THE COVID-19 CONTAGION AND MENTAL HEALTH OF THE STUDENTS
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Abstract

Purpose of the study: The main purpose of the study was to find out “the effect of covid-19 contagion and mental health of the students at higher secondary schools in Dera Ismail Khan”.

Methodology: The descriptive method of research was used in this study. Convenient and snowball sampling techniques were used to get the required data. For data analysis mean, standard deviation, p-value, and t-distribution were used.

Main Findings: It was found that parents’ perceptions were very positive as 77.9% of parents agreed with the 15 statements of the questionnaire. The difference between the perceptions of urban and rural parents remained insignificant and their perceptions were nearly similar about the topic under research. So, Pakistan should adopt all the necessary measures to restore the mental health of students through any means and at any cost.

Applications of this study: This current study is applicable in the mental health of high and higher secondary schools students of district Dera Ismail Khan, Khyber Pakhtunkhwa, Pakistan.

Novelty/Originality of this study: The results of this research imitate its innovation. This research targeted to find the effect of corona varius on the mental health of the higher secondary school students. This research will provide us with complete awareness about covid-19 and its effect on the mental health of higher secondary school students. This research provides us with a strong root for covid-19 and its effect on students' mental health and also provides us psychological treatment as well.

Keywords: COVID-19, Mental Health, Students, Effects, Convenient and Snowball Sampling.

INTRODUCTION

Preamble

The COVID-19 contagion appeared in China in the closing days of 2019 and it blew out across the world at a very high speed. A novel virus Corona was appeared to attack the respiratory system of humans very badly and The World Health Organization named this virus Coronavirus disease-19 (Rodriguez-Morales, Tiwari, Sah & Dhama 2020). The COVID-19 or coronavirus infected nearly all countries of the world including Pakistan within months as an uncontrollable outbreak throughout the globe. The initial two cases of contagion were confirmed by the Pakistan health ministry on 26th February in Karachi and Islamabad on the same day. All the confirmed cases of COVID-19 in Pakistan had fresh travel records from other countries and the government machinery of Pakistan has been initiating all essential steps to offer the services of the state to the people during the crisis to support the public against the contagion (Waris, Khan, Ali, Ali & Baset 2020).

It is a naked fact that the COVID-19 has affected the physical as well as the psychological well-being of the people in general and of students in specific. It has provoked not only mortality but mental problems like psychological fear, anxiety, depression, stigma, prejudice, laziness, marginalization, disturbance, loneliness, stress, social distance, and despair among the people and students (Rana, Mukhtar & Mukhtar, 2020). A mentally healthy individual comprehends his potential to deal the challenging situations, do something creative for their community and contribute to humanity. Mental health gives students self-acceptance, meaningful life, creativity, good relations with other humans, personal growth, and self-confidence to proceed ahead (Mukhtar, 2020).

COVID-19 pandemic has compelled individuals towards social distance and self-isolation that questioned the mental health of individuals to a very great extent. It has led them towards domestic violence, unhealthy relations, lack of freedom, abuse, trauma, poverty, lack of resources, negative emotions, poor law and order situation, laziness, and idleness. These elements have disturbed their self-acceptance, autonomy, environmental mastery. Students and common individuals have become the victim of poor mental health and it would be an immense loss to a developing nation (Lima et al., 2020), like Pakistan.

The COVID19 pandemic has become a very major crisis as it has affected nearly all countries of the world with immense speed and it is still going on. Naturally, such pandemics are always associated with adverse effects on the mental health of people like stress, anxiety, anger, sleep disturbance, and so on (Adhikari et al., 2020). Pakistan-
poverty-ridden third world country has been hit severely by the coronavirus as there are 87317 confirmed cases with 1838 deaths to date (Ministry of National Health Pakistan, 2020). The adverse situation of the COVID-19 pandemic has very adverse effects on the mental health of medical workers, doctors, old adults, students, and children in a collectivist country like Pakistan where social distancing is not less than a curse (Brooks et al., 2020).

Lockdown and poor economic status have given low mood, irritability, depression, emotional disturbance, emotional exhaustion, confusion, and fear to people of Pakistan. Lockdown and social distancing have wide-ranging and long-lasting effects on the public because depriving people of their liberty is often contentious and it may harm their mental health (Mukhtar, 2020). It has been discovered in research studies that college students in China have been significantly affected due to the COVID-19 epidemic, lockdown, and closure of educational institutes (Cao, 2020) so, the researcher has decided to find out and compare the perceptions of parents about COVID-19 contagion and the mental health of students living in Dera Ismail Khan, Khyber Pakhtunkhw, Pakistan.

Statement of the problem

As Pakistan is suffering from the COVID-19 epidemic and its severe effects along with the other countries of the world so it was appropriate and beneficial to find out and compare “The perceptions of parents about the COVID-19 contagion and mental health of students” to get prepared to fulfil the closure gap of educational institutes across the country for a longer period. It will also pave the way to recover the mental health and solve all the problems of students without any wastage of time for the better future of Pakistan.

Research Objectives

The main objective of the existing research study was to find out and compare the perceptions of urban and rural parents about the COVID-19 contagion and mental health of their school-going adult children.

LITERATURE REVIEW

The COVID-19 contagion has brought the WHO (World Health Organization) to announce the concern of public health emergency at international level as it brought not only mortality to a large number of humans across the world but it has brought mental health problems as well to all humans in one way or the other (Lu, 2020). The individuals are suffering from stress, trauma, disorder, poverty, social distance, anxiety, fatigue, sleep disorder, pain, weakness, and boredom due to the outbreak of COVID-19 in the world and these evils are also a threat to humans on earth so they must prepare themselves to cope with these evils (Huang et al., 2020).

The COVID-19 contagion threatened the lives and cerebral health of individuals as it had triggered mental problems like depression, anxiety, sleep disorders, and loneliness. All nations must develop and implement concrete measures to maintain the mental health of their members and students for a better future in the world (Qui et al., 2020). The contagion formed psychological health an immense issue around the globe and the situation is the same in Bangladesh, India, and Pakistan. It is the cause of social isolation, economic recession, social boycott, mental health problems in idle people and students as well (Mamun, & Ullah, 2020).

Pakistan is located between the two main centers of COVID-19 (Iran & China) with sufficient friendship and traffic with both countries. It is a fact that Pakistan has lower health standards and facilities than China to deal with the COVID-19. The only way that the Pakistani Government can defeat the disaster is to have everyone work together to check this outbreak from spreading. Pakistan with its less strong Government, lack of facilities, limited medical trained staff, poor economy, and limited resources cannot control the COVID-19 completely so its friend countries must come up and help this country to avoid the bad effects of this bad outbreak (Saqlain et al., 2020).

This contagion threatened developing countries like Pakistan and these countries have to face devastating social, educational, and economic crises in the coming time. (Augustine, 2020). The suicide rate after the contagion would be very common in developing countries as a result of lockdown and economic recession. Pakistani media covered 29 suicide cases during January 2020 and 16 suicidality cases were directly related to COVID-19. 13 cases were the result of economic recession and only 3 cases were the result of fear of infection (Goyal et al., 2020).

A contraction in an economic cycle that reduces economic productivity and increases unemployment comes in the circle of economic recession. These economic recessions affect the mental health and well-being of individuals to a large extent. Research studies indicated that unemployed and jobless people become prey to anxiety, stress, and psychological illness. It has been reported that nearly 55% of people don’t have social protection and it will affect their education system, food security, law & order, human rights, and self-development (Mamun & Griffiths 2020).

Pakistan is an under developing country and it is facing various serious problems like lack of medicine, unhygienic conditions, the lake of trained medical staff, lack of testing laboratories, lack of food & water, and above all poor economy to support its public during COVID-19 outbreak. Pakistani Government declared to shut all cities for 45 days to keep the citizens in their houses to save them from coronavirus during the pandemic. All educational institutes were closed on 13th March 2020 across the country to keep students safe from the COVID-19 contagion. This closure of
educational institutes had its side effects as well. These side effects are educational loss, wastage of time, idleness, and mental health problems (Nafees & Khan, 2020).

Being a developing country, Pakistan cannot support its lower and lower-middle-class during the outbreak. It has started to give twelve thousand rupees to 7 million daily wage labor but it is too small amount to support a whole family for three months (Ifikhar, 2020). Researches informed that the outlays of a middle size family of 4 to six members were calculated from fourteen to seventeen thousand rupees per month (Haq et al, 2008). The financial problems of students’ parent directly affect the psychological wellbeing of them during the lockdown when all educational institutions are further bolted till 31 August 2020. Pakistan has to use all the government resources for complete and comprehensive planning to solve the problems of students in particular and the problems of people in general in the coming days after the outbreak (Nafees & Khan, 2020).

The Covid-19 contagion has affected the economy of the nations. The mental well-being of students is being affected by the promotion of corona cases, social distance, closure of schools and colleges, idleness, and laziness. It was discovered that individuals faced pressure, depression and stress, sleep disorder due to physical and social difficulties during international health emergencies. The social and emotional picture in society has been completely changed due to the coronavirus outbreak. Now, students are becoming the prey of mental illnessitches (Eisenberg, Gollust, Golberstein & Hefner, 2007). Destructive thoughts, anger, boredom, stress, anxiety, stubbornness, negative emotions eating disorders, and sleep disorders are undergone by students during the contagion or pandemic period. These problems can affect students’ academic performance and mental health in the future (Tosevski, Gajic & Milovanvic, 2010). As students are facing a problem so the government must pay attention to the mental fitness of students (Saleem, & Mahmood, 2013) after the contagion to save the nation from immense loss.

Mortality and severe mental health issues are the most common results of ongoing pandemics across all borders and countries of the world. Strict social distancing and delay in opening the educational institutes in Pakistan are the necessary steps taken by the government to stop the current pandemic. But these measures are problems as well because these are producing negative effects on the mind of the general public and students. Many types of research have revealed that the COVID-19 has been affecting badly the mental health of medical staff, paramedical staff, patients, the public, old adults, and children (Chen, 2020).

The starting place of Coronavirus contagion was Wuhan, china and it spread across the world very fast. Pakistan is an under-developing country in south Asia and it also became the prey of coronavirus. Its economy is weaker and its resources are very limited so it is difficult for such a country to face the contagion. The effects of coronavirus are numerous on the mental health of people and students. An investigation survey was conducted in china about the psychological impact of the outbreak on the psychological aspect of students studying in colleges. The data was gathered from 7143 with a 100% response rate through a seven items questionnaire on a four-point Likert Rating Scale. After the analysis of the data, it was declared that the psychological side of college students has been affected significantly after the epidemic has come into control. It has been found that the students are suffering from severe mental health issues and they need the help of the government, societies, families, and colleges during and after the public health emergencies to restore their mental health. It has been suggested that schools and government machinery cooperate to tackle this problem to provide the students a comprehensive and timely psychological service to the college and school students to accelerate the pace of promotion and prosperity in the country (Cao et al, 2020).

The COVID-19 has become the cause to interrupt the daily routines of all individuals across the world which is the first step toward anxiety. All schools have been closed in nearly 188 countries of the world and 1500 million students are at home. They have been kept away from schools, colleges, and even education this closure means lack of access to their resources for students. It has been found that students have started negative emotions due to no access to their daily resources and daily routines. When schools are closed, the school students have lost an anchor in life. They have started to close themselves upstairs, refuse to eat, refuse to take shower, and refuse to come out of the bed. In some cases, they have become frustrated and short-tempered. 20 % of school students have been found with a maximum level of stress after the postponement of exams. Social distancing is social isolation in abusive homes for these students. The most alarming thing is their adjustment in schools when schools start working after the outbreak. It is time to get ready to recover from the loss of students’ academics and mental health at any cost (Lee, 2020).

**Research Questions/Hypothesis of the study**

The following were the research questions/hypotheses of the research study:

Research Q. What are the perceptions of urban/rural parents about the COVID-19 contagion and mental health of their school-going adult children?

H0: There is no significant difference between the perceptions of urban & rural parents about the COVID-19 contagion and mental health of their school-going adult children.
RESEARCH METHODOLOGY

Research Design

The current study was conducted to discover and compare “The perceptions of parents about the COVID-19 contagion and the mental health of Students”. As the current study was dealing with the current situation COVID-19 and the mental health of the students so its design was descriptive. Descriptive research is quantitative and uses the observational method to get the data. It is often a cross-sectional study and variables are uncontrollable to the researcher. Descriptive research is very appropriate when the sample size is large and scattered then the data is collected through a questionnaire with closed-ended questions and numeric values for concrete conclusions.

Research Population

The research population has been defined as the total of respondents and that is the focus of research investigation to get the data. The individuals and objects in a research population have common characteristics and qualities so the researches are made easy based on these common characteristics of the individuals and objects. In the current research study, the population consists of parents whose adult children were studying in high and higher secondary schools in the district Dera Ismail Khan, Khyber Pakhtunkhwa, Pakistan.

Sample Size

The selection of a representative sample from the entire population makes the work of a researcher easy and affordable it also lessens the chance of error. A group of individuals or objects is selected from the general population that represents the whole population. In the present research study, 375 parents living in the urban areas and 267 parents living in the rural areas were selected and approached to get the questionnaire filled by them. This sample represented the entire population.

| Location            | Parents |
|---------------------|---------|
| Parents of urban areas | 375     |
| Parents of rural areas | 267     |
| Total Parents       | 642     |

Sampling Technique

It would be difficult to study the whole population and the sampling technique allowed the researcher to get the information from a sub-set of the population. Reducing the number of individuals or objects through appropriate sampling techniques reduced the cost, time, and burden of the researcher. The convenient and snowball sampling techniques were used to get the questionnaire filled by the respondents available easily. Questionnaires were sent to 375 parents living in the urban areas and 267 parents living in the rural areas to get filled in from respondents. Some
questionnaires were also sent and received via email and WhatsApp. The received questionnaires were arranged properly. The arranged data was analyzed through percentage, mean, and t-test for getting results.

**Research Instrument Development**

A questionnaire containing the following item on a 5-point Likert rating scale was developed in the light of Gad-7 an often used, well-validated, and renowned research instrument with Cronbach's alpha value = 0.912 (Toussaint et al. 2020) to gather the data from the respondents.

1. Students feel nervous or anxious.
2. They lose their autonomy.
3. They don’t stop worrying.
4. They have fear of different things.
5. They undergo trouble relaxing
6. They are idle.
7. Social distancing is not easy.
8. They remain restless
9. They undergo sleep disorder
10. Trivial things irritate them.
11. They can’t continue their daily routines.
12. Negative emotions catch them.
13. They don’t have environment mastery.
14. They have weak self-acceptance.
15. They get less pocket money

**Validity of the research tool**

The research tool used in the present study was a questionnaire on a 5-point Likert rating scale. The questionnaire was developed with a comprehensive study of related research studies in the light of the Generalized Anxiety Disorder Scale (GAD-7) and is often used, a well-validated, and renowned research instrument with strong content validity. Moreover, the developed questionnaire was further got evaluated by seventeen educationists for the enhancement of its validity.

The GAD-7 internal consistency i.e. Cronbach's was $\alpha = 0.912$ (Toussaint et al. 2020). The reliability -Cronbach's alfa of the questionnaire used for data collection of the present study was 0.872. So, both the internal consistency and content validity of the research tool were very excellent that would make the received data and calculated results reliable.

**Table 2: Reliability of research tool**

| Questionnaire                                      | No. of Questions | Alpha |
|----------------------------------------------------|------------------|-------|
| COVID-19 and the mental health of students         | 15               | 0.872 |

**Statistical analysis**

The settled data were calculated with appropriate statistics. Percentage and mean scores were used to find out the perception of male and female subject specialist teachers about the COVID-19 and the mental health of students. The t-test had been employed to discover the difference between the perceptions of urban parents and rural parents about the COVID-19 and on the mental health of students.

**Table 3: Detailed description of Parents’ (Rural/Urban) perception about COVID-19 and mental health of students**

| S# | Teacher                      | Locality | N   | Mean | S.D  | t_cal | t_tab | $\alpha$  | P-value |
|----|------------------------------|----------|-----|------|------|-------|-------|----------|---------|
| 1  | Students feel nervous or    | Urban    | 375 | 3.80 | 0.61 | -8.7150 | ±1.96 | 0.05     | 0.00001 |
|    | anxious.                    | Rural    | 267 | 3.35 | 0.69 |       |       |          |         |
| 2  | They lose their autonomy.   | Urban    | 375 | 3.87 | 0.68 | -8.2943 | ±1.96 | 0.05     | 0.00001 |
|    |                              | Rural    | 267 | 3.41 | 0.71 |       |       |          |         |
| 3  | They don’t stop worrying.   | Urban    | 375 | 3.97 | 0.67 | -15.260 | ±1.96 | 0.05     | 0.00001 |
|    |                              | Rural    | 267 | 3.12 | 0.73 |       |       |          |         |
| 4  | They have fear of different| Urban    | 375 | 4.01 | 0.63 | -4.2190 | ±1.96 | 0.05     | 0.00001 |
|    | things.                      | Rural    | 267 | 3.79 | 0.68 |       |       |          |         |
| 5  | They undergo trouble relaxing | Urban    | 375 | 4.00 | 0.60 | 3.7928 | ±1.96 | 0.05     | 0.00020 |

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RESULTS

The following results were drawn from the arranged data after the employment of statistical tools.

1. The means of item no. 1 were 3.80 (Urban parents) & 3.35 (rural Parents) respectively and these values revealed that their perceptions were very positive as 71% of respondents agreed with the statement “Students feel nervous or anxious”. The difference between the perceptions of urban and rural parents remained insignificant.

2. The means of item no. 2 were 3.87 (Urban parents) & 3.41 (rural Parents) respectively and these values revealed that their perceptions were very positive as 72. 8% of respondents agreed with the statement “They lose their autonomy”. The difference between the perceptions of urban and rural parents remained insignificant.

3. The means of item no. 3 were 3.97 (Urban parents) & 3.12 (rural Parents) respectively and these values revealed that their perceptions were very positive as 70.9% of respondents agreed with the statement “They don’t stop worrying.” The difference between the perceptions of urban and rural parents remained insignificant.

4. The means of item no. 4 were 4.01 (Urban parents) & 3.79 (rural Parents) respectively and these values revealed that their perceptions were very positive as 78.0% of respondents agreed with the statement “They have fear of different things”. The difference between the perceptions of urban and rural parents remained insignificant.

5. The means of item no. 5 were 4.00 (Urban parents) & 3.81 (rural Parents) respectively and these values revealed that their perceptions were very positive as 78.1% of respondents agreed with the statement “They undergo trouble relaxing”. The difference between the perceptions of urban and rural parents remained insignificant.

6. The means of item no. 6 were 3.99 (Urban parents) & 3.58 (rural Parents) respectively and these values revealed that their perceptions were very positive as 75.7% of respondents agreed with the statement “They remain idle”. The difference between the perceptions of urban and rural parents remained insignificant.

7. The means of item no. 7 were 3.97 (Urban parents) & 3.51 (rural Parents) respectively and these values revealed that their perceptions were very positive as 74.8% of respondents agreed with the statement “Social distancing is not easy for them”. The difference between the perceptions of urban and rural parents remained insignificant.

8. The means of item no. 8 were 4.50 (Urban parents) & 4.01 (rural Parents) respectively and these values revealed that their perceptions were very positive as 85.01% of respondents agreed with the statement “They remain restless”. The difference between the perceptions of urban and rural parents remained insignificant.

9. The means of item no. 9 were 3.79 (Urban parents) & 3.33 (rural Parents) respectively and these values revealed that their perceptions were very positive as 71.2% of respondents agreed with the statement “They suffer sleep disorder”. The difference between the perceptions of urban and rural parents remained insignificant.

10. The means of item no. 10 were 4.46 (Urban parents) & 4.09 (rural Parents) respectively and these values revealed that their perceptions were very positive as 85.5% of respondents agreed with the statement “Small things irritate them”. The difference between the perceptions of urban and rural parents remained insignificant.
11. The means of item no. 11 were 4.39 (Urban parents) & 4.17 (rural Parents) respectively and these values revealed that their perceptions were very positive as 85.6 % of respondents agreed with the statement “Their daily routines have disturbed”. The difference between the perceptions of urban and rural parents remained insignificant.

12. The means of item no. 12 were 3.97 (Urban parents) & 3.79 (rural Parents) respectively and these values revealed that their perceptions were very positive as 77.6 % of respondents agreed with the statement “Negative emotions catch them”. The difference between the perceptions of urban and rural parents remained insignificant.

13. The means of item no. 13 were 3.95 (Urban parents) & 3.76 (rural Parents) respectively and these values revealed that their perceptions were very positive as 77.1 % of respondents agreed with the statement “They lose environment mastery”. The difference between the perceptions of urban and rural parents remained insignificant.

14. The means of item no. 14 were 4.63 (Urban parents) & 4.17 (rural Parents) respectively and these values revealed that their perceptions were very positive as 80.8 % of respondents agreed with the statement “They are dropping self-acceptance”. The difference between the perceptions of urban and rural parents remained insignificant.

15. The means of item no. 15 were 3.90 (Urban parents) & 3.72 (rural Parents) respectively and these values revealed that their perceptions were very positive as 77.6 % of respondents agreed with the statement “Parents’ falling economics affect them.” The difference between the perceptions of urban and rural parents remained insignificant.

| Table 4: Locality wise comparison of parents’ perception about COVID-19 and mental health of the students |
|---------------------------------------------------------------|
| Response | Locality | N | Mean | S.D | t<sub>calculated</sub> | t<sub>tabulated</sub> | P-value |
|-----------------|----------|---|------|----|----------------|-----------------|---------|
| Locality wise comparison of parents’ perception about COVID-19 and mental health of the students | Urban | 375 | 4.08 | 0.63 |                |                 |         |
| | Rural | 267 | 3.71 | 0.66 | 0.05 | 7.1906 | ±1.96 | 0.0001 |

The means values were 4.08 (Urban parents) & 3.71 (rural Parents) respectively and these values revealed that their perceptions were very positive as 77.9 % of respondents agreed with the 15 statements of the questionnaire about the COVID-19 contagion and mental health of their school-going adults. The difference between the perceptions of urban and rural parents remained insignificant and their perceptions were nearly similar about the topic under research.

FINDINGS

1. It was found that the perceptions of parents about the COVID-19 and the mental health of students were very positive. It revealed that due to the worst attack of COVID-19 in Dear Ismail Khan, Khyber Pakhtunkhwa, the mental health of students had been affected to great extent.

2. It was also found that the perceptions of parents living in urban areas and parents living in rural areas were nearly similar. It revealed that the attack of COVID-19 and the falling mental health of students were alike in cities and villages.

DISCUSSION

The mental health of people has been affected by the severe attack of COVID-19 in Pakistan because the symptoms of mental health fall in public are prevalent in Pakistan so it is necessary to take necessary steps to bring people to recovered status for the progress and prosperity of the country (Rana, Mukhtar, & Mukhtar, 2020).

The mental health of 71% of students was affected after the outbreak of COVID19 contagion due to increased levels of stress, anxiety, and depression (Son et al 2020).

Students near graduation faced problems regarding mental health as they were facing anxiety, depression, and loneliness after the dynamic effects of COVID19 across all fields of life (Lee et al 2021).

The COVID19 outbreak affected the mental well-being of medical students as well. It was found that nearly 50% of students suffered from mental disorders and it was suggested to take necessary measures to lessen students’ mental disorders through physical fitness, positive activities, and exercises (Seetan et al 2021).

Public health emergencies after the powerful outbreak of COVID19 contagion produced a psychological impact on university students. Anxiety and economic stresses affected their mental health to a large extent (Asif & Sattar, 2020).
Disturbance in daily activities, weak or no safety measures, uncertainty, depression, and no information about defense measures during pandemic affected students’ mental health badly (Moghe, Kotecha & Patil, 2020).

The results of the current study had also strengthened the findings of previous research studies that the outbreak of coronavirus became the cause to affect the mental health students. Mental Illness factors like nervousness, sleep disorder, anxiety, irritation, idleness, fear, loss of autonomy, shaky self-acceptance, negative emotions, and parents ‘falling economics are prevalent throughout the research population area. There was similarity among the various researches that the mental health of common people and students are being attacked by the Coronavirus pandemic.

CONCLUSION OF THE STUDY

The attack of the COVID-19 pandemic in a developing country like Pakistan is very bitter and the after-effects also worse than expected. The mental health of students has been affected and it is falling day by day. Pakistan must introduce psychological interventions as a part of the public health emergency program to resolve the problem at its primary stage. As students are the assets of every nation so Pakistan should adopt all the necessary measures to restore the mental health of students through any means and at any cost.

RECOMMENDATIONS

- Pakistan must introduce psychological involvements as a part of public health at high and higher secondary schools.
- An alternative program may be started to resolve the problem at its initial stage.
- Workshops, seminars, and conferences may be conducted to improve the mental health of the students at this very crucial stage.
- Every student may be provided Individual attention to improving the mental health of the students.

SUGGESTIONS FOR FUTURE RESEARCHERS

- The current study was conducted at high and higher secondary schools; future researchers may expand it to other classes.
- The current study was descriptive the future researcher may be done with experimental or any other suitable method.

LIMITATIONS

The research study was conducted in district Dera Ismail Khan so its results can be generalized only to Dear Ismail khan, Khyber Pakhtunkhwa, Pakistan

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AUTHORS CONTRIBUTION

Dr. Malik Amer Atta initiated the idea of this article, prepare the introduction, objective, research hypothesis, methodology, statistical analysis, and preparation of tables. Dr. Azmat Ullah helped in Literature review, Plagiarism, references, citation, and editing the article. Bushra Salah-Ud-Din worked on proofreading, analysis of data, and conclusion. All the team involved in the correction of a research article. Sadia Bibi, Ph.D. Scholar worked on plagiarism and correction of formatting.

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