

Day Time Sleepiness, Fear of COVID-19 and Emotional Adjustment among Adolescent

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Abstract:

The aim of the current study was to investigate the relationship between Day Time Sleepiness, Fear of COVID-19 and Emotional Adjustment among Adolescent. The sample consists of total 136(84 female & 52 male) with in age range of 14-20 years. The Epworth Sleepiness Scale (ESS) (Johns, 1991), Generalized Fear of COVID-19 Scale (Ahorsu, et. al., 2020), and Adolescent's Emotional Adjustment Inventory (AEAI), (Patil, 1989) were used. The data were analysed by using descriptive statistics i.e. Mean and SD, Pearson's Product Moment correlation and step wise multiple regression analysis. The results indicated that Day Time Sleepiness ($r = .19, p < .05$) and fear of COVID-19 ($r = .31, p < .01$) have significant positive relation with emotional adjustment among adolescent. The step wise regression analysis found fear of COVID-19 ($R^2 = .09, p < .001$) is a predictor of emotional adjustment which accounts 09% of variance in emotional adjustment among adolescents.

Keyword: Day Time Sleepiness, Fear of COVID-19 & Emotional Adjustment

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I. INTRODUCTION

COVID-19 is a disease caused by a new strain of coronavirus. 'CO' stands for corona, 'VI' for virus, and 'D' for disease. Formerly, this disease was referred to as '2019 novel corona virus'. Most of people who are infected with the COVID-19 experienced mild to moderate respiratory illness and recover without special treatment. Some of people, who have underlying medical problems like diabetes, cardiovascular disease, chronic respiratory disease, and cancer, are more likely to develop serious illness. There are various Signs and symptoms of COVID-19 which may appear two to 14 days after exposure. Common signs and symptoms includes: Cough, Fever, and Tiredness. Early symptoms of COVID-19 may include a loss of taste or smell. Other symptoms can include: Shortness of breath or difficulty breathing, Muscle aches, Chills, Sore throat, Runny nose, Headache, Chest pain. Because of chronicity of covid-19 person may develop fear about the various that lead to over thinking which may create overburden on the individual and then he may feel stress and have negative mood. Person feels stress when he or she has excessive pressure from the environment or other types of demand placed upon them. It arises when they worry that they can't cope. Stress can be defined as any types of change causes physical, emotional, psychological strain. Stress is our body's response to anything that requires attention or action. Stress occurs when the pressure is greater than the resources. There are various types of stress depending upon its intensity. Earlier study, Hall et al. (2008) reported that in times of an epidemic, people tend to experience fear of getting infected with the virus/disease resulting in anxiety, stress, and depression. Similarly, Shete and Garkal (2015) concluded that a high level of stress has been observed in post graduate medical student. The study further concluded that there are

various factors which affect the level of stress like age and gender. It is surmised that people facing a pandemic with no vaccination would result in fear of the unknown (in this case, the coronavirus) making them anxious, stressed and depressed (Xiang et al. 2020).

Adolescent is the most significant and critical period of the human life. It has been described as the spring of life of human being and an important era in the human life span. The word adolescent comes from Latin word adolescent' which means to grow to maturity. A number of definitions have been given by developmental psychologist from time to time; the children experience a number of changes in the transitional period. The period runs between childhood and adulthood and in some time called the period of teenage. There are many issue of adolescents related to their emotional adjustment, school; home and to opposite gender, Freedom from home, Adjustment in suitable vocation, Developing a sound philosophy of life, and Health adjustment. Several studies have been incorporated explaining its adverse or negative effect of anxiety on children's social, emotional and academic success (Essau, Conradt, & Petermann, 2000). Similarly, Bharadwaj and helloed (2006) showed that emotionally stable adolescent were better in school adjustment. The mean score of boys are higher than that of girls on mental health. This indicated that the adolescent girls show better mental health than adolescent boys (Gupta & Kumar, 2010). There are various issues related to emotional problem which have been observed in Adolescents like, Changing role of home, school, and society, Unfavourable relation at home, Social expectation, Difficulty in adjustment with the opposite sex, Religious conflict, School failure, and

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Vocational problems. Earlier study also emphasised on the factor which are very important for health and wellbeing of the youth and adolescents, factors like, Happiness, social skills and self-esteem (Panchal & Joshi, 2013).

Sleep is an important part of the persons daily life, person spend about one third of his/her life time in doing so. Sleep is important for various brain functions, including the nerve cells communication. In fact, human brain and body stay active while the person in sleep stage. Everyone needs sleep, because of biological purpose. Sleep affects almost every type of tissue and system within the body. Several researches shows that a chronic lack of sleep, or getting poor quality sleep, increase the risk of disordered including high blood pressure, diabetes, depression, anxiety. Sleep is a complex and dynamic processes that affect human function in all manner. Day time sleepiness is common for all but when it happen in excessive way then it become problematic for the person. Excessive daytime sleepiness refers to the persistent sleepiness and has often lack of energy, even during the day time after had adequate or prolonged night time sleep. Many researchers have been conducted on the sleep regulation and sleep related problems (Delannoy, et. al., 2015; Heidari, 2019; Okada, et. al 2017; Suen, Hon, & Tam, 2008).

II. OBJECTIVES

- To study the Day Time Sleepiness and adolescent emotional adjustment.
- To study the Fear of Covid-19 and adolescent emotional adjustment.
- To find out the predictor of adolescent emotional adjustment.

III. HYPOTHESIS

- There will be positive correlation between Day Time Sleepiness and adolescent emotional adjustment.
- There will be positive relation between Fear of Covid-19 and adolescent emotional adjustment.
- Day Time Sleepiness and Fear of Covid-19 will be the predictor of adolescent emotional adjustment.

IV. METHOD

Sample:

The study was conducted through online mode; the Google form was created and circulated on different Whatsapp groups and individual level. The sample consists of 104 (64 males and 40 females). Their age ranged between 14-20 years.

Tools for the study:

The following psychometrics tools were used for the data collection.

Fear of COVID-19 scale (Ahorsu, et. al., 2020):

The scale is a 7 item measure designed to assess the degree to which individual fear of COVID-19. Respondents relate each item on a 5- point Likert type scale. Answer included "Strongly disagree", "disagree", "neutral", "agree" and "Strongly agree". The minimum score possible for each

question is 1 and the maximum is 5. A total score could be calculated by adding up each item score (ranged from 7 to 35). The fear of covid-19 has good internal consistency ($\alpha = .82$) and test retest reliability (.72), Concurrent validity was also supported by the Hospital Anxiety and Depression Scale as reported by (Ahorsu, et. al., 2020).

The Epworth sleepiness scale (ESS) (Johns, 1991):

ESS is a scale intended to measure the daytime sleepiness that is measured by using the short questionnaire. This scale is helpful in diagnosing sleep disorders. It was developed by Dr Murray Johns of Epworth hospital in Melbourne, Australia. The Respondents related each item on a 4-point like types scale. Answer include "no chance of dozing", slight chance of dozing", "moderate chance of dozing", high chance of dozing". The minimum score possible for each question is 0 and the maximum is 3. ESS has appropriate reliability (Cronbach's α , 0.75) and validity (Convergent & Discriminant) reported by Baumgartel, Terhorst, Conley & Roberts in 2013.

Adolescent's Emotional Adjustment Inventory (AEAI), (Patil, 1989):

The AEAi tools used for the data collection purposes. The inventory made up of two parts A & B. part A elicited personal data, while part B was made up of 33 items aimed at measuring emotional adjustment among adolescents. Part B required the participant to answer to the items on Yes or No format. The reliability co-efficient of the present inventory on the basis of split half method is 0.82.

V. PROCEDURE

After informed consent the proper instruction was given to participants, and then the above mentioned psychometric tools were administered through online Google form and obtained the data. The answered questionnaires were scored as per instruction given by the author.

VI. RESULTS

The present investigation was conducted to study the Day Time Sleepiness, Fear of COVID-19 and Emotional Adjustment among Adolescent. The obtained data were analysis by applying descriptive statistics i.e. mean and SD, and Pearson's product Moment method of correlation. Descriptive results revealed that participants scored Low on the measures of Day Time Sleepiness (Mean=5.98, SD=4.45) from a maximum of 24 which indicate that participant have enough sleep, Fear of COVID-19 (Mean=12.85, SD=7.33) from a maximum of 35, and low on Emotional Adjustment (Mean=9.88, SD=7.67) from a maximum of 33 (refer Table 1).

Table- 1 Inter-correlation Matrix

	Emotional Adjustment	Day Time Sleepiness	Fear of Covid-19
Emotional Adjustment	---	.19*	.31**
Day Time Sleepiness		---	.66**
Fear of Covid-19			---
Mean	9.88	5.98	12.85
S.D	7.67	4.45	7.33

* Correlation is significant at the 0.05 level

** Correlation is significant at the 0.01 level

Table 1 shows the correlation between Emotion Adjustment, Day Time Sleepiness and Fear of COVID-19 among adolescent. Relationship between Daytime Sleepiness and Emotion Adjustment is found to be positive with a correlation coefficient of .19 which is significant .05 levels. Emotion adjustment is found to be positively correlated with fear of COVID-19 with a correlation coefficient of .31 which is significant at .01 levels. The relationship between Daytime sleepiness and fear of COVID-19 is found to be positive with a significant correlation coefficient ($r = .66, p < .01$).

Table-2 Summary of Stepwise Multiple Regression (Dependent Variable: Emotional Adjustment)

Step	Variable	R	R ²	R ² Change	Beta	Std. Error	F	P
1	Fear of Covid-19	.30	.09	.09	.30	7.33	13.83	.001

Table-2 shows the result of stepwise multiple Regressions. The predictor measure of fear of COVID-19 account for 9% of variance in emotion adjustment. ($R = .30, R^2 = .09$) F value is equal to 13.83 which are significant at .001 levels.

VII. DISCUSSION

The main objective of the present research was to explore the relationship between Day Time Sleepiness, Fear of COVID-19 and Emotional Adjustment among Adolescent. As far as the relationships are concern, the Day Time Sleepiness and Emotional Adjustment positively correlated with each other. People with high level of enough sleep have better emotional adjustment. Thus hypothesis 1 stating the positive relation between Day Time Sleepiness and Emotional Adjustment is accepted and proved here. Earlier study revealed that adolescents were observed day time sleepiness with several factors such as economic status, academic achievement, being satisfied with body image, sleeping and waking time, smoking, and reading books (Altan, et. al, 2018). Other reported, adolescents have sleep problems because of the development age. This is the most commonly sleep problem that is the daytime sleepiness, which is caused by inadequate and poor quality sleep (Aysan et al., 2014).

Finding also revealed that Fear of Covid-19 positively correlated with adolescent emotional adjustment. People with high level of fear of Covid-19 may report high level of problem related to the emotional adjustment. Thus hypothesis 2 regarding the positive relation between Fear of Covid-19 and adolescent emotional adjustment is accepted and proved here. Previous study reported that Fear of Covid-19 highly associated with mental health risk among adolescent (Fegert, Vitiello, Plener, & Clemens, 2020). Earlier study also revealed adolescent emotional adjustment is also affected by depression and anxiety (Panchal & Yadav, 2020).

Result also found that fear of COVID-19 accounts for 9% of variance in adolescent emotional adjustment. So, the present study conclude that fear of COVID 19 is a potent predictors of adolescent emotional adjustment therefore we can't ignore its contribution in person life because of uncertainty and pandemic situation. Thus, the hypothesis 3 that stated the predictor of adolescent emotional adjustment is accepted

here. Current findings are similar with the finding that showed people facing a pandemic with no vaccination would result in fear of the unknown making them anxious, stressed and depressed (Xiang et al. 2020).

VIII. REFERENCES

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