Shyness Correlates of Facebook Addiction among College Students

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ABSTRACT
The present study assesses the relationship between the shyness and face book addiction among college students studying in Mysuru city. Shyness Assessment Test (D’Souza, 2006) and Bergen Facebook Addiction Scale (BFAS, 2012 were administered to a sample of 120 college students. Shyness of students was measured in 3 domains and face book addiction in 6 elements domains. Data were subjected to product moment correlation and stepwise multiple regression to find out the relationship between shyness and face book addiction, including the domains of shyness which predict face book addiction. Also gender comparisons were tested through Independent samples ‘t’ tests. Results revealed that most of the elements of face book addiction including total face book addiction scores correlated positively and significantly with all the domains of shyness and total shyness scores. Only cognitive/affective domain of shyness, best predicted the face book addiction to the extent of 10.5%. Male students had higher addiction in tolerance, relapse, withdrawal elements of face book addiction including total addiction than female students.

Keywords: face book addiction, shyness, college students

Facebook, one of the widely used social networking sites has been used world over and number of users increasing day by day. According to statistics provided by Facebook by itself (https://zephoria.com/top-15-valuable-facebook-statistics/), worldwide there are more than 2.13 billion individuals are very actively using the Facebook, most common age being 25-34 years. In Indian the Facebook users are more than 195 million. However, usage of Facebook has both advantages and disadvantages. The negative effects being addicted to Facebook are lose of interest in the individual surroundings, the person will be in his/her own world ignoring others, reduction of real world social interactions, decrease in the social and communication skills, and even the user may become obese, along with other negative

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Shyness frequently involves negative self-evaluations, social avoidance and withdrawal. The experience of shyness can occur at cognitive, affective, physiological and behavioural levels in combination or one at a time. Shyness is one of the major problems faced by students, which is detrimental to their psycho-social-cultural progress. Few of the Indian studies have shown that shyness has negative influence on performance (D’Souza, Singh & Basavarajappa, 1999), increased fear (D’Souza, Gowda & Gowda, 2006), decreased happiness (Sreeshakumar, Nagalakshmi, D’Souza, 2007), increased maladjustment (D’Souza & Urs, 2001) and shy adolescents had higher need for guidance in social, educational and total guidance needs (D’Souza, Urs, & Jayaraju, 2008), increased academic stress (D’Souza, 2015). Shy individuals might use social networking sites, which provide them safer social interactions. Emily et al (2009) observed that shyness and quantity of time spent on Facebook are highly related, thus having positive attitude towards Facebook.

Studies done earlier have clearly come out with the conclusion that individuals tend to addict to internet in general. After the introduction of several social networking sites, the addictions could be specific to social networking sites like Facebook, whatsapp, twitter, Linkedin, etc. Since student community uses more Facebook and instagrams now a days, the present study aimed to find out whether shyness has any role in Facebook addiction, very minimal research has been done in this area. This study investigates how various domains of shyness contribute to Facebook addiction, including gender differences. It is hypothesized that shyness does contribute to Facebook addiction, and there will be gender differences in Facebook addiction.

METHODOLOGY

Sample

The sample for the study was selected from various colleges of Mysuru city. A total of 120 students studying in Arts, Science and commerce disciplines were distributed with questionnaires-both shyness assessment test and face book addiction scale along with demographic details and requested to return them at the earliest.

Tools

1. **Personal data sheet:** Personal and socio-demographic information is collected in this sheet.
2. **Shyness Assessment Test (SAT):** Shyness Assessment Test developed by D’Souza (2006), It consists of 54 items and requires the subject to indicate his/her response by marking Yes, or No. If the answer is ‘yes’, further, the participant has to indicate one of

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the three levels-low, medium or high. The items in the test pertain to three domains of shyness- Cognitive/Affective (32 items), Physiological (11 items) and Action oriented (11 items). The reliability index ascertained by split half (odd-even) method and Cronbach’s alpha coefficient for the scale as a whole were found to be 0.735 and 0.812 respectively.

3. Face book Addiction Scale: In the present study to measure face book addiction, The Bergen Facebook Addiction Scale (BFAS) (Andreassen, Torsheim, Brunborg, & Pallesen, 2012), was used. This scale contains 18 items, measuring six elements of face book addiction. The six elements are salience, mood modification, tolerance, withdrawal, conflict, and relapse, having 3 items in each. The respondent has to answer each item selecting one of the options- Rarely or none of the time, Some or a little of the time, Occasionally or a moderate amount of time, Most of the time and All of the time. The scorings are done from 1 to 5, indicating higher score for higher addiction. The reliability index as calculated by coefficient of alpha was .83. The 3-week test-retest reliability coefficient was .82. The item to total correlations were also found to be sufficiently high. Higher scores on face book addiction indicated higher addiction.

Procedure
The test was administered to the college going students by asking them to fill up the relevant demographic details. Later they were requested to answer both shyness assessment test and Face book addiction scale. They were asked to indicate their responses in the respective sheets given to them. Once the data were collected, they were screened for completeness, scored and fed to computer. The data were analyzed using Pearson’s product moment correlations, stepwise multiple regression analysis and Independent samples ‘t’ tests.

Table 1 represent results of Pearson’s product moment correlations between various domains of shyness and elements of face book addiction, Table 2 shows results of stepwise multiple regression for total face book addiction scores by various domains of shyness and Table 3 presents results of Independent samples for mean differences between male and female students in various elements of face book including total face book addiction scores.

RESULTS

Table 1 Results of Pearson’s product moment correlation between domains of shyness and elements of Facebook addiction scale.

| Elements of addiction scale | Facebook | Domains of shyness Cognitive/affective | Physiological | Action oriented | Total |
|-----------------------------|----------|----------------------------------------|---------------|-----------------|-------|
| Salience                    | Correlation | .370                                   | .284          | .218            | .306  |
| P value                     | .001      | .002                                   | .017          | .001            |       |
| Tolerance                   | Correlation | .177                                   | .244          | .128            | .190  |
| P value                     | .053      | .007                                   | .163          | .037            |       |
| Mood Medication             | Correlation | .183                                   | .244          | .223            | .254  |
| P value                     | .046      | .007                                   | .015          | .005            |       |

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| Elements of Facebook addiction scale | Domains of shyness | Cognitive/affective | Physiological | Action oriented | Total |
|-------------------------------------|--------------------|--------------------|----------------|-----------------|-------|
| Relapse | Correlation | .227 | .244 | .150 | .217 |
| P value | .012 | .007 | .102 | .017 |
| Withdrawal | Correlation | .180 | .147 | .146 | .178 |
| P value | .049 | .110 | .110 | .052 |
| Conflict | Correlation | .232 | .205 | .119 | .187 |
| P value | .011 | .025 | .197 | .041 |
| Total | Correlation | .336 | .322 | .235 | .319 |
| P value | .001 | .001 | .010 | .001 |

Cognitive/affective domain of shyness correlated significantly and positively with elements of facebook addiction like salience ($r=.370; p=.001$), mood medication ($r=.183; p=.046$), relapse ($r=.227; p=.012$), withdrawal ($r=.180; p=.049$), conflict ($r=.232; p=.011$) and total face book addiction scores ($r=.336; p=.001$). As the shyness in cognitive domain increased, facebook addiction in these elements and total scores also increased linearly and significantly. However, cognitive/affective domain of shyness did not correlate significantly with tolerance element of face book addiction.

Physiological domain of shyness found to be correlate significantly and positively with salience ($r=.284; p=.002$), tolerance ($r=.244; p=.007$), mood medication ($r=.244; p=.007$), relapse ($r=.244; p=.007$), conflict ($r=.205; p=.025$) and total face book addiction scores ($r=.322; p=.001$). As the shyness in physiological domain increased, facebook addiction in these elements and total scores also increased linearly and significantly. However, physiological domain of shyness did not correlate significantly with withdrawal element of face book addiction.

When action-oriented domain of shyness was correlated with elements of face book addiction and total face book addiction was analysed, this domain of shyness correlated significantly and positively with elements of face book addiction like salience ($r=.218; p=.017$), mood medication ($r=.223; p=.015$), and total face book addiction scores ($r=.235; p=.010$). As the shyness in action oriented domain increased, face book addiction in these elements and total scores also increased linearly and significantly. However, action oriented domain of shyness did not correlate significantly with tolerance, relapse, withdrawal, and conflict elements of face book addiction.

Total shyness scores correlated significantly and positively with all the elements of facebook addiction, except for withdrawal. The correlation coefficients obtained between total shyness and salience ($r=.306; p=.001$), tolerance ($r=.190; p=.046$), mood medication ($r=.254; p=.005$), relapse ($r=.217; p=.017$), conflict ($r=.187; p=.041$) and total face book addiction scores ($r=.319; p=.001$). As the total shyness increased, face book addiction in these elements and total scores also increased linearly and significantly.
Table 2 Summary results of stepwise multiple regression or prediction of Conscientiousness from Facebook addiction.

| Model | Variables Entered | Variables Removed | R     | R Square | Adjusted R Square |
|-------|-------------------|-------------------|-------|----------|------------------|
| 1     | Cognitive/affective domain | - | 0.336 | 0.113 | 0.105 |

Beta coefficients at step 1 = .336

Regression analysis: When all the scores of 3 domains of shyness were regressed on total Facebook addiction scores, stepwise multiple regressions revealed that only one domain of shyness was found to be the best predictors of Facebook addiction. The first domain entered into the equation was the cognitive/affective domain with Pearson correlation of .336, squared R value of .113 and variance of .105. In other words, action oriented domain of shyness contributed to 10.5% of the Facebook addiction among the present sample. The beta values for the first predicted model were found to be 0.336 at step I.

Gender and internet addiction

Table 3 Mean scores of male and female students on various elements of Facebook addiction and results of Independent samples ‘t’ tests

| Elements of Facebook addiction scale | Gender | Mean | S.D | ‘t’ value | P value |
|-------------------------------------|--------|------|-----|-----------|---------|
| Salience                            | Male   | 5.65 | 2.35| 0.545     | .587    |
|                                     | Female | 5.42 | 2.34|           |         |
| Tolerance                           | Male   | 5.80 | 2.42| 2.155     | .033    |
|                                     | Female | 4.97 | 1.77|           |         |
| Mood Medication                     | Male   | 6.97 | 2.81| 1.699     | .092    |
|                                     | Female | 6.07 | 2.99|           |         |
| Relapse                             | Male   | 7.08 | 2.91| 3.450     | .001    |
|                                     | Female | 5.48 | 2.11|           |         |
| Withdrawal                          | Male   | 6.42 | 2.23| 2.089     | .039    |
|                                     | Female | 5.50 | 2.56|           |         |
| Conflict                            | Male   | 6.65 | 3.39| 0.509     | .612    |
|                                     | Female | 6.33 | 3.43|           |         |
| Total                               | Male   | 38.42| 10.49| 2.324     | .022    |
|                                     | Female | 33.83| 11.10|           |         |

The mean differences between male and female students were found to be significantly different for the elements of Facebook addiction like tolerance (t=2.155; p=.003), relapse (t=3.45; p=.001), withdrawal (t=2.089; p=.039) and in total Facebook addiction scores (t=2.324; p=.022), where male students had higher addiction than female students. However, in other elements-salience, mood modification, and conflict no such significant mean differences were found.
DISCUSSION

Major findings of the study

1. Most of the elements of face book addiction including total face book addiction scores correlated positively and significantly with all the domains of shyness and total shyness scores.
2. Only cognitive/affective domain of shyness, best predicted the facebook addiction to the extent of 10.5%.
3. Male students had higher addiction in tolerance, relapse, and withdrawal elements of face book addiction including total addiction than female students.

It is clear that shyness and face book addiction were significantly related to each other. Results of the present study are in agreement with studies done by Satici (2018), who found that Facebook addiction influenced a significant indirect effect on subjective wellbeing through shyness and loneliness. Sheldon (2013) found a negative association between shyness and self-disclosure to face book friend as well as face to face friend. She found that individuals who were shyer spend more time on Facebook, but the information revealed by them is less. Witte, Frank and Lester (2007), in their study found that introversion, neuroticism, and problematic Internet usage as assessed by the Online Cognition Scale best predicted problematic internet usage. Baker and Oswald (2010),found that subject who were shyer reported stronger association between use of Facebook and Friendship quality. Further, it was observed that cognitive/affective domain of shyness predicted the Facebook addiction more than other two domains, where thinking part took over Facebook addiction. Facebook addicts have higher proneness to develop depressive symptoms and loneliness thoughts they might end up (Sagioglou & Greitmeyers, 2014). Aydin, Muyan-Yilik, and Demir (2013) found a positive relationship between Facebook usage and shyness.

Further, it was found that male students had higher Facebook addiction than female students. But research in this area has contradictory results. Study by Andreassen et al. (2012) revealed that women had higher scores than men on the BFAS. However, the findings of the present study are not endorsed by previous studied done by Giota & Kleftaras (2013) and Khattak, Ahmad, and Mohammad (2017), who reported non-significant gender differences.

Educationists, psychologists, planners and other concerned should seriously think about effects of shyness on various psychological issues in general and Facebook addiction in particular. Effective strategies should be planned to reduce shyness and increase the confidence among them would be the priority. This may in turn reduce the Facebook addiction among adolescents and adults, to curb the menace of it for a better citizen for better future.

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Conflict of Interest
The authors colorfully declare this paper to bear not conflict of interests

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