

A LITERATURE REVIEW ON TRUST, PRIVACY CONCERN AND IDENTITY CONSTRUCTION IN SOCIAL NETWORKING SITES & ONLINE FANTASY ROLE-PLAYING GAMES

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Abstract

The most popular social networking site, Facebook, has more than 500 million active users. People spend over 700 billion minutes per month on Facebook. How come a social networking site rank in the 3rd place in world population and what the main motivations push people to join in social networking sites? This study reviewed the literature in order to investigate the reasons behind joining social networking sites in terms of trust and privacy concerns in a socio-psychological aspect. Literature on identity construction at online fantasy-role playing games also contributed to our review. We conclude that people act more free in anonymous identities in online world which has both negative and positive impacts.

Keywords: *Social networking sites, trust and privacy concerns, anonymity, online fantasy role-playing games*

JEL Classification:

INTRODUCTION

Designed to be disseminated through social interaction, created using, social media uses highly accessible and scalable publishing techniques, as well as Internet and web-based technologies to transform one-to-many broadcast media monologues into many-to-many social media dialogues, supporting the democratization of knowledge and information, and transforming people from content consumers into content producers. From business view, social media is also referred as user-generated content or consumer-generated media.¹ Social computing and networked media also e-merge as concepts that deserve special attention within this social media framework.

EC JRC defines (2009) social computing as a “set of open, web-based and user-friendly applications that enable users to network, share data, collaborate and co-produce content” (p.15). As an all-capturing definition social computing includes applications such as:

¹ Wikipedia, (http://en.wikipedia.org/wiki/Social_media)

Social networking sites where users can share personal information with friends (such as Facebook) or professional background and interests with colleagues or potential partners for collaboration (such as LinkedIn); Blogs, where users can express themselves and interact with others; commercial websites where users can share tastes and assessments (such as Amazon), and online auction and shopping websites, where they can share opinions and jointly generate a reputation management system (such as in eBay); data-sharing websites where people can upload, share, tag and annotate photos or videos (such as Flickr or Youtube), and collaborative websites where users can jointly share and create new content (such as Wikipedia), as well as file-sharing websites; multi-player online games (such as World of Warcraft), and finally mobile social networking and micro-blogging applications, where users can extend their thoughts and messages almost in real time to anyone interested (such as Twitter). (pp. 15-16)

Meanwhile, networked media incorporates decentralized forms of mass communication via which individuals and groups “can actively contribute to sharing and shaping a universe of media content”. (EC 2009, p. 10) As a result, new, innovative ways are investigated on supporting people in their daily lives, and on initiating technology-enabled social change that strongly involves users for co-creating networked applications.²

Within this “social and networked computing and media”, as Powasek (2001) and Twist (2004) point out, tens of millions of people worldwide interact in online games and that number is growing. Role-playing games have developed entire virtual worlds and communities with complex social elements and interactions aside from the aspect of gaming. (Medeni, Sağsan, Miyata 2010) Meanwhile, only in Facebook, the world’s biggest social networking platform, there are more than 500 million active users and half of these members log in Facebook in any given day also they spend over 700 billion minutes per month on Facebook.³ Moreover, Facebook is ranked in the third place in the world population with its 500 million members.⁴ Thus, the reasons why people join in the social networking sites and what activities they perform in social networking sites are the sensational subjects of many studies.

Accordingly, in this study, firstly we examine the reasons behind joining social networking sites. Then, we discuss how trust affects the decisions to join social networking sites and how privacy concerns are related with these issues. Furthermore, we review the literature in order to examine the identity construction in online world and alternative identities will be discussed to depict the picture of one’s online and offline world interaction, specifically benefiting the studies on online fantasy role-playing games.

2. LITERATURE REVIEW

2.1. Reasons behind Joining Social Networking Sites

Several studies state that young people’s offline and online lives are psychologically connected. These studies indicate that young people use social networking sites to connect with the people in their offline worlds. For instance, Ellison et al. (2007) find that college students use Facebook to maintain or bolster existing offline connections rather than to form new relationships. In a similar study, Subrahmanyam et al. (2008) find that internet users’ online profile does not really differ

² For more information, (<http://www.ist-citizenmedia.org:8080/display/PU/Abstract>)

³ For more information, (<http://www.facebook.com/press/info.php?statistics>)

⁴ Wikipedia, (http://en.wikipedia.org/wiki/List_of_countries_by_population)

from their offline profile. Furthermore, they pointed out the facts that teenagers use chat rooms for development of their gender and ethnic identity from a qualitative study which is conducted to American and Austrian teenagers.

Moreover, Subrahmanyam et. al.(2008) question the other reasons behind the willingness of young people to join social networking sites and the variety of the activities that they do in such sites. Using an online survey of more than 131 college students in an urban university in Los Angeles, they find that “To stay in touch with friends I don’t see often” is the most common answer in the survey motive for using social networking site. Moreover, they conclude that “Read/Respond to notes/messages”, “Read comments/posts on profile”, “Browse friends pages/walls” are the common activities of young people in social networking sites.

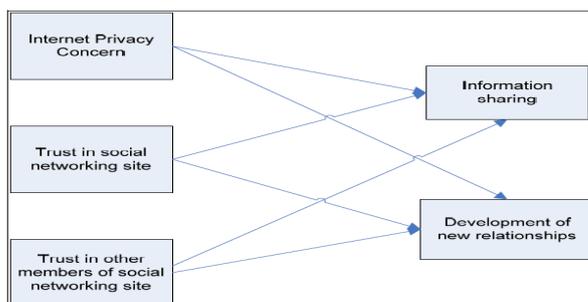
Similarly, Gangadharbatla (2008) investigates the factors that influence college students to join social networking sites. Gangadharbatla (2008) expects to find out self- efficacy, need to belong, need for cognition and collective self-esteem as psychological factors in the attitude of college students towards social networking sites. However, Gangadharbatla (2008) discovers that need for cognition is not relevant factor in the willingness to join social networking sites. “Internet self-efficacy, need to belong, and collective self-esteem all positively affect attitudes and willingness to join SNS, which provide the first two conditions of a mediation effect”. (Gangadharbatla, 2008)

In a recent study, Pempek, Yermolayeva & Calvert, 2009 report that young adults spend approximately 30 minutes per day in Facebook and they prefer to observe content rather than creating moreover constructing profiles and engaging in activities such as observing profiles, walls, pictures of offline friends are considered remarks of reflecting identity.

2.2 Trust in Social Networking Sites

Dwyer, Hiltz, and Passerini (2007) determine that internet privacy concern, trust in social networking site, trust in other members of social networking site as independent variables in information sharing and development of new relationships. Figure 1 below shows their privacy trust model. According to this model information sharing and development of new relationships depend on internet privacy concern and trust in social networking site and other members of social networking site. However, the results of study show that although people seem to express very strong concerns about privacy of their personal information, they behave less vigilantly to protect it. There seems to be privacy concern in sharing personal information, the only information people avoid to share is their screen name. (See, for example, Dwyer, Hiltz, and Passerini (2009))

Figure 1: Privacy Trust Model



(Source: Dwyer, Hiltz & Passerini, 2007)

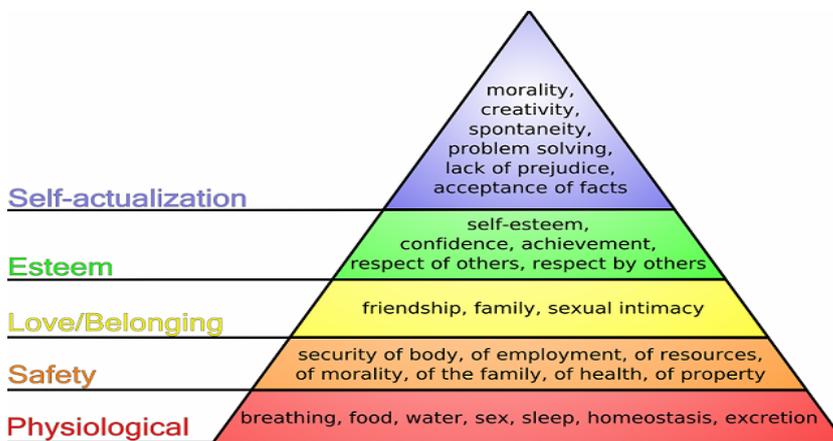
Furthermore, their study compares Facebook and Myspace in terms of trust and privacy issues and highlights that people trust Facebook more than Myspace so they share more personnel information in their Facebook profiles than they share in Myspace profiles. Although people express less trust in Myspace site and to its members, they use Myspace to develop new relationships. Therefore, Dwyer, Hiltz, and Passerini (2007) conclude that trust is not as necessary as it is offline worlds in online interaction.

In general, young people believe that it is their responsibility to protect their online data rather than companies and governments. (See, for example, Wainer & Romina (2009)) However, Siegrist and Cvetkovich (2000) suggest that social trust is related to judgments of risks and benefits of hazards that individuals little know. Laypeople cannot develop accurate and reliable information about risks and benefits related to modern technologies, thus their decisions and judgments are guided by social trust. On the other hand, people don't need social trust in experts or authorities when they have knowledge in making decisions.

2.3. Social Identity Construction and Anonymity

Several studies report that when presenting one's self to others, the performer strives to maintain a great deal of control over her persona and minimize the appearance of characteristics that are contrary to an idealized version of one's own self. (See, for example, Kirsti (2009)) For instance, according to research on online fantasy-role playing games, the more technological or administrative control players have over their fantasy characters, the more likely that the character will be some sort of reflection or refraction of the real person, a creation of a new reality in a mirror world, or in a funhouse trick mirror (Fader, 1998). As commented by Thinkanalogous (2004a, accessed 13.07.2006 in Medeni, Sağsan, Miyata 2009) on Internet, your character is a reflection of yourself, and everyone else's character is also a reflection of their own selves. The social dynamics, elements and interactions in online fantasy-role playing games can become so complex that sometimes the boundary between the virtual fantasy and real worlds becomes indistinct.

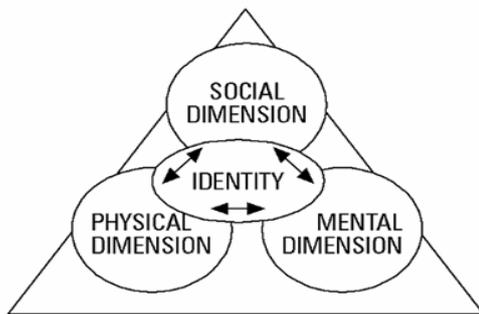
Figure 2: Maslow's Hierarchy of Needs



Source: Wikipedia (Adapted from the figure @
http://en.wikipedia.org/wiki/Maslow's_hierarchy_of_needs)

According to Maslow's theory of hierarchy of needs⁵, deficiency needs of human beings are placed from the bottom of the pyramid which is shown in Figure2 above. It is claimed that human beings aren't able to realize self-actualization of themselves without fulfill these needs. After physiological and safety needs are met, human beings need to fulfill social needs such as love and belongingness. If human beings cannot develop feelings of belongingness and being loved or liked, they will not able to develop self-esteem and also self- actualization. Moreover, Maslow's pyramid model of hierarchy of needs is in parallel with the Osteaker's dynamic triangle of motivation model stated in Figure 3. Osteaker's model, identity construction can be constructed though social, physical and mental dimensions.

Figure 3 : Dynamic Triangle of Motivation Model



Source: Osteraker (1999)

Online fantasy role-playing communities present interestingly complex cases in the sense that they are built upon three different dimensions: (1) the real world, (2) a fantasy or 'projective' world, (3) an online, virtual world, which blend with each other in an interesting manner. Even the term "virtual" means the intellectual, fantasy and the online, computerized aspects together. While both the fantasy and virtual world share the common denominator of non-reality, the online dimension provides the environment that makes this mixing of reality and non-reality possible in an unprecedented way. (Medeni and Medeni, 2005).

The reflective interaction between the fantasy and reality provides various types of knowledge transfer in the form of identity and experience that occur between the different physical/real, online/virtual and intellectual/mental dimensions. As a consequence, online role-playing games have developed entire virtual worlds and communities with a sense of purpose, a shared history, and complex social interactions (Powazek, 2001; Murray, 2004). While the primary purpose of these (online) gaming communities is to have fun, nestled within them are important social and psychological phenomena such as identity construction, storytelling, learning, leadership, cooperation and competition. (Medeni, Sağsan, Miyata 2009)

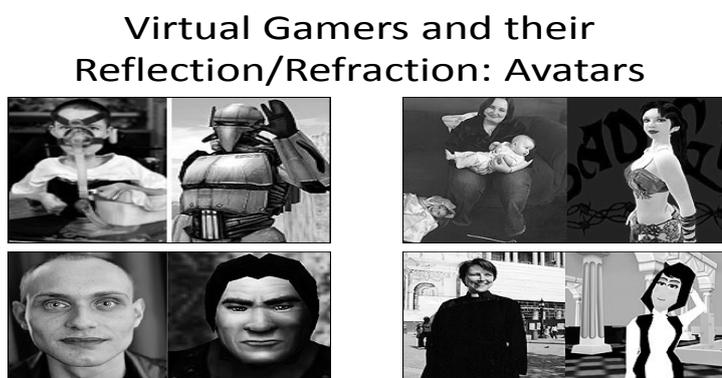
⁵ Classics in the history of Psychology adapted from @
(<http://psychclassics.yorku.ca/Maslow/motivation.htm>)

The discussion of potential space and knowledge representation, as suggested by Jovchelovitch (2007), also contributes to this discussion of identity construction. According to Jovchelovitch's (2007) discussion about the representation of knowledge, the status of representation is at once epistemic, social, and personal. Representations are symbolic constructions of the world outside, not copies of it. In other words, "rather than being the replica of a world that stands outside waiting for the labor of cognition, representations are constructive acts of engagement, a mode relating to the world outside" (p. 26). In that respect, representation is considered a potential space as the "third area of living," in addition to the first, which is self and the second, which is the reality of the world. It is in this potential space that reality and fantasy meet and become one. This third area of living, the potential space, is "also the foundation of all human communication," transcending the boundary between the "me" and "not-me." Here, "people are neither in the world of fantasy nor in the world of shared reality, but in the paradoxical third place that belongs to both these places at once." This third that belongs to both these places at once." This third place creates "within its borders a symbolic world that can accommodate self and other, fantasy and reality, art and science, the rational and the irrational." Thus, symbolic representation is "the quintessential activity of the potential space," itself creating potential spaces (Jovchelovitch, 2007, p. 33).

A real player and community member actually comments on the identity construction and social interaction in this "potential space": ".___ Another example of such a community might be a Listserv. In such cases you take on an identity that is yourself, but a self that can be different than your physical self in that, as you say, you are less afraid of the consequences of your behaviors and actions. You can participate in violent discussions. Throw insults that you would not in daily life. And, from the result of that experience, you can take away strategies for dealing with the art of the Argument. The same goes for other more possibly constructive acts. Helping behavior, the Art of Explanation, social etiquette, and many others. (A1)" (Medeni, Sağsan, Miyata 2009)

As a representational format, information and communication technology (ICT) can also be considered to operate as a sensual masking. The character chosen by a role player can be seen as a mask acting as a metaphor for the person. Just as the transfer of knowledge from ICT to production (the CAD and 3D modeling systems) materially affects our architectural world, the roles played in virtual worlds can have an important practical impact on our personal identities and personalities. Besides, the two terms - object and metaphor - inform each other. Having been involved in fantasy role-playing, immersed in virtual narratives, for a player it becomes difficult to think of fantasy, mystic creatures such as elves or wizards now without seeing them as a particular form of computer user (Wiszniewski and Coyne, 2002). In fact, the self-images that people create in virtual communities show that there is a reflection of the person in the fantasy character that is created and played. These reflections may be physical, but may also be aspects of a person's personality. Some players almost self-consciously construct a persona that is completely opposite to the one they project in real life. The virtual environment provides a filter and can be used as a way to express a different side of personalities, escape the social constraints of real life, or experiment and find out what kind of person one wants to be in real-life (Twist, 2004). (Figure 4)

Figure 4: Identity Construction in Virtual Worlds



Source: (Adapted from the illustration @ <http://news.bbc.co.uk/1/hi/technology/3683260.stm>)

In general terms, people in social computing networks build light weight identities in which reputation, trust, accountability, presence, social roles and ownership are the control mechanisms and this new way of identity construction lead to be emerged flexible and autonomous identities. (Wainer&Romina, 2009) Flexible and autonomous identities of social representation in online network can be in the form of anonymous and pseudonymous roles as well as real identities and people use anonymous or pseudonymous identities to build new relationships or to be active in discussion groups. Racists or members of hate groups may use anonymity to send hateful and threatening e-mails. (McKenna and Bargh, 2000)

Moreover, anonymity causes deindividuation in human behavior because getting away from real identity reduces social inhibitions. People have less self-awareness in anonymous roles so this will increase impulsivity. Furthermore, dishonesty will appear in thoughts and actions and one easily transgress rules and laws in a different character or role. Hiding real identities will cause deindividuation in which people feel less responsible for their actions.

On the other hand, anonymity has positive impacts in a way. For example in health related discussion groups, people talk about their diseases more open when they use nick names in forums. No one will talk explicitly about his/her disease in real identity in these discussion groups. Lea, Spears & Groot (2001) report that visual anonymity not always cause self-awareness and loss of self, it increases self-categorization which leads to think group members similar to one's self. Thus, the anonymity of members in health related discussion groups may be considered as in this aspect.

3. CONCLUSION

In this paper, we first focused on the motivations and activities of young people's attitudes toward social networking sites. Keeping in touch with their offline worlds is the primary reason in joining

social networking sites in young people's willingness. Browsing their friends' walls and profiles is the most common activity in social networking sites.

Secondly, we reviewed the literature on trust issues in social networking sites. Most of the studies conclude that young people think that it is their responsibility to protect their personal information in social networking sites. In a recent study, it is concluded that giving personal information to the social networking sites depends on trust in social networking sites and other members in social networking sites. Young people expressed that they have high level of privacy concerns in sharing their personal information but this contradicts the fact that sharing their screen name is the only dependent variable in their concerns. In another study related with the role of social trust and knowledge, it is stressed that social trust is necessary when people don't have adequate knowledge in making judgments of risk and benefits otherwise they make their own judgments. Therefore, young people believe that they don't need any judgment of technical expertise and they have trust in the social networking sites in which they share their personal information.

Lastly, based on the previous studies such as those on online fantasy role-playing games we argued that when someone is presenting own identity there may be a tendency to make identity representation in an idealized way. Therefore, in online world anonymous and pseudonymous identities make idealized version of construction easier. One can create an online profile in an idealized version of own self. The findings are also in line with this judgment. In the study of comparison of Myspace and Facebook, it is argued that people develop new relationships more often in Myspace than in Facebook. In Myspace, people hide their real identities in their accounts and they even exaggerate what they like or who they are so they likely to become more comfortable in the idea of meeting new people. Indeed, people like to be loved and socially accepted so the need to developing self-efficacy, belonging to some group and collective self-esteem are the psychological mechanisms forcing to join social networking sites.

In future studies these findings from the literature review can be used to understand better the phenomenon of social networking by comparative studying of such well-known examples as Facebook or LinkedIn. We also hope our findings also help related studies elsewhere.

Bibliography

Ala-Mutka, Kirsti (2009), "Social Computing and Learning", The Impact of Social Computing on the EU Information Society and Economy, JRC Scientific and Technical Reports.

Dwyer, Catherine, Starr Hiltz and Katia Passerini. (2007) "Trust and privacy concern within social networking sites: A comparison of Facebook and MySpace", Proceedings of the Thirteenth Americas Conference on Information Systems, Keystone, Colorado

Fader, Peter S. (1998). Role-playing games Available online at: <http://www.nycgoth.com/more/rpgs> (accessed 15.07.2006).

Gangadharbatla, Harsha (2008, Spring) "Facebook me: Collective Self Esteem, Need To Belong, and Internet Self-Efficacy as Predictors of the Igeneration's Attitudes Toward Social Networking Sites", Journal of Interactive Advertising, Vol.8 No.2, pp.5-15

JRC EC (2009). The impact of social computing on the EU information society and economy

Jovchelovitch, Sandra. (2007). Knowledge in context: Representations, community and culture. New York: Routledge.

Katelyn Y. A. McKenna and John A. Bargh (2000) "Plan 9 From Cyberspace: The Implications of the Internet for Personality and Social Psychology", *Personality and Social Psychology Review*, Vol.4, No.1, pp. 55-75

Lea, Martin, Russell Spears and Daphne de Groot. (2001) "Knowing Me, Knowing You: Anonymity Effects on Social Identity Processes Within Groups", *Pers Soc Psychol Bull*, Vol.27, pp. 526 -537

Lusoli, Wainer & Romina Cachia (2009), "Social Computing and Identity", *The Impact of Social Computing on the EU Information Society and Economy*, JRC Scientific and Technical Reports.

Maria C. Osteraker, (1999) "Measuring motivation in a learning organization", *Journal of Workplace Learning*, Vol. 11, No. 2, pp.73 – 77

Michael, Siegrist and George Cvetkovich (2000) "Perception of Hazards: The Role of Social Trust and Knowledge", *Society for Risk Analysis*, Vol. 20, No.5

Medeni, Tunç and Tolga İhsan Medeni. (2005). Virtual role-playing communities, "Wold" and World. E. Coakes and S. Clarke (Eds.). In *Encyclopedia of communities of practice in information and knowledge management* (pp.580-582). Hershey: Idea Group.

Medeni, Tunç, Mustafa Sağsan and Kazunori Miyata (2009). "Learning to Reflect in Online Fantasy Role-Playing Games", *Bilgi Dünyası*, 10 (2)

Murray, Janet (2004). From game-story to cyberdrama. Available online at: http://www.electronicbookreview.com/v3/servlet/ebr?essay_id=murray&command=view_essay

(accessed 27.09.2005).

Powazek, Derek M. (2001). *Design for community: The art of connecting real people in virtual places*. New Riders Press.

Subrahmanyam, Kaveri, Stephanie M. Reich, Natalia Waechter & Guadalupe Espinoza. (2008) "Online and offline social networks: Use of social networking sites by emerging adults", *Journal of Applied Developmental Psychology*, Vol.29, pp. 420–433

Thinkanalogous. (2004a). Gaming group growth: Character interactions. Available online at: <http://www.gamegrene.com/node/371> (accessed 15.07.2006).

Tiffany A. Pempek, Yevdokiya A. Yermolayeva and Sandra L. Calvert. (2009). "College students' social networking experiences on Facebook", *Journal of Applied Developmental Psychology*, Vol.30, pp. 227–238

Twist, Jo (2004). Virtual gamers reveal themselves BBC News. Available online at: <http://news.bbc.co.uk/1/hi/technology/3683260.stm> (accessed 15.07.2006).

Wisniewski, Dorian and Richard Coyne (2002). Mask and identity: The hermeneutics of self-construction in the information age. K. Ann Renninger (Ed.). In *Building virtual communities: Learning and change in cyberspace (learning in doing: social, cognitive and computational perspectives)* (pp.191-214). Cambridge: Cambridge University Press.