

Role of Parent and Peer Attachment, and Family Environment in Discriminating Between Adolescents in Low and High Problematic Internet Use Groups

Pednekar N.K.^{1*}, Dr. (Mrs.) Suninder Tung²

ABSTRACT

Internet is the face of growing technological advancement. On one hand it helps acquiring information, makes communication across the globe easy, while on the other hand, it can result in over dependency or Problematic Internet Use. This phenomena is more commonly reported in adolescents. Considering the importance of parental and peer attachment and the family atmosphere during this vulnerable phase, the present study was undertaken to find the role of attachment and family environment in discriminating between high and low PIU among adolescents. A sample of 611 in the age group of 13-18 years were assessed using PIUQ (Demetrovics et al., 2008), IPPA (Armsden & Greenberg, 1987), and FES (Moos & Moos, 1983). The results obtained indicate that the selected variables could significantly (Wilk's Lambda = .735, $p < .001$) discriminate between the two groups: high and low Problematic Internet Users.

Keywords: *Adolescents, Problematic Internet Use, Attachment, Family Environment*

Internet use is growly widely among adolescents. Being a modern world tool of communication, it helps communicate with acquaintances as well as strangers, irrespective of their age, gender, race or geographical location. This feature of the web has made its popularity grow in today's youth owing to the applications internet provides to establish communication, like instant messenger, whatsapp, chat room, etc.(Boneva, et al., 2006; Craig, 2003; Gross, 2004; Schiano et al.,2002). The virtual world also offers wide array of information on different domains of knowledge. This inexhaustible source of knowledge and information further adds on to adolescent's need to access the inherent.

¹ Research Scholar, Psychology Department, Guru Nanak Dev University, Amritsar, India

² Professor, Psychology Department, Guru Nanak Dev University, Amritsar, India

*[Responding Author](#)

Received: March 17, 2017; Revision Received: April 10, 2017; Accepted: April 25, 2017

Role of Parent and Peer Attachment, and Family Environment in Discriminating Between Adolescents in Low and High Problematic Internet Use Groups

Adolescence being a vulnerable phase of an individual's life, when he/she experiences a change at physical, emotional, psychological and environment dimensions, it makes them more prone to develop attraction towards the internet owing to its unique features (like, speed, connectivity, anonymity, etc.). Internet becomes a problem when the usage is excessive. Different terms have been used to define this conditions; e.g.: 'Pathological Internet Use' (Davis, 2001), 'Internet Addiction' (Goldberg, 1995; Young, 1996), and 'Problematic Internet Use' (Caplan, 2002; Gorohol, 2005). Young (2011) has defined Internet Addiction as "any online-related, compulsive behaviour which interferes with normal living and causes severe stress on family, friends, loved ones, and one's environment." Since there is no standardized definition of Internet misuse and so a discussion over whether Internet Addiction: should be viewed in relation to other disorders listed, has arisen (Shaffer, 2002).

Irrespective of the terminology used, it is evident that excessive internet use results in decreased work productivity, neglect of daily life activities, affects family time, relationships get strained, communication within family reduces, meal quality get affected, reduction in hobbies and developing mental health issues (Nalwa & Anand, 2003; Young, 1998; Beard, 2005; Kraut et al., 1998).

Among the several other factors affecting adolescent's internet usage, attachment with parents will have impact. Although, during teenage period the process of individuation-separation takes off; it involves moving away from parents but at the same time expect them to be available when the need arises. This process is important as it helps in the process of identity formation and development of autonomy (Blos, 1967). However, in absence of this secure bond, the growing adolescent might feel insecure and hence move towards the internet to seek information, attention and to cling on to stranger.

Besides parents, peers too have a significant role during adolescent period. Peer relationship will have an impact on the adolescent's social and behavioural functioning. As peers start becoming an important source of support, their offline interactions might start getting replicated on the internet. Online communication is an add-on to improve bonding with their friends (Wellman et al., 2001; Shklovski et al., 2004). However, due to lack of maturity, they might not know where to stop, which might result in internet dependency over a period.

Moreover, the family environment the adolescent will also have an impact on his/her online activities as well as the usage, a family environment that reflects warmth and support has been found to manifest in positive psychological consequence like high self-confidence, self-esteem and excellence in the domain of academic achievement (Hill, 1987; Hill & Holmbeck, 1986; Holmbeck et al., 1995; Steinberg, 1990; Steinberg, et al., 1995). On the other hand, numerous studies (like Yun, 1998; Lee, 2000; Choi & Han 2006; Young, 1999; Nam, 2002) have found a

Role of Parent and Peer Attachment, and Family Environment in Discriminating Between Adolescents in Low and High Problematic Internet Use Groups

relation between adolescent's family environment and their internet usage. Studies show, family environment reflecting violence and conflict play a predictive role in development of internet addiction among the adolescents (Young, 1999; Nam, 2002; Yen, 2007; Park et al., 2008; Kim & Kim, 2002).

Considering the previous studies and growing internet fad in adolescents, the present study was undertaken to find which dimensions of attachment and family environment play a role in distinguishing between low and high PIU.

Objective

- To find the variables discriminating between High and Low Problematic Internet Users (Adolescents).

Null-Hypotheses

1. The dimensions of Attachment will not significantly discriminate between low and high PIU groups.
2. The dimensions of Family Environment will not significantly discriminate between low and high PIU groups

METHODOLOGY

Sample

The total sample 611 (13-18 years) was drawn from different schools and colleges of Mumbai.

Tools

1. **The Problematic Internet Use Questionnaire (PIUQ) - Demetrovics, Szeredi & Roza, 2008 :** The PIUQ assesses "misuse" of the internet by obtaining scores on three subscales: obsession, neglect, and control disorder or one single score of PIU. For the purpose of this study, a single score of PIU has been used. It consists of 18 items which are to be answered on a five-point Likert-type scale; responses can range from *Never* to *Always*. The total scores range from 18-90. The test has a reliability of .87 and has a good validity. The scale has been used by DeSa (2010) on Indian sample.
2. **Inventory of Parent and Peer Attachment (IPPA) – Armsden and Greenberg, 1987:** The IPPA is a self-report questionnaire consisting of 25 items for each father, mother and peer group which can be scored on the dimensions of trust, communication and alienation. The responses are obtained on a 5-point Likert type scale, ranging from almost never true to almost always true. Cronbach's alpha for mother attachment, father attachment and peer attachment was found to be .87, .89, and .92 respectively. In Indian setting, the scale was used by Daisy (2012).

Role of Parent and Peer Attachment, and Family Environment in Discriminating Between Adolescents in Low and High Problematic Internet Use Groups

3. Family Environment Scale (FES) – Moos & Moos, 1983: The FES measures social environmental characteristics of the family on the basis of 90 items across 10 dimensions: Cohesion, Expressiveness, Conflict, Independence, Achievement Orientation, Intellectual-Cultural Orientation, Active-Recreational Orientation, Moral-religious Emphasis, Organization and Control. The scoring is done with the help of scoring template. Test-retest reliability range from .52 - .91. The scale was successfully used in India by Kaur (2013).

RESULTS AND DISCUSSION

For the purpose of discriminant analysis, the total sample of 611 adolescents was divided into two groups: Group I including cases low on PIU and Group II including cases on high o PIU. The classification was done on the basis of percentiles; scores below 25th percentile were assigned Group I indicating low PIU and scores above 75th percentile were assigned to Group II indicating high PIU.

As seen in Table 1, Wilk’s Lambda value of 0.735 (p<.001) was obtained reflecting that the adolescents with low and PIU scores can be significantly discriminated on the basis of variables under study. On perusal of Table 2 it can be seen, 72.4% of original grouped cases were correctly classified.

Table 1: Showing the variables along with the discriminant coefficients found to be significant in discriminating between Low and High PIU groups.

Variables significant for Group I (Low PIU)	Discriminant Coefficients	Variables Significant for Group II (High PIU)	Discriminant Coefficients
Peer Trust	0.777	Cohesion	0.483
Achievement Orientation	0.560	Control	0.435
Father Communication	0.388	Father Trust	0.421
Intellectual Cultural Orientation	0.298	Conflict	0.374
Independence	0.294	Organization	0.252
Peer Alienation	0.219	Mother Alienation	0.182
Father Alienation	0.058	Mother Trust	0.164
Active Recreational Orientation	0.012	Mother Communication	0.097
		Moral Religious Emphasis	0.061
		Peer Communication	0.046
		Expressiveness	0.009

Wilk’s Lambda = 0.735 p< .001

A glance at Table 1 reveals that Peer Trust (0.777), Father Communication (0.388), Peer Alienation (0.219), Father Alienation (0.058) of Attachment scale, and Achievement Orientation (0.566), Intellectual-Cultural Orientation (0.298), Independence (0.294) and Active-Recreational Orientation (0.012) of Family Environment Scale suggest low PIU among the adolescents.

Role of Parent and Peer Attachment, and Family Environment in Discriminating Between Adolescents in Low and High Problematic Internet Use Groups

On the other hand, Father Trust (0.421) Mother Alienation (0.182), Mother Trust (0.164), Mother Communication (0.097) and Peer Communication (0.046) dimensions of Attachment, and Cohesion (0.483), Control (0.435), Conflict (0.374), Organization (0.252), Moral-Religious Emphasis (0.061) and Expressiveness (0.009) dimensions of Family Environment Scale are predictors of Group II, that is, adolescents with high PIU.

In the low PIU group, dimensions of Attachment scale- Peer Trust, Peer Alienation and Father Alienation were found to be playing a significant role. Peer trust reflects a feeling of security that adolescent has in his/her friends that they will understand and reciprocate his/her emotional needs. Adolescence being a phase when role of peers plays an important role, having mates with whom he/she share a healthy bond will result in low PIU. Studies by Lei and Wu (2009) support the findings where they found peer trust and communication to have a negative relation with Internet Addiction in the youth. Also, the results in the present study indicated role of Peer Alienation in predicting low PIU in adolescents. Similar results were reported by Gera & Kaur (2014); an adolescent feeling isolated from his/her peer would show decline in his/her internet usage. They postulated that adolescents’ internet use is for the purpose of staying touch with their friends.

Moreover, Achievement Orientation, Intellectual-Cultural Orientation, Independence and Active-Recreational Orientation of Family Environment Scale were found to play a significant role in predicting low PIU. This suggests, individuals raised in a family environment which emphasizes on achievement, culture, independence and recreational activities will be more focused on activities that are in line with these. Also, indulgence in outdoor, real-life activities will be preferred by these individuals, rather than online activities. This suggests less possibility of development of PIU among them.

Table 2: Showing classification of cases obtained on the basis of variables under study (Low and High PIU) of adolescents (N=611).

	Group I (Low PIU)	Group II (High PIU)	Total
Group I (Low PIU)	100	53	153
Group II (High PIU)	30	118	148

72.4% of original cases been classified correctly

Table 2 also reveals discriminant coefficients for variables significantly predicting in Group II, that is, high PIU. In the high PIU group, Mother Alienation, Father Trust, Mother Trust, Mother Communication and Peer Communication have been found to play a role. These are the dimensions of attachment scale. Attachment during adolescence is of utmost importance for the psychosocial development of these individuals (Moretti & Peled, 2004). The separation-individuation process that occurs during process can result in feelings of insecurity (Frank et al.,1990). So, even though they are experiencing conflicts with their parents, there is an innate

Role of Parent and Peer Attachment, and Family Environment in Discriminating Between Adolescents in Low and High Problematic Internet Use Groups

need for security, love, affection from the parents. Trust and communication pattern lay the substratum for a healthy relationship with the parents; research reveals individuals sharing a relationship with parents which is based on trust and communication are less likely to indulge in problem behaviours (Cooper et al., 1998; Howard et al., 1992), Problematic Internet Use. However, the results obtained are contrary to these previous. One of the reasons for such a finding could be that, although the relation perceived with parents is healthy, but quantitatively it might not be satisfying. Considering the socio-cultural background of the sample drawn, parents do have a hectic life. Perhaps they are not able to allot sufficient time to their children on regular basis. Also, the growing fad of smart phones, apps, tabs, etc., has not left adults from getting attracted towards it either. There is a possibility that even parents are spending most of their time on the internet and perhaps this is the medium to communicate with their children as well.

However, mother alienation has also been found to have predicting role and the coefficient value higher than the coefficient values for trust and communication; indicating, alienation with mother has a stronger role to play in predicting PIU among adolescents. Supporting the obtained outcome were the results reported by Deng et al. (2013), where mother-child alienation was found to have a positive role in predicting problematic behavior in adolescents.

Moreover, Peer Communication was also seen to be playing a significant role in predicting PIU in adolescents. A possible reason for this could be that they are using internet as a medium to communicate with their friends. Also, internet offers a wide range of multimedia games with graphics that makes the virtual world feel so real that these young individuals start preferring online games as compared to outdoor activities. Research findings show internet is used to communicate with friends and hence, use of internet is done with the purpose of enhancing their relation with peers (Lenhart et al., 2001).

From the Family Environment Scale, the dimensions found to be predicting high PIU were Cohesion, Control, Conflict, Organization, Moral-Religious Emphasis and Expressiveness. Cohesion meaning the degree to which family members provide help, support and commitment to each other, have been found to have negative relation with internet addiction among adolescents, in the past (Park et al., 2008). However, the contradiction in the results obtained might be because, the environment provided at home is one which supports time being spent on the internet. The family members might be too active themselves on the internet that the adolescent's excessive online behaviour might not seem a problem to them.

Moreover, Control, Conflict, Organization and Moral-Religious Emphasis were also found to be predicting high PIU. These dimensions of Family Environment Scale reflect a family atmosphere in which adolescent might behave like a rebel (Erikson, 1968) which is a very common behaviour during this phase. Internet might offer them that virtual space where they could vent

Role of Parent and Peer Attachment, and Family Environment in Discriminating Between Adolescents in Low and High Problematic Internet Use Groups

out all the negative feelings which were bottled up. Family life that is rigidly structured encourages greater level of control, conflict and organization. Adolescents in raised in such a family atmosphere make use of the virtual media to express themselves to escape the family stresses and rebelling against the family pressure (Kim, 2001; Cho, 2001; Kim & Kim, 2003; Nam, 2002; Kim & Choi, 2002).

Also, Expressiveness was found to be predicting high PIU indicating that the adolescents are indulging in the internet even when the family environment encourages openly expressing their viewpoints. A possibility operating here could be that use of the internet is being done for some different purpose, like playing games, watching inappropriate content, online shopping, etc.

Overall, on the basis of the results obtained, both the null hypotheses were rejected.

Implication

The present study has an important implication considering the growing concern over adolescents' Problematic Internet Use. As it was evident from the results of the study, role of parent and peer attachment and family environment of the adolescent will have a role to play in their internet usage. Hence, the issue can be dealt efficiently if these aspects are worked upon.

Acknowledgments

The author appreciates all those who participated in the study and helped to facilitate the research process.

Conflict of Interests: The author declared no conflict of interests.

REFERENCES

- Armsden, G. C., and Greenberg, M.T. (1989). *Inventory of Parent and Peer Attachment (IIPA)*. WA: University of Washington Seattle.
- Beard, K. W. (2005). Internet Addiction: A review of current assessment techniques and potential assessment questions. *CyberPsychology and Behavior*, 8(1), 7-14.
- Bhagat, G., & Sehgal, M. (2011). The Relationship of Parental Bonding and Internet Addiction. *Indian Journal of Psychological Sciences*, Vol 2 (2), 29-37.
- Blos, P. (1967). The second individuation process of adolescence. *Psychoanalytic Study of the Child*, 15: 162-186.
- Caplan, S. E. (2002). Problematic Internet and psychosocial well-being: development of a theory-based cognitive-behavioral measurement instrument. *Computers in Human Behavior*, 18(5), 553-575.
- Choi, N. Y., & Han, Y. J. (2006). Predictors of children's and adolescents' game addiction: Impulsivity, communication with parents and expectation about the Internet games. *Korean Journal of Home Management*, 24(2), 209-219.

Role of Parent and Peer Attachment, and Family Environment in Discriminating Between Adolescents in Low and High Problematic Internet Use Groups

- Cooper, M. L., Shaver P.R., Collins N.L. (1998). Attachment Styles, Emotional Regulation and Adjustment in Adolescence. *J Pers Soc Psychol*, 74: 1380-1397.
- Davis, R. A. (2001). A cognitive-behavioral model of pathological internet use. *Computers in Human Behavior*, 17, 187-195.
- Demetrovics, Z., Szeredi, B., & Roza, S. (2008). The three-factor model of internet addiction: The development of the Problematic Internet Use Questionnaire. *Journal of Behavior Research Methods*, 40(2), 563-574.
- Deng, L. Y., Fang, X. Y., & Yan, J. (2013). The Relationship between inter-parental relationship parent-child relationship and adolescents' Internet addiction. *Journal of Special Education*, 9, 71-77.
- Erikson, E. (1968). Identity: Youth and Crisis. Norton, New York.
- Frank, S. J., Pirsch, L. A., & Wright, V. C. (1990). Late Adolescents' Perceptions of their Relationships with their Parents: Relationships among Deidealization, Autonomy, Relatedness, and Insecurity and Implications for Adolescent Adjustment and Ego Identity Status. *Journal of Youth and Adolescence*, 19: 571-588.
- Gera, M. and Kaur, K. (2014). A Correlational Study of Peer Relationships and Internet Usage of Adolescent's. *International Journal of Multidisciplinary Approach and Studies*, 1(5): 48-58.
- Hill, J.P. (1987). Research on Adolescents and their Families: Past and Prospect. In C.E. Irwin (Ed.), *Adolescent Social Behaviour and Health: New Directions for Child Development*, 37:13-31. San Francisco: Jossey-Bass.
- Hill, J.P., and Holmbeck, G.N. (1986). Attachment and Autonomy during Adolescence. In G.J. Whitehurst (Ed.), *Annals of Child Development*, 3: 145-189. Greenwich, CT:JAI Press.
- Holmbeck, G.N., Paikoff, R.L. and Brooks-Gunn, J. (1995). Parenting Adolescents. In M. Bornstein (Ed.), *Handbook of Parenting*: 91-118. Hillsdale, NJ: Lawrence Erlbaum.
- Howard M.S., Medway F.J. (2004) Adolescents' Attachment and Coping with Stress. *Psychol Schools*, 41: 391-402.
- Kraut, R., Patterson, M., Lundmark, V., Kiesler, S., Mukopadhyay, T., & Scherlis, W. (1998). Internet paradox: A social technology that reduces social involvement and psychological well-being? *American Psychologist*, 53, 1017-1031.
- Lee, S.J. (2009). Online Communication and Adolescent Social Ties: Who Benefits more from Internet Use? *Journal of Computer –Mediated Communication*, 14(3): 509-531.
- Lei, & Wu, Y. N. (2009). Adolescents' peer attachment and their internet use. *Studies of Psychology and Behavior*, 7(2), 81-86.
- Lenhart, A., Rainie, L. and Lewis, O. (2001, June 20). *Teenage Life Online: The Rise of the Instant-Message Generation and the Internets' impact on friendships and family relationships*. Pew Internet and American Life Project. Retrieved March 6, 2017, from http://www.pewinternet.org/files/oldmedia/Files/Reports/2001/PIP_Teens_Report.pdf

Role of Parent and Peer Attachment, and Family Environment in Discriminating Between Adolescents in Low and High Problematic Internet Use Groups

- Li Lei and Yana Wu, 2007. "Adolescents' paternal attachment and Internet use," *Cyber Psychology & Behavior*, 10(5): 633–639.
doi: <http://dx.doi.org/10.1089/cpb.2007.9976>, accessed 25 June 2014.
- Lin, Sunny S. J. and Tsai, C. C. (2002). Sensation seeking and Internet dependence of Taiwanese high school adolescents. *Computers in Human Behavior*, 18: 411-426 Web. July 2, 2014
<http://www.Ingentaconnect.com/content/els/07475632/2002/00000018/00000004/art00056>
- Moos, R. and Moos, B. (1983). Clinical Applications of the Family Environment Scale. In E. Filsinger (Ed.), *A Sourcebook of Marriage and Family Assessment*. (pp 253-273). Beverly Hills, CA: Sage.
- Moretti, M.M. and Peled, M. (2004). Adolescent-Parent Attachment: Bonds that Support Healthy Development. *Pediatric Child Health*, 9 (8): 551-555.
- Nalwa, K. & Anand, A.P. (2003). Internet Addiction in Students: A cause of Concern. *CyberPsychology*, 6(6), 653-656.
- Nam, Y. O. (2002). A study on the psychosocial variables of youths' addiction to Internet and cyber and their problematic behavior. *Korean Journal of Social Welfare*, 50, 173-207.
- Park, S.K., Kim, J.Y., and Cho, C.B. (2008). Prevalence of Internet Addiction and Correlations with Family Factors Among South Korean Adolescents. *Journal of Adolescence*, 43(172): 895-910.
- Shaffer, H.J. (2002). *Is Computer Addiction a Unique Psychiatric Disorder?* Psychiatric Times. Retrieved on September 12, 2008 from <http://www.psychiatrictimes.com/p020435.html>
- Subrahmanyam, K. and Lin, G. (2007). Adolescents on the Net: Internet Use and Well-Being. *Adolescence*, 42(168):659-677.
- Wellman, B., Hasse, A.Q., Witte, J., and Hampton, K. (2001). Does the Internet Increase, Decrease or Supplement Social Capital? Social Networks, Participation, and Community Commitment. *American Behavioral Scientist*, 45(3): 436-455.
DOI: <https://doi.org/10.1177/00027640121957286>
- Young, K. S. (1998). Internet addiction: The emergence of a new clinical disorder. *Journal of CyberPsychology and Behavior*, 1(3), 237-244.
- Young, K.S. (1999). Internet Addiction: Symptoms, Evaluation and Treatment. In L.VandeCreek & T. Jackson (Eds.), *Innovations in Clinical Practice: A Source Book* (pp. 19-31). Sarasota, Florida: Professional Resource Press.

How to cite this article: Pednekar N, Tung S (2017), Role of Parent and Peer Attachment, and Family Environment in Discriminating Between Adolescents in Low and High Problematic Internet Use Groups, *International Journal of Indian Psychology*, Volume 4, Issue 3, ISSN:2348-5396 (e), ISSN:2349-3429 (p), DIP:18.01.010/20170403