

SOCIAL NETWORKING SITE USE IN TWO DISTINCT CULTURES: DIFFERENCES IN SELF-PRESENTATION

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ABSTRACT

The popularity of social networking sites continues to grow worldwide with varying acceptance in different regions. This study examines culture and gender effects on SNS use by comparing users from Saudi Arabia, a culture known for conservative religious values, to users from the United States, an individualistic culture.

INTRODUCTION

Social networking sites such as Facebook, MySpace and Twitter have become commonplace in today's Internet world. However, one observed phenomenon is the way in which these SNSs grow in some areas more than others. This study compares the perceptions of Facebook users from different regions and attempts to answer questions about the varying acceptance of this SNS. Facebook users in Saudi Arabia, a conservative and religious culture with over 3.2 million Facebook users (Facebook Press Release; CITC, 2010) were surveyed. An identical study was also conducted in the United States (US), a more individualistic culture. The study will try to determine what differences may exist in the effect of the two distinct cultures on SNS adoption and use.

A significant number of studies on SNS use have been carried out in the US (Lin & Bhattacharjee, 2010; Lin et al, 2005; Shi et al, 2010; Sledgianowski & Kulviwat, 2009), but there are relatively few studies that have been completed in Saudi Arabia (Al-Saggaf, 2011). This paper will attempt to fill this gap in the literature by examining the impact of gender on both Saudi and US users' intentions to use an SNS. We begin by reviewing the literature concerned with culture and adoption of information technology (IT) in a diverse culture such as Saudi Arabia. Next we propose a model of SNS adoption based on a synthesis of the theory of reasoned action (TRA) and the IT-culture conflict, and describe the methodology employed in the study. Finally, we discuss the analysis of the data, and conclude with a discussion of the results and implications for both literature and practitioners.

BACKGROUND AND LITERATURE REVIEW

Culture

The concept of culture and its relation to IT use in both the US and Saudi Arabia can be illustrated by the review of culture in information systems (IS) research (Leidner & Kayworth, 2006). The importance of noting the difference in cultural dimensions stems from the fact that culture will influence the design of any information technology system. Culture in this study is defined as a subset of the cultural national values previously defined by Hofstede (1980). From this research we can conclude that national culture has a significant effect on how IT is diffused. Recognizing the contrast between Arab (collectivistic and high-context) and US cultures (individualistic and low-context) helps us develop an understanding of the cultural influence on the adoption and use of information systems. (Hall, 1976; Hill et al, 1998).

The current research examines Facebook, currently one of the most popular SNSs. An SNS can be defined as “web sites that allow people to stay connected with other people in online communities” (Kim et al, 2009). Previous studies highlight the importance of investigating behaviors that are associated with the adoption and use of SNSs (Tufekci, 2008; Sledgianowski & Kulviwat; 2009). The next step is to clearly identify which factors can be generalized across cultures and which are culture-specific.

Gender

Research on the effect of gender in the adoption and use of information systems has been conflicting (Johnson; 2010; Venkatesh et al, 2003; Al-Gahtani, 2008; Baker et al, 2007; Glass & Li, 2010). Furthermore, culture can have an impact on the ways in which gender affects the use of IT. Issues related to Saudi females being restricted from internet use have been reported in previous studies (CITC 2007, 2010). This point illustrates how Saudi culture can control the use of IT through regulating access to the Internet, specifically for females, who fear bad reputation is associated with internet use (Uthman, 2009).

Social psychology literature has shown the importance of gender roles in examining behavior based on gender (Eagly and Karau, 1991). As the current study is also investigating the effect of culture, it is thought that the intention to use an SNS will be significantly different among male and female users in both the US and Saudi Arabia. The current study evaluates the effect of gender and culture as interaction variables, with nationality or country considered to be a direct indicator of culture as proposed by Hofstede’s (1980) cultural dimensions.

CONCEPTUAL MODEL AND HYPOTHESES

Behavioral Intention – Intention to Use and Self-Presentation Beliefs

The proposed research model is based on the Theory of Reasoned Action (TRA) originally proposed by Ajzen & Fishbein (1973) in social psychology. TRA posits that behavioral intentions are influenced by both attitudes and social norms. In the context of the current study, behavioral intention is examined in the context of the intention to use an SNS. In the two distinct cultures being investigated in this study, it is expected that both culture and gender will have a significant interaction effect on the intention to use an SNS.

Because using an SNS involves the controversial function of sharing personal photos, it is expected that particular behavior should be investigated separately through the concept of self-presentation (Tufecki, 2008). Self-presentation refers to the public image one projects to others including sharing photos. Therefore, it is expected that self-presentation beliefs, or the sharing of personal photos, will also be significantly affected by the interaction of both culture and gender.

Attitude toward Behavior

As mentioned above, attitude toward behavior stems from an individual's feelings (either positive or negative) regarding engaging in a specific behavior. It also takes into account a person's belief regarding the related consequences occurring from that specific behavior. Considering the current study is investigating the intention to use an SNS in two distinct cultures, it is expected that attitude will have a significant effect on the behavioral intention to use an SNS. Therefore, the following hypotheses are presented:

H1: Attitude will have a positive relationship with a user's intention to use the SNS.

H2: Attitude will have a positive relationship with self-presentation beliefs.

Social Norms

Social norm stems from an individual's perception of whether people important to that person think the behavior should be performed and should also include the weight of the motivation to comply (Ajzen & Fishbein, 1973). What is accepted and even expected by the community which the individual values is therefore thought to have an impact on the individual's opinions regarding the behavior and thus, the likelihood of the individual to perform that specific behavior. For the purposes of this study, social norm is defined as an individual's perception of whether people important to the individual think they should use Facebook. Therefore, we present the following hypotheses:

H3: Social Norms will have a positive relationship with intention to use the SNS.

H4: Social Norms will have a positive relationship with self-presentation beliefs.

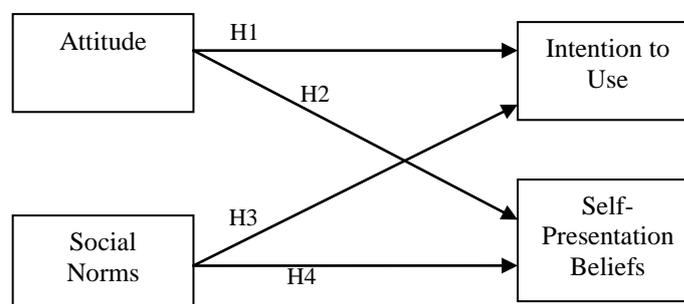


Figure 1 Proposed Research Model

METHODOLOGY

The data for this study were collected in two phases. An online survey in English was first administered to undergraduate students at a large university in the Southwestern United States. The survey was then translated into Arabic, verified independently by two Arabic scholars and distributed online to both Saudi students at an American University and to Saudi Facebook groups. We received a total of 260 responses (131 US and 129 Saudi).

The survey consisted of previously validated scales for the following constructs: attitude, social norms and intention to use. They were adapted for this study as necessary. A developmental scale was used for the construct of self-presentation beliefs. Questions related to sharing personal photos were used to evaluate self-presentation beliefs. Seven-point Likert scales were used to measure the perception items in the survey. Demographic data were also collected from both groups and the descriptive statistics for our samples are presented in Tables 1 and 2. These statistics do not reveal any significant differences between US and Saudi respondents.

US Descriptive Statistics			
Gender	%	Use Real Name	%
Male	63%	Yes	95%
Female	37%	No	5%
Facebook Use			
Have account	91%		
Don't have account	9%		
Last use of Facebook		Age	
Within last 24 hrs	80%	Average	26 yrs
Past week	18%	Maximum	53 yrs
Past month	2%	Minimum	19 yrs

Table 1. United States descriptive statistics

Saudi Descriptive Statistics			
Gender	%	Use Real Name	%
Male	46%	Yes	95%
Female	54%	No	5%
Facebook Use			
Have account	98%		
Don't have account	2%		
Last use of Facebook		Age	
Within last 24 hrs	89%	Average	28 yrs
Past week	9%	Maximum	58 yrs
Past month	2%	Minimum	18 yrs

Table 2. Saudi Arabia descriptive statistics

DATA ANALYSIS

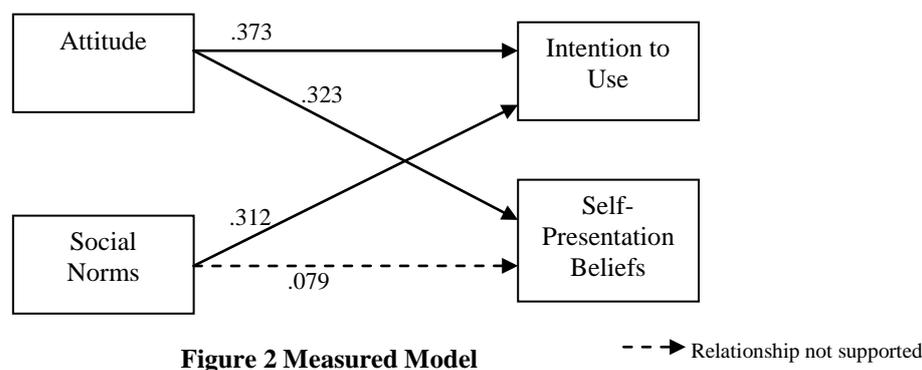
Assessment of the Measurement Model

Both exploratory and confirmatory factor analysis were performed on the latent variables considered in our model. Using Harman's one factor test (Harman, 1976) on our data we found no apparent issues of common method bias. Following this test, we assessed the measurement model and they satisfied all criteria for reliability and both convergent and discriminant validity. Our results from the confirmatory factor analysis showed all item loadings greater than the 0.5 threshold value (Hair et al, 1998). In addition, the average variance extracted (AVE) values were all above the 0.5 cutoff point, suggesting that our variables explain more than half of the variance of its indicators and that our construct models are valid measures (Fornell & Larcker, 1981). For internal consistency, the Cronbach's alpha of all but one construct (self-presentation beliefs) showed values greater than 0.70 (Hair et al, 1998). Although the Cronbach's alpha value for the developmental construct of self-presentation beliefs was .64, it is acceptable for exploratory analysis (Peterson, 1994).

Assessment of the Structural model

We used Partial Least Squares (PLS), a component-based structural equation modeling technique with bootstrap resampling of 1000 sub-samples to analyze our data. SmartPLS 2.0 software package was used to analyze the data. In Figure 2, the results show attitude ($\beta = 0.373$, $t=7.45$, $p < 0.001$) and ($\beta = 0.323$, $t=5.36$, $p < 0.001$) as a strong predictor of both intention to use and self-presentation beliefs respectively. These provide support for H1 and

H2. The path from subjective norm to intention to use is significant ($\beta = 0.312$, $t=5.62$, $p < 0.001$). However, its path to self-presentation beliefs is not significant ($\beta = 0.079$, $t=1.17$, $p > 0.05$). Thus, H3 is supported while H4 is not. Furthermore, the R^2 for intention to use is higher (31.0%) than that of self-presentation beliefs (12.7%), indicating that attitude and subjective norms explain more of the variance in intention to use than in self-presentation beliefs. A summary of the hypotheses and their results are listed in Table 3. The coefficients are displayed on the respective arrows on Figure 2.



Hypothesis	Result
H1: Attitude will have a positive relationship with a user's intention to use the SNS	Supported
H2: Attitude will have a positive relationship with self-presentation beliefs.	Supported
H3: Social Norms will have a positive relationship with a user's intention to use the SNS	Supported
H4: Social Norms will have a positive relationship with self-presentation beliefs.	Not Supported

Table 3: Summary of Hypotheses Results

We also performed a multivariate analysis test instead of two separate univariate tests on our dependent variables to determine if there were any differences between gender and country. A recognized advantage of conducting MANOVA is its ability to control for family-wise error rate (i.e., type 1 error). We tested for homogeneity of variance across the groups by testing whether the population variance-covariance matrices of the different groups in the analysis are equal.

Interestingly, our results showed group differences in country and the interaction between country and gender with Wilk's Lambda values 0.83, $p < 0.05$ and 0.892, $p < 0.05$ respectively. However, our Wilk's Lambda value of 0.982 and $p = 0.102$ showed no differences in gender. Moving to the univariate tests, country showed statistical significance in terms of its effect on self-presentation beliefs ($F=26.566$, $p<0.05$) but not on intention to use ($F=2.229$, $p=0.137$). Though gender neither showed statistical significant effect on self-

presentation beliefs ($F=3.043$, $p>0.05$) nor on intention to use ($F=0.695$, $p=0.405$) the interaction between gender and country yielded statistical significant effects with $F=6.157$, $p<0.05$ and $F=29.196$, $p<0.05$ on intention to use and self-presentation beliefs respectively.

Further analysis of the constructs using Contrast results confirmed that the only significant difference among the interaction of country and gender was associated with self-presentation beliefs with an observed power of .99. Table 4 demonstrates the different confidence interval of the construct among the respondents where the values were consistently lower for Saudi females.

Country	Gender	Mean	Std. Error	95% Confidence Interval	
				Lower Bound	Upper Bound
USA	Male	4.317	.157	4.008	4.625
	Female	4.967	.199	4.574	5.359
Saudi	Male	4.361	.182	4.003	4.719
	Female	3.092	.170	2.758	3.426

Table 4. Contrast Test for Self Presentation Beliefs

DISCUSSION, LIMITATIONS, AND FUTURE DIRECTIONS

The goal of this study was to examine how intention to use an SNS and self-presentation beliefs are affected by attitude and social norm and the interaction effects of both culture and gender. The study examined the perceptions of SNS users in both Saudi Arabia and the US. The findings indicate that there are no significant differences based on culture or gender regarding the intention to use the SNS. However, a major finding was that the self-presentation beliefs varied significantly between males and females in the two cultures. In addition, one finding that was surprising is significant effect of social norms on sharing of personal photos.

There were some limitations to the study that should be noted. First, the study used only college students, which has received some criticism for the lack of generalizability. However, as Facebook was originally intended for college students and still retains a large demographic of college students, it was felt that their use was appropriate. Another limitation was the selection of only the US and Saudi Arabia as the two cultures of study. This further reduces the generalizability of the findings, but the study still offers a glimpse of potential issues for SNS developers when implementing their platforms in foreign countries. A final limitation is the exclusion of other factors that have been identified as significant predictors of SNS use, such as privacy and trust. However, the inclusion of these factors was outside the scope of this study and is suggested as a potential area for future studies.

CONCLUSION

The current study evaluated the intention to use an SNS in both the US and Saudi Arabia. A major contribution of the findings is that the proposed model has significance in both

countries. The results extend the IS literature by providing empirical evidence supporting the effect of attitude on intention to use an SNS. While prior studies have removed this construct, this study shows the strength of attitude when examining the use of social networking systems. Another significant finding is the difference between the two cultures that exists regarding the self-presentation beliefs. The results confirm the importance of considering cultural values and beliefs when designing global information systems.

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