

# Religiosity and the Perceived Consequences of Social Media Usage in a Muslim Country

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## ABSTRACT

This study sought to examine the relationship between religiosity and psychological consequences of social media usage in a Muslim country based on secularization theory. Using a sample of college undergraduates, a survey was conducted which included measures of religiosity and a host of psychological outcomes, both positive and negative. Results showed that religiosity is negatively related to viewing social media as an alternative to face-to-face interaction, feelings of self-confidence, panic. There were significant gender differences in four of the five dependent variables. The results are largely consistent with secularization theory in that religiosity shielded individuals from negative consequences of social media usage while providing an alternative for positive ones.

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## Introduction

The Internet has altered the character of human social interaction in such a manner so as to allow us to connect with many individuals. Boyd and Ellison (2008) explain that since their appearance, social networking sites (or SNS) have drawn millions of users who have integrated these sites into their daily practices. Wilson et al. (2009) suggest that SNS have come to play such a significant role in enabling communication and relationship building for many individuals, in particular young people, that it would be crucial to investigate the various factors that influence their usage.

The advent of the mobile phone has had a massive impact on the way people communicate around the globe. Through the use of these devices people are not tied to landlines any longer and are free to call anyone, anytime, anywhere. The addition of smartphones and other online mobile devices such as the tablet brought about the added value of mobile Internet usage. Coupled with social media applications this technology enabled people to use SNS on the go, from any location around the hour. Zichkur and Smith (2012) report that 46 percent of Americans use smartphones, with reasons for using them including convenience, nonstop access to email, Internet, gaming, camera, texting and making phone calls.

## Religiosity and the Internet

As a cultural system, religion needs to be viewed in the framework of technology adoption and Internet usage patterns, since we can easily fail to notice that it permeates almost all aspects of life with its related practices (Hirschman 1983). Rather than the general propensity to view technology adoption, media usage and religion separately, the interplay between the medium adopted and religion need to be considered jointly for a wider and deeper appreciation of the interaction between the two (Buddenbaum, 2002). The relationship between religiosity and communication technology as an empirical concern is a complex and multi-dimensional as there remains a perceived inherent conflict between science and religion with their opposing and mutually exclusive world views (Brossard et al, 2009).

It is important to recognize the distinction between religion (a person's religious denomination) and religiosity (the strength of a person's religious observance, as signified by their observance of their religion's rituals, and the extent to which their daily life is guided by the precepts adopted by their religion). Religion can be a highly powerful force guiding moral behavior and deterring religious people from taking part in many socially undesirable activities (Durkheim, 1912/1995). Studies consistently report religiosity as playing a key role in deterring smoking, use of drugs and other addictive substances, and promiscuous sexual behavior (Koenig et al, 2001; Wallace et al, 2003; Dunn, 2005; Weaver et al, 2005). This may be due to religion's normative function with the above behaviors being counter to the norms of religious groups of

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which an individual is a member. In addition, religion has an integrative function in the form of social support coming from the religious group which the individual belongs to. This support acts as an alternative to the aforementioned behaviors as anxiety-reducing mechanisms (Hood et al, 2009). Therefore, the more highly attached people are to the values of their religion and the more integrated they are into their religious community (i.e, the greater their religiosity is), the less susceptible they are to various chemical and behavioral dependencies.

Secularization theory, as posited by Weber (1958), suggests that increased Western emphasis on rational thought, scientific empiricism and technical progress over the past 400 years have led to a steady decline of mysticism and religion as valid world views about the nature of things (Swatos&Christiano, 1999). Utilizing secularization theory as a framework, Armfield and Holbert (2003) argued the strength of religiosity should be negatively related to Internet use because the content found on the web is largely secular in nature and non-representative of religious values. The findings based on US survey data were consistent with this hypothesis.

Secularization theory is one of the principal paradigms in the study of mass media and religion (Buddenbaum& Stout, 1996) and provides the base for the work in this study. This theory suggests that attachment to strong religious beliefs reflects a lifestyle that is traditional in nature, and that this life style is coming under mounting attack from rising secularism that is spreading across the world (Swatos & Christiano, 1999). All types of mass media are hypothesized to reflect the move toward increasing secularization, presenting a largely secular picture of the world we inhabit. As a result, strong religious beliefs correlate negatively to all forms of mass media use because the overwhelming majority of media content does not reflect traditional religious values. This argument is consistent with the personal identity function delineated in uses and gratifications perspective (e.g. Blumler, 1979), which postulates that individuals often turn to media to reinforce some preexisting norm or value structure and stay away from media channels that do not reflect their values.

The present study sought to extend Armfield and Holbert's (2003) work by considering whether young adults with greater religious profile differ from those who are the opposite in terms of the perceived consequences of social media usage. Do religious individuals view the positive and negative outcomes of social media usage in the same ways as less religious ones? Based on secularization theory one would expect religious people to suffer less from the negative aspects of social media usage while viewing positive features as inconsequential or unimportant to them.

There are several findings in Western societies that are consistent with secularization theory. Conservative religious beliefs were found to be negatively related to the viewing of sexual or violent television content (Atkin 1985; Hamilton& Rubin 1992) and cyberpornography (Stack et al, 2004; Smith & Denton, 2005). There is also evidence that religiosity is negatively correlated with time spent on entertainment. For instance, religious American youth watch less television and play fewer video games (Thomsen &Rekve, 2003; Smith & Denton, 2005). Similarly, religiosity is negatively related to Internet addiction (Meerkek et al, 2006). As indicated by Young's (1998a) Internet addiction criteria, many Internet activities (e.g. online gaming, chatting, tweeting) are also possibly addictive because they facilitate psychological escape from everyday worries. Based on clinical observations Young (1998b) concludes that a desire for escape is usually the primary reason of Internet addictions. According to Charlton et al. (2013) the need for escape might be less among highly religious individuals for the following reasons: First, their lifestyle exposes them less to potential stressors. Second, where stressors are present, the belief in supernatural support might act as a buffer. Third, religious people can rely on greater social support from their religious communities in accordance with the integrative function of religion (Hood et al. 2009). It is not surprising then that religiosity is positively related with a host of indicators of mental health, including reduced anxiety and depression, and higher self-esteem and self-control (Blaine et al. 1998). Thus, religiosity may protect against social media related negative outcomes such as anxiety, depression and social isolation.

### **Islam and Social Media Usage**

Barzilai and Barzilai-Nahon (2005) argue that the Internet is a 'cultured technology' meaning that the Internet, and by extension social media, shape and are shaped by the culture in which it is being used. This view acknowledges that the Internet is a technology that frames the cultural landscape by means of complex

social and value-construction processes. Understanding the religious culture is significant to those who aim to explain the values of different Internet cultures.

With the rise in religious fundamentalism comes a reaction to globalization and technology (Campbell, 2005). The Internet is viewed by Muslims as largely a reflection of Western values and beliefs. There is fear in the Islamic world of the loss of its own identity due to the overwhelming amount of western content transmitted through the Internet. Some religious establishments view the Internet as a western tool intended for the destruction of the traditional values of Islam. The practice of free speech enabled by the Internet results in what is considered by religious authorities as undermining the hierarchical structure of ethics and morality that lies at the heart of traditional religion (Spigelman, 2000).

In spite of the numerous theoretical attempts to ground the relationship between the religion of Islam and Internet usage, there is little empirical research done in predominantly Muslim societies. In the present study, I will attempt to enhance our understanding of social media usage and religiosity as it pertains to Islam. Unlike some Muslim countries, the practice of Islamic rituals in Kuwait is not enforced on the populace. However, it can be argued that the country is largely Conservative, and the practice of Islamic rituals is widespread among the population. On the other hand, Kuwait has one of largest social media penetration in the Arab world with 1 in every 3 people having a Twitter account according to one source (MEPRA 2013). This high level of social media usage coupled with conservative religious values compels us to examine the interplay between social media and religion. This will hopefully allow us to understand how the social media experience is shaped by the culture in which it is used as posited in the concept of 'cultured technology' (Barzilai and Barzilai-Nahon, 2005).

### **Research objectives**

The general aim of this study is see whether there are differences between religious and non-religious persons in terms of their perceived consequences of social media usage. It is a preliminary empirical test of secularization theory as outlined by Buddenbaum and Stout (1996) and the 'cultured technology' hypothesis proposed by Barzilai and Barzilai-Nahon (2005). Specifically, we seek to answer the following research questions:

RQ1: Is religiosity related to viewing social media as an alternative to face-to-face interaction?

RQ2: Is religiosity related to having more self-confidence using social media compared to face-to-face interaction?

RQ3: Is religiosity related to feelings of anxiety from loss of access social media?

RQ4: Is religiosity related to feelings of panic stemming from losing one's mobile

RQ5: Is religiosity related to spending less time with family due to social media usage?

### **Method**

#### **Sample**

A self-administered survey questionnaire was used for this study. Because young people constitute the core users of social media, the data were collected from a sample of purposively selected college students. College students enrolled in coursework in mass communication at a large state university in Kuwait were asked to participate in this study. The questionnaires were distributed over a period of three months starting in March 2013. The total sample size was 808. Arabic was the language used in the questionnaire.

Students were assured of anonymity and confidentiality, and participation was voluntary. The age of the participants ranged from 18 to 39 with 93% ranging between 18 to 25 years of age. The mean age of the participants in the study was 21 years. The participants were 239 (29.6%) male and 569 (70.4%) female. This gender distribution reflects the enrollment profile of the university student body which is 70% female. Since this is a state university, the overwhelming majority were Kuwaiti nationals by law so there was no need to record nationality. Finally, given the makeup of the sample, it is safe to assume that the overwhelming majority of respondents are of the Muslim faith.

The self-administered questionnaires were distributed during regularly scheduled class sessions. The instrument consisted of both Likert scale questions used to measure the individual's perceptions, attitudes

and behaviors as well as demographic questions and questions about media use patterns. All questions were in Arabic (see Almenayes, 2014).

### **Independent Variables**

#### **Religiosity**

Respondents were asked three questions which represent practices of the Muslim faith. The first question was about the number of times a respondent performed prayer in a mosque per week. The response options ranged from zero (never) to 7 (daily). The second question was about the number of times the respondent "Omra", the small pilgrimage to Mecca. The responses ranged from zero (never) to 7 (7 or more). Finally, respondents were asked about the number of verses they memorized from the Quran, the holy book of Islam. The responses ranged from zero (none) to 7 (seven or more). A summative index was created by adding up the result of all three questions to represent the variable "religiosity." The score ranges between 0 and 22 with a mean of 5.34 and a standard deviation of 4.17.

#### **Gender**

Gender was recorded as a dummy variable with males receiving 0 and females 1. Gender is used here mainly as a control variable because I wanted to remove its possible effect on religiosity. Religiosity, as measured here, is based on practices that are by and large reserved for males. For example, females don't normally attend mosque for prayer, they usually pray at home. Without controlling for gender, it may very well appear that men are more religious than women just because they are not restricted from attending mosque. Therefore, it was decided to remove the effect of gender by entering it as a control variable.

#### **Hours Spent Using Social Media per Day**

Respondents were asked a single question about the total number of hours spent using social media daily on an eight point scale: (1) less than two hours, (2) from two to 4 hours, (3) from 4 to 6 hours, (4) from 6 to eight hours, (5) from eight to 10 hours, (6) from 10 to 12 hours, (7) from 12 to 14 hours, (8) more than 14 hours.

### **Dependent Variables**

All dependent variables were measured using a Likart scale in response to a statement on five points ranging from "strongly agree" (5) to "strongly disagree" (1).

#### **Social media as alternative to face-to-face interaction**

The corresponding statement for this variable reads: "To me, social media have become an alternative to face-to-face interaction with others."

#### **Self-confidence**

The corresponding statement for this variable reads: "I feel more confident when I communicate with others through social media compared to face-to-face interaction."

#### **Anxiety**

The corresponding statement for this variable reads: "I feel anxious when my social media are down due to malfunction from the mother company."

#### **Panic**

The corresponding statement for this variable reads: "I will panic if I suddenly discovered that I lost my mobile."

#### **Spending less time with family**

The corresponding statement for this variable reads: "My usage of social media made me spend less time with my family compared to the past."

## **Results**

### **Research question 1**

RQ1 asked if religiosity is related to viewing social media as an alternative to face-to-face interaction. Hierarchical regression analysis was used to examine this question. The results are summarized in table 1. The first block includes gender and the second and third blocks include religiosity and time using social media respectively. Each block was entered after controlling for gender. The time spent using social media was included to measure its independent effect regardless of religiosity.

As table 1 shows there were significant differences between males and females in finding social media an alternative to face-to-face interaction with females more likely to view social media as an alternative than males ( $\beta = .129, p < .001$ ). Religiosity is negatively related to this variable regardless of gender ( $\beta = -.074,$

p<.05). This suggests that the more religious a person is, the less likely they will view social media as an alternative to face-to-face interaction. The time spend using social media, on the other hand, was a positive predictor of the dependent variable ( $\beta = .119$ ,  $p<.001$ ). This suggests that the more time one spends using social media the more likely they will view it as an alternative to face-to-face interaction.

**Table 1: Regressing Alternative to Face-to-Face on Gender, Religiosity and Time Spent Using Social Media**

Variable	B	SE B	$\beta$	T
<b>Block 1</b>				
<b>Gender</b>	.332	.089	.129	3.63**
<b>Block 2</b>				
<b>Religiosity</b>	-.020	.011	-.074	-1.90*
<b>Block 3</b>				
<b>Time Spent</b>	.062	.018	.119	3.40**

Note: For block 1,  $R=.129$ ,  $R^2=.017$ ,  $F=13.20^{**}$ ,  $df=1$ . For block 2,  $R=.145$ ,  $R^2=.021$ ,  $F=8.44^{**}$ ,  $df=2$ . For block 3,  $R=.177$ ,  $R^2=.031$ ,  $F=13.01^{**}$ ,  $df=2$ . \* $p<.05$ , \*\* $p<.001$

**Research question 2**

RQ2 asked if religiosity is related to feeling more confident using social media compared to face-to-face interaction. The regression analysis in table 2 indicates that females are more likely than males to feel more confident using social media ( $\beta = .170$ ,  $p<.001$ ). More interestingly, religiosity is negatively related to the dependent variable ( $\beta = -.074$ ,  $p<.05$ ). This finding suggests that individuals who are religious are less likely to feel that social media gives them more confidence compared to face-to-face interaction. Time spent using social media had no significant effect on the dependent variable.

**Table 2: Regressing More Confidence on Gender, Religiosity and Time Spent Using Social Media**

Variable	B	SE B	$\beta$	T
<b>Block 1</b>				
<b>Gender</b>	.437	.090	.170	4.84**
<b>Block 2</b>				
<b>Religiosity</b>	-.021	.011	.074	-1.92*
<b>Block 3</b>				
<b>Time Spent</b>	.024	.019	.044	1.26

Note: For block 1,  $R=.170$ ,  $R^2=.029$ ,  $F=23.48^{**}$ ,  $df=1$ . For block 2,  $R=.183$ ,  $R^2=.034$ ,  $F=13.63^{**}$ ,  $df=2$ . For block 3,  $R=.175$ ,  $R^2=.031$ ,  $F=12.6^{**}$ ,  $df=2$ . \* $p<.05$ , \*\* $p<.001$ .

**Research question 3**

RQ3 asked if religiosity is related to feelings of anxiety due to social media interruption. Table 3 shows that there are significant differences between males and females on this variable with females more likely to feel agitated due to social media interruption. Religiosity, our main variable of interest, was not a significant predictor of anxiety suggesting that there are no differences between religious individuals and others on this variable. Heavy users of social media, on the other hand, are far more likely to feel anxious than light users when the service is interrupted ( $\beta = .240$ ,  $p<.001$ )

**Table 3: Regressing Agitated by Service Interruption on Gender, Religiosity and Time Spent Using Social Media**

<i>Variable</i>	<i>B</i>	<i>SE B</i>	$\beta$	<i>T</i>
<b>Block 1</b>				
<b>Gender</b>	.296	.086	.121	3.42**
<b>Block 2</b>				
<b>Religiosity</b>	-.007	.010	-.026	-.670
<b>Block 3</b>				
<b>Time Spent</b>	.123	.018	.240	7.01**

*Note: For block 1, R=.121, R<sup>2</sup>=.015, F=11.73\*\*, df=1. For block 2, R=.124, R<sup>2</sup>=.015, F=6.08\*\*, df=2. For block 3, R=.265, R<sup>2</sup>=.070, F=30.33\*\*, df=2. \*p<.05, \*\*p<.001.*

**Research question 4**

RQ4 addressed the relationship between religiosity and feelings of panic if one lost his or her mobile phone. Panic in this context is taken as a proxy measure for dependence on the medium. Based on secularization theory we would expect religious individuals to be less dependent on mobile media than the less religious. Table 4 shows that religiosity is a negative predictor of feeling of panic ( $\beta = -.172, p<.001$ ). This means that religious individuals are less likely to panic if they found that their phone is missing. Conversely, heavy users of social media are far more likely to panic if their phone is missing ( $\beta = .167, p<.001$ ).

**Table 4: Regressing Panic if Lost Mobile on Gender, Religiosity and Time Spent Using Social Media**

<i>Variable</i>	<i>B</i>	<i>SE B</i>	$\beta$	<i>T</i>
<b>Block 1</b>				
<b>Gender</b>	.439	.066	.230	6.61
<b>Block 2</b>				
<b>Religiosity</b>	-.036	.088	-.172	-4.56**
<b>Block 3</b>				
<b>Time Spent</b>	.067	.014	.167	4.91**

*Note: For block 1, R=.230, R<sup>2</sup>=.053, F=43.71\*\*, df=1. For block 2, R=.278, R<sup>2</sup>=.077, F=32.82\*\*, df=2. For block 3, R=.283, R<sup>2</sup>=.080, F=34.98\*\*, df=2. \*p<.05, \*\*p<.001.*

**Research question 5**

RQ5 asked if there is a relationship between religiosity and time spent with family members. Based on secularization theory we would expect more religious individuals not to sacrifice family time for the benefit of using social media. Table 5 shows that there is no significant relationship between religiosity and time spent with family. However, time spent using social media is a strong predictor of spending less time with family ( $\beta = .212, p<.001$ ). This means that the time spent using social media comes at the expense of family time. In addition, there were strong gender differences with females more likely to spend less time with family than males ( $\beta = .087, p<.001$ ).

**Table 5: Regressing Less Time for Family on Gender, Religiosity and Time Spent Using Social Media**

<i>Variable</i>	<i>B</i>	<i>SE B</i>	$\beta$	<i>T</i>
<b>Block 1</b>				
<b>Gender</b>	.212	.086	.087	2.45**
<b>Block 2</b>				
<b>Religiosity</b>	.005	.010	.021	.525
<b>Block 3</b>				
<b>Time Spent</b>	.109	.018	.212	6.15**

*Note: For block 1, R=.087, R<sup>2</sup>=.008, F=6.00\*\*, df=1. For block 2, R=.089, R<sup>2</sup>=.008, F=3.13\*, df=2. For block 3, R=.237, R<sup>2</sup>=.056, F=23.91\*\*, df=2. \*p<.05, \*\*p<.001.*

## **Discussion**

This study, with the guidance of secularization theory, sought to find out whether young adults with greater religious profile differ from those who are the opposite in terms of the perceived consequences of social media usage. It sought to answer the general question of whether religious individuals view the positive and negative outcomes of social media usage in the same ways as less religious ones. Based on secularization theory one would expect religious people to suffer less from the negative aspects of social media usage while viewing positive features as inconsequential or unimportant to them.

Results showed that religious individuals are less likely to substitute online interaction for face-to-face interaction. This is consistent with secularization theory which suggests that people with strong traditional religious beliefs are likely to shun online media in favor of strong social relations with like-minded individuals and social groups (Hood et al. 2009). Results also show that heavy social media users are far more likely to forgo face-to-face interaction in favor of online interaction using social media. This is truer for males than females. This may be a product of the fact that females in a traditional Muslim society are more restricted than males in social life especially when it comes to face-to-face interaction with members of the opposite sex. Social media in this context remove this restriction allowing females to interact in real time with anyone they wish to contact.

Females felt more self-confident using social media compared to face-to-face interaction. Once again, this could be the result of living in a traditional society where females are not accustomed to interacting with people they don't know, especially from the opposite sex. However, religious people felt no such increase in self-confidence when using social media. This could be a result of the strong social ties they enjoy which involves frequent social interactions leading to increased self-confidence in face-to-face situations. This finding is consistent with the general tenants of secularization theory which predicts that religious people will have strong social ties in their communities boasting qualities such as self-esteem and self-confidence.

Secularization theory predicts that religious individuals are less likely to depend on mass media, including social media, to fulfil their needs. Less religious people, on the other hand, use mass media more and as such are more reliant on them to fulfil their needs. One would expect then that a person who is reliant on a medium will experience more anxiety should he or she lose access to this medium. The study results show that more religious individuals are less likely to experience panic if they lose their mobile device which gives them access to social media. This is consistent with secularization theory which suggests that individual with strong religious beliefs will shun mass media due to their secular content and, as such, they are less reliant on it.

Finally, religiosity made no difference in terms of time spent with family. This suggests that both religious and non-religious individuals spend more or less time with their families. What predicted time spent with family was time spent with social media. It appears that social media displace time spent with family. In other words, time spent using social media comes at the expense of time spent with the family and not work or study time. In the latter context (e.g., the classroom) the environment is structured and strict rules are enforced which disallow any extraneous activities outside the task at hand. So, this forces the individual to allocate time from home to devote to social media.

## **Limitations and recommendations**

There are several limitations that might influence the generalizability of these findings. First, the cross-sectional data employed in this study do not warrant a claim of any causal relationships between the independent and dependent variables. Moreover, the sample which had female to male ratio of 2:1 could skew the results by showing more variance in the former compared to the latter. In fact, all results which showed gender differences were in favor of females. Perhaps a quota sample with equal numbers of males and females should have been used to insure that we don't get gender differences because of the uneven distribution.

Second, the main independent variable "religiosity" was based on self-reports of the practice of religious rituals that are largely restricted to males such as performing prayer in the mosque. Since our sample is overwhelmingly female (74.4%) the results could be skewed. For example, the range of the variable is 0-22 and the mean is 5.34 indicating that the sample as a whole is less religious. If the distribution was normal

the mean should be closer to 10. This, once again, could be an artifact of the sample composition which is predominantly female. An attempt to correct this was done by entering gender as a control variable in the regression. However, the results should be interpreted with caution.

Third, the operationalization of some constructs might limit the scope of the study. All social and psychological variables in addition to the main independent variable were based on self-reports. For example, the variable "time spent using social media" was measured by asking participants how much time they spend using social media on a typical day. Even though this question measures usage time accurately, uncertainty remains as to whether users are active all the time they are logged on to a specific application. Heavy and light users can be better analyzed in future studies by inquiring how many messages are sent or received each day.

Forth, the operationalization of typical social media use provided a viable empirical portrait to examine the research questions, but might not precisely reflect the complexity of an individual's use patterns. It is probable that each individual uses several social media functions (e.g. Chat, post pictures, audio or video) each day. Researchers would benefit from developing tools for capturing the complexity of social media and user patterns.

Finally, the fact that data collected for this study of social media was limited to college students' use should be taken into consideration. Only investigating college students' social media usage might not completely explain the electronic social networking behavior. Future researchers are also strongly encouraged to attempt to replicate these findings by analyzing users of different social media platforms (e.g. Twitter, Instagram...etc.) separately to account for the different features they provide (see Almenayes, 2014).

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