Drivers of Social Media Networking Site Continuance Intention in Jordan and South Africa: Do National Cultural Differences Matter?

Daniel K. Maduku, University of Johannesburg, South Africa*
Emad Abu-Shanab, Qatar University, Qatar

https://orcid.org/0000-0002-2826-883X

ABSTRACT

The present study integrates perceived service quality and national cultural dimensions into the expectation-confirmation model (ECM) to ascertain the antecedents of user satisfaction and continuance use of SNSs and tested the moderating role of culture on the strengths of relationships in the adapted ECM. Data for empirical testing of the research model, using a partial least squares (PLS) structural equation modelling technique with multi-group analysis, were obtained from 987 SNS users in Jordan and South Africa. The findings suggest that, although there are differences in the path estimates of users in these contexts, these differences are not statistically significant, implying that cultural factors are not salient considerations for promoting SNS user satisfaction and continuance use intention. Implications of these findings for theory and practice are discussed.

KEYWORDS
Continuance Intention, Expectation Confirmation Model, Jordan, National Culture, Social Networking Sites, South Africa

1. INTRODUCTION

The advent of Web 2.0 technologies parallels the growth trajectory of social networking sites (SNSs) (Muntinga et al., 2011). SNSs enable users to share their personal information via their profiles, link with other users in their social circles, upload, tag and distribute multimedia, link other members to a range of websites, and launch or join user groups founded on common interests and goals (Lockyer & Patterson, 2008). Given their usefulness, the use of SNSs has witnessed tremendous rates of adoption, particularly among young people (Abeeke, 2016). Recent internet research by the Pew Research Center (2015) indicates that 90% of young American adults between the ages of 18 and 29, and 77% of adults between the ages of 30 and 49, use social media. In the Middle East, research (Mid East Media, 2015) shows that, in 2015, nearly eight in ten people (79%) reported using social media daily. In Africa, it is estimated that 9% of the population use social media (Kemp, 2016).
The growth in the use of SNSs has generated a rich stream of research. The majority of this research has been devoted to understanding the motivations of initial acceptance of SNSs (Abu-Shanab & Frehat, 2015; Dunne et al., 2010; Kwon & Wen, 2010; Lee et al., 2003; Park et al., 2009); but only a few studies have focused on continuance use intention (Chang & Zu, 2012; Oghuma et al., 2016), even though maintaining long-term user loyalty through the continued use of SNSs is beneficial to sustaining the business model of SNSs, and also serves as an important indicator of information systems (IS) success (Bhattacharjee, 2001).

Empirical research confirms that higher levels of perceived customer service translate into higher customer satisfaction, loyalty, and profitability levels (Alalwan et al., 2016; Swaminathan et al., 1999). Therefore, service quality on SNS platforms is central to users’ satisfaction and their continuance use intention. Moreover, as the use of SNSs increases, providing user-oriented, quality services on SNSs will become an important strategy for SNS providers to satisfy the needs of their users, leading to their retention (Van Riel et al., 2001; Yang et al., 2005). Nevertheless, recent studies have not particularly addressed the role of customer service in promoting user satisfaction with SNSs and continuance use intention, and so little research attention has been paid to the role of service quality and its impact on users’ satisfaction and continuance use intention of SNSs. This study therefore integrates service quality into the proposed model, and addresses the first research question (RQ):

**RQ1:** Does the service quality of SNSs impact on users’ satisfaction and their continuance intention?

SNSs have morphed into global media that are widely used by people from many cultures to communicate with one another. Therefore the cultural values held by a specific group of people are likely to affect its usage. Indeed, empirical research has heralded cultural values as important indicators of users’ innovation use behaviour (Carter & Weerakkody, 2008; Muk & Chung, 2015; Zhu & Kraemer, 2005). However, the role of culture in the use of SNSs across contexts is largely unclear. This study attempted to contribute towards addressing this knowledge gap by posing the second research question:

**RQ2:** Do the factors influencing users’ satisfaction with SNSs and their continuance use intention vary significantly across different cultures?

To ascertain the effect of culture, this study adopted a multigroup analysis (MGA) to do a comparative analysis by testing an adapted expectation confirmation model (ECM) with samples collected from two countries with similar and contrasting national cultures: Jordan and South Africa.

From a theoretical viewpoint, this study integrated service quality into ECM to examine its impact on users’ satisfaction and continuance intention within the SNS IS domain; and its findings have wider implications for understanding the impact of service quality on the user satisfaction and continuance intention of SNSs, and of social commerce in general (Choi, 2019). By comparing Jordanian and South African SNS users, this study ascertained cross-cultural scale validity and underlying motivations for SNSs across two cultures. The findings of this study will thus provide a clear understanding of what has an impact on SNS continuance intention across cultures. SNS developers and international marketers could thus use the findings to develop strategies that make SNSs more relevant to the target users.

**2. LITERATURE REVIEW AND THEORETICAL MODEL**

**2.1. SNS Use in Jordan and South Africa**

SNSs are defined as “web-based services that allow individuals to (a) construct a public or semi-public profile within a bounded system, (b) articulate a list of other users with whom they share a
connection, and (c) view and traverse their list of connections and those made by others within the system” (Ellison, 2007). The use of SNSs is an increasingly popular practice in most parts of the world. Although developed countries are ahead in their use of SNSs, emerging and developing countries such as Jordan and South Africa are catching up.

A study by the Pew Research Center (2016) noted that a majority of internet users in emerging and developing countries claimed to be using SNSs. The study further identified Jordan as one of the countries with the highest use of SNSs (90%) among adult internet users. In respect of the popular SNSs among Jordanians, most users (95.06%) reported using Facebook, with a few using Twitter (3.69%), Pinterest (0.55%), Google (0.49%), and others (0.21%) (StatsMonkey, 2015).

In South Africa, SNS use has witnessed dramatic growth rates. A study conducted by World Wide Worx (2016) among South African SNS users showed that, between 2015 and 2016, Facebook use grew from 12 million to 13 million and Twitter use from 6.6 million to 7.4 million users. The report also indicated that sharing videos on YouTube increased by 15% – from 7.2 million to 8.28 million users. Within the same period, Instagram use increased significantly from 1.1 million to 2.68 million, making Instagram the fastest-growing SNS in South Africa. Retaining the number of users on these SNSs is as important as recruiting new users, as research has emphasised continued use as a key measure of IT success (Bhattacherjee, 2001; Oghuma et al., 2016; Venkatesh et al., 2011).

2.2. Hofstede's Cultural Dimension

The innovation use behaviour of individuals can be ascribed to countries’ cultural orientations (Ahmed, 1998; Karahanna et al., 2006). The underlying reason for this is that societal norms and beliefs provide intrinsic guidelines that shape the perception, dispositions, and behaviour of people in a given cultural setting (Overby et al., 2005). ‘National culture’ is thus loosely defined as that set of conventional values, rules, and beliefs that are common among people within the same nation (Hofstede, 2003). Hofstede (2003) developed a model outlining six dimensions of national cultural values that describe common challenges that each society experiences; people from each country are found to have different approaches to these challenges. These six dimensions of cultural values – power distance index (PDI), individualism (IDV) vs collectivism, masculinity (MAS) vs femininity, uncertainty avoidance (high versus low), long-term orientation (LTO) vs short-term orientation, and indulgence vs restraint (IVR) – remain widely used bases for cross-national consumer research. A comparative analysis of the national cultural attributes of Jordan and South African is presented in Figure 1 (Hofstede Insights, 2017).

According to the results, Jordan has a national ‘power distance’ of 70, while that for South Africa is 49. Although the results suggest that both are hierarchical societies, Jordan is a more hierarchical society, whereas South Africa is less hierarchically ordered. Jordan’s low score of 30 on the individualism/collectivism dimension suggests that it is considered a ‘collectivist’ society, whereas South Africa, with a score of 65, is generally an ‘individualist’ society. In ‘individualist’ societies, people generally have a high preference for a loosely knit social framework and are more independent in their attitudes and frameworks. Thus their use of SNSs for social gratification may be limited. The ‘masculinity’ comparison shows that Jordan has a moderately low score of 45, suggesting that it is a ‘feminine’ society, whereas South Africa scores 63 on this dimension and is thus a ‘masculine’ society. People in a ‘feminine’ national culture, as in the case of Jordan, are generally caring and modest, whereas those on the masculine side are assertive and competitive (Degens et al., 2017). As shown in Figure 1, there are observable differences between the other national cultural dimensions of these two countries, suggesting that these differences may influence SNS continuance intention among the people of these countries.

2.3. Expectation-Confirmation Theory (ECT)

The expectation-confirmation theory (ECT) propounded by Oliver (1980) is arguably among the seminal theories on customer loyalty or continuance intention. The theory has been widely used by
researchers to understand consumer satisfaction and post-purchase behaviour such as repeat purchases and customer loyalty (Anderson & Sullivan, 1993; Dabholkar et al., 2000; Lin et al., 2009; Patterson et al., 1997). ECT posits that consumers go through a cognitive post-consumption process to evaluate their satisfaction with a product or service, based on their expectation of its performance, perceived performance, and disconfirmation of beliefs (Oliver, 1977). According to the ECT, before consuming a product or using a service, consumers develop a normative standard of its performance; on consuming the product or service, they gain a perception of its performance, which is then evaluated against the predefined performance standard. Consumers are deemed to be satisfied if the perceived actual performance of the consumed product or service is higher than their initial expectation (Oliver 1980). Customers who experience satisfaction are likely to repurchase and develop loyalty for the product or service; those who are dissatisfied are likely to discontinue their purchases and possibly switch to a competitor’s brand.

The ECT has been successfully adapted by Bhattacharjee (2001) to develop the expectation-confirmation model (ECM) of IS continuance. In the ECM, Bhattacharjee (2001) demonstrates that IS continuance intention is a function of users’ perceived usefulness and satisfaction. Furthermore, satisfaction is predicted by the users’ confirmation of the perceived usefulness of the system. A review of the literature shows that ECM has been extensively applied to understand IS continuance intention. However, what is noteworthy is that the model has been adapted and extended by various researchers to suit the context and technology domain; and therefore the selection of independent variables that were examined in prior studies using the ECM varied across contexts, IS domains, and the objectives of the study.

This study follows a similar approach by considering the context of SNS use in emerging countries such as Jordan and South Africa. The perceived usefulness construct of the ECM, borrowed from the technology acceptance model (TAM) (Davis, 1989), denotes users’ expected benefits of using an IS. This construct is the only usage-related belief in the ECM. Given that users use SNSs to obtain different gratifications (Dunne et al., 2010; Huang, Hsieh & Wu, 2014; Ifinedo, 2016), in this study the perceived usefulness construct was decomposed into the three gratifications of SNS use: social purposes, entertainment purposes, and educational purposes. This adaption addressed the different aspects of SNS usage-related beliefs that are likely to influence users’ perceived usefulness of the system (Chang & Zhu, 2012; Yin & Yang, 2010).
2.4 Service Quality

In the literature, service quality has been strongly established as one of the key pillars of service loyalty; interest in service quality has therefore generated much interest among practitioners and academics (Brady & Robertson, 2001; Ha & Lee, 2018; Hapsari et al., 2017; Hemsley-Brown et al., 2016). A key reason for this interest is the belief that service quality is inextricably linked with a firm’s bottom-line performance (Caruana, 2002).

The seminal research of Pitt et al. (1995) emphasised that information systems research should incorporate a measure of service quality as an assessment of IS quality. Follow-up researchers have heeded this call and investigated the effect of service quality on IS performance (Akter et al., 2013; Huang et al., 2015). These studies generally emphasised that IS service quality contributes significantly to increasing the acceptance of IS and their continued use, and is an approach to accomplishing better-use outcomes for IS users. In spite of this, the role of service quality in SNS acceptance and continuance use has not received much attention in the literature. In the information systems (IS) success model, DeLone and McLean (2010) posited service quality as one of the important determinants of user satisfaction and intention to continue using an IS system. In this regard, we argue that users’ satisfaction with and intention to continue using SNS will be influenced – to some degree – by the perceived service quality they receive from the SNS providers.

‘Service quality’ is generally defined as the outcome of the comparison that arises between customers’ normative expectations about a service and their perception of the service’s performance. In the seminal conceptualisation of service quality, Parasuraman et al. (1985, 1988) relied on generally accepted quantitative and qualitative procedures to generate a 22-item instrument (SERVQUAL) that measures five dimensions of service quality: reliability, responsiveness, assurance, empathy, and tangibility. These SERVQUAL measures have been the most widely used measures of service quality. Follow-up studies, however, have questioned the universal validity and applicability of the SERVQUAL instruments. For instance, Cronin and Taylor (1992) argued that the measurement of SERVQUAL confuses satisfaction and attitude. Consequently, they proposed service performance measures (SERVPERF) with a theoretical performance-based paradigm as a more parsimonious alternative to measuring service quality. Cronin and Taylor (1992, 1994) empirically demonstrated that SERVPERF measures have a stronger correlation with service quality than the score computations suggested by SERVQUAL, and so they recommended the use of SERVPERF, which used only the 22 performance items of SERVQUAL. Parasuraman et al. (1994) responded to the weaknesses pointed out in the original SERVQUAL, and made sweeping improvements to it. Some of these improvements include the reconceptualisation and extension of expectation, a three-column format of SERVQUAL to do away with the need to re-administer the items, a reduction in the number of items from 22 to 21, and a reduction of the five dimensions to three, with assurance, responsiveness, and empathy merged into a single factor.

This study follows the view of service quality conceptualisation as a gap (Parasuraman et al., 1994; Rust et al., 1995); and in operationalising service quality in SNSs, participants were requested to rate each of the performance items in the SERVQUAL relative to their expectations.

2.5. Use and Gratification (U&G) Theory

Users of SNSs do so for various reasons. The basic premise of the use and gratification (U&G) theory is that individuals seek out media that fulfill their needs and ultimately lead to gratification (Weaver Lariscy, 2011). One way to understand the ultimate needs that consumers seek to fulfill through the use of SNSSs is through the U&G theory (Raacke & Bonds-Raacke, 2008). Accordingly, this study employs the gratifications obtained from SNS use as a measure of the perceived benefits of using the system. Researchers have since successfully deployed the U&G theory to understand IS use behaviour (Li et al., 2015; Liang et al., 2007). Thus the use of the U&G theory is justified in this study to understand the benefits derived from SNSs.
The U&G theory has its roots in communication, and explains why and how people actively seek out types of media and kinds of content to fulfil their social and psychological needs (Rubin, 1994; Ruggiero, 2000). The term ‘gratification’ was invented by Herzog (1944) to denote the specific aspects of the use satisfaction of radio audiences. According to the theory, an audience actively engages in choosing a specific medium based on their self-awareness of the needs that must be fulfilled by the media. These needs then trigger motives that guide the use of a medium to achieve affective, cognitive, and behavioural outcomes (Katz et al., 1973; Weibull, 1985).

Since its inception, the U&G theory has been widely used in traditional mass media research, including radio (Mendelsohn, 1964), newspapers (Elliott & Rosenberg, 1987), and television (Babrow, 1987; Rubin, 1994). For instance, by applying the U&G theory, Rubin (1994) noted that audience gratification in watching specific types of television programmes is associated with different human needs, including information acquisition, emotional release, reality exploration, companionship, and value reinforcement.

With recent developments in information systems that have led to new forms of media, understanding why and how consumers actively seek out the new media to satisfy their needs has become imperative. In this regard, researchers have employed the U&G theory to understand consumers’ gratifications when accepting new media platforms such as email (Dimmick et al., 2004), the internet (Ferguson & Perse, 2000; Stafford et al., 2004), the world wide web (Eighmey & McCord, 1998), cell phones (Leung & Wei, 2000), online games (Huang et al., 2014; Li et al., 2015; Wu et al., 2010; Yee, 2006), and social media (Cheung et al., 2011; Dunne et al., 2010; Pai & Arnott, 2013; Park et al., 2009; Quan-Haase & Young, 2010; Raacke & Bonds-Raacke, 2008).

The U&G theory employs multiple constructs. The most robust and widely used constructs are entertainment (Eighmey & McCord, 1998; Leung & Wei, 2000; Li et al., 2015), information purposes (Chaouali, 2016; Kaye & Johnson, 2002; Leung & Zhang, 2016), and social purposes (Chaouali, 2016; Li et al., 2015; Quan-Haase & Young, 2010; Raacke & Bonds-Raacke, 2008). Given the prevalence of SNS use among students (Hamid et al., 2015; Roblyer et al., 2010), its use for educational purposes has gained traction from research in recent years (Abu-Shanab & Al-Tarawneh, 2015; Hamid et al., 2015; Holcomb et al., 2010; Madge et al., 2009; Roblyer et al., 2010; Yu et al., 2010). Thus this study added educational purposes to entertainment and social purposes as gratifications that are fulfilled by using SNSs.

### 2.6. An Integrated ECM for SNSs Continuance Usage

When users perceive that a medium fulfils the gratifications that they initially sought, they will have greater motives to use the medium continually (Palmgreen & Rayburn, 1979). The extent to which an SNS fulfils the users’ gratifications for using it is its perceived usefulness. Thus ‘perceived usefulness’ in this paper denotes the extent to which an SNS fulfils the entertainment, social, and educational purposes for which it is used. Consistent with ECM, this study therefore proposes a conceptual model (Figure 2) that indicates that the gratifications (social, educational, and entertainment purposes) obtained from SNSs are predicted by users’ confirmation. Moreover, the model proposes that the gratifications obtained from social media influence users’ satisfaction with the system and their continuance intention, and that satisfaction and continuance intention are both predicted by service quality. Finally, the model proposes that national culture moderates the relationships proposed in the conceptual model.

### 2.7. Hypotheses Development

#### 2.7.1. Confirmation

Confirmation generally denotes the extent to which consumption experience meets the consumers’ pre-consumption expectation. Confirmation is said to occur when consumers’ consumption experiences match their pre-consumption expectation. On the other hand, when the actual consumption
experience falls short of consumers’ expectation, a disconfirmation occurs. In the IS literature, Bhattacharjee (2001) describes confirmation as “the realization of the expected benefits of IS use” and disconfirmation as “performance lagging expectation [signifying] failure to achieve expectation”. In the SNS-use context, users have gratifications they seek from using the media. The performance of SNSs in meeting their sought-after gratifications is therefore measured against the gratifications obtained. Once the gratifications obtained exceed the gratifications sought, confirmation is likely to be achieved. This confirmation, once achieved, will likely increase the perception of the SNSs’ usefulness in contributing to the obtained gratification (Chiu et al., 2005; Roca et al., 2006). In general, usefulness and ease of use (in addition to habit) are significant predictors of continuous use of social networks (Li, Yang & Guo, 2019). In line with this, the following hypotheses are proposed:

**H1**: Confirmation will have a significant positive effect on social gratifications obtained from using SNSs.

**H2**: Confirmation will have a significant positive effect on entertainment gratifications obtained from using SNSs.

**H3**: Confirmation will have a significant positive effect on educational gratifications obtained from using SNSs.

In the ECT, satisfaction is said to occur when consumers’ actual experience meets or exceeds their pre-consumption experience. In the IS research domain, prior research has empirically established confirmation as a significant antecedent of satisfaction (Chang & Zhu, 2012; Hong et al., 2017; Oghuma et al., 2016; Venkatesh et al., 2011). Based on this, we expect that, once the use of an SNS fulfils the users’ sought gratifications, they will experience positive confirmation that will effectively lead to satisfaction with the media. Thus we propose:
H4: Confirmation will have a significant positive effect on users’ satisfaction with SNS use.

2.7.2. Social Purposes
The U&G theory suggests that people use media for social purposes, including communication and interaction with others in their social circles (Phang et al. 2009; Whiting & Williams, 2013). Wall posts and chat programs that are integrated into SNSs (such as Facebook) and independent chat programs (such as WhatsApp, WeChat, BlackBerry Messenger, and Wickr) are frequently patronised by users to exchange information with others and thus fulfill their need for interaction (Bryant & Marmo, 2012; Hall, 2018). Moreover, from a social gratification perspective, research has shown that SNSs provide users with supportive social relationships that reaffirm their sense of belonging (Hampton & Wellman, 2001). Thus SNSs enable users to connect with their friends, family, and others in their social circles and to engage in interactive communication; their need for gratification through social connections will be met, and so they are likely to be satisfied with the system. Moreover, research has shown that satisfied customers are likely to engage in positive post-satisfaction behaviours, such as repurchase and word-of-mouth (Guo & Wang, 2015; Leong et al., 2015). It therefore suggests that, when SNS users are satisfied with the use of the system for social purposes, they are likely to continue using the system. Thus we propose:

H5: Social gratifications obtained from using SNSs will have a significant positive impact on users’ satisfaction.

H6: Social gratifications obtained from using SNSs will have a significant positive impact on users’ continuance intention.

2.7.3. Entertainment Purposes
The use of SNSs for entertainment purposes points to the fun and enjoyment that users obtain from interacting with others in SNSs (Ku et al., 2013; Pai & Arnott, 2013). SNS use for entertainment purposes is one of the main explanations for the increasing use of SNSs (Hsu & Wu, 2011; Ifinedo, 2016; Ryan et al., 2014; Special & Li-Barber, 2012; Zolkepli & Kamarulzaman, 2015). Thus, if users find SNSs to be entertaining and mentally stimulating, their propensity to continue using the technology will be high. Empirical evidence supports the argument that users derive entertainment value from using SNSs, and that these benefits drive satisfaction with the system as well as their continued use of SNSs (Hsu et al., 2015; Ifinedo, 2016; Lin & Lu, 2011). From the foregoing argument, we propose:

H7: Entertainment gratification obtained from SNS use will have a significant positive effect on users’ satisfaction with the system.

H8: Entertainment gratification realised from SNS use will have a significant positive effect on the users’ continuance intention.

2.7.4. Educational Purposes
Educational institutions that facilitate communication between students and faculty in an effort to promote learning have exploited the characteristics of SNSs. These sites are being used as an effective technological tool to improve communication among students, teachers, and parents, particularly at the higher education level (Brady et al., 2010). For instance, by using Twitter, teachers are able to share in-classroom tweets with parents; students are not only able to flip their classrooms via YouTube, but can also share their classroom experiences using Instagram. Moreover, students can use blogging to share ideas on homework and provide feedback on classroom lessons. Students managing their project-based learning (Daily Genius, 2014) can also use Pinterest. A survey conducted by Best Masters in Education (2014) reported that 96% of students having access to the Internet use SNSs,
while 50% of users who discuss education topics talk about their school work on SNSs. The report also noted that 27% of the participating schools have an online community for students and teachers, and that 35% of the schools have students or instructors running blogs.

SNSs offer unique opportunities for educators to “facilitate a strong sense of community among students” and encourage “personal interactions that can lead to the creation of new knowledge and collective intelligence” (Brady et al., 2010). According to Roblyer et al. (2010), teaching as an act of fostering relationships with students – and thus using SNSs such as Facebook – will be an effective way to create a connection with students. Consequently, students might adopt SNSs to promote their learning and the acquisition of knowledge. Baird and Fisher (2005) argued that SNSs provide the opportunity to take social interaction to deeper levels and to address learning styles that are rooted in digital technologies. So users who feel that SNSs meet the educational goals they seek will be satisfied with the system and will be inclined to continue using the services. Thus we propose that:

H9: Educational gratification obtained from SNS use will have a significant positive effect on users’ satisfaction with the system.

H10: Educational gratification realised from SNS use will have a significant positive effect on users’ continuance intention.

2.7.5. Satisfaction

Customer satisfaction is one of the foremost arbiters of customer retention (Homburg & Giering, 2001; Hong et al., 2017; Izogo & Ogba, 2015; Shi et al., 2014; Valaei & Baroto, 2017). In the IS literature, users’ satisfaction with the system has been identified not only as a key determinant of continuous use but also as a measure of IS success (Battacherjee, 2001; Chang & Zhu, 2012; Hong et al., 2017; Valaei & Baroto, 2017). In the social media use context, Chang and Zhu (2012) empirically found a significant direct association between SNSs users’ satisfaction and continuance intention. Accordingly, we propose:

H11: Users’ satisfaction with SNS use will have a significant positive effect on their continuance intention.

2.7.6 Service Quality

The importance of service quality for customer satisfaction and continued patronage of a product or service cannot be over-emphasised. Indeed, researchers agree that delivering quality service is not only a key benchmark for assessing the competitiveness of a firm (LeBlanc, 1992; Yee et al., 2010), but also a critical factor in customer satisfaction (Bansal & Taylor, 2015; Ganapathi & Abu-Shanab, 2020;). Studies have evaluated service quality on the basis of either ‘pure’ service (e.g., banking, credit card service, medical care) (Donabedian, 2005; Lassar et al., 2000; Lee et al., 2010; Woo & Ennew, 2005) or ‘mixed’ service, which offers both tangible products and intangible service (e.g., retail, restaurants, the travel industry) (Ha & Jang, 2010; Saleh & Ryan, 1991; Wall & Berry, 2007). There is overwhelming empirical evidence to support higher levels of perceived service quality as a key antecedent of customer satisfaction.

In the IS literature, besides the IS success model, which has service quality as one of its exogenous variables, prior studies have integrated service quality into models such as the expectation–confirmation model to examine user satisfaction and intention to continue using IS (see Oghuma et al., 2016; Veeramootoo, Nunkoo & Dwivedi, 2018). In the domain of SNS research, a study by Marjanovic et al. (2018) identified service quality as an important factor explaining students’ satisfaction with, and continued use of, a system. Thus we propose the following hypotheses:

H12: Service quality will have a significant positive effect on users’ satisfaction with SNS use.
H13: Service quality will have a significant positive effect on SNS users’ continuance intention.

2.7.7 Cross-Cultural Comparisons

Research on technology adoption differences between countries, based on many contextual factors, is common (Alhassan, Adam & Nangpiire; 2020), but it is not specifically focused on national culture. The analysis of the national cultures of Jordan and South Africa, based on Hofstede’s cultural dimensions, revealed that there are differences between the two countries on almost every dimension. For instance, South African national culture is characterised by individualism, masculinity, and fairly low uncertainty avoidance; whereas the national culture of Jordan espouses the opposite in each case. Cross-cultural theory suggests that the national culture of consumers influences their consumption behaviour (Beaton et al., 2000; Cannon et al., 2010; Triandis et al., 1988; Tse et al., 1988), and differences of culture between countries underscore the differences in consumer behaviour from one country to the next. Research has indicated that power distance and uncertainty avoidance are major predictors of the major adoption variables (such as usefulness and ease of use) and the continuous use of technology (Mensah, 2020).

However, Malhotra et al. (1996) have argued that two cultures must have some features in common while at the same time differing in others. Given that, in our cultural comparison, the two countries have both similarities and contrasts in Hofstede’s national culture dimensions, we consider our cultural comparison to be legitimate. In the innovation acceptance literature, cultural differences have been identified as a key determinant of users’ innovation acceptance and use behaviour (Alquraan et al., 2017; Chau et al., 2002; Dinev et al., 2009; Shane et al., 1995). Thus we expect that relationships in the conceptual model will be moderated by culture. Consequently, we propose:

H14: The strengths of the relationships in H1-H13 will differ significantly between Jordanian and South African SNS users.

3. METHODS

3.1 Measurement Development

A paper-based self-administered questionnaire was used in a survey to obtain responses from participating SNS users from Jordan and South Africa. The items used were either selected and adapted from previous related studies or developed for the purposes of this study. The five items used to measure ‘personal purposes’ were developed from the work of Bolton et al. (2013) and Valenzuela et al. (2009). ‘Social purposes’ for using SNSs was measured with five items adapted from the work of Bolton et al. (2013) and Lovejoy and Saxton (2012). The four ‘service quality’ items were selected and adapted from the study of Cristobal et al. (2007). The items used to measure the ‘entertainment purposes’ construct were adapted from the work of Bolton et al. (2013). The items used for measuring ‘educational purposes’ for using SNSs were developed by the researchers and guided by the work of Bolton et al. (2013), Valenzuela et al. (2009), and Lovejoy and Saxton (2012). All of the items were measured on a five-point Likert scale with anchors ranging from ‘1’ (strongly disagree) to ‘5’ (strongly agree).

For the Jordanian sample, the questionnaire was first translated into Arabic by a person who is proficient in both English and Arabic. Next, the questionnaire was translated back into English by another person with similar proficiency in both languages. This was done to ensure equivalence in the meaning of the items across the national contexts. To ensure content validity and to refine the instruments, the questionnaire was subjected to an expert review.

3.2 Sampling and Data Collection

The sample of this study was drawn from students of institutions of higher learning in Jordan and South Africa. For both countries, a non-probability sampling technique in the form of convenience sampling
was used to identify the participants in the study. A small group of student research assistants was recruited and trained to conduct the survey. For each country, the research assistants visited institutions of higher learning and approached potential participants who were readily available to participate in the study. After explaining the purpose of the study to them and outlining their rights (including anonymity and voluntary participation), willing participants were given a copy of the questionnaire to complete. The survey yielded 396 valid responses from Jordan and 591 from South Africa.

4. DATA ANALYSIS AND RESULTS

4.1 Descriptive Analysis
The descriptive analysis of the data was carried out using Statistical Package for Social Sciences (SPSS) version 24. Of the 396 Jordanians who participated in the study, 111 (28%) were males and 285 (72%) were females. In the South African sample, 257 (43.5%) were males and 334 (56.5%) were females. What is noteworthy is that both surveys had more female participants than male. In terms of age, the results showed that the majority of the respondents who participated in the study were between the ages of 21 and 40 years. Only a few respondents (N=22) were above the age of 40. In fact, in the Jordanian sample, none of the respondents was above the age of 40, suggesting that the sample in the study is quite youthful.

4.2. Structural Equation Modelling
A structural equation modelling (SEM) technique using SmartPLS version 3.2.6 software (Ringle et al., 2015) was employed to evaluate the research model. We examined the moderating role of culture, which was operationalised as a dichotomous variable – Jordan and South Africa – using multi-group analysis (MGA). Byrne (2001) recommends that MGA, which involves the separation of samples into groups whose membership is based on a hypothesised moderating variable, is suitable for SEM analysis when the moderator is a discrete variable. SmartPLS software was used to generate groups in the data for measurement and structural model analyses; separate analyses were run concurrently for each group, and the path estimates generated for each were compared to ascertain the validity of the measurement model and the differences in structural paths. SmartPLS 3.2.7 generates pairwise comparisons between groups using three different statistical procedures: PLS-MGA (MGA) (Henseler et al., 2009), parametric (PMT), and Welch-Satterthwait (WS). The PMT assumes equal variances across groups, whereas the WS assumes unequal variance. These metrics were used in this study.

Table 1. Demographic information of survey respondents

<table>
<thead>
<tr>
<th></th>
<th>Overall sample</th>
<th>Jordan</th>
<th>South Africa</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Frequency %</td>
<td>Frequency %</td>
<td>Frequency %</td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>368</td>
<td>37.3</td>
<td>111</td>
</tr>
<tr>
<td>Female</td>
<td>619</td>
<td>62.7</td>
<td>285</td>
</tr>
<tr>
<td>Total</td>
<td>987</td>
<td>100</td>
<td>396</td>
</tr>
<tr>
<td><strong>Age (years)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18 – 20</td>
<td>169</td>
<td>17.2</td>
<td>65</td>
</tr>
<tr>
<td>21 – 40</td>
<td>796</td>
<td>80.6</td>
<td>331</td>
</tr>
<tr>
<td>&gt;40</td>
<td>22</td>
<td>2.2</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td>987</td>
<td>100</td>
<td>396</td>
</tr>
</tbody>
</table>
to ascertain the significance of the difference in the path coefficients between Jordanian and South African SNS users.

4.2.1. Measurement Model Analysis
A confirmatory factor analysis (CFA) was conducted to validate the psychometric properties of all the items used to measure the constructs. Convergent and discriminant validities are two important criteria for assessing measurement models (Bagozzi & Yi, 1988; Chin et al., 1997; Fornell & Larcker, 1981). To test the convergent validity of the measurement model, we examined the standardised factor loadings of composite reliability (CR) and average variance extracted (AVE). Convergent validity is confirmed when loadings of an item are 0.6 or more, CR is not less than 0.7, and AVE is greater than or equal to 0.5 (Chin et al., 1997; Hair et al., 2010). In the initial estimation of the measurement model, one item for social purposes (SOP1), one for educational purposes (EDP2), two for entertainment purposes (ENP2 and ENP3), and one for perceived service quality were identified as having a factor loading below the 0.6 threshold. These items were subsequently dropped and the model was re-examined.

The results of the measurement model analysis for the overall sample, and those for the Jordanian and South African samples, are presented in Table 2. The results showed that all items across the three samples – overall, Jordanian, and South African – were above the recommended threshold of 0.6. The CRs and the AVEs were also above the 0.7 and 0.5 thresholds respectively. Thus we concluded that the convergent validity of the measures was achieved across all the samples.

The second step in the assessment of the measurement model was to test its discriminant validity. This was established using the Fornell and Larcker (1981) technique and the HTMT ratio of correlations (Henseler, Ringle & Sarstedt, 2015). According to the Fornell and Larcker (1981) technique, for discriminant validity to be established, the square root of the AVE estimates should be greater than its correlation coefficients with other constructs. The results of the discriminant analyses of the samples presented in Table 3 showed that, for the overall sample and the country-specific samples, the square roots of the AVEs (diagonal bold estimates) were greater than the inter-factor correlations (estimates below the bold diagonal values) among the constructs, thus providing evidence of discriminant validity. With regard to the HTMT criteria, discriminant validity is established when the estimated HTMT ratio of correlations is less than either 0.85 or 0.90 (Henseler et al., 2015). From the results presented in Table 3, in both the overall and the country-specific samples, the HTMT ratio of correlations was less than the conservative threshold of 0.85, thus providing further evidence of the discriminant validity of the study’s measurement model.

The square roots of the AVEs are the bold diagonal values. The values beneath these are correlations among the constructs, and those above the bold diagonal values are the HTMT ratio of correlations.

4.2.2. Structural Model Analysis
After establishing convergent and discriminant validity for the measurement model, the structural model was assessed to determine the significance of the hypotheses and the variance explained (R²) by predictors in the outcome variables. Before this was done, the presence or absence of multicollinearity among the independent factors was established.

To check whether multicollinearity was an issue, the variance inflation factors (VIFs) and the tolerance values of the independent factors were examined. According to Mason and Perreault (1991), multicollinearity does not present a threat when VIFs are less than 10 or when the tolerance values are less than 0.1. For the Jordanian sample, the results of the analysis indicated that the VIF values ranged from 1.339 to 1.772, while those of the South African sample ranged from 1.340 to 1.448. Thus multicollinearity did not present a problem in this study.

After confirming the absence of multicollinearity, the hypothesised relationships were examined using SmartPLS software. Furthermore, to ascertain the impact of culture, a PLS multi-group analysis (Henseler et al., 2009) was conducted to determine whether there were significant differences in the
The results of the analysis suggested that confirmation accounted for 7%, 14%, and 18% of the variance in social purposes, entertainment purposes, and educational purposes respectively. Furthermore, the overall model accounted for 18% and 33% of the variances in satisfaction and continuance intention respectively. On examining the structural paths, the results of the overall path coefficients between SNS users in Jordan and in South Africa. The results of the analysis are presented in Figure 3 and Table 4.

The results of the analysis suggested that confirmation accounted for 7%, 14%, and 18% of the variance in social purposes, entertainment purposes, and educational purposes respectively. Furthermore, the overall model accounted for 18% and 33% of the variances in satisfaction and continuance intention respectively. On examining the structural paths, the results of the overall path coefficients between SNS users in Jordan and in South Africa. The results of the analysis are presented in Figure 3 and Table 4.

### Table 2. Convergent validity of measurement model

<table>
<thead>
<tr>
<th>Construct</th>
<th>Indicator</th>
<th>Overall Loading</th>
<th>Overall CR</th>
<th>Overall AVE</th>
<th>Jordan Loading</th>
<th>Jordan CR</th>
<th>Jordan AVE</th>
<th>South Africa Loading</th>
<th>South Africa CR</th>
<th>South Africa AVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social purposes</td>
<td>SOP2</td>
<td>0.768</td>
<td>0.525</td>
<td></td>
<td>0.768</td>
<td>0.525</td>
<td>0.779</td>
<td>0.541</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>SOP3</td>
<td>0.698</td>
<td>0.698</td>
<td></td>
<td>0.698</td>
<td>0.771</td>
<td></td>
<td>0.771</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>SOP4</td>
<td>0.687</td>
<td>0.687</td>
<td></td>
<td>0.687</td>
<td>0.670</td>
<td></td>
<td>0.670</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Educational purposes</td>
<td>EDP1</td>
<td>0.860</td>
<td>0.606</td>
<td></td>
<td>0.860</td>
<td>0.606</td>
<td>0.878</td>
<td>0.642</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>EDP2</td>
<td>0.817</td>
<td>0.817</td>
<td></td>
<td>0.817</td>
<td>0.834</td>
<td></td>
<td>0.825</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>EDP3</td>
<td>0.774</td>
<td>0.774</td>
<td></td>
<td>0.774</td>
<td>0.825</td>
<td></td>
<td>0.825</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>EDP5</td>
<td>0.757</td>
<td>0.757</td>
<td></td>
<td>0.757</td>
<td>0.784</td>
<td></td>
<td>0.784</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Entertainment purposes</td>
<td>ENP1</td>
<td>0.787</td>
<td>0.554</td>
<td></td>
<td>0.799</td>
<td>0.666</td>
<td>0.822</td>
<td>0.606</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>ENP4</td>
<td>0.803</td>
<td>0.863</td>
<td></td>
<td>0.863</td>
<td>0.810</td>
<td></td>
<td>0.810</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>ENP5</td>
<td>0.661</td>
<td>6.001</td>
<td></td>
<td>0.755</td>
<td>0.775</td>
<td></td>
<td>0.755</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>ENP5</td>
<td>0.761</td>
<td>0.766</td>
<td></td>
<td>0.766</td>
<td>0.768</td>
<td></td>
<td>0.768</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Confirmation</td>
<td>CON1</td>
<td>0.867</td>
<td>0.685</td>
<td></td>
<td>0.867</td>
<td>0.685</td>
<td>0.876</td>
<td>0.702</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>CON2</td>
<td>0.853</td>
<td>0.854</td>
<td></td>
<td>0.854</td>
<td>0.857</td>
<td></td>
<td>0.857</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>CON2</td>
<td>0.841</td>
<td>0.839</td>
<td></td>
<td>0.839</td>
<td>0.862</td>
<td></td>
<td>0.862</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>CON2</td>
<td>0.788</td>
<td>0.788</td>
<td></td>
<td>0.788</td>
<td>0.792</td>
<td></td>
<td>0.792</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Service quality</td>
<td>PSQ1</td>
<td>0.792</td>
<td>0.561</td>
<td></td>
<td>0.792</td>
<td>0.561</td>
<td>0.818</td>
<td>0.601</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PSQ2</td>
<td>0.824</td>
<td>0.824</td>
<td></td>
<td>0.824</td>
<td>0.79</td>
<td></td>
<td>0.79</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PSQ4</td>
<td>0.743</td>
<td>0.743</td>
<td></td>
<td>0.743</td>
<td>0.807</td>
<td></td>
<td>0.807</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SAT1</td>
<td>0.860</td>
<td>0.606</td>
<td>0.860</td>
<td></td>
<td>0.606</td>
<td>0.877</td>
<td></td>
<td>0.640</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>SAT2</td>
<td>0.803</td>
<td>0.815</td>
<td></td>
<td>0.815</td>
<td>0.819</td>
<td></td>
<td>0.819</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>SAT2</td>
<td>0.829</td>
<td>0.777</td>
<td></td>
<td>0.777</td>
<td>0.792</td>
<td></td>
<td>0.792</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>SAT2</td>
<td>0.754</td>
<td>0.754</td>
<td></td>
<td>0.754</td>
<td>0.803</td>
<td></td>
<td>0.803</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Satisfaction</td>
<td>ICU1</td>
<td>0.901</td>
<td>0.753</td>
<td></td>
<td>0.901</td>
<td>0.753</td>
<td>0.915</td>
<td>0.782</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>ICU2</td>
<td>0.883</td>
<td>0.883</td>
<td></td>
<td>0.883</td>
<td>0.902</td>
<td></td>
<td>0.902</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>ICU2</td>
<td>0.829</td>
<td>0.830</td>
<td></td>
<td>0.830</td>
<td>0.859</td>
<td></td>
<td>0.859</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>ICU3</td>
<td>0.889</td>
<td>0.888</td>
<td></td>
<td>0.888</td>
<td>0.890</td>
<td></td>
<td>0.890</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
sample suggested that confirmation had a significant positive impact on social purposes ($\beta = 0.260$, $t = 8.934$), entertainment purposes ($\beta = 0.369$, $t = 11.991$), and educational purposes ($\beta = 0.300$, $t = 9.929$), thus supporting H1, H2 and H3. The results further suggested that confirmation ($\beta = 0.228$, $t = 5.972$), social purposes ($\beta = 0.073$, $t = 2.849$), and entertainment purposes ($\beta = 0.117$, $t = 3.251$) had a significant positive effect on satisfaction; however, the impact of educational purposes ($\beta = 0.015$, $t = 1.772$) on satisfaction was found to be non-significant. Therefore, while the empirical evidence provided support for H4, H5, and H7, H9 was not supported. Such results might account for the general and common use of social network (entertaining channel for users), which is dependent on the sample nature. This result might change in another context or with another sample. Moreover, while the results suggested that social purposes ($\beta = 0.022$, $t = 1.369$) were not a statistically significant predictor of SNS continuance intention among users, entertainment purposes ($\beta = 0.336$, $t = 9.572$) and educational purposes were identified as significant positive predictors of SNS continuance intention. Thus, while H6 was not supported, H8 and H10 were supported. This was a surprise, as social purpose is a significant determinant of satisfaction, but not to continue using a platform – which means that individuals (represented by the sample only) will discard other people’s

<table>
<thead>
<tr>
<th>Overall sample</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Confirmation</td>
<td>0.828</td>
<td>0.628</td>
<td>0.427</td>
<td>0.519</td>
<td>0.701</td>
<td>0.472</td>
<td>0.431</td>
</tr>
<tr>
<td>2 Continuance intention</td>
<td>0.512</td>
<td>0.867</td>
<td>0.475</td>
<td>0.600</td>
<td>0.510</td>
<td>0.406</td>
<td>0.448</td>
</tr>
<tr>
<td>3 Educational purposes</td>
<td>0.337</td>
<td>0.391</td>
<td>0.779</td>
<td>0.450</td>
<td>0.483</td>
<td>0.303</td>
<td>0.499</td>
</tr>
<tr>
<td>4 Entertainment purposes</td>
<td>0.366</td>
<td>0.457</td>
<td>0.324</td>
<td>0.744</td>
<td>0.512</td>
<td>0.373</td>
<td>0.482</td>
</tr>
<tr>
<td>5 Satisfaction</td>
<td>0.374</td>
<td>0.34</td>
<td>0.246</td>
<td>0.272</td>
<td>0.779</td>
<td>0.454</td>
<td>0.607</td>
</tr>
<tr>
<td>6 Service quality</td>
<td>0.49</td>
<td>0.397</td>
<td>0.345</td>
<td>0.336</td>
<td>0.332</td>
<td>0.749</td>
<td>0.382</td>
</tr>
<tr>
<td>7 Social purposes</td>
<td>0.283</td>
<td>0.304</td>
<td>0.335</td>
<td>0.285</td>
<td>0.255</td>
<td>0.371</td>
<td>0.725</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Jordanian sample</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Confirmation</td>
<td>0.828</td>
<td>0.509</td>
<td>0.531</td>
<td>0.605</td>
<td>0.764</td>
<td>0.505</td>
<td>0.523</td>
</tr>
<tr>
<td>2 Continuance intention</td>
<td>0.512</td>
<td>0.867</td>
<td>0.560</td>
<td>0.629</td>
<td>0.583</td>
<td>0.456</td>
<td>0.570</td>
</tr>
<tr>
<td>3 Educational purposes</td>
<td>0.337</td>
<td>0.391</td>
<td>0.779</td>
<td>0.603</td>
<td>0.663</td>
<td>0.416</td>
<td>0.530</td>
</tr>
<tr>
<td>4 Entertainment purposes</td>
<td>0.356</td>
<td>0.475</td>
<td>0.329</td>
<td>0.816</td>
<td>0.638</td>
<td>0.435</td>
<td>0.604</td>
</tr>
<tr>
<td>5 Satisfaction</td>
<td>0.374</td>
<td>0.340</td>
<td>0.246</td>
<td>0.270</td>
<td>0.779</td>
<td>0.519</td>
<td>0.783</td>
</tr>
<tr>
<td>6 Service quality</td>
<td>0.490</td>
<td>0.397</td>
<td>0.345</td>
<td>0.336</td>
<td>0.332</td>
<td>0.749</td>
<td>0.469</td>
</tr>
<tr>
<td>7 Social purposes</td>
<td>0.283</td>
<td>0.304</td>
<td>0.335</td>
<td>0.275</td>
<td>0.255</td>
<td>0.371</td>
<td>0.725</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>South African sample</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Confirmation</td>
<td>0.838</td>
<td>0.666</td>
<td>0.372</td>
<td>0.456</td>
<td>0.664</td>
<td>0.383</td>
<td>0.383</td>
</tr>
<tr>
<td>2 Continuance intention</td>
<td>0.551</td>
<td>0.884</td>
<td>0.427</td>
<td>0.599</td>
<td>0.462</td>
<td>0.376</td>
<td>0.376</td>
</tr>
<tr>
<td>3 Educational purposes</td>
<td>0.299</td>
<td>0.361</td>
<td>0.801</td>
<td>0.445</td>
<td>0.381</td>
<td>0.225</td>
<td>0.477</td>
</tr>
<tr>
<td>4 Entertainment purposes</td>
<td>0.335</td>
<td>0.467</td>
<td>0.331</td>
<td>0.778</td>
<td>0.482</td>
<td>0.365</td>
<td>0.503</td>
</tr>
<tr>
<td>5 Satisfaction</td>
<td>0.361</td>
<td>0.312</td>
<td>0.189</td>
<td>0.279</td>
<td>0.800</td>
<td>0.409</td>
<td>0.503</td>
</tr>
<tr>
<td>6 Service quality</td>
<td>0.484</td>
<td>0.365</td>
<td>0.282</td>
<td>0.333</td>
<td>0.312</td>
<td>0.775</td>
<td>0.322</td>
</tr>
<tr>
<td>7 Social purposes</td>
<td>0.26</td>
<td>0.266</td>
<td>0.323</td>
<td>0.311</td>
<td>0.219</td>
<td>0.312</td>
<td>0.736</td>
</tr>
</tbody>
</table>
opinions if they are not benefitting from social networks. Furthermore, the results suggested that satisfaction ($\beta = 0.134, t = 5.714$) had a significant positive effect on continuance intention. Lastly, the effect of perceived service quality ($\beta = 0.137, t = 3.863$) on satisfaction ($\beta = 0.168, t = 4.997$) and continuance intention was found to be significant and positive, thus providing statistical support for H11, H12, and H13.

The results of the SmartPLS MGA showing the path coefficients and t-values of the paths in the structural model of the Jordanian and South African SNS users, and the significance of the differences in the structural paths between the groups using the MGA, PMT, and WS, are presented in Table 4. The results indicated that there were differences in the strengths of the path coefficients between the groups; for instance, among the Jordanians, their satisfaction with SNS use was not significantly predicted by the entertainment purposes for using the system ($\beta = 0.082, t= 1.547$), while this relationship was significant in the South African sample. However, in the South African sample, the social purposes ($\beta = 0.073, t= 1.616$) and educational purposes ($\beta = 0.015, t= 0.370$) for using SNSs were not significantly associated with users’ satisfaction, while these relationships were significant in the Jordanian sample. In spite of this, none of these differences was significant, as the p-values of the differences between the path coefficients exceeded the p<0.05 threshold. Thus we concluded that H14 was not supported.

5. DISCUSSION AND IMPLICATIONS

This study integrated perceived service quality into ECM to examine the antecedents of satisfaction and continuance intention using data obtained from SNS users in Jordan and South Africa, and to determine the moderating effect of national culture across these groups of SNS users. All the hypotheses proposed for the study were tested in the full and the country-specific samples. The empirical findings have implications for both theory and practice.
5.1. Theoretical Contributions

The main contribution of the study is the adaptation of the ECM for cross-cultural contexts of SNS continuance intention. The underlying ECM structure is an integral part of the tested model for ascertaining the precursors of users’ satisfaction with SNS and their continuance use intention. The findings of the study are generally robust across the SNS users of both the Jordanian and the South African cultures. Therefore this study not only extends the generalisability of the ECM from the context of general IS use to the SNS use domain in the context of emerging countries, but also confirms the validity of the ECM across different national cultures.

Moreover, the findings of this study confirmed the impact of confirmation on the gratifications obtained from SNS use, and examined the effect of the gratifications on users’ satisfaction with SNS use and subsequently on IS continuance use intention. Although the U&G theory has been deployed in previous research (Cheung et al., 2011; Dunne et al., 2010; Pai & Arnott, 2013; Park et al., 2009) to understand users’ gratifications with SNSs, few if any studies have examined whether users’ gratifications sought are confirmed by gratifications obtained (Palmgreen et al., 1980). By integrating selected gratifications obtained from using SNSs into our adapted ECM, this study has demonstrated that confirmation is a key antecedent of SNS users’ gratification obtained. These findings held true for both Jordanian and South African SNS users, thus emphasising the importance of confirmation in explaining the gratifications obtained from SNS use among users in different international contexts. Moreover, the three selected gratifications obtained for SNS use that we integrated into the adapted ECM for this study were used as surrogate measures for the perceived usefulness construct in the original ECM. Thus the findings of this study contribute to explaining how different aspects of perceived usefulness captured by the selected gratification obtained from SNS explain users’ satisfaction with the system and their continuance intention. This study also took up the call to examine different dimensions of perceived usefulness in different IS domains (Chang & Zhu, 2012; Yin & Yang, 2010).

Table 4. PLS multi-group analysis

<table>
<thead>
<tr>
<th></th>
<th>Jordan</th>
<th></th>
<th>South Africa</th>
<th></th>
<th>p-value of differences between parameter estimates</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Coefficient</td>
<td>T-Value</td>
<td>Coefficient</td>
<td>T-Value</td>
<td>MG</td>
</tr>
<tr>
<td>CON -&gt; SOP</td>
<td>0.341</td>
<td>6.773</td>
<td>0.260</td>
<td>6.852</td>
<td>0.099</td>
</tr>
<tr>
<td>CON -&gt; ENP</td>
<td>0.424</td>
<td>8.404</td>
<td>0.369</td>
<td>8.879</td>
<td>0.202</td>
</tr>
<tr>
<td>CON -&gt; EDP</td>
<td>0.409</td>
<td>7.717</td>
<td>0.300</td>
<td>7.029</td>
<td>0.057</td>
</tr>
<tr>
<td>CON -&gt; SAT</td>
<td>0.208</td>
<td>3.999</td>
<td>0.228</td>
<td>4.511</td>
<td>0.608</td>
</tr>
<tr>
<td>SOP -&gt; SAT</td>
<td>0.116</td>
<td>2.315</td>
<td>0.073</td>
<td>1.616</td>
<td>0.263</td>
</tr>
<tr>
<td>SOP -&gt; ICU</td>
<td>0.106</td>
<td>2.013</td>
<td>0.022</td>
<td>0.480</td>
<td>0.114</td>
</tr>
<tr>
<td>ENP -&gt; SAT</td>
<td>0.082</td>
<td>1.547</td>
<td>0.117</td>
<td>3.052</td>
<td>0.701</td>
</tr>
<tr>
<td>ENP -&gt; ICU</td>
<td>0.264</td>
<td>4.594</td>
<td>0.336</td>
<td>7.312</td>
<td>0.836</td>
</tr>
<tr>
<td>EDP -&gt; SAT</td>
<td>0.116</td>
<td>2.392</td>
<td>0.015</td>
<td>0.370</td>
<td>0.057</td>
</tr>
<tr>
<td>EDP -&gt; ICU</td>
<td>0.179</td>
<td>3.293</td>
<td>0.157</td>
<td>3.546</td>
<td>0.375</td>
</tr>
<tr>
<td>SAT -&gt; ICU</td>
<td>0.138</td>
<td>2.940</td>
<td>0.134</td>
<td>4.451</td>
<td>0.478</td>
</tr>
<tr>
<td>PSQ -&gt; SAT</td>
<td>0.118</td>
<td>2.185</td>
<td>0.137</td>
<td>2.843</td>
<td>0.602</td>
</tr>
<tr>
<td>PSQ -&gt; ICU</td>
<td>0.170</td>
<td>3.357</td>
<td>0.163</td>
<td>4.208</td>
<td>0.456</td>
</tr>
</tbody>
</table>

CON=Confirmation; SOP=Social purposes; ENP=Entertainment purposes; EDP=Educational purposes; SAT=Satisfaction; PSQ=Perceived service quality; ICU=Continuance intention
Another important contribution of the study is the integration of perceived service quality into the ECM as adapted for this study. According to the underlying ECT, when consumers experience a negative disconfirmation, they become dissatisfied and discontinue their purchases or switch to alternatives. Consumer switching behaviour is high in instances where there are numerous alternatives with low or no exit barriers in the industry (Chuah et al., 2017; Sharma & Patterson, 2000). With the proliferation of SNS platforms and the apparent absence of exit barriers, switching rates are likely to be high. The findings of this study illuminated the role of service quality in garnering SNS user satisfaction and continuance use intention.

Finally, although previous studies (Dinev et al., 2009; Im et al., 2011; Tarhini et al., 2017) have emphasised the role of national culture in IS use behaviour, this study’s finding – that there are no statistically significant differences in the antecedents of SNS satisfaction and continuance intention between Jordanian and South African users – is interesting. Perhaps it signals the blurring role of national culture as a significant moderator of SNS users across different geographic contexts, given that most users are young people. This study is one of few to examine the moderating role of national culture on SNS use behaviour across national cultures in two emerging nations, and lays a foundation for future studies in this regard.

5.2. Practical Implications

The model proposed and tested in this study identified the antecedents of user satisfaction and continuance use of SNS. The findings suggested that developers strive to develop SNS platforms that engender users’ positive confirmation, satisfaction, and continuance use intention.

To increase users’ satisfaction with SNS use and continuance use intention, service providers should develop services that will increase the social gratifications that users expect from participating in SNSs. Developers must develop effective tagging and recommendation systems that enable users to connect with others who share similar interests and identities. Moreover, interactive communication systems such as live chats and voice and video calls should be deployed or enhanced to facilitate live interactive communication between members of a network. Some form of incentive system should also be developed to encourage users to keep their profile and user interfaces active.

Educational gratifications obtained from SNSs also emerged as a salient predictor of user satisfaction with SNS and continuance intention among users. Users – particularly students – increasingly rely on SNSs to find new and relevant information to make decisions or to solve specific problems (Abu-Shanab & Abu-Shanab, 2019). Others also make use of SNSs to share their knowledge and expertise; and research has supported the role of social networks in improving collaborative learning between students and faculty and students (Ansari & Khan, 2020). It is important, therefore, for SNS developers to recognise this need and to redesign SNSs to facilitate collaborative study networks and group study sessions, and to encourage the streaming or recording of lectures. The extent to which users associate their academic success with SNSs will eventually develop their loyalty in using the services.

With regard to entertainment gratifications, SNS service providers should develop a strong entertainment value proposition for their customers. The entertainment value of SNSs should move from merely writing on virtual walls, tagging pictures, or poking or being poked by a connection in one’s network, sharing videos, or checking-in at locations, to include gaming applications that allow users to play different games such as poker and roulette. Integrating these games into SNSs could play a considerable role in enhancing the entertainment value proposition of SNSs, as many users would find pleasure and relaxation in playing these games, thus enhancing their satisfaction with the system and the ‘stickiness’ of the SNSs.

The findings suggest that, although there are differences in the antecedents of user satisfaction and continuance use intention between Jordanian and South African users, these differences are not statistically significant, implying that international marketing that seeks to develop strategies and services to increase user satisfaction and continuance use of their SNS platforms could benefit
from deploying a single strategy that addresses the general gratifications obtained from SNSs that contribute to user satisfaction and continuance use intention, instead of developing country-specific strategies. The opposite could also be considered: social networks could be explored to identify the factors pertaining to national culture for marketing purposes (Iqbal, 2017).

6. LIMITATIONS AND FUTURE RESEARCH

Although the results of this study expand our knowledge of SNS continuance behaviour, it comes with a number of limitations that provide scope for future research. First, the participants in both samples were obtained through a non-probability sampling procedure in the form of convenience sampling. Second, the study followed a cross-sectional descriptive design. Future studies could consider implementing a longitudinal study that uses probability sampling procedures in order to infer causality from the relationships posited in the theoretical model. Third, there is a plethora of SNSs, each having its unique characteristics and features that target different user segments – e.g., Twitter for micro-blogging, or YouTube for video sharing. In spite of these obvious differences, this study clustered all SNSs into a homogeneous group. A comparative study of users’ continuance intention with the major SNSs would better illuminate the factors associated with user satisfaction and continuance intention for each site. Fourth, this study treated service quality as a unidimensional construct. This might obscure a comprehensive analysis of the different tenets of social quality. For this reason, future studies should consider a multidimensional approach to measuring the service quality of SNSs.
REFERENCES


APPENDIX: MEASUREMENT ITEMS

Table 5. Additional Measurement Items

<table>
<thead>
<tr>
<th>Construct</th>
<th>Indicator</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Social purposes</strong></td>
<td>SOP1</td>
<td>Social media networking sites enable me to connect with people who I don’t know.</td>
</tr>
<tr>
<td></td>
<td>SOP2</td>
<td>Social media networking sites enable me communicate with people with similar interests.</td>
</tr>
<tr>
<td></td>
<td>SOP3</td>
<td>Social media networking sites assist me to find new friends I never met.</td>
</tr>
<tr>
<td></td>
<td>SOP4</td>
<td>Social media networking sites enable me to sustain my existing relationships.</td>
</tr>
<tr>
<td></td>
<td>SOP5</td>
<td>Social media networking sites assist me to revive my old abandoned relationships.</td>
</tr>
<tr>
<td><strong>Educational purposes</strong></td>
<td>EDP1</td>
<td>Social media networking sites enable me to find new and useful information I need.</td>
</tr>
<tr>
<td></td>
<td>EDP2</td>
<td>Social media networking sites enable me to get help in doing assignments.</td>
</tr>
<tr>
<td></td>
<td>EDP3</td>
<td>Social media networking sites assist me to conduct research about specific problems.</td>
</tr>
<tr>
<td></td>
<td>EDP4</td>
<td>I use social media networking sites to share with others my knowledge and expertise.</td>
</tr>
<tr>
<td></td>
<td>EDP5</td>
<td>I use social media networking sites to know about assignments deadlines and requirements.</td>
</tr>
<tr>
<td><strong>Entertainment purposes</strong></td>
<td>ENP1</td>
<td>I use social media networking sites to have fun, and enjoy my time when alone.</td>
</tr>
<tr>
<td></td>
<td>ENP2</td>
<td>I use social media networking sites to enjoy my time with friends in my group.</td>
</tr>
<tr>
<td></td>
<td>ENP3</td>
<td>I use social media networking sites to explore my sense of humour with others.</td>
</tr>
<tr>
<td></td>
<td>ENP4</td>
<td>I use social media sites to listen to music, and see videos posted by others.</td>
</tr>
<tr>
<td><strong>Confirmation</strong></td>
<td>CON1</td>
<td>My experience with using social media networking sites was better than what I expected.</td>
</tr>
<tr>
<td></td>
<td>CON2</td>
<td>The service level provided by the social media networking sites was better than what I expected.</td>
</tr>
<tr>
<td></td>
<td>CON3</td>
<td>Overall most of my expectations from social media networking sites were confirmed.</td>
</tr>
<tr>
<td><strong>Service quality</strong></td>
<td>PSQ1</td>
<td>I feel that SNSs provide services as promised.</td>
</tr>
<tr>
<td></td>
<td>PSQ2</td>
<td>I feel I can depend on SNSs service providers to handle the problems I face with using their platforms.</td>
</tr>
<tr>
<td></td>
<td>PSQ3</td>
<td>I believe SNSs keep users informed when service will be provided.</td>
</tr>
<tr>
<td></td>
<td>PSQ4</td>
<td>I feel SNSs are willing to help users.</td>
</tr>
<tr>
<td><strong>Satisfaction</strong></td>
<td>SAT1</td>
<td>Very dissatisfied — very satisfied</td>
</tr>
<tr>
<td></td>
<td>SAT2</td>
<td>Very displeased — very pleased</td>
</tr>
<tr>
<td></td>
<td>SAT3</td>
<td>Very frustrated — very contented</td>
</tr>
<tr>
<td></td>
<td>SAT4</td>
<td>Very unpleasant — very pleased</td>
</tr>
<tr>
<td><strong>Continuance intention</strong></td>
<td>CI1</td>
<td>I will continue using social media networking sites in the future.</td>
</tr>
<tr>
<td></td>
<td>CI2</td>
<td>I will use more social media networking types.</td>
</tr>
<tr>
<td></td>
<td>CI3</td>
<td>I expect that I will continue using social media networking sites.</td>
</tr>
</tbody>
</table>
Daniel K. Maduku (Ph.D.) is an Associate Professor in the Department of Marketing Management of the University of Johannesburg. His research interest span across digital marketing with particular focus on mobile commerce, social media marketing and the use of social analytics to provide real-time analysis of key consumer metrics to improve marketing decision-making. Dr Maduku’s research has been published in notable journals including the Journal of Business Research, International Journal of Information Management, International Journal of Advertising, Computers in Human Behaviour, Cyberpsychology, Behavior, and Social Networking, and the International Journal of Nonprofit and Voluntary Sector Marketing.

Emad A. Abu-Shanab is a Professor of Management Information Systems and E-government at Qatar University, Doha, Qatar. His major research areas are e-government, technology acceptance/adopton, e-learning, e-CRM and e-marketing, and the digital divide. Other areas in management information systems like strategic issues of IS, cloud computing, GDSS, IT project management, and ERP systems.