

THE INTERNATIONAL JOURNAL OF HUMANITIES & SOCIAL STUDIES

Social Networking: Identity Illusion and Effects on Mental Health

Ayesha Saha

Junior Research Fellow, Defence Institute of Psychological Research, Defence Research & Development Organisation, Delhi, India

Samridhi Ahuja

Junior Research Fellow, Defence Institute of Psychological Research, Defence Research & Development Organisation, Delhi, India

Abstract:

Over the years, internet has successfully taken over our lives and has become a one-stop shop for all our queries. The United Nations Children's Fund reported that India has 137 million internet users, taking the third place in global ranking, out of which 60 million people are users of different social networking sites (SNSs). As the youth of today struggles to create an identity for themselves, they are increasingly drawn towards and influenced by the world of social media. With the growing popularity and frequent usage of SNSs, about 86% of adolescents are drawn towards this virtual reality. Away from the stressors of daily life, this virtual world creates a kaleidoscopic view of life that has endless possibilities. The overuse of SNSs, however, can create an illusion of identity which fulfils their psychosocial needs. This paper attempts to review the existing literature on social networking and its effect on adolescent identity illusion and mental health. Research on adolescents using SNSs indicates that they tend to self-present and self-express themselves in a socially desirable way, which creates a mirage of their true identity. Furthermore, evidence suggests that excessive use of SNSs may negatively impact one's mental health, resulting in low self esteem, inhibited interpersonal interactions, depression, compulsive behaviour and narcissism.

Keywords: Adolescents, identity illusion, mental health, social networking.

1. Introduction

The use of the internet has gone viral, with a large population caught in the 'web' that it has woven. It was twenty years ago that Tim Berners-Lee launched the world wide web in an attempt to make sharing of information easier. People did not know much about this new technology and the benefits that this would bring in the years to come (Sheppard, 2014). Today, the number of people with access to the facilities of the internet is increasing by the second and technology has made its way into the homes of a large percentage of the population. Around 40% of the world's population has an internet connection today. In 1995, it was less than 1%. The number of internet users has increased tenfold - from 1999 to 2013 (Internet Live Stats).

The advent and the increasing use of the internet has served to make our lives easier. The world and the treasures it holds is literally one click away. The transformational technology of the internet has become a one-stop solution for all our questions. The United Nations Children's Fund (UNICEF) of India reports that India has 137 million internet users and remains in the third place in global ranking after China and the United States.

Research suggests that the internet has become an influential and addictive source that deeply impacts our psychosocial life (Chandiramani, 2014). Today, one can fulfil almost all one's needs by merely logging on to the desired site. Whether it is the desire to quench one's curiosity about the natural phenomena of the world, or to seek companionship, to purchase essential goods or to indulge in luxury items - all this and much more is available to those who have access to this wonderful technology called the internet. However, over the years, what the internet has also taken away from our lives is the effort that was needed to achieve this information as well as the thrill and satisfaction of a job well done. The excitement of meeting new people and initiating a dialogue or the fun escapades of shopping - the internet provides it all. Thus, even though we may be losing out on the little things in life that gave us a sense of fulfilment, the internet continues to remain an integral part of our life. Its influence is so pervasive that whether one likes it or not an individual gets "hooked on" to it endlessly, often even without a purpose.

2. Understanding Social Networking

Social Networking Sites (SNSs) are a type of social media that has digitalized communication and has made the art of maintaining relationships far easier than the methods used earlier. Users of these sites are able to keep in touch with the lives of their loved ones and to reach out to their acquaintances. This, in turn, fosters stronger relationships. These sites differ from the other internet websites as they allow the user to frequently change and update information about themselves. The user of these sites is acknowledged by the other members as compared to the user of the other websites available on the internet where the user remains anonymous (Guzzetti, 2006; Hum, Chamberlin, Hambright, Portwood, Schat & Bevan, 2011).

It is imperative to understand the purpose of SNSs in today's society in order to understand their effect. Use of these SNSs provides adolescents with an escape into their ideal world, where they are bound by no societal norms and other constraints. Research indicates that SNSs provide adolescents with a platform for voicing their opinions and act as source for providing them with a sense of belongingness (Guzzeti, 2006). The motivation that drives teenagers to be frequent visitors to SNSs like Facebook and Twitter on a daily basis is communication and entertainment. Most of them (67.3%) engage in these sites under the influence of their friends (Khan, 2013).

The youth of today is continuously connected to the world wide web and more predominantly to social networking forums such as Facebook (93%), followed by YouTube (87%). Online dating sites like Tinder and Tumblr too are gaining popularity (McAfee's Tweens, Teens & Technology). According to a study conducted by Lampe, Ellison & Stienfield (2006), adolescents make use of these SNSs primarily to keep in touch with their friends and to find out more about the people they come across socially.

In the same way, social media has become a forum for Indian teens to express their feelings and thoughts, social events etc., to their peer groups (Minimol & Angelina, 2015b). In India, the number of social media users has increased by 4 million in a matter of six months, i.e., from 62 million in June 2013 to 66 million in December 2013 as reported by the Internet and Mobile Association of India (IAMAI). Moreover, it was estimated that India would surpass the United States which has the world's second largest internet users - a whopping 243 million. In June 2014, with 92 million users of a single social networking site like Facebook, India became the second largest country of Facebook users reflecting the increase in the use of technology.

A survey conducted by McAfee's Tweens, Teens & Technology reported that 70% of online youth in India spend more than five hours on the internet in a normal week. Internet access is still predominantly desktop based (41%), while 36% use laptops and 27% use smart phones. Teenagers have become the "early adopters" and "exploiters" of social media (Purvaja, 2013) with about 73% using SNSs like Facebook, Twitter etc., regularly (Espinoza & Juvonen, 2011).

3. Effects of Social Networking Sites

It has been found that about 86% of the student population has been using SNSs excessively, as a result of which many experience behavioural issues (Meena, Mittal & Solanki, 2013; Andreas, 2008). With the advent of the social networks, friends are just one click away, yet these relationships tend to lack the warmth and flavour of human interaction.

While SNSs may provide adolescents with a platform for socializing and forming friendships, some of the teenagers are inclined to misuse these sites as well. They may misrepresent themselves or impersonate others to engage in harmful behaviours (Valkenburg, Schouten & Peter, 2005). The use of SNSs makes adolescents prone to developing a negative view of self by way of comparison of self with others, tracking the achievements of others and in turn, discounting one's own achievement (Livsey, 2013).

According to Minimol and Angelina, (2015b), excessive use of SNSs by teenagers has been associated with social isolation, depression, and experimenting with their identity. Likewise, increase in the prevalence of SNSs users among Indian teenagers in semi-urban areas for endless reasons has become an area of concern. Excessive usage of internet creates a condition of being habitually or compulsively dependent upon it (Griffiths, 1995). For some people, it may be a way to get away from their loneliness and boredom by engaging in online dating, online gaming, SNSs etc. One of the major downfalls of getting addicted to this virtual reality is that the individual may forget about the existence in the real world with family and friends, and as a result, the responsibilities towards the same (Young, 1998).

Furthermore, excessive usage of the internet has been associated with impulsivity, a construct that is defined by actions taken or thoughts expressed on the spur of the moment (Chandiramani, 2014). High usage of SNSs by adolescents has been found to be related with impulsive behavior because it is an easy way to gain quick attention, hide inadequacies, achieve power, and seek vengeance (Ko, Yen, Chen, Chen & Yen, 2008). Elizabeth and Hardie (2006) have found that adolescents who spend more time on online activities like social networking tend to be socially anxious, emotionally withdrawn or alienated and on assessment have also been reported to be impulsive (Cao, 2009). With various options in online forums, it is as simple as a click of a button to create a different identity, a new persona which is more of a reflection of one's "ideal self" as opposed to one's "true self".

4. What is Identity?

The successful transition of adolescents through different phases of development provides the basis for formation of an identity. The concept of identity was first recognized by psychoanalyst Erik Erikson (1950, 1968) as a major personality achievement and an important step in becoming a well-adjusted adult. Forming an identity involves describing who you are, identifying things that one values and be able to decide on the way forward in life (Berk, 2013).

According to Erikson (1950, 1968) successful outcomes of different developmental stages across infancy and childhood, result in the development of a positive identity. A critical phase of psychosocial development during the adolescent years is defined as 'Identity v/s Role confusion'. It is at this stage that the teenager works at developing a sense of self by exploring different alternatives and roles and then amalgamating them to form a single identity. Erikson believed that adolescents experience an 'identity crisis'- which is defined as a period of exploration of values and goals before moulding and recognizing them as their own. This period of exploration and experimentation provides the adolescent with an insight into themselves, their goals and enable them to make decisions about their lives that impact their future. An individual who is unable to successfully resolve the identity crisis tends to experience low self-esteem, defy authority, is prone to be overly obedient or tends to experience self-rejection.

Identity formation is an ongoing process and in order to move towards a successful end, the individual goes through certain phases. James Marcia (1980) gave four identity statuses to illustrate the development of a health identity. According to Marcia, an individual

could remain in a particular phase while others may experience transition depending on the exposure and experiences the individual goes through. These four statuses were:

- Identity diffusion. These individuals lack an understanding of the direction they want to proceed in and there are no clear goals that they work towards. These individuals may feel overwhelmed by alternatives and consequently never explore them.
- Identity foreclosure. Individuals in this status have pre-decided a goal or value to hold on to. However, they do this without exploring alternatives. Their goals are not tailored according to their needs, but are handed them down by the authority figures.
- Identity moratorium. This is a period of exploration for individuals in this status, who continually try out new values and goals that become the guiding principles of their life and help them reflect upon what they want to fulfill.
- Identity achievement. An individual achieves this status when he/ she has explored all the available choices and have decided on to a set of values and goals that they would want to pursue. Individuals in this status are at peace with oneself and experience a sense of satisfaction.

According to various theorist's individuals who are successfully able to transcend the stages of foreclosure and diffusion towards moratorium and achievement are able to construct a positive identity.

Apart from the turmoil that the adolescent goes through while gaining a sense of who he/she really is, the simultaneous cognitive development brings with it, two distorted thought processes. Elkind & Bowen (1979) called the first thought process '*imaginary audience*' which is the belief that everyone's attention is on them and in lieu of this thought they pull all the stops to avoid situations in which they would face embarrassment or humiliation. The second distortion of thought is '*personal fable*', adolescents tend to believe that other members of the society are thinking about them and therefore tend to develop an escalated sense of self and feel that they are special from others.

5. Factors Affecting Identity Development

- Family. Adolescents with secure ties to the family members move towards a positive pattern of identity formation. Adolescents who feel closer to their parents felt that parents provided them appropriate guidance and provided them with a space to voice their thoughts (Berzonsky, 2004; Luyckx, Goossens, Soenens & Beyers, 2006). According to Deci & Ryan (2002), parents who engaged in positive problem solving and provided space for negotiations to the children, fostered high self-esteem. This way of problem solving also encouraged a balanced family interaction pattern thereby fostering positive identity development (Deci & Ryan, 2002).
- Peers. Peer interaction promotes an exploration of diverse values, thought patterns and possibilities. Close friends also serve as pillars of emotional support and can serve as role models to promote formation of a healthier identity. Study by Felsman & Blustein (1999), showed that attachment of students to their peers served as a predictor for successfully deciding on the career choices.
- Media. A consequence of excessive use of social media and networking affects the perception of how one depicts his/her identity and understands their self. This identity construction is excessively dependent on the feedback and comments received from the peers and acquaintances on these social platforms (Ganda, 2014).

6. Identity Illusion and Social Networking

Youth today is busy creating online communities around themselves, providing glimpses into different facets of their life and creating a visible image of themselves for everyone to see. SNSs today are also providing tools and opportunities to its users to reinvent their identity, to be what they want others to believe about them. Driven by the distorted self-image of personal fable and imaginary audience, adolescents are likely to go to any lengths to avoid the feeling of embarrassment or being looked down upon. Access to SNSs provide the user with the opportunity to create an image of self by what they write or post about themselves which does not actually mirror who they are in reality (Jones & Homes, 2011).

In the older times social messages received from the media and other social sources were positive in nature as opposed to the glaring negative messages received today. This has had a drastic impact on one's identity, edging people on, to portray what they want to be rather than what they actually are (Taylor, 2011). These idealized versions of self when represented lead to a gap that emerge between one's real and ideal self. Adolescents end up comparing their own real self with peer's idealized online representation (Zwier, Araujo, Boukes & Willemsen, 2011). When reflecting on their own self representations adolescents are likely to lose sense of real self when there exists a chasm between the real and online self. This can lead to the development of a negative self-identity because the adolescent retreats from accepting who they really are (Davis, 2012).

Evidences suggest that the use of SNSs tends to build pressure on the adolescent to project an appealing image of self – a "face worthy of Facebook" (Boon & Sinclair, 2009). Because the tools to create an illusion of self are easily available, these sites become a platform for execution and reinforcement of these identities (Barnett, 2009). This trend is also leading to a shift in the process of identity formation, from an internal locus of control to an external locus of control. The reference point of one's self then becomes the perception that one's peers hold, the comments and feedback received on the networking sites etc. which in turn shape the actions of the individual.

These SNSs also at times may provide the users with opportunity to create multiple profiles, resulting into multiple presentations of self. These multiple representations however can create an illusion about one's identity which is far from one's real self-leading to a distorted self-view and identity construction. A person with a distorted view of self would be unable to function and adapt well to the societal demands leading to disturbed state of mind. Understanding of mental health emphasizes that a person can function optimally

only when the view about self consists of awareness of both positive and negative aspects of self (Taylor & Brown, 1988). Use of SNS however, enables the person to gloss over the negative aspects of oneself creating an imbalance in self-perception.

7. Understanding Mental Health in the Context of Social Networking

Mental health has been defined as a state of well-being, when the individual is able to face the daily stressors of life effectively to contribute towards the community fruitfully and productively, to their maximum potential (WHO, 2007). The present review focuses on self-esteem, anxiety and compulsive behaviour, depression and narcissism as components of adolescent mental health. Since, adolescence is a major phase of transition for every individual, a period of stress and turmoil which impacts their growth and development, the mental health of youth today is a major concern. Moreover, a large proportion of the disease burden is accounted by the youth in all societies (UNICEF, 2011).

It has been found that the age of onset for most of the lifetime diagnosable mental disorders is 14 years of age, with its prevalence increasing especially among adolescents in the past 20-30 years (Kalaiyarasan & Solomon, 2014; Knopf, Park & Mulye, 2008). Since the impact of mental illness affects the functioning of an individual in almost all domains of their life, it is imperative that its early predictors of mental illnesses are not ignored. According to Lawrence, Johnson, Hafekost, Boterhoven, Sawyer, Ainley & Zubrick (2015) mental disorders affect an individual in varying degrees and a wide variety of ways. Therefore, it should not be assumed that only if the severity of the illness is greater, it will affect the individual.

Social bonding is an essential part of an individual's living (Stein & Stein, 2008); and with recent advances in technology, social interaction is merely just 'a click away'. Social media has woven into the everyday lives for a majority of the population (Betton & Tomlinson, 2013). Of late, excessive use of social networking sites has become a major source of negative impact on adolescents' mental health. According to a survey by the Australian Psychological Society (2010), it has been found that though SNSs provide the users with an alternative to communication, concerns have been raised regarding loss of social skills and reduced face-to-face interactions. The psychological impact of this "assumed benefit" has been related with increasing levels of loneliness, (Kraut, Patterson, Lundmark, Kiesler, Mukhopadhyay, & Scherlis, 1998; Nie & Hillygus, 2002) depression, anxiety, compulsive behaviour, and narcissism (Strickland, 2014).

The term "iDisorder" was coined by Rosen, Cheever, and Carrier (2012) to define the negative psychological effects of technology. In 2013, in a study by Rosen, Whaling, Carrier and Cheever found associations between depressive disorder, dysthymia, compulsive behaviour, narcissism, bipolar-mania and antisocial personality disorder and usage of social networking sites like Facebook (like number of hours spent, number of friends etc.).

8. Social Networking and Narcissism

As defined, narcissism is an inflated and grandiose self-concept (DeWall, Buffardi, Bonser & Campbell, 2011). The study by Rosen et al. (2013) had also found that excessive time spent on Facebook and number of times logged on Facebook was associated with greater scores on narcissism. Research has suggested that increased use of social networking sites, for instance self-promoting content on Facebook profiles has been associated to aggravate narcissism (Buffardi and Campbell 2008). According to Buffardi and Campbell (2008), social networking sites rise as an excellent podium for regulating the inflated perceptions of narcissists because of the large audience and the control over self-presentation that SNSs provides. Moreover, narcissists tend to have a large social group on sites like Facebook that helps them to draw the attention of a large group by posting profile photographs that are physically attractive, in affirmation with their self-beliefs. Though social networking may be a medium for extroverts to maintain social ties (Gosling, Augustine, Vazire, Holtzman & Gaddis, 2011; Ross, Orr, Sisic, Arseneault, Simmering, & Orr, 2009), narcissists may use it as a means to self-promote.

In a study by Ong, Ang, Ho, Lim, Goh, Lee & Chua (2011), the findings revealed that adolescents would self-regulate their inflated self-views by self-generating content on social networking sites. These adolescents were found to have higher levels of narcissism. Moreover, since narcissism has been found to be associated with lower levels of empathy, impulse control and aggression, the authors suggested that the impact of narcissistic online self-presentation among adolescents should be addressed to in greater depth.

Similarly, DeWall, Buffardi, Bonser & Campbell, (2011) examined narcissism as personality trait marked by self-promotion, vanity, and grandiosity, and related it to how people communicate information about themselves online in two studies. The findings revealed that narcissists tend to communicate in ways that draw attention to themselves. Specifically, they found that narcissistic people who used relatively few first-person singular pronouns (e.g., "I," and "me") displayed more self-promoting and "sexy" images of themselves on their Facebook profiles and would use more profane and aggressive words in an online self-descriptive task.

Other studies are also in line with the existing literature suggesting that when narcissists do not express their inflated views about themselves, they instead tend to gain that attention by engaging in actions that will outshine them from others, giving them the attention to which they feel entitled (Campbell, Bonacci, Shelton, Exline, & Bushman, 2004).

9. Social Networking and Anxiety and Compulsive Behaviour

Similarly, research has also suggested associations of excessive engagement on social networking sites with compulsive and anxiety prone behaviour (Strickland, 2014; Rosen et al., 2013). This happens especially when the individual does not have access to their email or social networking sites that makes them feel anxious and worried, as was found in a study by Anxiety UK (2012). Moreover, the study by Rosen et al. (2013) found that the youth especially engaged in checking their profiles on social networking sites as often as every hour, every 15 minutes or all the time and were reported to be more anxious than the older generations when they were unable to gain access to the SNSs.

“Phantom vibration syndrome” has been defined as perception of vibrations from a cell phone when it is not vibrating, due to a constant connectivity (Drouin, Kaiser & Miller, 2012; Rothberg, Arora, Hermann, St. Marie, & Visintainer, 2010). Its occurrence has also been reported in a large population, and is reflective of manifestation of anxiety in individuals who are obsessed in frequent checking updates on the SNSs and messages on their phone (Strickland, 2014). Furthermore, what drives the anxiety levels of young adolescents to greater heights is the fear of missing out on something new. The evidence for the same has been supported in a study by Wortham (2011) where missing out on updates regarding social events, festivities of social groups causes anxiety among the youth. As Strickland (2014) explains that the fear of missing out impacts the perception of the interpersonal relationships of adolescents. The fear drives the adolescents to compulsively check their phones or devices so that they do not miss out on anything. The fear of missing out also gives rise to feelings of exclusion in social groups which is another reason why the act of compulsion takes place.

10. Social Networking and Depression

Davila, Stroud, Starr, Miller, Yoneda & Hershenberg (2009) and Selfhout, Branje, Delsing, ter Bogt, Meeu (2009) proposed the term “Facebook depression,” to define a condition that develops when adolescents devote long periods of time to the use of SNSs as a result of which they experience symptoms of depression. These adolescents are vulnerable towards being socially isolated and may resort to substance abuse, unsafe sexual practices or self-destructive behaviours in times of stress (Strum, 2010).

Study by Pantic (2012), revealed that an increase in time spent on Facebook by adolescents in high school was positively correlate with depression. More time spent on Facebook and managing one’s profile to make it appealing to the other user’s results in decrease in real time interaction. This limited interaction can keep a person withdrawn in their own shell, giving rise to negative thoughts and irrational beliefs about self. Such an individual is at a greater risk of depression. Rosen et al. (2013) found that adolescents who tend to be online for a greater duration and are constantly involved in managing their image on Facebook manifest more clinical symptoms of major depression. Lou, Yan, Nickerson & McMorris (2012) found that more frequent and consistent Facebook use were predictors of increased loneliness.

While SNSs promote social interaction among diverse groups, it also places users at the risk of receiving negative feedback and berating comments about themselves. Davila, Hershenberg, Feinstein, Gorman, Bhatia & Starr (2012) examined social networking behaviours of 334 students and summarized that more negative and limited positive interactions on social networking sites were associated with increased vulnerability to depressive symptoms.

Increased use of SNS and online forums leaves the users with no time for physical activity. They are satisfied with the network of friends they can engage in conversation with online and the stimulating content on these sites. However, these habits may have harmful effects on the mental health of the person. The evidence for the same is suggested in a study by Strine, Mokdad, Dube, Balluz, Gonzales, Berry, Manderscheid & Kroenke (2008) that revealed that a lack of physical activity is linked with lifetime depressive disorders and lifetime co-morbid anxiety and depressive disorders. On the other hand, study by Wise, Adams-Cambell, Palmer & Rosenberg (2006) found that regular physical activity ranging between one and seven hours per week reduces the risk of depression.

11. Social Networking and Self-Esteem

The excessive use of SNSs fosters lower levels of self-esteem and self-image because of the increase in social comparison (Strickland, 2014). In a study by Chou and Edge (2012) suggested that individuals who spent a greater amount of time on Facebook perceived other people on their friend’s list as being happier. Likewise, Zuo (2014) found that social comparison using Facebook for long hours was related with lowered self-esteem and negative mental health outcomes.

Furthermore, Forest and Wood (2012) found that individuals with low self-esteem tend to post more negative status updates and do not update their status as frequently nor do they reveal emotional content as overtly. While social networking sites like Facebook, Twitter have been designed to share personal information about oneself including one’s thoughts, feelings, likes and dislikes, this may foster lower levels of self-esteem because it makes individuals aware of their shortcoming and limitations more overtly (O’Keeffe & Clarke-Pearson, 2011).

Thus, the existing literature has empirically proven that the frequent and excessive use of social networking sites leads to negative psychological effects on adolescents’ identity development and wellbeing. Although SNSs may have proven to be useful to some extent, the ill effects of the same cannot be overlooked.

12. Conclusion

Adolescence is a period of rapid transition into adulthood pervading all spheres of life, predominantly biological and psychosocial functioning. It is at this stage when the importance of interpersonal relationships shifts from the family towards the peer groups. Thus socialization becomes an important aspect of their daily lives. Social Networking Sites (SNSs) therefore becomes an essential mediator for initiating and maintaining social interactions and affiliations. The easy accessibility of SNSs like Facebook and Twitter are attracting a large percentage of the youth. These sites are not just accessible from the comforts of one’s home but are also available on mobile devices like cell phones, tablets, laptops etc.

The present review focused on the impact of excessive social networking on the development of one’s identity and the effects on mental health of adolescents. It is not uncommon that the use of SNSs may foster feelings of self-comparison thereby instilling a sense of low self-worth. This social comparison may leave the adolescent feeling dejected with oneself, leading to adoption of an identity which may not be a true representation of that individual. Therefore, excessive engagement in social networking sites may cause an *illusion* of one’s “true identity”. This drift from one’s “real self” towards an “ideal self-presentation” in the virtual reality in turn affects the mental health of adolescents. The impact of SNSs on the psychological wellbeing of the adolescent has been associated

with depression, anxiety and compulsive behaviour, reduced self-esteem and narcissism. Presence of these psychological ailments influences the day to day functioning of the adolescent, thereby hindering their growth and development. The need of the hour then points towards creating opportunities for adolescents that provides them with real time interactions such as hobby classes like art and crafts, photography, music, cooking, structured and organised sports etc. An emotionally enabling environment also helps in venting of emotions in a healthier manner.

Additionally, the existing literature in the Indian context has not addressed this issue in depth. Rather, the emphasis of these studies are more towards the evaluating the effect of social networking on academic motivation and achievement of adolescents. Therefore, the dearth of research within this framework gives rise to the need for more empirical work in the areas of identity and mental health.

13. References

- i. Anxiety UK (2012, July 9). Anxiety UK study finds technology can increase anxiety.
- ii. Retrieved from <http://www.anxietyuk.org.uk/2012/07/for-some-with-anxiety-technology-can-increase-anxiety/>
- iii. Barnett, C. (2009). Towards a methodology of postmodern assemblage: Adolescent identity in the age of social networking. *Philosophical Studies in Education*, 40,200-210.
- iv. Berk, E. (2013). *Child Development*. New Jersey: Pearson Education Inc.
- v. Berzonsky, M.D. (2004). Identity style, parental authority and identity commitment. *Journal Of Youth And Adolescence*,33, 213-220.
- vi. Betton, V. & Tomlinson, V. (2013).*Social Media in Mental Health Practice*. Leeds and York
- vii. Partnership NHS Foundation Trust. Boon, S., & Sinclair, C. (2009). A world I don't inhabit: Disquiet and identity in second life and Facebook. *Educational Media International*, 46(2), 99-110.
- viii. Buffardi, L. E., & Campbell, W. K. (2008). Narcissism and social networking web sites. *Personality and Social Psychology Bulletin*, 34, 1303–1314.
- ix. Chou, H.G. & Edge, N. (2012). “They are happier and having better Lives than I am”: The impact of using Facebook on perceptions of others’ lives. *Cyberpsychology, Behavior, and Social Networking*, 15(2), 117-121.
- x. Craig, R., Orr, E.S., Sisc, M., Arseneault, J.M., Simmering, M.G., Orr, R.R. (2009). Personality and motivations associated with facebook use. *Computers in Human Behaviour*, 25 (March), 578-586.
- xi. Davila, J., Hershenberg, R., Feinstein, B. A., Gorman, K., Bhatia, V., & Starr, L. R. (2012).
- xii. Frequency and quality of social networking among young adults: Associations with depressive symptoms, rumination, and co-rumination. *Psychology of Popular Media Culture*, 1(2), 72–86.
- xiii. Davis, K. (2012). Tensions of identity in a networked era: Young people’s perspectives on the risks and rewards of online self-expression. *New Media & Society*, 14(4), 634-651.
- xiv. Deci, E.L., & Ryan, R.M. (2002). Self-determination research: Reflections and future directions. In E.L. Deci & R.M. Ryan (Eds). *Handbook of self-determination research*, 431-441. Rochester, NY: University of Rochester Press.
- xv. Davila J, Stroud C.B., Starr, L.R., Miller, M.R., Yoneda, A., Hershenberg, R. (2009) Romantic and sexual activities, parent-adolescent stress, and depressive symptoms among early adolescent girls. *Journal of Adolescence*. 32, 909-924.
- xvi. DeWall, N.C., Buffardi, L.E., Bonser, I. & Campbell, W.K. (2011).Narcissism and implicit attention seeking: Evidence from linguistic analyses of social networking and online presentation. *Personality and Individual Differences*, 51, 57–62.
- xvii. Drouin, M., Kaiser, D. H., & Miller, D. A. (2012). Phantom vibrations among
- xviii. undergraduates: Prevalence and associated psychological characteristics. *Computers in Human Behavior*, 28, 1490–1496.
- xix. Elkind, D., & Bowen, R. (1979). Imaginary audience behaviour in children and adolescence. *Developmental Psychology*, 15, 33-44.
- xx. Erickson, E.H. (1950). *Childhood and society*. New York: Norton.
- xxi. Erikson, E.H. (1968). *Identity, youth and crisis*. New York: Norton.
- xxii. Espinoza, G. & Juvonen, J. (2011). The pervasiveness, connectedness, and intrusiveness of social network site use among young adolescents. *Cyberpsychology, Behavior, And Social Networking*. DOI: 10.1089/cyber.2010.0492.
- xxiii. Felsman, D.E., & Blustein, D.L. (1999). The role of peer relatedness in late adolescent career development. *Journal of Vocational Behaviour*, 54,279-295.
- xxiv. Forest, Amanda L. and Joanne Wood (2012), “When Social Networking Is Not Working:
- xxv. Individuals With Low Self-Esteem Recognize but Do Not Reap the Benefits of Self- Disclosure on Facebook,” 23 (March), *Psychological Science*, 296 - 305.
- xxvi. Ganda, M. (2014). *Social Media and Self: Influences on the Formation of Identity and*
- xxvii. *Understanding of Self through Social Networking Sites (Undergraduate Thesis, Portland State University)*. Retrieved from <http://pdxscholar.library.pdx.edu/cgi/viewcontent.cgi?article=1064&context=honorsthesis>
- xxviii. Guzzetti, B. J. (2006). Cybergirls: Negotiating social identities on cybersites. *E-Learning*, 453(2),158-169.
- xxix. Gosling, Samuel D., Augustine, A., Vazire, S., Holtzman, N.S., & Gaddis, S. (2011). Manifestations of personality in online social networks: self-reported facebook-related behaviors and observable profile information. *Cyberpsychology, Behaviour, and Social Networking*, 14, 438-488.
- xxx. Gonzales A.L. & Hancock, J.T. (2011) Mirror, mirror on my Facebook wall: effects of exposure to Facebook on self-esteem. *Cyberpsychology, Behavior, and Social Network*.14,79-83.
- xxxi. Homes, D., & Jones, P. (2011). *Key concepts in media & communication*. Sage. London.
- xxxii. Hum, N. J., Chamberlin, P. E., Hambright, B. L., Portwood, A. C., Schat, A. C., & Bevan, J.
- xxxiii. L. (2011). A picture is worth a thousand words: A content analysis of Facebook profile photographs. *Computers In Human Behavior*, 27(5), 1828-1833.
- xxxiv. Indiafacts (2014) *Internet & Social Media Usage among youth in India: McAfee Report*.

- xxxv. Retrieved from <http://indiafacts.in/report/internet-social-media-usage-among-youth-india-mcafee-report/>
Internet and mobile association of India. (2013). Annual report 2012-2013. Retrieved from
<http://www.iamai.in/pdf/AnnualReport201314LowRes.pdf>
- xxxvi. Internet live facts (2015) Internet users. Retrieved from <http://www.internetlivestats.com/internet-users/>
Kalaiyaran, M.& Solomon, D.M. (2014). Mental health among adolescence. *IMPACT: International Journal of Research in Applied, Natural and Social Sciences*, 2(8), 27-32.
- xxxvii. Khan, S. (2013). Impact of Social Networking Websites on Students. *Abasyn Journal of Social Sciences*, 5(2).
- xxxviii. Kraut, R. E., Patterson, M., Lundmark, V., Kiesler, S., Mukhopadhyay, T., & Scherlis, W. (1998). Internet paradox: A social technology that reduces social involvement and psychological well-being? *American Psychologist*, 53, 1017-1032.
- xxxix. xl. Lawrence, D., Johnson, S., Hafekost, J., Boterhoven De Haan, K., Sawyer, M., Ainley, J., Zubrick, S.R. (2015). *The Mental Health of Children and Adolescents. Report on the second Australian Child and Adolescent Survey of Mental Health and Wellbeing.* Department of Health, Canberra.
- xli. Livsey, B.K. (2013). Self-concept and online social networking in young adolescents:
xlii. Implications for school counselor. (Masters Thesis, The University of Texas at Austin). Retrieved from
<https://repositories.lib.utexas.edu/bitstream/handle/2152/22468/LIVSEY-MASTERSREPORT-2013.pdf?sequence=1>.
- xliii. Lou, L. L., Yan, Z., Nickerson, A., & McMorris, R. (2012). An examination of the reciprocal relationship of loneliness and Facebook use among first-year college students. *Journal of Educational Computing Research*, 46(1), 105–117.
- xliv. Luyckx, K., Goossens, L., Soenens, B., & Beyers, W. (2006). Unpacking commitment and exploration: Preliminary validation of an integrative model of late adolescent identity formation. *Journal of Adolescence*, 29, 361-378.
- xlv. Marcia, J.E. (1980). Identity in adolescence. In J. Adelson (Ed.), *Handbook of adolescent psychology* (pp.159-187). New York: Wiley.
- xlvi. Nie, N. H. & Hillygus, D. S. (2002). The impact of internet use on sociability: Time-diary findings. *IT & Society*, 1, 1 - 20.
- xlvii. O'Keeffe, G.S. & Clarke-Pearson K. (2011). Council on communications and media the impact of social media on children, adolescents, and families. *Pediatrics*, 127, 800-804.
- xlviii. Ong, E.Y., Ang, R., Ho, J., Lim, J., Goh, D., Lee, C., & Chua, A. (2011). Narcissism, extraversion and adolescents' self-presentation on Facebook. *Personality and Individual Differences*, 50, 180–185.
- xlix. Pantic, I. (2012). Association between online social networking and depression in high school students: Behavioral physiology viewpoint. *Psychiatria Danubina*, 24(1), 90–93.
- l. Rosen, L.D., Whaling, K., Rab, S., Carrier, L.M., & Cheever, N.A. (2013). Is Facebook creating “iDisorders”? The link between clinical symptoms of psychiatric disorders and technology use, attitudes and anxiety. *Computers in Human Behavior*, 29, 1243-1254.
- li. Rosen, L. D., Cheever, N. A., & Carrier, L. M. (2012). *iDisorder: Understanding our obsession with technology and overcoming its hold on us.* New York, NY: Palgrave Macmillan.
- lii. Rothberg, M. B., Arora, A., Hermann, J., St. Marie, P., & Visintainer, P. (2010). Phantom vibration syndrome among medical staff: A cross sectional survey. *British Medical Journal*, 341(12), 6914.
- liii. Sheppard, F. (2014). A brief history of the internet over the past 20 years and the role of the World Wide Web. Retrieved from <http://www.abc.net.au/news/2014-05-25/internet-changes-over-20-years/5470442>
- liv. Selfhout, M.H.W., Branje, S.J.T., Delsing, M., ter Bogt, T.F. & Meeu, W.H.J. (2009). Different types of internet use, depression, and social anxiety: the role of perceived friendship quality. *Journal of Adolescence*, 32, 819-833.
- lv. Stein, M. B. & Stein, D. J. (2008). Social anxiety disorder. *Lancet*, 371, 1115–1125.
- lvi. Strine, T.W., Mokdad, A.H., Dube, S.H., Balluz, L.S., Gonzales, O., Berry, J.T.,
lvii. Manderscheid, R., & Kroenke, K. (2008). The association of depression and anxiety with obesity and unhealthy behaviors among community dwelling adults. *General Hospital Psychiatry*, 30, 127–137.
- lviii. Strum S. (2010). Social networking psych studies: research shows teen facebook users prone to depression. *Trend Hunter*. Retrieved from www.trendhunter.com/trends/depressionfrom-facebook
- lix. Taylor, B., & Brown. (1988). Illusion and Well-Being: A Social Psychological Perspective on Mental Health. *Psychological Bulletin*, 103 (2), 193-210.
- lx. Taylor, J. (2011). Technology: Is technology stealing our (self) identities. Blog post. Retrieved from
<https://www.psychologytoday.com/blog/the-power-prime/201107/technology-is-technology-stealing-our-self-identities>
- lxi. The Australian Psychological Society Ltd. (2010). *The social and psychological impact of online social networking: APS National Psychology Week Survey.*
- lxii. United Nations Children's Fund (UNICEF). (2011). *The State of the World's Children 2011,*
- lxiii. *Adolescence: An age of opportunity,* UNICEF, New York.
- lxiv. Valkenburg, P. M., Schouten, A. P., & Peter, J. (2005). Adolescents' identity experiments on the Internet. *New Media & Society*, 7(3), 383-402.
- lxv. Wise, L.A., Adams-Cambell, L.L., Palmer, J.R., & Rosenberg, L. (2006). Leisure-time physical activity in relation to depressive symptoms in the black women's health study. *Annals of Behavioral Medicine*, 32, 384-392.
- lxvi. Zwier, S., Araujo, T., Boukes, M., & Willemsen, L. (2011). Boundaries to the articulation of possible selves through social networking sites: The case of Facebook profilers' social connectedness. *Cyberpsychology, Behavior, And Social Networking*, 14(10), 571-576.
- lxvii. Zuo, A. (2014). *Measuring up: Social comparisons on facebook and contributions to self- esteem and mental health* (Doctoral dissertation). Retrieved from Deep Blue, University of Michigan Library.