

# Social Networking Sites Continuance: An Application of Extended Theory of Planned Behaviour

Himanshu Rajput\*

*\*Research Scholar, School of Business & Management Studies, Central University of Himachal Pradesh, Himachal Pradesh, India. E-mail: himanshu8rajput007@gmail.com*

## ABSTRACT

Social networking sites (SNSs) have become popular in India with the proliferation of Internet. SNSs have gained the interests of academicians and researchers. The current study is an endeavor to understand the continuance of social networking sites in India. The study applies an extended version of theory of planned behavior. Additional factors privacy concerns and habits were incorporated into the standard theory of planned behaviour. A survey was conducted in a Central University in India. Overall, data was collected from 150 respondents. PLS-SEM was used to test the proposed model. All the hypotheses except the moderating role of habits between intentions and continued use of social networking sites, were supported by the results. Habits were found to affect continued use of social networking sites indirectly through continued intentions.

**Keywords:** Habits, Theory of Planned Behaviour, SNS Continuance; Social Networking Sites

## INTRODUCTION

On 30<sup>th</sup> June, 2014, Google announced the discontinuance of its social networking site (SNS), Orkut from September, 2014 as it was losing its user base to other SNSs (Anwar, 2014). Before that, another SNS, Google Buzz was also shut down. After the initial adoption by internet users these sites could not engage their users for long. The continued use of an SNS is must for their survival in today's digital world. In a digital market like India where people are adopting Internet and Internet-based services at a fast pace, SNSs have already become the mainstream online services. India is already home to second largest Facebook users in the world (Nayak, 2014). The SNS sector is witnessing the heat of competition. Google's effort to make a mark in SNS through launching Google plus, despite the setbacks, signifies the importance that online players give to SNS sector. India with second-largest population in the world is an emerging online market that can cater to the growth need of these players. But only initial adoption of an SNS cannot ensure the long term success of their service (Kang et al., 2013). The companies have to make sure the continued use over the time as the monetary cost of switching for users is minimal in this sector. This study is an endeavour to address the same issue. To understand the continued use of SNSs is the primary aim of this study. For this purpose, the study uses the theory of planned behaviour as a framework.

Habit and privacy concerns are added to the standard TPB to predict the continued use of SNSs in India

## THEORETICAL BACKGROUND AND RESEARCH MODEL

### Social Networking Sites Continuance

Traditionally, the emphasis of IS research studies has been on initial adoption and use of IS and there has been very little work on continued use or post adoption use of IS (Al-Debei, 2013). Particularly, in new fields like SNSs the studies have been more or less centred on initial adoption, behavioural and demographic pattern of users, interplay between SNS use and personality etc. But to sustain in today's highly competitive and dynamic digital market the initial adoption or success is not enough. IT service providers have to be relevant in changing times and they have to engage their user base. Thus, the continued use of SNSs by the users is the key to their success. Of late, a little academic work has been conducted to understand the continuance of these applications. The work so far revolves around the prior-established theories from social psychology, consumer behaviour, media studies, like the theory of planned behaviour, the expectancy-confirmation theory (ECM), technology adoption model (TAM) and uses and gratification (U & G) framework. For example, Kefi et al. (2010), Al-Debei et al. (2013) and

Hsu et al. (2013) used an extended form of TPB to predict continued use of SNSs. Islam & Mantymaki (2012), Kim (2011) and Hsu et al. (2013) used ECM. Ku et al. (2013) used U & G approach to study the continued use of SNSs. Most of these studies have been conducted in western cultural setup, which makes the findings of these studies less relevant in a different cultural context like India. The cultural difference between Western countries and India warrants such studies to be conducted in Indian context.

### Theory of Planned Behaviour (TPB)

TPB (Ajzen, 1985; 1987) is an extension of the theory of planned behaviour (Ajzen & Fishbein, 1975;1980) for explaining the behaviour that are not fully under the volitional control of human beings (Ajzen, 1991). According to TPB, the actual behaviour (AB) of an individual can be explained by her/his intention (IN) to perform that task and her/his perceived behavioural control (PBC) over performing that task. PBC also affects actual behaviour directly. Furthermore, the intention to perform a task is determined by the attitude (A) of the individual towards the behaviour; the subjective norms (SN) held by individual and perceived behavioural control. TPB has become one of the most influential and frequently used models for predicting human behaviour (Ajzen, 2011) and thus has got the attention of researchers to explain various human activities. TPB has been successfully used in context of general human activities like explaining conservation technology adoption decisions (Lynne et al.,1995), understanding exercise during breast cancer treatment (Courneya & Friedenreich,1999), predicting recycling behaviour (Tonglet et al., 2004), understanding the intentions to attend a sport event (Cunningham & kwon, 2003), explaining literary reading (Miesen, 2003), understanding parasuicide behaviour (O'Conner & Armitage, 2003), predicting voluntary employee turnover (Van Breukelen et al., 2004), predicting safe lifting behaviour (Johnson & Hall, 2005), understanding intentions of drinking and driving (Chan et al. ,2010) etc.

In IS studies, TPB has been used frequently to explain the adoption and use of IT (e.g., Lin et al., 2006; Baker et al., 2007; Ozer & Yilmaz, 2010; Darvell et al., 2011; Cameron, 2012 etc.)

The findings of these studies have demonstrated high predictive power of TPB in explaining the acceptance and use of IT (Hsu et al., 2006). Despite the high use of TPB in studies to understand the acceptance and use of IT, its use in understanding the continuance of IT has been very limited (Al-Debei et al., 2013).

Along with the standard TPB, researchers have used decomposed and extended TPB to better explain the various human behaviours ( e.g., Morris et al., 2005; Hsu et al., 2006; Pavlou & Fygenson, 2006; Thorbjornsen et al., 2007; Liao et al., 2007). Ajzen (1991) himself favoured such an extension or decomposition of TPB if additional factors capture a significant proportion of the variance in intentions or actual behaviour.

### Attitude

Attitude represents an individual's evaluation of a particular stimulus (Ajzen & Fishbein, 1977) and thus refers to the degree to which a person has a favourable or an unfavourable evaluation of the behaviour in question (Ajzen, 1991). In this study, attitude is defined as the evaluation of an individual towards social networking sites.

The capability of attitude to anticipate behavioural intentions has been a crucial subject of research and theory. Attitude is presently, by and large perceived as an important factor to understand and predict social behaviour (Ajzen, 2001). In TPB, the attitude has been assumed a predictor of intention to perform a particular behaviour. The more favourable a person assumes the result from performing a task, the more willingness she/he has to perform that task. Previous studies have supported the positive relationship between attitude and intentions (Ajzen & Fishbein, 1980).

According to basic assumption of TPB, this study posits:

H1: Attitude towards SNSs will positively affect the intentions to continue the use of SNSs.

### Subjective Norm

Subjective norm refers to an individual's perceived social pressure to perform a behaviour (Ajzen, 1991). It represents the subjective evaluation of the pressure to or not to perform a behaviour from the people an individual considers important. In this study subjective norm refers to perceived pressure from important ones to continue the use of SNSs.

In TPB, subjective norm is considered to positively influence the intentions to perform the behaviour. Social networking sites are social in nature and thus it is imperative to consider that the perceived pressure from peers, friends and family members will have a positive influence over the continuance of SNSs. Previous studies on SNSs have reinforced the relationship (e.g., Pelling &

White, 2009). In the light of the assumption of TPB and results from previous studies, this study proposes:

H2: Subjective norm will positively affect the intention to continue the use of SNSs.

### Perceived Behavioural Control

Added to the theory of reasoned action to explain behaviours that are not solely under the control of individuals, PBC refers to the perceived ease or difficulty of performing the behaviour (Ajzen, 1991). Accordingly, in this study PBC is defined as an individual's perceived ease or difficulty in continuing the use of SNSs. In TPB, PBC is assumed to be a direct determinant of intentions and as well as the actual behaviour. In the studies cited by Ajzen (1991) the correlation coefficient between PBC and intention varied between 0.2 and .76 while the correlation between PBC and behaviour varied between .2 and .87. Thus, the relationship between PBC and intentions and PBC and actual behaviour has been weak to strong varying from studies to studies. Going by the TPB, the study proposes that PBC will positively influence the intentions to continue the use of SNSs as well the continued use of SNSs.

H3: Perceived behavioural control positively influence the intentions to continue the use of SNSs.

H4: Perceived behavioural control positively influence the continued use of SNSs.

### Intentions

In TPB, intentions are assumed to include motivational factors that influence the performance of a behaviour by an individual. Intentions represent how hard an individual is willing to try to perform a behaviour (Beck & Ajzen, 1991). In this study intentions simply represents the willingness of an individual to continue the use of SNSs. TPB assumes that stronger intentions to perform behaviour leads to higher chances of performing it. Sheeran (2002) in his review of the intention-behaviour relationship reported a mean overall correlation of .53 between the constructs; McEachan et al. (2011) in their meta-analysis of TPB in health-related behaviour reported a correlation of .43 between intention and behaviour. Based upon the basic assumption of TPB and considering the positive results of prior studies, following hypothesis is proposed:

H5: Intentions to continue the use of SNSs positively influence the continued use of the SNSs

### Habit

Verplanken et al. (1997) define habits as 'learned sequences of acts that become automatic responses to specific situations which may be functional in obtaining certain goals or end states'. An individual develops habits to perform a behaviour after its repetition over a time. Triandis (1977) observed that the probability of performing a behaviour is a function of both intentions and habits. The latest developments in psychology have exhibited supremacy of habits in the explaining automatic use of a system (Ko, 2013). Furthermore, the effect of IS habits on IS use may be steady and unaltered while the effect of intentions may vary over the time (Lee, 2014).

IS researchers have used habits as a construct to explain the use and continuance of IS by users (e.g., Limayem & Cheung, 2008). Limayem et al. (2007) define IS habits as the extent to which individuals tend to make automatic use of a target IS because of learning effect and demonstrated that continued use of an IS is a result of habits along with intentions. In case of SNSs continuance, habits formed over the prolonged use may play a critical role as a behaviour performed repeatedly becomes automatic and less reasoned-based as explained by TPB (Verplanken et al., 1998; Limayem et al, 2007).

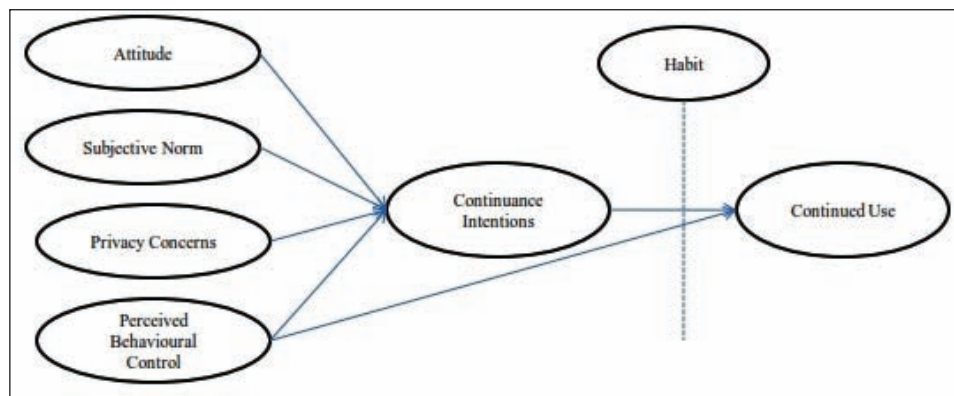
Kang et al (2013) observed that past research on IS continuance and habits demonstrated direct, moderate and mediation relationship between habits and continuance. They empirically supported the role of habits as moderator between continuance intention and continued use. Assuming that after initial adoption of SNSs by users, it will become more automatic and the role of conscious or rational decision will become less effective, the study posits the negative moderating role of habits between continuance intention and the continuance of SNSs.

H6: Habits moderately affect the relationship between continuance intentions and the continuance of SNSs.

### Privacy Concerns

For this study, privacy concern is defined as 'a person's awareness and assessment of risks related to privacy violations on SNSs' (Tan et al., 2012). People share their personal information on SNSs. The information can be used for the purposes other than the intended ones and thus may lead to intrusion into privacy of an individual. Of late, online privacy is becoming a critical issue among internet users (Baek et al., 2014). Personal information on the internet can easily be copied by unauthorised persons.

F-1, the proposed model



In a study on privacy and Facebook users (Acquisti & Gross, 2006), it was observed that people with profiles on Facebook had more prominent concerns than the persons who did not have Facebook profile for the strangers knowing where they lived and their class schedules. The perceived lack of privacy in SNSs can create a concern in users and thus may lead to discontinuance of SNSs (Rauniar et al., 2013). The recent news of exposure of Facebook data of 6 million users to unauthorised users (Shih, 2013) has reinforced the privacy concern among the SNSs users. Such incidents may negatively impact the intention to continue the use of SNSs. Thus, this study posits:

H7: Privacy concerns negatively influence the SNSs continuance intention.

## METHOD

### Participants

The survey instrument was administered on postgraduate and research students in a central University. The survey was conducted in both online and offline mode. For the purpose of online collection of data, a link to the survey instrument was sent to participants on Facebook.

Overall, the data were collected from 150 students. The sample included 91 (60.67%) male and 59 (39.33%) female students.

## MEASURES

The measures for the variables were adapted from previous studies. All the items were measured on five-point Likert scale. The three item scale for attitude, two-item scale for subjective norm and three-item scale for

perceived behavioural control were taken from Al-Debei et al. (2013). The three item scale for privacy concerns was adapted from Xu et al. (2008). The three item scale for habit was adapted from Limayem & Cheung (2008). The three item scale for measuring continuance intention was adapted from Bhattacharjee (2001) and Shiau & Chau (2012). The two item formative scale to measure continued use of SNSs was adapted from Kang et al. (2013).

## RESULTS

For analysis, PLS-SEM was used. The reason for choosing PLS-SEM over CB-SEM is that it is easy to use with formative latent variable as well its robustness with the small sample size. PLS-SEM also does not demand the distributional assumptions (Rigdon et al., 2010). The analysis was conducted through SmartPLS 2.0 M3 (Ringle et al., 2005). Before testing the model, the data was checked for common method bias. Then, measurement model was examined, followed by structural model.

## COMMON METHOD BIAS

To check the presence of common method bias, Harman's one factor test was conducted. In unrotated factor analysis 5 factors were generated. The first factor accounted for approximately 35% of the variance. As no single factor emerged and no factor accounted for most of the variance, there is no common method bias in the data.

## MEASUREMENT MODEL

The validity and reliability of measurement model were assessed through confirmatory factor analysis (CFA). The construct validity was assessed by composite reliability

**T-1, Measurement model; CR=composite reliability, AVE= Average Variance extraction**

<i>Construct</i>	<i>Item</i>	<i>Loading</i>	<i>Weight</i>	<i>CR</i>	<i>AVE</i>
Attitude ( $\alpha=0.7$ )	A_1	0.79		0.83	0.62
	A_2	0.81			
	A_3	0.77			
Subjective norm ( $\alpha=0.76$ )	SN_1	0.87		0.89	0.81
	SN_2	0.93			
Perceived behavioural control ( $\alpha=.8$ )	PBC_1	0.88		0.88	0.71
	PBC_2	0.83			
	PBC_3	0.82			
Privacy concern ( $\alpha=.8$ )	PC_1	0.81		0.88	0.71
	PC_2	0.84			
	PC_3	0.88			
Continuance intention ( $\alpha=.95$ )	CI_1	0.86		0.96	0.73
	CI_2	0.90			
	CI_3	0.89			
Habit ( $\alpha=.62$ )	H_1	0.82		0.79	0.57
	H_2	0.54			
	H_3	0.86			
Continued Use	CU_1		0.49		
	CU_2		0.61		

(CR), which was found above the cut off value of .7 (Bagozzi and Yi, 1988).

The convergent validity was evaluated by average variance extracted (AVE). For each latent variable, AVE was greater than the recommended threshold of .5 (Fornell & Larcker, 1981). The discriminant validity was confirmed through the comparison of square root of AVE of latent variables with their correlation with other latent variables. T-2 shows the square roots of latent variables in bold diagonal. The square root of AVE for each variable

exceeded their correlation with other variables.

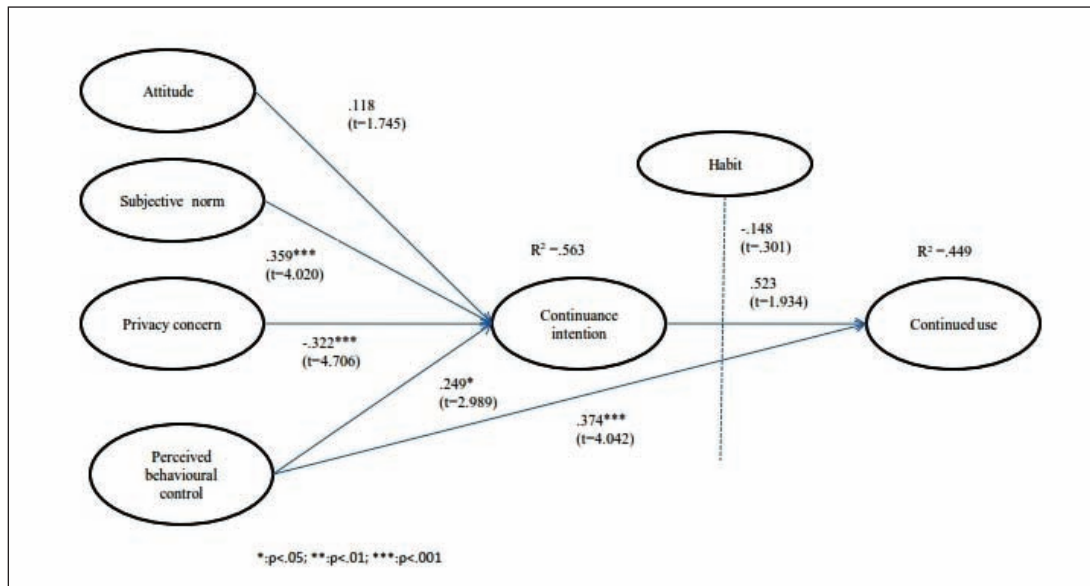
## STRUCTURAL MODEL

For assessing structural model, the study uses PLS bootstrapping as suggested by Chin (1998). F-2 shows the model with the standardised path coefficients and related t-values in brackets. The significant paths are indicated with asterisk. Subjective norm ( $\beta=.359$ ,  $p<.001$ ), perceived behavioural control ( $\beta=.249$ ,  $p<.05$ ) and privacy concern ( $\beta=-.322$ ,  $p<.001$ ) were found to be statistically

**T-2, Inter Construct Correlations and Square Roots of AVE; Diagonal Elements (in bold) Represent the Square Root of AVE**

	<i>Attitude</i>	<i>Continuance Intentions</i>	<i>Habits</i>	<i>Perceived Behavioural Control</i>	<i>Privacy Concern</i>	<i>Subjective Norms</i>
Attitude	<b>0.79</b>					
Continuance Intentions	0.34	<b>0.85</b>				
Habits	0.1	0.55	<b>0.75</b>			
Perceived Behavioural Control	0.26	0.52	0.31	<b>0.84</b>		
Privacy Concern	-0.21	-0.56	-0.29	-0.36	<b>0.84</b>	
Subjective Norms	0.25	0.59	0.29	0.35	-0.36	<b>0.9</b>

F-2, PLS Results of the Initial Model



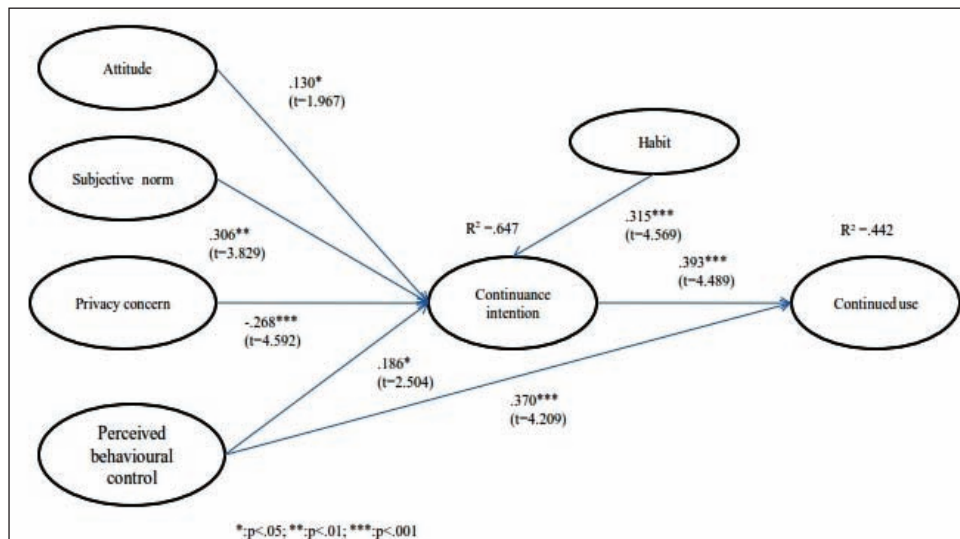
significant predictors of SNSs continuance intentions predicting 56.3% of the variance. Attitude ( $\beta=.118$ ,  $p>.05$ ) was not found to be a significant predictor of SNSs continuance intentions. Continuation intention ( $\beta=.523$ ,  $p>.05$ ) was not found significant predictor of continued use while perceived behavioural control ( $\beta=.374$ ,  $p<.001$ ) was found to be a significant predictor of continued use of SNSs.

To test the moderating relationship of habit between continuance intention and continued use, the PLS-product-indicator approach as proposed by Chin et al. (2003) was used. The proposed moderating role of habit ( $\beta=-.148$ ,  $p>.05$ ) was not supported statistically. Thus, hypotheses

H2, H3, H4 and H7 were accepted while hypotheses H1, H5, H6 were not supported by data. Overall, the model predicted 44.9% of the variance in continued use of SNSs.

With the inclusion of habit as direct predictors of SNSs continuance intentions and indirect predictors of continued use, the model was re-specified and run again. The model with standardised path coefficients and related t-values is shown in F-3. In re-specified model all the paths were found to be statistically significant. Overall, the model explained 64.7% variance in continuance intentions and 44.2% of the variance in continued use of SNSs.

F-3, PLS Results of Re-Specified Model



## DISCUSSION

The continued use of SNSs is necessary for their success (Chen, 2013). India is an emerging digital market, home to the world's third largest base of Internet users and second largest in terms of Facebook users. Drawing upon the theory of planned behaviour, this study proposes and empirically tests a model to predict the continued use of SNSs in India. Along with elements of standard TPB, study includes two other elements that affect the continued use of SNSs: privacy concern and habit. The initial model hypothesised moderating role of habits between continuance intentions and continued use, which was not supported by the data. The re-specified model that hypothesised direct impact of habit on continuance intention was tested. All the paths in re-specified model were found to be significant. The indirect relationship between continued use and habit through continuance intention reinforces the findings of Wilson et al. (2010) and Barnes (2011). It seems that habits formed as a result of prior use of SNSs contribute to the conscious intentions to continue the use of SNSs. Privacy concern was found to be a negative factor in continued use of SNSs. The result is not surprising, as many studies (e.g. Ku et al., 2013) have demonstrated the similar findings. The recent incidents of intrusion on the privacy of users have reinforced the concerns among the users. The basic hypotheses of TPB were also supported. As previous studies have shown the high predicting power of TPB in explaining the actual behaviour, the results are not surprising in the case of SNSs continuance.

## IMPLICATIONS

The study contributes to the IS literature in Indian context. There is a dearth of literature on Indian culture that deals with the issue of use of IS. The study tries to fill this gap in literature by extending the theory of planned behaviour to Indian SNS context. The study provides valuable inputs for SNSs. The privacy concerns emerge a hurdle in continued uses of SNSs. SNSs have to address the issue of perceived privacy concern among users as a serious matter in policy formulation. On one hand, SNSs have to strengthen their privacy policy, on the other hand, they have to, make users more aware about their privacy policy and settings. More customisation of and simplification in privacy settings may be introduced. Habits play an important role in forming the intentions to continue the use of SNSs. SNSs in collaboration with internet service providers, may introduce inexpensive or free trial packages to engage new users and to develop a

habit among the users. Furthermore, SNSs have to make an effort to make a positive attitude among the users by promoting the positive outcomes of use. The multi-platform promotion through success stories may be used for the purpose.

## LIMITATIONS AND FURTHER DIRECTION

The study uses students as a sample. This limits the generalisation of the findings. A further study with a more diversified sample may be conducted to test the proposed model. The study uses Facebook as a proxy for SNS in the survey. SNSs differ in nature and features, thus Facebook may not represent other SNSs. The study uses self-reported measures for collecting data which may result in biased data. A further study with recording of actual usage may be carried out. Scope of including other social-psychological factors in the model can be considered by researcher in further study.

## REFERENCES

- Acquisti, A., & Gross, R. (2006, January). Imagined communities: Awareness, information sharing, and privacy on the Facebook. In *Privacy enhancing technologies* (pp. 36-58). Springer Berlin Heidelberg.
- Ajzen, I., Fishbein, M. (1975). *Belief, attitude, intention and behaviour: An introduction to theory and research*. Reading, MA: Addison-Wesley
- Ajzen, I., & Fishbein, M. (1980). Predicting and understanding consumer behaviour: Attitude-behaviour correspondence. *Understanding attitudes and predicting social behaviour*, 148-172. Englanwood cliffs, NJ: Prentice-Hall
- Ajzen, I. (1985). From intentions to actions: A theory of planned behaviour. J. Kuhl, & J. Beckman (Eds.), *Action-control: From cognition to behaviour* (pp. 11-39). Heidelberg: Springer
- Ajzen, I. (1987). Attitudes, traits, and actions: Dispositional prediction of behaviour in personality and social psychology. In L. Berkowitz (Ed.). *Advances in experimental social psychology*, 20 (1), 1-63. New York: Academic Press
- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision*, 50 (2), 179-211 Retrieved from <http://www.sciencedirect.com/science/article/pii/074959789190020T>
- Ajzen, I. (2001). Nature and operations of attitudes. *Annual Review of Psychology*, 52, 27-58

- Ajzen, I. (2011). The theory of planned behaviour: reactions and reflections. *Psychology & Health*, 26(9), 1113–27. doi:10.1080/08870446.2011.613995
- Ajzen, I., & Fishbein, M. (1977). Attitude-behavior relations: A theoretical analysis and review of empirical research. *Psychological Bulletin*, 84 (5), 888–918. doi:10.1037//0033-2909.84.5.888
- Al-Debei, M. M., Al-Lozi, E., & Papazafeiropoulou, A. (2013). Why people keep coming back to Facebook: Explaining and predicting continuance participation from an extended theory of planned behaviour perspective. *Decision Support Systems*, 55 (1), 43–54. doi:10.1016/j.dss.2012.12.032
- Anwar, J. (2014, June 30). Google says tchau Orkut, will shut down social network on September 30. *The times of India*. Retrieved from <http://timesofindia.indiatimes.com/tech/tech-news/Google-says-tchau-Orkut-will-shut-down-social-network-on-September-30/article-show/37534749.cms>
- Baek, Y. M., Kim, E., & Bae, Y. (2014). My privacy is okay, but theirs is endangered: Why comparative optimism matters in online privacy concerns. *Computers in Human Behavior*, 31, 48-56. doi:10.1016/j.chb.2013.10.010
- Bagozzi, R. P., & Yi, Y. (1988). On the evaluation of structural equation models. *Journal of the academy of marketing science*, 16 (1), 74-94.
- Baker, E. W., Al-Gahtani, S. S., & Hubona, G. S. (2007). The effects of gender and age on new technology implementation in a developing country: Testing the theory of planned behavior (TPB). *Information Technology & People*, 20 (4), 352-375. doi:10.1108/09593840710839798
- Barnes, S. J. (2011). Understanding use continuance in virtual worlds: Empirical test of a research model. *Information & Management*, 48 (8), 313-319. doi:10.1016/j.im.2011.08.004
- Beck, L., & Ajzen, I. (1991). Predicting dishonest actions using the theory of planned behavior. *Journal of Research in Personality*, 25 (3), 285–301. doi:10.1016/0092-6566 (91) 90021-H
- Bhattacharjee, A. (2001). An empirical analysis of the antecedents of electronic commerce service continuance. *Decision support systems*, 32 (2), 201-214.
- Cameron, R., Ginsburg, H., Westhoff, M., & Mendez, R. V. (2012). Ajzen's theory of planned behaviour and social media use by college students. *American Journal of Psychological research*, 8 (1), 1-20
- Chan, D. C. N., Wu, A. M. S., & Hung, E. P. W. (2010). Invulnerability and the intention to drink and drive: an application of the theory of planned behavior. *Accident; Analysis and Prevention*, 42 (6), 1549–55. doi:10.1016/j.aap.2010.03.011
- Chen, R. (2013). Living a private life in public social networks: An exploration of member self-disclosure. *Decision Support Systems*, 55 (3), 661-668.
- Chin, W. W., Marcolin, B. L., & Newsted, P. R. (2003). A partial least squares latent variable modeling approach for measuring interaction effects: Results from a Monte Carlo simulation study and an electronic-mail emotion/adoption study. *Information systems research*, 14 (2), 189-217.
- Chin, W.W. (1998). Commentary: issues and opinion on structural equation modelling. *MIS Quarterly*. 22 (1).7-16
- Courneya, K. S., & Friedenreich, C. M. (1999). Utility of the theory of planned behavior for understanding exercise during breast cancer treatment. *Psychoncology*, 8 (2), 112-122.
- Cunningham, G. B., & Kwon, H. (2003). The Theory of Planned Behaviour and Intentions to Attend a Sport Event. *Sport Management Review*, 6 (2), 127-145. doi:10.1016/S1441-3523 (03) 70056-4
- Darvell, M. J., Walsh, S. P., & White, K. M. (2011). Facebook tells me so: applying the theory of planned behaviour to understand partner-monitoring behavior on Facebook. *Cyberpsychology, Behavior and Social Networking*, 14 (12), 717-22. doi:10.1089/cyber.2011.0035
- Fornell, C., & Larcker, D.F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing research*. 18 (1).39-50
- Hsu, C.-L., Yu, C.-C., & Wu, C.-C. (2013). Exploring the continuance intention of social networking websites: an empirical research. *Information Systems and E-Business Management*. doi:10.1007/s10257-013-0214-3
- Hsu, M.-H., Yen, C.-H., Chiu, C.-M., & Chang, C.-M. (2006). A longitudinal investigation of continued online shopping behavior: An extension of the theory of planned behavior. *International Journal of Human-Computer Studies*, 64 (9), 889–904. doi:10.1016/j.ijhcs.2006.04.004
- Islam, A. K. M., & Mäntymäki, M. (2012). *Continuance of Professional Social Networking Sites: A Decomposed Expectation-Confirmation Approach*. Paper presented at the Thirty Second International Conference on Information Systems. Shanghai. Retrieved from <http://aisel.aisnet.org/icis2012/proceedings/DigitalNetworks/5/>

- Johnson, S. E., & Hall, A. (2005). The prediction of safe lifting behavior: an application of the theory of planned behavior. *Journal of Safety Research*, 36 (1), 63-73. doi:10.1016/j.jsr.2004.12.004
- Kang, Y. S., Min, J., Kim, J., & Lee, H. (2013). Roles of alternative and self-oriented perspectives in the context of the continued use of social network sites. *International Journal of Information Management*, 33 (3), 496-511. doi:10.1016/j.ijinfomgt.2012.12.004
- Kefi, H., Mlaiki, A., & Kalika, M. (2010). Shy people and Facebook continuance of usage: does gender matters? Proceedings of the sixteenth American Conference of Information Systems. Lima, Peru: AIS electronic Library
- Kim, B. (2011). Understanding antecedents of continuance intention in social-networking services. *Cyberpsychology, Behavior and Social Networking*, 14 (4), 199-205. doi:10.1089/cyber.2010.0009
- Ko, H.-C. (2013). The determinants of continuous use of social networking sites: An empirical study on Taiwanese journal-type bloggers' continuous self-disclosure behavior. *Electronic Commerce Research and Applications*, 12 (2), 103-111. doi:10.1016/j.elerap.2012.11.002
- Ku, Y.-C., Chen, R., & Zhang, H. (2013). Why do users continue using social networking sites? An exploratory study of members in the United States and Taiwan. *Information & Management*, 50 (7), 571-581. doi:10.1016/j.im.2013.07.011
- Lee, W.-K. (2014). The temporal relationships among habit, intention and IS uses. *Computers in Human Behavior*, 32, 54-60. doi:10.1016/j.chb.2013.11.010
- Liao, C., Chen, J.-L., & Yen, D. C. (2007). Theory of planning behavior (TPB) and customer satisfaction in the continued use of e-service: An integrated model. *Computers in Human Behavior*, 23 (6), 2804-2822. doi:10.1016/j.chb.2006.05.006
- Limayem, M., & Cheung, C. M. K. (2008). Understanding information systems continuance: The case of Internet-based learning technologies. *Information & Management*, 45 (4), 227-232. doi:10.1016/j.im.2008.02.005
- Limayem, M., Hirt, S. G., & Cheung, C. M. K. (2007). How habit limits the predictive power of intention: The case of information systems continuance. *MIS Quarterly*, 31 (4), 705-737.
- Lin, J., Chan, H. C., & Wei, K. K. (2006). Understanding competing application usage with the theory of planned behavior. *Journal of the American Society for Information Science and Technology*, 57 (10), 1338-1349.
- Lynne, G. D., Franklin Casey, C., Hodges, A., & Rahmani, M. (1995). Conservation technology adoption decisions and the theory of planned behavior. *Journal of economic psychology*, 16 (4), 581-598.
- McEachan, R. R. C., Conner, M., Taylor, N. J., & Lawton, R. J. (2011). Prospective prediction of health-related behaviours with the theory of planned behaviour: A meta-analysis. *Health Psychology Review*, 5 (2), 97-144.
- Miesen, H. W. J. M. (2003). Predicting and explaining literary reading. *Poetics*, 31 (3-4), 189-212. doi:10.1016/S0304-422X(03)00030-5
- Morris, M. G., Venkatesh, V., & Ackerman, P. L. (2005). Gender and Age Differences in Employee Decisions About New Technology: An Extension to the Theory of Planned Behavior. *IEEE Transactions on Engineering Management*, 52 (1), 69-84. doi:10.1109/TEM.2004.839967
- Nayak, V. (2014, January 7). 92 Million users make India the second largest country (study). Retrieved from <http://www.dazeinfo.com/2014/01/07/facebook-inc-fb-india-demographic-users-2014/>
- O'Connor, R. C., & Armitage, C. J. (2003). Theory of planned behaviour and parasuicide: An exploratory study. *Current Psychology*, 22 (3), 196-205. doi:10.1007/s12144-003-1016-4
- Ozer, G., & Yilmaz, E. (2011). Comparison of the theory of reasoned action and the theory of planned behaviour: an application on accountants' information technology usage. *African Journal of Business Management*, 5 (1), 50-58
- Pavlou, P. A., & Fygenon, M. (2006). Understanding and predicting electronic commerce adoption: an extension of the theory of planned behavior. *MIS quarterly*, 115-143.
- Pelling, E. L., & White, K. M. (2009). The theory of planned behavior applied to young people's use of social networking web sites. *CyberPsychology & Behavior*, 12 (6), 755-759.
- Rauniar, R., Rawski, G., Johnson, B., & Yang, J. (2013). Social media user satisfaction-theory development and research findings. *Journal of Internet Commerce*. 12 (2). 195-224
- Rigdon, E.E., Ringle, C.M., & Sarstedt, M. (2010). Structural modelling of heterogeneous data with partial least squares. In N.K. Malhotra (Ed.), *Review of marketing research*, (Vol.-7). (pp.255-296). Armonk, NY: M.E. Sharpe

- Ringle Christian M, Wende Sven, Will Alexander. SmartPLS 2.0. Hamburg; 2005. Retrieve from <http://www.smartpls.de>.
- Sheeran, P. (2002). Intention-behavior relations: A conceptual and empirical review. *European review of social psychology*, 12 (1), 1-36.
- Shiau, W.-L., & Chau, P. Y. K. (2012). Understanding blog continuance: a model comparison approach. *Industrial Management & Data Systems*, 112 (4), 663-682. doi:10.1108/02635571211225530
- Shih, G. (2013, June 22). Facebook admits year-long data breach exposed 6 million users. Retrieved from <http://in.reuters.com/article/2013/06/21/net-us-facebook-security-idUSBRE95K18Y20130621>
- Tan, X., Qin, L., Kim, Y., & Hsu, J. (2012). Impact of privacy concern in social networking web sites. *Internet Research*, 22 (2), 211-233. doi:10.1108/10662241211214575
- Thorbjornsen, H., Pedersen, P. E., & Nysveen, H. (2007). "This Is Who I Am": Identity expressiveness and the theory of planned behavior, *Psychology & Marketing*, 24 (9), 763-785. doi:10.1002/mar.20183
- Tonglet, M., Phillips, P. S., & Read, A. D. (2004). Using the Theory of Planned Behaviour to investigate the determinants of recycling behaviour: a case study from Brixworth, UK. *Resources, Conservation and Recycling*, 41 (3), 191-214. doi:10.1016/j.resconrec.2003.11.001
- Triandis, H. C. (1977). *Interpersonal behavior*. Monterey, CA: Brooks/Cole Publishing Company
- Van Breukelen, W., Van der Vlist, R., & Steensma, H. (2004). Voluntary employee turnover: Combining variables from the 'traditional' turnover literature with the theory of planned behavior. *Journal of Organizational Behavior*, 25 (7), 893-914.
- Verplanken, B., Aarts, H., Knippenberg, A., & Moonen, A. (1998). Habit versus planned behaviour: A field experiment. *British Journal of Social Psychology*, 37(1), 111-128.
- Verplanken, B., Aarts, H. & Knippenberg, A. D. (1997). Habit, information acquisition, and the process of making travel mode choices. *European Journal of Social Psychology*, 27, 539-560.
- Wilson, E. V., Mao, E., & Lankton, N. K. (2010). The Distinct Roles of Prior IT Use and Habit Strength in Predicting Continued Sporadic Use of IT. *Communications of the Association for Information Systems*, 27 (1), 185-206. Retrieved from <http://aisel.aisnet.org/cais/vol27/iss1/12>.
- Xu, H., Dinev, T., Smith, H. J., & Hart, P. (2008). Examining the formation of individual's privacy concerns: toward an integrative view. *ICIS 2008 Proceedings*. Paris, France

## APPENDIX 1. QUESTIONNAIRE ITEMS

Construct	Item	Measure
Attitude	A_1	I have positive opinion of Facebook.
	A_2	I think continuance usage of Facebook is good for me
	A_3	I think continuance usage of Facebook is appropriate for me
Subjective Norm	SN_1	People who influence my behaviour think that I should continue using Facebook
	SN_2	People who are important to me think that I should continue using Facebook
Perceived Behavioural Control	PBC_1	How much control do you feel have over continuance usage of Facebook?
	PBC_2	How much do you feel that whether your continuance usage of Facebook is beyond your control?
	PBC_3	Whether or not I continue use Facebook is entirely up to me
Habit	H_1	The use of Facebook has become spontaneous for me.
	H_2	Using Facebook for online social networking has become a natural act for me
	H_3	Whenever I use an SNS, Facebook comes to my mind
Continuance Intention	CI_1	I intend to continue using Facebook rather than discontinue its use
	CI_2	My intentions are to continue using Facebook, rather than using any alternative SNS
	CI_3	If I could, I would like to discontinue my use of Facebook
Continued Use	CU_1	On average, how frequently have you visited Facebook over the past month?
	CU_2	On average, how much time have you spent per day visiting Facebook over the past month?

## **BRIEF BIO OF AUTHOR/S:**



**Himanshu Rajput** is research fellow in School of Business & Management Studies, Central University of Himachal Pradesh. He has done his Master in Business Administration from H.N.B. Garhwal University, Srinagar, Uttarakhand. He is currently working on socio-psychological aspects of social media usage. His research interests are consumer behaviour, online marketing, and social media studies.