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Use of Social Media by Saudi College Students: Relationship Development, Maintenance, and Communication with the Opposite Sex

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ABSTRACT

Interaction with non-family members of the opposite sex is prohibited in public places in the Kingdom of Saudi Arabia (KSA). Although communication is allowed between males and females within families, it is characterized by hierarchy and high-power distance, creating communication limitations. Since the same restrictions do not exist online, Saudi citizens can utilize online environments to overcome these face-to-face boundaries. This survey study takes a uses and gratifications perspective by examining how a sample of 221 men and women Saudi college students use social media for the gratification of (a) relationship development and maintenance needs with the opposite sex; (b) communication-interaction needs with the opposite sex both inside and outside the KSA. The findings indicate that Saudi students use social media to establish relationships and communication with the opposite sex that may not occur in face-to-face environments due to cultural prohibitions; however, the extent to which one chooses to engage with the opposite sex via social media differs according to sex and one's current country of residence—inside the KSA versus outside the KSA—and the cultural-social norms within these environments.

Keywords: Social Media, Saudi Arabia, Sex, Gender, Communication

Use of Social Media by Saudi College Students: Relationship Development, Maintenance, and Communication with the Opposite Sex

With a population of over two-thirds under the age of 35 (Godinho, 2020), the Kingdom of Saudi Arabia (KSA) has the highest annual growth rate of social media users worldwide (Radcliffe & Bruni, 2019). While some studies do exist regarding social media usage in Saudi society, given the growth and popularity of social media usage within the KSA, scholarship has not kept pace. Most of these studies examine social media within

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the context of business (Alsajjan & Dennis, 2010; Al-Somali, Gholami, & Clegg, 2009; Makki & Chang, 2015; Abed, Dwivedi, Williams, 2015), healthcare settings (Househ, 2013; Bahkali, Almainan, Bahkali, Almainan, Househ & Alsurimi, 2015), education (Alsaleem, 2013; Alwagait, Shahzad, Alim, 2015), social media and Arab revolutions (Samin, 2012; Howard & Hussain, 2011; Harb, 2011; Ghannam, 2011), and other social movements, such as the women's right to drive campaigns (Agarwal, Lim, & Wigand, 2012). While some studies do examine the impact of sex and gender on Saudi social media usage (Khaddaf, 2010; Alkahtani, 2012; Askool, 2012; Guta & Karolak, 2015; Al-Talhi & Maarop, 2018), more scholarship is needed regarding the impact of social media on contact between the sexes. This is particularly important because interaction with non-family members of the opposite sex is prohibited in public places in the KSA (Alsaggaf, 2015); however, the same restrictions do not apply via ICTs (Alkahtani, 2012). Thus, social media provides Saudi citizens the ability to communicate with non-family members of the opposite sex. Furthermore, since communication between males and females within families is characterized by hierarchy and high-power distance, creating communication limitations (Guan & Li, 2017), social media can also be used as a tool to open the communication lines between family members of the opposite sex. Therefore, this study examines how Saudi college students are using social media to gratify the need to develop and maintain relationships and interact with the opposite sex. This study takes a uses and gratifications approach. In particular, we expand upon the traditional uses and gratifications need cluster of "social integrative" by examining how male and female Saudi college students use social media for the gratification of (a) relationship

development and maintenance needs with the opposite sex; (b) communication-interaction needs with the opposite sex both inside and outside the KSA.

Literature Review

Social Media Usage in the KSA

Facebook, Twitter, Instagram, WhatsApp, and Snapchat were all quickly adopted by Saudi Arabians in the same year they were released. There are currently 27.8 million social media users in the KSA. In addition, the number of social media users increased by 2.1 million (8%) between 2020 and 2021 (Kemp, 2021). Comparatively, in previous years, data from *We Are Social* and *Hootsuite* reveal that social media users in the KSA grew by 32% from 2017 to 2018, compared to 13% average growth worldwide, making KSA the country with the highest annual growth rate of social media users for that year (Radcliffe & Bruni, 2019). In 2018, the KSA reported 9 million Snapchat users, which is 28% of its total population (Radcliffe & Bruni, 2019). Data shows that 52 % of the population accessed social media in 2018 and this number is projected to reach 53% in 2023 (Statista, 2020).

Although the Saudi government has been trying to close some of the most popular social media platforms—Twitter, Facebook, and WhatsApp—and dispense harsh penalties for all content offenders, usage continues (The Economist, 2015). Anti-cybercrime laws were first established in the KSA in 2007. These laws placed heavy fines or imprisonment on violations, such as accessing a government network without authorization, creating programs or websites that violate Islamic values, and using websites for fraudulent transactions (Elnaim, 2013). Following the Arab Spring revolution, in which social media organized anti-government protests rose around North

Africa and the Middle East, the KSA established stricter laws over social media usage and access. For example, offenders can be publicly named and shamed (Wilkinson, 2015). In 2017, a new anti-terrorism law increased the range of potential cyber-crimes by including non-violent acts as forms of terrorism, such as disturbing public order, endangering national unity, or characterizing the king or crown prince in a way offensive to religion or justice. Thus, social media users have self-censored in regard to topics such as politics, religion, and the royal family (Freedom on the Net, 2018; Human Rights Watch, 2017). Finally, although interaction with non-family members of the opposite sex is not technically prohibited via ICTs (Alkahtani, 2012), given the current environment of penalties for social media use that violates Islamic values, one cannot assume that it is being used for such a purpose. Therefore, more study is needed regarding how social media is being used to interact with the opposite sex, such as developing and maintaining relationships, and even dating.

Social Media and Dating in the KSA

Gender segregation is a prominent feature of Saudi society (Elamin & Omair, 2010) and men and women are separated in various aspects of public life, such as education, work, entertainment, and shopping. Gender segregation has created two societies—male and female—and subsequently, minimal communication between genders (Bahry, 2008). Although many restaurants still separate people into men and family sections, there are now cafes and eateries where men and women can sit together. One interview subject revealed that most of his relationship with his girlfriend has taken place online. The couple traveled to Egypt, where gender mixing is more accepted, in order to meet for the first time (Brinley-Bruton, 2017). Much of the change to more relaxed social rules (such as

gender segregation) has been brought about by the Crown Prince Mohammed bin Salman, who has pushed for a more moderate version of Islam in an attempt to grow the economy and appeal to the 70% of Saudis who are under 30 years old (Chulov, 2017).

Nowadays, with the softening of certain social rules, things once forbidden—movies, music, theater, men and women mixing public and even dating—has become more acceptable in certain cities (Northam & Tanis, 2018). In more relaxed cities, like Jeddah, young adults admit that they are actively dating; however, they usually do not reveal this to their parents. One interviewee met her current boyfriend on Tinder. However, she used a picture she painted of herself on her bio rather than her actual photo. She has since taken her profile down (Northam & Tanis, 2018). Currently, many young Saudis are meeting via Tinder, Snapchat, Twitter and Instagram (Brinley-Bruton, 2017).

Traditional methods for finding a match have included having relatives choose, utilizing the service of a matchmaker, receiving suggestions from a friend, or personal choice (al-Anzi, 2009). However, According to Bahry (2008), due to mobility and globalization, new alternative methods have emerged, such as social institutions with religious leader supervision, TV channels, Saudi newspapers and magazines, and social media. As Saudi society changes, there is a need to examine the influence that social media has had on these changes, in particular, the influence of social media on Saudi societal norms in terms of relationship development and maintenance and communication-interaction with the opposite sex. The intention of this study is to fill this need through empirical examination of Saudi perspectives regarding how they use social media and its influence on establishing relationships.

Gender and Computer Mediated Communication (CMC) Usage

Current social media usage stats report the percentage of U.S. adults who use at least one social media site at 66% male and 78% female. This usage has remained relatively stable within the last five years (Pew Research, 2021). However, men and women tend to use social networking sites for different reasons. While both men and women tend to use social media to self-enhance (Krasnova, Veltri, Eling, Buxmann, 2017), women use social media for relational uses, such as maintaining close relationships (Krasnova et al., 2017; Muscanell and Guadagno, 2012), and men tend to use social media for general information seeking purposes (Krasnova, et al., 2017) and to form new relationships (Muscanell and Guadagno, 2012). . Kimbrough, Guadagno, Muscanell, and Dill (2013) found that, “even when men and women have the freedom to act...they still act in accordance with gender role expectations” (p. 898). This is in accordance with social role theory (Eagly, 1987), in which men are expected to be more agentic (independent and task focused) and women more communal (relationship and social interaction focused). For example, Kimbrough et al. (2013) found that women use mediated communication (e.g. text messaging, social networking, video chat) more than men. Similarly, Lin and Wang (2020) found that women place more importance on social ties and commitment more than men on social networking sites. Furthermore, women are more concerned with privacy risk than men in regard to information sharing. Lin and Wang (2020) also relate their findings to social role theory, which posits that women tend to focus more on interpersonal communications. In addition, men are more assertive (according to social role theory) and may care less about privacy risks. However, these studies examine male and female CMC use from a western perspective. For example, Muscanell et al. (2012) and Kimbrough et al. (2013) use majority Caucasian samples from

U.S. Universities, Lin and Wang (2020) use students from a large university in the U.S., and Krasnova, et al., 2017 sampled German students. The following section will examine gender and social media use specifically from the KSA.

Gender and Social Media Usage in the KSA

While interaction with the opposite sex is prohibited in public places in the KSA (Alsaggaf, 2015), there are no specific/formal restrictions via ICTs (Alkahtani, 2012). Furthermore, Saudi females are more comfortable interacting with the opposite sex when they know it does not go against societal beliefs (Alkahtani, 2012). For example,

“social media has a positive effect on the collaborations of students, as they are able to keep their cultural and religious values without *physically* intermingling with the opposite sex, which is a requirement of religion and culture” (Alkahtani, 2012, p. 3).

Women, on the other hand, have more concerns about using social media than men due to social and cultural norms in Saudi society (Askool, 2012). According to Khaddaf (2010), 68% of Saudi girls do not reveal their family names on their profiles and 32% use an alias for the Facebook accounts. Meanwhile, 80% of Saudi boys use their real full names on their Facebook accounts. Saudi women also tend to use photos of their fathers or a drawing, rather than a photo of themselves for their profiles. Similarly, Guta and Karolak (2015) found that,

“In the context of the Saudi society, the social media sites, in the absence of the body and without gatekeepers, brought new ways of self-expression and identification among Saudi females. They were able to articulate themselves for whom they think they really are, not whom the society wants them to be” (p. 124).

Thus, the internet offered Saudi women the ability to reshape their offline identities by choosing what information to put forth, rather than having their identities decided for them. However, Guta and Karolak (2015) note that distancing oneself from ones' offline "real" identity online, especially gender, is problematic because "doing gender" is not voluntary but something that is ascribed. Therefore, although the women within their study chose nicknames and or concealed personal images, they did not distance themselves from their female gender.

Further studies have found that Saudi women primarily use social media for entertainment, keeping up to date (e.g. news & current events), and for social purposes (e.g. connect with family and friends) over business purposes (Al-Talhi & Maarop, 2018). These findings corroborate with previous studies (Askool, 2012), which found that Saudi women primarily used social media to maintain relationships with family and friends. Regarding social media usage, Askool (2012) concluded that, "cultural restrictions have more impact on behavioural intention than other constructs" (p. 216). For example, family pressures may also play a role in social media usage.

Family Communication

Interactions between family members are influenced by social relations set by cultural norms and religion. Traditional Arab family structure is characterized by Sanders (1983) as the following:

"From an early age, children are taught that males are inherently superior to females. Respect for masculine authority and seniority is stressed, and children are expected to show proper deference to their elders. The questioning of decisions

or judgments made by superiors is considered neither permissible nor proper” (p. 459).

The national government is at the top of the hierarchy in Saudi society. This is followed by religious leaders (Imams), tribal authorities, family elders, parents, husband (for married women) and individuals (Stranger, Alnaghaimshi, & Pearson, 2017). However, the Arab family structure has evolved over time, influenced by the economy, globalization, and immigration. More recently, many Arab fathers find themselves separated from their families, seeking out work in neighboring Arab countries or even in the west, such U.S. or Canada. This has resulted in changing family structure and communication patterns (Ahmed, 2012). Current research on Arab fathers in the U.S. have challenged stereotypes of authoritarian and uninvolved fathers (Krayem, 2016). The shift in family structure in Saudi Arabia, in particular, can also be attributed to recent changes in the lifting of driving and traveling (without a male guardian’s permission) bans for women (Shalhoub, 2019). Although communication between sexes within the family is permitted, it is often constrained by cultural/social norms. For example, strongly influenced by cultural pressure to submit to authority figures, Guan and Li (2017) found that, in conflict, Saudi adult children tend to avoid and accommodate their parents more compared to their U.S. counterparts. They are also strongly swayed (even on social media) by the opinions of those in higher positions (Stranger et al., 2017). Furthermore, family members and friends, rather than strangers, tend to make up the core of Saudi social media networks (Stranger et al., 2017). However, although communication with opposite sex family members is permitted, it is often constrained by hierarchical cultural and religious norms. Although ICTs offer a less inhibited space for communication, do the same

cultural and religious pressures regarding hierarchy and proper communication carry-over online? This study takes a uses and gratification perspective in order to examine how Saudi students use social media to gratify needs of relationship development, maintenance, and communication with the opposite sex.

Use and Gratifications

According to the uses and gratification approach, the audience or user has agency and proactively seeks out media to meet their needs, rather than being a passive recipient of media (Ruggiero, 2000; Katz, Blumler, & Gurevitch, 1974; Rubin, 1986). There is some debate within the social science community whether uses and gratifications is an approach/perspective or theory. Some scholars have argued for its use as a theory (Ruggiero, 2000; Rafaeli & Ariel, 2008), arguing that the emergence of CMC has revived the approach as a cutting-edge theoretical approach for which to examine new media. Uses and Gratifications has evolved since its early days, which focused solely on mass media consumption, such as watching television or listening to the radio, but did not specify specific needs types. Later studies, such as Katz, Blumler, and Gurevitch (1974) developed specific typologies, and outlined what has become the traditional five needs clusters (Rubin, 1986)—including cognitive (seeking information and understanding), affective (such as emotional or aesthetic interactions), social integrative (seeking status or belonging), personal integrative (need for confidence and high self-esteem) and diversion (entertainment). The social integrative need refers to the need to socialize with family and friends and can include the following motivations, which are some of the most prominent motivations for social media usage: Socialization and community building (Rafaeli & Ariel, 2008; Rafaeli, Ariel, Hayat, 2007; Hanson & Haridakis, 2008; Park,

Kee, Valenzuela, 2009; Ballard, 2011), building new social contacts (Park et al., 2009; Krishnatray, Singh, Raghavan & Arma, 2009) and maintaining current social contacts (Dunne, Lawlor, & Rowley (2010). Our study expands upon the social integrative need by examining how Saudi college students use social media to gratify needs of relationship development, maintenance, and communication with the opposite sex.

More recently, scholars have reexamined uses and gratifications within the context of new media (Ruggiero, 2000; Rafaeli & Ariel, 2008; Sundar & Limperos, 2013; Lee, Ma, & Go, 2011; Rathanyake & Winter, 2018). Ruggiero (2000) found that the traditional needs clusters were still valid; however, new media offered new ways to analyze and apply them, such as examining interactivity, demassification and asynchronicity of the Internet. Similarly, Moore and Chuang (2017) found that:

“The uses and gratifications approach...is a valid means by which to examine the motivations and gratifications sought and obtained by users of new media, specifically online social media platforms and virtual communities. However, the examination of new needs and motivations is also needed in order to expand the approach.” (p. 2318).

While some scholars have found that uses and gratification is useful in examining how and why people use new media technologies (Ruggiero, 2000; Rafaeli & Ariel, 2008; Lee, Ma, Goh, 2011; Moore & Chuang, 2017), others suggest modifying, expanding, and refining the traditional needs clusters as new needs and affordances have emerged with new media technologies (Sundar & Limperos, 2013; Rafaeli & Ariel, 2008; Rathanyake & Winter, 2018).

With further advancement of new media technology, Sundar and Limperos (2013)

propose an affordance-based model (MAIN), rather than a user-centered approach, that consists of modality—different types of presentation (such as audio or visual), agency—user ability to create content, interactivity—affordances that allow making real-time changes to content, and navigability—affordances that enable users to move throughout the platform (MAIN), rather than relying on the traditional needs clusters. MAIN addresses new activities that emerged with new media technologies, such as mobility and personal identity enhancement, which previous traditional media did not afford. While Sundar and Limperos (2013) examined an array of new media, such as tablets and cell phones, Rathanyake and Winter (2018) proposed a typology specifically for studying social media uses and gratifications by expanding the components of the MAIN model to apply specifically to the affordances of social media. The MAIN model was expanded to include Modality—realism and “being there,” Agency—agency enhancement, community building, bandwagon, and filtering, Interactivity—interaction, activity and responsiveness, and Navigability—browsing and playing, proposing a typology specifically for studying social media uses and gratifications. Both models take a medium-related approach to uses and gratifications, rather than a user-centered approach used by previous studies.

Overall, the uses and gratifications perspective has evolved over time to accommodate new media technologies and has proven its use in the examination of why and how people use certain media (Ruggiero, 2000; Rafaeli & Ariel, 2008; Sundar & Limperos, 2013; Lee et al., 2011; Moore & Chuang, 2017). However, there is a need to examine the application of uses and gratification not only within the context of new media but also within the context of culture.

By applying uses and gratifications to Saudi student social media use, we can examine the relevancy of uses and gratifications in the unique communicative environment of Saudi culture. In other words, we are able to see how Saudi students are using social media as a tool to meet their needs of communicating and maintaining and developing relationships with the opposite sex, which may otherwise not be allowed in face-to-face environments. In particular, this study takes a user-centered approach and expands on the traditional need cluster of “social integrative,” which is the need to socialize with family and friends. Further, the discussion section will elaborate on how our findings corroborate with recent affordance-based expansions (Sundar & Limperos, 2013; Rathanyake & Winter, 2018) of uses and gratifications and the traditional needs clusters.

Research Questions

Overall, the literature review reveals similarities between western studies on female usage of social media and the KSA. Women from both regions tend to use social media for relationship maintenance (Muscanell & Guadagno, 2012; Kimbrough et al. 2013; Krasnova et al., 2017; Lin & Wang, 2020; Al-Talhi & Maarop, 2018; Askool, 2012). In contrast, men tend to use social networking sites to form new relationships (Muscanell & Guadagno, 2012). In addition, although social media offers some communication freedoms compared to that of face-to-face (Al-Saggaf, Williamson, and Wekert, 2002; Guta and Karolak, 2015); in general, men and women tend to adhere to certain societal gender norm expectations even within their social media communication (Kimbrough et al., 2013; Askool, 2012). Therefore, this study puts forth the following research question:

RQ1: How do male and female students use social media for the gratification of

(a) relationship development and maintenance needs with the opposite sex; (b) communication-interaction needs with the opposite sex?

Furthermore, the Arab family structure has shifted due to the economy, globalization, and immigration, and many family members are geographically separated due to fathers moving away for work (Ahmed, 2012) or adult children attaining a higher education abroad, such as Saudi Arabia, which is the fourth largest sponsor of international students to the U.S. (Taylor & Albasri, 2014). Furthermore, Social media use can help people adjust to a new culture or country (Lin, Peng, Kim, Kim, and LaRose, 2012). Given that most western countries (such as the U.S. and the U.K.) do not place restrictions on contact with the opposite sex, the following research question is put forth:

RQ2: How has social media influenced in-country and out-country Saudi students' contact with the opposite sex in terms of (a) relationship development and maintenance; (b) communication-interaction?

Method

Participants

Participants included 221 Saudi students (60.6 % male and 39.4% female). The age range of participants was between 18 and 40 years old, with 25% between 18-23; 57% between 24-30; 18% over the age of 30. Although all participants were Saudi citizens, 65.6% were currently living in the KSA, 28.5% in the U.S., 4.9% in the U.K. and 1% in Canada. Concerning academic level, 50.2% of participants were undergraduate students, 33.5% master's degree students, 9.5% Ph.D. students and 6.8% other (e.g. diploma/ESL students).

Procedure

Surveys were administered via social media channels: Facebook, Twitter, WhatsApp, Instagram, and Snapchat. In addition, the Saudi Arabian Cultural Mission (SACM) in the U.S.A. distributed surveys via their Facebook and Twitter accounts. The SACM is one of the specialized agencies created by the Saudi government in 1951 to administer programs and policies to meet the educational and cultural needs of Saudis studying in the United States.

Measures

Two versions of the survey were utilized—one in Arabic and one in English. Participants were asked to select either the Arabic or English version. Only 51 participants utilized the survey in English.

Screening questions. Respondents under 18 were automatically excluded from the survey. In addition, since this study focuses on Saudi citizens, non-Saudi citizens were excluded from the survey. In total, there were 221 participants—218 participants were Saudi citizens, and three were dual Saudi citizens—2 Saudi Americans: 1 Saudi-Palestinian. All participants were Saudi students.

Participant Information. In addition to age and nationality, participants were also asked to indicate their sex—Male/Female.

General social media usage. Five questions asked participants questions about their general social media usage. For example, how often they use social media per day, which social media platforms they use the most, what they use social media for, how frequently they share their opinions via social media; and whether social media has influenced their perspective of Saudi social issues.

Social media contact with the opposite sex. Twelve questions were asked in total in relation to social media contact with the opposite sex, which is comprised of two variables: (a) relationship development and maintenance (b) communication-interaction. Six questions were asked in relation to communication-interaction. These questions asked participants to indicate on a scale of 1 (strongly disagree) to 5 (strongly agree) their level of agreement with each statement, such as: Since I started using social media networks, I noticed that my ability to communicate with the opposite sex has improved, and Using social media has made me more comfortable having conversations with members of the opposite sex. Reliability was measured at a Chronbach's alpha level of .83.

Four questions were asked in relation to relationship development and maintenance. These questions asked participants to indicate on a scale of 1 (strongly disagree) to 5 (strongly agree) their level of agreement with each statement, such as: I use social media to help me have more friends of the opposite sex, I use social media to maintain relationships with members of the opposite sex, and I use social media to help me get a date. Reliability was measured at a Chronbach's alpha level of .80.

In addition, participants were asked to indicate how many friends of the opposite sex they have because of social media. Participants were also asked to fill in the blank to the following question: I use social media to get a date with the opposite sex because I do not want to have trouble with a. my family, b. religious people, c. the government, d. other, e. not applicable. For all questions, participants were able to choose "not applicable."

Results

The results section will first discuss general social media usage in order to provide context for how respondents are using social media and what needs such use gratifies. This will be followed by the results that provide answers for our two main research questions.

General Social Media Usage

According to our findings, on average, participants use social media 1-4 hours per day (57.5%), 5-10 hours per day (32.5%), more than 10 hours a day (5%), less than 30 minutes a day (3.6%), and don't use social media everyday (1.4%). Participants ranked social media platform usage from most-used to least-used in the following order: WhatsApp, Snapchat, Twitter, Instagram, YouTube, Facebook, and Other. Their reasons for choosing to use social media are: Getting local news (71.5%), keeping in touch with family (70.1%), maintaining friendships (68.8%), getting international news (56.6%), searching for a job (37.6%), pursuing research (35.7%), making friends (33%), other (17.6%), and pursuing romance (11.8%).

In response to whether using social media has affected their point of view regarding Saudi social issues, 72.4% agree or strongly agree, 14.9% are neutral, 10.8% disagree or strongly disagree and 1.8% chose not applicable. When asked whether they share their opinions on social media, 19.9% responded never, while 80.1% share their opinions at least once a week.

Social Media Contact with the Opposite Sex

RQ1 examined how male and female Saudi students use social media for the gratification of (a) relationship development and maintenance needs with the opposite

sex; (b) communication-interaction needs with the opposite sex.

An independent sample t-test was conducted to compare the relationship development and maintenance and communication-interaction scores for males and females. For relationship development and maintenance, there was a significant difference in scores for males ($M = 9.63$, $SD = 4.16$) and females ($M = 8.38$, $SD = 3.33$; $t(209.52) = 2.47$, $p < .05$, two-tailed). The magnitude of the differences in the means (mean difference = 1.25, 95% CI : .256 to 2.54) was small (eta square = .027). The independent sample t-test demonstrates that males use social media to develop and maintain relationships with the opposite sex (such as getting more friends of the opposite sex, to maintain relationships with the opposite sex, and getting a date with the opposite sex) more than females. For example, 26.9% of males agree to strongly agree that with social media they have more friends of the opposite sex, compared to 19.5% of females. In addition, 26.2% of males agree to strongly agree that they use social media to help them have more friends of the opposite sex, compared to just 12.6% of females.

For communication interaction, there was not a significant difference in scores for males ($M = 13.48$, $SD = 5.19$) and females ($M = 13.34$, $SD = 4.87$; $t(219) = .190$, $p = .85$, two-tailed). The magnitude of the differences in means (mean difference = .133, 95% CI : -1.24 to 1.51) was very small (eta squared = .0001). The findings demonstrate that males and females do not differ in their communication-interaction (improved ability to communicate, increased interactions, communicating more comfortably with the opposite sex) with the opposite sex. For example, on average, a third of respondents agreed or strongly agreed that social media has helped with their

interaction with their communication and interaction with the opposite sex. Notably 30% of Saudi students agreed/strongly agreed that they use social media to interact more freely with the opposite sex due to Saudi tradition restrictions, while 47% disagreed/strongly disagreed.

Inside versus Outside the KSA

RQ2 examined how social media has influenced in-country and out-country Saudi students' contact with the opposite sex in terms of (a) relationship development and maintenance; (b) communication-interaction. An independent sample t-test was conducted to compare the relationship development and maintenance and communication-interaction scores for Saudi students inside versus outside the KSA.

For relationship development and maintenance, there was a significant difference in scores for inside the KSA ($M = 8.53$, $SD = 3.63$) and outside the KSA ($M = 10.30$, $SD = 4.13$; $t(219) = -3.28$, $p < .01$, two-tailed). The magnitude of the differences in the means (mean difference = -1.77 , 95% CI: -2.83 to $-.707$) was small to moderate (eta squared = $.046$). The findings demonstrate that Saudi students living outside the KSA use social media to develop and maintain relationships with the opposite sex significantly more than those living inside the KSA. For example, 31.5% of Saudi students living outside the KSA agree to strongly agree that they use social media to maintain relationships with the opposite sex, compared to 13.8% of Saudi students living inside the KSA. In addition, 32.9% of Saudi students living outside the KSA agree to strongly agree that with social media they have more friends of the opposite sex, compared to 19.3% of Saudi students living inside the KSA.

For communication-interaction, there was a significant difference in scores for

Saudi students living inside the KSA ($M = 12.54$, $SD = 4.78$) and Saudi students living outside the KSA ($M = 15.12$, $SD = 5.18$; $t(219) = -3.70$, $p < .001$, two-tailed). The magnitude of the differences in the means (mean difference = -2.58 , 95% CI: -3.95 to -1.20) was moderate ($\eta^2 = .058$). The findings demonstrate that Saudi students living outside the KSA use social media for communication-interaction with the opposite sex significantly more than Saudi students living inside the KSA. For example, 50% of Saudi students living outside the KSA agree to strongly agree that social media has made them more comfortable interacting with the opposite sex, compared to 28.3% of Saudi students living inside the KSA. In addition, 44.7% of Saudi students living outside the KSA agree to strongly agree that their ability to communicate with the opposite sex has improved since using social media, compared to 33.8% of Saudi students living within the KSA.

Discussion

The purpose of this study was to examine how Saudi students use social media to gratify needs of relationship development and maintenance and communication with the opposite sex given cultural restrictions on such activity. In particular, our study addressed two questions: RQ1: How do male and female Saudi students use social media for the gratification of (a) relationship development and maintenance needs with the opposite sex; (b) communication-interaction needs with the opposite sex? and RQ2: How has social media influenced in-country and out-country Saudi students' contact with the opposite sex in terms of (a) relationship development and maintenance; (b) communication-interaction?

First, according to our findings, males use social media for the gratification of

relationship development and maintenance needs with the opposite sex more than females. Although, social media is being used to establish relationships that may not otherwise occur in face-to-face environments due to cultural restrictions, according to Kimbrough, et al. (2013), men and women still adhere to gender role expectations even when they have the freedom to act. Therefore, even though social media provides an environment where women may participate more freely (Guta & Karolak, 2015), cultural/social norms and values may still hold strong. However, there was not a significant difference between men and women in terms of communication-interaction with the opposite sex. This may indicate that men and women are communicating and interacting with the opposite sex at a more equal rate. As previously noted, Saudi females are more comfortable interacting with the opposite sex when they know it does not go against societal beliefs (Alkahtani, 2012), such as collaborating with other students via social media, which does not go against religious or cultural values because they are not physically intermingling. However, relationship development and maintenance in our study included items such as “I use social media to help me get a date/have premarital relationships with opposite sex,” and “I use social media to maintain relationships with members of the opposite sex.” Thus, women may have felt more comfortable simply interacting with members of the opposite sex, but not developing a relationship, such as dating. According to Askool (2012), women have more concerns about social media than men due to social and cultural norms in Saudi society.

Second, our results show a statistically significant difference between Saudi citizens living abroad versus those living within the KSA regarding both developing

and maintaining relationships with the opposite sex and communication-interaction. For both variables, those living abroad had higher scores than those living within the KSA, indicating a higher use of social media to develop/maintain relationships with and communicate with the opposite sex. Most of these students were living within the U.S. or the U.K. Given that these students are living geographically separated from their family and friends, it is not surprising that they have a higher use of social media to develop/maintain relationships with and communicate with the opposite sex. It is likely that they are using social media to both keep in touch with friends and family back home and create new contacts in their new cultural environments. It could also indicate social media being used as a tool for cultural adaptation. Chi (2015) found that international students with more social relations within the community experienced fewer difficulties with acculturation. Social media has also been useful in helping people adjust to a new culture or country (Lin, et al., 2012). Therefore, it is possible that Saudi students studying abroad are using social media to not only communicate with friends and family back home, but to establish new networks of friends in their current cultural environment, including members of the opposite sex. Communicating with members of the opposite sex, such as new classmates, via social media may feel more comfortable to Saudi students studying abroad who may not yet be used to physically mingling with members of the opposite sex. For example, a study of Saudi graduate students studying abroad found gender-related differences as one of the main challenges to acculturation, such as American male students sitting next to Saudi female students (Young & Snead, 2017). Social media offers a non-physical space for these interactions to occur.

Theoretical Implications

The findings of this study expand the social integrative need within Rubin's traditional needs clusters by examining it within Saudi culture, where interaction with opposite sex outside of the family is prohibited and interaction within the family is limited. The social integrative need pertains to the need to socialize with family and friends. It includes motivations such as community building (Rafaeli & Ariel, 2008; Rafaeli, Ariel, Hayat, 2007; Hanson & Haridakis, 2008; Park, Kee, Valenzuela, 2009; Ballard, 2011), building new social contacts (Park et al., 2009; Krishnatray, Singh, Raghavan & Arma, 2009), and maintaining current social contacts (Dunne, Lawlor, & Rowley (2010). Overall, our findings demonstrate men and women use social media to gratify social integrative needs; however, not in all cases—men use social media for relationship development and maintenance needs more than women, but men and women use social media for communication-interaction needs at an equal rate. In addition, Saudi students use social media to gratify social integrative needs; however, more so under certain conditions—living outside of the KSA. Therefore, the findings indicate that Uses and Gratifications perspective should be expanded to take sex, culture and location into account.

Furthermore, Saudi student use of social media to interact with the opposite sex also points to the affordances of social media that allows for user agency. Rathanyake and Winter's (2018) expansion of Sundar and Limperos' (2013) accordance based MAIN model expands the factors of Agency, including such items as: "Social media help me to have real interactions with people although I am not in physical proximity," "Social media allow me to freely express my opinions," "Social

media allow me to freely assert my identity,” and “Social media allow me to have my say” (p.377). Furthermore, Rathanyake and Winter (2018) also include community building, which includes items such as, “Social media help me to be part of a community that I would not otherwise have been part of,” and “Social media allow me to build a network that could bring me social support” (p. 378). From this perspective, the affordances of social media may allow for more freedom for Saudi students to interact with members of the opposite sex of whom they would otherwise not have face-to-face interaction. For women in Saudi society, in particular, not being bound to physical appearance means they are freer to craft their personas according to how they see themselves, rather than how society views them. “[Saudi women] were able to articulate themselves for whom they think they really are, not whom the society wants them to be” (Guta & Karolak, 2015, p. 124). However, according to our findings, although the medium provides the tools for the interaction to occur, some may choose not to engage with the opposite sex for certain types of communication, such as establishing relationships because of cultural factors, such as Saudi females who tend to be more comfortable interacting with the opposite sex when it does not go against societal beliefs (Alkahtani, 2012), such as virtually/non-physically interacting with classmates. Furthermore, the findings of our study indicate that the location of the interaction, even via social media, which does not have a “physical space,” can influence the communication and relationship development needs with the opposite sex are gratified. Future research should examine application of affordance-based uses and gratification models within the context of culture, sex, and location.

Practical Implications

The findings of this study also have implications for practitioners. As social media expands globally, stakeholders should be aware of the impact that its use has on changing social structures. This awareness can help to appropriately design social media for certain contexts. According to Choi, Chu, and Kim (2012), design should take into consideration social interaction needs. For example, Cyworld (South Korean social media platform) reinforces exclusive relationships consistent with Korean (vertical collectivist) cultural practices of interacting with more strong ties whereas, Facebook is more liberal in accepting loose relationship formation. Our study found that male and female Saudi students tend to use social media to communicate and interact with the opposite sex more equally; however, women are not as comfortable using it for relationship development and maintenance, such as getting a date. Therefore, designers could design social media platforms to focus more on communication-interaction, such as focused discussion topics, rather than focusing on developing relationships. Furthermore, acknowledging that Saudi students living inside and outside the KSA use social media differently could also impact training provided to Saudi students studying abroad. According to Young and Snead (2017), there is a need for more support provided by university personnel and professors during the acculturation process of Saudi students studying abroad. Furthermore, social media has also been useful in helping people adjust to a new culture or country (Lin, et al., 2012). Therefore, more cultural training should be provided both during pre-departure and while studying abroad regarding host country social media practices and using social media as a tool for both keeping in touch with friends and family back

home and acculturation into the host country.

Limitations and Future Studies

The limitations of this study leave potential for future studies in this area. First, participants were asked to self-report their social media usage regarding the opposite sex. Since interaction with the opposite sex is taboo in Saudi society, although the survey was anonymous and confidential, it is possible that some participants may have downplayed their interaction or not wanted to report their interaction due to fear of negative repercussions. Second, this study specifically examines Saudi college students and may not be generalized to a larger population of Saudi social media users. Future studies should use random or systematic sampling in order to be representative of a larger population of Saudi social media users. Future studies could also follow-up on those who indicated they are using social media to interact with the opposite sex. Third, our study does not examine strategies for maintaining relationships on social media, rather we examine simply whether it is used to maintain relationships and communicate with the opposite sex. Future studies should examine in which way social media is used to maintain relationships. Fourth, future studies should examine the influence of the length of time living outside the KSA. Fifth, except for survey items that indicate the type of relationship (e.g., dating; family), whether interactions occurred with family members, friends, or romantic partners is not specified. Future studies should examine the type of relationship in which the interaction occurs. Finally, this study focused on the use of social media to gratify social integrative needs. Future studies should examine the impact of Saudi culture on other needs.

Conclusion

Overall, the findings of this study indicate that social media is being used by Saudi students to establish relationships and communication with the opposite sex that may not occur in face-to-face environments due to cultural restrictions. However, this use is influenced by one's current country of residence, where establishing and maintaining relationships and communication with the opposite sex occurs more frequently outside the KSA than inside, and males maintain and develop relationships with the opposite sex via social media more than females. Thus, although Saudi students use social media to meet their social integrative needs, they do not do so in all cases or settings. Therefore, uses and gratifications is in need of further expansion—social integrative needs should account for sex, current place of residence, and culture.

References

- Abed, S, Dwivedi, Y.K. and Williams, M.D. (2015b). SMEs' adoption of e-commerce using social media in a Saudi Arabian context: a systematic literature review. *International Journal of Business Information Systems*, 19(2), 159–179.
- Agarwal, N., Lim, M., & Wigand, R.T. (2012). Raising and rising voices in social media: A novel methodological approach in studying cyber-collective movements. *Business and Information Systems Engineering*, 4, 113-126.
- Ahmed, R.A. (2012). The Father's Role in the Arab World: Cultural Perspectives. In Shwalb, D. W., Shwalb, B. J., & Lamb, M. E. (Eds.). (2012). *Fathers in Cultural Context: Cross-Cultural Perspectives*, 122-147.
- Al-Anzi, F. (2009). *The role of the ways of thinking, partner selection criteria and some demographic variables to achieve the level of marital adjustment among a sample of Saudi society*. (Doctoral dissertation). Umm AlQura University, Mecca, SA.
- Alkahtani, N. (2012). *The Impacts of Social Media and Electronic Mediating: Improving Educational Outcomes for Saudi Women within an Electronic Social Networking Environment* (Thesis, Master of Electronic Commerce (MECom)). University of Waikato, Hamilton, New Zealand. Retrieved from: <https://hdl.handle.net/10289/6327>
- Alsaggaf, R. M. (2015). Identity Construction and Social Capital: A Qualitative Study of the Use of Facebook by Saudi Females (Doctoral dissertation, Department of Media and Communication).
- Al-Saggaf, Y. & Williamson, K. & Weckert, J. (2002). Online Communities in Saudi Arabia: An Ethnographic Study. *The Thirteenth Australasian Conference on Information Systems*, 1-13.
- al-Saggaf, Y. (2013). Males' trust and mistrust of females in Muslim matrimonial sites. *Journal of Information, Communication and Ethics in Society*, 11, 174–192.
- Alsajjan, B. & Dennis, C (2010). Internet banking acceptance model: Cross-market examination. *Journal of Business Research*, 63, 957-963.
- Alsaleem, B.I.A. (2013). The Effect of "WhatsApp" electronic dialogue journaling on improving writing vocabulary word choice and voice of EFL undergraduate Saudi students. *Arab World English Journal*, 4(3), 213-225.
- Al-Somali, S. A., Gholami, R., & Clegg, B. (2009). An investigation into the acceptance of online banking in Saudi Arabia. *Technovation*, 29(2), 130-141.
- Al-Talhi, M. & Maarop, N. (2018). Understanding social media usage by females in Saudi Arabia: A descriptive finding. *Journal of Fundamental and Applied Science*, 10(2s), 151-161.
- Alwagait, E., Shahzad, B., & Alim, S. (2015). Impact of social media usage on students' academic performance in Saudi Arabia. *Computers in Human Behavior*, 51(B), 1092-1097.
- Annual Growth of Social Media Users (2018, Jan.) *We Are Social*. Retrieved from: <https://wearesocial-net.s3.amazonaws.com/wp-content/uploads/2018/01/DIGITAL-IN-2018-008-GROWTH-IN-SOCIAL-MEDIA-USERS-V1.00.png>
- Agarwal, N., Lim, M., and Wigand, R.T. (2012). Online collective action and the role of social media in mobilizing opinions: A case study on women's right-to-drive campaigns in Saudi Arabia. *Web 2.0 Technologies and Democratic Governance*.
- Askool, S. (2012). An Investigation of Social Media Use in Saudi Arabia. *WEBIST*, 471-481.

- Bahkali, S., Almainan, A., Bahkali, A., Almainan, S., Househ, M., Alsurimi, K. (2015). The role of social media in promoting women's health education in Saudi Arabia. *Stud Health Technol Inform*, 213, 259-262.
- Bahry, L. (2008 March). Marriage advertisements in Saudi Arabia. *Middle East Institute Encounter*, 7.
- Bajnaid, A.N., & Elyas, T. (2017). Exploring the phenomena of online dating platforms versus Saudi traditional spouse courtship in the 21st Century. *Digest of Middle East Studies*, 26(1), 74-96.
- Ballard, C. (2011). What's happening @ Twitter: a uses and gratifications approach. *University of Kentucky Master's Theses*. Paper 155. Retrieved from http://uknowledge.uky.edu/gradschool_theses/155
- Brinley Bruton, F. (2017, Dec. 22). Tinder, dating and sex in Saudi Arabia—where love is a “sin.” NBC News. Retrieved from: <https://www.nbcnews.com/news/world/tinder-dating-sex-saudi-arabia-where-love-sin-n824101>
- Chaudhry, I. (2014). #Hashtags for change: Can Twitter promote social progress in Saudi Arabia. *International Journal of Communication* 8, 943–961.
- Chi, R., & Suthers, D. (2015). Assessing intercultural communication competence as a relational construct using social network analysis. *International Journal of Intercultural Relations*, 48, 108-119.
- Choi, Chu & Kim (2012). Culture-Laden Social Engagement: A Comparative Study of Social Relationships in Social Networking Sites among American, Chinese and Korean Users. In *Computer-Mediated Communication across Cultures: International Interactions in Online Environments*, p. 1-16.
- Chulov, M. (2017, Oct. 24). I will return Saudi Arabia to moderate Islam, says crown prince. *The Guardian*. Retrieved from: <https://www.theguardian.com/world/2017/oct/24/i-will-return-saudi-arabia-moderate-islam-crown-prince>
- Culnan, M. J., & Markus, M. L. (1987). Information technologies. In F. M. Jablin, L. L. Putnam, K. H. Roberts, & L. W. Porter (Eds.), *Handbook of organizational communication: An interdisciplinary perspective*, 420–443. Newbury Park, CA: Sage.
- Dunne, Á., Lawlor, M., & Rowley, J. (2010). Young people's use of online social networking sites – A uses and gratifications perspective. *Journal of Research in Interactive Marketing*, 4(1), 46–58.
- Eagly, A.H. (1987). *Sex differences in social behavior: A social-role interpretation*. Lawrence Erlbaum Associates: Hillsdale
- Elamin, A. M., & Omair, K. (2010). Males' attitudes towards working females in Saudi Arabia. *Personal Review*, 39(6), 746-766.
- Elgersma, C. (2018, June 18). Everything you need to know about Snapchat. *Phys.Org*. Retrieved from: <https://phys.org/news/2018-06-snapchat.html>
- Elnaim, B.M.E. (2013). Cybercrime in Kingdom of Saudi Arabia: The threat today and expected the future. *Information and Knowledge Management*, 3(12), 14-18.
- Godinho, V. (2020). Two-thirds of Saudi Arabia's population is under the age of 35. *Gulf Business*. Retrieved from: <https://gulfbusiness.com/two-thirds-of-saudi-arabias-population-is-under-the-age-of-35/>
- Goodwin, G.D. (2020, Nov. 3). What is WhatsApp? A guide to navigating the free internet-based communication platform. *Business Insider: Tech*. Retrieved from: <https://www.businessinsider.com/what-is-whatsapp-guide>

- Freedom on the Net (2018). *Saudi Arabia*. Retrieved from: <https://freedomhouse.org/report/freedom-net/2018/saudi-arabia>
- Ghannam, J. (2011). *Social Media in the Arab World: Leading up to the Uprisings of 2011*. Washington, DC: Center for International Media Assistance.
- Guadagno, R.E., Muscanell, N.L. (2012). Make new friends or keep the old: Gender and personality differences in social networking use. *Computers in Human Behavior*, 28, 107-112.
- Guadagno, R.E., Muscanell, N.L., & Pollio, D.E. (2013). The homeless use Facebook?! Similarities of social network use between college students and homeless young adults. *Computers in Human Behavior*, 29, 86-89.
- Guan, X., & Li, X. (2017). A cross-cultural examination of family communication patterns, parent-child closeness, and conflict styles in the United States, China, and Saudi Arabia. *Journal of Family Communication*, 17(3), 223-237.
- Guta, H. & Karolak, M. (2015). Veiling and Blogging: Social Media as Sites of Identity Negotiation and Expression among Saudi Women. *Journal of International Women's Studies*, 16(2), 115-127.
- Hanson, G. & Haridakis, P. (2008). Users watching and sharing the News: A Uses and Gratifications approach. *Journal of Electronic Publishing*, 11(3).
- Harb, Z. (2011). Arab revolutions and the social media effect. *M/C: A Journal of Media and Culture*, 14(2). Retrieved from: <http://journal.media-culture.org.au/index.php/mcjournal/article/view/364%3E>
- Househ, M. (2013). The use of social media in healthcare: organizational, clinical, and patient perspectives. *Stud Health Technol Inform*, 183, 244–248.
- Howard, P.N. & Hussain, M.M. (2011). The upheavals in Egypt and Tunisia: *The Role of Digital Media*. *Journal of Democracy*, 22(3), 35-48.
- Katz, E., Blumler, J. & Gurevitch, M. (1974). Utilization of mass communication by the individual. In J. Blumler & E. Katz (Eds.). *The Uses of Mass Communications: Current Perspectives on Gratifications Research*. Beverly Hills, CA: Sage. 19-32.
- Kemp, S. (2021). Digital 2021: Saudi Arabia. *DataReportal*. Retrieved from: <https://datareportal.com/reports/digital-2021-saudi-arabia#:~:text=There%20were%2027.80%20million%20social,total%20population%20in%20January%202021>.
- Khaddaf, I.A. (2010). 68 Percent of Saudi Girls Drop Last Name on Facebook. *Muslimah Media Watch*. Retrieved from: <https://www.patheos.com/blogs/mmw/2010/02/68-percent-of-saudi-girls-drop-last-name-on-facebook/>
- Kimbrough, A.M., Guadagno, R.E., Muscanell, N.L., & Dill, J. (2013). Gender differences in mediated communication: Women connect more than do men. *Computers in Human Behavior*, 29, 896-900.
- Krasnova, H., Veltri, N.F., Eling, N., & Buxmann, P. (2017). Why men and women continue to use social networking sites: The role of gender differences. *The Journal of Strategic Information Systems*, 26(4), 261-284.
- Krayem, Z. (2016). *The Impact of Immigration on First Generation Arab Immigrant Fathers' Parenting Practices and Role in Family*. (Doctoral Dissertation). Available from ProQuest Dissertations Publishing.
- Krishnatray, P., Singh, P., Raghavan, S. & Arma, V. (2009). Gratifications from new media. *Journal of Creative Communications*, 4, 19–31.

- Lee, C.S., Ma, L., Goh D.H.L. (2011). Why Do People Share News in Social Media? *Active Media Technology*, 6890, 129-140.
- Lin, J.H., Peng, W., Kim, M., Kim, S., & LaRose, R (2012). Social networking and adjustments among international students. *New Media & Society*, 14(3), p. 421–440.
- Lin, X., & Wang, X. (2020). Examining gender differences in people’s information-sharing decisions on social networking sites. *International Journal of Information Management*, 50, 45-56.
- Makki, E., & Chang, L. (2015). Understanding the Effects of Social Media and Mobile Usage on E-Commerce : An Exploratory Study in Saudi Arabia. *International Management Review*, 11(2), 98–110.
- Mohamed, B. & Elamin, B. (2013). Cyber Crime in Kingdom of Saudi Arabia: The Threat Today and the Expected Future. *Journal of Information & Knowledge Management*, 3.
- Moore, C.M., & Chuang, L.M. (2017). Redditors Revealed: Motivational Factors of the Reddit Community. *Proceedings of the 50th Annual Hawaii International Conference on System Sciences*, Computer Society Press.
- Northam, J. & Tanis, F. (2018, June 4). Hooking up gets easier to do in Saudi Arabia. NPR: Morning Edition. Retrieved from:
<https://www.npr.org/sections/parallels/2018/06/04/615843528/hooking-up-gets-easier-to-do-in-saudi-arabia>
- Park, N., Kee, K. M., Valenzuela, S. (2009) Being Immersed in Social Networking Environment: Facebook Groups, Uses and Gratifications and Social Outcomes. *Cyberpsychology & Behavior*, 12(6).
- Pew Research Center (Feb. 2021). Social Media Fact Sheet. *Pew Research Center: Internet and Technology*. Retrieved from: <https://www.pewresearch.org/internet/fact-sheet/social-media/?menuItem=45b45364-d5e4-4f53-bf01-b77106560d4c>
- Radcliffe, D. (2016). Social Media in the Middle East: The Story of 2016 Top trends and data from the past 12 months. University of Oregon: Scholar’s Bank. Retrieved from:
<https://scholarsbank.uoregon.edu/xmlui/handle/1794/22839>
- Radcliffe, D., & Bruni, P. (2019). State of social media: Middle East: 2018. *University of Oregon: Scholar’s Bank*. Retrieved from:
<https://scholarsbank.uoregon.edu/xmlui/handle/1794/24301>
- [Rafaeli, S. & Ariel, Y. \(2008\) Online motivational factors, incentives for contribution and participation in Wikipedia. In A Barak \(Ed.\) *Psychological Aspects of Cyberspace: Theory, Research, Applications*. Cambridge University Press.](#)
- [Rafaeli, S., Ariel, Y., & Hayat, T. \(2007\). Virtual Knowledge-Building Community & Users' Incentives: The Wikipedia Case. *Conference Papers – International Communication Association, 1*.](#)
- Rathnayake, C. & Winter, J.S. (2018). Carrying forward the uses and grats 2.0 agenda: an affordance-driven measure of social media uses and gratifications. *Journal of Broadcasting & Electronic Media*, 62(3), 371-389.
- Rothwell, G. (2020). Perceptions of Snapchat as an Asynchronous Educational Discussion Platform. *International Journal of Multidisciplinary Sciences and Advanced Technology*, 1(3), 24-34.
- Rubin, A. M. (1986). Uses, gratifications, and media effects research. In J. Bryant & D. Zillmann (Eds.), *Perspectives on Media Effects*, 281–301. Hillsdale, NJ

- Ruggiero, T. (2000). Uses and gratifications theory in the 21st century. *Mass Communication and Society*, 3, 3–37.
- S. B. (2015). The Economist explains: Why Saudis are ardent social media fans. *The Economist*. Retrieved from: <http://www.economist.com/blogs/economist-explains/2015/03/economist-explains-21>
- Samin, N. 2012. “Saudi Arabia, Egypt, and Social Media Moment.” *Arab Media & Society*, 15. Retrieved from: <http://www.arabmediasociety.com/?article=785>
- Sanders, J. L. (1986). Egyptian and American university students’ attitudes toward parents and family. *Journal of Social Psychology*, 126, 459–463.
- Saudi Arabia: New Counterterrorism law enables abuse (2017, Nov. 23). *Human Rights Watch*. Retrieved from: <https://www.hrw.org/news/2017/11/23/saudi-arabia-new-counterterrorism-law-enables-abuse>
- Saudi social media users ranked 7th in world (2015). *Arab News*. Retrieved from: <http://www.arabnews.com/saudi-arabia/news/835236>
- Shalhoub, L. (2019). How Saudi’s ‘new direction’ is changing life for women like me. *BBC News: Middle East*. Retrieved from: <https://www.bbc.com/news/world-middle-east-49208737>
- Statista Research Department (August, 2020). Social network user penetration in Saudi Arabia from 2017 to 2023. *Statista*. Retrieved from: <https://www.statista.com/statistics/553656/mobile-messaging-user-reach-saudi-arabia/>
- Stranger, N., Alnaghaimshi, N., & Pearson, E. (2017). How do Saudi Youth Engage with Social Media? *First Monday: Peer-Reviewed Journal on the Internet*. 22(5). Retrieved from: <https://firstmonday.org/article/view/7102/6101#fig1>
- Sundar, S. & Limperos, A. (2013) Uses and Grats 2.0: New Gratifications for New Media. *Journal of Broadcasting & Electronic Media*, 57(4), 504-525.
- Taylor, C. and Albasri, W. (2014) The Impact of Saudi Arabia King Abdullah’s Scholarship Program in the U.S. *Open Journal of Social Sciences*, 2, 109-118.
- Economic and Social Research Council. (2021). What is Twitter and why you should use it. What is Twitter and why should you use it? Retrieved from: <https://esrc.ukri.org/research/impact-toolkit/social-media/twitter/what-is-twitter/>
- Wilkinson, D. (2015). Saudi Arabia updates cybercrime law to include “naming and shaming” penalty. *The Norton Rose Fulbright Data Protection Report*. Retrieved from <http://www.dataprotectionreport.com/about/>
- Young, B.N., & Snead, D. (2017). Saudi Arabian International Graduate Students’ Lived Experiences at a U.S University. *Journal of Learning in Higher Education*, 13(2), 39-44.