

# APPLYING THE TECHNOLOGY ACCEPTANCE MODEL TO UNDERSTAND SOCIAL NETWORKING SITES (SNS) USAGE: IMPACT OF PERCEIVED SOCIAL CAPITAL

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## ABSTRACT

*This study examines the individuals' participation intentions and behaviour on Social Networking Sites (SNSs). For this purpose, the Technology Acceptance Model (TAM) is utilized and extended in this study through the addition of "perceived social capital" construct aiming to increase its explanatory power and predictive ability in this context. Data collected from a survey of 1100 participants and distilled to 657 usable sets has been analysed to assess the predictive power of proposed model via structural equation modelling. The model proposed in this study explains 56% of the variance in "Participation Intentions" and 55% of the variance in "Participation Behaviour". Participation of behavioural intention in the model' explanatory power was the highest amongst the constructs (able to explain 28% of usage behaviour). While, "Attitude" explain around 11% of SNSs usage behaviour. The study findings also show that "Perceived Social Capital" construct has a notable impact on usage behaviour, this impact came indirectly through its direct effect on "Attitude" and "Perceived Usefulness". Participation of "Perceived Social Capital" in the models' explanatory power was the third highest amongst the constructs. "Perceived Social Capital", alone explain around 9% of SNSs usage behaviour.*

## KEYWORDS

*Adoption, Perceived Social Capital, Social networking sites, Technology Acceptance Model, Usage.*

## 1. INTRODUCTION

The Internet, since its introduction, has facilitated a different forms of social interaction and activities through the World Wide Web (WWW) or Web 1.0 inventions such as personal web pages. Within Web 1.0, the vast majority of users simply acting as consumers of content. Later, Web 1.0 has been altered to Web 2.0 Websites which represents the movement forward one step from publishing to participation. In fact, Web 2.0 Websites including video sharing sites such as YouTube and social networking sites like Twitter and Facebook refers to the second generation of the WWW that facilitates collaboration and information sharing [4].

In last years, we have witnessed the rapid growth of online social networking services (SNSs), which support interpersonal communication and collaboration using Internet-based platforms. Due to this popularity and its impact on individuals' daily lives, the SNSs have captured the attention of researchers [34].

Scholars have studied SNS using a diversity of methodologies from multiple disciplines. They have conducted studies, for instance, on the basis of industry competition dynamics [16] and building of social relationships through online social networks [15]. Thus, this study systematically examines what factors contribute to SNS usage.

The current study' topic matches to one of the five core research areas which forming the information systems discipline as identified by Sidorova, et al., [29]: (1) Information technology and organizations, (2) Information technology systems development, (3) Information technology and individuals, (4) Information technology and markets, and (5) Information technology and groups.

The information technology and individuals, as a research area, studies primarily psychological aspects of human computer interactions, focusing on research themes such as individual technology acceptance, information technology adoption, HR issues in IS, computer self-efficacy, trust, and website design. Therefore, this study represents a mainstream area of information systems research, contributing to the development of the discipline.

This study participates in this effort, theoretically and practically, by adopting the Technology Acceptance Model (TAM) as a base model which is the most widely used and validated model and have been applied in several research discipline across various technologies [31]. In order to effectively predict participation in SNSs, this study develops a theoretical framework by extending TAM, including the addition of perceived social capital, to provide a better understanding of SNS acceptance and usage in Saudi Arabia. Data collected from a survey of 1100 participants and distilled to 657 usable sets has been analysed to assess the predictive power of TAM model via structural equation modelling.

The paper proceeds as follows. In section 2, we review the theoretical model; TAM, Social Capital and presents the proposed hypotheses along with the study model. In section 3, the methods of analysis are presented. The results of the study are then presented in Section 4. Thereafter, an equation has been formulated and used to calculate the participation of every model's construct in the model's explanatory power is presented along with a discussion of the results in Section 5. Section 6 is devoted to highlight the implications of the current study to theory and practice. Section 7 highlights the study limitations and links it with future research avenues.

## **2. RESEARCH MODEL AND HYPOTHESES DEVELOPMENT**

### **2.1. Perceived Social Capital**

Social capital has been defined in various ways from variety of perspectives. It can be defined by its function for instance information channels, obligations and expectations [9]. Social capital also can be seen as features of social life such as norms, trust and networks which allowing individuals to perform sort of action together in an efficient way [28]. To summarize, social capital is the resources and benefits that can be made from engaging in social networks and utilizing relations that has been built through interactions among participants in that networks [9].

Social capital can be categorized to two categories, namely cognitive and structural. Cognitive category is more related to personal aspects (e.g. attitudes, beliefs, norms and values). The structural category represents the solidity of social relationship and measurement to level of social interactions [18].

Cognitive social capital, in it is turn, can be broken into three parts, namely bridging, bonding [27] and maintained social capital [15]. Bridging part of cognitive social capital reflects external relationships between individuals [1] and can be consider as a 'weak ties' relations [27] or "loose connections" among persons by which individuals can provide opinions or information without emotional or personal relation. While, bonding part of cognitive social capital represents close associations individuals might have with family members, close friends and other close relations

and focus on internal ties between actors in which emotional support is exchanged. The third part of cognitive social capital called 'Maintained social capital' [15] which represents individuals' ability to maintain relationships to their prior social networks.

Social capital has been presented to be a predictor of school attrition, academic performance, physical and mental health, sources of employment, and economic development ([24], [15]). Recently, Social capitals have been examined in the context of SNS. Ellison, et al. [14] found that online social networks can build and support individuals social capital and help in maintaining social capital with higher bonding and bridging levels. While, Lu and Lee study [22] has shown knowledge capital and social capital can encourage continuous sharing behaviour. Moreover, Guo, et al. [17] conduct a study to explore the predicted effect of Social Networking Site use on Perceived Social Capital, and they found that SNS use for social and informational functions increased individuals' levels of perceived bridging social capital. Generally and regarding to interaction among individuals, increase levels of social capital cause a general commitment to collective action and that has a significant positive influence on interaction [15]. Thus, the following hypotheses are proposed:

Hypothesis 1. User perceived social capital will positively influence user perceived usefulness.

Hypothesis 2. User perceived social capital will positively influence user attitude.

## **2.2. Technology Acceptance Model (TAM)**

TAM was proposed by Davis [10] to explain and predict users' adoption/acceptance or rejection of IT ([10], [11]). TAM is conceptually based on TRA [3], which specifies two behavioural beliefs, perceived usefulness and perceived ease of use, as determinants of attitude towards behavioural intentions and IT usage behaviour [8]. In TAM, behavioural intention to use, leads to actual IT usage behaviour. Behavioural intention is determined jointly by attitude and perceived usefulness, where perceived usefulness also affects attitude directly. Meanwhile, perceived ease of use directly influences both attitude and perceived usefulness [13]. Perceived usefulness is defined as "the degree to which a person believes that using a particular system would enhance his or her job performance", while the perceived ease of use is defined as "the degree to which a person believes that using a particular system would be free of effort" [10]. According to Wiley-Patton [32] researchers attribute the strength of TAM to its ubiquitous applicability. In TAM, beliefs about ease of use and usefulness are always the most important determinants of intention to use, and this belief set is "readily generalized to different computer systems and user populations" [10]. Other models such as TRA and TPB use beliefs sets that are specific to each situation making it difficult to apply them across various users' context [32]. Whereas TAM's constructs are measured in the same way in every situation ([23], [31], [32]). Due to its ubiquitous applicability and mainly to its parsimony, TAM has become the most preferable and popular model and has been widely used in a range of IT acceptance studies [8]. Although the parsimony of TAM is seen as one of its strengths, it is also considered a limitation [31]. TAM with its two original constructs, perceived usefulness and perceived ease of use, is able to provide some predictive information however, that information is not considered enough to assist designers to predict acceptances for a new system [23]. Scholars have criticized TAM and showed that many theoretical constructs, found important in predicting technology acceptance, are ignored and excluded. For example, TAM does not explicitly include any social variables [7] or individual characteristics which can have a significant influence on TAM estimates [13] or even influence how TAM constructs are related [25]. Thus, the current study extends TAM by including perceived social capital and suggests that perceived social capital is significant determinants of SNS acceptance and use. Therefore, the study hypotheses were developed based on TAM model hypotheses (see Fig. 1).

- Hypothesis 3. User perceived ease of use will positively influence user perceived usefulness.  
 Hypothesis 4. User perceived ease of use will positively influence user attitude.  
 Hypothesis 5. User perceived usefulness of use will positively influence user attitude.  
 Hypothesis 6. User perceived usefulness of use will positively influence user behavioural intention.  
 Hypothesis 7. User Attitude will positively influence user behavioural intention.  
 Hypothesis 8. User behavioural intention will positively influence user behaviour.

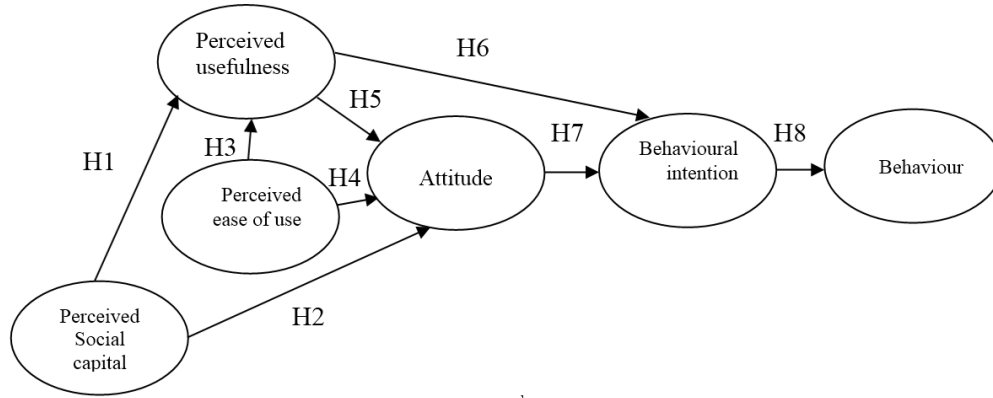


Figure 1. The study model

### 3. METHODOLOGY

#### 3.1. Measurement

Identifying the concepts or constructs that a researcher intends to measure, and then choose appropriate measuring systems to measure those constructs is essential and has a significant impact on the accuracy of findings [36]. The items used in the survey instrument to measure the constructs were identified and adopted from prior research; particularly from IS research, in order to ensure the face (content) validity of the scale used. The items were widely used in the majority of prior studies indicating potential subjective agreement among researchers that these measuring instruments logically appear to reflect accurate measure of the constructs of interest. Table 1 lists the items developed for each construct in this study as well as set of prior studies where these items have been adopted from.

Table 1: List of items by construct

Construct	Items	Adapted from
<b>Behavioural intention (BI)</b>	BI1. I intend to use SNS website in next three months. BI2. I expect my use of the SNS website to continue in the future.	[30], [26], [4].
<b>Perceived Ease of Use (EU)</b>	EU1. Learning to use SNS was easy for me EU2. I find SNS easy to use EU3. English language is not a barrier when I use SNS	[30], [26].

<b>Attitude (AT)</b>	AT1. I have positive opinion in SNS website. AT2. I think usage of SNS website is good for me AT3. I think usage of SNS website is appropriate for me	[10], [2], [4].
<b>Perceived usefulness (PU)</b>	PU1. SNS is more convenient than other traditional social networks options PU2. SNS makes it easier to find information and people. PU3. SNS improves my information and people seeking PU4. SNSs help me to find information more quickly PU5. I think that SNSs is useful. Overall, I think that using the SNSs is advantageous.	[30], [26], [21].
<b>Perceived Social Capital (SC)</b>	SC1. SNSs make it easier to develop social relationship (networking). SC2. SNSs improve my social relationship (networking). SC3. SNSs enhance my effectiveness in building social relationship. SC4. SNSs help me to build social relationship more quickly. SC5. I find SNSs useful in my social relationship.	[21]
<b>SNS Usage (US)</b>	US1. On average, each week I use my SNS website often US2. For each log session, I use my SNS web site long US3. On my SNS, I often post something US4. On my SNS, I often view something US5. On my SNS, I often share something US6. On my SNS, I often reply to others	[5], [33].

### 3.2. Data Collection Procedures

Data for this study were collected in two stages (6 months apart), from samples stratified into gender groups, by means of a survey conducted in Saudi Arabia in 2014. This type of sampling technique has been chosen due to the difficulty of drawing an actual representative sample in Saudi Arabia. Most houses in Saudi Arabia have not their own mail boxes and postal services are not available for every house. Moreover, due to the conservative nature of Saudi Arabian society, it is hard to approach women in Saudi Arabia. Therefore, stratified samples were drawn from numerous areas in the country. Female relatives were also engaged to distribute questionnaires to the female strata besides using electronic means to guarantee reaching females as well as males. The survey questionnaires were distributed to 1100 participants (550 male and 550 female). A total of 421 responses were received from male participants and 367 from female participants. After checking the data for validity, 657 were deemed fit for use in the analysis.

## 4. DATA ANALYSIS AND RESULTS

### 4.1. Reliability and validity

Table 2 Cronbach's Alpha Reliability of Constructs in the Study

Construct	Number of Items	Cronbach's Alpha
Perceived Social Capital	5	.962
Perceived Ease of Use	3	.905
Perceived usefulness	5	.927

Attitude	3	.912
Intention	2	.889
Usage	5	.938
Overall alpha value	23	.961

The Kaiser–Meyer–Olkin (KMO) and principal component factor analysis were conducted to examine the adequacy of the study sample and the validity of the study instrument, respectively. As the value of KMO was 0.883 as in Table3, the study sample was considered adequate and the appropriateness of using principal component factor analysis on the collected data was assured.

Table 3. KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.883
Bartlett's Test of Sphericity	Approx. Chi-Square	11127.679
	Df	78
	Sig.	.000

## 4.2. Hypotheses testing

The study proposes a model that lends itself to studying the adoption of new technologies and applies it to determine significant factors that influence adoption of SNSs in Saudi Arabia. This model can be constituted through the test of 7 hypotheses. These hypotheses identify the relationship among factors as independent variables that impact adoption behaviour. Each accepted hypothesis represents an explanation of usage behaviour as dependent variables. Explanations are nomothetic and advance via deductive reasoning. The study hypotheses were tested using multiple regression analysis.

First, the two independent variables (i.e. “Perceived Social Capital” and “Perceived ease of use” were regressed on “Perceived Usefulness”. As in Fig. 2, it was found that “Perceived Social Capital” ( $\beta = 0.502$ , Standardized path coefficient,  $p < 0.001$ ) and “Perceived ease of use” ( $\beta = 0.211$ , Standardized path coefficient,  $p < 0.001$ ) are significantly and positively related to “Perceived Usefulness” (adjusted  $R^2=0.47$ ) (see Table 4, Table 5 and Fig. 2). Thus, H1 and H3 are supported.

Thereafter, “Perceived ease of use”, “Perceived Usefulness” and “Perceived Social Capital” were regressed on “Attitude”. Results, as in Fig. 2, indicate that “Perceived ease of use”, “Perceived Social Capital” and “Perceived Usefulness” are significantly and positively related to “Attitude” (adjusted  $R^2=0.24$ ): “Perceived ease of use” ( $\beta = 0.312$ , Standardized path coefficient,  $p < 0.001$ ), “Perceived Usefulness” ( $\beta = 0.310$ , Standardized path coefficient,  $p < 0.001$ ) and “Perceived Social Capital” ( $\beta = 0.361$ , Standardized path coefficient,  $p < 0.001$ ). Thus, H2, H4 and H5 are supported.

Moreover, “Perceived Usefulness” and “Attitude” were regressed on “Behavioural intention”. Results, as in Fig. 2, indicate that “Perceived Usefulness” and “Attitude” are significantly and positively related to “Behavioural intention” (adjusted  $R^2=0.56$ ): “Perceived Usefulness” ( $\beta = 0.138$ , Standardized path coefficient,  $p < 0.001$ ) and “Attitude” ( $\beta = 0.606$ , Standardized path coefficient,  $p < 0.001$ ). Thus, H6 and H7 are supported.

Finally, the 8th Hypothesis was tested using multiple regression analysis which showed that “behavioural intention” ( $\beta = 0.747$ , Standardized path coefficient,  $p < 0.001$ ) has a significant and positive effect on “usage behavior” (adjusted  $R^2=0.557$ ) (see Table 4, Table 5 and Fig. 2). Thus, H8 is supported.

Table 4 Coefficients for Proposed model

Dependent variable	Path direction	Independent variables (predictors)	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
			B	Std. Error	Beta		
Perceived Usefulness	←	Perceived Social Capital	.509	.053	.502	9.532	.000
Perceived Usefulness	←	Perceived ease of use	.238	.060	.211	3.995	.000
Attitude	←	Perceived ease of use	.291	.060	.312	4.852	.000
Attitude	←	Perceived Social Capital	.302	.057	.361	5.330	.000
Attitude	←	Perceived Usefulness	.255	.039	.310	6.574	.000
Intention	←	Perceived Usefulness	.130	.031	.138	3.904	.000
Intention	←	Attitude	.611	.043	.606	18.191	.000
Usage	←	Intention	.772	.027	.747	28.765	.000

P values less than 0.001 were considered statistically significant

Table 5. Standardized Regression Weights

Criterion variable	Path direction	Criterion variable predictors	Estimate	(Significance)
Perceived Usefulness	←	Perceived Social Capital	.502	Significant
Perceived Usefulness	←	Perceived ease of use	.211	Significant
Attitude	←	Perceived ease of use	.312	Significant
Attitude	←	Perceived Social Capital	.361	Significant
Attitude	←	Perceived Usefulness	.310	Significant
Intention	←	Perceived Usefulness	.138	Significant
Intention	←	Attitude	.606	Significant
Usage	←	Intention	.747	Significant

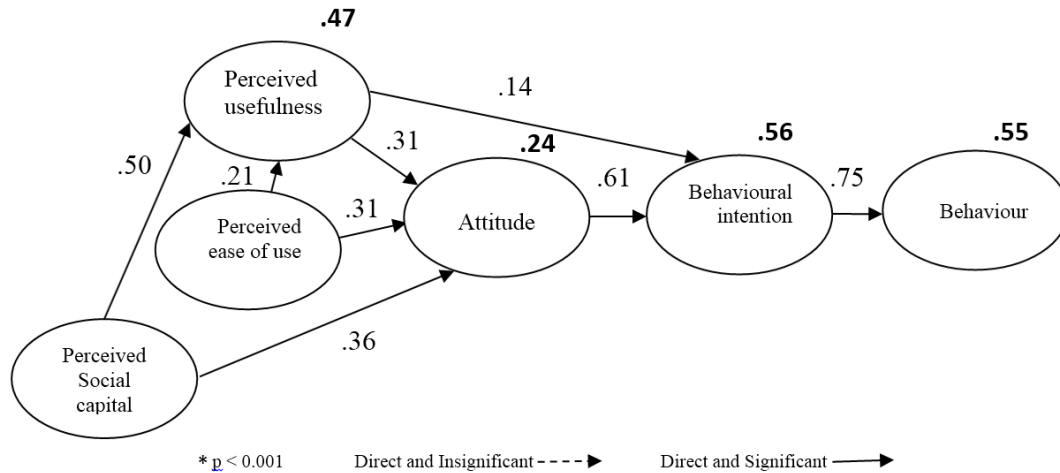


Fig. 2. The study results

## 5. DISCUSSION

The aim of the study is to understand why people can adopt SNSs. In other words, this study is an effort to extend our understanding of the factors behind the adoption of SNSs in Saudi Arabia. This study confirms the importance of the social aspects and characteristics in forming individuals' intentions and their SNSs usage behaviour. Moreover, this study comes to help in covering the gap of research in Saudi Arabia on how users of SNSs based on their behavioural effects intend to adopt SNS. For this purpose, the technology acceptance model is applied and extended through the adding of "perceived social capital" construct in order to rise its explanatory power and enhance its predictive ability in the context of the study.

The study finding asserts that participation behaviour on SNSs determined by "participation intention" which in turn is determined by individuals' "attitude" and "perceived usefulness". The model adopted in this study explains 56% of the variance in "Participation Intentions" and 55% of the variance in "Participation Behaviour".

The results show that "participation intention" is significantly and positively related to "participation behaviour" in the SNS context. Indeed, such a strong relation among the behavioural intention and behaviour constructs concurs with many prior studies such as Taylor and Todd [30] study, according to their research, "behavioural intention plays an important substantive role, but is also important pragmatically in predicting behaviour" [30]. Likewise, De Guinea and Markus [12] indicate that IT use behaviour is the result of conscious, cognitive behavioural intention. The importance of behavioural intention towards usage behaviour is also reported in other study to understand online community user participation by Zhou [35].

The study results show that "Perceived ease of use", "Perceived Social Capital" ( $\beta = 0.361$ , Standardized path coefficient,  $p < 0.001$ ) and "Perceived Usefulness" are significantly and positively related to "Attitude" (adjusted  $R^2=0.24$ ) (see Table 4, Table 5 and Fig. 2). Moreover, it was found that "Perceived Social Capital" ( $\beta = 0.502$ , Standardized path coefficient,  $p < 0.001$ ) and "Perceived ease of use" ( $\beta = 0.211$ , Standardized path coefficient,  $p < 0.001$ ) are significantly and positively related to "Perceived Usefulness" (adjusted  $R^2=0.47$ ).



### 5.1. Understanding Behaviour

The proposed model able to explain 55% of SNSs usage behaviour. This ability relates to the diversity of the model's constructs and the diversity of relations among their constructs. In the model, behavioural intention is the primary, direct determinant of behaviour on the premise that “a person who intends to take a certain action is likely to carry out that behaviour” [19]. However, the additional explanatory power afforded by the other relative factors. An equation has been formulated and used to calculate the participation of every model's construct in the model's explanatory power. The formula was applied to the model using the total (direct and indirect) effects of each model's construct on the SNSs usage behaviour (see Table6, Table7 and Table 8) as follow:

$$A_x = \frac{\beta_x^2}{\sum_{k=1}^n \beta_x^2} \times R_B^2$$

Where:

$A_x$  = Participation of variable  $A_x$  in a model' explanatory power

$\beta_x^2$  = Square of beta coefficients or standardized coefficients of variable

$R_B^2$  = Model' explanatory power (*behaviour*)

$\sum_{k=1}^n \beta_x^2$  = Total of causal effects for the model's constructs

Table 6. Decomposition of total causal effects for the model's constructs

	SC	ES	PU	AT	BI
PU	.502	.211	.000	.000	.000
AT	.687	.320	.310	.000	.000
BI	.309	.140	.149	.606	.000
US	.240	.109	.092	.278	.747

Table 7. Standardized Direct Effects

	SC	ES	PU	AT	BI
PU	.502	.211	.000	.000	.000
AT	.361	.312	.310	.000	.000
BI	.000	.000	.138	.606	.000
US	.000	.000	.000	.000	.747

Table 8. Standardized Indirect Effects

	SC	ES	PU	AT	BI
PU	.000	.000	.000	.000	.000
AT	.326	.008	.000	.000	.000
BI	.309	.140	.011	.000	.000
US	.240	.109	.092	.278	.000

Table 9 shows the participating model' variables and their explanatory power. In the proposed model, behavioural intention is the primary, direct determinant of behaviour and its participation in the model' explanatory power was the highest amongst the constructs. Behavioural intention was able to explain 28% of usage behaviour. This shows that behaviour is largely driven by behavioural intention and that has a notable impact on the model's explanatory power.

Table 9. Participation of model's variables in the models' explanatory power

<b>Constructs</b>	<b>The proposed model</b>
Intention	28%
Attitude	10.4%
Perceived Social Capital	9%
Perceived Ease of Use	4.1%
Perceived Usefulness	3.5%
Total	55%

This impact can be obviously seen when behavioural intention is excluded from the model, since the prediction of behaviour decreases substantially (from  $R^2_{(B)} = 0.55$  to  $R^2_{(B)} = 0.27$ ). The drop in predictive power when behavioural intention was omitted concurs also with the Taylor and Todd [30] study, according to their research, "behavioural intention plays an important substantive role, but is also important pragmatically in predicting behaviour" [30]. Likewise, De Guinea and Markus [12] indicate that IT use behaviour is the result of conscious, cognitive behavioural intention.

Table 8 and 9 also show that "attitude" construct has a notable impact on usage behaviour, this impact came indirectly through its direct effect on behavioural intention. Participation of "attitude" in the models' explanatory power was the second highest amongst the constructs. "Attitude", alone explain around 10.4% of SNSs usage behaviour.

Scholars have shown that attitude positively influences behavioural intentions [3]. Attitude is defined as an individual's feelings towards performing a specific behaviour, which is his positive or negative evaluation of performing the behaviour ([10], [2]). In other words, attitude means the complete assessments or feeling of a person concerning the examined behaviour. In the context of this study, attitude is defined as the general evaluations of individuals regarding the adoption of SNS.

The study findings also show that "Perceived Social Capital" construct has a notable impact on usage behaviour (see Table 9), this impact came indirectly through its direct effect on "attitude" and "Perceived Usefulness". Participation of "Perceived Social Capital" in the models' explanatory power was the third highest amongst the constructs. "Perceived Social Capital", alone explain around 9% of SNSs usage behaviour.

This findings concurs with social capital nature which exist in the relationships between individuals and their connections with communities [28], since that SNS, such as Facebook, LinkedIn, Twitter, and Google Plus, is a platform allows users to build social relations with the people within and beyond their social circle ([20], [6]).

## **6. IMPLICATIONS FOR THEORY AND PRACTICE**

### **6.1. Implications for theory and research**

In the field of information systems, scholars have conducted many studies focusing on the adoption of different information technologies and widely cover aspects related to adoption intentions and behaviour. Several IS models have been developed and applied to understand determinants of behavioural intention and usage behaviour. In particular, this study extended the technology acceptance model TAM with additional factor influencing behavioral intention toward new technology.

The present study also contributes to the technology acceptance model by providing a support to the robustness of TAM as a powerful model and for its efficacy in understanding and predicting people's use of SNSs. Overall, this study provided some support for the application of the TAM model in the context of high-level SNS use with attitude and Social capital significantly predicting intention, which, in turn, significantly predicted behaviour. Moreover, in this study an effort has been provided to extend the TAM's original key constructs aiming to explain user acceptance and usage of SNS. A new determinant was identified and empirically validated: perceived social capital. Extending TAM with this construct provides a more intense understanding of the dynamics effect behind the formation and change of SNS user acceptance.

### **6.2. Implications for practice**

The present study found that Social capital constructs indirectly influence usage behaviour through its direct effect on attitude. This indicates that social capital are attractions that encourage individuals to adopt SNSs and the social relationship embedded in SNSs posts is an important factor. The current study asserts that the expectations for enhancing social relationships would encourage individuals to engage in SNSs.

Highlighting the benefits of social capital could retain regular SNS users and even attract others from another service provider. Thus SNS service providers should take that into account while making strategies and developing SNS platforms. For example, they can develop themes or appropriate styles consider the three categories of social capitals namely bridging, bonding [27] and maintained social capital [15] then users could choose the appropriate one according to their expectancy. For bridging social capital, SNS service providers should develop theme allows users to exchange useful information or new perspectives without prior personal or emotional experience with others. For bonding, the SNS service providers should adopting methods to support emotional relations between users and focus on internal ties between individuals. For maintained social capital, the SNS service providers should establish a mechanism to increase individuals' ability to maintain relationships to their prior social networks.

## **7. LIMITATIONS AND FURTHER RESEARCH**

A careful and systematic effort has been presented in this study to examine theory of planned behaviour in understanding and predicting people's use of SNSs. In order to strengthen the study a number of features such as a large sample size, actual measures of behaviour collected over time and a realistic setting were included. However, the present study has limits, it only considered intention and behaviour in the context of SNSs usage, and it is unclear whether the analytical results can be generalized to other areas of context in IS. The sample was collected in Saudi Arabia and generalisation of the study findings to other countries might be limited due to cultural differences in online user behaviours. Hence, the proposed model should be tested further

using samples from other countries, thus future research is needed for a number of reasons in order to test the model further in SNS context.

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