scale, where 1 = Not at all fair and 7 = Fair) and informative (a 7-point scale, where 1 = Not at all informative and 7 = Informative) scale results for all six pictures, there was a Cronbach’s Alpha of $\alpha = .89$ ($M = 5.13$, $SD = .86$). Thus, credibility data was created for each picture by computing informative and fair means.

**Demographics.** Participants were also asked to report basic demographic information, so the sample could be described. Age, race, ethnicity, gender, and year in school were reported by participants, following the data collection tact of Alhabash (2011), who asked participants to report age, gender, racial background, level of education, and annual family income. Other priming studies have also stressed the importance of collecting these kinds of individual difference variables (i.e. Mahood et al., 2006; Mastro et al., 2009; Stevens Aubrey et al., 2008).

**Controls**

Data on photo attractiveness, valence, and arousal were also collected in an effort to control for potential covariates (by looking for correlations with target word latencies and target word hit rate data before the main data analysis) and included a memory task to exclude cases where participants did not put sufficient effort into reading news stories of primes. If participants did not fully read or understand news stories, it was assumed that the news story primes would not impact (and make void) their response latencies, hit rate, or credibility rankings.
**Memory task.** This involved a cued recall measure in which respondents were asked to describe each story with a short phrase or sentence with the headlines for each story provided as cues. This was similarly used in Sternadori and Wise (2009). Respondents who did not have memory for the majority of stories were not included in the analysis (i.e. they wrote vague, one-word answers, or unrelated responses). Cases 20, 43, 62, 71, and 109 were removed from the data set. Cases 20, 62, and 71 were in the non-prototypical condition, while cases 43 and 109 were in the prototypical condition. This resulted in \( n = 36 \) in the prototypical condition (previously \( n = 38 \)), \( n = 34 \) (previously \( n = 37 \)) in the non-prototypical condition, and \( n = 37 \) in the control condition.

**Main Experiment Sample**

Statistical power was considered when determining how many participants were needed for each condition; it was speculated that each condition would require at 30-40 participants. Using G*Power software, a power analysis was calculated for the ANOVA: repeated measures, within-between interaction statistical test, with effect size .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 \( N = 75 \) (not for each condition), meaning that 25 participants would be required per condition under these parameters.

Given the results of these analyses, participants were openly recruited from two large lower-level undergraduate courses at the Missouri School of Journalism. A total of \( N = 112 \) students (valid \( N = 107 \) after cases were removed given memory task data) signed up and participated in the study, making for an appropriate sample size for the
repeated measures design. To reward participants for their time and effort, they were
given extra credit for their participation in the experiment.

**Description of sample.** The average age of participants was \( M = 19.32, \ SD = 1.56 \). 44.6% of participants were 19 years old, 23.2% were 18, and 22.3% were 20. The remaining 9.8% of participants were 21 (8.0%), 26 (.9%), and 31 (.9%). In terms of
gender, most participants were female at 78.6% \( (n = 88) \). There were 24 male
participants, which made up 21.4% of the sample.

In terms of education level, most participants were in their freshman year of
college at 55.4% of the sample \( (n = 62) \). Sophomores made up 29.5% of the sample (33 people), 13.4% were juniors \( (n = 15) \), and 1.8% were seniors \( (n = 2) \).

Most participants were White at 82.10% of the sample \( (n = 92) \). 8.9% of the
sample was Asian \( (n = 10) \), 4.5% \( (n = 5) \) identified as “Some Other Race,” 1.8% \( (n = 2) \) identified as Black or African American, 1.8% \( (n = 2) \) identified as “Mixed,” and .90 \( (n = 1) \) identified as American Indian or Alaska Native. For the “Some Other Race” category, participants listed Hispanic \( (n = 3) \), Middle Eastern \( (n = 1) \), and Mexican \( (n = 1) \).

Self-reported ethnicities, measured separately from race, were examined and
coded into categories. White or Caucasian was the largest ethnic group at 60.7% \( (n = 68) \), followed by European at 12.5% \( (n = 14) \), American/Native American at 9.8% \( (n = 11) \), Asian at 8.0% \( (n = 9) \), Latino/Hispanic/Mexican at 4.5% \( (n = 5) \), African American at 1.80% \( (n = 2) \), Afghan at .90% \( (n = 1) \), and “Very Mixed” at .90% \( (n = 1) \). Therefore, White and European groups made up the majority of participants.
Stimuli

There were 12 print news stories shown in two conditions (six prototypical stories of Arab and Israeli women and six non-prototypical stories of Arab and Israeli women). To clarify, participants in prototypical and non-prototypical depiction conditions saw six stories (three female Arab and three female Israeli prototypical or non-prototypical stories). One condition was a control condition in which participants were not primed, meaning that they did not read news stories, but still responded in the same six response latency tasks (corresponding to the six Israeli and Arab photos appearing in news stories for other participants). In summary, the conditions were manipulated as such between subjects: Condition 1: Prototypical stories featuring Arab (three stories) and Israeli female targets (three stories); Condition 2: Non-prototypical stories featuring Arab (three stories) and Israeli female targets (three stories); Condition 3: No stories. A chart of this is located in the Appendix.

Stories about Israeli and Arab targets were adapted from *National Public Radio* online and *The New York Times* online in January and early February and were pretested to evaluate whether they were prototypical or non-prototypical. First, a purposive sample of print news stories from major news sources was found that fit prototypical and non-prototypical categories (i.e. stories that portray Arab women as productive, peaceful, and non-submissive to men and stories that portray Israeli women as less powerful or contributive to society, receivers of equal treatment in military and civic settings, and as indifferent or unrelated to Israeli nationalism). The 12 most prototypical (three female Arab and three female Israeli) and non-prototypical (three female Arab and three female Israeli) stories in the pretest data were chosen for the stimulus materials.
Stories were made short for the experimental setting. The shortest story had a word count of 125 (“Israelis Facing a Seismic Rift Over Role of Women”) and the longest had a word count of 200 (“In Egypt's New Parliament, Women Will BeScarce”). The word count data for stories had a mean of $M = 162.25$, $SD = 32.08$. These stories, as they appeared in the experiment, are shown in the Appendix.

In terms of media representation of Arab women, the primary (i.e. prototypical or stereotypical) themes that emerge are that Arab women do not contribute very much to society or are unproductive, are aggressive, violent, demonic, or are suicide bombers, and are innocent, victimized or submissive to male figures (Ahmed, 1992; Berkowitz, 2004; Hoodfar, 2001; Khatib, 2006; Oh, 2008; Shaheen, 2007; Tawil-Souri, 2007). Prototypical media representation has shaped Israeli women as powerful or productive in society, as victimized caregivers or victims of sexual harassment or unequal treatment in the military, and as Zionist or militaristic in Israeli society (i.e. showing loyalty to the state of Israel) (Lahav, 2010; Levin, 2011; Rosenfield, 1982; Sasson-Levi, 2007). Stories rated in the pretesting were derived from these literatures on stereotypical and non-stereotypical depictions of Arab and Israeli women.

The text of stories was changed between prototypical and non-prototypical conditions; no text story appeared twice for any particular participant and in the entire study. There were 12 different news stories. However, the three Arab prototypical stories and the three Arab non-prototypical stories featured the same six photos of women (three Israeli and three Arab total) (as ethnicity was a within-subjects factor and depiction served as a between-subjects factor). The photos were selected based on neutral and similar attractiveness, valence, and arousal ratings in pretesting.
Multiple stories were shown to maximize both treatment and message variance, given the theses of Reeves and Geiger (1994) and Thorson, Wicks, and Leshner (2011). Reeves and Geiger and Thorson et al. state that treatment variance refers to message manipulations (i.e. how levels of depiction type and target ethnicity vary in stimuli). Message variance is emphasized much less in experimental study in the field of journalism and mass communication. Like Reeves and Geiger, Thorson et al. maintain that exposing study participants to multiple messages per treatment level allows researchers to generalize findings to message categories. Under this premise, if multiple messages are not used per treatment, the findings are limited to the specific messages used in the design.

**Procedure and Apparatus**

In the experiment procedure, student participants were randomly assigned to one of three conditions presented on MediaLab software in Gannett 176 (Jarvis, 2008). First, the researcher briefed each participant on the purpose and function of the study by handing a consent form to each person entering the lab and by explaining the risks and benefits of the study. The researcher also made herself available for any questions the participants had. The researcher’s affiliation, email, and any other pertinent contact information was included on the forms. Once participants read the consent forms and agreed to participate, participants entered the lab and sat at computers designated for the experiment. The consent form, as it appeared in the experiment, is located in the Appendix.

Participants were then told by the researcher to follow instructions carefully and to start the experiment procedure. Participants first saw a screen that telling them to read
the following news stories and to answer questions and to proceed to the next screen to start the study. Then, right after the instructions, respondents completed a response latency trial to understand how to complete response latency tasks. In the trial, respondents evaluated a photo of a familiar target (President Obama) and responded to 12 true and false descriptive words (i.e. ‘Christian’ was a target word and ‘Muslim’ was a foil). They were instructed that this was a trial for them to get used to the task and were told to evaluate whether words were “a good way” of describing the person in the photo. Then, on the next page in the MediaLab experiment, participants were told to carefully read stories adapted from real news coverage about women, to follow instructions, and to click to the next screen when they were ready to proceed.

The MediaLab software randomized the order of the six stories they saw. After exposure to each of the six stories—three about Arab women and three about Israeli women—in prototypical and non-prototypical conditions, participants first rated the story’s credibility and then completed a response latency task that corresponded to the story they had just read. Before the response latency task after each story, participants were requested to rate the credibility of the story they read (“Please assess the credibility of the news story you just read by completing the following statements”). Credibility scales for informative (1 = Not at all informative and 7 = Informative), fair (1 = Not at all fair and 7 = Fair), and balanced (1 = Not at all balanced and 7 = Balanced) appeared on subsequent pages. Photos and stories were not shown in the credibility rating questions, since the participants had just read the story. The control group did not rate credibility for any stories because they did not read stories.
Participants were then told to respond to photos of Israeli and Arab women (a within-subjects factor) that appeared in news story stimuli in a priming (response latency) task like the trial task (where targets and foils appeared in random order). The two groups who were shown stories and the control group proceeded through the same latency tasks, since the photos used in the stories were the same between groups (concurrent with the within subjects factor of target ethnicity). In the control condition, participants completed the same six tasks, without having read any stories.

Respondents clicked yes or no choices on shift keys (hitting left—yes—or right—no—shift keys) on Apple keyboards accurate to +/- 1 millisecond (ms) in response to target and foils in appearing after a photo in each task. There were six separate tasks in each condition using the six separate photos used in the news stories (three Israeli and three Arab).

An instruction screen appeared before all six tasks in Direct RT. Participants could take as much time as they wanted to read the instruction page that included these directions:

On the following page, you will be shown a photo of a person. Words will then appear after the photo. As each word appears, please evaluate whether the word is a good way of describing the person. If it is a good way, press the left shift for ‘YES’ and the right shift for ‘NO’ if it is not a good way to describe the person. Answer as QUICKLY and as CAREFULLY as you can. Press the spacebar to continue.
Instructions for the pretest were similar, except a sentence was included about the trial:

“This is a trial for you to get used to the task. You will be asked to complete similar tasks later in the session.”

After pressing the spacebar, a participant would see the photo that had just appeared in the news story prior to the task and credibility ratings for 2,000 milliseconds (ms). Twenty words (10 connected to stereotypes—either Arab or Israeli stereotypes, depending on the photo shown—and 10 foils) then appeared individually at random for 3000 ms each, eliciting yes or no responses from participants. Participants were timed out after 3000 ms if they did not respond, making respondents move on to another descriptor. Latencies were computed in milliseconds, starting with the appearance of each word to the hit of a left shift (‘yes’) or the hit of a right shift (‘no’).

Words included in the tasks came from pretesting. Target words for Israeli women were discriminated against, believer, hardworking, devout, religious, daughter, mother, faithful, nationalistic, and tough. Foils were slow, human bomb, violent, hateful, uneducated, short, naïve, silent, poor, and brown. Target words for Arab women were modest, religious, under-appreciated, wears head scarf, misunderstood, traditional, covered, maternal, caregiver, and devout. Foils were cowardly, unmotivated, unintelligent, doctor, uneducated, naïve, slave, without opinion, without career, and hostile.

After the response latency tasks were completed all participants in all conditions then rated the photos from the stories and response latency tasks on valence, arousal, and attractiveness. The control group also rated the photos because they had seen the photos in the response latency tasks.
Following photo ratings, participants in prototypical and non-prototypical conditions completed a memory task so the researcher could be ensured that the participants read the stories in the stimuli (Miller & Leshner, 2007; Sternadori & Wise, 2009). Participants were told to verify that they had read the stories in the study by writing a short descriptive phrase in following pages. On screens following this instruction page, participants were given a story title on each page and wrote short phrases or sentences to describe the story content. Control group participants did not complete the memory task because they did not read stories. After this was completed, all participants were told to report their gender, race, ethnicity, age, and year in school. Control group participants reported this information after they rated the photos in the response latency tasks.

At the end of these response procedures, participants were debriefed and were thanked for their time. They were handed slips to give to their professors for extra credit. A guide to this procedure is in the Appendix.

**Data Analysis Approach**

The data analysis method was adapted from Dovidio et al. (1986). Dovidio et al. (1986) guided data analysis of potential interactions between independent variables (message factors) and the dependent variable of response latency.

Foils (words rated as non-descriptive of Arab and Israeli women) were not examined because response latency measures show strength of stereotypes, not non-stereotypes (Devine, 1989). Yes responses (hit rate) to foils were low. For Arab foil words, the average hit rate was $M = .10, SD = .11$. The average for Israeli foils was lower at $M = .07, SD = .08$, whereas hit rate for targets was $M = .64, SD = .17$. Arab
photos had a higher hit rate than Israeli photos. Hit rate for Arab photos was $M = .70$, $SD = .22$ and hit rate for Israeli photos was $M = .58$, $SD = .23$. Lower foil hit rates validated their classification as foils (and not as descriptive of the groups).

Following Dovidio et al. (1986), a 2 (ethnicity: Arab and Israeli) x 3 (depiction type: prototypical, non-prototypical, and control) x 3 (multiple messages) repeated measures analysis of variance (ANOVA) was run on response times to target words (those found to be most descriptive of the groups) of participants, using SPSS software. Additional repeated measures ANOVAs were run on explicit stereotypes and credibility ratings. The ANOVA shows researchers whether there is significant difference between group means and describes sources of variation (Wimmer & Dominick, 2006).
Data Examination

Latencies were computed according to the milliseconds it took respondents to respond ‘yes’ or ‘no’ to a word from the time of the word’s appearance on the screen in Direct RT. The response latencies (for target words) were examined in SPSS for identification of outliers and so such outliers could be coded to fit with other data (short and long responses—under 200 milliseconds and over 1800 milliseconds). Two-hundred and 1800 ms as cutoff points in data cleaning have been used as RT removal points in a recent priming study, for instance (Colombo & Zevin, 2009).

Many other studies on priming as measured by response times to words have used 1800 ms as a ceiling for response times to words (Bub, Masson, & Cree, 2008; Damian & Rahman, 2003; Lee, 2006; Lukatela, Frost, & Turvey, 1998). Bub et al. (2008) and Damian and Rahman (2003) used 250 ms as a floor for their response latencies, while Lee (2006) and Lukatela et al. (1998) used a lower cutoff of 100 ms. This study followed Colombo and Zevin (2009), eliminating latencies lower than 200.

There were 10 responses under 200 ms (.16% of total valid responses, N = 6,286). There were 522 responses exceeding 1800 ms (8.30% of total valid responses). Thus, 8.46% of responses had to be recoded because they were too fast or too slow; those under 200 ms were recoded as 200 ms and those over 1800 ms were recoded as 1800 ms to prevent data loss. 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. The missing data are where participants were timed out for not responding within 3000 ms.

**Covariates.** In terms of covariates, there was no significance found in tests of correlation for attractiveness ($r = .10, p = .31$), valence ($r = -.15, p = .12$), and arousal ($r = .03, p = .78$) photo ratings with target latency data. These factors were not subsequently considered in repeated measures of ANOVA analyses.

Attractiveness, valence, and arousal were also tested as covariates for hit rate. The scores did not correlate with target hit rates: attractiveness ($r = -.11, p = .26$), valence ($r = -.03, p = .73$), and arousal ($r = -.09, p = .38$).

**Photo Data.** A 2 (ethnicity) x 3 (depiction) x 3 (multiple messages) repeated measures ANOVA on attractiveness, valence, and arousal (1 = *Not at all attractive, Not at all arousing*, or *Negative*; 7 = *Attractive, Arousing*, or *Positive*) main experiment data revealed that there was no difference between Arab pictures and Israel pictures in terms of attractiveness, $F(1, 109) = 1.64, p = .20$ ($M_{Arab} = 3.74, SD = 1.26$; $M_{Israel} = 3.59, SD = 1.11$). Arousal for Arab pictures was significantly higher than Israeli pictures according to the repeated measures ANOVA $F(1, 109) = 5.18, p < .05$ ($M_{Arab} = 5.01, SD = 1.45$; $M_{Israel} = 4.78, SD = 1.59$). Positivity for Arab pictures was significantly higher than Israeli pictures according to the repeated measures ANOVA $F(1, 109) = 11.359, p < .01$ ($M_{Arab} = 3.31, SD = 1.28$; $M_{Israel} = 2.96, SD = .99$). Tables of the data are located in the Appendix.
Tests of Hypotheses and Research Questions

**H1**: It was first predicted that students who read prototypical Arab stories would have the strongest stereotype activation. Specifically, participants would have strongest stereotype activation in response to words describing prototypical depictions of Arab women versus to non-prototypical Arab and Israeli depictions from print news story primes.

**RQ1**: It was asked if ethnicity and depiction in news stories would impact stereotype activation. That is, would there be an interaction between depiction (prototypical, non-prototypical, and control) and ethnicity (Arab women and Israeli women) on stereotype activation (signified by response latency)?

A 2 (ethnicity) x 3 (depiction) x 3 (multiple messages) repeated measures ANOVA was run on response latency data. No significance was found for an Ethnicity x Depiction interaction for response times in the repeated measures ANOVA \( F(2, 102) = .43, p = .65, \eta^2_p = .01 \). Hypothesis 1 was not supported and Research Question 1 was answered in the negative, due to these findings.

In regards to Hypothesis 1, 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 \((M_{prototypicalArab} = 1103.10, SD = 203.04; M_{non-prototypicalArab} = 1093.17, SD = 197.19; M_{controlArab} = 985.01, SD = 144.58)\) seemed to have slower response latency data than Israeli targets \((M_{prototypicalIsraeli} = 1066.61, SD = 184.68; M_{non-prototypicalIsraeli} = 1073.99, SD = 184.69; M_{controlIsraeli} = 974.46, SD = 162.58)\). 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. This means that stereotype activation
was not strongest for prototypical depictions of Arab women.

There was also no main effect for ethnicity. Although, a main effect for ethnicity approached significance in a 2 (ethnicity) x 3 (depiction) x 3 (multiple messages) repeated measures ANOVA on latency data $F(1, 102) = 3.43, p = .07$, power = .45, $\eta^2_p = .03$. 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: The second hypothesis predicted that participants would have greater cultural stereotype accuracy (more yesses to target words) after reading stories with Arab photos than after reading stories with Israeli photos. That is, Arab subjects in story primes were predicted to have higher hit rates (the number of accurate responses-yesses-for target words) than Israeli subjects toward target stereotypical descriptors.

A 2 (ethnicity) x 3 (depiction) x 3 (multiple messages) repeated measures ANOVA was run on hit rate data (yes and no responses to the photos in the response latency task) to test H2. It 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 power = 1.0, $\eta^2_p = .24$. The hit rate for Arabs ($M_{prototypicalArab} = .74$, $SD = .15$; $M_{non-prototypicalArab} = .57$, $SD = .25$; $M_{controlArab} = .79$, $SD = .17$) was higher in the prototypical and control conditions than for Israelis ($M_{prototypicalIsraeli} = .62$, $SD = .19$; $M_{non-prototypicalIsraeli} =$
.61, SD = .18; \( M_{\text{control Israeli}} = .49, SD = .27 \). However, Israeli women (\( M_{\text{non-prototypical Israeli}} = .61, SD = .18 \)) received a higher hit rate in the non-prototypical condition than Arab women (\( M_{\text{non-prototypical Arab}} = .57, SD = .25 \)). Generally, the data for this interaction shows that participants stereotyped Arab women more, particularly when shown prototypical stimuli and when not primed in the control condition (see Figure 1). It seemed that the non-prototypical primes somewhat deterred participants from accurately stereotyping Arab women.

*Figure 1. The impact of ethnicity and depiction type on hit rate*

Figure 1 shows that non-prototypical depictions reduced stereotyping for Arab women, while stereotyping was similar for prototypical and control depictions. For Arab women, stereotyping occurred without primes and the prototypical depictions aligned with stereotypes. Almost the opposite was true for Israeli women. Participants stereotyped the least in the control condition, while both prototypical and non-prototypical news
stories as primes increased stereotyping of Israeli women (prototypical slightly more than non-prototypical).

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, $\eta^2_p = .20$. 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.

**H3:** This stated that there would be a main effect for depiction on response such that students who read prototypical stories would have stronger stereotype activation (faster response times) than the students who read non-prototypical stories and students who did not read stories.

The 2 (ethnicity) x 3 (depiction) x 3 (multiple messages) repeated measures ANOVA supported Hypothesis 3. Response times were significantly different between conditions (depictions) with $F(2, 102) = 4.56, p < .05$ and power = .76, $\eta^2_p = .08$. Response times were quickest for the control group ($M_{control} = 979.20, SD = 137.51$) and slowest for the non-prototypical condition ($M_{non-prototypical} = 1080.78, SD = 174.04$). The prototypical condition fell in between these two means ($M_{prototypical} = 1083.90, SD = 185.60$). This data suggested that the stories as primes reduced strength of stereotype activation, regardless of depiction type, as prototypical and non-prototypical depictions yielded slower latencies (see Figure 2).

A Bonferroni post hoc analysis was done for depiction to further examine significance because it was thought that the control group may have been the main source
of difference, given its lower score ($M_{prototypical} = 1083.90, SD = 185.60; M_{non-prototypical} = 1080.78, SD = 174.04; M_{control} = 979.20, SD = 137.51$).

The Bonferroni post hoc test showed that the prototypical condition ($M = 1083.90, SD = 185.60$) was significantly different from the control condition ($M = 979.20, SD = 137.51$) and non-prototypical condition ($M = 1080.78, SD = 174.04$) was significantly different from control condition ($p < .05$). However, prototypical and non-prototypical conditions were not significantly different ($p = 1.00$). Therefore, the control condition data were the sources of difference, suggesting that exposure to the primes may have weakened stereotype activation or created new information in the minds of the participants.

*Figure 2*. The impact of depiction on response latencies
**H4:** It was hypothesized that students who read prototypical stories would have the most accurate stereotyping. That is, it was hypothesized that there would be a main effect for depiction type on cultural stereotype accuracy (hit rate), showing that stereotype accuracy was highest (hit rates highest) for the prototypical condition, versus the non-prototypical and control conditions.

While there was a significant difference between depictions for response latencies to target words, a 2 (ethnicity) x 3 (depiction) x 3 (multiple messages) repeated measures ANOVA on hit rate data showed that there was not a statistically significant difference between the three conditions for hit rate with $F(2, 102) = 2.18, p = .12$, power = .44, and $\eta_p^2 = .04$. Thus, Hypothesis 4 is not supported.

Even though there was a not a significant difference between conditions for hit rate data, the hit rate data affirms H4. Hit rate was highest in the prototypical condition ($M = .68, SD = .14$), as anticipated in the hypothesis. Hit rate was second highest in the control condition ($M = .64, SD = .18$) and lowest in the non-prototypical condition ($M = .59, SD = .19$). However, these results are not significantly different, so nothing can be inferred about the differences in stereotype accuracy for the between subjects factor.

**H5:** This hypothesis predicted that ethnicity and depiction would impact credibility in such a way that there would be an interaction between ethnicity and depiction on credibility ratings of stories shown to participants. The data would show that prototypical depictions of Arabs would be perceived as more credible than non-prototypical depictions of Arabs and prototypical and non-prototypical depictions of Israelis.
H6: It was also hypothesized that stories about Arab women would be perceived as more credible than stories about Israeli women. There would be a main effect for ethnicity in that stories featuring Arab ethnicity would be rated as more credible than stories featuring Israeli ethnicity because Arab depictions are dissimilar from the predominantly White student sample (Beaudoin & Thorson, 2005).

A 2 (ethnicity) x 2 (depiction) x 3 (multiple message) repeated measures of ANOVA was run on credibility to test H5. Answering H5, a significant interaction was found (Ethnicity x Depiction) $F(1, 68) = 6.54, \ p < .05, \ \eta^2_p = .09$. However, the data did not support the hypothesis. The means for the Ethnicity x Depiction interaction reflected that non-prototypical Israeli ($M = 5.28, SD = .95$) and Arab ($M = 5.27, SD = .94$) stories got the highest credibility ratings, followed by prototypical Arab stories ($M = 5.19, SD = .96$), and prototypical Israeli stories ($M = 4.78, SD = .82$). Prototypical Israeli stories were rated as less credible than the other three types (see Figure 3).
In support of H6, a main effect was found for ethnicity $F(1, 68) = 5.96, p < .05$, power = .67, and $\eta^2_p = .08$. As anticipated, stories about Arab women received higher credibility ratings than stories about Israeli women ($M_{Arab} = 5.23, SD = .95$; $M_{Israeli} = 5.02, SD = .91$). The results here show that coverage of Arab women presented in the study is consistent with cultural stereotypes and that the Arab group is perceived as perhaps dissimilar from the student sample. The coverage of prototypical Israeli women may be less consistent or too similar to coverage about White (or American) groups.
Chapter 5
Discussion

Findings

Informed by scholarship on identification, categorization, cultural stereotypes, and prototypes, this study examined priming stereotypes of Arab and Israeli women in the news. No similar study was found, as most priming research in mass communication and journalism journals focuses on political priming, priming violence, and priming racial stereotypes (mainly concerning Black and White Americans). This research contributes in that there is less research on Arab and Israeli representation in comparison to representation of African Americans and other marginalized groups (Oh, 2008). Mastro and Tukachinsky (2011) suggest that types of representation and the role of media messages in the process of stereotyping must be researched because this focus can reveal how to lessen negative stereotypes. This study also considered the enigmatic processes of the human mind. In the mind, a maximum amount of information is taken in with the least amount of cognitive effort (creating cognitive economy) (Rosch, 1978). This intake of information is contingent upon categories mapping the structure of the perceived world as closely as possible (Rosch, 1978). This categorization process takes place as mediated messages, as information, are digested by the mind. This study examined this categorization process in regards to stereotyping, looking at how news stories impacted stereotyping and knowledge structures of participants.

The results of the main experiment have many implications for scholarship and journalism in regards to representation and its effects on the mind. First, H1 was not
supported because responses (for target words) to prototypical Arab women were not significantly faster than responses in any other condition (depiction) or ethnicity; there was no main effect for ethnicity and no interaction between depiction and ethnicity on stereotype activation. This outcome shows that there was no difference in implicit stereotyping between Arab women and Israeli women groups. That is, stereotype activation was not significantly stronger for either group. This may be because the respondents did not have set or differentiated stereotypes for these groups. The news primes may have presented new information to interfere with or to create cultural stereotypes in the participants’ minds. In the literature, 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 the stereotypes for other groups exist and can thus be activated by stimuli (in terms of yielding a significant result).

However, there was a main effect for ethnicity and an interaction between ethnicity and depiction for stereotype accuracy (signified by hit rate, or yes responses to target words in operations) in a repeated measures ANOVA, as predicted in H2. This supported the second hypothesis, which predicted that participants would have greater cultural stereotype accuracy (more yesses to target words) after reading stories with Arab
photos than after reading stories with Israeli photos. Arab photos received a significantly higher hit rate for target words. Arab photos also got higher hit rates in the prototypical conditions and control conditions, but lower hit rate than Israeli photos in the non-prototypical condition. These hit rate results also showed that non-prototypical depictions made for less stereotyping toward Arab women, while stereotyping was similar for prototypical and control depictions. The prototypical and control conditions yielded more stereotyping in terms of accuracy. So, for Arab women, stereotyping occurred in participants who did not read news stories and in participants who read prototypical stories. For Israeli women, participants stereotyped less in the control condition without having read stories, compared to when they were exposed to prototypical and non-prototypical news stories (depictions).

This suggests that non-stereotypical stories may have 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). The work of McRae and Bodenhausen (2001) on stereotype activation emphasizes that activation or stereotype accessibility can be signified by automatic and latent processes in the mind. 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. This finding communicates an important practical implication—that non-stereotypical/non-prototypical news coverage can prevent or reduce the strengthening (and certainly, 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 stereotype accessibility, since hit rates were higher when participants were exposed to news primes (in regards to the second hypothesis). In this case, it is speculated that the news primes may have created a distraction to participants, since the mean hit rate was significantly lower for the control group than for participants who saw prototypical and non-prototypical stories. The new stories here may have also led to cognitive overload or difficulty to complete the task. 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.

Comparing the results in regards to H1 and H2, it is possible that the participants in this study were extraordinary in terms of their ability to control their automatic responses, since significant results came from the stereotype accuracy or explicit stereotyping data, rather than from the stereotype strength or implicit stereotype activation data. Contrary to Devine (1989), scholars have found that stereotype activation did not occur in egalitarian or humanitarian individuals (Lepore & Brown, 1997; Wittenbrink et al., 1997). Scholars have also posited that the ability of individuals to engage in executive control influences participants’ responses in implicit tasks (such as the IAT or response latency) (Chatham, et al., 2011). Executive control is a cognitive
control process by which executive functions influence goal-directed behaviors (Chatham et al., 2011; Friedman & Miyake, 2004). Given this literature, it may be that the response latency tasks could have been measuring task difficulty or cognitive overload, rather than stereotyping. Other literature also notes that when race or inequality is made apparent in a latency-type task, participants can become more controlled in their responses; this can make responses more accurate (Amodio, Devine, & Harmon-Jones, 2007).

Moreover, the non-significant differences between latencies after reading stories about Arab and Israeli women and after no priming cannot allow for a definite conclusion about the priming effects shown by the hit rate data (see the Appendix for the RT data). It may also be that explicit stereotypes are more accessible than implicit stereotypes or that implicit stereotyping is too conservative as a measure, as latency is complex. Response latency measurement may also be improved in the context of political and opinion research (Mulligan, Grant, Mockabee, & Monson, 2003). It is difficult to definitively conclude that news story primes or stories about primes cannot affect implicit stereotypes. Perhaps future research can examine the discrepancy between explicit and implicit stereotyping after exposure to various news media.

Another key point in regards to the second hypothesis about a main effect and interaction in the hit rate data was that there was a contrast between responses to Israeli ($M = .49, SD = .27$) and Arab ($M = .79, SD = .17$) photos in the control group (after no priming). 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. This is based on the literature of prototype-based processing. After prototypes appear in primes, those
prototypes are available for prior decision-making and judgments (Collins & Loftus, 1975). The lack of identifying information for these photos as primes in the control condition may have caused less stereotype activation. The photos of Arab women, however, had some identifying information because all women in the photos wore headscarves. Thus, the headscarf may have signified the Arab identity, or perhaps Middle Eastern or Muslim identities.

More generally, it was found that there were differences in response times between depictions. So, prototypical, non-prototypical, and control manipulations affected response latency. Participants responded fastest in the control condition and slower in the prototypical and non-prototypical conditions. The post hoc test for condition (depiction) revealed that prototypical and non-prototypical conditions were not significantly different in terms of mean difference criteria. These results show that the significant results in between-subjects effects may have been caused by the difference in response times in the control condition. Thus, respondents may not have been exhibiting stronger stereotypes in the prototypical condition (or in regards to prototypical/stereotypical stories about Arab women).

These results in regards to the third hypothesis—quickest response times after exposure to control conditions (no stories)—indicate that media stimuli may lead to certain delays in processing. Hypothesis 3 stated that there would be a main effect for depiction on response such that students who read prototypical stories would have stronger stereotype activation (faster response times) than the students who read non-prototypical stories and students who did not read stories.
The processing delay after reading prototypical and non-prototypical stories may have been due to the fact that the news primes distracted the participants or they may have added to the complexity of the stereotype as the stereotype became activated. In relation to the distraction explanation, the findings may be useful information to academics and practitioners of persuasion because it implies that media stimuli can perhaps slow and alter reactions to external stimuli (i.e. a person or group of people). This finding also relates to the literature on executive control (Chatham et al., 2011; Friedman & Miyake, 2004). The response latency data could be showing the difficulty of the task or load on cognition, rather than stereotype strength. However, in relation to stereotype complexity, this result may also show that primes interfere with current knowledge structures, either creating or altering cultural stereotype information in the mind. Stereotypes for these groups may not be accessible or readily held enough (Entman, 2010; Grimes & Drechel, 1996; Macrae & Bodenhausen, 2001). Thus, this shows that the news media have the potential to either create or alter knowledge structures on such groups.

Non-significant results for between condition differences in the hit rate/stereotype accuracy data indicate that the difference here may be more implicit, in regards to the lack of support for Hypothesis 4. H4 predicted that students who read prototypical stories would have the most accurate stereotyping. This difference between the latencies and hit rate could mean that the potential alteration or load explanations above may only be true in regards to implicit stereotyping, or automatic activation. Since hit rates were not significantly different between conditions and across ethnicities, the strength of the depictions may not be enough to create a priming effect on explicit stereotypes across
ethnic identity. This may give an indication that the media presented in this experiment are not strong enough to create a stereotype or to interfere with processing.

For the credibility data collected for H5 and H6, a main effect was found for ethnicity and an interaction was found between ethnicity and depiction. Stories about Arab women received higher credibility ratings overall, supporting Beaudoin and Thorson (2005). Non-prototypical Israeli and non-prototypical Arab stories had higher credibility ratings than ratings for prototypical Arab stories and prototypical Israeli stories, which is somewhat contrary to the hypothesis that prototypical Arab stories would be rated highest on credibility. The results may indicate that people’s perceptions of Arab women are stronger and their appearance in the news is more normalized than those of Israeli women.

There may also be an outgroup effect in that the students may have rated stories about Arab women as more credible because Arabs may be an outgroup in relation to a White ingroup (the participants). For instance, it has been found that identification with white racial ingroups intensifies and strengthens negativity toward Black and Latino targets in experiments (Mastro & Kopacz, 2006; Turner, 1999). Self-Categorization Theory may have also played a role in this outcome, where the mind puts social and personal identity at opposite poles to conceive a self-concept; the self-concept converges with the person’s ingroup and diverges from a relevant outgroup (Turner, 1985, 1987).

In response to Arab women, the participants gave similar credibility ratings in prototypical and non-prototypical conditions. However, credibility ratings for Israeli women were higher when participants read non-prototypical stories than when participants read prototypical stories. This is meaningful because the participants rated
stereotypical news as less credible than non-stereotypical news, especially news about Israeli women. This shows that stereotypical news about these groups may be given less consideration or may be seen as less legitimate than non-stereotypical news. Credibility is an important news value to journalists (Meyer, 1988), so journalists may also learn to value non-stereotypical news coverage of different groups in society.

**Limitations and Conclusion**

In addition to these inferences, study limitations must be discussed. First, the sample sizes for the two pretests were somewhat small at $n = 12$ for pretest 1 and $n = 12$ for pretest 2. However, $t$-tests showed that word ratings for targets and foils were significantly different and the ratings for stories were mostly significantly different. The results of this pretest also seem to be inconsistent with findings in content and textual analysis and cultural study (Ahmed, 1992; Berkowitz, 2004; Hoodfar, 2001; Khatib, 2006; Lahav, 2010; Levin, 2011; Oh, 2008; Rosenfield, 1982; Sasson-Levi, 2007; Shaheen, 2007; Tawil-Souri, 2007). Since Arab and Israeli women groups may not be as dominant in society as Black and White groups, it is hard to determine whether these tests accurately rated descriptive words as reflective of existing cultural stereotypes.

The process for collecting foils and target words may need to be refined in future research as these participants may have been trying to be socially desirable about the cultural stereotypes in their rating of descriptors. It could be argued that the words rated as most descriptive of Arab women (used as stereotypical words in the subsequent experiment) may not match depictions of Arab women found in the literature. For instance, target words for Arab women were modest, religious, under-appreciated, wears head scarf, misunderstood, traditional, covered, maternal, caregiver, and devout. Foils
(or lowest rated words) were cowardly, unmotivated, unintelligent, doctor, uneducated, naïve, slaves, without opinion, without career, and hostile. Major themes occurring in media include Arab women as not contributing very much to society or as unproductive, aggressive, violent, demonic, suicide bombers, innocent, victimized or as submissive to male figures (Ahmed, 1992; Berkowitz, 2004; Hoodfar, 2001; Khatib, 2006; Oh, 2008; Shaheen, 2007; Tawil-Souri, 2007). These depictions seem to align somewhat with foil words.

In regards to Israeli women, top rated descriptors for Israeli women were discriminated against, believer, hardworking, devout, religious, daughter, mother, faithful, nationalistic, and tough. Lowest rated words (used as foils) were slow, human bomb, violent, hateful, uneducated, short, naïve, silent, poor, and brown. The target descriptors for Israeli women may align more with prototypical media representation, that has shaped Israeli women as powerful or productive in society, as victimized caregivers or victims of sexual harassment or unequal treatment in the military, and as Zionistic or militaristic in Israeli society (i.e. showing loyalty to the state of Israel) (Lahav, 2010; Levin, 2011; Rosenfield, 1982; Sasson-Levi, 2007). Given this discussion, the pretest procedures should be considered in future research. Target and foil descriptors could also be derived from the literature (Alhabash, 2011) or foils could be words rated as descriptors of different groups (i.e. Black or Latino groups, perhaps).

Another limitation could lie in the use of a young student sample. They may inherently not hold the same cultural stereotypes as other age groups. However, scholars have argued that student samples and individual difference are less of a concern (Basil, 1996; Lang, 1996). Basil (1996), for example, notes that theoretical and practical
findings can still be inferred from student samples. Basil (1996) also argues that random assignment to conditions can make this concern null. This study assumes that its randomly assigned student subjects yielded usable findings that have theoretical and practical implications. Lang (1996) also emphasizes that the use of a convenient student sample can allow researchers to make meaningful statistical inferences relative to theory. Lang (1996) writes that statistical inferences in regards to a larger population cannot be made. The main goal of this research was to connect its findings back to theory, and to not necessarily generalize the findings to a larger population. Therefore, the use of a convenient student sample here gave meaningful results to scholarship.

The study also has its limits in terms of what it can provide for academia. As previously stated, this study cannot show that certain media framed Arab women a certain way or set the public agenda in the interest of any group. This was not a framing or agenda-setting study. The primary concern of this study was whether media content could activate stereotypes. This study could also not show how people may behave or act upon stereotypes activated by media. It also did not help explain the effects of priming in specific types of media, such as political news coverage or media violence, two major areas of research in terms of priming effects (Roskos-Ewoldsen et al., 2009). Perhaps these kinds of studies can supplement this research in the future.

Despite these limitations, the findings of H2 yielded a striking finding that is applicable to the practice of journalism and strategic communication. A conclusion drawn from the stereotype accuracy data is that the news media may be influential in reinforcing stereotype accuracy or may even be responsible for changing or creating stereotypes. First, significant results showed that participants more accurately identified
target (stereotypical) words as true of the presumed cultural stereotype for Arab women than for Israeli women. This showed that there was more accurate stereotyping for Arab women. However, an interaction between ethnicity and depiction on the hit rate data revealed more about stereotyping in this study. The interaction between ethnicity and depiction on the stereotype accuracy data showed that the news depictions may have made stereotyping of Israeli women more accurate, or may have created greater stereotyping of Israeli women because there were more yes responses to target words after participants read prototypical and non-prototypical stories. The interaction showed a different effect on stereotyping of Arab women. Non-prototypical primes made stereotyping less accurate, whereas stereotype accuracy was similarly higher after participants read prototypical or no stories. So, prototypical primes did not seem to impact stereotyping of Arab women, but non-prototypical primes appeared to be successful in reducing stereotype accuracy.

These results may mean that coverage of Israeli women may be of concern to news producers and society, despite the fact that there were higher yes responses to target words for Arab photos in the main effect on hit rate data. There is promise for non-stereotypical news coverage of Arab women, however. Since these results show that non-prototypical/non-stereotypical coverage can reduce stereotype accuracy towards Arab women, journalists and public relations practitioners may conclude that stories can change knowledge in the US about Arab women. The presumed collective notion (Devine, 1989) of Arab women can be altered by journalism and communication efforts.

Even as this finding shows the potential power of the news media, this study cannot stand alone as a case for the power of media. Priming stereotypes of these groups
and others need to be studied more in future research so that stereotyping or stereotyping attenuation as potential media effects can be explored. More specifically, the measures for (and the relationships between) foils and targets, stereotype activation, and stereotype accuracy or understanding also should be examined in future study. 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. As the title of this thesis indicates, the mind’s reflexivity and dynamism makes it enigmatic, and thus an ever-continuing area of research for media scholars.
Appendix

Tables

Table 1

*Ethnicity x Depiction Response Latency Data*

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Standard Dev.</th>
</tr>
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<tbody>
<tr>
<td>Prototypical Arab</td>
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*Main Effect Ethnicity Response Latency Data*

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*Between-Subjects Effect for Depiction on Response Latency Data*

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*Between-Subjects Effect for Depiction on Hit Rate Data*

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*Main Effect Ethnicity Credibility Data*

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*Photo Main Experiment Attractiveness Data*

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*Photo Main Experiment Valence Data*

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Visual of Procedure

Condition 1
Prototypical
Trial
Story 1
Credibility Measures
Response Latency Task
Story 2
Credibility Measures
Response Latency Task
Story 3
Credibility Measures
Response Latency Task
Story 4
Credibility Measures
Response Latency Task
Story 5
Credibility Measures
Response Latency Task
Story 6
Credibility Measures
Response Latency Task
6 Response Latency Tasks
Photo Ratings
Demographics

Condition 2
Non-Prototypical
Trial
Story 1
Credibility Measures
Response Latency Task
Story 2
Credibility Measures
Response Latency Task
Story 3
Credibility Measures
Response Latency Task
Story 4
Credibility Measures
Response Latency Task
Story 5
Credibility Measures
Response Latency Task
Story 6
Credibility Measures
Response Latency Task
Photo Ratings and Memory Task
Photo Ratings and Memory Task
Demographics

Condition 3
Control
Trial
No Stories
6 Response Latency Tasks
Photo Ratings
Demographics
Story Stimuli

Stereotypical/Prototypical Arab

In Egypt’s New Parliament, Women Will Be Scarce

In Egypt’s recent parliamentary elections, the first since Hosni Mubarak’s ouster and the fairest in the country’s history, Islamists won big. And one group suffered a shocking disappointment — women.

It appears there will be only about eight women out of the 508 seats — or fewer than 2 percent.

Women who ran on party lists were placed far down on those lists, meaning they had virtually no chance of getting into office.

“It really hurts so much when the same people you were with in that square that day, who are fighting against the regime ... are now turning against you,” says Dalia Ziada, an activist who ran for Parliament. Ziada found that changing attitudes toward women in politics is an uphill battle.

“I tried to test how the society is thinking about women after the revolution,” she says. “We went to three locations ... and we did a survey that was composed of only one question. Would you accept to see your president as a woman? One hundred percent of them said ‘no.’ This is what people think, it’s OK to have democracy, but women are not in the equation of democracy.”

Syrian Family Found Guilty In Honor Killings

A jury on Sunday found three members of an Syrian family guilty of killing three teenage sisters and another woman in what the judge described as “cold-blooded, shameful murders” resulting from a “twisted concept of honor,” ending a case that shocked and riveted Canadians.

Prosecutors said the defendants allegedly killed the three teenage sisters because they dishonored the family by defying its disciplinary rules on dress, dating, socializing and using the Internet.

The jury took 15 hours to find Mohammad Shafia, 58; his wife Tooba Yahya, 42; and their son Hamed, 21, each guilty of four counts of first-degree murder. First-degree murder carries an automatic life sentence with no chance of parole for 25 years.

After the verdict was read, the three defendants again declared their innocence in the killings of sisters Zainab, 19, Sahar 17, and Geeti, 13, as well as Rona Amir Mohammad, 52, Shafia’s childless first wife in a polygamous marriage.

Their bodies were found June 30, 2009, in a car submerged in a canal in Kingston, Ontario, where the family had stopped for the night on their way home to Montreal from Niagara Falls, Ontario.

Palestinian Woman Escapes Father’s Dark Captivity

A young Palestinian woman who was imprisoned for 10 years in a series of dark rooms by her father said Monday she survived the ordeal by listening to the radio, dreaming of seeing sunshine again and finding small pleasure in an apple she was fed each day.

Bara’a Melhem, 20, said she was enjoying her first taste of freedom after a decade of isolation and threats of rape and abuse, and she hopes to use her experience to help others.

Speaking softly but confidently, Bara’a Melhem said she was beaten, barely fed and let out only in the middle of the night to do housework. She was given only a blanket, radio and a razor blade by her father and stepmother, and both of them encouraged her to kill herself.

“Fear, fear, fear — that was the basis of my life,” Melhem said.
Stereotypical/Prototypical Israeli

Israelis Facing a Seismic Rift Over Role of Women

In the three months since the Israeli Health Ministry awarded a prize to a pediatrics professor for her book on hereditary diseases common to Jews, her experience at the awards ceremony has become a rallying cry.

The professor, Channa Mayan, knew that the acting health minister, who is ultra-Orthodox, and other religious people would be in attendance. So she wore a long sleeve top and a long skirt. But that was hardly enough.

Not only did Dr. Mayan and her husband have to sit separately, as men and women were segregated at the event, but she was instructed that a male colleague would have to accept the award for her because women were not permitted on stage.

Israelis Clash Over Strict Religious Codes, Israeli Girls Face Harassment

According to Israel’s President Shimon Peres, a fight is under way, for “the soul of the nation and the essence of the state.” But the threat isn’t coming from outside Israel. It’s over differing interpretations of Judaism.

Recently, a young girl was filmed by a local TV station being harassed by ultra-Orthodox Jews for — in their view — not dressing modestly enough. The episode took place in Beit Shemesh, a city between Tel Aviv and Jerusalem that has become a symbol of this growing battle in Israel.

In a protest that swelled into the thousands, demonstrators in Beit Shemesh rallied against what they say is the imposition of strict codes of religious behavior in communities across this country.

Israeli Women at War: How Roles are Changing

Yael Kidron is 22 years old and a combat soldier in the Israeli Defence Forces’ mixed-sex Karakal Battalion, based in the Negev desert. She argues that it is only fair to allow women to take on physically challenging army roles. The Karakal Battalion, which guards Israel’s borders with Egypt and Jordan, is 70% female.

“I decided to come and serve in a combat unit, because for one thing I grew up with five brothers and I needed to do something physical. It’s not just sitting down and doing paperwork. I wanted to do something more challenging, and this is why I am here,” said Kidron.

Women have served in combat roles in the Israeli Defence Forces (IDF) since the mid-1990s.
Non-Stereotypical/Non-Prototypical Arab

On One Field, Two Goals: Equality and Statehood

Given the sheer exhilaration of the cheering, flag-waving, anthem-singing crowd packed into the soccer stadium in this otherwise drab West Bank town one afternoon this week, one could have been forgiven for thinking that an independent Palestinian state had just been born.

The Palestinians were playing the Jordanians. But more significant was that the women's teams were playing.

"In our culture," said Rakaya Takrozi, 50, the Palestinian team's manager, "Palestinian women work side by side with the men in the fields and factories. They fight together, demonstrate together. Sometimes she takes the place of the man because he is in jail or is in the mountains, hiding."

This game, she said, proved that "Palestinian women can do everything — even football."

Palestinian Women Behind The Wheel, And Ahead Of The Pack

Palestine might not seem like a breeding ground for race car drivers. After all, the area is dotted with checkpoints and roadblocks, hundreds of obstacles that can cramp a driver's ability to explore a car's limits.

But that hasn't stopped a group of Palestinian women from driving very fast, winning races and making a name for themselves along the way.

"In Saudi Arabia, women are prevented from driving — here in Palestine we have women who drive race cars," said an official in the Palestinian Motor Sport and Motorcycle Federation.

Noor Daoud, a member of Palestine's Speed Sisters, has had her right to drive taken away before — in 2009, after Israeli police caught her going around 125 mph, she said.

But she still drives her modified and stripped-down BMW at the track: "I like to go to Betania when it is quiet on a Friday, throw down some cones and practice my turns. Every time I am mad or stressed I just go there and take it out in my driving," said Daoud. "They cannot believe that a girl has been driving that way. I love it."

Saudi Women Shatter the Lingerie Ceiling

A SOCIAL revolution began in Saudi Arabia this month, and it has little if anything to do with the Arab Spring. Women are going to work in lingerie shops.

The Ministry of Labor is enforcing a royal decree issued last summer ordering that sales personnel in shops selling garments and other goods, like cosmetics, that are only for women must be female. More than 28,000 women applied for the jobs, the ministry said.

This is a milestone on the arduous path to employment equality for women in a country where they are systematically excluded from retail activity. Under the new rules, the country's thousands of lingerie and cosmetics shops have until June to replace their male employees with women.

The campaign to change the rules began several years ago, and was led by English-speaking financial advisor Reem Asaad. "I was delighted because this is something that we've been waiting for since 2005," said Asaad.
Non-Stereotypical/Non-Prototypical Israeli

Where Politics Are Complex, Simple Joys at the Beach

Skitish at first, then wide-eyed with delight, Palestinian and Israeli women and girls entered the sea, smiling, splashing and then joining hands, getting knocked over by the waves, throwing back their heads and ultimately laughing with joy.

Palestinians from the southern landlocked part of the West Bank risked criminal prosecution, along with the dozen Israeli women who took them to the beach. And that, in fact, was part of the point: to protest what they and their hosts consider unjust laws.

Ihana Hammerman, a writer, translator and editor, had been spending time in the West Bank learning Arabic when a girl there told her she was desperate to get out, even for a day.

Ms. Hammerman decided to smuggle a the girl to the beach. The resulting trip, described in an article she wrote for the weekend magazine of the newspaper Haaretz, prompted other Israeli women to invite her to speak, and led to the creation of a group they call We Will Not Obey. It also led a right-wing organization to report her to the police, who summoned her for questioning.

Challenging Traditions at the Heart of Judaism

A struggle for the character of the Western Wall, this city's iconic Jewish holy site and central place of worship, is under way, and it is being fought with prayer shawls and Torah scrolls.

On Friday, sheets of rain obscured the Old City's ancient domes. But by 7 a.m. about 150 Jewish women had gathered at the Western Wall to pray and to challenge the constraints imposed on them by traditional Jewish Orthodoxy and a ruling by the Israeli Supreme Court.

Under their coats many of the women, supporters of a group of religious activists called Women of the Wall, wore a tallit, or fringed prayer shawl, a ritual garment traditionally worn only by men. Some were their prayer shawls openly, an illegal act in this particular setting that can incur a fine or several months in jail.

Last month Nofrat Frenkel, 28, an Israeli medical student and a committed follower of Conservative Judaism, a modern, egalitarian strain, was the first woman in Israel to be arrested during prayers at the Western Wall, also known as the Kotel, for publicly wrapping herself in a tallit.

Israel's New Labor Leader Faces a Party in Decline

The election of a new leader of Israel's historic but severely diminished Labor Party prompted talk of a possible revival on Thursday. But analysts were predicting a modest comeback in the best case, with a special emphasis on socioeconomic issues.

Shelly Yachimovich, 41, a former journalist and a Labor member of Parliament since 2006, defeated Amir Peretz, a former leader of the center-left Labor Party and a former union leader, in a runoff ballot on Wednesday by 54 percent to 45 percent. Ms. Yachimovich is the seventh leader of Labor in a decade.

"The Labor movement built this country," Ms. Yachimovich said early Thursday in a victory speech, harking back to the early state founders and builders from the once-dominant movement, like David Ben-Gurion and Golda Meir. She added, "Its time has come to rebuild the state of Israel."
Consent Form

CONSENT FORM

You are invited to participate in a research study conducted by Erika Johnson, a master’s candidate at the School of Journalism at the University of Missouri. The investigator hopes to better understand the role of the news media in activating existing stereotypes of Israeli and Arab women in the United States. The results from this study will help to contribute to knowledge on news media and may contribute to our understanding of these groups.

If you decide to participate, you may be asked to read a series of stories about Israeli and Arab women and may be asked to evaluate the fit of descriptors of the women featured in the stories. You will also be asked questions about media use, credibility of news stories, and personal data (i.e. demographics). Participation will last no more than one hour for each subject. Your decision whether to participate will not affect your current or future relations with the University of Missouri or the School of Journalism. Your participation is voluntary and you are free to withdraw at any time without affecting those relationships.

The stories you may be asked to read have been adapted for the study from actual news sources. Therefore, it is possible that you may have read or seen them before your participation. Due to these facts, the risks to participating in this study are expected to be no greater than those encountered in ordinary, everyday life. The benefits of your participation are the opportunity to take part in an academic study that examines how media may influence cultural stereotypes.

The data from this study will be anonymous. The data you provide will received a code number, so your name will in no way be connected with the responses you provide. Your participation will be kept confidential, except solely to inform your instructor of your participation.

You will not receive monetary payment for your participation. However, your instructor has agreed to provide credit for your participation. You will be given a slip signed by the researcher at the end of the study to give to your instructor as proof of your participation. If you decide not to participate, your grade will not be affected; an alternative assignment will be arranged for credit.

The principal researcher conducting this study is Erika Johnson. You may ask any questions you have now. If you have questions later, you may contact her at E-mail: ekjwvf@mail.missouri.edu or Phone: (314) 402-3050.

If you have any questions or concerns regarding the study and would like to talk to someone other than the researcher(s), contact MU Campus Institutional Review Board located in 483 McReynolds Hall, phone number (573) 882-9585.
Please acknowledge that you have read the above information. Any questions you may have raised have been answered. By writing your assigned participant ID and dating this consent form you are stating that you are at least 18 years of age, and that you consent to participate in the study.

Participant ID ______________________________________

Date ___________________________________________
Pretest Results

Table 1

*Attractiveness Pretest Photo Data*

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<thead>
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*Valence Pretest Photo Data*

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### Arousal Pretest Photo Data

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<td>1.44</td>
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Photos in the following order for attractiveness, valence and arousal pretest data:
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*Arab Pretest Story Ratings Data*

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<td>In Egypt’s New</td>
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<tr>
<td>Palestinian Woman Escapes</td>
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<td>Saudi Women Shatter</td>
<td>4.17</td>
<td>1.85</td>
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<td>On One Field</td>
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<td>1.61</td>
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<tr>
<td>Palestinian Women Behind</td>
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<td>1.85</td>
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Table 5

*Israeli Pretest Story Ratings Data*

<table>
<thead>
<tr>
<th>Story</th>
<th>Mean</th>
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</thead>
<tbody>
<tr>
<td>Israelis Clash</td>
<td>5.25</td>
<td>1.42</td>
</tr>
<tr>
<td>Israelis Facing Seismic</td>
<td>5.08</td>
<td>1.56</td>
</tr>
<tr>
<td>Israeli Women at War</td>
<td>3.75</td>
<td>2.01</td>
</tr>
<tr>
<td>Simple Joys</td>
<td>2.58</td>
<td>1.62</td>
</tr>
<tr>
<td>Israel’s New Labor</td>
<td>2.50</td>
<td>1.57</td>
</tr>
<tr>
<td>Challenging Traditions</td>
<td>2.33</td>
<td>1.61</td>
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Table 6

*Arab Foils Data*

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
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<tbody>
<tr>
<td>Cowardly</td>
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</tr>
<tr>
<td>Unmotivated</td>
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<td>1.18</td>
</tr>
<tr>
<td>Unintelligent</td>
<td>2.92</td>
<td>0.86</td>
</tr>
<tr>
<td>Doctors</td>
<td>3.08</td>
<td>1.19</td>
</tr>
<tr>
<td>Uneducated</td>
<td>3.29</td>
<td>1.57</td>
</tr>
<tr>
<td>Naïve</td>
<td>3.36</td>
<td>1.38</td>
</tr>
<tr>
<td>Slaves</td>
<td>3.38</td>
<td>1.71</td>
</tr>
<tr>
<td>Without opinion</td>
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<td>1.71</td>
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<tr>
<td>Without careers</td>
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<td>1.60</td>
</tr>
<tr>
<td>Hostile</td>
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<td>1.32</td>
</tr>
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Table 7

*Arab Targets Data*

<table>
<thead>
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<td>Modest</td>
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<tr>
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<td>.86</td>
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<tr>
<td>Under-appreciated</td>
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<tr>
<td>Wear head scarf</td>
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<td>1.39</td>
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<tr>
<td>Misunderstood</td>
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<td>Traditional</td>
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<tr>
<td>Covered</td>
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<td>1.08</td>
</tr>
<tr>
<td>Maternal</td>
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<td>1.18</td>
</tr>
<tr>
<td>Caregiver</td>
<td>5.31</td>
<td>1.31</td>
</tr>
<tr>
<td>Devout</td>
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<td>1.25</td>
</tr>
</tbody>
</table>
Table 8

*Israeli Foils Data*

<table>
<thead>
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<tr>
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<tr>
<td>Human bomb</td>
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<td>1.81</td>
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<tr>
<td>Violent</td>
<td>2.92</td>
<td>1.19</td>
</tr>
<tr>
<td>Hateful</td>
<td>3.00</td>
<td>1.18</td>
</tr>
<tr>
<td>Uneducated</td>
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<td>1.44</td>
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<tr>
<td>Short</td>
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<td>1.07</td>
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<tr>
<td>Naive</td>
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<td>1.34</td>
</tr>
<tr>
<td>Silent</td>
<td>3.57</td>
<td>1.28</td>
</tr>
<tr>
<td>Poor</td>
<td>3.62</td>
<td>1.85</td>
</tr>
<tr>
<td>Brown</td>
<td>3.62</td>
<td>1.56</td>
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</tbody>
</table>
Table 9

*Israeli Targets Data*

<table>
<thead>
<tr>
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<tbody>
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<tr>
<td>Believers</td>
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<tr>
<td>Hardworking</td>
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<td>Devout</td>
<td>5.38</td>
<td>1.45</td>
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<tr>
<td>Religious</td>
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<td>1.15</td>
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<tr>
<td>Daughters</td>
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<td>1.18</td>
</tr>
<tr>
<td>Mothers</td>
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<td>1.27</td>
</tr>
<tr>
<td>Faithful</td>
<td>5.23</td>
<td>1.01</td>
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<tr>
<td>Nationalistic</td>
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<tr>
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