Social media adoption among university students: the role of gender, perceived usefulness and perceived ease of use

Michael Dzigbordi Dzandu

Department of Business Informatics, Systems and Accounting,
University of Reading,
Reading, UK
and
Department of Information Studies,
University of Ghana,
P.O. Box LG 60,
Legon, Ghana
Email: mdzandu@ug.edu.gh

Henry Boateng

Department of Marketing and Customer Management,
University of Ghana Business School,
P.O. Box LG 78,
Legon, Accra, Ghana
Email: kofihenry17@gmail.com

Franklin Gyamfi Agyemang*

Royal Ann College of Health,
P.O. Box KS 6253,
Kumasi, Ghana
Email: gyamfiagyemang@yahoo.co.uk
*Corresponding author

Fidelis Quansah

Department of Marketing,
University of Professional Studies,
P.O. Box LG 149,
Madina, Accra, Ghana
Email: fidquan@yahoo.com

Abstract: Social media adoption has been phenomenal especially among the youth. This study seeks to examine the effect of perceived usefulness, perceived ease of use and gender on social media adoption. The survey research design was used in this study to provide a basis for the generalisation of the findings of this study. The respondents were mostly youth and were selected using convenience sampling technique. Data was analysed using

multiple regression. The findings indicate that, perceived usefulness and perceived ease of use significantly predict social media adoption. However, there is no significant difference between males and females on adoption of social media. The implications of the results for the youth, teachers, technologist, marketers and developers of information systems have been put forward.

Keywords: social media; gender; technology adoption model; TAM; perceived ease of use; perceived usefulness; Facebook; Twitter.

Biographical notes: Michael Dzigbordi Dzandu holds a BSc in Computer Science and Psychology; and an MPhil in Librarianship from the University of Ghana, Legon. He has been an Assistant Lecturer at the Department of Information Studies, University of Ghana, Legon since 2009. His research interests are in application of ICTs in organisations, ICT for development, electronic records, information and knowledge management, internet and mobile technologies; and technology management. Currently, he is a PhD student at the Informatics Research Centre, Business Informatics, Systems and Accounting, Henley Business School, University of Reading, Whiteknights, Reading, RG6 6UD, UK.

Henry Boateng was a Research Assistant at the University of Ghana Business School. His main research interests are social media, customer knowledge management, information and knowledge management and transfer in business organisations, electronic business and commerce and internet application in marketing.

Franklin Gyamfi Agyemang is an ICT Tutor at the Royal Ann College of Health. He holds MBA in Management Information Systems. Prior to earning a Master's degree, he studied information studies from the University of Ghana. His main research areas are customer knowledge management and knowledge management, knowledge transfer, and library automation.

Fidelis Quansah is the current Head of Department of Marketing at the University of Professional Studies Accra. Her research interest is in the areas of international marketing, online marketing, consumer behaviour and services marketing.

1 Introduction

Social media is one of the popular inventions of the 21st century. The adoption of social media has increased exponentially since the technology was invented. Social media create several opportunities for users to interact, seek and share information and emancipate themselves while embracing new forms of technology and assimilating them into their day to day life (Payton and Kvasny, 2012; Shirazi, 2013). Similarly, most people especially the youth use social media to share their status, build social network,

display pictures and for self-gratification (Subramanian et al., 2014). Some studies have been conducted on social media and its adoption and like most technologies, most people have adopted social media because of the perceived ease of use and its perceived usefulness (van Slyke, 2007). As established in earlier information system research, technology adoption model (TAM) has proven to be a robust model for examining technology adoption (Davis, 1989; Davis et al., 1989). The technology acceptance model has been used to assess the adoption of different kinds of technologies such as email, word enterprise resources planning (ERP) systems; e-commerce (Amoako-Gyampah and Salam, 2004; Gefen, 2004) has also been found to be a strong predictor of these technologies. Similarly social media adoption has been studied using technology acceptance model. van Slyke (2007) noted that most people have adopted social media because of its perceived benefits and ease of use. Again, gender difference in technology adoption has been studied (Selwyn, 2007). Jackson et al. (2008) noted that previous researches focusing on gender and information technology use have corroborated three main findings; males were found to have more favourable attitudes toward computers and its usage as compared to females; Both females and males perceive computer activities to be male activities; females are apathetic to computer courses and computer-related careers than are males (Brosnan, 1998; Meredith et al., 1998). However, it appears there is paucity of empirical studies on gender difference in a technology adoption with regard to a technology with perceived utilitarian function like social media (Goh, 2011). On the other hand, Hill et al. (2008) believe that differences in age can account for the variation in internet adoption.

Hamade (2013) investigated Kuwait students' perceptions of social media and their impact on adoption and found Twitter and Facebook as the mostly used social media. Again, it was found that, social media impact on the students' relationship with family members and friend. This study did not look at the factors that influence the adoption. Moreover, the study was conducted in an Arab country where gender role in society is different from that of Ghana where this current study was conducted. Nonetheless, Hamade (2013) called for more empirical studies to be conducted on social media adoption among students. Against this backdrop, this study examines the effect of perceived usefulness, perceived ease of use and gender on social media adoption. The rest of the paper has been divided into four sections. Section one presents a literature review while section two focuses on the methodology employed. Section three presents the findings of the study while the last section captures discussion and conclusions of the study.

2   Literature review

2.1   Technology adoption model

TAM as developed by Davis (1986) was based on Fishbein and Ajzen's (1975) theory of reasoned action (TRA). TRA explains that; attitudes are influenced by beliefs, which consequently lead to intentions, which then guide or generate behaviours. The TAM explains and/or predicts belief, attitude, intention and behaviour of users towards information technology acceptance (Davis et al., 1989). User acceptance is basically based on two behavioural beliefs from the TAM namely the perceived ease of use (PEU)

and the perceived usefulness (PU). These two beliefs determine an individual's behaviour intention (BI) to use an IT (Davis et al., 1989).

2.2 Perceived usefulness

Perceived usefulness is defined as the degree to which a person believes that using a particular technology would enhance his or her job performance (Davis et al., 1989). Hence, in the context of this study, perceived usefulness can be explained to be the extent to which a prospective user believes that he or she will benefit from using social media. Davis et al. (1989) describe a system high in perceived usefulness as one for which a user believes in the existence of a positive user-performance relationship. The user perceives the system to be an effective way of performing the task(s). An individual evaluation of the result of their behaviour in terms of the foreseen benefits base their choice on the desirability of the usefulness (Al-Daihani, 2010; Kim et al., 2007). Technology is rejected by users if perceived not useful even if the technology was easy to use. Extant literature has shown perceived usefulness to have a significant effect on user adoption and satisfaction across a range of technologies (Davis et al., 1992). Sago (2013) found that the frequency of use of social media services is positively impacted by the level of perceived usefulness provided by the social media services. Lee et al. (2007) conducted an online survey of business students and found that perceived usefulness has less significant impact on behavioural intention to use instant messaging as compared to perceived ease of use. In an online survey of undergraduate and graduate business students, Strader et al. (2007) found that perceived usefulness had not a positive effect on intention to use instant messaging. Lu et al. (2009) assert that users need to find instant messaging as a useful tool in improving their communication efficiency, enabling them to more conveniently chat with their friends, colleagues and others before they will adopt. Shirazi (2013) explored the role of social media in communication discourse in the Islamic Middle East and North African (MENA) countries and found that social media help the citizens to partake in conversations and mobilisation. This study confirms communication and social networking role of social media as noted by Hamade (2013).

2.3 Perceived ease of use

Perceived ease of use is defined as the degree to which a person believes that using a system would be effortless (Davis et al., 1989). Considering that human's effort is a limited resource, an application perceived to be easier to use than another is more likely to be adopted by users (Davis et al., 1989). Numerous studies have found perceived ease of use is a major determinant of attitude towards a technology (Burton-Jones and Hubona, 2005; Setterstrom et al., 2013). Sago (2013) concluded that the perceived ease of use of the social media services is the reason for its frequent use. Lee et al. (2007) conducted an online survey of business students and found that perceived ease of use has a stronger impact on behavioural intention to use instant messaging. In an online survey of undergraduate and graduate business students, Strader et al. (2007) found that perceived ease of use had a positive effect on intention to use instant messaging. van Slyke (2007) together with Ilie et al. (2005) found that the perceived relative advantage and ease of use had an influence on intention of business students to use instant messaging positively.

2.4   Gender and social media adoption

Selwyn (2007) confirms gender differences exist for already adopted technologies and also among genders aged 16 to 25 year olds (Goh, 2011). Jackson et al. (2008) found that Chinese females were clearly less engaged with technology than were Chinese males. They were less likely to use the internet for communication and entertainment and rated their technology skills and enjoyment lower than did Chinese males. Again, Hamburger and Ben-Artzi (2000) found that gender differences were evident in early studies of the individuals' online activities as women higher in introversion and extraversion traits turned to the internet for its social services, such as online chats and discussion groups. Again, neuroticism, which is exhibited as loneliness, was attributed to women's internet use that posited that lonely women were drawn to the internet perhaps as a means to reduce their loneliness (Amichai-Hamburger and Ben-Artz, 2003). Tannen (1990) illustrated that there are differences in the ways men and women communicate; women place a greater emphasis on establishing connections with others and building a sense of community. Considering this gender-based trend among women and previous findings, it can be argued that vast majority of social media users rely on it to build connections and maintain relationships (Lenhart, 2009; Raacke and Bonds-Raacke, 2008). Correa et al. (2010) conclude that one would expect women regardless of their behaviour to be drawn to social networking sites. Sago (2013) found equal adoption of social media services across genders. However, Shashaani and Khalili (2001) attested that females were less confident in their own ability to work with computers even though they showed strong beliefs in equal gender ability and competence in the use of computers. In a study of undergraduate business students' perceptions and use of instant messaging, Ilie et al. (2005) found women value perceptions of ease of use, and visibility more than men; men value perceptions of relative advantage, result demonstrability and perceived critical mass more than women.

3   Methodology

This study employed the survey research design. The reasons for selecting the survey design were to generate quantitative descriptions of the characteristic of the respondents and test the relationship between the independent variable (perceived usefulness, perceived ease of use and gender) and the dependent variable (social media adoption). The respondents of the study were university students from Ghana. This decision was made because university students especially the youth have been found to be technology savvy. Theses respondents were accessible and therefore were selected using convenience sampling technique. The number of questionnaires that were distributed was 500, however, after editing the raw data, 275 (75%) were usable and therefore were used in the final analysis. The questionnaires were self-administered on the University of Ghana campus. The items measuring perceived usefulness, perceived ease of use and social media adoption were adapted from Davis et al. (1989). Items measuring perceived usefulness included; "social media can help me interact with my colleagues" and "people who use social media have a high profile". Similarly, items such as; "I interact with much ease on social media platforms and "I am skilful at using social media" were used to measure perceived ease of use. Also items measuring social media adoption included "I will keep on using a social media". The respondents were asked to indicate their gender,

age, religion and type of social media used. The questionnaire has been appended to the paper (see Appendix). For the purposes of parametric test using regression analysis, dummy variables were created and used for gender (i.e., male = 1 and female = 0) since gender is naturally measured on a nominal scale. To ensure the reliability of the instrument, a reliability test was performed. The mean standard deviation and the Cronbach's alphas, of the constructs are captured in Table 2. Data was analysed using multiple regression. This was to test the relationship between the independent variables and the dependent variable.

3.1 Presentation of findings

The respondents of the study were profiled according to their gender, age, religion and type of social media used (see Table 1). There were more females (54.5%) than males (45.3%). Furthermore, the results show that most (84.8%) of the respondents were within the ages of 21–25 years. Those within the ages of 16–20 years accounted for 6.9% while those within the ages of 26–30 years constituted 5.8%. Similarly those within the ages of 31–35 years constituted 0.4% whilst those who were 36 years and above accounted for 0.7%. Concerning the religious affiliation of the respondents, it was revealed that 89.5% were Christians while 6.9% were Muslims. Additionally, 0.4% of the respondents were traditionalists while 0.7 were Buddhist. Those in other religions accounted for 2.5%. This shows that most of the respondents were Christians.

Furthermore, the results show that 40.0% of the respondents were regular users of Facebook while 14.9% constituted regular users of Twitter. Regular users of Linkedln 2.2% while regular users of Instagram accounted for 10.5%. Regular users of Whatsapp were 25.5% and the other social media applications accounted for 6.9%. This indicates that Facebook is the dominant social media application among the respondents.

Table 1   Demographic characteristics of respondents

Demographic variable		Frequency	Percentage (%)
Gender	Male	125	45.3
	Female	150	54.5
	Total	275	100.0
Age	16-20 years	19	6.9
	21-25years	234	84.8
	26-30years	16	5.8
	31-35years	1	0.4
	36 years and above	5	1.8
	Total	275	100.0
Religion	Christianity	247	89.5
	Islam	19	6.9
	Traditional	1	0.4
	Buddhism	2	0.7
	Other	7	2.5
	Total	275	100.0

Table 1   Demographic characteristics of respondents (continued)

Demographic variable		Frequency	Percentage (%)
Type of social media	Facebook	110	40.0
	Twitter	41	14.9
	Linkedln	6	2.2
	Instagram	29	10.5
	Whatsapp	70	25.5
	Others	19	6.9
	Total	275	100.0

The means and standard deviations of the constructs are presented in Table 2. The mean scores for perceived usefulness, perceived ease of use and social media adoption were near 4.0 which indicate that the respondents were in agreement with the statements.

Table 2   Descriptive statistics and Cronbach alpha (α)

Variables	M	SD	α
Gender**	1	0.50	*
Perceived usefulness	3.7	1.01	.83
Perceived ease of use	4.4	0.98	.86
Social media adoption	3.8	1.03	.78

Notes: **NB: dummy variables were used for gender where 1 = male, 0 = female, for the
         purpose of regression analysis.
         *No Cronbach's alpha.

The relationship among the variables was ascertained using Pearson correlations. All the variables were significantly correlated except gender. Perceived usefulness was positively correlated with perceived ease of use ($r = 0.214$) and social media adoption ($r = 0.223$). Perceived ease of use was positively correlated with social media adoption ($r = 0.211$). The correlations among the variables are presented in Table 3.

Table 3   Correlations among the predictors and social media adoption

Variables	GENDER	PU	PEOU	SMA
GENDER**	1			
PU	0.097	1		
PEOU	0.027	0.214*	1	
SOCIAL MEDIA ADOPTION (SMA)	0.079	0.223*	0.211*	1

Notes: **NB: dummy variables were used for gender where 1 = male, 0 = female, for the
         purpose of regression analysis.
         *p ≤ .05.

To assess the effect of gender, perceived usefulness and perceived ease of use on social media adoption, multiple regression was performed. The overall model fit was 43% ($R^2 = 0.431$, p < 0.05) (see Table 4 and 5). This means that the variables can correctly predict social media adoption by 43%.

Table 4   Summary results of regression model for predictors of social media adoption

Model	R	R square	Adjusted R square	Std. error of the estimate
1	0.542[a]	0.477	0.431	0.97319

Note: [a]Predictors: (constant), gender, perceived usefulness, perceived ease of use.

Table 5   ANOVA for predictors of social media adoption

Model		Sum of squares	df	Mean square	F	Sig.
1	Regression	19.544	3	6.515	6.484	.000[a]
	Residual	273.298	272	1.005		
	Total	292.842	275			

Notes: [a]Predictors: (constant), gender, perceived usefulness, perceived ease of use.
[b]Dependent variable: social media adoption.

Furthermore the results show that males 5.7% use social media more than females but this was insignificant (β =.057, P-value = .330, p > 0.05). Again, perceived usefulness was found to significantly explain 18% of the variance in social media adoption (β = .181, p < 0.05). Additionally, it was noted that perceived ease of use significantly explains 17% of the variations in social media adoption (β = .171, p < 0.05).

Table 6   Regression coefficients for the predictors of social media adoption

Model		Unstandardised coefficients		Standardised coefficients	T	Sig.
		B	Std. error	Beta		
1	(Constant)	1.991	0.389		5.113	0.000
	Gender**	0.118	0.121	0.057	0.976	0.330
	Perceived usefulness	0.185	0.061	0.181	3.021	0.003
	Perceived ease of use	0.240	0.084	0.171	2.872	0.004

Notes: **NB: dummy variables were used for gender where 1 = male, 0 = female, for the purpose of regression analysis.
Dependent variable: social media adoption.

4   Discussion and conclusions

The objective of the study was to examine the role of perceived usefulness, perceived ease of use and gender in social media adoption. The results indicate that with the exception of gender, the other predictors play a significant role in social media adoption. Thus the dimensions of the perceived usefulness constructs adopted for this study were significantly predictive of the adoption of social media by the youth (Davis et al., 1992; Lu et al., 2009; Sago, 2013; Lee et al., 2007; Strader et al., 2007). Similarly, the study found the dimensions of perceived ease of use to be significantly predictive of the adoption of social media in line with evidence from extant literature (Burton-Jones and Hubona, 2005; Ilie et al., 2005; Lee et al., 2007; Sago; 2013; Setterstrom et al., 2013;

Strader et al., 2007; van Slyke, 2007). It is noted that, perceived usefulness and perceived ease of use even though influenced the adoption of technologies such as social media as in this study, with time technologies become very easy to use and their usefulness become obvious. In addition, usefulness of technology sometimes erode with the passage of time as user needs change and users' expectations of the technology become even more sophisticated such that technology that seem useful today become useless as it begins to fail in meeting increasing and complex user needs.

The benefits of social media to individuals and organisations have been acknowledged in extant literature (van Slyke, 2007). People use it for their self-gratification, communication, information seeking and sharing (Subramanian et al., 2014), displaying their pictures and building social networks. Similarly, respondents of this study have adopted social media mainly because they facilitate learning, interaction, and serve as symbol of status. Again, social media are perceived as prestigious technology and therefore using them makes the user prestigious.

Furthermore, it was found in this current study that social media adoption is a result of the fact that the interfaces of most social media are user friendly, it is easier to navigate the websites create user account and interact easily on a social media platforms. Again, the user does not need any special skills in information technology to use social media. This finding is consistent with most previous studies. For example Setterstrom et al. (2013) and Sago (2013) note that people adopt some technology because they are less complex to use. On the other hand, if the technology is complicated and a special skill is needed to operate, people will not use or adopt such technology (Davis et al., 1989).

Concerning gender, the study found that males and females alike adopt social media (Sago, 2013). Thus for this study, gender does not adequately explain the variations in social media adoption in spite of the fact that some studies (Jackson et al., 2008; Selwyn, 2007) have shown the significant role of gender in technology adoption. This finding might be attributed to the general perceived usefulness of social media (Subramanian et al., 2014). Again, it may be as a result the general desires of the youth (both males and females) to use these media for their self-gratification, i.e., uploading pictures and status messages to boost self-esteem. In this case, it can be argued that people will adopt any technology that is useful; technology that facilitate routine activities irrespective of their gender. Therefore marketers, technologist and service providers can focus more on exploiting those dimensions of the TAM used in this study in delivering social media-driven products and services to the youth instead of gender-driven technologies, products and services.

This study has implications for developers of information systems based on the evidence of the dimensions of the perceived ease of use construct of the TAM adopted for this study. The interfaces must be more user-friendly, and one that requires basic skills in information technology to operate. Furthermore, improving adoption of information systems will mean the system is relevant to the target users. The system must add value to the life, enhance their self-esteem and create for them a status of symbol (Rodgers, 1994).

Also, the implications of the results of the study for teachers are that social media platforms can be exploited for teaching and learning purposes since its adoption is very high among the youth especially university students. Teachers can engage students in discussions and tutorials via social media platforms to enhance teaching and learning whilst increasing teacher-student contact hours. Facebook, Twitter and Whatsapp provides invaluable platforms for teachers and students alike to engage in meaningful

information sharing, teaching and learning everywhere and anytime beyond the walls of the physical classrooms. However, a formal adoption of social media by teachers for teaching and learning purposes, especially in developing countries like Ghana, which was the study setting, would have to be carefully thought of and planned as access to technology, lack of electricity, poor internet connectivity and low internet speed among others still remain a challenge.

5 Limitations of the study

The limitation of this study is that, it relied on only three predictor variables. However, it has been noted that several factors such as subjective norm, behavioural control, age, and educational level and facilitating condition and cost (Venkatesh et al., 2003) are crucial in technology adoption. Therefore, future studies should include other predictor variables. Again, the respondents were selected using convenient sampling technique. Again, a more robust analyses technique like structural equation modelling (Bagozzi and Yi, 2012) might be employed in future studies.

This study examined the adoption of social media through the lens of TAM with particular emphasis on the effect of perceived usefulness and perceived ease of use; and gender. Using data drawn from 275 university students as a proxy for the youth, there was evidence that perceived usefulness and perceived ease of use significantly predict the adoption of social media. However, males and females alike adopt social media as no significant difference was observed between them. The study also found Facebook and Whatsapp to be the most (65.5%) used social media platform among the youth sampled. The study thus confirmed aspects of the TAM model (perceived usefulness and perceive ease of use) which predicts the adoption of social media among the youth from a developing country context. The study concludes that marketers, teachers, information systems designers and technologist can exploit those dimensions of the TAM constructs that predict social media adoption used in this study to promote social media-driven products and services.

References

Al-Daihani, S. (2010) 'Exploring the use of social software by master of library and information science students', *Library Review*, Vol. 59, No. 2, pp.117–131.

Amichai-Hamburger, Y. and Ben-Artz, I.E. (2003) 'Loneliness and internet use', *Computers in Human Behavior*, Vol. 19, No. 1, pp.71–80.

Amoako-Gyampah, K. and Salam, A.F. (2004) 'An extension of the technology acceptance model in an ERP implementation environment', *Information and Management*, Vol. 41, No. 6, pp.731–745.

Bagozzi, R.P. and Yi, Y. (2012) 'Specification, evaluation, and interpretation of structural equation models', *Journal of the Academy of Marketing Science*, Vol. 40, No. 1, pp.8–34.

Brosnan, M. (1998) *Technophobia: The Psychological Impact of Information Technology*, Routledge, London.

Burton-Jones, A. and Hubona, C.S. (2005) 'Individual differences and usage behavior: Revisiting a technology acceptance model assumption', *The Database for Advances in Information Systems*, Vol. 36, No. 2, pp.58–77.

Correa, T., Hinsley, A.W. and Zúñiga, H.G. (2010) 'Who interacts on the Web?: The intersection of users' personality and social media use', *Computers in Human Behavior*, Vol. 26, No. 2, pp.247–253.

Davis, F.D.A. (1986) *Technology Acceptance Model for Empirically Testing New End-User Information Systems: Theory and Result*, PhD dissertation, Sloan School of Management, Massachusetts Institute of Technology.

Davis, F.D., Bagozzi, R.P. and Warshaw, P.R. (1989) 'User acceptance of computer technology: a comparison of two theoretical models', *Management Science*, Vol. 35, No. 8, pp.982–1003.

Davis, F.D., Bagozzi, R.P. and Warshaw, P.R. (1992) 'Extrinsic and intrinsic motivation to use computers in the workplace', *Journal of Applied Social Psychology*, Vol. 22, No. 4, pp.1111–1132.

Fishbein, M. and Ajzen, I. (1975) *Belief, Attitude, Intention, and Behavior: An Introduction to Theory and Research*, Addison-Wesley, Reading, MA.

Gefen, D. (2004) 'TAM or just plain habit', *Advanced Topics in End User Computing*, Vol. 3, No. 3, pp.1–9.

Goh, T. (2011) 'Exploring gender differences in SMS-based mobile library search systems adoption', *Educational Technologies and Society*, Vol. 14, No. 4, pp.192–206.

Hamade, S.N. (2013) 'Perception and use of social networking sites among university students', *Library Review*, Vol. 62, Nos. 6–7, pp.388–397.

Hamburger, Y.A. and Ben-Artzi, E. (2000) 'The relationship between extraversion and neuroticism and the different uses of the internet', *Computers in Human Behavior*, Vol. 16, No. 4, pp.441–449.

Hill, R., Beybib-Davies, P. and Williams, M.D. (2008) 'Older people and internet engagement: acknowledging social moderators on internet adoption, access and use', *Information Technology and People*, Vol. 21, No. 3, pp.244–266.

Ilie, V., van Slyke, C., Green, G. and Lou, H. (2005) 'Gender differences in perceptions and use of communication technologies: a diffusion of innovation approach', *Information Resource Management Journal*, Vol. 18, No. 3, pp.13–31.

Jackson, L.A., Zhao, .Y, Qiu, W., Kolenic, A., Fitzgerald, H.E., Harold, R. and von Eye, A. (2008) 'Culture, gender and information technology use: a comparison of Chinese and US children', *Computers in Human Behavior*, Vol. 24, No. 6, pp.2817–2829.

Lee, M., Cheung, C. and Chen, Z. (2007) 'Understanding user acceptance of multimedia messaging services: an empirical study', *Journal of the American Society for Information Science and Technology*, Vol. 58, No. 13, pp.2066–2077.

Lenhart, A. (2009) *Adults and Social Network Websites*, Pew Internet and American Life Project [online] http://www.pewinternet.org/Reports/2009/Adults-and-Social-Network-Websites.aspx (accessed 14 October 2014).

Lu, Y., Zhou, T. and Wang, B. (2009) 'Exploring Chinese users' acceptance of instant messaging using the theory of planned behavior, the technology acceptance model, and the flow theory', *Computers in Human Behavior*, Vol. 25, No. 1, pp.29–39.

Kim, H.W., Chan, H.C. and Gupta, S. (2007) 'Value-based adoption of mobile internet: an empirical investigation', *Decision Support System*, Vol. 43, No. 1, pp.111–126.

Meredith, A., Helen, J. and Woodcock, L. (1998) 'Women can do I.T. – but why don't they?', *Conference Proceedings: Winds of Change: Women and Culture of Universities*, pp.762–766, University of Technology Press, Sydney, Australia.

Payton, F.C. and Kvasny, L. (2012) 'Considering the political roles of black talk radio and the Afrosphere in response to the Jena 6', *Information Technology and People*, Vol. 25, No. 1, pp.81–102.

Raacke, J. and Bonds-Raacke, J. (2008) 'MySpace and Facebook: applying the uses and gratifications theory to exploring friend-networking sites', *Cyberpsychology and Behavior*, Vol. 11, No. 2, pp.169–174.

Rodgers, S. (1994) 'An exploratory study of research utilization by nurses in general medical and surgical wards', *Journal of Advanced Nursing*, Vol. 20, No. 5, pp.904–911.

Sago, D. (2013) 'Factors influencing social media adoption and frequency of use: an examination of Facebook, Twitter, Pinterest and Google+', *International Journal of Business and Commerce*, Vol. 3, No. 1, pp.1–14.

Selwyn, N. (2007) 'Hi-tech guy-tech? An exploration of undergraduate students' gendered perceptions of information and technologies', *Sex Roles*, Vol. 56, Nos. 7–8, pp.525–536.

Setterstrom, A.J., Pearson, J.M. and Orwig, R.A. (2013) 'Web-enabled wireless technology: an exploratory study of adoption and continued use intentions', *Behaviour and Information Technology*, Vol. 32, No. 11, pp.1139–1154.

Shashaani, L. and Khalili, A. (2001) 'Gender and computers: similarities and differences in Iranian college students' attitudes towards computers', *Computers and Education*, Vol. 37, No. 3–4, pp.363–375.

Shirazi, F. (2013) 'Social media and the social movements in the Middle East and North Africa', *Information Technology and People*, Vol. 26, No. 1, pp.28–49.

Strader, T., Ramaswami, S. and Houle, P. (2007) 'Perceived network externalities and communication technology acceptance', *European Journal of Information Systems*, Vol. 16, pp.54–65.

Tannen, D. (1990) *You Just Don't Understand: Women and Men in Conversation*, Ballatine, New York, NY.

Subramanian, R, Wise, K., Davis, D., Bhandari, M. and Morris, E. (2014) 'The relative contributions of implicit and explicit self-esteem to narcissistic use of Facebook', *Computers in Human Behavior*, Vol. 39, No. 1, pp.306–311.

van Slyke, D.M. (2007) 'Agents or stewards: using theory to understand the government-nonprofit social service contracting relationship', *Journal of Public Administration Research and Theory*, Vol. 17, No. 2, pp.157–187.

Venkatesh, V., Morris, M.G., Davis, G.B. and Davis, F.D. (2003) 'User acceptance of information technology: toward a unified view', *MIS Quarterly*, Vol. 27, No. 3, pp.425–478.

Appendix

Please tick one box for each statement according to how you disagree or agree with the statement using this key: 1 = STRONGLY DISAGREE, 2 = DISAGREE, 3 = NEUTRAL, 4 = AGREE, 5 = STRONGLY AGREE

	1	2	3	4	5
Perceived usefulness					
Social media facilitate my daily work					
Social media can help me interact with my colleagues					
Using social media is a status symbol					
People who use social media have more prestige than those who do not					
People who use social media have a high profile					
Perceived ease of use					
It is easy to use social media					
I interact with much ease on social media platforms					
Most social media interfaces are user friendly					
I am skilful at using social media					
Social media adoption					
I will keep on using a social media					
I spend a lot of time on social media					
Overall I use social media					

Gender   A. Female   B. Male

Age   A. 16–20 yrs   B. 21–25 yrs   C. 26–30 yrs   D. 31–35 yrs   E. Other

Religion   A. Christianity   B. Islam   C. Traditional   D. Buddhism   E. Other

Which of the following social media do you use most?

A. Facebook   B. Twitter   C. LinkedIn   D. Instagram   E. Other………………

What do you use the social media chosen above for?

…………………………………………………………………………………………………..