

Does Anxiety Influence Instagram Addiction among College Students?

Lancy D'Souza^{1*}, Hemamalini, M.J²

ABSTRACT

This study attempted to find out the relationship between anxiety and Instagram addiction of students pursuing pre university and degree courses. The sample consisted of 131 students comprising of students aged between 14-23 years. The students completed Test for Instagram addiction (TIA) developed by D'Souza, Samyukta and Bivera (2018) and anxiety measurement from DASS (Lovibond & Lovibond, 1995). Test for Instagram addiction measured addiction in 6 factors—Lack of control, Disengagement, Escapism, Health and interpersonal troubles, Excessive use and Obsession. Through DASS, the authors measured anxiety scores. Pearson's product moment correlations were employed to find out the relationship between factors of Instagram addiction and anxiety. Simple linear regression was employed to find out the slopes of various components of Instagram addiction to anxiety. Results revealed that as the anxiety scores increased addiction to Instagram in components lack of control, disengagement, health and interpersonal troubles and obsession increased and in total scores, also increased linearly and significantly. Increased anxiety lead to lack of control over usage of Instagram, health and interpersonal troubles, and disengagement for the college students.

Keywords: *Instagram Addiction, Anxiety, College Students*

Information exchange today is made easy by digital technology. Internet has entered into various domains of life of people in research, amusement, business, banking and communication networks. Through internet the communication is made simple and fast, thereby avoiding controversial issues (Busari, 2016). Internet has become part and parcel of one's life. There is an extreme dependency on internet and applications related to it. In India, access to internet is very easy and economical; there is a high proneness to addiction to it. This may result in many psychological and physiological problems. It has taken over all other tasks of routine especially among adolescents. This affects their time and attention to be given to school/college work, domestic and responsibilities at home, and even interaction

¹ (Associate Professor of Psychology, Maharaja's College, University of Mysore, Mysore-570 005, India)

² (Placement officer, Maharani Lakshmi Ammanni College for women, 18th Cross, Malleshwaram, Bengaluru-1, India)

[*Responding Author](#)

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and relationships with others. Internet addiction disorder is overuse of internet with stress manifestation of signs of anger, tension and anxiety. Internet addiction disorders (IAD) is growing at a fast rate becoming a prevalent mental health problem around the world (Goldberg, 1995). Tao et al (2010) opine that internet addiction affects health badly and results in negative impact on eye-sight, sleep pattern and other different illnesses. Even proneness to eating disorders is highlighted by their study due to internet addiction. In Nepal, Bhandari et al, (2017) found that Internet addiction mediated 16.5% of the indirect effect of sleep quality on depressive symptoms among undergraduate students. A recent study by D'Souza, Samyukta and Tejaswini (2018) revealed that as the internet addiction increased, sleep quality of the female students decreased linearly and significantly. 'Neglect work' and 'excessive use' of Internet were found to be the best predictors of sleep quality. In another study, it was found that peer stress factor of academic stress was found to be the major predictor of internet addiction (D'Souza, Manish & Raj, 2018). Sometimes even personality of an individual may also prone to Facebook and Internet addiction (D'Souza, Ravi, Lakshmeesh & Singh, 2018; D'Souza, 2018).

Internet is so attractive to adolescents and adults as it provides expressions of emotions through several social networking applications. Instagram is one such application, has taken over many other social networking applications. It is a photo sharing social networking app launched in the year 2010 has more than one billion monthly active users worldwide as of June 2018. It has high levels of user engagement and one of the fastest growing social networking sites at present. This media provides a platform for sharing photographs videos and messages in private and public way. Another study revealed that the Instagram is used as "Surveillance/Knowledge about others," "Documentation," "Coolness," and "Creativity." (Sheldon & Bryant, 2016). But use of these social networking applications has several antecedents. Review on this line on Instagram did not yield any studies. However, related studies have revealed the following. Stress is one of the crucial antecedents for internet addiction (Ah & Jeong, 2011; Cho, 2006; Lee et al (2014) for adolescents, which is backed by general strain theory. Negative emotions aroused by strain and stress, which leads to problem behaviour. Ju (2011) and Jang, Hwang and Choi (2008) in their studies found that internet addiction is linked to stress. A recent post Times health newsletter clearly revealed that Instagram is the worst social media network for mental health and wellbeing, based on a study on almost 1500 individuals aged between 14 to 24 years (time.com/4793331/instagram-social-media-mental-health/2018). D'Souza and Meenakshi (2018) reported that among dental students as the addiction on Instagram increased, sleep quality of the dental students decreased linearly and significantly. It was found that 'Lack of control' and 'Excessive use' factors of Test for Instagram addiction were the major predictors of sleep quality.

In the present study an attempt is made to find out the relationship between anxiety and Instagram addiction among college students pursuing non-professional courses. The other interests of the researchers are to find out how anxiety of the students affects Instagram addiction among various components of Instagram. It is hypothesized that anxiety does affect Instagram addiction.

METHOD

Sample

Students studying their pre university and colleges were selected for the purpose of the study from few colleges of Bengaluru city. A total of 131 students were randomly selected, studying Arts, Science and Commerce/management courses. Their age varied from 14 to 23 years with the mean age of 19.21 ± 1.52 years.

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Tools employed

TEST FOR INSTAGRAM ADDICTION (TIA). D'SOUZA, SAMYUKTA AND BIVERA (2018)

TIA is developed by D'Souza, Samyukta and Bivera in the year 2018. It contains 26 statements, which measure Instagram addiction of the individual in 6 which included components like Lack of control, Disengagement, Escapism, Health and interpersonal troubles, Excessive use and Obsession. To be answered in 5 point Likert scale was used for scoring ranging from All the time (5), most of the time (4), sometime (3), once in a while (OW), rarely/never (1). To find out the reliability, the Cronbach's reliability test was done and the alpha value obtained for the total inventory was 0.931 and for various components varied from 0.680 to 0.863. Further, when item to total scores correlations were performed; all the correlation coefficients obtained through Pearson's product moment correlation techniques were found to be highly significant, indicating that the TIA has high reliability and validity. Even the correlation coefficients obtained between components were found to be highly significant.

ASSESSMENT OF ANXIETY (DASS-21)

In the present study anxiety was assessed using DASS-21, developed by Lovibond and Lovibond (1995). DASS 21 comprises of 21 statements which measure Depression, anxiety, and stress of an Individual. In the present article, only anxiety scores were considered for the analysis. There are 7 statements in DASS, which exclusively measure anxiety of an Individual. DASS has high internal consistency with Cronbach's alpha of 0.94 and has been used widely all over the world (Gloster et al, 2008). In India also several researchers have used DASS scale for measuring depression, anxiety and stress (Bhasin, Sharma, & Saini, 2010). The response to each question varies from "Did not apply to me at all" to "Applied to me very much, or most of the time". The scoring was done as per the instructions given by original authors separately for depression, anxiety and stress. To get a final score, total scores under anxiety were multiplied by 2.

Procedure:

The second author personally visited few colleges in Bengaluru city to collect the data. After taking the permission from the respective authorities, both test for Instagram addiction and anxiety scale component of DASS were administered to a total of 131 students studying in various colleges of Bengaluru city. Before administering the questionnaire, they were assured of confidentiality. They were asked to answer all the questions. In case of difficulty in understanding the item/s, in order to get good response they were made clear in their local language. Once the data were collected, they were scored and fed to the computer.

The data were analysed using, Pearson's product moment correlation and simple linear regression. Table 1 provides the results of Pearson's product moment correlations between factors of Instagram addiction and anxiety. Table 2 presents results of the simple linear regression between anxiety and components of Test for Instagram addiction.

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Table 1: Results of product moment correlations between anxiety scores and factors of Instagram addiction

Variable 1 Factors of TIA	Variable 2	Correlation coefficient
1. Lack of control	Anxiety	0.381***
2. Disengagement	Anxiety	0.284**
3. Escapism	Anxiety	0.160 ^{NS}
4. Health and interpersonal troubles	Anxiety	0.409***
5. Excessive Use	Anxiety	0.112 ^{NS}
6. Obsession	Anxiety	0.260**
Total scores	Anxiety	0.370***

Note: Df=129; *** P=.001, **P=.01; *P=.05; NS-Non-significant

From the table 1, it is clear that anxiety scores were significantly and positively related to four factors of Test for Instagram Addiction (TIA). Anxiety was found to be significantly and positively related to lack of control ($r=0.381$), disengagement ($r=0.284$), health and interpersonal troubles ($r=0.409$), obsession ($r=0.260$) and total Instagram addiction scores ($r=0.370$). However other components like escapism and excessive use did not correlate significantly with anxiety scores. As the anxiety increased, lack of control, disengagement, health and interpersonal troubles and obsession increased linearly and significantly, including total Instagram addiction scores.

REGRESSION ANALYSIS

Table 2: Results of simple linear regression (IV=Anxiety; DV=Factors of TIA)

Variable 1 Factors of TIA	Constant	b1
1. Lack of control	10.339	0.221
2. Disengagement	12.535	0.177
3. Escapism	13.585	0.085
4. Health and interpersonal troubles	5.562	0.177
5. Excessive Use	4.105	0.068
6. Obsession	8.918	0.117
Total scores	54.602	0.881

When the slopes were calculated using simple linear regression, maximum slope was observed for lack of control followed by health and interpersonal troubles, and disengagement, and least slope was found for excessive use and escapism. In other words, when the anxiety is more, lack of control over usage of Instagram, health and interpersonal troubles and disengagement were more, compared to rest of the components of Instagram addiction.

DISCUSSION

Major findings of the study

- As the anxiety scores increased, addiction to Instagram in components lack of control, disengagement, health and interpersonal troubles and obsession increased and in total scores, also increased linearly and significantly
- Increased anxiety lead to lack of control over usage of Instagram, health and interpersonal troubles, and disengagement for the college students.

Our study clearly indicated that a positive relationship between anxiety and Instagram addiction in most of the components of Instagram addiction, including total Instagram addiction. There are no studies available to substantiate our findings which are directly related to anxiety and Instagram addiction. However, few studies related to anxiety, stress and internet addictions are in agreement with the findings of the present study. A study by Van Ameringen et al (2016) found that college students who are addicted to internet addiction had higher levels of functional impairment, depression and anxiety, attentional problems and ADHD symptoms. Gupta, Khan, Rajoura and Srivastava, (2018) in their study found a strong positive association between stress and risk of internet addiction. Younes et al (2016), Thomée, Härenstam, and Hagberg (2016), Al-Gamal, Alzayyat, and (2012) in their studies found that stress to be positively associated with risk of internet addiction. Gupta, Khan, Rajoura and Srivastava, (2018) opined that few individuals with avoidant style of coping may use the internet excessively to escape the stress arising out of real-world problems, leading to addiction. McNicole and Thorsteinsson (2017) found that internet addiction was associated with increased levels of psychological distress. Studies by Müller, Beutel and Wölfling (2014), Morrision and Gore (2010) and Leung (2006) found significant relationships between internet addiction and depression and other co-morbid disorders. Times.com (2018) study revealed that Instagram is associated with high levels of depression, anxiety, bullying and fear of missing out phenomenon (FOMO).

Present study clearly brought out the fact that when the anxiety in an individual is increased there was a lack of control over usage of Instagram, increased health and interpersonal troubles and disengagement. All these factors in turn lead to increased anxiety, stress and depression, which affects the psycho-social functioning of the individual. Among students these issues might affect their academic performance, which has its own toll in the future.

Several strategies can be planned to avoid addiction to Instagram. According to Busari (2016) use of internet must be alternatively replaced with less risky and healthy activities, which might include Yoga practising, exercising, meditation and involving in sports activities. The addiction towards social networking applications like Instagram, Facebook, TikTok etc., are on increase day by day. Therapies like Cognitive behaviour therapy may play a major role in reducing the addiction to internet/social networking applications by changing their thought process from negative to automated positive thoughts including reduction in anxiety disorders (Santos et al, 2016) for a better living. Future research should focus on these line to underpin the ill effects of Instagram addiction.

REFERENCES

- Ah Y.A, & Jeong, W.C (2011). The mediating effect of internet addiction between academic stress and school maladjustment in adolescence. *Korean Journal of Adolescents*, 18, 27-50.

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- Al-Gamal E, Alzayyat A, & Ahmad M.M. (2016). Prevalence of internet addiction and its association with psychological distress and coping strategies among university students in Jordan. *Perspect Psychiatr Care*. 52, 49–61.
- Bhandari, Parash., Neupane, Dipika., Rijal, Shristi., Thapa, Kiran., Mishra, Shiva & Kumar Poudyal, Amod. (2017). Sleep quality, internet addiction and depressive symptoms among undergraduate students in Nepal. *BMC Psychiatry*. 17. 106. 10.1186/s12888-017-1275-5.
- Bhasin S.K, Sharma R, & Saini N.K. (2010). Depression, anxiety and stress among adolescent students belonging to affluent families: A school-based study. *Indian J Pediatr*. 77, 161–165. [PubMed]
- Busari A.O. (2016). Academic Stress and Internet Addiction among Adolescents: Solution Focused Social Interest Programme as Treatment Option. *J MentDisord Treat* 2:114. doi:10.4172/2471-271X.1000114.
- Cho, C.B. (2006). The influence of the experience of domestic violence in adolescence on internet addiction. *Korean Journal of Adolescents*, 13, 1-52.
- Dong (2013). Impaired error - monitoring function in people with internet addiction disorders: An event-related fMRI study. *Eur Addict Res* 19, 269-275.
- D'Souza, L. (2018). Personality correlates of Facebook addiction among college students. Paper presented at 5th Academic conference on Social sciences, Singapore (7-8th July, 2018).
- D'Souza, L. & Meenakshi, S. (2018). Relationship between Instagram addiction and sleep quality among dental students. *International Journal of research in Engineering, IT and social sciences*, 8 (10), 103-108
- D'Souza, L., Manish, S. & Raj, S (2018). Relationship between academic stress and internet addiction among college students. *International Journal of Indian Psychology*, 6(2), 100-108. DIP: 18.01.010/20180602, DOI: 10.25215/0602.010
- D'Souza, L., Samyukta, A & Tejaswini, S.M. (2018). Relationship between Internet Addiction and Sleep Quality among Female Students, *International Journal of Indian Psychology*, 6 (1), 83-88. DIP: 18.01.088/20180601, DOI: 10.25215/0601.088
- D'Souza, L., Samyukta, A., & Bivera, T.J. (2018). Development and validation of test for Instagram addiction (TIA). *International Journal of Indian Psychology*, 6 (3), 4-14. DIP: 18.01.081/20180603, DOI: 10.25215/0603.081
- Gloster AT, Rhoades H.M, Novy D, Klotsche J, Senior A, Kunik M, et al. (2008). Psychometric properties of the depression anxiety and stress scale-21 in older primary care patients. *J Affect Disord*. 110, 248-259. [PMC free article] [PubMed]
- Goldberg, I. (1995). *Internet addictive disorder (IAD) diagnostic criteria*. From www.psycom.net/iadcriteria.html
- Gupta, A., Khan, A. M., Rajoura, O. P., & Srivastava, S. (2018). Internet addiction and its mental health correlates among undergraduate college students of a university in North India. *Journal of family medicine and primary care*, 7(4), 721-727.
- Jang K.S, Hwang S.Y, & Choi J.Y (2008). Internet addiction and psychiatric symptoms among Korean adolescents. *Journal of School Health* 78, 165-171.
- Ju. S. (2011). Verification of mediation effects and moderation of resilience in relations between stress caused by study and parents that adolescents perceive and internet addiction. *Korean Journal of Adolescence* 11, 61-83.
- Lee J, Hwang JY, Park SM, Jung HY, Choi S, et al. (2014) Differential resting-state EEG patterns associated with comorbid depression in Internet addiction. *Progress in Neuro-Psychopharmacology and Biological Psychiatry*, 50, 21-26.
- Leung L. (2006). Stressful life events, motives for Internet use, and social support among digital kids. *CyberPsychology & Behavior* 2006; 10:204–214 [PubMed]

Does Anxiety Influence Instagram Addiction among College Students?

- Lovibond S H & Lovibond P F (1995). Manual for the Depression Anxiety Stress Scales. (2nd. Ed.) Sydney: Psychology Foundation. www.psy.unsw.edu.au/dass/
- McNicol, M. L., & Thorsteinsson, E. B. (2017). Internet Addiction, Psychological Distress, and Coping Responses Among Adolescents and Adults. *Cyberpsychology, behavior and social networking*, 20(5), 296-304.
- Morrison C.M, & Gore H. (2010). The relationship between excessive Internet use and depression: a questionnaire-based study of 1,319 young people and adults. *Psychopathology*, 43, 121–26 [PubMed]
- Müller KW, Beutel ME, Wölfling K. A (2014). Contribution to the clinical characterization of Internet addiction in a sample of treatment seekers: validity of assessment, severity of psychopathology and type of co-morbidity. *Comprehensive Psychiatry* 55,770–777 [PubMed]
- Santos, V. A., Freire, R., Zugliani, M., Cirillo, P., Santos, H. H., Nardi, A. E., & King, A. L. (2016). Treatment of Internet Addiction with Anxiety Disorders: Treatment Protocol and Preliminary Before-After Results Involving Pharmacotherapy and Modified Cognitive Behavioral Therapy. *JMIR research protocols*, 5(1), e46. doi:10.2196/resprot.5278
- Sheldon, P., & Bryant, K. (2016). Instagram: Motives for its use and relationship to narcissism and contextual age. *Computers in Human Behavior*, 58, 89-97. time.com
- (2018). time.com/4793331/instagram-social-media-mental-health/2018
- Tao R, Huang X, Wang J, Zhang H, Zhang Y, et al. (2010) Proposed diagnostic criteria for internet addiction. *Addiction* 105, 556-564.
- Thomé S, Härenstam A, & Hagberg M.(2012). Computer use and stress, sleep disturbances, and symptoms of depression among young adults – A prospective cohort study. *BMC Psychiatry*. 2012;12:176.
- Van Ameringen M, et al. (2016). Internet addiction or psychopathology in disguise? Results from a survey of college-aged internet users. Presented at: European College of Neuropsychopharmacology Congress; September 17-20, 2016; Vienna.
- Younes F, Halawi G, Jabbour H, El Osta N, Karam L, Hajj A, et al. (2016). Internet addiction and relationships with insomnia, anxiety, depression, stress and self-esteem in university students: A Cross-sectional designed study. *PLoS One*.11:e0161126.

Web resources

www.internetworldstats.com/emarketing.htm, 2018

<http://time.com/4793331/instagram-social-media-mental-health/2018>

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Conflict of Interest

There is no conflict of interest.

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