An Investigation on Problems Faced by the Students of Pakistan During Board Exams in 2020-2021 in the Era of Covid-19 Pandemic

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Abstract

The current study explored the problems faced by students during board exams in 2020–21 in the era of the COVID-19 pandemic. A quantitative, causal comparative research approach was chosen to collect the information regarding problems faced by students during the pandemic. Cross-sectional surveys were used to measure the variables, and the results of these surveys gave numerical descriptions of the variables. The population of the research was comprised of secondary and higher secondary school students. The random sampling technique is used. The data was collected through a closed-ended questionnaire. The instrument underwent pilot testing in order to validate and establish its reliability. In addition to descriptive statistics, inferential statistics (including the t-test and the Pearson correlation coefficient), and in order to answer the research questions and ultimately accomplish the purpose of the study, correlation coefficient and linear regression analysis were used. The data was analyzed using SPSS software. The results indicate that students' performance is greatly influenced by their anxiety level in board exams during a pandemic. The scope of this investigation was restricted to the Lahore government school. The researcher suggests that this study might be carried out in several cities around the state of Punjab. The participants in this research were all pupils enrolled in secondary or upper secondary schools. The study suggested that more research should be carried out at the elementary level and that comparisons should be made between the perspectives of kids and adults.

Keywords: Board Exams, COVID-19, Higher Secondary School, Anxiety Level, Problems, Quality Education.

INTRODUCTION

The board examination is a central assessment instrument to assess pupils' knowledge [1]. The assessments also facilitate the student to recognize his powers and flaws and are a pointer concerning the road to be taken ahead, as far as one's high-quality of subjects is connected. An active examination system is a key to quality education throughout the world [2]. Standard examinations or board examinations are part of the education process in many countries overall the world. These examinations play a significant role in determining how and what learning and teaching processes continue in the classroom [3]. To support the learning and teaching process is the purpose of conducting exams but the innate study of students can behold up through some form of assessment [4].

The study investigates that student are compelled physically and emotionally by the strict behaviour of their parents, elders, and relatives. In 2020 and 2021, students and their parents were deeply concerned due to the COVID-19 pandemic. Students failed to meet their educational requirements during this period. At the time, students were uncertain about the board exams, questioning whether they would be held or not. This confusion arose because students felt inadequately prepared for the exams due to the shortcomings of their school, teachers, and their own efforts. The online education system implemented during the pandemic proved ineffective for board exams, leading to significant challenges for matric and intermediate pupils. Between these challenges, getting valuable education become a challenge [5] Students' problems include cramming for terrifying final examinations while also trying to absorb extensive course content and educational system is intertwined with problems related to exams [6].

Authentic learning occurs when it promotes students' understanding of the subject taught. An actual change and improvement in the examination system can be only by changing and improving the overall education system. If the examination system is not too good, the result evaluating the success of student learning and teaching process cannot be good. Therefore, to overcome the issues faced by the students during board exams is to improve the system of examination and change the policies of exams during COVID-19.

There were no centralized board examinations for any grade level in 2020. Transitioning to the Intermediate level was a confusing experience for many students, particularly those in grades 10 and 12. Online education has been introduced for the first time to a large audience in Pakistan. How to teach-learn in conjunction with assessing in the meantime, several avoidable situations have arisen in this online development. It is their first time participating in online classes, and they are experimenting with the incorrect flexibility of this development since transferring from a traditional classroom to computer-based training in a virtual classroom changes the learning and teaching experience [7]. Most kids are remaining at home during the lockdown, which is taking place around the country. Furthermore, it is rare to come across internet access in remote places [8]. As a result of the poor internet signal strength, many students now access the internet via their mobile devices and internet access in Pakistan is prohibitively costly [9]. There are certain technological issues, such as a lack of computer and smartphone skills. Similarly, students and professors alike must download software such as Zoom and Google Chat, among others, to participate in online discussions and there is a limited amount of time in which these applications can be online [10]. Another essential skill is the ability to effectively manage one's time and due to various methodological issues, students may not be able to react to the class for 40 minutes at a time on Zoom [11]. Board examinations in 2020–2021 may be a burden for pupils because of this. This study will be helpful for parents, teachers, and policymakers to address the problems of the board exams. The study will also contribute to the current body of knowledge in the dominion of student learning. It is also the first effort to unfold the views of students with special needs. The main focus of the study is to investigate the problems that are students face due to COVID-19 in their board exams. The role of examination in student's life has a significant effect on their academic life and in the future for professional life. When exams are not conducted the student's evolution at a particular level cannot be determined.

Objectives of the Study

The objectives of the study were:

1. Explore the perceptions of secondary and higher secondary school students regarding COVID-19 effect on students' performance

2. Explore the perceptions of secondary and higher secondary school students regarding COVID-19 effect on students' anxiety
3. Explore the impact of student performance on test anxiety regarding COVID-19 on secondary and higher secondary students
4. Explore the differences in student performance on secondary and higher secondary students regarding COVID-19 with respect to demographic (gender, age, education)
5. Explore the differences in student anxiety on secondary and higher secondary students regarding COVID-19 with respect to demographic (gender, age, education)

Research Questions

The research questions were:

1. What are the perceptions of secondary and higher secondary school students regarding COVID-19 effect on students' performance in board exam?
2. What are the perceptions of secondary and higher secondary school students regarding CONVID-19 effect on students' board exam anxiety?
3. What is the impact of student performance on test anxiety in board exam regarding COVID-19 on secondary and higher secondary student?
4. What are the differences in student performance on secondary and higher secondary students regarding COVID-19 with respect to demographic (gender, age, education)?
5. What are the differences in student anxiety on secondary and higher secondary students regarding COVID-19 with respect to demographic (gender, age, education)?

RESEARCH METHODOLOGY

Research Design

The method of research known as quantitative research was used in the study. The research study used a research design known as the causal-comparative research design. In order to investigate the possible causes and effects of the variables that contributed to the COVID-19 problems and effect on the student's board exam. The study was descriptive type to investigate the problem faced by students during board exam. The survey was carried out so that data could be collected. A survey with a cross-sectional design was employed for the data gathering in the research.

Population

Lahore is the Punjab's most populous district. Secondary and higher secondary school pupils in Lahore were the focus of the current investigation. The population of this study included all government secondary and higher secondary schools.

Table 1. Gender wise distribution of secondary and higher secondary school students.

Female school	Male school	Total school
228	184	412

Following table 1 showed the gender wise distribution of secondary and higher secondary school in district Lahore.it was clear that here were 228 female and 184 male secondary and higher secondary schools located in Lahore.

Sampling

According to Zikmund (2003), a sample is a subset of a larger population whose unexplained characteristics are being studied. Random sampling procedure was used to drawn sample from the population [12]. In a simple random sample, every member of the population has the same probability of being selected as a sample participant [13]. The researcher selected 5 male and 5 female secondary and higher secondary school by lottery method. The researcher wrote the names of the schools on the pieces of paper. Then the papers rolled up and shuffled in the bowl. The researcher asked the fellow to take up 2 rolled papers from the bowl 5 times. Then conducted data from 25 female and 25 male students from secondary school and 25 female and 25 male students from higher secondary school. Therefore, 100 male and female (Male= 50 and Female=50) students were selected by using random sampling technique as per availability of the respondents.

Table 2. Demographic Information of the Respondents.

Demographics	F	%
Qualification		
Matric	50	50
Intermediate	50	50
Others		
Gender		
Male	50	50
Female	50	50
Age		
16-18 Years	71	71
18-20Years	29	29

Instrument

The current study utilized closed ended questionnaire. The questionnaire was self-structured and adapted Form-WTAS (Westside Test Anxiety Scale) with prior permission via email. Minor adjustments were made in the light of pilot testing to ensure that items are clear to the respondents and precisely mirror the original meaning. Instruments were comprised of three sections. In first section information was collected regarding demographic characteristics of the sample. Second and third section measured all the variables. The questionnaire is a research instrument that may be used to collect data for quantitative and occasionally qualitative research purposes. The questionnaire is the most often used instrument for gathering data from research participants and is used for a wide variety of objectives. Researchers acquire accurate data that will be analyzed in the future [14]. According to the study's goals, it gathers information and comments from participants [14]. As a result, the survey was divided into three sections.

First Section Demographic Variable

First section was collected information regarding demographic characteristics of the sample. To collect demographic information from respondents, the researcher developed the questionnaire that consists of gender, age, and qualification.

Problem Faced During Board Exam

Second section measured the problem faced by during board exam and effect of these conditions on the academic grades. This section consisted of 31 items.

Table 3. Students' problems subscales with Number of Items.

Sr. no.	Subscales	Items
1	Academic Performance	1,2,3,4,5,6,7
2	Electronic Device	8,9,10,11
3	Safety Measurements	12,13,14,15,16,17
4	Teaching Factors	18,19,20,21
5	Time Managements	22,23,24,25
6	Personal Characteristics	26,27,28,29,30,31

Exam Anxiety in COVID-19

Third section consisted of students' exam anxiety during COVID-19 and poor concentration on exam due to COVID-19 fear. This section consisted of 10 items.

Table 4. Exam Anxiety Subscale with Number of Items.

Sr. no.	Subscales	Items
1	Exam Anxiety	1,2,3,4,5
2	Concentration	6,7,8,9,10

Table 5. Interpretation of Cronbach's Alpha Coefficient. (George & Mallery, 2016)

Interpretation	Strength
Excellent	>.9
Good	>.8
Acceptable	>.7
Questionable	>.6
Poor	>.5
Unacceptable	>.5

Table 6. Alpha Reliability Coefficients by Scale.

Variable	N	Items	A
SP	50	31	.71
WTAS	50	10	.89
Overall reliability	50	41	.65

Data Collection

The recorded authentic material might be used as needed to verify the study findings. As a matter of fact, it is widely acknowledged in the scientific community [15]. These data came from students since they are the units of measurement used in statistical analysis. Rating instructions were included on a questionnaire that participants may fill out anonymously. Respondents' responses were kept

confidential. The principal of each high school was the first person the researcher contacted to get permission to gather data from kids there. A questionnaire was used by the researcher to gather information. Participants might take part anonymously. Students were given the option to leave tests if they did not wish to answer any of the questions. There were scheduled meetings in which the data was gathered. In the discussion, the researcher went through all of the instrument's specifics, including how to grade the survey. The questionnaire explanation and distribution took around 15-20 minutes. Filling out the survey took over 20 minutes for the respondents. After the conclusion of each school, questionnaires were collected.

Data Analysis

Statistics are used in data analysis to discover relationships between variables [16]. There are two stages of data analysis: variance and normalcy [17]. By inputting individual replies and the sum of individual responses by upper secondary schools for analysis. Individuals' answers on each item used in the research were gathered from high school students in the area. Software for Social Science (SPSS) version 16 was used to analyze the data. All demographic and subscales were incorporated in the statistical technique of study to describe skewness and kurtosis; frequency distribution; mean, median; standard deviation; and range. The reliability coefficient was determined for each scale in order to assess the scale's dependability [18]. Correlation and regression analysis were used to investigate the association between students' (SP) and board exam anxiety (WTAS).

Results

Following were the findings of the current study:

The perception of students' performance regarding COVID-19 effect on students' performance in board exams. The mean score for the respondents of the study SP scale was 1.037 which indicated the student's rated SP score lower than scale median (2.5) on five-point Likert type rating scale. The student's performance form (SP) ranged from strongly disagree (1) to strongly agree (5). The result of the findings revealed that the sub scale AP has highest value (M=24.09, SD=3.21956). The findings indicated that the sub scale TM has lowest value (M=12.63, SD= 2.69925). The mean and standard deviation of SP is 1.037 and 11.01652 respectively.

The perceptions of secondary and higher secondary school students regarding CONVID-19 effect on students' board exam anxiety. The mean score for the respondents of the study WTAS scale was 35.56 which indicated the student's rated SP score higher than scale median (2.5) on five-point Likert type rating scale. The student's performance form (SP) ranged from strongly disagree (1) to strongly agree (5). The findings revealed that the subscale exam anxiety (EA) has the highest value (M=18.3000, SD= 3.82047). The findings revealed that lack of concentration (LC) subscale has the lowest value (M= 17.2600, SD= 4.01165). The mean and standard deviation of WTAS is 35.5600 and 7.05579 respectively.

The impact of student performance on board exam anxiety regarding COVID-19 on secondary and higher secondary student. The findings of the current study revealed that correlation analysis was conducted by using Pearson r between subscales. Pearson product moment correlation coefficient was utilized. The variable SP has strong negative relationship with WTAS (r=0.566; $p < .05$). When WTAS increased, SP decreased as they have strong negative relation. In order to find out the significant effect of students' performances on board exam anxiety regarding COVID-19, linear regression analysis conducted. The WTAS-explained variance in SP can be seen in the model's summary. Dependent variables SP and

WTAS was independent variable (β = -.058, F= .332, p=.00). The value of R^2 was .003. Statistically significant results can be found in the regression model. This indicated that SP highly associated with WTAS.

Difference in perceptions of SP on the basis of gender. The findings of the study revealed that female and male perceptions regarding SP subscales (academic performance, electronic device, safety measurement, teacher factor, time management, personal characteristics) were reported as significantly at p≤.05 level of significance. The variable AP reported highest mean and standard deviation, (M= 24.86, SD=3.53) in male and (M= 23.86, SD= 2.69) in female. The variable PC was reported not significant.

Difference in perceptions of SP on the basis of age. The t-test used to reveal the findings of the study to compare the mean score of SP with the subscales based on their age. Which provided the results of perceptions regarding students' performance based on age groups. In this regard the subscales (academic performance, electronic device, safety measurement, teaching factor, and time management) were reported not significant at p≤.05 level of significance. The variable AP has highest mean and standard deviation (M= 24.07, SD= 3.09) in age group from 16-18 and (M=24.13, SD= 3.55) in age group from 18-20 respectively.

Difference in perceptions of SP on the basis of qualification. The findings of the study revealed that t-test was used to compare the mean score of student performance subscales based on their qualification. In this regard the subscales (academic performance, electronic device, safety measurement, teaching factor, and time management) were reported significant at p≤.05 level of significance based on qualification. The variable AP has highest mean and standard deviation (M= 24.86, SD= 3.53) in matric qualification group and (M=23.32, SD= 2.69) in intermediate qualification group respectively.

Difference in perceptions of WTAS on the basis of gender. The findings of the study revealed that t-test was used to compare the mean score of student's anxieties in board exam subscales based on their gender. In this regard male and female students' perceptions regarding anxiety in board exam due to COVID-19 sub-scales (exam anxiety, lack of concentration) were reported as not significantly at p≤.05 level of significance. The variable EA reported highest mean and standard deviation, (M= 18.54, SD=2.83) in male and (M= 18.06, SD= 4.62) in female.

Difference in perceptions of WTAS on the basis of age. The findings of the study revealed that t-test was used to compare the mean score of students' anxieties in board exam subscales based on their age groups. In this regard the subscales (exam anxiety, lack of concentration) were reported not significant at p≤.05 level of significance. The variable EA has highest mean and standard deviation (M= 18.32, SD= 4.83) in age group from 16-18 and (M=18.24, SD= 4.83) in age group from 18-20 respectively.

Difference in perceptions of WTAS on the basis of qualification. The findings of the study revealed that t-test was used to compare the mean score of student's anxieties in board exam subscales based on their qualification. In this regard the subscales (exam anxiety, lack of concentration) were reported not significant at p≤.05 level of significance. The variable EA has highest mean and standard deviation (M= 18.70, SD= 3.11) in matric qualification group and (M=17.90, SD= 4.40) in intermediate qualification group respectively.

DISCUSSION

The aim of the current study was to investigate the problems faced by students in board exams during COVID-19. The findings of the study revealed significant relation between exam anxiety and students' performance during COVID-19.

The perception of students' performance regarding COVID-19 effect on students' performance in board exams. The mean score for the respondents of the study SP scale indicated the student's rated SP score lower than scale median. Similar results demonstrated by much research [9, 10, 19, 20, 21, 22].

The perceptions of secondary and higher secondary school students regarding COVID-19 effect on students' board exam anxiety. The mean score for the respondents of the study WTAS scale is found agree as higher than scales median. Similar results demonstrated by many research works [23, 24, 25, 26].

The impact of student performance on board exam anxiety regarding COVID-19 on secondary and higher secondary student. The findings indicated Statistically significant results found between students' performance and their anxiety level in board exam during COVID-19. The results indicated that SP highly associated with WTAS. During COVID-19 students exam anxiety level put significant effect on their students' performance and students faced a lot of challenges during pandemic [27]. The parallel results were given by [20, 28, 29, 30]. The students' performances greatly influenced by the challenges faced by students like poor internet availability or connection with teachers. As a result, students must wait for a response from the course teacher when they have questions or concerns about the material they're studying online, and it put significant impact on their exams anxiety due to poor clarity related to subject matter [8].

Difference in SP and WTAS on the basis of demographical variable, it found that the values of all variables SP were significantly different based on gender and qualification. While on the other hand no significance difference reported on the basis of age in both variables (SP, WTAS). While on the other all variable of WTAS also found non significance result reported based on gender and qualification. No statistically significant differences were found among males and females regarding WTAS. Although overall mean scores between males and females did not clarify a statistical difference, when exploring the levels of anxiety there was a 9.8% of females that report extremely high anxiety and another 9.8% that report high test anxiety [31]. According to several studies conducted throughout the world, with high school students showing no age group difference [32]. A similar conclusion was obtained in research that was carried out in Jizan on undergraduate students to evaluate general levels of anxiety [33]. These results are consistent with the findings of earlier studies [34]. However, some research has shown that men experience greater levels of anxiety than women do or that there are no gender differences in anxiety levels [35].

Conclusion

It was concluded from the study that aimed to explore student anxiety and performance in board exams during COVID-19 at secondary and higher secondary levels are:

- Anxiety during board exams significantly affected students' performance.
- Students experienced poor academic grades due to issues like lack of electronic devices, poor internet, ineffective time management, teacher inefficiency in using technology, and poor safety measures in exam halls.
- These problems led to increased anxiety and lack of concentration among students during board exams.
- There was a strong negative correlation between student performance and willingness to take exams (WTAS).
- No significant gender differences were found in anxiety levels, but male and female perceptions differed regarding academic performance and factors like technology, safety, and time management.
- Significant results were found based on students' performance, but not based on WTAS or students' age.

Recommendations

The current study recommends future research in several areas.

- This study focused on Lahore government schools; future research should cover other cities in Punjab.
- Participants were secondary and upper secondary students; future studies should include elementary level.
- A comparison between students' and adults' perspectives is recommended.
- Larger sample sizes may lead to more positive findings.
- Future studies should use longitudinal surveys for better insights into variables.
- Qualitative research should be used to explore the connection between WTAS and SP.
- Such research would help verify earlier findings.

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