

Comparative Sketches of Suicidal Ideation and Depression of Internet Addicted Male and Female College Students of Kolkata

Sraboni Chatterjee¹

Sreeparna Majumder²

Abstract : *The aim of the present study is to make a comparative analysis of suicidal ideation and depression of internet addicted male and female college students. A sample of 200 college students having moderate levels of internet addiction (100 male and 100 female) was selected. The interacting variables selected for the present study were suicidal ideation and depression. Result indicates that from the viewpoint of significant differences no such remarkable differences were found out in case of suicidal ideation, only depression proves to be an important catalyst in such instances. Magnitudinal differences reveal that male college students possess a lesser depressive tone and utilize the internet as a mode of recreation, but on the other hand, female college students possess higher depressive tone and becomes the easy victims of emotional upheavals. Correlational analysis pinpoints that increment in depressive tone also invite suicidal thoughts in the lives of both males and females. As a whole, internet addiction proves to be an important factor for college students and its adverse effect illuminated the lives of young adults with psychosocial turmoil.*

Key words: internet addiction, suicidal ideation, depression

Introduction : The current world scenario is significantly embedded with significant student population. There are several ways, positive and negative, through which social media made its impact on college students. Due to paucity of time and vistas of activities, college students use social networking sites for their higher education. Researchers have begun to objectively examine impacts

on students' well-being and have found some preface results that call for more research. They find that social media are not the problem—the problem is the specific use and purpose of social media tricks that make the divergence.

Huge numbers of individuals on the web are interested to gather information about others and meet other individuals, to assemble, share data and encounters on many areas and topics. As a result of this, hundreds of social networking sites have been prepared, and they have pulled in a large number of clients in the few short years that interpersonal dealings has turned into a marvel. The key elements of the social media websites are vitally the same, yet each site attracts variety of clients in a wide range of ways. Social site mostly tries to gather huge public, while the aim of others is to draw in individuals based on their race, ethnicity, and nationality. The social media websites are additionally different in the ways in which they appear and join new data and focused devices, similar to transportable access, blogging, photograph and video sharing.

The main purpose of social media is to give admission to its clients and users. They can have conversation with individuals and build social relations on the web. They can equally split their contemplations and individual data on social media including everyday happenings, suppositions, movies, recordings and web-links. This is also another way through which individual's aptitude and business can be developed. The capacity of online networking to extend valuable data quickly has made it the quickest developing method of association. With such a high rate of students using social media networking on daily basis, there is a strong need to scrutinize the extent to which social media is having its impact on students. Individual's interests, characteristics can be shared through the platform of social networking websites. Users can place their personal information and pictures on a profile page, which displays a list of the user's connections, also known as "friends" (Junco and Cole-Avent, 2008; Junco and Mastrodicasa, 2007). Beyond the social networking sites themselves, the fame of mobile technology with cell phones has provided another coating of impact on college students. Literature suggests that face book is one of the popular social networking site (Dahlstrom, deBoor, Grunwald, and Vockley, 2011; Junco, 2011a). People favor to play games online that do not engross any physical activity. The purpose for this is individuals desire to play games online which do not involve any physical action.

Considering the effect of social media, Khan (2010), found out that a large portion of students use social media networking because of the peer pressure and due to the fact that their friends have been using it. Those who achieved 3.0 to 3.5 GPA (Grade Point Average), for the most part utilize person to person communication sites for excitement. Maqableh, Rajab, Quteshat, Ra'ed Moh'd Taisir Masa'deh, Khatib, Karajeh, (2015) suggested that the students, who spend most of their time of the week days using social media, also able to maintain their academic grades by giving adequate time to their studies in weekends.

In studying the impact of social media so many variables are found that have high correlation with it. Depression and suicidal ideation are the significant one among them. World Health Organization (2012) defined that at the extreme level suicide is the ultimate result of depression. A new study found that teenagers are increasingly depressed, feel hopeless and are more likely to consider suicide (Twenge, 2012). During the process of excessive stress and depression, some people may undergo with suicidal thoughts.

Considering the above discussion it is clear that internet addiction is one of the prevalent problems of present day and it is highly correlated with depression and suicidal ideation, so the present venture probes to make a comparative analysis between internet addicts male and female college students with respect to their suicidal ideation and depressive tone.

Implementing all the categorical discussions the objectives of the present study are resolute to be: -

- To locate, the difference, if there is any, between male and female college students with respect to their internet addiction.
- To locate the difference, if there is any, between male and female college students with respect to their depression
- To locate the difference, if there is any, between male and female college students with respect to their suicidal ideation
- To locate, if there is any relation, between Internet addiction and depression among male college students
- To locate, if there is any relation, between Internet addiction and suicidal ideation among male college students
- To locate, if there is any relation, between suicidal ideation and depression among male college students

- To locate, if there is any relation, between Internet addiction and depression among female college students
- To locate, if there is any relation, between Internet addiction and suicidal ideation among female college students
- To locate, if there is any relation, between suicidal ideation and depression among female college students

2. METHOD:

2.1 Research Problem:

The present study attempts to make a comparative measurement between male and female college students with respect to their internet addiction, suicidal ideation and depression

2.2 Operational Definitions:

2.2.1 Internet addiction: The internet is a new tool that is used as an essential part of everyday life all over the world and its use increases especially among young people. In spite of the extensively perceived merits of this tool, psychologists have been alert of the negative impacts of its use, especially the over or exploitation and the related physical and psychological problems (Greenfield, 2000). The term "Internet addiction" explained that pathological compulsive internet usage was proposed by Goldberg (1995). Internet addiction is characterized by undue or feebly controlled preoccupations, urges or behaviours regarding computer use and internet access that direct to mutilation or distress (Shaw and Black, 2008).

2.2.2 Depression: Depression is largely seen by the universal public and conventional media as a neuropsychiatric illness (Wingert & Kantrowitz, 2002) with a unpredictable course that is best described in disease-state terms such as *disorder, episodes, reduction, recovery, reversion, and recurrence* (Frank et al., 1991). Depression is a state of low mood and loathing to activity that can affect a person's thoughts, behavior, mind-set, and sense of welfare (DSM-V; 2013).

2.2.3 Suicidal Ideation: The interpersonal-psychological theory of suicidal behavior (Joiner, 2005) proposes that it is difficult for an individual to die by suicide unless s/he has both the yearning to die by suicide and the ability to do

so. Suicidal ideation is defined as thoughts, dreams and the desire to commit suicide, being a frequent behavior surrounded by adolescents and characterized as a personality disorder or with the character of emotional blackmail (Ahmad, 2014 & Abasse, 2009)

2.3 Research Hypotheses:

- There is no significant difference between male and female college students in terms of their internet addiction
- There is no significant difference between male and female college students in terms of depression
- There is no significant difference between male and female college students in terms of suicidal ideation.
- There is no significant relation between suicidal ideation and depression among male college students.
- There is no significant relation between suicidal ideation and depression among female college Students

2.4 Sample: Total number of 200 college students (100 male and 100 female) was selected on the basis of following criteria:

2.4.1 Inclusion Criteria:

- Age: 19 – 22 years
- Sex: Female and Male
- Mother Tongue: Bengali
- Socio- economic Status – Middle to Upper socio-economic status
- Locality / Area – Kolkata
- Marital status – Unmarried
- Educational Qualification - H.S passed

2.4.2 Exclusion Criteria:

- Age: Below 19 years and above 22 years
- Mother Tongue: Non - Bengali
- Socio- economic- status: lower middle class
- Locality / Area: Outside Kolkata
- Marital status: Married

- Educational Qualification: High school students
- Those who were not access internet was excluded
- Clinical Status- Presence of psychopathological symptoms

2.5 Tools Used:

2.5.1 Information Blank: Consisting of information like name, age, sex, religion, mother tongue, education, family history, personal hobby, future economic plan, and major illness.

2.5.2 The General Health Questionnaire (GHQ) by Goldberg and Hiller (1979) is used for eliciting psychiatric morbidity among the sub-samples.

Description of the Tools: The test has been developed by Goldberg and Hiller in 1979. It is a self- administered selection test through which psychiatric disorders among the respondents can be detected. The questionnaire was designed in a easy way to administer, acceptable to respondents, reasonably short and objective in the sense that it did not require the person administering it to make biased assessment about respondents. There is no time-limit to complete the test. The instruction to complete it precedes the inventory.

Development of the Test: This test was developed by Goldberg and Hiller (1979) in different version depending upon the nature of items. GHQ-28 containing 28 items is derived from factor analysis of GHQ-60 and consists of four subscales; each subscale assesses separate factors like somatic symptom, anxiety and insomnia, social dysfunction and severe depression. It is used as a case detector and as good as other version of GHQ. At the same time it gives scale sub-scores. Each item has four response alternatives.

Scoring: Scoring was done by GHQ method (0-0-1-1-) as suggested by Goldberg and William (1988). Limits for case- identification was considered as 4/5, i.e. score signifies a non-psychiatric case. Total score ranges from 0-28.

Interpretation: It is based on the responses given and scores assigned to them accordingly. Greater score indicates negative health conditions i.e. lower score indicative of good health condition.

Reliability: In GHQ, correlation co-efficient of each item with total score is significant at 0.01 level. The split-half reliability is 0.97. The sensitivity and specificity of the test are 1 and 0.88 respectively.

Selection of the Tools: In the present study, the General Health Questionnaire (GHQ) is used among the subjects to search out those with a psychiatric disorder.

2.5.3. Internet Addiction Test (Young 1996): It is a reliable and valid measure of addictive use of internet developed by Dr. Kimberly Young in 1996. The scale is consisting of 20 items that measures mild, moderate and severe level of Internet Addiction. In this scale the items rated in a five point Likert Scale.

Internet addiction measured by Internet Addiction Test:

20-49 points: Mild (one is a standard online uses. One may surf the web a bit too long at time, but have control over once usage.)

50-79 Points: Moderate (one is experiencing occasional or frequent problems because of the internet. One should consider their full impact on once life.

80-100 Points: Severe (One's internet usage is causing significant problem in once life and address the problem directly caused by one's internet usage). The higher score indicates greater level of addiction.

Reliability and Validity: Factor analysis through principal component and various rotations exposed five factors of social problems, effect on presentation, lack of control, pathological use of chat rooms and neglecting educational and occupational duties. Content and convergent validity, internet consistency ($\alpha = 0.88$), test-retest reliability ($r = 0.88$) and bisection ($r = 0.72$) was determine and all were acceptable, regarding results.

2.5.4 Beck Depression Inventory-II (Beck, 1996): This inventory is a extensively used instrument that provides in sequence about the occurrence and rigorousness of depressive symptoms. It was developed by Beck and available in the year 1996. It is a 21 question multiple choice self-report inventories scored from 0-3. Now after completion of the questionnaire, add up the score for each of the twenty-one questions by counting the number to the right of each question one has marked. The uppermost possible total score for the whole test would be sixty-three. This would mean one can circled number three on all twenty-one questions. Since the lowest potential score for each question is zero, the lowest achievable score for the test would be zero.

Levels of depression measure by Beck's Depression Inventory- 0-10: These ups and downs are considered normal, 11-16: Mild mood disturbances, 17-20: Borderline Clinical Depression, 21-30: Moderate Depression, 31-40: Severe Depression and Over 40 Extreme depression

Reliability and Validity: Reliability estimates ranges from .72 to .91 for the BDI-II total and for the scale scores. Concurrent convergent and discriminant validity were established were established for BDI-II

2.5.5 Suicidal Ideation Scale (Reynolds, 1991): Suicidal ideation, which means, the judgment and cognitions one has about suicidal behaviors and intent, may be considered a chief marker for the risk of more serious suicidal behaviors.

Adult Suicidal Ideation Questionnaire (ASIQ; Reynolds, in press-a), is a self report questionnaire and consisting of 25 questions. The summation of its items represents the total score. The range of score is from 0 to 150, where a high score indicates greater suicide ideation (Reynolds, 1991).

Reliability and validity: Results indicated that test-retest ($r_{\text{sub tt}} = .86$) reliability of the ASIQ with college students was satisfactory and internal consistency was ($r_a = .97$). Depression, hopelessness, anxiety, and self-esteem have significant correlations ($r_s = .38$ to $.60$) with depression. Validity of the instrument was assessed with quite a few methods. The correlation with the Beck Depression Inventory (BDI) of ASIQ was $r = 0.60$; in case of Beck Hopelessness Scale, $r = 0.53$; by means of Beck Anxiety Inventory, $r = 0.38$; and with the Rosenberg Self-Esteem Scale (RSES), $r = 0.48$; and with an pointer for previous suicide attempt, $r = 0.33$, which is to some extent attenuated by the low commonness of past suicide attempt in the sample and the dichotomous character of the indicator. All the findings of correlations in this validity analysis were significant at $p < 0.001$. The author further assesses the validity of the ASIQ with multiple regressions and also with covariates for each of the five measures used to make lawful the ASIQ above. Coefficient for the BDI across the total sample was 0.301; .279 for BHS; .190 for suicide attempt; -.127 for RSES. All coefficients were also significant at $p < 0.001$, except RSES, which was significant only at $p < 0.01$. BAS was not found to be significant. These coefficients suggest that a relationship exist with depression, hopelessness, and suicide attempts with the ASIQ score. There is a growing concern for identifying individuals at risk for suicidal behaviors. Suicidal ideation, that is, the thoughts and cognitions one has about suicidal behaviors and intent, may be considered a primary marker for the risk of more serious suicidal behaviors.

2.6 Sampling Technique: The present research endeavor has employed purposive sampling as the technique of selection of subjects. Here on the basis of inclusion and exclusion criteria the researcher on the basis of her own judgement selects the member from the population to the sample. After outlining the methodological plan adopted during the present study, it is necessary to describe the procedural steps in some details. At this juncture, it is also needed to shed light to some preparatory work that was done prior to the final administration of the tests.

2.7 Procedure:

Step 1: Rapport was established with the candidates.

Step 2: At first, considering the inclusion and exclusion criteria male and female students belonging to the age group of 19-22 years, having Higher Secondary passed educational qualification and mother tongue Bengali were selected. The students were selected from Kolkata and their per capita family income was above Rs: 20,000 (assessed through the Information Blank). General Health Questionnaire by Goldberg and Hiller (1979) was administered to the college students in order to assess the presence of psychopathological symptoms within them. As the study aims to assess the level of depression among the internet addicted college students, so here, by administering GHQ, students who have scored 4/5 were eliminated from this present venture because presence of any psychiatric morbidity can produce a buffer in the pathway of completion the aim of this study. At this point, 400 students were taken into consideration for the further proceedings.

Step 3: In the next step, Internet addiction Test by (Young, 1996) was administered to all of them. As this study purports to examine the comparative parameter of depression and suicidal ideation between internet addicted male and female college students, so those college students who have scored 50 and above (moderate and severe addiction) in this test were taken for further processing of the study. From the total sample of 400 students only 200 students (100 were male and 100 were female) were used for the final study.

Step 4: After that, Adult Suicidal Ideation Scale (Reynolds, 1991) and Beck Depression Inventory (Beck, 1996) were applied to them randomly to avoid the order effect. As GHQ was applied beforehand and psychiatric morbidity was already ruled out so the level of depression carried out by these individuals may

be contributed due to internet addiction. Moreover, the administrator provided some crucial points to the informant of the students regarding the further treatment of those students who were belonging to the category of moderate level of depression (score range 21-30). Beck Depression Inventory was a clinical scale and Adult Suicidal Ideation Questionnaire was not but in the literature it was found that the correlation between these two scales were ($r = 0.60$) quite satisfactory, so these two scales were taken in the present venture.

2.8 Statistic Used:

Descriptive Statistics: Mean, Standard deviation and coefficient of correlation was applied to find out the relation between the variables for both sexes.

Inferential Statistics: t-test was also used for finding out the significance of mean differences between the groups.

3. RESULTS:

The data obtained from the subjects were systematically organized and properly tabulated with respect to each of the variables considered in the present study. The presentation of the data has reflected the measures of the obtained selected study variables and their statistical distributions on the basis of which suitable statistical techniques were applied to analyze and to find out essential information to serve the objectives of the study. The processed data have been represented in different sections as follows-

As the study deals with the comparative parameter of male and female college students addicted to internet with respect to suicidal ideation and depression, so, the basic criteria for screening must be considered at this preliminary level. It was already mentioned that from 400 students, only 100 males and 100 females who have scored 50 and above (moderate addiction) were selected.

In the following two table descriptive statistics and t-test for mean difference was calculated to see that whether the addicted group was significantly different from the non-addicted group or not.

Table 1 shows the mean and standard deviations of internet addicted and non-addicted males and females

Males (N=200)				Females (N=200)			
Addicted (N=100)		Non-Addicted (N=100)		Addicted (N=100)		Non-Addicted (N=100)	
Mean	S.D	Mean	S.D	Mean	S.D	Mean	S.D
84.18	8.85	28.24	11.15	85.47	5.25	20.98	8.80

Table 2 shows the significant mean difference between internet addicted and non-addicted individuals of male and female groups

Males (N=200)					Females (N=200)				
Addicted (N=100)		Non-Addicted (N=100)		t-value (df=398)	Addicted (N=100)		Non-Addicted (N=100)		t-value (df=398)
Mean	S.D	Mean	S.D	39.20**	Mean	S.D	Mean	S.D	62.88**
84.18	8.85	28.24	11.15		85.47	5.25	20.98	8.80	

*p<0.05 level of significance **p<0.01 level of significance

The above table indicates that in case of gender; addicted and non-addicted both groups are significantly different with each other.

Table 3 represents mean, standard deviations and significant mean difference of internet addicted male and female groups with respect to the selected variables

Variables	Males (N=100)		Females (N=100)		t-values
	Mean	S.D	Mean	S.D	df=198
Internet Addiction	84.18	8.85	85.47	5.25	1.27
Suicidal Ideation	62.08	19.31	62.80	19.14	.265
Depression	27.80	7.07	29.19	6.29	1.46*

*p<0.05 level of significance; **p<0.01 level of significance

The findings of the above table reveal the fact that significant mean difference was found only in case of depression but in case of other interacting variables namely, internet addiction and suicidal ideation no such differences were found out. In case of internet addiction female group possess higher magnitudinal trend than male ones but considering suicidal ideation it can be commented that both groups are positioned at the same point.

Table 4 represents the Co-efficient of correlation between Internet Addiction and Depression in case of male group

	N=100 df=98
Co-efficient of correlation Internet addiction and Depression	.099

*p<0.05 level of significance; **p<0.01 level of significance

The above table represents that in case of male group no significant correlation was found out between Internet addiction and Depression

Table 5 represents the Co-efficient of correlation between Internet Addiction and Suicidal Ideation in case of male group

	N=100 df=98
Co-efficient of correlation Internet addiction and Suicidal Ideation	.057

*p<0.05 level of significance; **p<0.01 level of significance

The above table represents that in case of male group no significant correlation was found out between Internet addiction and Suicidal Ideation

Table 6 represents the Co-efficient of correlation between depression and suicidal ideation in case of male group

	N=100 df=98
Co-efficient of correlation depression and suicidal ideation	.764**

*p<0.05 level of significance **p<0.01 level of significance

The above table represents that in case of male group significant high positive correlation was found in case of depression, and suicidal ideation which indicates with increased rate of depression, suicidal thoughts also increases

Table 7 Co-efficient of correlation between Internet Addiction and Depression in case of female group

	N=100 df=98
Co-efficient of correlation between Internet Addiction and Depression	.363**

*p<0.05 level of significance **p<0.01 level of significance

The above table represents that in case of female group a significant low positive correlation was found out between Internet Addiction and Depression. Increment in the use of internet addiction also results in increased amount of depression

Table 8 Co-efficient of correlation between Internet Addiction and Suicidal Ideation in case of female group

	N=100 df=98
Co-efficient of correlation between Internet Addiction and Suicidal Ideation	.117

*p<0.05 level of significance **p<0.01 level of significance

The above table represents that in case of female group no significant correlation was found between Internet Addiction and Suicidal Ideation

Table 9 Co-efficient of correlation between depression and suicidal ideation in case of female group

	N=100 df=98
Co-efficient of correlation between depression and suicidal ideation	.764**

*p<0.05 level of significance **p<0.01 level of significance

The above table represents that in case of female group significant high positive correlation was found in case of depression and suicidal ideation which indicates that the increment in the amount of both variables are in same direction.

4. DISCUSSION:

The total set of data was explained considering descriptive statistics of mean and standard deviations of all the selected groups of samples. The significant differences and the relationship between the variables were obtained from t-test and co-efficient of correlation in many instances of the selected variables of the present study.

4.1 Internet Addiction:

Analysis of result indicates slight magnitudinal difference with respect to internet addiction between male (Mean=84.18; S.D=8.85) and female (Mean=85.48; S.D=5.25) college students. Inferential statistics pinpoints the fact that no significant mean difference was found between the two groups.

Different literature reveals diversified findings regarding this issue. Ono and Zavodny (2003) have analyzed that women involved more in online activities than men. This may happen due to several factors. Not only that, some differences between genders in certain areas of cognition may occur due to internet use (Halpern, 1996). In another study Weiser (2000) commented that that men use the internet basically for entertainment and leisure related purposes, whereas

for women use it mostly for interpersonal communication and educational support. Frangos, Frangos (2009) in their study found that men were more involved in usage of internet than women. Zeynep (2012) informed totally reversed findings from his study. He said that, the rate of internet addiction usage among women is higher than men.

In the present study magnitudinal data implies that the differences between the genders are not a remarkable one, so both of them are positioned mostly at similar point and whatever the difference may be contributed to their individual nature of usage.

4.2 Suicidal Ideation:

Analysis of result of mean difference indicates that from the view point of suicidal ideation male (Mean=62.08 and S.D=19.31) and female (Mean=62.80 and S.D=19.14) both groups are positioned at the similar point.

Literature suggests that addiction was found as important threat factor for suicidal behavior (Sue, Sue, Sue, & Sue, 2013), allied with hopelessness and depression (Arria et al., 2009). Internet addiction can be seen as an important danger area as it has been reported repeatedly among college students in current scenario. Suicidal ideation is found to be more prevalent in internet addicted persons (Kim et al., 2006). Similarly, a well-built positive connection was found out between suicidal ideation, depression and internet addiction (Ryu, Choi, Seo, & Nam, 2004). Some studies have also exposed that depression and suicidal ideation are not only associated but also through their symptoms too (Fu, Chan, Wong, & Yip, 2010). Studies by Ibrahim, Amit, Che Din, and Ong (2017) revealed that suicidal ideation was elevated among male participants compared with female one. Age was the forecaster of suicidal ideation for males, while depression and loss of motivation, as components of hopelessness, were the leading factors of suicidal ideation among females. Delfabbro et. al. (2013) and Canetto & Sakinofsky (1998) have reported gender differences in suicide behaviors with an overrepresentation of females reporting suicidal ideation and exhibiting nonfatal suicidal behavior than males.

In this present scenario both male and female college students are positioned at similar point from the perspective of suicidal ideation. Considering the scoring pattern it was found that the cut of point of the ASIQ was 75 and the mean

values for both genders are below from that level. So, for the present sample suicidal ideation was not found to be a significant factor that can make a difference between the two genders. The minute difference may be attributable to their individual pattern of thought process.

4.3 Depression:

Result analysis pinpoints the fact that significant mean difference was found out between both groups with respect to the above mentioned interacting variable, namely depression. Magnitudinal trend indicates that female group (Mean=29.19 and S.D=6.29) possesses higher scores than male subsamples (Mean=27.80 and S.D=7.07).

Several studies have surveyed the relationship among the Internet addiction and psychological characteristics of the adolescents' including depression. According to them some emotional factors may be related to college students' internet addiction (Kandell, 1998), among which depression is the remarkable one. Internet addiction and depression are bi-directionally related, as opposed to a directive one. Young students suffering from depression showing more proneness towards internet (Morrison and Goore, 2010 & Cotton, 2004) and vice versa, those involved in unwarranted use of the internet are more liable to be depressed (Akin and Iskender, 2011; Rabadi, et. al, 2017 & Sharma, Bharati, De Sousa, Shah, 2016).

In this present venture, female students acquired the highest position in this respective dimension. Literature suggests that gender differences exist in the causal root of development of depression, and these differences are especially profound during adolescence. The development of depressive emotions occur more for female students than in male students, and the magnitude of depressive emotions tends to be more severe in females than in males (Hankin and Abramson, 2001). The high degree of depressive emotions has been exposed to have a strong connection with Internet addiction, may sometimes contributing to negative or dysfunctional social behaviors (Whang, Lee, and Chang, 2003). In search of the reasons of such findings researchers have argued that individuals use internet as a mode to escape from the reality and higher depressive tone results in aloof and distant social interaction, which ultimately leads pursue satisfying interpersonal interactions online (Kardefelt-Winther, 2014).

Co-efficient of correlation for Male Students:

4.4 Relation between Internet addiction and Depression for Male Group:

The coefficient of correlation between internet addiction and depression for male group is .099. The findings indicate a positive correlation though not significant was revealed between the two interacting variables. Literature suggests that college students show an association between Internet addiction and depression (Ko, et. al.2014). Another study by Tsitsika, Critselis, Louizou, et al (2011) has also reported the similar findings. People addicted to the internet reinstate real world, compassionate relationships with virtual, online interaction and this impacts their mental well-being and mental health.

4.5 Relation between Internet addiction and Suicidal Ideation for Male Group:

Here also positive correlation was found out between the two interacting variables and the value is .057. Internet-addicted persons are found to have more suicide ideation (Kim et al., 2006). Literature also suggests similar findings that a positive correlation was found between internet addiction and suicidal ideation (Ryu, Choi, Seo, & Nam, 2004). Here, similar line of findings though not significant was revealed. Suicide risk equally higher in the college students addicted to internet (Kurt, 2015).

4.6 Relation between Suicidal ideation and Depression for Male Group:

The coefficient of correlation between suicidal ideation and depression in case of male group is .764. The findings indicate that a significantly high positive correlation was found out between the two interacting variables. Rationale pinpoints the fact that due to the adverse effect of social media if depression increases then the other interacting variable will also increase in positive direction. Young (1998) reported that the vast majority of Internet addicts have a tendency of suicidal thoughts and suffers from depression. The time they spent in internet eventually increase their level of depression and sometimes invite suicidal thought (Young, 1998). Here also similar findings have been pointed out.

Co-efficient of correlation for Female Students:

4.7 Relation between Internet addiction and Depression for Female Group:

Statistical analysis indicates a low positive significant correlation between these two interacting variables (.363). Survey of literature indicates that females with

internet addiction have proneness towards developing depressive tone (Lodha, 2018). The outcome of the current study also show similar pattern with the mentioned literature.

4.8 Relation between Internet addiction and Suicidal Ideation for Female Group

Similar statistical findings though not significant were also found in case of correlation between internet addiction and suicidal ideation (.117). Same rationale that was already mentioned in the male section (4.6) was responsible for such findings.

4.9 Relation between Suicidal ideation and Depression in case of Female Group:

The coefficient of correlation between suicidal ideation and depression is .764. As similar significant magnitudinal relationship was found out so, it can be commented that same analytical explanations (that have already been mentioned in the section of male group) are also responsible for such findings.

5. CONCLUSION:

The present study depicts that college students have a strong craving for internet, sometimes they use it for escaping from the real world. Gender wise no difference was found in case of internet addiction and suicidal ideation but relationship pattern depicts that internet addiction and suicidal ideation have a association with each other. Strong positive relation was found in case of suicidal ideation and depression and also gender differences were found in case of depression also. The sample used here was a small one and on the basis of such sample such comments cannot be applied to a larger population so further studies needs to be done in this arena

6. LIMITATIONS:

There can be no study without any limitation. The present study is also not an exceptional. The limitations of present study are:

- The sample size is very small.
- Data was collected only from Kolkata area, which is not representative of all male and female college population

- More variable such as stress, adjustment, Psychological well-being, personality, happiness, if added with the present study then the result will be discussed with more strong evidence.
- A number of questionnaires were used in this study. However, questionnaires may invite falsification and faking behaviour on the part of the subject.

7. SUGGESTIONS FOR FURTHER RESEARCH:

- Large sample size would yield a better data and would be representative of the male and female college population.
- Similar study of college student can be compared with the school students to see if level of maturity has any effect on Internet Addiction

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Bio-Profile of the Authors:

1. Assistant Professor, Department of Psychology, Bijoy Krishna Girls' College, Howrah
E-mail: srabonichatterjee2107@gmail.com, Mobile No: 91+ 9830454283
2. MA in Psychology
Mobile No: 91+7044973764, E-mail: sreeparnamajumder.sonta@gmail.com