

ACADEMIC PROCRASTINATION AMONG SECONDARY SCHOOL STUDENTS: EXPLORING THE ROLE OF SMARTPHONE ADDICTION. A MIXED METHOD APPROACH

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ABSTRACT

Objectives: The study is intended to investigate gender difference on academic procrastination & smart-phone addiction among the secondary school students. Furthermore the study was also aimed to study the influence of smart-phone addiction on academic procrastination.

Method: The current study adopted the mixed method research design, Such a design amalgamates the powers of diverse research approaches to proliferate accuracy of data, allows for generating more clear picture of the novel phenomenon (Creswell, 2014).

Sample: The present study was conducted on secondary school student of South Kashmir (n = 200). Statistical techniques like S.D. and t-test were used for data analysis.

Instrumentation / Psychometric Measures: The following standardised tools were used to collect the required data. **I.** Academic Procrastination Scale by A. K. Kalia and Manju Yadav **II.** Smart phone Addiction Scale by Vijayshri and Masaud Ansari. **III.** Semi-structured and in-depth interview.

Results: The results revealed that a significant mean difference was observed between male and female secondary school students on academic procrastination and smartphone addiction. Male students are found to procrastinate their academics more and also exhibit more smart-phone addiction as compared to female students. Furthermore factors like cyber-loafing, anxiety & depression and poor time management are found to facilitate academic procrastination among the students.

Key words: Academic procrastination, Smart-phone addiction, Cyber-loafing, Anxiety, Time management, Gender.

Introduction:

Academic procrastination is a type of delaying explicitly to academic settings. Characterized as superfluously deferring or eluding assignments that should be finished (Schraw, Wadkins, & Olafson, 2007). It includes realizing that one needs to do a scholastic duty or undertake an academic task, however, by one way or other, neglecting to persuade oneself accordingly, as such within the expected period. Accordingly academic procrastination might be responsible for late assignments, academic anxiety, utilization of self-impeding techniques and fear of failure and it regularly results in poorer performance than the individual is capable for achieving (Lee, 2005; Ferrari & Scher, 2000). Research evidences proposes that, academic procrastination is identified with poorer degrees of self-regulated learning, lower academic self-efficacy and related more with elevated degrees of stress and anxiety and negative outcomes in students (for example, Howell & Watson, 2007). It is the particular absence of performance of studies and is prevalent among the students globally (Rabin, Fogel, & Nutter-Upham, 2011). Indeed, it has been demonstrated that learners with enhanced scholastic outcomes utilize more viable time management and proper self-regulation methodologies.

It has been revealed that smartphone addiction is a serious matter among majority of the students (Taymur, et.al. 2016), as they have a potential risk to experience smart-phone addiction (young; 2015). Students who display menacing cell phone use are probably going to encounter usage control problems (Lee & Lee, 2017). They are probably going to invest a lot of time on online media as opposed to perusing their academics (Adeniyi, 2019). Subsequently, they may postpone their academic related tasks (Yasin & Mustafa; 2018). As stated by Hawi & Samaha (2016) that smart-phone addicted students were hardly able to achieve higher levels of academic attainments, because students may suffer from reduced self-esteem as a result of their increased problematic smartphone use (Heather et al., 2019).

Rationale of the study: Why talk about smartphone addiction.

The present generation of teenagers and youngsters have an advanced relationship with technology that is formed at birth (Beastall 2008). Prenksy (2001) noticed their knowledge of and dependence on ICT, labelling them as "living lives immersed in technology" (p. 1). Even though technological advancements are expected as a cause of ease and entertainment among the customers, but excessive use can likely have an adverse impact, like smartphone addiction. Smartphone addiction is a disorder including uncontrollable excessive use of the smart phones, typically measured as, total amount of time users are online over a certain time period. Perilous smart phone use or online

gaming addiction can have a problematic outcome among the students. Students experience circumstances that negatively impact their academics. They presumably don't study for their exams on time, neither they concentrate on subjects and therefore may defer their referred home work (Ayça, İlknur & Tuğba, 2019). Recurrent smart-phone addiction is a key predictor of low academic achievement in schools and possibly in higher education too. Spending too much time on your phone becomes an issue when it consumes so much of your time, it causes you to harm your face-to-face relations, education, hobbies, your work or other vital aspects of your life and particularly leads to academic procrastination among students.

The age group of 12-18 years using smartphones has shown a rapid increase in the past few years and they are the most vulnerable to smart phone addiction. Adolescents are strongly glued to their smartphone, as a period of *stress and strain*, and *identity crises*, adolescents are usually going through a series of physical and psychological changes. While, on the one end, they are reliant on their parents with regard to their life and identity, on the other end, they are vexing to be independent of their parents, to build their own identity and personality. During these psycho-physical changes, a smartphone becomes indispensable for teenagers, they are more fascinated about the new technology and gets used to the operations of such devices more easily. Catherine Price (2018) in her book *How To Break Up With Your Phone*, argued that most smartphone users have a toxic relationship with their phones, sabotaging their sleep, creativity, and interpersonal relationships. This relationship is tagged as “*Nomophobia*”, from “*No-Mobile-Phone-Phobia*”. As for the author’s view is concerned, no empirical study has focussed on the causal connection between academic procrastination and smartphone addiction in the delimited area. Thus it seems very essential to examine the relationship between smartphone addiction and academic procrastination among secondary school students.

Literature review:

An attempt has been made to present a brief review of the available studies in the present field of investigation. It is a well-known fact that new vistas of knowledge cannot be explored unless we look into the past. Hence it is very important to scan the work carried out previously and accordingly address the areas which has not yet been explored.

Li, Goa & Xu. (2020) carried out a study on the “mediating and buffering effect of academic self-efficacy on the relationship between smartphone addiction and academic procrastination”. The results revealed that smartphone addiction was positively associated with academic procrastination, while as it is negatively associated with academic self-efficacy. Further, mediation analysis indicated that, after controlling for gender, age and academic year, smartphone addiction had a direct predictive influence on students' academic procrastination and an indirect predictive effect via academic self-efficacy.

Saad, M. (2020) investigated, “self-regulated learning and academic procrastination as predictors of smartphone addiction among disabled students”. The outcomes indicated that a causal relationship exists between smartphone addiction, academic procrastination and self-regulated learning. Both academic procrastination and self-regulated learning contributed to the prediction of smartphone addiction.

Yang, Asbury, & Griffiths (2019) carried out a study on, “problematic smartphone use: Associations with academic anxiety, academic procrastination, self-regulation and subjective wellbeing”. The results revealed that problematic smartphone use predicted academic anxiety and academic procrastination. Also problematic smartphone use facilitated the interactions between, academic procrastination and academic anxiety with self-regulation.

Qaisar, S et.al. (2017) carried out a study on “problematic mobile phone use, academic procrastination and academic performance of college students”. It was found that the excessive

Mobile phone usage is linked with lesser performance of learners. It was further revealed that male students were found to have better academic performance as compared to female college students.

(a) Objectives of the study:

1. To find and compare academic procrastination among secondary school students on the basis of gender.
2. To find and compare smart phone addiction among secondary school students on the basis of gender.

(b) Hypotheses:

1. There is no significant mean difference between male and female secondary school students on academic procrastination.

2. There is no significant mean difference between male and female secondary school students on Smart-phone addiction.

Methodology:

The current study adopted the mixed method research design, adopting mixed designs yields converging evidences, maximizes the reliability of outcomes (Creswell, 2014). Mixed method design is applicable in educational settings (Yin, 2006). Such a design amalgamates the powers of diverse research approaches to proliferate accuracy of data, allows for generating clearer picture of the novel phenomenon (Creswell, 2014). In the first phase of the present study the results were quantified by employing different statistical methods. And in the second phase of the study the investigator adopted Semi-structured and in-depth interview to assess the effects of smartphone addiction on academic procrastination among secondary school students.

(a) Instrumentation / Psychometric Measures:

The following standardised tools were used to collect the required data:

1. Smart phone Addiction Scale by Vijayshri and Masaud Ansari.(2020)
The scale is consisted of 23 items divided into Six Dimensions—I. Compulsion, II. Forgetfulness, III. Lack of Attention, IV. Depression and Anxiety, V. Disturbed Hunger/Sleep, VI. Social Withdrawal.
2. Academic Procrastination Scale by A. K. Kalia and Manju Yadav (2015)
The scale is consisted of 25 items divided into four areas—I. Procrastination in Home Work, II. Procrastination in preparation for examination, III. Procrastination in Project Work, IV. Procrastination in co-curricular activities.
3. Semi-structured and in-depth interview.

(b) Participants / Sample

The present study was conducted on secondary school student of South Kashmir (N = 200). Which is further divided into 100 male and 100 female secondary school students. I had easy access to the schools chosen, and the students of 9th and 10th standard were taken into consideration. Sample of 200 secondary school students were selected through simple random sampling technique. Some extreme cases were located for the purpose of qualitative analysis.

Data analysis and Interpretation:

Data were analysed with the help of Microsoft excel professional plus 2013, any significant mean difference among the groups were analysed by using the independent samples t-test.

Showing the Significance of difference between the Mean Scores of male and female students on academic procrastination.

Table, (I)					
Gender	N	Mean	SD	t-value	Sig.level
Male	100	66.32	12.89	3.01	Significant at 0.01 level
Female	100	60.45	13.04		

As presented in the table 'I' it has been indicated that the computed t-value came out to be significant at **0.01** level of significance (t-value-**3.01**). It indicates that a significant mean difference was found between male and female secondary school students on academic procrastination, hence the null hypothesis No. 1st which is stated as 'there is no significant mean difference between male and female secondary school students on academic procrastination' stands rejected. Male students are found to procrastinate their academics more as compared to female students.

Showing the Significance of difference between the Mean Scores of male and female students on smart phone addiction.

Table, (II)					
Gender	N	Mean	SD	t-value	Sig.level
Male	100	55.66	14.01	2.79	Significant at 0.01 level
Female	100	49.23	11.44		

As shown in table 'II' it has been indicated that the computed t-value came out to be significant at 0.01 level of significance (t-value- 2.79). It shows that a significant mean difference was found between male and female secondary school students on smartphone addiction, hence the null hypothesis No. 2nd, which is stated as 'there is no significant mean difference between male and female secondary school students on Smart-phone addiction' has also been rejected. Male students were found to have more smart-phone addiction as compared to their counterparts.

Findings based on qualitative assessment:

The major tool utilized to collect the required data was the semi-structured and in-depth interview. Teachers, parents and students were taken into consideration for the interview. The questions were open ended with plenty of scope for both interviewee and interviewer in order to delve deeper into the facets vital to academic procrastination among secondary school students. The analysis yielded insight into factors that facilitate academic procrastination among secondary school students due to excessive use of smart-phone. Excessive smart phone use might affect an individual's curiosity in a classroom. Smart-phone addicted users have shown a deteriorated learning concentration. As reported by Samaha & Hawi, (2016), the risk of using a smart phone has been found to have a negative impact on pupils' academic achievement.

Factors that led to academic procrastination due to smart-phone addiction among secondary school students are as:

(a) Cyber loafing in classrooms:

Cyberloafing is described as the usage of the Internet for personal browsing or e-mail during working hours (Lim, 2002). It is a tendency among the learner to make use of internet for activities which are irrelevant to the learning environment. Due to the widespread usage of smartphones, students' propensity for cyber-loafing has grown, internet addiction among the students during the school hours to surf websites for non-academic purposes deviates the learners from the normal learning path. For instances a few teachers reported that as technological gadgets such as smart-phone and personal computer have become prevalent among the students. Availability of internet had advanced a tendency among students to use their smart phones during teaching learning for activities which are irrelevant to academics. Another teacher reported that almost all the students in a particular classroom were using their smartphones for 'texting' or for some other purposes like 'checking the scores' etc. this cyber loafing behaviour of students causes various negative effects for the learning environment, it affects the flow of teaching learning transaction and lowers the academic success and performance to a great extent.

(b) Anxiety, depression and Insomnia:

Excessive smartphone use is associated with poor psychological wellbeing, anxiety and depression among the students. Few of the parents were of the opinion that their wards are mostly glued to their smart phones, and mostly they appeared to be full of depression and anxiety and are unable to concentrate on their studies fully and it has been demonstrated that this anxiety and depression might adversely impacts learning outcomes and performance of students. It was also reported that excessive levels of problematic social networking among students revealed more sleeping disturbances, which in turn causes low quality sleep, resulting in low academic achievements. Less motivation and self-regulation failure is another factor causing academic procrastination among secondary school students. For instance few parents were of the view that if smart phones were taken back from their wards, they have observed frustration and restlessness among them, this self-regulation failure increases their habit of smart phones, which then outcomes in the form of addiction. It has also been observed that less motivation towards academics among the learners due to the excessive smartphone use distracts the students and precludes the motivation for indepth learning.

(c) Poor time management:

Smart-phone addiction usually involves, playing online games, social networking like face-book, Instagram etc. listening music and watching movies. These activities may take up valuable time that may otherwise be spent on academic pursuits. As reported by some of the students that they sometimes pretend to learn online on a smartphone or PC, but in fact they are not using it for academic purpose. One of the teacher reported that squandering valuable study time due to excessive Facebook use could be a possible cause for academic procrastination among the students. It was also found that young students' remains busy in expressing themselves in an online space, use different kinds of applications, frequently searching for emotional ties, and frequently expressing their instant reactions and feedbacks at any occurrence. The investigator came to a conclusion that more the students playing with their smartphones, less they are devoted to other activities including academics.

Discussion:

Academic procrastination, is a well-documented phenomenon and it has been observed that learners often procrastinate when approaching academic duties (Klassen et.al, 2009; Lay & Silverman, 1996). While as smart-

phone addiction has garnered attention from research scholars from the past few years in the academic setting, and it was revealed that problematic smart-phone use or smart-phone addiction is associated with academic procrastination (e.g. Rozgonjuk, Kattago, & Taht, 2018). The present study was aimed to investigate the gender difference on academic procrastination and smart-phone addiction among the secondary school students, and it was found that male students were found to procrastinate their academics more as compared to female students. The results of the current study are in consonance with the results of the studies carried out by Khan, et.al. (2014) and Demir, & Ferrari (2009), they stated that gender impacts academic deferment. They further stated that male members were found to have greater risks to procrastinate their academics as compared to female members. Furthermore it was also found that male students were found to have more smart-phone addiction as compared to their counterparts. The possible reasons could be that “Technology is regarded by society as highly technical and of male interest, and the use of information technology tools is regarded as a male-specific activity” (North & Noyes, 2002). As a result females appear to develop negative attitudes toward information technology tools. (Sainz & Saez, 2010). Additionally the result of the present study was supported by Jilisha, et.al. (2019) & Kwon et al. (2016), they viewed that men were more prone to smart-phone addiction than women. Although some researcher have indicated that females were highly over-represented in the ‘addicted’ category (e.g. Lapointe, Boudreau-Pinsonneault, & Vaghefi, 2013; Vaghefi, Lapointe, & Boudreau-Pinsonneault, 2017). Nevertheless the effects of gender on smartphone addiction is little inconclusive and therefore needs further investigation.

Based on the qualitative assessment, it was found that cyber- loafing among the students predicts the academic procrastination, conclusive evidences showed that currently students are using smartphone in a perilous manner and are lacking their control, interest, physical activities, communication and confidence, which disturbs their academic, as they are matted in cyberloafing during class hours (Gokcearslan, Uluyol & Sahin, 2018), it was also indicated that excessive smartphone use is associated with poor psychological wellbeing, poor time management ,anxiety and depression among the students. A plethora of related studies also showed a strong relationship between smart-phone addiction and poor psychological wellbeing, anxiety and loneliness among the students (e.g. Bian & Leung, 2015; Huang, Zhou, & Yu, 2013; Long et al. 2016).

Suggestions: How to manage smart-phone addiction among the students.

1. Amount of time to be allowed on the screen must be discussed and negotiated between the parents and children, and prepare a schedule of when he/she can utilize his/her smartphone.
2. Loneliness: if you find your child is predilected to be isolated, he may be a victim of smart-phone addiction. Parents must be very vigilant about the causes of “child-isolation”.
3. Smart phones must be banned in the classroom to avoid the cyberloafing activities during the teaching learning process.

Conclusions:

Regular and even excessive access to increasing technologies may convolute our lives, meddle with day to day activities and diminish productivity among the students. The way that youngsters in the present era are using electronic devices, doesn't in any way make them great users. Firstly they are equipped for playing with technology, however not actually utilizing it effectively (Kvavik, 2005). They can Google, but lack the basic information skills to efficiently trace-out the material they needed, they additionally don't possess the information to sufficiently decide the pertinence or reality of what they have searched or found. So therefore while smartphone usage is steadily increasing we recommend preventive measures and interventions aimed at protecting the young generation.

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