

Using Social Networking Sites (SNS): Mediating Role of Self Disclosure and Effect on Well-being

Manoj Das

Abstract

Social networking sites (SNS) have acquired the fascination of academicians for quite some time now due to its unique advantages and outreach. This research aims at examining the antecedents of SNS usage from the perspective of people who fear or prefer avoiding face-to-face communication as well as those who lack meaningful relations in their life. Drawing upon uses and gratifications theory (U & G) and self-determination theory, we identify the motives for SNS usage and its impact on individual's well-being.

Previous studies focused on investigation of these motives individually, in isolation of the other attributes with most of the studies being experimental in nature. However, the fact remains that, most of these attributes are co-existing within an individual, and hence it would be interesting to study them simultaneously, which would help in identifying their relative strengths and interactive effects. Hence while addressing this gap in the literature; we seek to investigate the simultaneous as well as the interactional effects of loneliness, social connectedness, social isolation, social anxiety, and the mediating role of self-disclosure. It would help practitioners in designing SNS more effectively to ensure enhanced user satisfaction with their usage.

Keywords: social networking sites, uses and gratifications theory, self disclosure, social anxiety, loneliness

1. Introduction

As per Ishii and Ullmer (1997), "we live between two realms: our physical environment and cyberspace." (p. 234). The "physical environment" represents the physical environment in which we, humans, live (Gibson, 1979). "Cyberspace" hereafter referred to as the "digital world" made up of bits & bytes and distinct due to its intangibility. It remains uncontested that these worlds

are "parallel but disjointed" (Ishii & Ullmer, 1997). With the proliferation of digital technologies in our everyday lives and the increased usage of networking sites, these two realms are slowly converging into one another. We are slowly merging our physical bodies with our online selves and moving from "you are what you wear" to "you are what you post".

Computer mediated communication (CMC) has emerged as an indispensable part of interaction in our everyday lives (Stone, 2009). A social networking site (SNS) represents an online community wherein members share their personal information by creating "profiles" with the purpose of communicating with other users of SNS in different ways and an array of topics (Mahajan, 2009; Pempek, Yermolayeva, & Calvert, 2009). They serve a variety of purposes like 'social searching'- with the purpose of finding information regarding offline contacts, and 'social browsing'- developing new connections with different individuals (Lampe, Ellison, & Steinfield, 2006; Joinson, 2008; Trusov, Bucklin, & Pauwels, 2009), befriending new people (Golder, Wilkinson, & Huberman, 2007), increasing social capital (Ellison, Steinfield, & Lampe, 2006), providing a platform for computer-mediated communication (Bennett, Maton & Kervin, 2008, Ross et.al, 2009).

Despite the immense usage of SNS, there has been a scant amount of research related to it, in particular with reference to the motives of usage and the kind of benefits derived. (Ross et al., 2009). We draw upon uses and gratifications theory (U & G), which specifies 'how and why' a particular media is used with underlying motivations and derived satisfaction associated with it (Stafford, Stafford, & Schkade, 2004). U & G theory explains usage of different media by focusing on the individual motivations driving the decision (Katz, Blumler & Gurevitch, 1999). It identifies the specific gratifications, which individuals seek to satisfy notably their psychological and sociological factors (Rubin,

2002). On the other hand, self determination theory, states that needs for competence, relatedness and autonomy (Ryan & Deci, 2000) play an important role in facilitating ones need and fulfilling need of social development and personal well-being.

This study contributes to the literature by drawing upon uses and gratifications (U&G) theory (Katz, 1959) and self-determination theory (Ryan & Deci, 2000) for identifying the motives behind SNS usage. This would help in understanding how people behave and seek gratification when using SNS. We particularly look at this from the perspective of people who fear or prefer avoiding face-to-face communication as well as those who lack meaningful relations in their life.

Previous studies focused on investigation of these effects individually, in isolation of the other attributes with most of the studies being experimental in nature. However, the fact remains that, most of these attributes are co-existing within an individual, and hence it would be interesting to study them simultaneously, which would help in identifying their relative strengths and interactive effects. Hence while addressing this gap in the literature; we seek to investigate the simultaneous as well as the interactional effects of loneliness, social connectedness, social isolation, social anxiety, and the mediating role of self-disclosure on well-being of an

individual. It would help practitioners in designing SNS more effectively to ensure enhanced user satisfaction with their usage. The structure of remaining paper is as follows: First of all literature review-highlighting motives of SNS usage, followed by hypothesis development and the conceptual framework.

1.1. Social Networking Sites and Motives for their Usage

Boyd & Ellison (2007) have defined SNS as "web-based services that allow individuals to (1) construct a public or semi-public profile within a bounded system, (2) articulate a list of other users with whom they share a connection, and (3) view and traverse their list of connections and those made by others within the system" (p. 211).

Typically, SNS users create a profile on a SNS with a picture and personal details and interests like place of work, schools attended, favorite sports and sitcoms. After creation of profile, they search for profiles of friends and colleagues and even join groups based on common interest by sending them a request. The most common motive is maintaining existing social networks effectively (Boyd & Ellison, 2007) with sometimes sending invitations to "friends of friends" (Staples, 2009). (Table 1).

Table 1: Motivation for Using Social Media

Author	Motivation for using social media
Kollock (1999)	Anticipated reciprocity, increased recognition, and sense of efficacy
Dholakia, Bagozzi, & Pearo(2004)	Purposive value ,self discovery, maintaining interpersonal connectivity, social enhancement, and entertainment
Lakhani & Wolf (2005)	Creativity, intellectual stimulation, and improving professional skills
Ryan et al. (2006)	Autonomy, competence, and relatedness
Yee (2007)	Achievement, social, and immersion
Joinson (2008)	Social connection, shared identities, photographs, content, social investigation, social network, surfing and status updating
Park, Kee, & Valenzuela (2009)	Socializing, entertainment, self-status seeking and 'information'
Rafaeli, Hayat, & Yaron (2009)	Getting information', 'sharing information' and 'entertainment'.
Zhou, Jin, Vogel, Fang, & Chen, 2011	Functional, Experiential and Social motivations

1.2. Uniqueness of CMC

Text based communication in CMC warrants special attention due to its special features like emoticons to express varied emotions and its importance for people experiencing difficulty in face-to-face communication (Reid & Reid, 2007). (Table 2).

2. Usage of SNS and Well-Being

Researchers have established the existence of a positive relationship between SNS's usage and the psychological well-being of an individual (Kim & Lee, 2011; Liu & Yu, 2013). Having a large number of friends on face book increases an individual's sense of well-being due to a favorable representation of oneself to others (Kim and Lee, 2011), this can also be mediated by self-disclosure and friendship quality rather than have a direct influence on well-being (Valkenburg & Peter, 2009; Wang & Wang, 2011). Huang (2010) has reported that social communication via internet is a positive predictor of psychological well-being. Due to the unique features of CMC, users are comfortable in making self-disclosure, which they would have otherwise avoided in case of face-to-face interactions or online interactions, which leads to high quality friendship (Valkenburg & Peter, 2007). Disclosure is also dependent on the timing, appropriateness of the particular context and comfort level with the partner (Valkenburg & Peter, 2009). Based on displacement hypothesis, spending more time on SNS reduces the quality of real life relations while augmentation hypothesis maintains that usage of SNS increases the quality of their real life relations. (Morgan & Cotton, 2003; Shaw & Gant, 2002; Valkenburg & Peter, 2007)

2.1. Loneliness

Loneliness can be defined as "the cognitive awareness of a deficiency in ones social and per-sonal relationships and the ensuing affective reactions of sadness, emptiness or longing" (Asher & Paquette, 2003 p.75). It can also be alternatively defined as, "being alone, felt deprivation of closeness"(Parkhurst & Hopmeyer, 1999). As social beings, we become vulnerable when we en-ter in social relationships.

Loneliness has been classified into two distinct types based on the kind of relationship deficit they arise from (Weiss, 1974). It can be either emotional loneliness due to the lack of emotionally close relationship with a caring and understanding person like a romantic partner. On the other hand, social loneliness arises from the absence of group ties with friends and other peers.

Loneliness is both a cause of as well as effect of internet usage among college students (Kim, LaRose & Peng, 2009; Tokunaga & Rains, 2010). Individual feeling depression and loneliness perceive themselves to be lacking in skills with regard to social competence (Caplan, 2003). McKenna, Green, and Gleason (2002) have argued that lonely individuals are "somewhat more likely to feel that they can better express their real selves with others on the Internet than they can with those they know offline" (p.28). This would lead them to believe that they are more successful in online social interactions leading to increased usage of networking sites and feeling of well-being (Baker and Oswald, 2010).

Additional support for usages of SNS sites by lonely individuals comes from social augmentation hypothesis, which posits that an additional opportunity for

Table 2: Unique Features of CMC

Author	Feature
Mckenna & Bargh, 2000	Anonymity, it allows internet users to share even intimate conversations with anyone they desire without actually sharing identifying in-formation
Mckenna & Bargh, 2000	Absence of non-verbal cues or vocal cues
Nguyen, Bin, &Campbell, 2012; Tidwell & Walther, 2002	Increased self-disclosure and intimacy
Caplan, 2005	Control over self-presentation

interacting with others exists due to the amplification of individual's total social resources (Bessi re, Kiesler, Kraut, & Boneva, 2008). It also opens up an avenue for meeting and befriending people thereby fulfilling their need of social interaction and relationship thereby eliminating both types of loneliness by satisfying the individual's needs of relatedness as well. This is also in line with the assumptions of stimulation theory and social compensation theory, which state that lonely individuals seek to compensate for lack of meaningful relations by using the self disclosure feature of SNS (Valkenburg & Josen 2007, Skues, Williams & Wise, 2012).

Hence, we can hypothesize that:

Hypothesis 1: There exists a positive relationship between avoiding loneliness and usage of SNS and well-being of individual.

2.2. Social Isolation

Although "loneliness" and "social isolation" are often used interchangeably, but they are in fact distinct concepts. (Bernard & Perry, 2013, de Jong Gierveld, Van Tilburg & Dykstra, 2006). People can be socially isolated without feeling lonely, or feel lonely amongst others.

Social isolation refers to being ignored or excluded with or without explicit declarations (Williams, 2007). Commonly used terms that are used interchangeably are ostracism, social exclusion, and rejection. Some of the reasons for occurrence of social isolation are increasing social cohesiveness, punishment for deviant behavior, getting rid of unwanted members and maintaining order in group (Gruter & Masters, 1986). Humans as social beings are very sensitive towards social isolation as they crave the interpersonal relations and group memberships to feel connected with others (Williams, 2007). It acts as an inhibitor from realizing our basic needs (i.e., belonging, self-esteem, control, and meaningful existence) (Williams, 2009). The absence of these social bonds can lead to deterioration of well-being along with physical and mental morbidity (Cacioppo, Hawkley & Thisted, 2010; Hawkley, Burleson, Berntson & Cacioppo, 2003; Williams, 2007).

We have evolved to develop pain as alarm signal for social isolation as it activates the neural systems, which

shares our affective component of physical pain (Eisenberger, 2012; MacDonald & Leary, 2005). We tend to compensate for the loss of these social bonds by using these SNS's. Drawing upon augmentation hypothesis it can be inferred that individuals generally use SNS for developing their social relations (Walther, 1996), and usage of media enhances the existing social relations of users (Valkenburg & Peter 2007, 2009). The embedded social cues within these media foster a sense of belonging, which acts as a surrogate of having social relations (Derrick, Gabriel, & Hugenberg, 2009).

CMC helps in overcoming the barriers of spatial and temporal constraints, which impede face to face communication for individuals (Wellman & Haythornthwaite, 2002). It provides social support due to its unique features like higher anonymity, option of editing and crafting messages along with access to varied information sources (Walther & Boyd, 2002).

Hence, we can hypothesize that:

Hypothesis 2: There exists a positive relationship between avoiding social isolation and usage of SNS and well-being of individual.

2.3. Social Anxiety

Social anxiety disorder refers to a marked and persistent fear of social or performance situations in which embarrassment may occur, resulting in significant distress and difficulties in functioning (American Psychiatric Association, 2013). Drawing upon the cognitive model of social anxiety, we can infer that individuals experiencing social anxiety strong negative beliefs about themselves (Clark & Wells, 1995; Liebowitz, 1987, Mattick, & Clarke, 1998, Rapee & Heimberg, 1997).

Due to these negative beliefs, such individuals tend to evaluate most social cues as negative evaluation, which tends to increase their anxiety. This increases their inability to process face-to-face transactions due to their concerns with self-presentation (Clark & McManus, 2002; Leary, & Kowalski, 1995; Schlenker & Leary, 1982). Most of these problems are effectively resolved in computer-mediated communication due to ease of control over personal information, and decreased scrutiny in terms of physical appearance and vocal

sounds, anonymity and absence of nonverbal cues there by enhancing it usage and well-being of user (High & Caplan, 2009, Kang, 2007, Madell & Muncer, 2007, Subrahmanyam & Lin, 2007).

Hence, we can hypothesize that:

Hypothesis 3: There exists a positive relationship between social anxiety and usage of SNS and well-being of individual.

2.4. Mediating Role of Self-Disclosure

Self-disclosure occurs when a person provides (i.e., discloses) information about himself or her-self to another person (Cozby, 1973). Based upon social penetration theory, when reciprocal disclosure occurs between individuals it results in development of strong relationships along with intimacy and strong interpersonal bonds (Altman& Taylor, 1973).Sharing of private thoughts, experiences, and emotions is a common and widespread practice in SNS (Joinson & Paine, 2007). Due to the unique features of CMC, youths prefer it to face-to-face communication for self-disclosure (Nguyen, Bin, & Campbell, 2012; Schouten, Valkenburg, & Peter, 2007; Walther, 1996). Increased self-disclosure leads to trust, friendships closeness, and satisfaction with the communication leading to higher levels of engagement. (Berger & Calabrese, 1975; Collins & Miller, 1994; Draper, Pittard, & Sterling, 2008; Jourard, 1971; Morry, 2005)

Research indicates that quality of friendship and well-being are positively related, and happy individuals have better relationships (Diener & Seligman, 2002; Michalos, Hubley, Zumbo, & Hemingway, 2001).This may be due to the feeling of being connected and a sense of belongingness associated with the usage of SNS (Morrow, Ross, Grocott, & Bennett, 2010), due to fulfillment of socio emotional needs (Goswami, 2012). Moreover, SNS users are less conscious about their self-presentation on SNS, which causes them to disclose more information as op-posed to face-to-face conversation (Walther, 1996).

Hence, we can hypothesize that:

Hypothesis 4: Usage of SNS is mediated by self-disclosure and leads to well-being of an individual.

2.5. Subjective Well-being

Subjective well-being stands for how an individual makes sense of his life through cognitive and affective evaluations (Diener, Lucas, Oishi, 2005). It is common knowledge that people share their problems with others in times of stress and the support thus obtained has significant benefit on that person's health and well-being (e.g. Uchino, Cacioppo & Kiecolt-Glaser, 1996). In fact, sharing events and discussing things with others is helpful in building one's social resources thereby allowing development of positive social interactions (Gable & Reis, 2001).Hence, sharing experiences using SNS helps to improve one's social ties with others in addition to providing psychological benefit (Gable, Reis, Impett, & Asher, 2004; Shen, Liu, & Wang, 2013; Valenzuela, Park, & Kee, 2009). A high number of friends on SNS leads to satisfaction with life and well-being since individuals compensate for the loss of meaningful relations in their real life with their friends on the SNS (Lee, Lee, & Kwon, 2011).

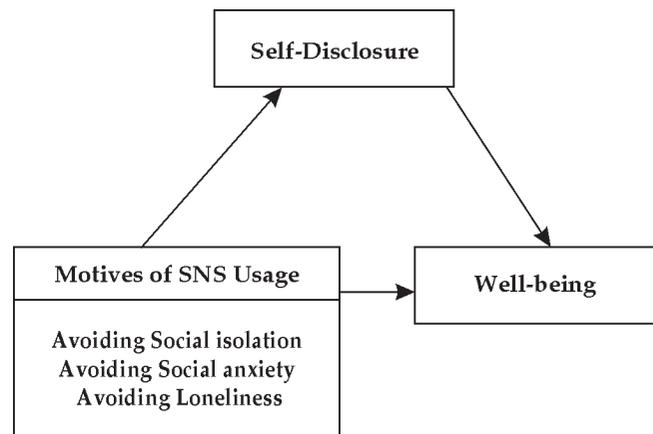


Figure 1 : Conceptual Framework

3. Discussion & Conclusion:

SNS form an indispensable part of our everyday lives; hence, there has been an increased attention towards understanding the motives for their usage. In this paper, we have tried to provide a holistic framework by identifying the antecedents of SNS usage for people who lack meaningful relationships in their lives and compensate for it by using SNS.

For such individuals SNS offers a gateway to a world where they can express their feelings without inhibition, receive social and emotional support they crave and thereby increase their sense of well-being (Goffman, 1959). Disclosing personal information is also easier due to anonymity and the absence of any kind of criticism along with feeling of being in control (Qian & Scott, 2007).

Some practical implications for companies could be targeting such individuals for targeting their products and creating virtual communities wherein they can share their ideas & comments freely (Gupta, Kim & Shin, 2010) which could act as a potential barrier for competitors. Companies would also be able to effectively promote their products and services extensively on such community pages (Algesheimer, Borle, Dholakia, & Singh, 2010). It could serve as a source for idea generation for new products and improvements in existing ones.

In addition, since the success of SNS depends on the number of members, content generation done by users, increased level of site visits and traffic which result in revenue generation (Carroll, 2007, Chen, 2013). Hence, designers of SNS need to keep in mind the motives of the users for using SNS and try to make it a pleasurable experience for using them.

Future research can empirically verify this model and identifying which are the most relevant motives for usage of SNS. It would help practitioners in designing SNS more effectively to ensure enhanced user satisfaction with their usage. Future research may also look into whether personality traits have an impact on usage of SNS. Lastly, a longitudinal study may reveal insights that are more promising.

References

- Algesheimer, R., Borle, S., Dholakia, U. M., & Singh, S. S. (2010). The impact of customer community participation on customer behaviors: An empirical investigation. *Marketing Science*, 29(4), 756-769.
- Altman, Irwin and Dalmas A. Taylor (1973). *Social Penetration: The Development of Interpersonal Relations*. New York: Holt, Rinehart and Winston.
- Asher, S. R., & Paquette, J. A. (2003). Loneliness and peer relations in childhood. *Current Directions in Psychological Science*, 12(3), 75-78.
- Bennett, S., Maton, K., & Kervin, L. (2008). The 'digital natives' debate: A critical review of the evidence. *British Journal of Educational Technology*, 39(5), 775-786.
- Berger, C. R., & Calabrese, R. J. (1975). Some explorations in initial interaction and beyond: Toward a developmental theory of interpersonal communication. *Human communication research*, 1(2), 99-112.
- Bernard, S., & Perry, H. (2013). *Loneliness and Social Isolation Among Older People in North Yorkshire*. Social Policy Research Unit, University of York: York. Loneliness Survey Team A, 3.
- Bessièrè, K., Kiesler, S., Kraut, R., & Boneva, B. S. (2008). Effects of Internet use and social resources on changes in depression. *Information, Community & Society*, 11(1), 47-70.
- Cacioppo, J. T., Hawkley, L. C., & Thisted, R. A. (2010). Perceived social isolation makes me sad: 5-year cross-lagged analyses of loneliness and depressive symptomatology in the Chicago Health, Aging, and Social Relations Study. *Psychology and Aging*, 25 (2), 453-463.
- Caplan, S. E. (2003). Preference for Online Social Interaction A Theory of Problematic Internet Use and Psychosocial Well-Being. *Communication Research*, 30(6), 625-648.
- Carroll, E. (2007). *Success Factors of Online Social Networks*. The University of North Carolina, Chapel Hill, USA.
- Chen, R. (2013). Member use of social networking sites-an empirical examination. *Decision Support Systems*, 54(3), 1219-1227.
- Clark DM, Wells A. (1995). A cognitive model of social phobia. In *Social Phobia: Diagnosis, Assessment and Treatment*, ed. R Heimberg, M Liebowitz, DA Hope, FR Schneier, pp. 69-93. New York: Guilford.
- Clark, D. M., & McManus, F. (2002). Information processing in social phobia. *Biological Psychiatry*, 51(1), 92-100.
- Collins, N. L., & Miller, L. C. (1994). Self-disclosure and liking: a meta-analytic re-view. *Psychological Bulletin*, 116(3), 457-475.
- Cozby, P. C. (1973). Self-disclosure: a literature review. *Psychological Bulletin*, 79(2), 73-91.
- Derrick, J. L., Gabriel, S., & Hugenberg, K. (2009). Social surrogacy: How favored television programs provide the experience of belonging. *Journal of Experimental Social Psychology*, 45(2), 352-362.
- Dholakia, U. M., Bagozzi, R. P., & Pearo, L. K. (2004). A social influence model of consumer participation in network- and small-group-based virtual communities. *International Journal of Research in Marketing*, 21(3), 241-263.
- De Jong Gierveld, J., Van Tilburg, T., & Dykstra, P. A. (2006). Loneliness and social isolation. In A. Vangelisti & D.

- Perlman (Eds.), Cambridge handbook of personal relationships (pp. 485-500). Cambridge, UK: Cambridge University Press.
- Diener, E., & Seligman, M. E. (2002). Very happy people. *Psychological Science*, 13(1), 81-84.
- Diener E, Lucas RE, Oishi S. (2005) Subjective well-being: The science of happiness and life satisfaction. In Snyder CR, Lopez SJ, eds. Handbook of positive psychology. New York: Oxford University Press, pp. 63-73.
- Draper, M., Pittard, R., & Sterling, M. (2008). *Self-disclosure and friendship closeness*. Hanover, IN: Hanover College, 3(4), 5.
- Eisenberger, N. I. (2012). The pain of social disconnection: Examining the shared neural underpinnings of physical and social pain. *Nature Reviews Neuroscience*, 13(6), 421-434.
- Ellison, N., Steinfield, C., & Lampe, C. (2006). Spatially bounded online social networks and so-cial capital: The role of Facebook. In Proceedings of the annual conference of the international communication association, June 19-23, 2006, Dresden, Germany.
- Gable, S. L., Reis, H. T., Impett, E. A., & Asher, E. R. (2004). What do you do when things go right? The intrapersonal and interpersonal benefits of sharing positive events. *Journal of Personality and Social Psychology*, 87(2), 228-245.
- Gable, S. L., & Reis, H. T. (2001). Appetitive and aversive social interaction. In J. Harvey & A. Wenzel (Eds.), *Close romantic relationships: Maintenance and enhancement* (pp. 169-194). Mahwah, NJ: Erlbaum
- Gibson, J. J. (1979). *The ecological approach to visual perception*. London, UK: Lawrence Erlbaum Associates.
- Goffman, E. (1959). *The Presentation of Self in Everyday Life*. Edinburgh: University of Edinburgh Social Sciences Research Centre.
- Golder, S. A., Wilkinson, D. M., & Huberman, B. A. (2007). *Rhythms of social interaction: Mes-saging within a massive online network*. In *Communities and Technologies 2007* (pp. 41-66). Springer: London.
- Goswami, H. (2012). Social relationships and children's subjective well-being. *Social Indicators Research*, 107(3), 575-588.
- Grueter, M., & Masters, R. D. (1986). Ostracism: a social and biological phenomenon: An introduction. *Ethological Sociobiology*, 7(3), 149-395.
- Gupta, S., Kim, H. W., & Shin, S. J. (2010). Converting virtual community members into online buyers. *Cyberpsychology, Behavior, and Social networking*, 13(5), 513-520.
- Hawkley, L. C., Burleson, M. H., Berntson, G. G., & Cacioppo, J. T. (2003). Loneliness in every-day life: cardiovascular activity, psychosocial context, and health behaviors. *Journal of Personality and Social Psychology*, 85(1), 105-120.
- High, A. C., & Caplan, S. E. (2009). Social anxiety and computer-mediated communication during initial interactions: Implications for the hyperpersonal perspective. *Computers in Human Behavior*, 25(2), 475-482.
- Huang, C. (2010). Internet use and psychological well-being: A meta-analysis. *Cyberpsychology, Behavior, and Social Networking*, 13(3), 241-249.
- Ishii, H., & Ullmer, B. (1997). Tangible bits: Towards seamless interfaces between people, bits and atoms. In Proceedings of the SIGCHI Conference on Human Factors in Computing Systems (pp 234-241). New York, NY: ACM Press.
- Joinson, A. N. (2008). Looking at, looking up or keeping up with people?: Motives and use of facebook. In Proceedings of the twenty-sixth annual SIGCHI conference on Human factors in computing systems, ACM, New York, USA.
- Jourard, S. M. (1971). *Self-disclosure: An experimental analysis of the transparent self*. New York: Wiley.
- Kang, S. (2007). Disembodiment in online social interaction: Impact of online chat on social support and psychosocial well-being. *Cyberpsychology & Behavior*, 10(3), 475-477.
- Katz, E. (1959). Mass communication research and the study of culture: An editorial note on a possible future for this journal. *Studies in Public Communication*, 2, 1-6.
- Katz, E., Blumler, J., & Gurevitch, M. (1999). Utilization of mass communication by individual. In J. Hanson & D. Maxcy (Eds.), *Sources notable selections in mass media* (pp. 51-59). Guilford, CT: Dushking/McGraw-Hill
- Kim, J., LaRose, R., & Peng, W. (2009). Loneliness as the cause and the effect of problematic Internet use: The relationship between Internet use and psychological well-being. *Cyberpsychology & Behavior*, 12(4), 451-455.
- Kim, J., & Lee, J. E. R. (2011). The Facebook paths to happiness: Effects of the number of Facebook friends and self-presentation on subjective well-being. *Cyberpsychology, Behavior, and Social Networking*, 14(6), 359-364.
- Kollock, P. (1999). *The economies of online cooperation: gifts, and public goods in cyberspace*. In: Smith, M.A., Kollock, P. (Eds.), *Communities in Cyberspace*. Routledge, New York, pp. 220-239.
- Lakhani, K.R., & Wolf, R.G. (2005). Why hackers do what they do: understanding motivation and effort in free/open source software projects. In: Feller, J.R., Fitzgerald, S., Hissam, S., Lakhani, R.K. (Eds.), *Perspectives on Free and Open Source Software*. MIT Press, Cambridge, pp. 3-21.
- Lampe, C., Ellison, N., & Steinfield, C. (2006, November). A Face (book) in the crowd: Social searching vs. social browsing. In Proceedings of the 2006 20th anniversary

- conference on Computer supported cooperative work (pp. 167-170). ACM.
- Leary, M. R., & Kowalski, R. M. (1995). The self-presentation model of social phobia. In R. G. Heimberg, M. R. Liebowitz, D. A. Hope, & F. R. Schneier (Eds.), *Social Phobia. Diagnosis, Assessment and Treatment* (pp. 94-112). New York: Guilford Press.
- Lee, G., Lee, J., & Kwon, S. (2011). Use of social-networking sites and subjective well-being: A study in South Korea. *Cyber psychology, Behavior, and Social Networking*, 14(3), 151-155.
- Lewandowski, J., Rosenberg, B. D., Jordan-Parks, M., & Siegel, J. T. (2011). The effect of in-formal social support: Face-to-face versus computer mediated communication. *Computers in Human Behavior*, 27(5), 1806-1814.
- Liebowitz, M. R. (1987). *Social phobia. Modern problems of pharmacopsychiatry*, 22, 141-173.
- Liu, C. Y., & Yu, C. P. (2013). Can facebook use induce well-being?. *Cyber psychology, Behavior, and Social Networking*, 16(9), 674-678.
- MacDonald, G., & Leary, M. R. (2005). Why does social exclusion hurt? The relationship between social and physical pain. *Psychological Bulletin*, 131(2), 202-223.
- Madell, D. E., & Muncer, S. J. (2007). Control over social interactions: An important reason for young people's use of the internet and mobile phones for communication?. *Cyberpsychology & Behavior*, 10(1), 137-140.
- Mattick, R. P., & Clarke, J. C. (1998). Development and validation of measures of social phobia scrutiny fear and social interaction anxiety. *Behaviour Research and Therapy*, 36(4), 455-470.
- McKenna, K. Y., Green, A. S., & Gleason, M. E. (2002). Relationship formation on the Internet: What's the big attraction?. *Journal of Social Issues*, 58(1), 9-31.
- Michalos, A. C., Hubble, A. M., Zumbo, B. D., & Hemingway, D. (2001). Health and other aspects of the quality of life of older people. *Social Indicators Research*, 54(3), 239-274.
- Morgan, C., & Cotton, S. R. (2003). The relationship between Internet activities and depressive symptoms in a sample of college freshmen. *Cyberpsychology & Behavior*, 6(2), 133-142.
- Morrow, E., Ross, F., Grocott, P., & Bennett, J. (2010). A model and measure for quality service user involvement in health research. *International Journal of Consumer Studies*, 34(5), 532-539.
- Morry, M. M. (2005). Allocentrism and Friendship Satisfaction: The Mediating Roles of Disclosure and Closeness. *Canadian Journal of Behavioural Science*, 37(3), 211-222.
- Nguyen, M., Bin, Y. S., & Campbell, A. (2012). Comparing online and offline self-disclosure: A systematic review. *Cyberpsychology, Behavior, and Social Networking*, 15(2), 103-111.
- Park, N., Kee, K. F., & Valenzuela, S. (2009). Being immersed in social networking environment: Facebook groups, uses and gratifications, and social outcomes. *Cyberpsychology and Behavior*, 12(6), 729-733.
- Parkhurst J.T., Hopmeyer A.(1999). Developmental change in the source of loneliness in child-hood and adolescence: Constructing a theoretical model. In: Rotenberg K.J., Hymel S. (Eds.), *Loneliness in childhood and adolescence* (pp.56-79). New York: Cambridge University Press.
- Qian, H., & Scott, C. R. (2007). Anonymity and self-disclosure on weblogs. *Journal of Computer Mediated Communication*, 12(4), 1428-1451.
- Rafaeli, S., Hayat, T., & Ariel, Y. (2009). Knowledge building and motivations in Wikipedia: Participation as "Ba". In Ricardo, F. J. (Ed.), *Cyberculture and new media* (pp. 52-69). New York, NY: Rodopi.
- Ross, C., Orr, E. S., Sisic, M., Arseneault, J. M., Simmering, M. G., & Orr, R. R. (2009). Personality and motivations associated with Facebook use. *Computers in Human Behavior*, 25(2), 578-586.
- Rubin, A. M. (2002). The uses-and-gratifications perspective of media effects. In J. Bryant & D. Zillmann (Eds.), *Media effects: Advances in theory and research* (2nd ed., pp. 525-548). Mahwah, NJ: Lawrence Erlbaum
- Ryan, R.M., Rigby, C.S., Przybylski, A. (2006). Motivation pull of video games: a self-determination theory approach. *Motivation and Emotion*, 30(4), 347-365
- Ryan, R. M., & Edward L. D. (2000). Self-Determination Theory and the Facilitation of Intrinsic Motivation, Social Development, and Well-Being. *American Psychologist*, 55(1), 68-78.
- Schlenker, B. R., & Leary, M. R. (1982). Social anxiety and self-presentation: A conceptualization model. *Psychological Bulletin*, 92(3), 641.
- Schmidt, L. A., & Fox, N. A. (1995). Individual differences in young adults' shyness and sociability: Personality and health correlates. *Personality and Individual Differences*, 19(4), 455-462.
- Schouten, A. P., Valkenburg, P. M., & Peter, J. (2007). Precursors and underlying processes of adolescents' online self-disclosure: Developing and testing an "Internet-attribute-perception" model. *Media Psychology*, 10(2), 292-315.
- Shaw, L. H., & Gant, L. M. (2002). In defense of the Internet: The relationship between Internet communication and depression, loneliness, self-esteem, and perceived social support. *Cyberpsychology & Behavior*, 5(2), 157-171.
- Shen, C. X., Liu, R. D., & Wang, D. (2013). Why are children attracted to the Internet? The role of need satisfaction perceived online and perceived in daily real life. *Computers in Human Behavior*, 29(1), 185-192.
- Sheth, Jagdish N., Sisodia, R S., & Sarma, A. (2000). The Antecedents and Consequences of Customer-Centric

- Marketing. *Journal of the Academy of Marketing Science*, 28 (1), 155-166.
- Skues, J. L., Williams, B., & Wise, L. (2012). The effects of personality traits, self-esteem, loneliness, and narcissism on Facebook use among university students. *Computers in Human Behavior*, 28(6), 2414-2419.
- Stafford, T. F., Stafford, M. R., & Schkade, L. L. (2004). Determining uses and gratifications for the Internet. *Decision Sciences*, 35(2), 259-288.
- Staples, D. S. (2009). Web 2.0 social networking sites. In M. D. Lytras & P. O. de Pablos (Eds.), *Social web evolution: Integrating semantic applications and Web 2.0 technologies* (pp. 57-75). London: IGI Global.
- Stone, B. (2009). *Breakfast can wait: The day's first stop is online*. New York Times.
- Subrahmanyam, K., & Lin, G. (2007). Adolescents on the net: Internet use and well-being. *Adolescence*, 42, 659-677.
- Tokunaga, R. S., & Rains, S. A. (2010). An evaluation of two characterizations of the relationships between problematic Internet use, time spent using the Internet, and psychosocial problems. *Human Communication Research*, 36(4), 512-545
- Trusov, M., Bucklin, R. E., & Pauwels, K. (2009). Effects of word-of-mouth versus traditional marketing: findings from an internet social networking site. *Journal of Marketing*, 73(5), 90-102.
- Uchino, B. N., Cacioppo, J. T., & Kiecolt-Glaser, J. K. (1996). The relationship between social support and physiological processes: A review with emphasis on underlying mechanisms and implications for health. *Psychological Bulletin*, 119(3), 488-531.
- Valenzuela, S., Park, N., & Kee, K. F. (2009). Is there social capital in a social network site?: Facebook use and college students' life satisfaction, trust, and participation. *Journal of Computer Mediated Communication*, 14(4), 875-901.
- Valkenburg, P. M., & Peter, J. (2007). Online communication and adolescent well-being: Testing the stimulation versus the displacement hypothesis. *Journal of Computer Mediated Communication*, 12(4), 1169-1182.
- Valkenburg, P. M., & Peter, J. (2007). Preadolescents' and adolescents' online communication and their closeness to friends. *Developmental psychology*, 43(2), 267-277.
- Valkenburg, P. M., & Peter, J. (2009). Social consequences of the Internet for adolescents: A decade of research. *Current Directions in Psychological Science*, 18, 1-5.
- Valkenburg, P. M., & Peter, J. (2009). The effects of instant messaging on the quality of adolescents' existing friendships: A longitudinal study. *Journal of Communication*, 59(1), 79-97.
- Walther, J. B. (1996). Computer-mediated communication impersonal, interpersonal, and hyperpersonal interaction. *Communication Research*, 23(1), 3-43.
- Walther, J. B., & Boyd, S. (2002). Attraction to computer-mediated social support. In C. A. Lin & D. Atkin (Eds.), *Communication technology and society: Audience adoption and uses* (pp. 153-188). Cresskill, NJ: Hampton Press.
- Wang, J., & Wang, H. (2011). The predictive effects of online communication on well-being among Chinese adolescents. *Psychology*, 2(4), 359-362.
- Weiss, R. S. (1974). The provisions of social relationships. In Z. Rubin (Ed.), *Doing unto others*. Englewood Cliffs, NJ: Prentice-Hall.
- Wellman, B., & Haythornthwaite, C. (Eds.). (2002). *The Internet in everyday life*. Oxford: Blackwell Publishers
- Williams, K. (2007). Ostracism. *Annual Review of Psychology*, 58, 425-452.
- Williams, K. D. (2009). Ostracism: Effects of being excluded and ignored. In M. Zanna (Ed.), *Advances in experimental social psychology* (pp. 275-314). New York: Academic Press.
- Yee, N., 2007. Motivations of play in online games. *Cyberpsychology and Behavior*, 9(6), 772-775.

Manoj Das is a participant of Fellow program in Management (FPM) in Marketing Area at IIM Indore. He has done his M.Sc (Organic Chemistry) and MBA from RTMNU. He has 3 years of teaching experience prior to joining the FPM course of IIM Indore. His areas of interest in research are social media and its impact on business and individuals, personal selling, Service marketing.