



Conceptual Review on Consequences of Screen Based Lifestyle Among University Students in Pakistan

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Abstract: Screen based life have drastic effects on the mental health patterns of the university students and is causing serious psychological issues. In the light of Social learning theory this study develops a moderated mediation model to see how university students perceive their mental health patterns in relation to their screen-based life style. In this regard, university students of Islamabad Pakistan will be selected using convenience sampling. The results will provide valuable evidence that how screen-based life relates to mental health patterns and what role can a physical activity play between the relationship. Moreover, the study will enhance the understanding the of self-efficacy as potential moderator in the relationship between screen-based life style, physical activity and mental health patterns. Thus, this theoretical paper will give broaden the concept of screen-based life style and its effects on mental health patterns, thus contributes to see the potential of these variables from social learning theory perspective in a developing country Pakistan.

Keywords: Screen Based life Style, Self-Efficacy, Physical Activity, Mental Health Patterns, Pakistan

1.Introduction

Now a days the mental health issues like depression, anxiety is of great concern especially in the youth ([Holliday et al., 2020](#)) The World Health Organization also highlighted this issue and claimed that by the year 2020, the mental health problems in the young generation will rise ([Wu, Tao, Zhang, Zhang, & Tao, 2015](#)). The existence of the mental disorders like depression and anxiety disorders ranges from 12 percent to 20 percent in youth and around 5 to 9 percent youngsters are mentally depressed ([Parto & Besharat, 2011](#)) Various behavioural patterns are associated with the mental health particularly one of them is the screen-based lifestyle which falls under the umbrella of sedentary behavior ([Mavis Asare & Samuel A. Danquah, 2015](#); [Cao et al., 2011](#); [Silva et al., 2018](#)). The screen-based behaviour is very common among youth in recent times due to the technological advancements in the

electronic devices ([Mavis Asare & Samuel A. Danquah, 2015](#); [Silva et al., 2018](#); [Wang, Li, & Fan, 2019](#)). The prolong use of smartphones, playing computer games for long hours, spending much of time in watching movies has led to emergence of other various physical issues like obesity ([Rey-López et al., 2010](#)), cardiometabolic risk ([Zhou, Yue, Zhang, Shangguan, & Zhang, 2021](#); [Zink, Belcher, Imm, & Leventhal, 2020](#)), weak eyesight and diabetes ([Cao et al., 2011](#)). Another influencing factor which also contributes to mental health issues in the lack of physical activity ([Knowlden, Hackman, & Sharma, 2016](#)). It is due to the lack of physical activity with leads to obesity problems, social isolation and poor academic performance ([Mavis Asare & Samuel A. Danquah, 2015](#)). However, on the other hand scholars like believe that the presence of the physical activity can contribute in improving the mental health of the youngsters ([Mavis Asare & Samuel A. Danquah, 2015](#); [Cao et al., 2011](#); [Zhou et al., 2021](#)). Physical activity can prevent the youth from diseases and other health related issues thus improving their mental health ([Rey-López et al., 2010](#); [Silva et al., 2018](#)). Along with physical activity, self- efficacy is also a necessary element of mental health ([Cao et al., 2011](#); [Holliday et al., 2020](#); [Zhou et al., 2021](#)). The concept of self-efficacy highlights the individual's own beliefs in relation to the capabilities of his/her to perform an action with great inspiration. Various studies have reported that lack of self-efficacy was related to mental health problems ([Chamanabad, Mirdoraghi, & Pakmehr, 2011](#); [Lin, Yeh, Chen, & Huang, 2010](#)). The individuals with improved levels of self-efficacy results in positive mental states ([Tahmassian & Jalali Moghadam, 2011](#)). Therefore, the current study contributes to the existing literature in mental health patterns in various ways. Firstly, previous studies have examined the association between screen-based lifestyle and mental health patterns ([Zink et al., 2020](#)) but whether physical activity mediates the relationship between screen-based life style and mental health patterns is still in infancy. Secondly none of the previous works according to the author's knowledge highlighted the moderating effect of self-efficacy of the above given relationship. Thirdly, previous studies were conducted in the developed world and mostly targeted the healthcare sector ([Holliday et al., 2020](#)) however the current study will target the university students of the developing country Pakistan to see how screen-based lifestyle affected the mental health patterns of the students and how the physical activity and self-efficacy can contribute in improving the mental health problems.

2.Theoretical Lens and Developing Hypothesis

The current study develops the framework based on social learning theory ([Bandura & McClelland, 1977](#)). This theory explains the connection between the behavioural patterns of humans and the physical environment, for example, people tend to develop behaviour according to the nearby environment instead of instinctual moods ([Akers & Jennings, 2016](#); [Bandura & McClelland, 1977](#)). In terms of moods, a reduction in the self-efficacy levels leads to mental health patterns like depression, anxiety but higher level of self-efficacy along with the physical activity level leads to improved mental health patterns ([Parto, 2011](#); [Tahmassian & Jalali Moghadam, 2011](#); [Thompson & Gomez, 2014a](#); [Zhou et al., 2021](#)). Previous studies have examined the relationship between screen-based lifestyle and mental health patterns and found mixed results ([Oswald, Rumbold, Kedzior, & Moore, 2020](#); [Tahmassian & Jalali Moghadam, 2011](#)), for example the study of [Oswald et al. \(2020\)](#) gave evidence that screen-based lifestyle is negatively related to physical activity and which further leads to mental health issues, however some authors like [Taveras et al. \(2007\)](#) founds no relationship between these two constructs. However, authors like ([Mavis Asare & Samuel A Danquah, 2015](#); [Cao et al., 2011](#); [Lin et al., 2010](#)) believe that physical activity can play a intervening role among screen based life style and mental health patterns, this is due to the fact that these scholars believe that physical activity as a curative behaviour and can improve the quality of life and reduction in the mental health patterns. Still there is an ambiguity in the results of whether the screen-based lifestyle is associated with lack of physical activity and how this relationship works. As far as the self-efficacy is concerned previous works have used this variable as moderator ([Chamanabad et al., 2011](#); [Thompson & Gomez, 2014b](#); [Zhou et al., 2021](#)). For example, the study of ([McKinley & Ruppel, 2014](#); [Zhou et al., 2021](#)) found that self-efficacy moderated the relationship between workplace stress and mental health patterns and the study concluded that higher level of self-efficacy was associated with the decrease in the mental health patterns. The study of [Thompson and Gomez \(2014b\)](#) proposed that lifestyle and mental health are positively correlated in terms of psychological distress. In

another empirical work of ([Mavis Asare & Samuel A Danquah, 2015](#); [Campbell, Kelly-Weber, & Lavallee, 2020](#)) in Ghanaian students Found that screen-based lifestyle is negatively related to physical activity.

However, whether the self-efficacy moderates the negative relationship between screen-based lifestyle and physical activity is still unclear and there this study strives to see the moderating effect of self-efficacy in the relationship screen-based lifestyle and mental health patterns as well as the on the relationship between screen-based lifestyle and physical activity. Moreover, the study uses physical activity as a mediator in the relationship between screen-based lifestyle and mental health patterns in line with previous empirical works. Therefore, based on social learning theory ([Akers & Jennings, 2016](#); [Bandura & McClelland, 1977](#)) and previous empirical works ([Mavis Asare & Samuel A Danquah, 2015](#); [Lin et al., 2010](#); [McKinley & Ruppel, 2014](#); [Parto, 2011](#); [Tahmassian & Jalali Moghadam, 2011](#)) the current study develops the following research questions:

Q1: What is the effect of screen screen-based lifestyle on physical activity?

Q2: Does Physical activity related to mental health patterns?

Q3: Does Physical activity mediates the relationship between screen-based lifestyle and mental health patterns

Q4: Does the relationship between screen-based lifestyle and mental health patterns is moderated by Self efficacy?

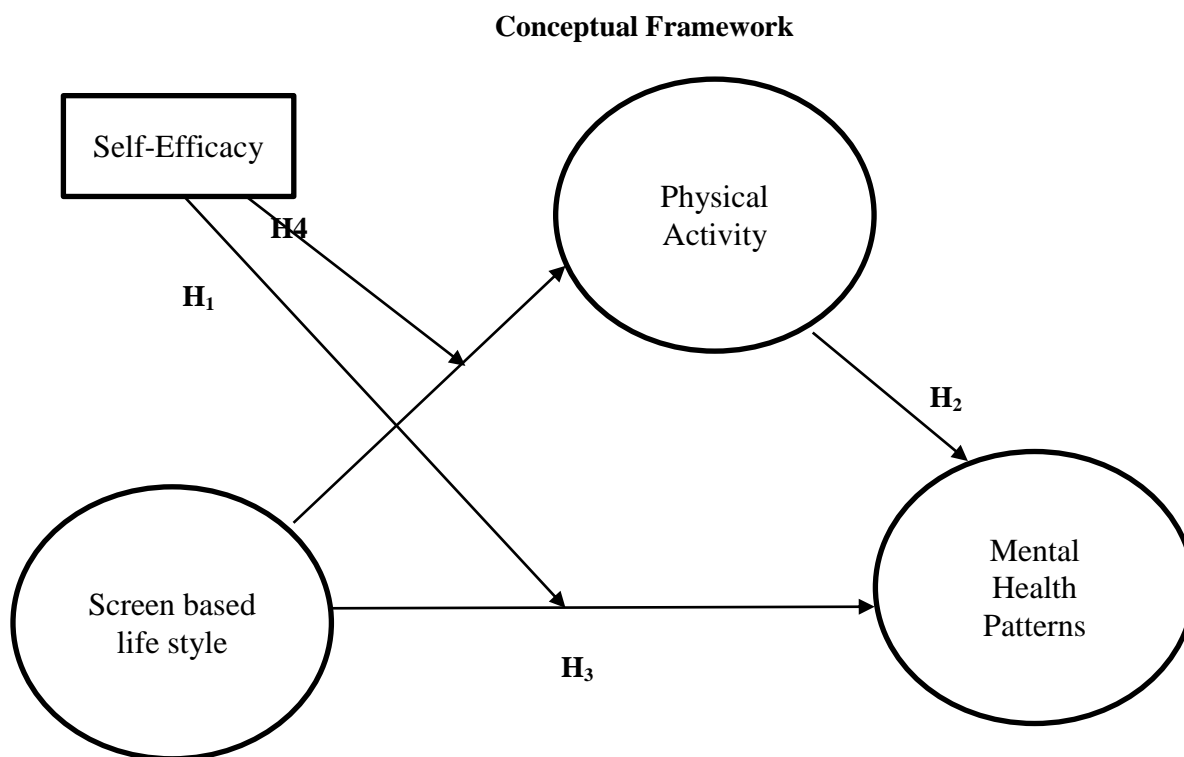
Q5: Does Self efficacy moderates the mediated relationship between screen-based lifestyle and mental health patterns

3. Research Methodology

The unit of analysis of this study will be the university students in Islamabad Pakistan. Convenience sampling technique will be applied to obtain the responses. The convenience sampling is a non-probability sampling technique which allows the researcher to collect data in less time and is a comparatively flexible technique as compared to other sampling techniques ([Etikan, Musa, & Alkassim, 2016](#)). The instrument that will be distributed to the students will contain two parts. Part one will contain the general information of the respondents. The second part will be related to the variables used in the study (screen-based lifestyle, self-efficacy, physical activity, mental health patterns). The instruments will be distributed to the university students to show their perceptions regarding the variables on the Likert scale from 1-5. On this Likert scale the 5 meant “strongly agree” and 1 meant “strongly disagree”. Moreover regarding the operationalization of the constructs screen based life style was measured using the scale of ([Hardy, Booth, & Okely, 2007](#)), self-efficacy will be measured using the scale of ([Schwarzer, 1993](#)), physical activity was measured using the scale of ([Godin & Shephard, 1985](#)) and for mental health patterns the scale of ([Berwick et al., 1991](#)) will be used. The justification of measuring the variables based on the scale given by these scholars is that they are all the pioneer scholars in the field of mental health patterns issues and represent real world scenarios in relation to mental health patterns of the students.

3.1. Motivation of the Study

In recent times the use of electronic devices among university students is causing serious mental health problems. The importance of mental health is very important since it is related to the academic performance of the students and is a point of concern among educational psychology scholars. Therefore, self-efficacy and physical activity are the important factors and determinants which can play a role in improving the mental health issues of the student. A comprehensive picture is needed to see how these two constructs answer the real societal issues in the education sector. Therefore, due to these logical arguments the current study is making a novel contribution in the field of educational psychology and mental health problems of the students.



4. Discussion

In order to get an overall view of integrating physical activity and self-efficacy on the relationship between screen-based lifestyle mental health patterns, the results from the theoretical model will highlights the issues related to mental health patterns and how to reduce them using physical activity. Moreover, the physical activity and self-efficacy will enhance the reader's understanding as important determinants of the mental health patterns. The present framework tries to examine screen-based lifestyle effect on the mental health patterns and gave a direction that physical activity will mediate the negative relationship between screen-based lifestyle and mental health patterns based social learning theory. Moreover, the moderating role of self-efficacy will also enhance the reader's understanding of how it will affect the mediated as well as direct relationship between screen-based lifestyle and mental health patterns. The results of the study will extend the previous works of ([Akers & Jennings, 2016](#); [Bandura & McClelland, 1977](#); [Thompson & Gomez, 2014a](#); [Zhou et al., 2021](#)) in the light of social learning theory.

5. Theoretical and Practical Contribution

The study also carries some important theory contributions. The study will test the social learning theory from the perspective of a developing country and university students. Moreover, the study by empirically testing the mediating role of physical activity and moderating role of self-efficacy will add to the body of social learning theory and hence will reinforce the theory development in the area of mental health patterns, Moreover the study will highlight the social processes in the light of social learning theory that how students see physical activity as potential source of reducing mental health problems. In conclusion universities that will try to promote physical activity and create a sense of self efficacy among students can be viewed as potential places of education in the eyes of parents as compared to universities who do not have any self-efficacy education among their students.

6.Limitations and Future Research

The study also has some limitations. First the study will be limited in the context of Pakistan. Second the study will use a cross sectional design and data will be collected at the single point of time this is because longitudinal study requires more time and resources. Therefore, future study should use mix method design as well as longitudinal research design to get more insights about the variables under study. Future studies should also replicate this study in some other industry to get more insights and can replicate the framework in some other country.

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