Mind and Society ISSN 2277-6907
Vol. 11, No.II June, 2022, Page No. 50 to 58

Relationship between Alexithymia, difficulties in emotion regulation, mental health & internet addiction in young adults

Received: 08 February 2022
Revision Received 07 May 2022
Accepted :15 May 2022
DOI:10.56011/mind-mri-112-20225

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Abstract

The internet has become a necessary tool for everyone in the 21st century. From using Google, YouTube, Facebook, Instagram to paying bills, shopping, etc. the internet provides us with a range of services. But at the same time, the number of hours spent online mindlessly scrolling through the websites or binge watching your favorite shows has increased & has become a cause of worry – for both, physical & mental health related issues. The present study aimed to investigate the role of certain psychological variables which are associated with addiction, mainly internet addiction. Alexithymia, emotion regulation difficulties & poor mental health can result into problematic internet use among young adults. Based on these views, it was hypothesized that these variables have association with internet addiction & internet addiction can be predicted by them. Total 250 young adults from different parts of the country participated in the study via offline & online modes of data collection following the safety protocols for COVID-19 virus. Consent form, demographic details & variable tests were given to the sample. Data analysis indicated that alexithymia & difficulties in emotion regulation had a positive correlation with internet addiction, mental health had a negative correlation & regression was significant. Out of all the three variables emotion regulation difficulties could explain internet addiction. Results showed that there was an association between alexithymia, difficulties in emotion regulation, mental health & internet addiction (<0.01 significant level).

Keywords: Internet Addiction, Mental health, Young adults

Introduction

Internet has been proven to be a gift for the human race ever since its inception. However, past couple of years has seen an increased mark of problematic internet usage especially among adolescents & young adults. Studies in the Indian context have shown the prevalence of internet addiction to be 1.3% in the general population (Nisbin, 2019). The excessive use of internet has become a major concern & is heavily being studied in literature. Problematic internet use or excessive internet usage can be defined as excessive use of the internet which gives some benefits to the individual, such as escaping from problems or regulating the mood & cause some negative consequences on the individual's life, such as withdrawal from social interactions in real life or worsening performance in work/school (Akin, 2014).

The aim of this study is to measure the role of psychological variables in predicting excessive internet use among young adults. Literature review points that individuals high in alexithymia, who have difficulty identifying & verbalizing their feelings to others, also have to put in a great effort & might be unable to effectively regulate their emotions. Additionally, limited ability to deal adequately with emotional states may lead individuals to feeling low on their emotional well-being which might affect their psychological & social well-being. Thus, to avoid the unpleasantness turning to internet can be looked as a solution & within no time it can lead to problematic or excessive internet usage.

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Alexithymia is a condition in which individuals find it difficult to identify, analyze & verbalize their emotions. Although less well known in the popular press, alexithymia as a theoretical psychotherapeutic construct, finds its origins in psychosomatic medicine, which in general is based on the principle that emotions & personality affect our bodily functions, & thereby play a role in physical wellbeing or illness & was introduced almost 30 years ago generating a far greater amount of empirical research since (Taylor, et. al., 2000; López-Muñoz & Pérez-Fernández, 2020). Alexithymia is implicated in a wide variety of psychological problems, such as depression & schizophrenia, emotional deficits in autism spectrum disorder & is also associated with suicidal tendencies, increased psychosomatic complaints & elevated mortality rates (Samur, et. al., 2013). It is seen to play an important role in the etiopathogenesis of addictive disorders, internet addiction & overuse being one (Kandri et. al., 2014; Mahapatra & Sharma, 2018) Alexithymic individuals who cannot identify their own subjective feelings also find it difficult to verbally communicate emotional distress to other people (Taylor, 2000).

Lane & colleagues (1996) study results suggested that alexithymia is associated with impaired verbal & nonverbal recognition of emotional stimuli. In a study in which depression & alcohol consumption were controlled for, alexithymia, was associated with anxiety in late adolescents (Karukivi, 2010) whereas in another study it was found that individuals suffering from alexithymia might also find it difficult to attain social gatherings & meetings (Kaur & Kaur, 2015).

Emotion regulation has been conceptualized as processes through which individuals modulate their emotions consciously & non-consciously (Barg & Williams, 2009; Rottenberg & Gross, 2003) to appropriately respond to environmental demands (Gross & Munoz, 1995). A risk factor identified for addiction (substance use, alcohol use disorders) is difficulties with emotion regulation (Kajanoja, 2019). Individuals who find it hard to identify & verbalize their emotions have a higher chance of finding it difficult to regulate their emotions. This difficulty can add to increased used of internet & become problematic in nature affecting various specs of that individual's life (Mennin & Farach, 2007; Powers, et. al., 2015). Zahra & colleagues investigated relationship between loneliness & the difficulty in emotional regulation with drug abuse & results presented that loneliness & emotion regulation difficulties both predict drug use in youth (Nikmanesh, et. al., 2015). Another study indicated that difficulty in emotion regulation, especially the ones' believe about his/her ability in regulating unpleasant emotions effectively, is important in procrastination (Bytamar, et. al., 2020).

Every day when we face the question of how are we doing, we reflect back on our state of well – being, even if it is a temporary or fleeting report of our current mental health status. The way one evaluates their own quality of life can directly have a connection with their level of well – being. (Angner, 2010). Until a few years back, mental health was considered to be an absence of an illness, a pathological disorder. However, mental health is not just that but a combination of eudaimonic & hedonic happiness which helps in understanding the optimal level of functioning of an individual. The mental health as defined by the WHO is a state of well-being in which the individual realizes his or her own abilities, copes with the normal stresses of life, works productively & fruitfully, & makes a contribution to his or her community (Galderisi, et. al., 2015). Jahoda subdivided mental health into three domains: self-realization, where individuals are able to fully exploit their potential; sense of mastery over the environment; & sense of autonomy, i.e. ability to identify, confront, & solve problems (Galderisi, et. al., 2015). In a study conducted on youth, results showed that indicators of mental wellbeing, such as flourishing, appear to be associated with a lower likelihood of cannabis use (Butler, et. al., 2019). Another study conducted on flourishing European population stated that there is a correlation between flourishing & life satisfaction (Huppert & So, 2009). Another study concluded that the early phase of university life needs to be used for promotion of mental health ensuring flourishing experiences rather than languishing because of social isolation, practical difficulties & overwhelming academics (Knoesen & Naude, 2017). In another study it was found that general self efficacy was a significant unique positive predictor of mental health (Giblett & Hodgins, 2021). Flourishing individuals are mainly characterized by high levels of conscientiousness & extraversion, social support & positive life-events & low levels of neuroticism (Schotanus-Dijkstra, et. al., 2016). The year 2021 witnessed yet another lockdown due to Covid – 19 & languishing was the dominant emotion seen throughout the world. People felt joyless & aimless during this year even though vaccines were on the horizon. Languishing is this feeling of blah, a

sense of stagnation & emptiness & it affected a lot of people's mental health (Grant, 2021).

Internet has become one of the most important academic & recreational tools in the last decade. However, this boon is steadily becoming a curse for everybody around. Excessive use of anything, more so excessive use of the internet may have negative impacts on daily life function, family relationships, academics & emotional stability. The easy access to internet has led dramatic increase in use, especially among youth. India stands second in the world with approximately 500 million Internet users (Maheshwari & Preksha, 2018). Individuals between 18 & 24 years old were more vulnerable to become internet addicts as compared to old individuals. Since the mid-1990s, internet addiction has been proposed as a new type of addiction & mental health problem, similar to alcoholism & compulsive gambling (Gedam, et. al., 2017).

Internet addiction is still not recognized in the Diagnostic & Statistical Manual of Mental Disorders (Rosenthal, et. al., 2018). Internet addiction involves the use of internet excessively & uncontrollably while losing sense of time. However time spent online can not only be an indicator of excessive internet use but it should also explain internet addiction by itself. Problematic use also requires some negative consequences & positive gains related to internet use (Akin, 2014). The negative consequences of irresponsible internet use must be brought to light for people and they should be made to realize how much time goes by while surfing on the internet or using social media apps.

Internet addiction is responsible for insomnia; it is a platform for lonely individuals sharing online interactions & a helpful tool for shy people with poor locus of control (Cheung & Wong, 2010; Caplan, 2006; Chak & Leung, 2004). Internet overuse & aggression is commonly seen among students & results indicated that internet addiction scores were significantly associated with all aggression scores (Kim, 2013). Students with internet overuse also had more negative emotions, less subjective well-being, less life satisfaction, & less positive emotions (Lei, et. al., 2019). In a study conducted results showed that parenting attitudes, family communication, family cohesion, & family violence exposure were associated with Internet addiction (Park, et. al., 2008). Internet addiction was also significantly associated with depressive symptoms, obsessive-compulsive symptoms, attention deficit hyperactivity disorder & poor academic performance (Ha, et. al., 2007; Cho et al., 2008; Akhter, 2013). A study stated that there is a positive significant relation ($P < 0.01$) between internet dependency with overall sensation seeking & sub scales of disinhibition & boredom susceptibility (Rahmani, 2011).

Alexithymia has been widely associated with increased cannabis use in adolescence, increased caffeine consumption, increased development of mobile phone addiction, pathological gambling & smart phone use severity (Orsolini, 2020; Gundogmus, et. al., 2021). It has been hypothesized that individuals with alexithymia may overuse Internet as a tool of social interaction which would aid in better regulation of their emotions & fulfillment of their unmet social needs (Mahapatra & Sharma, 2018). Other variables like parental attitudes, social support & emotion regulation in adolescents, lower parental supervision, higher alexithymia & the presence of an anxiety disorder are significant predictors of internet addiction (Karaer & Akdemir, 2019). According to Baysan – Arslan & colleagues (2016) findings the internet addiction scores were significantly higher among alexithymic individuals than those who are non-alexithymic & possible reason for this relationship may that alexithymic individuals try to regulate their emotional moods through addictive behavior. Individuals who may have a fear of negative evaluation & are socially anxious may find it easier to interact online rather than face-to-face interactions (Buyukbayraktar, 2020).

Hypothesis

1. There will be an increase in internet addiction with an increase in alexithymia among young adults.
2. There will be an increase in internet addiction with an increase in difficulties in emotion regulation among young adults.
3. There will be a decrease in internet addiction with an increase in mental health among young adults.
4. There will be an increase in alexithymia with an increase in difficulties in emotion regulation among young adults.
5. There will be an increase in alexithymia with a decrease in mental health among young adults.
6. There will be an increase in difficulties in emotion regulation with a decrease in mental health among young adults.
7. The variables alexithymia, emotion regulation difficulties & mental health will predict internet addiction.

Sample

This study was conducted on young adults. The age group selected for this study was 21 to 30 years of age, based on the developmental stages. The study comprised of a total of 250 participants, 159 females & 91 males. They were from various backgrounds – students, employees & self – employed

Materials & Method

Toronto Alexithymia Scale (TAS 20) was initially developed by Taylor (1984) & later revised by Bagby et. al. into a brief version (TAS 20). It is a 20 item self report scale designed to measure alexithymia in adult samples. Internal consistency of the scale was found to be .86 for the total TAS-20 score (Akin, 2014). The questions evaluate the presence of difficulty in identifying feelings, difficulty in describing feelings, & externally-oriented thinking.

Difficulties in Emotion Regulation (DERS) was revised & developed by Gratz & Roemer, (2004) & is a 36 item scale which evaluates the presence of lack of emotional awareness, lack of emotional clarity, non-acceptance of emotional responses, limited access to emotion regulation strategies, difficulties engaging in goal directed behavior, & impulse control difficulties. It has an internal reliability score of 0.93 & also has adequate construct & predictive validity (Gratz & Roemer, 2003).

Mental Health Continuum – short form (MHC – SF) is a 14 item scale which measures the emotional, social & psychological well – being of an individual. The MHC short form has shown excellent internal consistency (> .80) & discriminant validity in adolescents (ages12-18) & adults in the U.S., in the Netherlands, & in South Africa. The test-retest reliability of the MHC-SF over three successive 3 month periods averaged .68 & the 9 month test-retest was .65 (Keyes, 2009).

Internet Addiction Test (IAT) was developed by Young (1996) & is a 20 item self-report which evaluates the presence of preoccupation with the internet, increasing amounts of use, losing track of time, unsuccessful efforts to control usage, withdrawal symptoms, negative consequences of the situation in user's life, & some gains from the internet such as relieving a dysphoric mood. These were the internal consistency (α = 0.90–0.93) & good test-retest reliability (r = 0.85) values.

Data was collected from all active internet users. The data was collected from both online (Google forms) & offline (personally filled in the presence of the researcher) methods because of COVID – 19 protocols. Each participant from the sample completed a survey that included the consent form & the 4 variable scales.

Results & Discussion

Data was analyzed using IBM Statistical Package for social sciences (SPSS) 23 version & analysis of the data was done in line with the hypotheses. Normality of the data, mean, standard deviation, Pearson's product moment correlation & regression was calculated. Correlation was used to measure the strength & direction between variables & regression was used to measure the predictive value of alexithymia, difficulties in emotion regulation, mental health for internet addiction.

Table 1
Coefficient of Correlation among variables

Variable	Alexithymia	Difficulties in emotion regulation	Mental health	Internet addiction
Alexithymia	1	.648**	-.343**	.270**
Difficulties in emotion regulation	-	1	-.484**	.319**
Mental health	-	-	1	-.179**
Internet addiction	-	-	-	1

****Correlation is significant at the 0.01 level (1-tailed).**

Table 2
Stepwise Multiple Regression

Predictors	R square	Adjusted R square	df	F	St&ardized Coefficients Beta	Sig
Alexithymia	.150	.141	3	15.350	.139	.065
Emotion regulation difficulties	.150	.141	3	15.350	.289	.000
Mental health	.150	.141	3	15.350	.009	.885

Dependent variable: Internet addiction
Predictors: (constant) alexithymia, emotion regulation difficulties, mental health

Although alexithymia, emotion regulation difficulties, & mental health have had strong relationships with addiction, there are not enough studies investigating their relationship with internet addiction. Individuals are constantly glued to their gadgets with an active internet for every task of their day. Today, the amount of time being spent on the internet from audiences across the globe has increased & studies are being conducted in order to uncover internet's role in daily lives & its problematic use. There are only a few studies which study them separately on these concepts. The current study aims to bring these psychological factors together in order to see how they help in predicting the level of internet addiction.

After the data was analyzed, the results were concluded in accordance of the hypotheses framed earlier. Basic aim of this study was to investigate the relationship & predictive value between alexithymia, difficulties in emotion regulation, mental health & internet addiction.The first hypothesis was proved with a low positive correlation seen between internet addiction & alexithymia, which was (r = .270) significant at 0.01 level. This is consistent with literature which stated that individuals with alexithymia may overuse Internet as a tool of social interaction to better regulate their emotions & to fulfill their unmet social needs (Mahapatra & Sharma, 2018; Baysan – Arslan, et. al., 2016). The second hypothesis was proved with a moderate positive correlation seen between difficulties in emotion regulation & internet addiction, which was (r = .319) significant at 0.01 level. Emotion regulation difficulties did result in problematic internet use among young adults & also acted as a mediator between stress & problematic internet use (Yildiz, 2017; Yorulmaz, et. al., 2020). The third hypothesis was proved with a low negative correlation seen between mental health & internet addiction, which was (r = -.179) significant at 0.01 level. Mental health & internet addiction have limited literature being done on them. However, the present study was in consistent with previous literature review & internet addiction was seen to have a correlation with mental health (Khosroshahi & Nosrat, 2012; Lei, et. al., 2019).

The fourth hypothesis was proved with a high positive correlation between alexithymia & difficulties in emotion regulation, which was (r = .648) significant at 0.01 level. This was consistent with previous literature which stated that individuals suffering from alexithymia have a hard time regulating their emotions (Pandey, et. al., 2011). The fifth hypothesis was proved with a moderate negative correlation between alexithymia & mental health, which was (r = -.343) significant at 0.01 level. Literature indicates that difficulties in emotion regulation & the condition of alexithymia both have an impact on mental health. An important component of mental health is indentifying of emotions, describing them & regulation its emotions (Galderisi, et. al., 2015). The sixth hypothesis was proved with a moderate negative correlation between difficulties in emotion regulation & mental health, which was (r = -.484) significant at 0.01 level. This is in line with previously done literature review (Galderisi, et. al., 2015).

The seventh hypothesis was partially proved with a significant variance from all variables indicating regression; however, difficulties in emotion regulation predicted internet addiction the most. Thus all seven hypotheses are accepted & all the values were significant at 0.01 level. The direction of each of the

hypotheses was rightly proved. The results amongst the variables differed which could be attributed to small sample size, two modes of data collection, previous limited literature review & due to the pandemic controlling the environment around the sample was not possible.

The study had a new variable – mental health, which was not studied earlier along with other mentioned variables of the present study. Previous literature review did not show any studies having this set of variables. Mental health is definitely important & is also gaining quite a lot of awareness & acceptance among the population while gradually reducing the stigma associated with it. Various studies, key note speakers, podcasts & documentaries (ironically again over the internet) have pointed out how the active use of internet is creating a depletion in cognitive abilities of an individual. The attention span, memory, communicating habits, etc. have all deteriorated due to the excessive hours spent online. It is true that the internet also helps in reducing the gap & making work life easier, but at what cost is this easy life being helpful for us? Mental health is as important as physical health, & the body mind connection is definitely getting hampered if internet addiction is not controlled.

This study added to previous literature & gaps in knowledge findings. Though the sample size was relatively small, this was one of the very few studies studying these variables on the Indian population. The study included a sample from different occupational & education background giving an insight that even though these differences exist, internet addiction is commonly seen among all & needs immediate attention.

This study had several limitations. All the data studied here were collected by self-report measures & the setting of the sample was not the same or controlled. The research was also done within a very short span of sixty to seventy days which might affect the research process & results. Another limitation was that the study was conducted after the second wave of the pandemic has subsided & there was not enough information on how this could have also affected the present study.

There also needs to be awareness created among young adults about mental health & internet addiction. Mindfulness based practices where individuals are shown how to acknowledge, express & regulate emotions can in turn help with improving mental health & resulting in overall decrease use of internet addiction. The results could also help in developing evidence-based interventions for young adults working in various settings or even at educational institutions.

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