15 -ാം കേരള നിയമസഭ

12 -ാം സമ്മേളനം

നക്ഷത്ര ചിഹ്നം ഇല്ലാത്ത ചോദ്യം നം. 1425 **10-10-2024 - ൽ മറുപടിയ്ക്ക്**

എസ്.സി.ഇ.ആർ.ടി. കോവിഡ് കാലത്ത് നടത്തിയ ഗവേഷണ പഠനം

ചോദ്യം		ഉത്തരം	
ഡോ. മാത്യു കുഴൽനാടൻ		ശ്രീ വി ശിവൻകുട്ടി (പൊതുവിദ്യാഭ്യാസ-തൊഴിൽ വകുപ്പ് മന്ത്രി)	
(എ)	"കോവിഡ് - 19 കാലഘട്ടം കേരളത്തിലെ സ്കൂൾ വിദ്യാർത്ഥികളുടെ അക്കാദമികവും മനോസാമൂഹികവുമായ അവസ്ഥ" എന്ന പേരിൽ, എത്തിക്സ് കമ്മിറ്റിയുടെ അനുമതി ഇല്ലാതെ ചട്ടവിരുദ്ധമായി/നിയമവിരുദ്ധമായി നടപ്പിലാക്കിയ ഗവേഷണ പഠനത്തിനായി, നം.പി4 / 1819 / 20 എസ്.സി.ഇ.ആർ.ടി (തീയതി 19.12 .2020), നം.പി4 / 1819 / 2020 എസ്.സി.ഇ.ആർ.ടി (തീയതി 21 .06 .2021) എന്നീ ഉത്തരവുകൾ പ്രകാരം, എസ്.സി.ഇ.ആർ.ടി. പ്ലാൻ ഫണ്ടിൽ നിന്നും 7,68,662/- രൂപ അനുവദിച്ചു നൽകിയത് എന്ത് മാനദണ്ഡങ്ങളുടെ അടിസ്ഥാനത്തിലാണ് എന്ന് വ്യക്തമാക്കാമോ;	(എ)	റിസർച്ച് എത്തിക്സ് കമ്മിറ്റിയുടെ അനുമതിയില്ലാതെ നിയമവിരുദ്ധമായി ഗവേഷണ പഠനം എസ്.സി.ഇ.ആർ.ടി നടത്തിയിട്ടില്ല. കേരളത്തിലെ പൊതുവിദ്യാലയങ്ങളിലെ കുട്ടികളുടെ മാനസികാവസ്ഥ സംബന്ധിച്ച് ആധികാരിക പഠനങ്ങളോ വിവരങ്ങളോ വിരളമായ സാഹചര്യത്തിൽ 2018-19 വർഷത്തിലാണ് **SCERT, Psychological Problems and management in Public Funded Schools in Kerala** എന്ന പഠനം ഏറ്റെടുത്ത് നടത്തുന്നത്. ഇത്തരം പ്രവർത്തനങ്ങളിൽ ഉന്നത വിദ്യാഭ്യാസ സ്ഥാപനങ്ങളുടെ സഹകരണം തേടാമെന്ന് SCERT ജനറൽ ബോഡി തീരുമാനിക്കുകയുണ്ടായി. ഈ മേഖലയിൽ ഗവേഷണം നടത്തുമ്പോൾ ഒരു റിസർച്ച് എത്തിക്സ് കമ്മിറ്റിയുടെ മേൽനോട്ടവും അനുമതിയും ഉണ്ടാവുന്നത് നല്ലതാണെന്ന പഠനത്തിന് നേതൃത്വം നൽകിയ അക്കാദമിക് കോർഡിനേറ്ററുടെ നിർദ്ദേശ പ്രകാരമാണ് ആദ്യമായി SCERT യിൽ 2018 - 19 വർഷത്തിൽ എത്തിക്സ് കമ്മിറ്റി രൂപീകരിക്കുന്നത് . ആ പഠനത്തിന് നേതൃത്വം നൽകിയ അക്കാദമിക് കോഡിനേറ്ററാണ് കോവിഡ് കാലത്തെ പഠനത്തിന്റെയും അക്കാദമിക് കോഡിനേറ്ററായി പ്രവർത്തിച്ചത്. ഈ പഠനത്തിലും റിസർച്ച് എത്തിക്സ് കമ്മിറ്റി പ്രത്യേകമായി യോഗം ചേർന്ന് പഠനത്തിന്റെ വിശദാംശങ്ങൾ സൂക്ഷ്മമായി പരിശോധിക്കുകയും പഠനം തുടരാൻ നിർദ്ദേശിക്കുകയും ചെയ്തിട്ടുണ്ട്. ഇതിന്റെയെല്ലാം അടിസ്ഥാനത്തിലാണ് ഗവേഷണ പഠനം നടന്നിട്ടുള്ളത്. പ്രസ്തുത ഗവേഷണത്തിനായി 7,68,662/-രൂപ ചെലവഴിച്ചതിന്റെ യൂട്ടിലൈസേഷൻ സർട്ടിഫിക്കറ്റ് ഗവ. വനിത കോളേജിലെ പ്രിൻസിപ്പൽ നൽകിയിട്ടുണ്ട്.

(ബി)	പ്രസ്തുത ഫണ്ട് 11-06-2018 ലെ സ. ഉ. (പി).നം. 88/2018/ധന. എന്ന സർക്കാർ ഉത്തരവിലെ വ്യവസ്ഥകൾക്ക് വിരുദ്ധമായി ചെലവഴിച്ചതിന്റെ കാരണം വ്യക്തമാക്കാമോ;	(ബി)	**പഠനത്തിനായി ഓരോ ഘട്ടത്തിലും വിവിധ ശിൽപശാലകളും ഫിൽഡ് സന്ദർശനങ്ങളും പരിശീലനങ്ങളുമെല്ലാം സംഘടിപ്പിച്ചത് SCERT പിൻതുടരുന്ന രീതികളനുസരിച്ചാണ്. ഓരോ ഘട്ടത്തിലും നടപ്പാക്കേണ്ട പരിപാടിയുടെ നിശ്ചിത ഫോർമാറ്റിലുള്ള പ്രൊപ്പോസൽ തയ്യാറാക്കുകയും, ആയത് സൂക്ഷമായി പരിശോധിച്ച് നിയമപരമായും ചട്ടപ്രകാരവുമാണെന്നുറപ്പാക്കുകയും പരിപാടി നടത്താനുള്ള ഉത്തരവ് പുറപ്പെടുവിക്കുകയും അതനുസരിച്ച് ടി പ്രവർത്തനങ്ങൾ സംഘടിപ്പിക്കുകയുമാണ് ചെയ്തിട്ടുള്ളത്.**
(സി)	എസ്.സി.ഇ.ആർ.ടി. യുടെ ധനസഹായത്തോടെ നടത്തിയ പ്രസ്തുത പഠന റിപ്പോർട്ടിന്റെ പൂർണമായ പകർപ്പ് നൽകാമോ;	(സി)	പഠനത്തിന്റെ റിപ്പോർട്ട് അനുബന്ധമായി ചേർത്തിട്ടുണ്ട്.
(ഡി)	എത്തിക്സ് കമ്മിറ്റിയുടെ അനുമതിയില്ലാതെ ഇങ്ങനെ ചട്ടവിരുദ്ധമായി/ നിയമവിരുദ്ധമായി ഗവേഷണ പഠനം നടത്തിയതിനും സർക്കാർ ഫണ്ട് ചെലവഴിക്കുന്നതുമായി ബന്ധപ്പെട്ട സർക്കാർ ഉത്തരവിന് വിരുദ്ധമായി തുക ചെലവഴിക്കുകയും ചെയ്ത ഗവേഷകർ/ ഉദ്യോഗസ്ഥർക്കെതിരെ നടപടികൾ എടുക്കാതിരിക്കുന്നതിന്റെ കാരണം വ്യക്തമാക്കാമോ?	(ഡി)	SCERT ഡയറക്ടറുടെയും, റിസർച്ച് കമ്മിറ്റിയുടെയും എത്തിക്സ് കമ്മിറ്റിയുടെയും നിർദ്ദേശാനുസരണവും മേൽനോട്ടത്തിലുമാണ് പഠനം നടന്നത്. കോവിഡ് മഹാമാരിക്കാലത്ത് ഒട്ടേറെ നിയന്ത്രണങ്ങൾ നിലനിൽക്കുമ്പോൾ ഫീൽഡ്, സന്ദർശനവും വിവരശേഖരണവും ദുഷ്കരമായ സാഹചര്യത്തിലും ഫലപ്രദമായ രീതിയിൽ പഠനം പൂർത്തീകരിക്കാനും റിപ്പോർട്ട് പ്രസിദ്ധികരിക്കാനും കഴിഞ്ഞിട്ടുണ്ട്. തുടർന്ന് നിയമസഭയിൽ നടന്ന പല ചർച്ചയിലും ഈ റിപ്പോർട്ട് ഉദ്ധരി ക്കുകയും ചർച്ച ചെയ്യുകയും ചെയ്തിട്ടുണ്ട്. നിയമസഭക്ക് അകത്തും പുറത്തും ചർച്ച ചെയ്യപ്പെട്ട പഠന റിപ്പോർട്ട് നമുക്ക് മുൻപരിചയമില്ലാത്ത കോവിഡ് പോലുള്ള ഒരു മഹാമാരിക്കാലത്തെ അതിജീവിച്ചതിനെ സംബന്ധിച്ചുള്ള രേഖയാണ്.

സെക്ഷൻ ഓഫീസർ

Academic and Psychosocial Functioning of School Students of Kerala in Times of COVID-19

REPORT

Research Study conducted by
State Council of Educational Research and Training
and
Psychological Resource Centre,
Government College for Women
Thiruvananthapuram

2021

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Report layout

Bhattathiri

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SCERT Kerala & Psychological Resource Centre
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PART -1
FOREWORD

The integrity of the Keralites in braving the challenges of life and tiding over crises making maximum use of available opportunities was evident in the field of education during the COVID-19 pandemic. The situation during the pandemic was unusual: educational institutions were closed down and the children confined to the four walls of their homes. At this critical juncture we could, with the assistance of technology, intervene effectively to prevent the standstill of education. It was decided to start digital classes since the schools could not function as usual. The various sections of the General Education Department were pressed into service. As a result of the combined effort, online classes could be streamed on 1st June itself, despite the prevailing restrictions imposed as COVID protocol. The classes streamed on KITE-VICTERS, the comprehensive education channel, garnered unprecedented acceptance and support. The mission of our State to help the students back on to the track of learning, making use of television as the main medium with the support of social media, gained international acceptance and approbation. The study report of UNICEF records the excellence of the Kerala model in comparison with the educational activities elsewhere.

School education finds completion and fulfillment only in a social situation marked by the symbiotic relationship of teachers and students. Digital technology is a strategy to be used with discretion when the situation demands. We resorted to digital technology in the unusual context of the lockdown of all kinds of face-to-face classes. The system was generally accepted as a stop gap arrangement. Yet, an objective assessment of general access to digital equipment, the fruition of classes and the physical and mental tension of students is needed to put in place policies regarding the evolving system of education. It was under these circumstances that SCERT along with the Psychological Resource Centre of Government College for Women planned this research.

The study was conducted during September-December 2020. The report was prepared, collecting data from students, parents and teachers of selected schools, paying

visits to tribal areas and holding consultations with experts. It is hoped that this report will help in the fruitful use of digital technology and in ensuring the desired psychosocial development.

Dr J Prasad
Director
SCERT, KERALA

MESSAGE

COVID -19 has had its impact in the entire world. It brought in a crisis in all walks of life, and we have had a tight rope walking. Though we have learned several lessons from COVID, it has toppled several other things in life such as peace of mind and financial stability. The pandemic had its impact on the educational field too.

It is very significant that the Psychological Resource Centre working under the Department of Psychology of the Govt. College for Women has reached an agreement with the SCERT to conduct a study in the background of the situation when the schools are closed down and education has become digital. The study aims at understanding the direct and indirect impact of COVID on students.

The study has been completed after observing all the criteria and utilizing Information Technology very fruitfully. The findings of the study need a broad analysis. It will help solve the problems faced by students to a certain extent. I would like to congratulate the two institutions that took up this study. I wish continuity for the study and also the cooperation between the two institutions. I express gratitude to the Kerala government for extending assistance to such ventures.

I also express gratitude, love and obligation to all those who have given inspiration to the study. I submit the report with pride and satisfaction.

Dr Aravind Krishnan K
Principal, Govt College for Women,
Thiruvananthapuram

CONTENTS

PREFACE

The General Education in Kerala has been treading the steps of excellence during the past years. It was in the midst of our leap to achievements that the pandemic COVID-19 provided us with an experimental phase. It is remarkable that in this crucial situation our State could retain the students in the path of learning with the help of social participation and technological support.

Several studies have so far been conducted about the prompt steps taken by the State in the educational field during the COVID situation. Several findings have come out including that of UNICEF reporting the excellence of the State in comparison with other States. Though the schools remained closed during the past one year, the digital medium has come to our assistance to get over the crisis. Hence it is appropriate to study the use of digital devices in the field of education in future. It is also very important in the concern about the future to study, apart from the accessibility of digital education, the educational and psychosocial stability of the students and their family members. It was under these circumstances that the SCERT conducted a comprehensive study about the school education, in association with the Psychological Resource Centre of the Government College for Women, Thiruvananthapuram.

The study was planned and conducted at the time when the spread of the contagion was at its peak. That we could get over hurdles that came up at different stages of the research and we could finish it and bring out the report is a matter of great satisfaction. We are thankful for the support and help extended by authorities of SCERT, Govt. College for Women and the Education Department. Several schools in different areas cooperated in the study. We express our profound gratitude to the students, parents, teachers and Counselors who participated in the study and the investigators who collected data for the study in very adverse circumstances. We also thank the Department of Women and Child Development, the State Crime Records Bureau, T K Anandi, Gender advisor to State, and the subject experts who have given us the necessary guidelines. We hope that the study will shed light on areas like School

education during the days of COVID, Digital Learning, Mental Health of students during the days of COVID and the Wellness of Families.

Shiju Joseph
Maya Menon
TV Vineesh
Sajeev Thomas

Chapter 1

Introduction

Chapter - 1
Introduction

1.1. Background of the Study:

COVID 19 that brought about a crisis in human life across the world right from the beginning of the Year 2020 had adversely affected the entire field of education. But the educational field in Kerala took up the challenge without any delay. The digital system enabling the students to participate in the learning process started functioning at the beginning of the academic year 2020-21 itself. The COVID pandemic has brought about a drastic change in the general functioning of life and learning. As the schools were closed down, the learning process came to be centred in the houses. Social contact and contact with friends were almost snapped. It is quite appropriate in this context to subject the educational and psychosocial domains of both students and their parents to a serious study. COVID will continue to remain a serious threat. Research enabling the educational field to take precautionary measures becomes imperative in such a context.

Several studies have been conducted at the international level to find out the social impact of COVID 19 among school students. It has been found that the closure of schools had its impact not only on the concentration and learning activities of students, but also on their physical alertness, nutrition and daily habits. COVID also had its vicious impact on the psychosocial activities, family relations, social development, social relations and the mental development of students. The studies reveal that the mobile phones and the internet have helped the students and families cope up with the COVID situation. But the increased use of these gadgets has led to the symptoms of anxiety and depression among students. A meta analysis of important studies published towards the end of 2020 in this area (Wu et.al., 2020) points out that the average percentage of students with depression is 34.8 and those with anxiety is 28.2.

Mental health professionals predict that the negative impact of COVID on the mental health of students will continue in the coming years. It is hence imperative to study the measures that are to be taken to get over the crisis. The increasing number of suicides among school students has been discussed at several levels in Kerala. Several agencies have taken steps like tele-counselling to prevent this. Yet it is a necessity to study about the long term measures to prevent this.

The present study has been planned under these circumstances. The relevance of the study is that it comprehensively deals with a crucial period of time so as

to assist the future studies. It is hoped that the findings of the present study will help in planning the activities to tide over the crisis created by the COVID.

1.1. Duration of the Study:

From 1st September 2020 to 31st December 2020

1.2. Structure of the Study Report:

The report has been prepared in four chapters: Introduction, Methodology, Data Analysis, Summary and Conclusion.

The present study contains a good number of variables. A detailed analysis and reporting are essential when the variety and number of questionnaires are taken into consideration. Considering the practicality and readability, attempts have been made to make the report brief. Detailed statistical tables have been avoided. Out of the seven questionnaires administered, the English version of the most important among them is appended to the report.

Chapter 2

Methodology of Research

Chapter - 2
Methodology of Research

The Methodology of Research is briefly explained in the chapter.

2.1. Objectives:

The general objective of the study is to find out the psychosocial functioning of school students during the COVID pandemic and to formulate suggestions in accordance with the findings.

Detailed objectives are given below:

1. To find out the extent of availability of digital learning tools during the period of COVID pandemic.
2. To find out the accessibility and participation of school students in the digital classes.
3. To identify the academic and psychological needs of the students of weaker sections.
4. To find out the extent of anxiety and depression among High school and Higher Secondary students.
5. To find out the factors related to the feelings of depression, anxiety, worry about future and self harm tendency among students.
6. To find out the factors behind the suicide of students during the period of COVID pandemic.
7. To find out the economic and psychological difficulties faced by parents of school students during the period of COVID pandemic.
8. To find out the academic and psychosocial functioning of teachers during the period of COVID pandemic.
9. Based on above findings, suggest the planning of preventive measures related to mental health during school closures and reopens.

2.2. The Design of the Research:

The present study is a cross-sectional descriptive study using qualitative and quantitative methods.

2.3. Preparation of the Research:

Primary Studies and Discussions: The study has been designed based on extensive research review, data collection and discussions with investigators, consultants, heads of various institutions under the Education Department and

heads of various educational agencies. This was followed by interviews and focus group discussions with educators, psychologists and experts in the medical field. In addition to this, a pilot sample of Students (45), Parents (30), Teachers (20) Counsellors (3), and Souhrida Club Coordinators (3) were also interviewed.

Questionnaires: Questionnaires that could capture extensive, varied and comprehensive information were prepared on the basis of primary studies and discussions. The research team prepared the questions to elicit sociodemographic information of the participants. Questionnaires were further revised with the help of experts. Globally accepted standardized psychological tools have been used to evaluate personality traits and psychological functioning.

Permission of Research and Ethics Committee: The synopsis and protocol of the research along with the questionnaires were presented before the Research and Ethics committee of the SCERT on 24 September 2020 and permission obtained. Questionnaires and other data collection tools have been modified by incorporating the recommendations of the Expert Committee.

Pilot Study:

Questionnaires were circulated among 40 students between the 5th and 10th of October. Based on the responses, these students and their parents were interviewed and feedback was collected. The Questionnaires were then finalized. Printed as well as online version of questionnaires were prepared both in English and Malayalam.

Data Collection:

The main data collection of the study was conducted from 1st to 20th November 2020. The relevant orders and permissions for this were obtained from the concerned department heads.

2.4. Sample:

Method of Sample Selection:

The method adopted was to select a school sample proportionate to the strata determined and to recruit a subsample of students from the schools. The data collection was quite difficult due to the restrictions imposed by the COVID situation. Anticipated number of samples could not be obtained as a result of COVID-related restrictions including containment zones. But the proportion of the strata of the sample could almost be retained.

Schools were selected in the initial stage of sampling.

Schools:

Data were collected from 85 selected schools from among all the districts of the State. Representative institutions were selected based on the opinions and suggestions of SCERT and other educational agencies. Strata were determined considering the similarities and differences of factors like population, topography and socio-cultural features. Due representation was given to factors like North/ South/ Middle zones of the State, Panchayat/ Municipality/ Corporation areas, Government/ Aided Schools and Schools of mixed and other types.

After the selection of schools, the students and other categories involved in the study were selected.

- **Students:** In conformity with the sampling method adopted globally in similar studies and also from the expert opinion received from the primary studies, students of 1st, 3rd, 5th, 7th, 9th, 10th and 12th standards were selected. It was decided only the alternate standards needed to be sampled. It was also decided that the students of the 9th standard needed to be studied as they belonged to the adolescent stage who had the mental development to understand the questionnaire. Admission to the 11th standard had not commenced at the time when the study was started. Hence the students of 9th, 10th, and 12th standards were subject to the study based on the detailed questionnaire.
- **Parents:** The parents of the same set of students have been made part of the study.
- **Teachers:** Selected teachers teaching in all classes and the Headmasters participated in the study.
- **School Counselors:** Psychosocial counselors assigned to schools through the Department of Women and

Child Development participated in the study. Their list was provided by the Department of Women and Child Development. In addition to the detailed survey, telephone interviews were conducted with selected counselors.

- **Souhrida Club Coordinators:** Coordinators of selected Souhrida clubs who were working in the field of school mental health participated in the study. The list of the Coordinators has been provided by the Career Counselling Cell of Higher Secondary Schools. Detailed survey and online interviews were conducted with the Coordinators.
- Discussions were held with students, teachers, and groups of parents, and students, teachers and parents of schools of different areas. These opportunities were used for providing primary psychological support also.
- In addition to this, students with special needs and their parents also cooperated in the study.
- Parents and teachers of students who committed suicide also cooperated in the study. Primary data for this part of the study was made available by the State Crime Record Bureau. Discussions with Educationists, Psychologists and Teachers were used for the study.
- Extensive field studies were held in tribal areas.

The Strategy of Selecting Sample from each School:

Primary information was collected from the Principal and Headmaster. One division each from the classes 1, 3, 5, 7, 9, 10, 12 was selected. 'Stratified sample' from each division was prepared after consultation with the class teachers. Students were selected after taking the gender, socio economic condition, academic excellence and category as 'strata'. Attempts were made to include differently- abled students and students with family members who died of COVID and children of parents who were the frontline warriors against COVID.

A parent (either mother or father) of each student selected in this manner was included in the parent-sample.

A teacher, one from each class, was included in the Teacher-sample.

A unique code has been given to each student who participated in the survey, based on the school, class and strata. Those who participated in the survey needed only give this code after answering the questionnaire. Their name and other details were not called for. The research team separated the details of the strata after de-coding them.

Methods of Data Collection:

1. Questionnaires - Printed version directly and through online mode
2. Interviews – Direct and Online
3. Group Discussions - Online mode
4. Field Visits

Number of Available sample:

The number of completed responses by the end of the study is given below:

Survey Sample:

- Schools: 85 (in 14 districts)
- Students: 2829
- Parents: 2466
- Teachers: 412
- School Counsellors: 176
- Souhrida Club coordinators: 53

Qualitative Studies:

- Discussions at the school level: 6
- Focus group discussions with Parents, Students and teachers: 5
- Adivasi settlements (in 2 districts): 10
- Parents of students with special need: 6
- Parents of students who committed suicide: 4
- Experts: 15

Details of Sample of Students:

The table given below contains the details of the sample of students prepared on the basis of completed questionnaires.

Class	
1	331
3	317

5	324
7	328
9	486
10	549
12	494
Total	2829
Medium	
English	1723
Malayalam	1106
Total	2829
School	
Government	1437
Aided	1392
Total	2829
Gender	
Male	1310
Female	1519
Total	2829
Category	
General	680
OBC	1808
SC	301
ST	40
Total	2829
Socioeconomic status	
APL	1467
BPL	1362
Total	2829
Place of residence	
Panchayat	2431
Municipality	291
Corporation	107
Total	2829
Specialty of the Locality	
Tribal Settlement	8
Coastal Area	51
High Range / Forest Area	95
None of these	2675
Total	2829
Rural / Urban	
Rural	2050
Urban	778
Total	2829
Region	
North Kerala	1251
Central Kerala	958
South Kerala	621
Total	2829

2.5. Field Investigators who Conducted Data Collection:

The data was collected by 42 investigators, who were either postgraduates in Psychology or postgraduate students in Psychology. Three days' online training needed for data collection was given to them. The services of Principal Field Investigators and Field Coordinators were ensured on all days of data collection for supervision and doubt clearance.

The field investigators gave the parents information about the survey, through teachers. Later, permission was obtained from parents and teachers after detailing the survey. Considering the convenience, questionnaires were given either online or directly as print. Printed questionnaires were made available for those who found difficulty in

providing answers online. Assistance for clearing the doubts, if any, was provided and the completion of the questionnaire was ensured. Investigators had to explain the questions to a few parents and recorded their answers in the questionnaire. Questionnaires were available both in English and Malayalam.

The data collection was conducted strictly observing the COVID protocols. Participants were provided with details of the research team and phone numbers of various helplines such as Childline and DISHA for psychological support if needed.

2.6. Tools used for Data Collection:

Interview: Interview conducted with Primary School Students

Based on the questionnaire titled S6, interviews were held either directly or online. The procedure was to obtain permission from parents initially after making them aware of the details of the study and then to talk with the students. Details collected in the interview included background information, basic amenities, details of Victers classes and follow-up classes, leisure time activities and interests, details about the emotional responses, day to day activities and experiences during the days of COVID-19. Time taken for the interview was approximately 30 minutes. There was no compulsion to answer the questions.

Questionnaires:

1. Questionnaire for High School and Higher Secondary School Students (S1,S4)

Data were collected either online through Google form or by print form. The details of the study were shared with both parents and students and their permission was obtained before asking them to answer the questionnaire. The questions included a wide range of topics such as personal details, family structure, the pressures brought in by COVID-19, learning strategies, interests, availability of amenities, 'Victers' classes and follow-up classes, daily learning routine, screen use, physical and mental health, activities during free time, social support, personality traits and family condition, emotional functioning, emotion regulation, ways of coping up difficulties and the excessive use of internet. Mental health, emotional regulation, coping and internet overuse were assessed through standardized questionnaires. Students were given guidelines as to how to fill in the questionnaire. Opportunity was provided by investigators to clear doubts about filling up the questionnaire.

The time needed to answer the questionnaire S1 was around 30 minutes. Those students who were unable to answer a long questionnaire due to lack of readiness / circumstances had been given another version, S4, excluding some detailed questions on mental functioning from the long questionnaire. 691 students filled up S1 and 834 filled up S4.

The English version of S1 is appended.

2. Questionnaire for Parents (S2, S5)

After sharing the details of the study and obtaining permission from parents, they were requested to fill in the questionnaire, the printed version or the one on online mode, supplied to them. Questions were related to several areas such as the different pressures of COVID-19, observations about the learning and behavior of their wards, physical and mental health, free time activities, social support, emotional functioning, personality traits and family functioning, emotional regulation, experiences during the days of pandemic, anxieties, experiences and the suggestions of parents. Parents were given guidelines as to how to fill in the questionnaire. Opportunity was provided by investigators to clear doubts about filling up the questionnaire.

The time needed to answer the questionnaire S2 was around 30 minutes. Those parents who were unable to spare enough time had been given another version, S5, excluding some detailed questions on mental functioning from the long questionnaire. 1590 parents filled up S2 and 876 filled up S5.

3. Questionnaire for Teachers (S3)

After sharing the details of the study and obtaining permission from teachers, they were requested to fill in the questionnaire, provided online through Google form.

The questions asked included accessibility and effectiveness of the digital classes, the skill and self confidence in digital teaching, observations about the learning and behavior of students, the mental health of students and their parents, personality traits and family functioning, incidents occurred during the days of COVID, anxieties, experiences, and their suggestions.

4. Questionnaire for School Counselors (S7)

After sharing the details of the study and obtaining permission from school counselors, they were requested to fill in the questionnaire, provided online through Google form. The questions were about the mental health problems reported by students and their parents during the days of the pandemic.

5. Questionnaire for the Souhrida Club Coordinators (S8)

Data were collected online in a manner similar to that of school counselors.

Standardized Questionnaires used in the Study

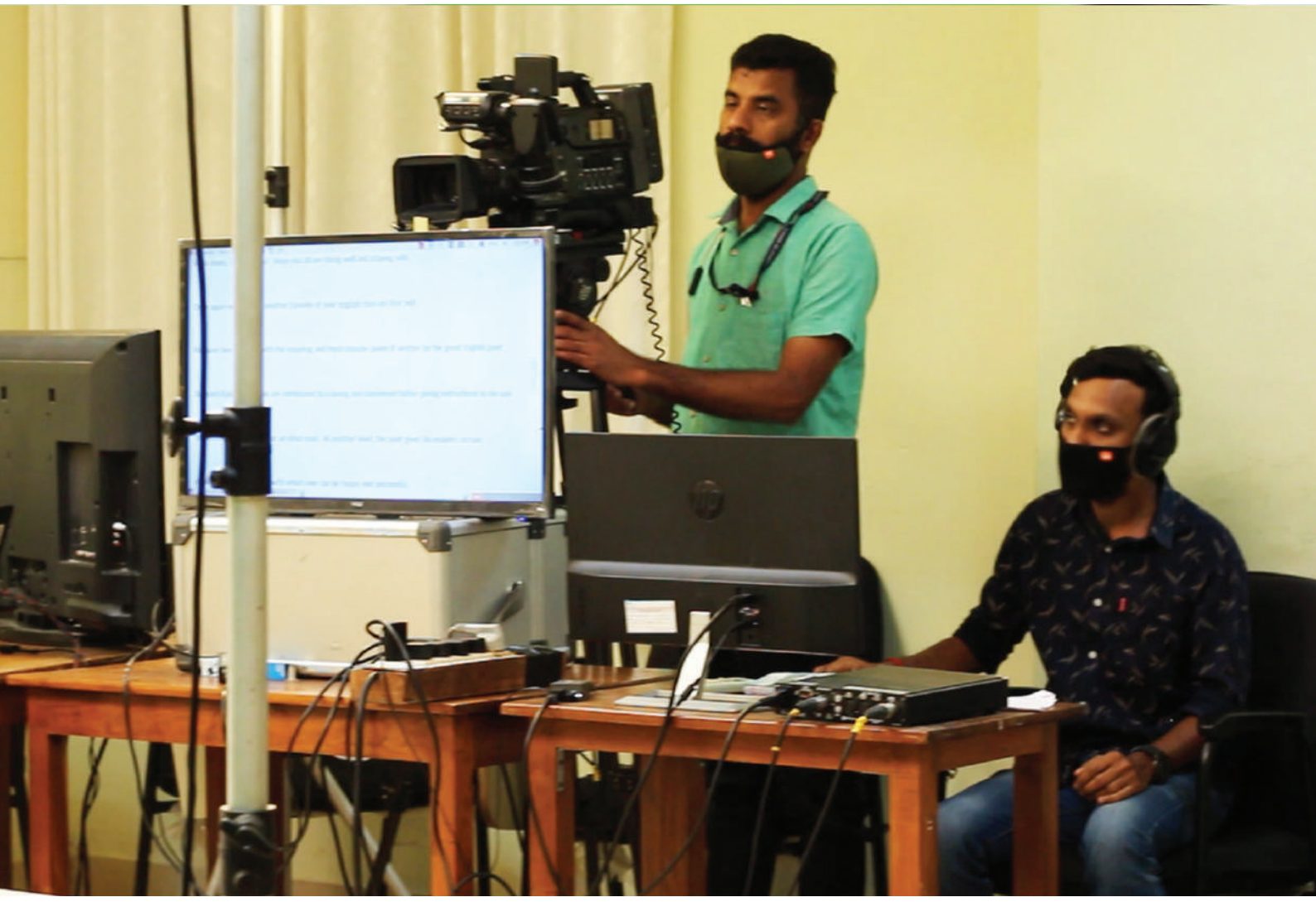
In order to ensure authenticity, standardized psychological tools were used to assess the main variables. This was incorporated into the main questionnaire. Malayalam translation was used in the Malayalam version. Permission is available to use these questionnaires for research purposes. A brief description of these questionnaires is given below:

1. **CoRonavIruS Health Impact Survey:** K. Merikangas, M. Milham, A. Stringaris (2020): Used to assess the impact of COVID and their extent. The study made use of the relevant sections of the questionnaire.
2. **Patient Health Questionnaire (PHQ-9/PHQ-2):** Spitzer, Williams and Kroenke (2001): Used to assess the prevalence and intensity of depressive tendency among students, parents and teachers. Malayalam translation is available.
3. **General Anxiety Disorder Questionnaire (GAD-7/ GAD-2):** Spitzer RL, Kroenke K, Williams JBW, Lowe B. (2006): Used to assess the prevalence and intensity of anxiety among students, parents and teachers. Malayalam translation is available.
4. **Big Five Inventory -2 Short Form (BFI -2XS):** Oliver P. John and Christopher J. Soto (2015): Used to assess the personality characteristics of students, parents and teachers.
5. **Difficulties in Emotion Regulation Scale (DERS-SF):** Gratz and Roemer (2020): Used to understand the difficulties in emotion regulation.
6. **Bergen Facebook Addiction scale (modified to general internet use):** Cecilie Schou Andreassen, Torbijorn Torsheim, Geir Scott Brunborg (2012): Used to assess the symptoms of excessive use of the internet.
7. **Brief COPE: Charles S. Carver (1997):** Used to assess the various methods adopted by individuals in coping with life stresses.
8. **UCLA 3 Item Loneliness Scale:** Russell, D. (2004): Used to assess the loneliness experienced by students and parents during the COVID days.
9. **Comprehensive General Parenting Questionnaire:** Ester F. C. Sleddens, Teressia M. O'Connor, Kathleen B. Watson, (2014): Used to obtain the report of parents on their parenting styles.

2.7. Methods used for Data analysis:

The data collected from various sources were analysed in the following ways:

1. Participation in online class and access to facilities were mainly described using percentage analysis and descriptive statistics.
2. Inferential Statistics was used to assess the rate and intensity of psychological difficulties. Chi- square and Correlation methods were mainly used. SPSS software was used for analysis.
3. Case studies and field studies were included as brief descriptive reports, prepared after discussions.



Chapter 3

Analysis of Data

Chapter - 3
Analysis of Data

This chapter deals with the analysis of data. They are grouped into 10 sections.

3.1. Access to Facilities

This section details the availability of tools for students during the COVID period. The information obtained from teachers and students are included separately.

3.1.1. Information Obtained from Teachers

According to the account given by headmasters, the percentage of availability of television among students in more than half of the schools (49) is between 95 and 100. All the students in 6 schools have television. According to the report of headmasters, the average of television availability is 93%. (The accurate information about the efficiency of television is not available with all the teachers. In very few places, the use of television is less due to local and communal reasons. Yet in the same schools, the use of smartphones is comparatively higher).

In 6 schools, the headmasters reported that all the students possess smartphones. There are still 4 schools that report nearly 50 percent of students in possession of smartphones. The average percentage of availability of smartphones is 87%.

Almost all headmasters (of 81 schools) reported that either the teachers or other agencies have provided television sets and smartphones to students who do not have one.

3.1.2. Information Obtained from High School/ Higher Secondary Students

A total of 1529 students belonging to High School and Higher Secondary School have participated in the study. The answers given by them to the questionnaire show that 1254 students (982%) have well functioning television at their homes. (The account given by teachers is about the availability of television. As per the student report, television sets in several houses are not functional).

The number of students who possess a laptop, personal computer or tab is 379 (24.79%).

The number of students who get access to smartphones for study purposes is 1490 (97.45%), which is higher than that of the report of teachers. A total of 328 students

(21.45%) have smartphones exclusively for their use.

The table below shows the details of the availability of smartphones of High School and Higher Secondary students.

Percentage of availability of smartphone for participation in digital/online classes	
A smartphone exclusively for a student	328 (21.45%)
A smartphone common to the student and siblings	367 (24%)
No smartphone available, but can access the smartphone of family members	795 (51.99%)
No access to smartphone	39 (2.55%)

Statistics show that the availability of smartphones is higher than that of the television.

The table shows the number of high school and higher secondary students who have purchased new facilities at home for digital learning during COVID period.

Percentage of households that purchased new learning equipments during COVID 19 pandemic	
Smartphone	359 (23.47%)
Internet facility	140 (9.16%)
Television	98 (6.41%)
Computer / PC / Tab	62 (4.05%)

3.1.3. Information Obtained from Primary School Students

Out of the total 1300 students of LP / UP Schools who participated in the study, 1140 (87.69%) have well functioning television in their homes. 1207 (92.87%) students have access to smartphones for study purposes.

3.1.4. Total Availability of Tools among Primary, High School, Higher Secondary Students

Among the students of Primary, High School and Higher Secondary classes, 84.62% have well functioning television in their homes. 95.33% have access to smartphones for study purposes.

3.2. Accessibility and Participation in Digital Classes

Details about the participation of students in the classes through 'Victers' channel and online classes are included here.

3.2.1. Accessibility of High School and Higher Secondary School Students to Victers Class

Among the High School and Higher Secondary students who participated in the study, 1440 (94.18%) were reported to have attended the Victers classes conducted by the General Education Department.

A total of 1517 students get opportunities to attend the Victers classes. Among them, 1474 students (96.4%) get the opportunity to attend the classes from their homes. 36 (2.35%) attend the classes from their relatives' houses and 7 (0.46%) make use of the learning centres.

Television was the medium used by 1048 (68.54%) students to participate in Victers classes. 593 (38.78%) make use of mobile applications or YouTube, either exclusively or apart from television.

3.2.2. Accessibility of Primary School Students to Victers Classes

During the period of lockdown, 1266 (97.38%) Primary School students were reported to have attended the Victers classes.

Among the Primary School students, 1261 (97%) attend

Victers classes from their homes, 27 (2.10%) from their relatives' houses and 11 (0.84%) make use of the learning centres.

The medium used by 1095 students (84.23%) is television. The number of those who use mobile applications or YouTube, either exclusively or apart from television, is 452 (34.77%).

The information collected from the general survey conducted among the parents (2466) of the students of Primary, High School and Higher Secondary Schools is similar to this. The parents reported that 1767 students (71.65%) mainly make use of TV, and 640 (25.95%) make use of smartphones to attend the Victers classes.

Accessibility of Primary, High School and Higher Secondary School Students in Total

The overall accessibility of Victers classes is 95.80% (2710 students) for primary, high school and higher secondary students.

3.2.3. Participation in the Victers Classes - High School and Higher Secondary Students

It was recorded that 729 High School and Higher Secondary students (47.93%) participated in the Victers classes conducted so far and that 7 (0.46%) did not participate in any class. See the chart below to know the details. (The number of students who responded to the question is 1521).

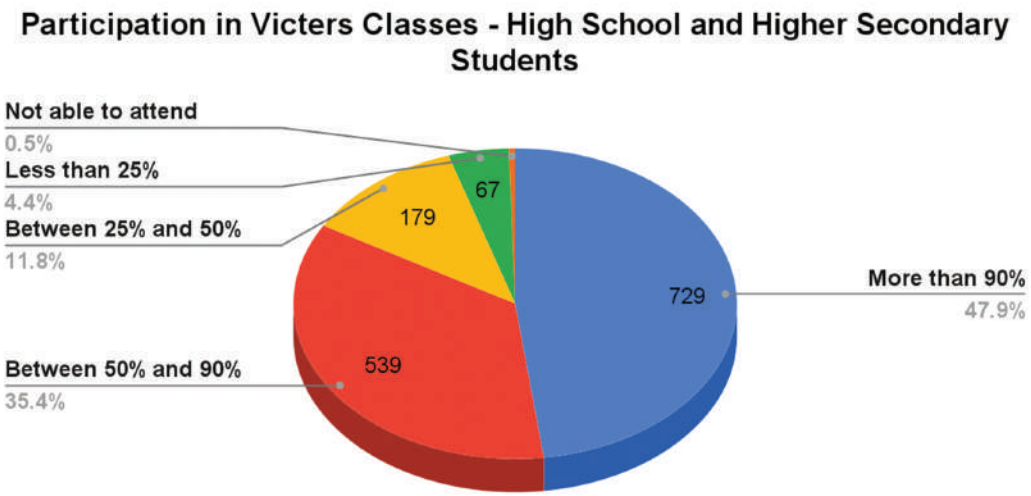
3.2.4. Participation of Primary School Students in the Victers Classes

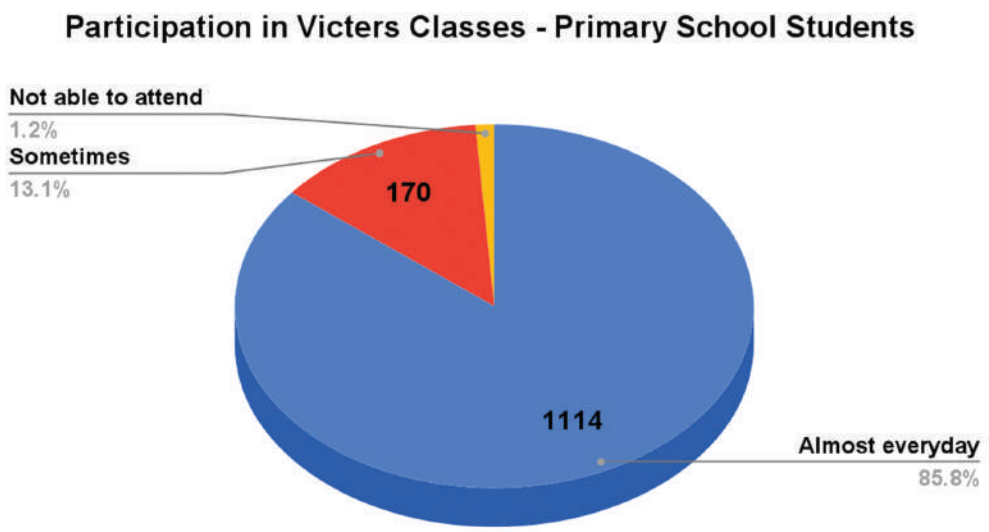
1007 primary school students (85.70%) attended Victers classes almost every day. 154 (13.10%) students attended some of the classes and 14 (1.19%) did not participate in any class.

3.2.5. Reasons for not Attending the Classes- Students of High School and Higher Secondary Schools

The reasons given by high school and higher secondary students for not attending Victers classes and the percentage of students who reported them are as follows.

Reasons for not attending the Victers classes	
Problems with electricity	413 (27.22 %)
Cable connection problems (TV) / Network connectivity issues	405 (26.70%)
Difficulty in comprehending / understanding the portions covered	313 (20.63%)





Financial Constraints to recharge data pack	188 (12.39%)
Teachers in school covers the same portions through online classes	154 (10.15%)
Other reasons include health problems, unexpected events etc.	116 (7.65%)
Not having a functional television set / phone	93 (6.13%)
Having to do other work at home	83 (5.47%)
Not interested	59 (3.89%)

It is noteworthy that the lack of interest (3.89%) is reported as a not-so-trivial reason why many students do not attend classes. According to the parents' report, this figure is slightly higher (8.88%).

3.2.6. Special Analysis of Students who did not Attend any Class

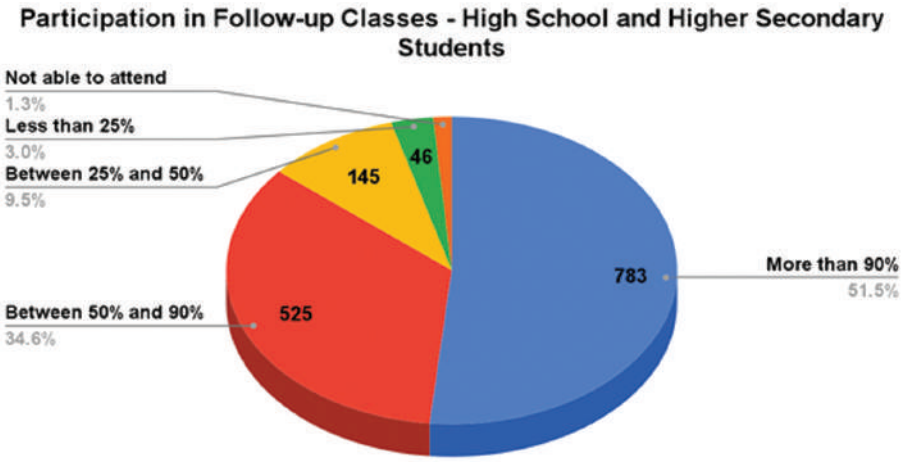
There are a few High School and Higher Secondary students (7) who had not attended any of the classes. Their details were examined. Three students belong to 9th standard, two to 10th and two to 12th standard. Six of them are from English medium classes. Five are from Government schools. Three belong to the general category and four to OBC. The number of students in the APL category is five.

Several reasons have been reported for not attending any classes. Majority of students (5) pointed out the Cable connection problems (TV) / Network connectivity issues and problems of electricity (4). Other reasons were lack of TV/smartphone (2), financial difficulty in recharging internet (2). One student did not attend the Victers class because teachers in school covered the same portions through online classes. There were also students (2) who did not attend because of the lack of interest.

The socio-economic circumstances of students are related at a moderate level to their reasons for not attending the Victers classes.

3.2.7. Follow-up Classes - High School/Higher Secondary Students

Among the 1497 high school and higher secondary students who responded to the question, 1431 (95.59%) reported that their teachers regularly take follow-up classes (worksheets, activities, etc.) of Victers classes.. Out of the 1519 students who responded to the question, 783 (51.54%)

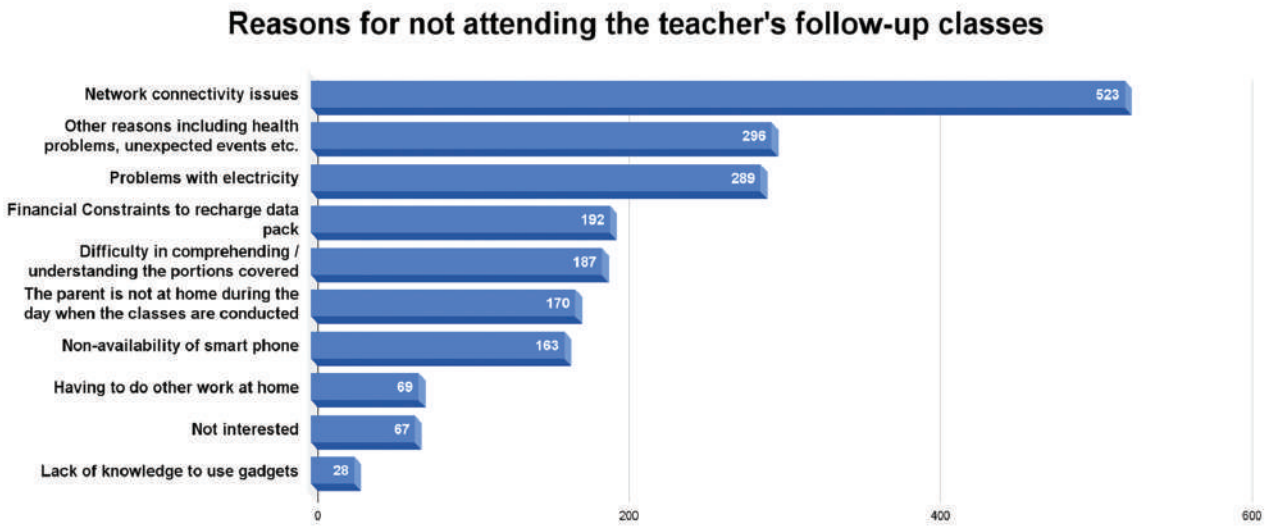


had reportedly attended 90% of the classes and 20 (1.32%) students could not attend any of the classes. See the chart for the details.

3.2.8. Reasons for not attending the Classes of Teachers

Majority of High School and Higher Secondary students (34.21%) reported the problems of internet connectivity as the reason for not attending the classes. Others pointed out unexpected reasons like health problems (19.36%), electricity problems (18.9%), financial constraints in recharging (12.56%), difficulty in comprehending lessons (12.23%), absence of parents during daytime (11.12%) and the non availability of smartphone (10.66%). A small percentage of students (1.83%) reported that they could not attend the classes due to the absence of technical knowledge.

The main reason for the non-accessibility of High School and Higher Secondary students to follow-up classes is the problem of internet connectivity. Yet, it must be noted that students attend follow-up classes along with the Victers classes or more than the Victers classes.



3.2.9. Follow-up Classes - Primary School

According to the report of the Primary School students, 1162 (89.4%) get follow-up classes. According to 80.92% of students, their teachers make use of WhatsApp for taking classes. It is also reported that 10.92% of teachers make use of Google classroom. Printed work sheets are provided by 11.69% of teachers.

Among the 1145 Primary schools students who responded to the questions, 824 (71.97%) reported that they get follow-up activities from teachers on all days. Teachers of 317 students (27.69%) engage in follow-up activities on some days. The number of teachers who do not engage in follow-up activities is below 1%.

According to the report of 969 students (83.75%), teachers always make necessary corrections in the follow-up activities. But according to 173 (14.95%), they do not always make corrections. There are students, below 1%, who report that teachers never correct follow-up activities.

76.7% of teachers give the feedback of follow-up activities on WhatsApp. As it is visible to everyone in the group, some students (14.3%) are ashamed about it. Others do not feel so.

3.2.10. The Online Classes for High School and Higher Secondary Students

It has been reported by 997 students (65.2%) that teachers conduct extra online classes in addition to Victers classes and follow-up classes. Teachers make use of platforms like Google meet and WhatsApp.

3.2.11. Social Factors Related to Accessibility and Participation

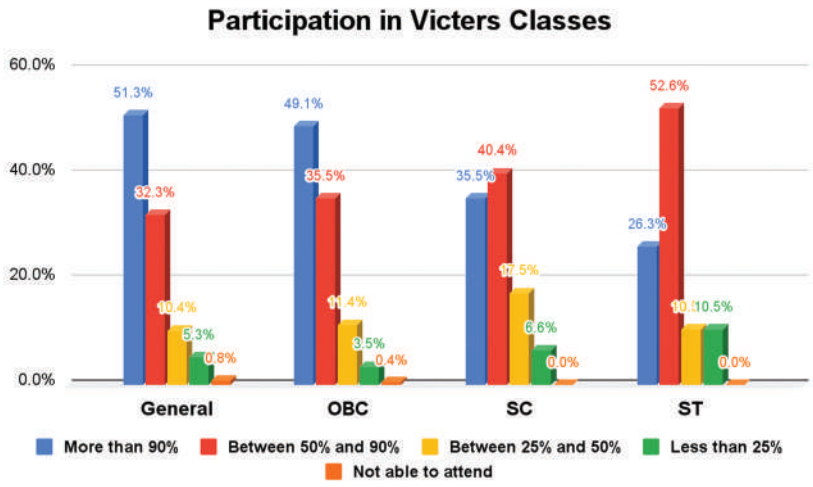
This section specifically analyzes the accessibility and participation of high school and higher secondary students who require special attention.

Among the students who participated in the study, 398 (26.03%) belong to General Category, 946 (61.87%) to OBC category, 166 (10.86%) to Scheduled Caste and 19 (1.24%) to Scheduled Tribe. Category wise analysis is given below.

Category-wise Participation in Victers classes:

It was recorded that among the General and OBC categories of students, nearly half of them participated in

	More than 90%	Between 50% and 90%	Between 25% and 50%	Less than 25%	Not able to attend
General	203 (51.3%	128 (32.3%)	41 (10.4%)	21 (5.3%)	3 (0.8%)
OBC	462 (49.1%)	334 (35.5%)	107 (11.4%)	33 (3.5%	4 (0.4%)
SC	59 (35.5%)	67 (40.4%)	29 (17.5%)	11(6.6%)	0
ST	5 (26.3%)	10 (52.6%)	2 (10.5%)	2 (10.5%)	0



more than 90% classes. Among the students of Scheduled Caste and Scheduled Tribe categories, a remarkable number of them have participated in the 50% to 90% number of classes. Among the SC category, the percentage of students who participated in more than 90% of classes is 35.54% and those who participated in the 50 to 90% number of classes is 40.36%. See the chart.

When the total number of students is taken, the percentage of those who participated in 50% or lesser number of classes is 16.7. When the students of SC category are taken, the percentage is 24.1 and that of Scheduled Tribe is 21%.

Among the 19 students who belong to the ST category, and who filled in the questionnaire, the number of students who participated in more than 90% of classes is 5. More than half of them (10) have participated in 50% to 90% of classes.

A close analysis of the data reveals that the rate of participation of SC students in the Victers Classes alone is higher in the 25% to 50% category and lower in the category above 90%. (Chi-square value: 25.13; p =.014). The participation of SC students in the Victers classes is evidently low.

(At the same time, a numerical minority of students (7 students: 0.5%) who have not participated in any Victers classes belong to the General and OBC categories).

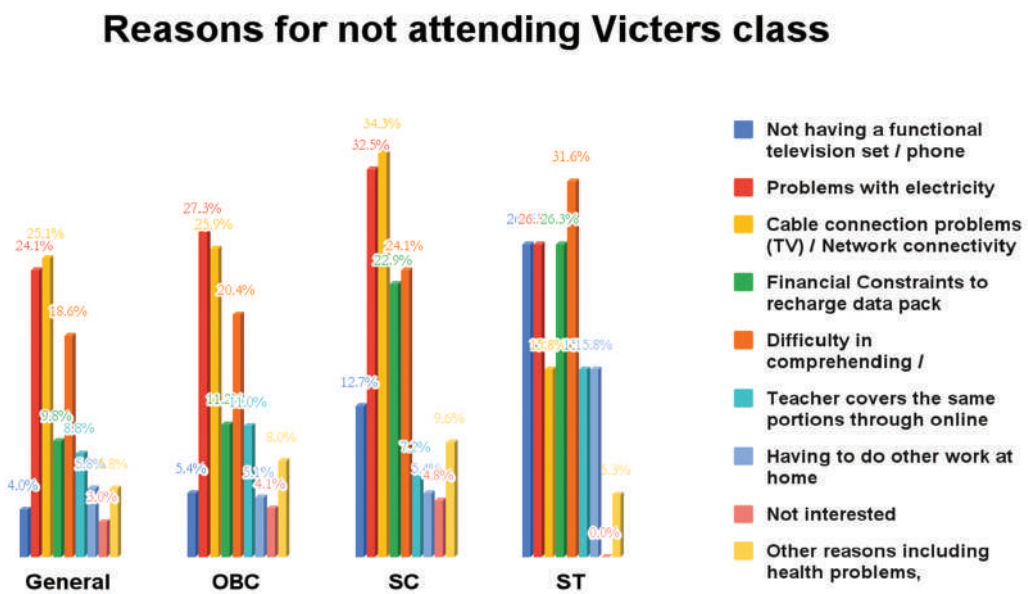
Among the 7 students who made use of the learning centres, 3 belong to OBC, 2 to SC and one each to ST categories.

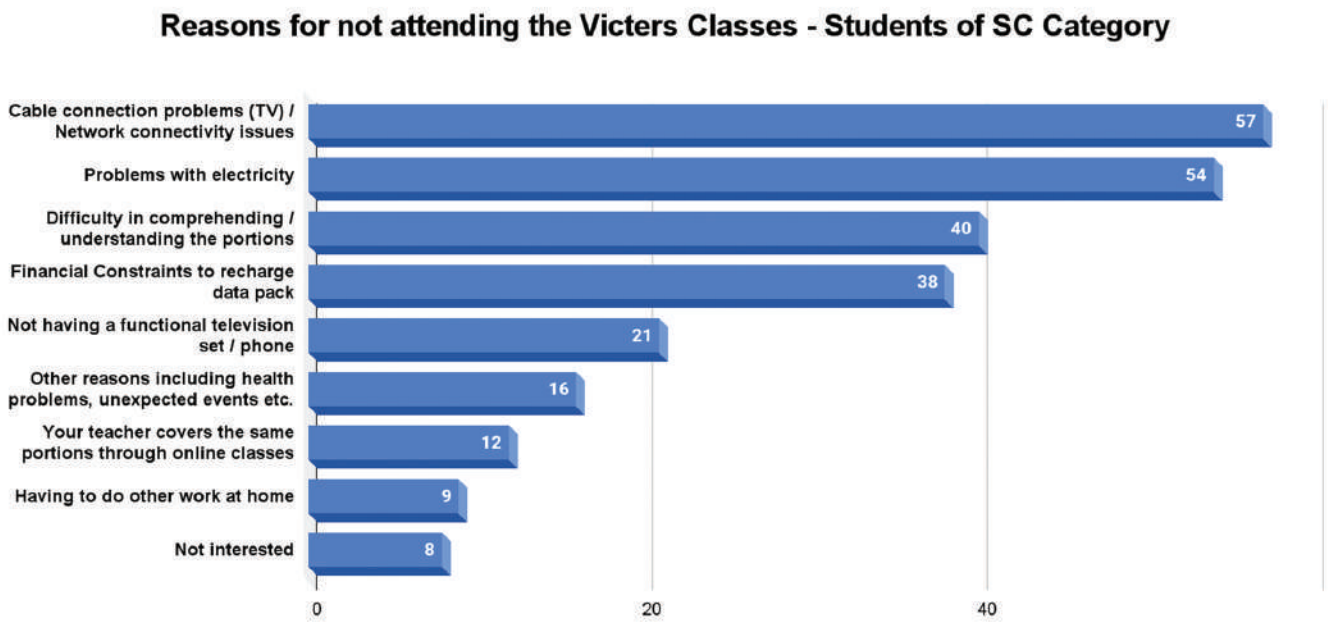
Category-wise Analysis: Reasons for not Attending the Classes

Majority of students who belong to General, OBC, SC and ST categories pointed out reasons of cable/internet problems for not attending the Victers Classes. The difficulty level of students of SC and ST categories in understanding the lessons and their financial difficulty in recharging are comparatively higher than that of the students of General and OBC categories. Students of ST categories have pointed out the non availability of TV/Smartphone and the problems of electricity along with other difficulties. The proportion of SC/ST students who lose classes due to the non-availability of TV or smartphone is significantly higher than that of the General category (Chi-square value: 29.908, p =.000). However, the difference in the number of students who lose classes due to other reasons is not statistically significant between students of various categories.

Reasons for not Attending the Victers Classes - Students of SC Category:

The main reasons for SC students for not attending the Victers Classes are the problems of cable and electricity





(See the chart). The other reasons are difficulty in understanding lessons and the financial constraints in recharging the internet (12.3% among all students and 22.89% in SC category).

Participation in the Follow-up Classes:

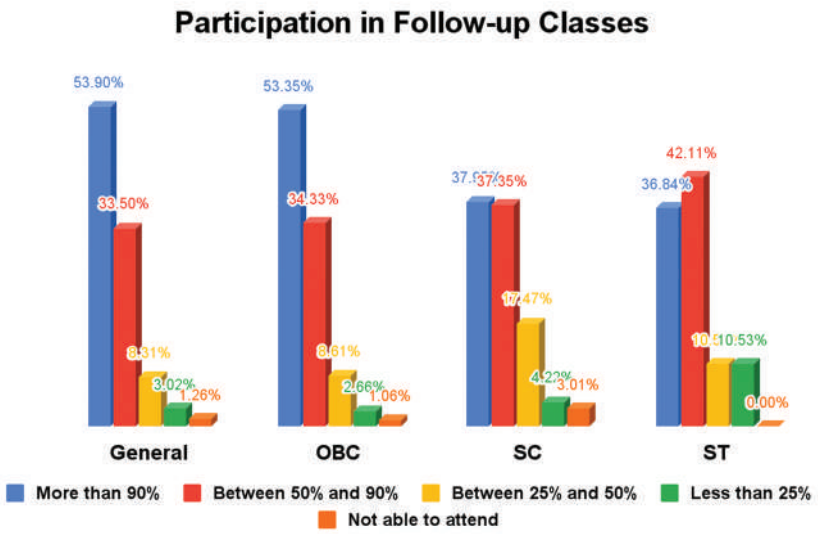
More than half of the students of General Category have recorded that they have participated in more than 90% of follow-up classes. A small percentage of General, OBC and SC students (1.8%) recorded that they have not participated in any class. The proportion of SC students who have participated in the follow-up classes is statistically higher in the 25% to 50% range and very low in the above 90% range (Chi square value: 30.159, p =.003). The participation of SC students in the follow-up classes is evidently low.

Reasons for not attending the Follow-up Classes

Problem in connectivity is the main reason reported by the majority of students in all categories. Among the students who pointed out financial difficulty for recharging as the reason for not attending, the number of SC/ ST students is very high. It is remarkable that the main reason for ST students not attending follow-up classes is their difficulty in understanding lessons. The non availability of television or mobile phones and problems of electricity are also other main reasons.

The proportion of students of SC and ST categories who lose follow-up classes of teachers due to the non availability of smartphones is statistically significant when compared to students from other categories. (Chi -square value: 11.565, p =.009). The proportion of SC

	More than 90%	Between 50% and 90%	Between 25% and 50%	Less than 25%	Not able to attend
General	214 (53.90%)	133 (33.50%)	33 (8.31%)	12 (3.02%)	5 (1.26%)
OBC	502 (53.35%	323 (34.33%)	81 (8.61%	25 (2.66%)	10 (1.06)
SC	63 (37.95%)	62 (37.35%)	29 (17.47%)	7 (4.22%)	5 (3.01%)
ST	7 (36.84%)	8 (42.11%)	2 (10.53%)	2 (10.53%)	0

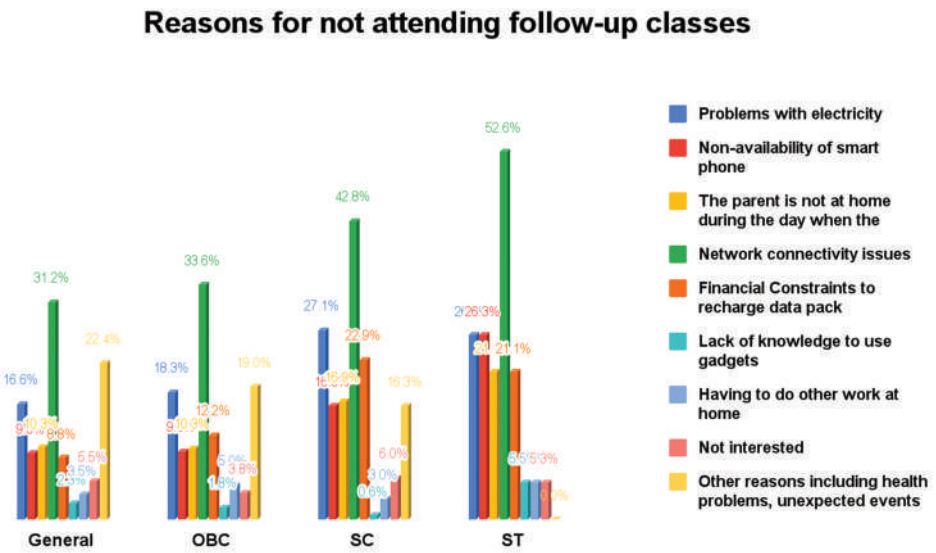


students who lose the classes due to the financial difficulty in recharging internet (Chi -square value: 22.666, p =.000), non availability of smart phone due to the absence of parent (Chi -square value: 8.434, p =.018) and network problems are also significantly higher as per Statistics.

Other reasons like electricity problems, difficulty in understanding and absence of interest are not statistically significant among categories.

Scheduled Tribe Students from the Forest Areas

Field study has been conducted focusing on ten tribal areas, as the survey alone was inadequate to obtain sufficient data about the accessibility of tribal students to classes. The study reveals that availability of tools in colonies and accessibility to classes are less. Electricity, TV and Cable connection have been ensured in the study centres associated with the colonies. Yet, the number of students



who attend classes without fail is very low. Students come to attend Victers classes from areas where there is encouragement from mentor teachers. The tribal students residing in the interior of the forest do not have facilities of electricity, TV, mobile phone. Arrangements have been made to make the Victers classes accessible to them. They are provided with food also. Yet they fail to attend the follow-up classes of teachers. Apart from the meager familiarity with the school and the lessons due to the interference of the elders, the tribal students are not much benefitted by the video classes.

Certain observations are very significant. The main reason for ST students, residing in the interior of the forest, for not attending the classes is their difficulty in understanding the lessons and the non availability of gadgets. Availability of gadgets or electricity is not an important problem for those residing in the border areas. But these students also show reluctance in participating in the classes.

The report of the field study is appended.

Primary School Students of High-range, Coastal and Tribal colonies:

Among the primary school students (1300) who participated in the study, 95 (7.31%) are from High range/ Forest areas, 51 (3.92%) from Coastal areas and 8 (0.625%) from tribal colonies.

85.26% (81) students of high range have availability of TV and 94.74% (90) have got smartphones. It was reported that 2 students do not participate in the Victers classes. 86.27% (44) students of Coastal areas have TV availability and 80.39% (41) have smartphone availability. 4 students from tribal colonies have TV and 6 of them have mobile phones.

The percentage of students from high ranges participating in all the follow-up classes of teachers is 87.4 (83 out of 95) and those from coastal areas is 57 (29 out of 51). Six out of nine students from tribal areas could participate in the classes. One student could not so far participate in any of the follow-up classes.

The Academic Status and Participation of students in Classes:

The participation of students in Victers classes and follow-up classes as reported by the teachers, and the students' academic status are statistically related. Among the students of poor academic status, the number of students who attend more than 90 % of classes is proportionately low. At the same time the percentage of participation of students in more than 90 % classes among high academic status is very high (chi- square + 40.167, p = .000).

3.3. Effectiveness of Classes

The section deals with the utility of Victers classes, follow-up classes and the online classes based on the analysis of the information obtained from the students.

3.3.1. High School and Higher Secondary School Students

Information was collected from the students as to how far the classes had been useful to them. The results were as follows.

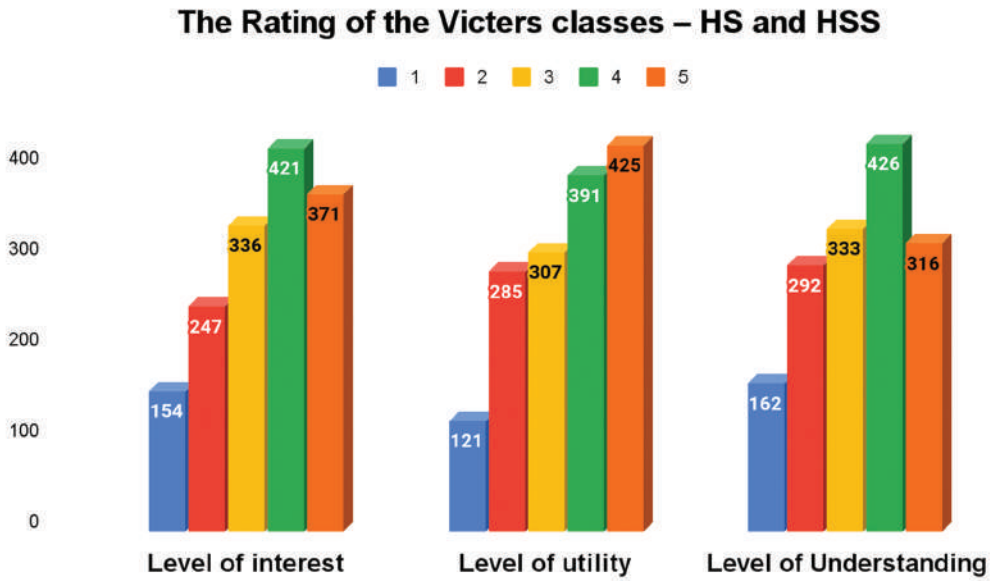
The Rating Given by Students about the Victers Classes

The students have been asked to rate their interest in the classes, the utility of classes and their level of understanding on a five point scale. Majority of students gave a very good rating. 73.77% of students gave a rating ranging from 3 to 5. Nevertheless, the number of students who gave low ratings was not small. (See the chart).

Why do Certain Students Fail to Understand the Classes?

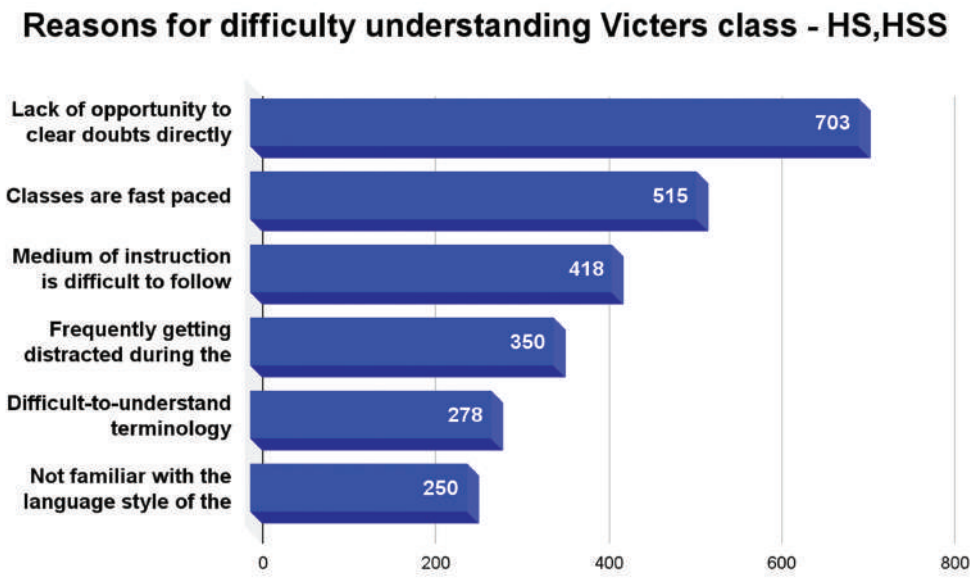
435 students (28.45%) do not find any difficulty in understanding the Victers classes and 1094 (71.55%) find difficulty in understanding the lessons due to various reasons.

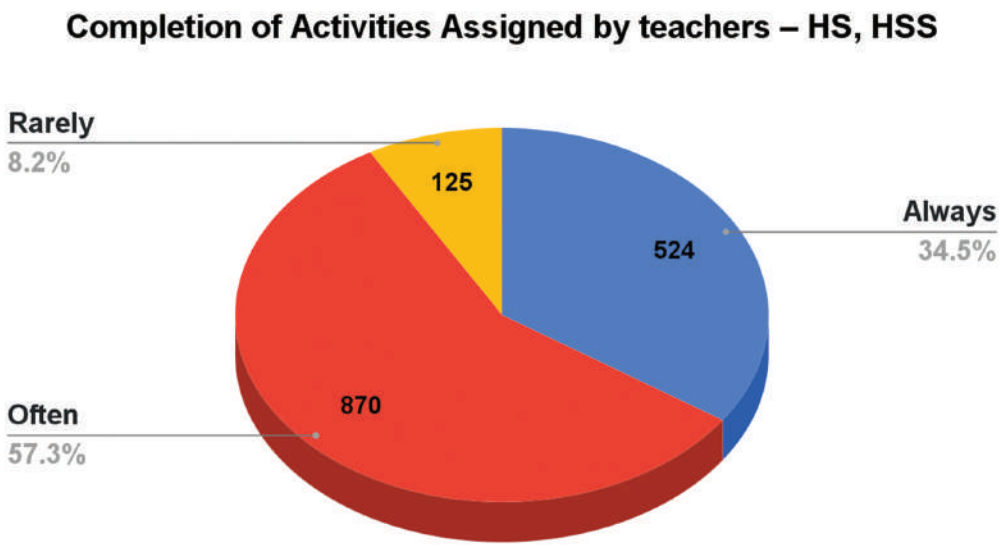
The main reason pointed out by students was that they do not get the opportunity to clear doubts (45.98%). Other reasons reported include fast paced classes (33.68%),



difficulty in following the medium of instruction (27.34%), loss of concentration during class (22.89%), use of difficult words by teachers (18.18%) and difficulty in following the style of teachers (16.35%). A small percentage of students reported health problems and other unexpected reasons.

Students have been asked the extent of completion of the follow up activities assigned by teachers. 524 (34.27 %) students always finish the activities given by teachers. 125 (8.18%) students complete the work very rarely. Majority of students reported that teachers always give feedback to continuous activities. Teachers usually give





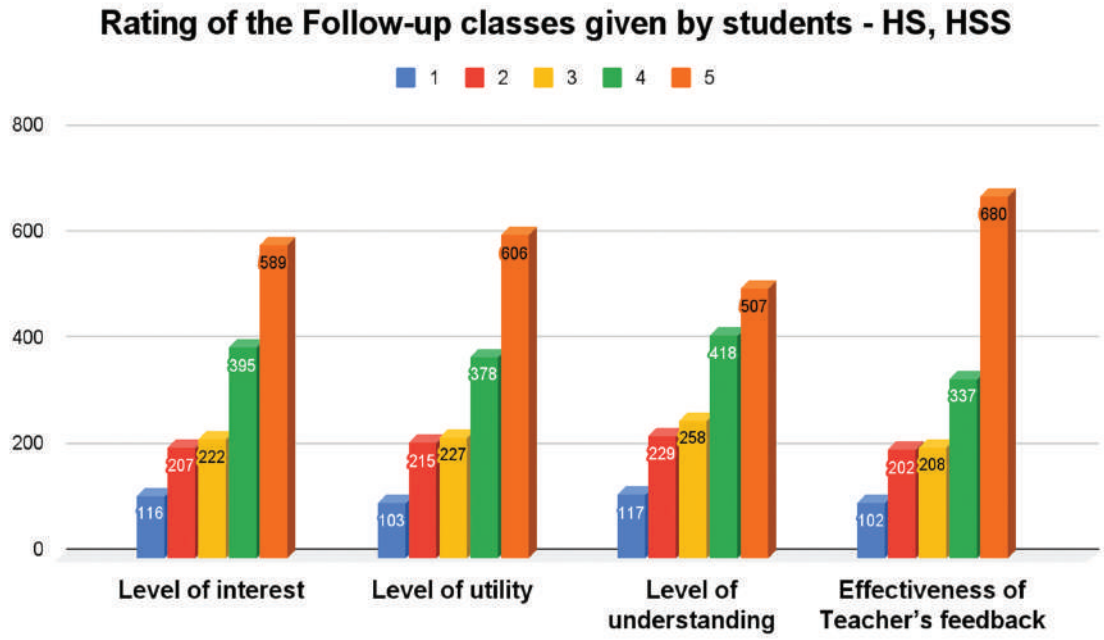
feedback through WhatsApp. In addition to this, they also make use of Google meet and Phone calls.

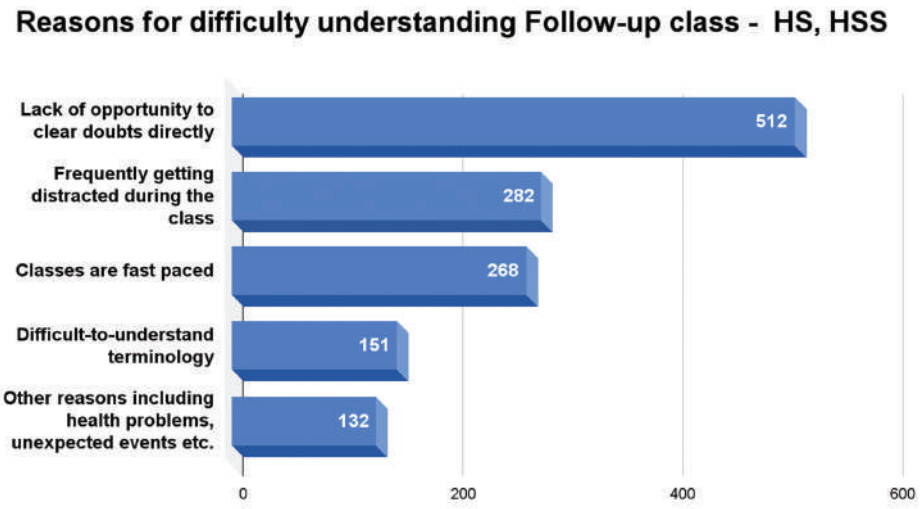
Rating of Follow-up classes given by students:

In the rating of the follow-up classes of teachers, the majority of students reported that the classes were very useful and interesting and that they liked the classes. Most of the reaction of students was in the 4-5 range (See the chart). The ratings were higher than that of the Victers class.

Reasons for difficulty understanding follow-up classes – HS, HSS

There was no difficulty for 739 students (48.33%) to follow the online and the follow-up classes. But 790 students (51.66 %) found difficulty to understand classes due to various reasons. (In the case of Victers classes it was 71.55%).

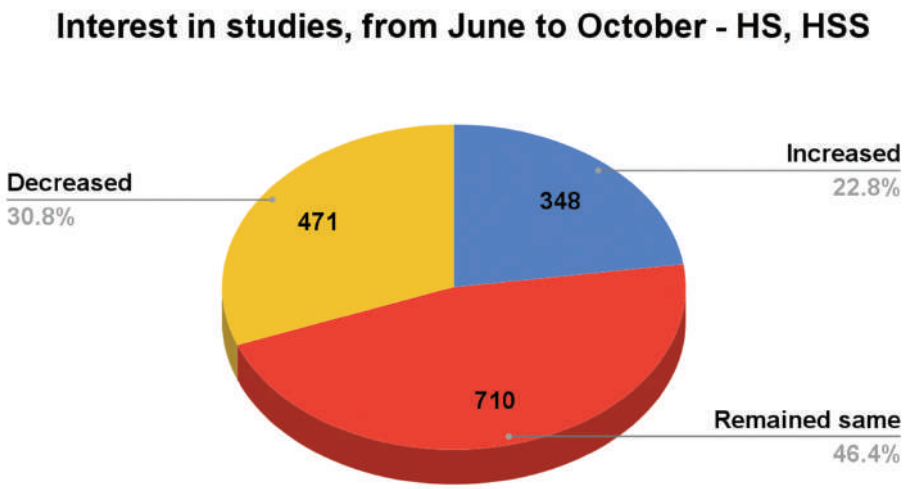


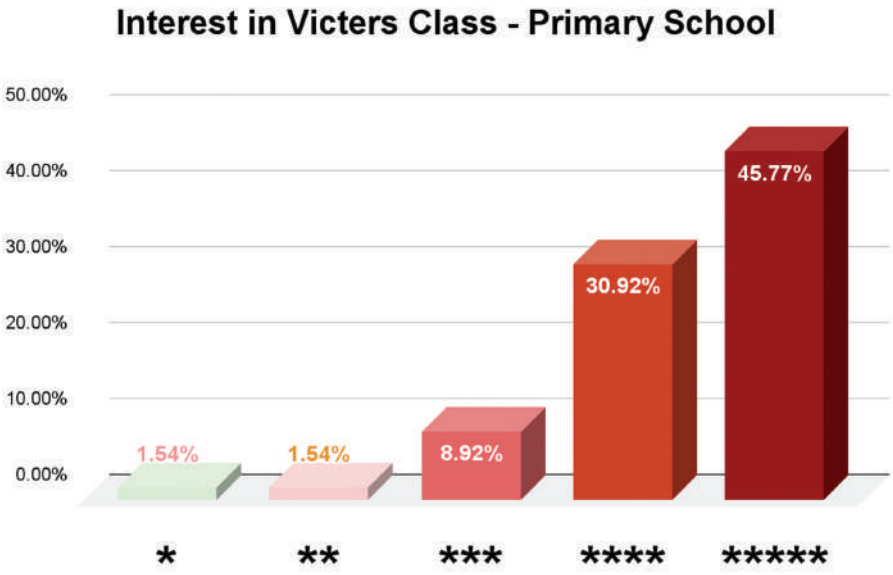


The main reason pointed out by students who failed to understand (33.40%) was the absence of opportunity of doubt clearance. (This was the main reason in the case of Victers classes and the teachers' classes, though the rate was low in the case of the latter). Other reasons pointed out were loss of attention (18.40%), fast paced classes (17.48%) and use of words difficult to understand. A minority (8.63%) of students also pointed out health problems and other unexpected reasons.

During the months of June to November, 710 (46.44%) students reported no change in their interest in studies, 471 (30.8%) students reported a decrease, and 348 (22.76%) reported an increase in their interest.

According to 55.92% students (855), the love and consideration of teachers waned during the days of COVID pandemic, for 37.08% (567) there is no change and for 7% (107) there was a decrease in comparison with that of the last year. The assistance provided by parents increased according to 943 (61.63%); there was no change according to 539 (35.25%) and there was a decrease according to 47 (3.07%) students.





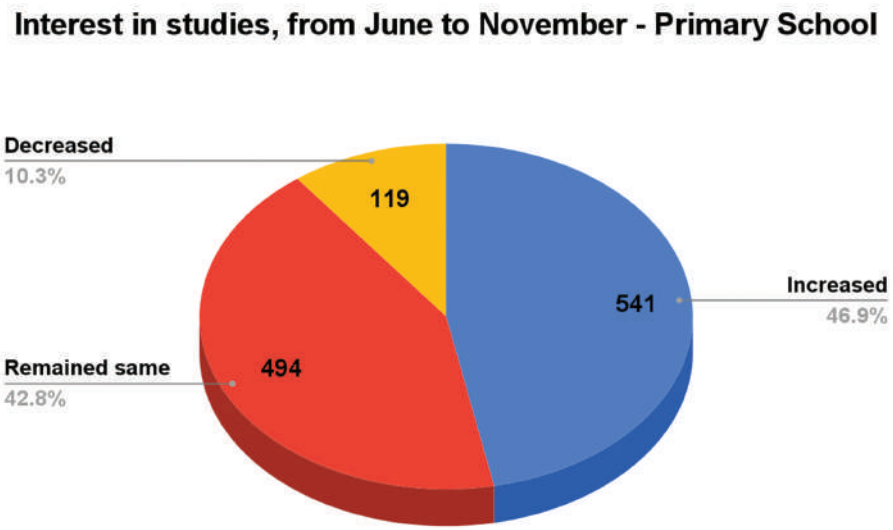
3.3.2. Effectiveness of the Classes – Primary School Students

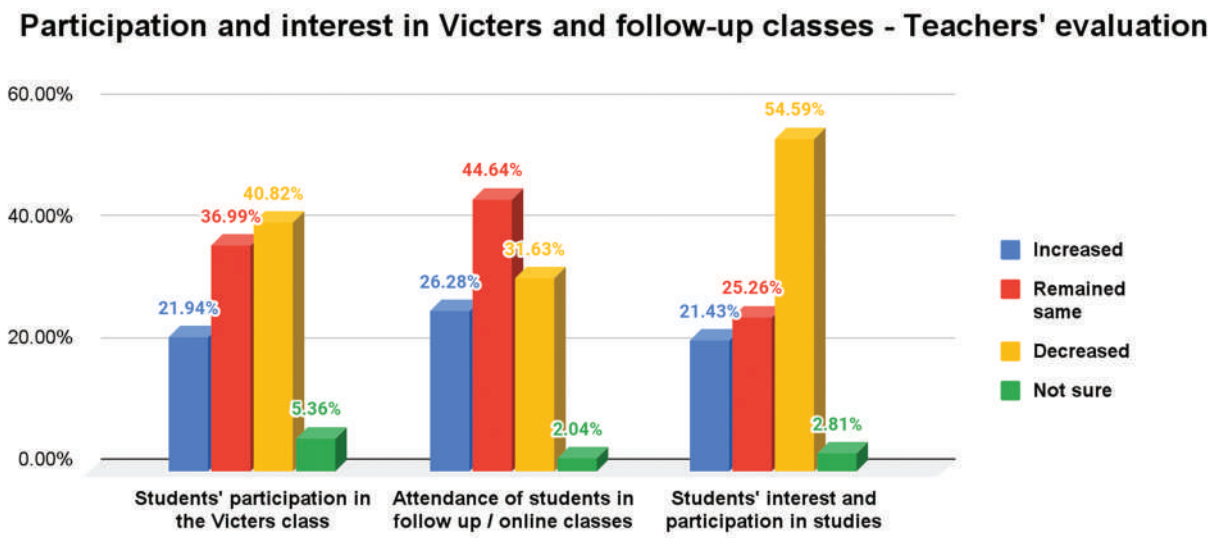
The Rating Given by Students to Victers Classes:

Among the students (1153) who responded to the questions, 97.20% reported that they like the Victers classes. Majority of students gave the rating between 4 and 5 (See the chart) out of a maximum rating of 5.

The most preferred classes are Malayalam, English and Maths. Maths and English are also at the top in terms of disliked subjects, although only a small number of children reported it.

The interest of Primary School Students for Victers classes increased during the months from June to November among 541 (46.88%) students, decreased among 119 (10.31%) students, and there was no change according to 494 (42.81%).





Participation of Students in Victers and Follow-up Classes: Teachers' Report

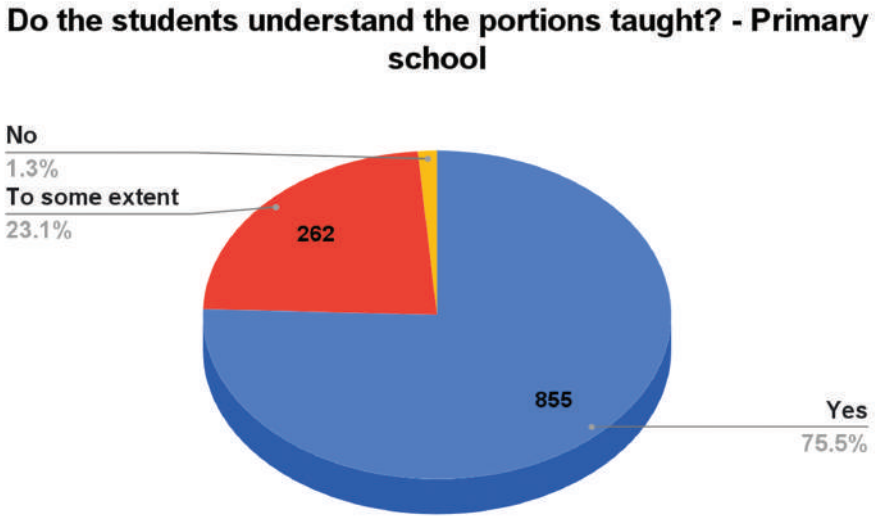
In the opinion of teachers, the participation and Interest of students in the Victers and Follow-up classes have waned. See the chart (Details of teachers of all sections).

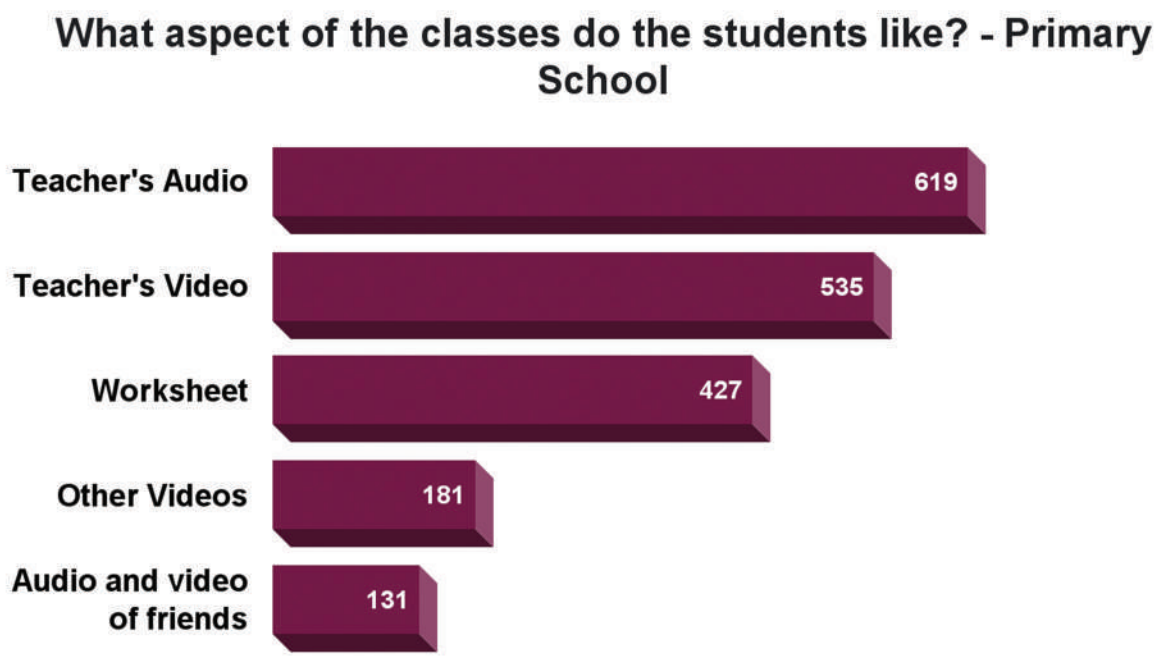
Among the 1132 Primary schools students who responded, 855 (75.53%) were able to follow the lessons taught, 262 (23.14%) understood the lessons to a certain extent and 15 (1.33%) failed to follow.

Do students understand what they are taught in the classroom?- Primary School

The primary school students preferred the audio and video classes of teachers.

There are 457 students (42.30%) who report that the teachers teach more lessons than in Victers (1081 responses). 405 students (34.40%) reported that there is only a very small portion to be studied. According to 533 students (45.20%) there is a moderate amount of portion to study, but according to 241 students (20.4%) they are fed up with the very large portion to study (1179 responses).





There are 104 students (11.06%) who are of the opinion that classes would have been better if taken in some other manner. 146 (15.53%) also hold the same opinion to a certain extent. 690 (73.40%) do not share that opinion (940 responses in total).

Information obtained from Discussions about Primary School students Interest in classes:

Online discussions were arranged with students, teachers and parents of six schools. Majority of participants were Primary School students and their parents. Further discussions were held with certain students who participated in the survey. The information collected from students revealed that when compared to the Victers classes, participation and interest in the follow-up classes of teachers is greater. The reasons pointed out are:

- Chances for doubt clearance
- Individual attention
- Unaffected by electricity problems
- Increased availability of mobile phone, internet etc.

3.3.3. Tuition Classes of High School and Higher Secondary Students

A few students of High School and Higher secondary schools (435 students- 28.44%) attend tuition classes and (29 students- 1.9%) attend entrance coaching classes. 40 students (2.61%) have tuition classes and classes in schools simultaneously. 137 Primary school students (10.54%) attend tuition classes. 386 (25.25%) of High School and Higher Secondary Schools use other mobile applications for study purposes in addition to the Victers classes. The number of students who purchased learning applications is 23 (1.77%). The number of primary school students who use the internet either alone or with the assistance of parents is 764 (58.77%).

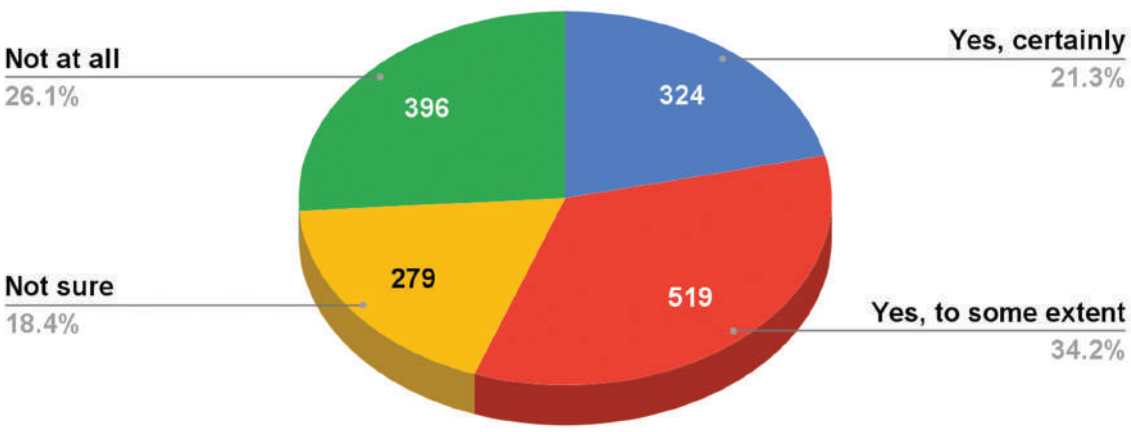
3.3.4. Average Time Spent for Study Purpose

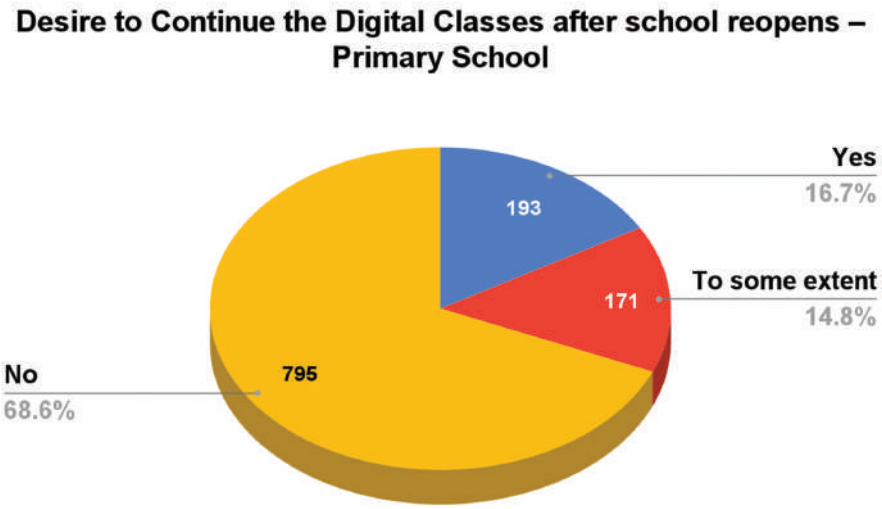
Most of the students of High School and Higher Secondary Schools spend approximately one to three hours for learning -including that of Victers, online, and coaching classes.

3.3.5. Should the Digital Classes be Continued?

Among the students of HS and HSS (519) who responded to the questions about the continuation of the digital classes after the schools reopen, 34.19% opined that they wish to have the classes to a certain extent. 324 students (21.34%) were of the opinion that they surely need the digital classes. 396 (26.09%) do not wish to continue the digital classes (Total number responded to the question-1518).

Among 1159 responses, 795 (68.6%) primary school students responded that they did not wish to continue the digital classes after the school reopened. 171 (14.75%) said they were interested to some extent and 193 (16.65%) said they were definitely interested.





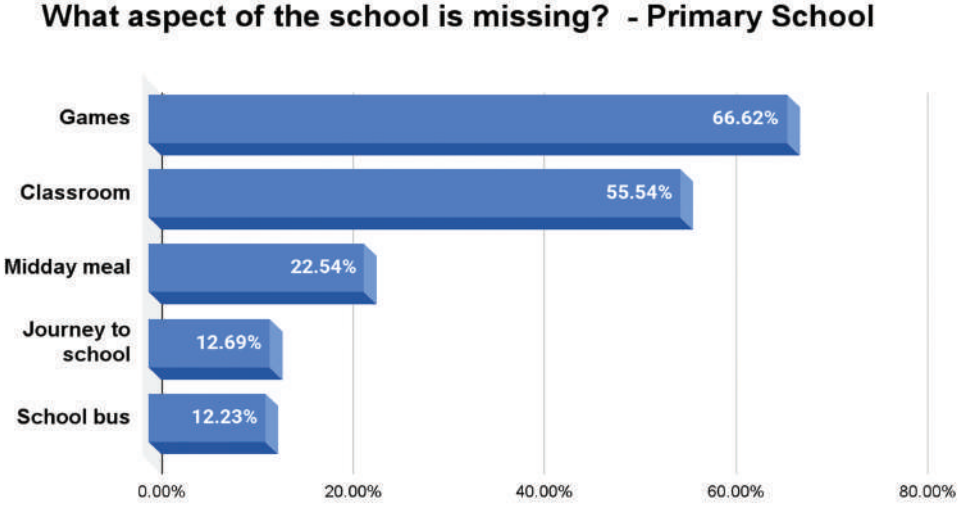
3.4. The Psychosocial Factors Related to Learning

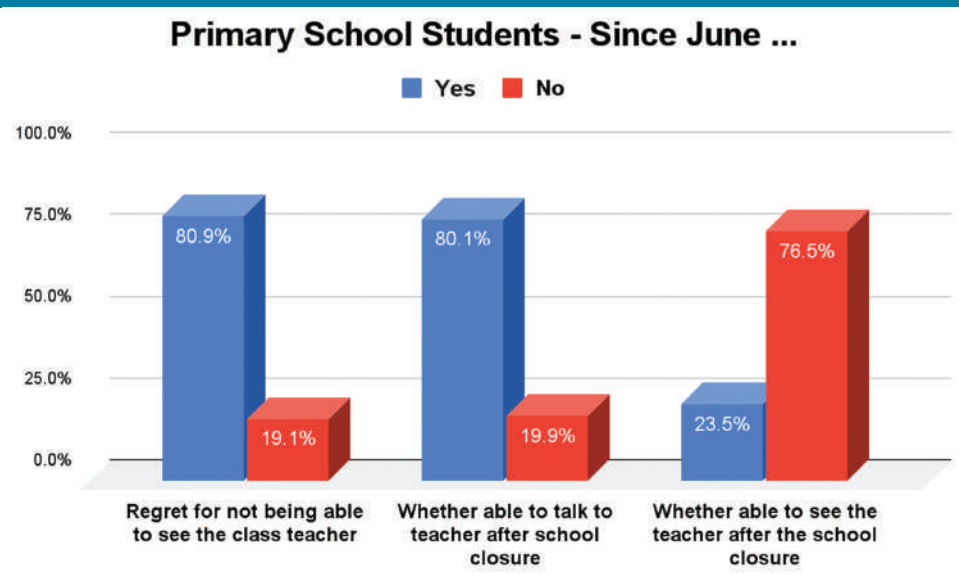
Among the several psycho-social factors that influenced the educational activities during the COVID pandemic, some are analyzed in this section. The relationship of some significant factors is mentioned towards the end of this section. A general description of the emotional difficulties of Primary School students is also included in this section.

3.4.1. Responses of Primary School Students to the Loss of School environment

Among 370 students (30.3% of the respondents) who joined a new school, mostly in the first standard, 252 (68.11%) have not seen their school (total of 1221 responses): 319 (86.22%) have not met their class teacher.

861 students (79.72%) are unhappy because of not being able to meet their close friends (1080 responses): 1096 out of 1164 (94.2%) miss their school: most important things they miss are the playtime in schools (66.62%),





classrooms (55.54%) and midday meals (22.54%).

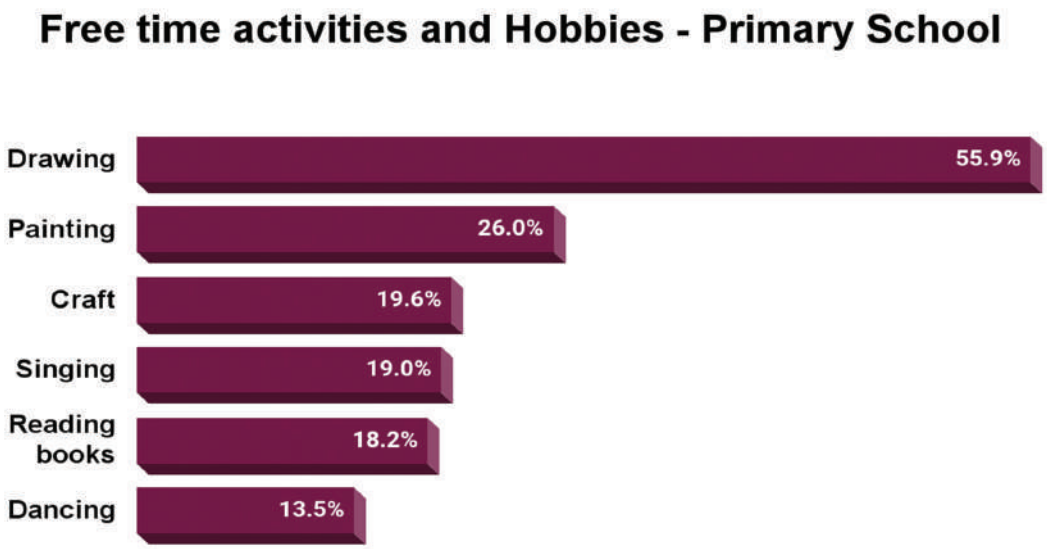
852 out of 113 (76.55%) have not met their class teacher after the closure of the school. 916 out of 1143 (80.14%) could talk to the teacher. 934 out of 1154 (80.9%) are unhappy for not meeting the teacher.

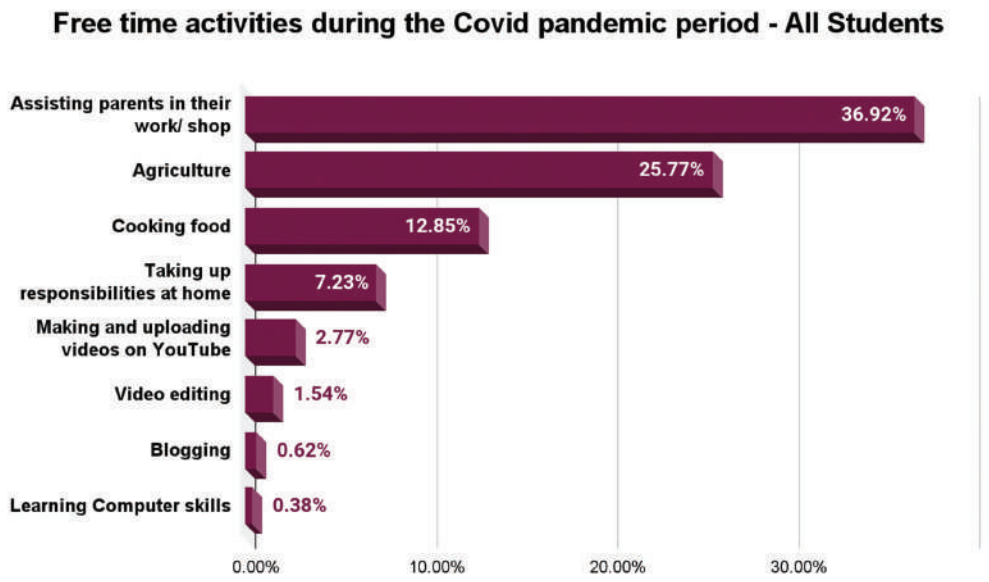
3.4.2. How was the Time Spent?

Out of 1094, 1048 (95.8%) students were engaged in various hobbies during their free time. Drawing and painting were the main hobbies of the students.

3.4.3. Was the COVID time useful in any way?

Majority of students remarked that they have utilized the COVID time for very useful purposes. Among the Primary, High School and Higher Secondary Schools, 1103 students (38.99%) helped their parents in household works during the days of COVID. 652 (23.05%) helped in agriculture and 647 (23.05%) helped in cooking. Number of students who took up responsibilities at home is 392 (13.86%). 116 (4.10%) students started Youtube channels and 200 (7.07%) started studying video editing. There





were students who started studying computer skills and blogging.

If the number of Primary schools students alone is taken, 60.38% students helped their parents in their work during COVID days. 42.14% involved themselves in agriculture and 21.01% in cooking. 11.82% took up responsibilities. 4.53% started a YouTube channel. There were students who started studying video editing and computer skills.

760 students (49.71%) of High school and Higher Secondary schools report that they spent their time chatting / texting during the free hours. 550 (35.97%) involved in physical activities and 505 (33.03%) in reading books. 371 (24.26%) spent their time playing video games and 386 (25.25%) in using social media.

Of the 1134 students of Primary Schools, 76 (6.70%) were mostly alone at home during the lockdown period, and 171 (15%) at times. 945 students (83.30%) spent their time with parents during the COVID days. Only 8% of students could spend most of their time with friends and 23 (2%) were alone most of the time.

COVID days imposed restrictions on freedom to travel and indulge in entertainment activities. 634 students (56.60%) of primary school have not gone outside to play. 262 (23.40%) do not have yards or a playground near their houses. These students had to stay indoors.

64.71% (1122) Primary schools students said they are unhappy in not celebrating festivals like Onam, Vishu, and Easter as in the previous year.

Towards the end of the questionnaire, there were questions about advantages and difficulties of the COVID days. The difficulty mostly pointed out by 35% of students was the situation of sitting at home without any chance to go out and the resultant boredom. For 25% the absence of school is a difficulty, and for 16% obstruction in social relation was a difficulty.

Among the parents who responded to the questionnaire, 17% pointed out it was advantageous to spend time with family members and 11% pointed out that time was spent for hobbies. 12% of parents pointed out that there were changes in the lifestyle and emotional state. 52% of parents are of the opinion that COVID days did not have any advantage at all.

30% of students pointed out the advantage of COVID was that they could spend time with family members.

3.4.4. The Use of Mobile Phones for Non academic Purposes – Primary schools students

538 (49.72% out of 1082) primary school students who

have access to a mobile phone for study, use their mobile phone to watch YouTube videos. 512 (47.32%) use mobile phones to play games and 140 (12.94%) to watch films or series. 282 (26.06%) students have been scolded by their father or mother for such usages. 348 (32.16%) students sometimes get scolded. The number of students who fight with their siblings for mobile phones is not so small. (19.13% (188 out of 983) and 24.92%(245) respectively)

3.4.5. Discomfort among the Primary School Students

Since June, 6.81% students always find it difficult to concentrate on studies. 5.7% find it difficult to stay calm while studying. 1.5% always feel that they are alone. 8.83% always feel bored.

3.4.6. Emotional States of Primary School Students

The emotional states of primary school students since June were asked in the interview and are indicated in the chart below. The rate of response to questions related to emotional conditions was different. 35 students (3.21%) out of 1092 were always unhappy, 19 (2.95%) out of 643 always had anger, restlessness or irritation. 125 (18.41%) out of 679 said that they were always happy; 55 (81.1%) reported they were never happy.

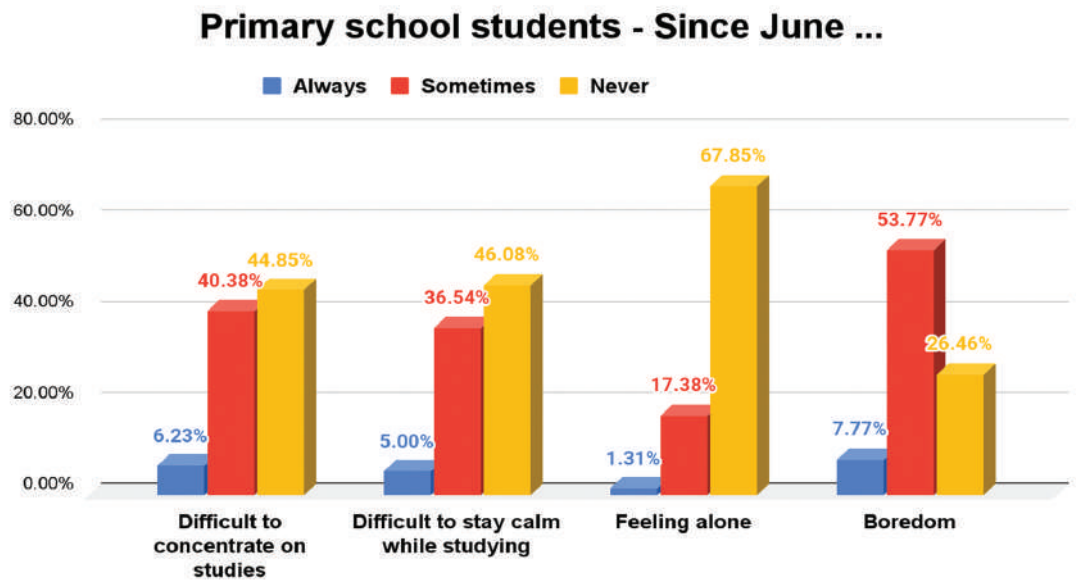
Primary school students 63 (9.5%) reported that boredom, anger and sadness have increased since June. 246 (37.27%) said that all these have increased to some extent. (660 students have responded.)

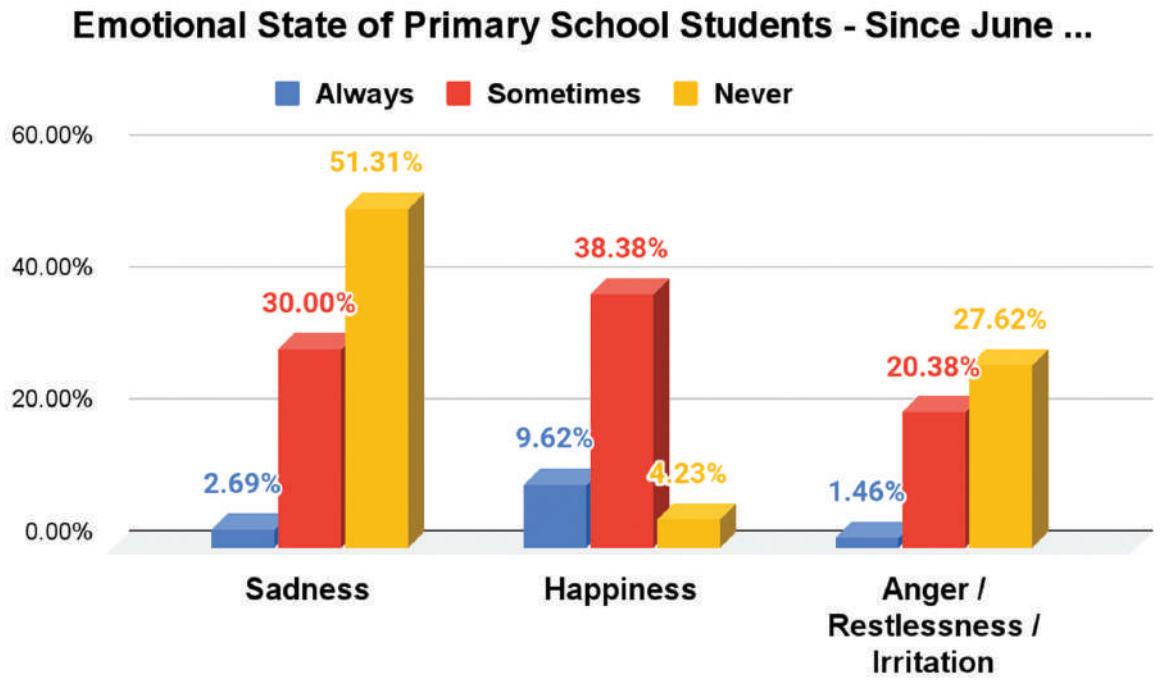
The assessment of parents about the mental condition of students is also relevant.

Parents report that the total use of media by students has increased.

The statistics of the impact of diligence, anger and anxiety on their studies, reported by parents, is given below.

The study has examined how far the various psychosocial factors have impacted the studies of students. The anxiety of students that the indefinite closure of schools might adversely affect their future and the change that has come over their interest in studies have been examined. Appropriate statistical methods like correlation and chi-square have been used to assess the impact of various social, educational and psychological factors. The findings are briefly given below.

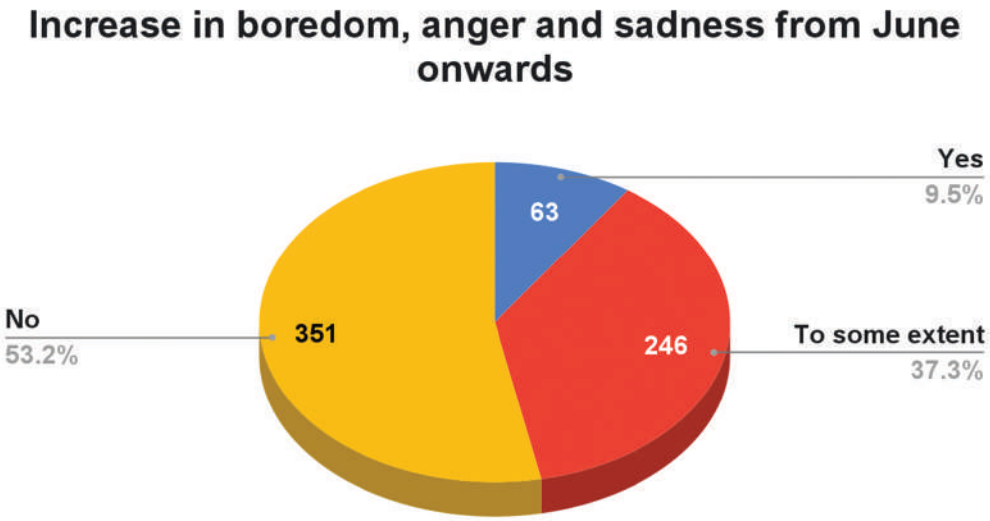


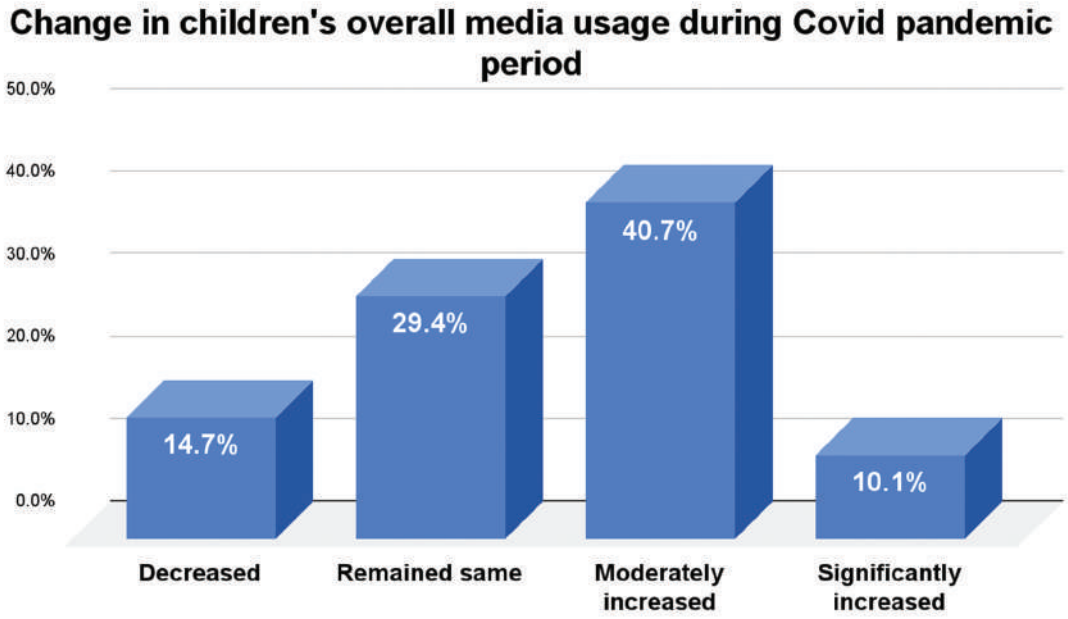


3.4.7. The Anxiety that the Indefinite Closure of Schools will Adversely Affect their Future

Students were asked to respond with options, 'Not at all worried,' 'Worried to some extent' and 'Worried a lot' to the related questions. The responses of students were cross tabulated based on their categories or their characteristic features. Following are the characteristics / categories of students who are concerned that the indefinite closure of schools during the COVID pandemic may adversely affect their future.

(Only the groups with statistical significance have been included in the table. The proportion of students who have anxiety is statistically higher among these groups. However, this does not mean that there exists a

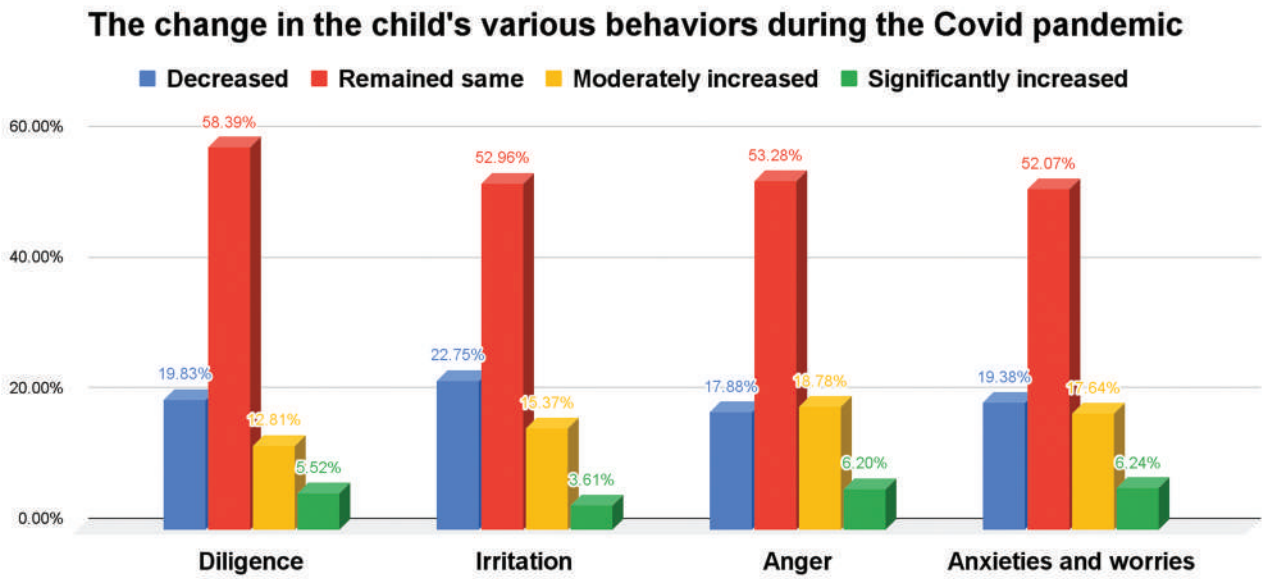




cause-effect relationship between these characteristics and anxiety).

3.4.8. Students whose Interest in Studies Gradually Declined during the Days of COVID

Students were asked to respond with options, 'Decreased', 'Remained the same', and 'Increased' to their interest in studies. The characteristics of students who recorded that their interest in studies waned during the period from June to October are given below. (The groups having statistical significance are only included in the table. The proportion of students who have reduced interest in studies is statistically higher among these groups. However, this does not mean that there exists a



Sl No	Characteristics/ Categories (N = 1529)	χ^2 value	Sig
1	Students of 12th standard (Statistically, the proportion of +2 students who reported having heightened worry about the future is significantly higher than the number of students of 9th and 10th)	10.057	.039
2	Students who do not have TV/smartphones in good working condition.	23.068	.000
3	Students whose parents have lost jobs	10.951	.000
4	Students who could not complete study activities	37.076	.000
5	Students who report that they rarely receive feedback of followup activities	14.835	.005
6	Student who have difficulty following a daily routine	32.929	.000
7	Students who have low participation in Victers and teachers' follow up classes	145.54	.000
8	Students who use mobile phone for more than 2 hours	33.605	.000
9	Students who get upset when smartphone is not available whenever they want it	64.322	.000
10	Those whose family atmosphere became worse during COVID period	74.420	.000
11	Students who had quarrels or disputes with parents during the COVID period	36.897	.000
12	Those who suffered higher level of loneliness	6.937	.031
13	Those who suffered higher level of boredom	78.747	.000
14	Those who suffered higher level of discomfort	75.468	.000
15	Those who had higher level of lack of attention	60.279	.000
16	Those who had higher level of lack of concentration	60.279	.000
17	Those who reported decreased consideration of teachers during COVID period	15.098	.005

cause-effect relationship between these characteristics and interest in studies).

3.4.9. Students who have difficulty completing the follow-up activities provided by teachers

The details of the students who found difficulty to complete the follow-up activities given by teachers are attached below:

In general, the academic status of students during lockdown is related to their physical, educational, psychological and family characteristics. Among these, lack of proper study schedule, increased mobile phone usage, and worsened home environment are common factors associated with a variety of academic difficulties. The above factors need to be taken into consideration while preparing the students for the exam and resuming the classes as before.

3.5. Health

3.5.1. General Health Information related to COVID -19

Among the students of High School and Higher Secondary Schools who participated in the study, 48 (3.14%) were under observation, 24 (1.57%) became COVID

Sl No	Characteristics / Categories (N = 1529)	χ^2 value	Sig.
1	Students of 12th standard	91.3	.000
2	Students of APL category	20.171	.000
3	Students who have not followed a study routine	175.110	.000
4	Students who do not have TV in good working condition	30.754	.000
5	Students with low participation (below 90%) in Victers classes	153.758	.000
6	Students with decreased interest in Victers classes	174.645	.000
7	Students who reported that the benefit of Victers classes is low	155.288	.000
8	Those who have a low level of understanding of Victers classes	155.750	.000
9	Those with low interest in teachers' follow up classes	100.909	.000
10	Students who reported that the benefit of teachers' classes is low	92.369	.000
11	Students who report they rarely receive feedback of follow up activities	63.673	.000
12	Students whose increased their TV watching time during COVID period	83.531	.000
13	Students who use mobile phone for more than 2 hours for nonacademic purposes	111.434	.000
14	Students who get upset when smartphone is not available whenever they want it	101.535	.000
15	Those whose family atmosphere became worse during COVID period	87.965	.000
16	Those who experienced high levels of concentration deficits during the COVID period	116.764	.000
17	Those who attend tuition classes	24.219	.000
18	Those who reported decreased consideration of teachers during COVID period	187.558	.000
19	Student who have difficulty following a daily routine	73.603	.000
20	Those who suffered higher level of boredom	164.432	.000
21	Those who suffered higher level of discomfort	221.629	.000
22	Those who had higher level of attention deficits during COVID period	338.389	.000

positive and family members of 22 students (1.44%) died of COVID.

Parents

During the time they participated in the survey, COVID test results of 46 (1.9%) persons became positive, 55 (2.25) came under observation and 706 (28.6%) close relatives also came under observation.

200 (8.1%) family members confirmed COVID positive, 286 (11.6%) were admitted in hospital and 56 close relatives (2.3%) passed away.

Teachers

Below one percentage of teachers who participated in the study were infected with COVID.

Family members staying in the houses of 6 (1.5%) and 23 (5.6%) persons staying away from homes tested COVID positive. close relatives of 93 (71.54%) teachers went under quarantine, 30 (23.08%) were hospitalized and cured of disease and 5 (3.85%) exhibited COVID symptoms. Close relatives of 2 (1.54%) teachers died of COVID.

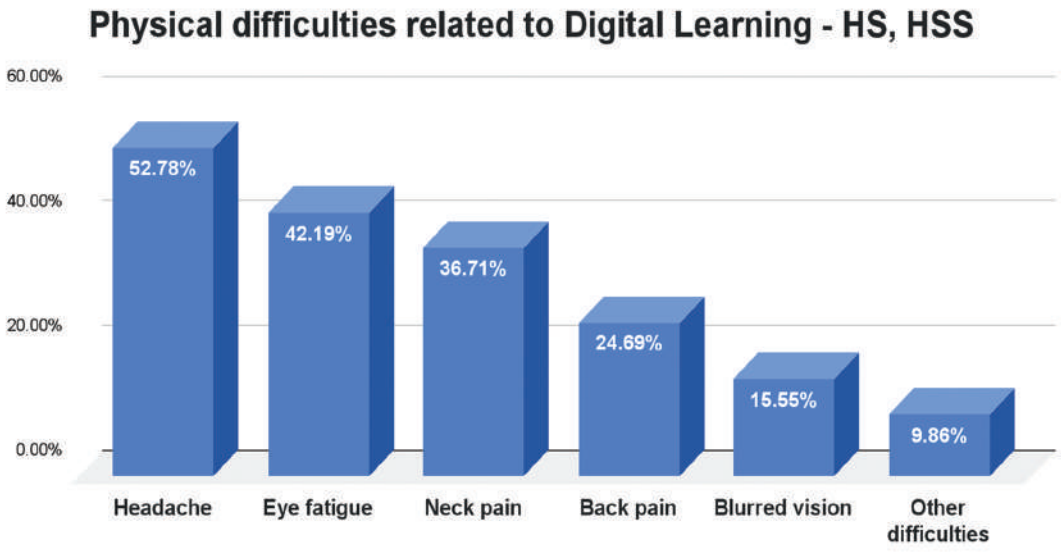
Sl No	Characteristics / Categories (N = 412)	χ^2 value	Sig.
1	Malayalam medium students	32.190	.000
2	Boys	34.774	.000
3	Students who were reported by teachers to be of low academic functioning	35.784	.000
4	Students with less participation in Victers classes	324.117	.000
5	Students with less participation in teachers' follow-up classes	459.780	.000
6	Students who have not followed a study routine	123.752	.000
7	Students with decreased interest in Victers classes	134.572	.000
8	Students who reported that the benefit of Victers classes is low	206.989	.000
9	Those who have a low level of understanding of Victers classes	165.794	.000
10	Students who report they rarely receive feedback of follow up activities	329.416	.000
11	Those who do not receive considerable help from parents and family for their studies	79.208	.000
12	Those whose family atmosphere became worse during COVID period	38.845	.000
13	Students who use mobile phone for more than 2 hours for nonacademic purposes	24.387	.000

3.5.2. Health Issues Related to Screen use

The continuous use of screens leads to health issues. Due to the use of screens, High School and Higher Secondary School students reported difficulties like headache (52.84%), eye fatigue (42.25%), neck pain (36.76%), back pain (24.72%) and blurred vision (15.57%).

After the digital learning started, 154 Primary school students (12.9%) faced problems with their eyes, such as vision problems, excessive tearing and itching. 213 students (16.4%) suffered from headaches after the digital learning started.

222 teachers (53.88%) recorded that students reported health issues related to digital learning such as headache, eye strain and back pain. The details of how often teachers communicated to students about the health hazards and their preventive measures are given in the table.



Have you communicated to your students about the health hazards and possible preventive measures (posture, eye relaxation etc.)?	
No	66 (16%)
Occasionally	311 (75.5%)
Regularly	35 (8.5%)

The details of how often teachers communicated to students about the importance of physical exercise are given in the table.

Have you communicated to your students about the importance of engaging in physical activity/ doing physical exercise during this period?	
No	58 (14.1%)
Occasionally	292 (70.9%)
Regularly	62 (15%)

3.5.3. Physical Exercise

Physical exercise is very rare among adolescent students while there are no regular classes. In the long run this will lead to lifestyle diseases. During the COVID pandemic, 25.5% of students reported that they had engaged in physical exercise daily for 30 minutes and at least 5 times a week. while 43.4% of students stated that they rarely exercised. 31.1% said that they did exercise only once or twice a week.

516 (33.7%) students reported that they had difficulty maintaining daily routines during the COVID pandemic period.

3.6 Mental Health

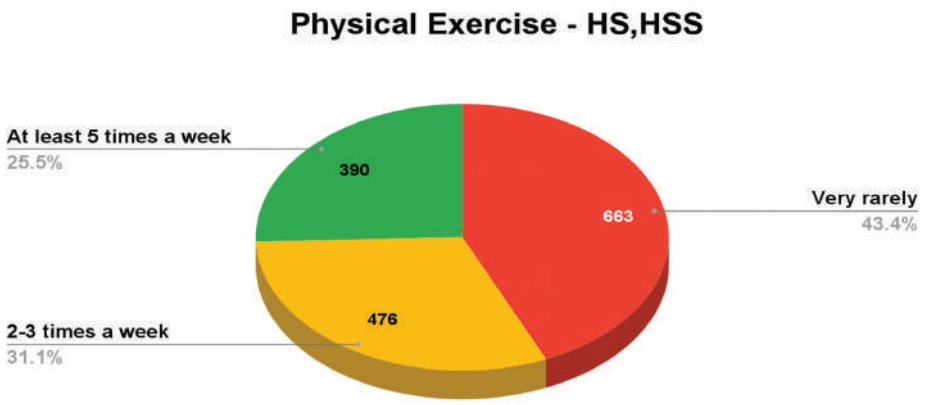
The study used several methods to assess the mental health of the students, their parents and the teachers during the COVID pandemic.

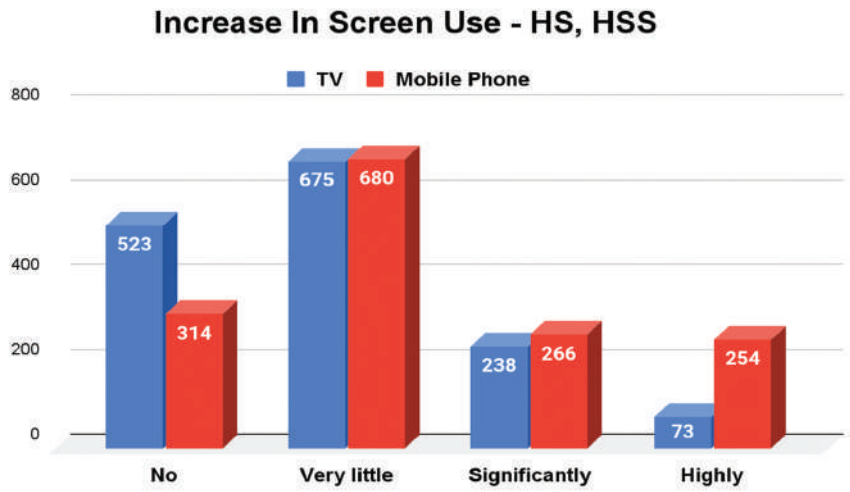
The information consolidated with the data obtained from both brief and long questionnaires for students, School Counselors and Souhrida club coordinators as well as the interviews and discussions with mental health professionals, are detailed below. Information related to the mental health of parents and teachers has been included separately in relevant sections of this report.

The mental health survey was mainly focused on high school and higher secondary school students. Analysis of data obtained from them is presented in the first half of this section, and the data obtained from counselors and Souhrida Club coordinators is included in the second half. (A general description of the emotional difficulties of primary school students is provided in section 3.4.6.)

3.6.1. Screen use: Television/ Mobile phone

In response to the question regarding screen use for non academic purposes, 986 (64.9%) students noted an increase in watching television, while 1200 (78.48%) reported an increase in the use of mobile phones. 523





students (34.21%) observed no change in their television watching time, and 315 (20.6%) reported that their usage of mobile phones remained unchanged.

234 high school, higher secondary school students (15.3%) reported a daily usage of mobile phones for more than two hours for non academic purposes. Relatively more students (561 - 36.69%) reported a daily usage of mobile phones between 30 minutes to an hour.

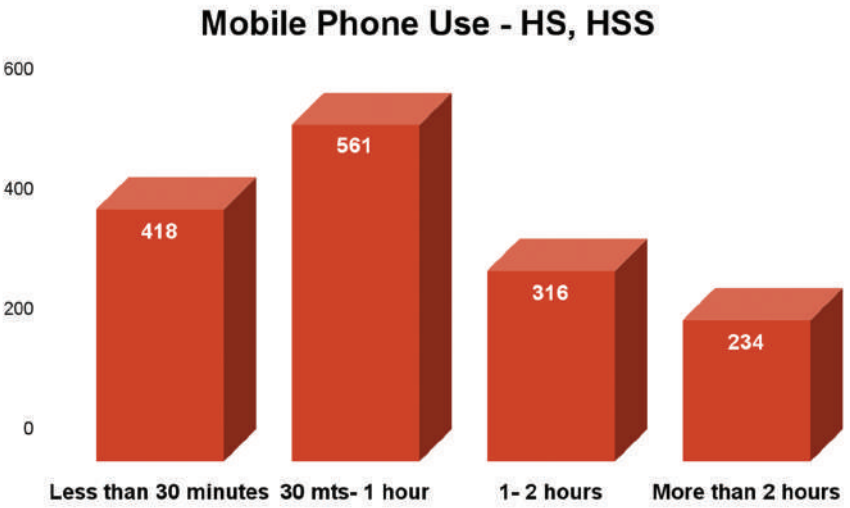
A questionnaire was given to the students to find out the problematic overuse of the Internet among those who use their phone for more than two hours for non-academic purposes. Accordingly, 4.39% (67) of high school and higher secondary students may have problematic internet overuse.

134 (8.76%) students feel a lot of discomfort if they are not able to use the phone at the desired time and 657 (42.97%) students feel the discomfort to some extent.

516 students (33.75%) reported difficulty in following a daily routine.

411 students (26.88%) were unable to keep in touch with close friends during the lockdown.

421 students (27.53%) reported that their home environment had worsened during the time of the pandemic.



713 students (46.6%) felt significantly lonely during the pandemic.

167 (10.9%) students experienced difficulty in emotional regulation during the pandemic.

Boredom increased significantly among the majority of students - 998 (65.27%). 443 (28.97%) had experienced decreased attention and concentration

3.6.2. Depression and Anxiety

High school and higher secondary students (S1+S4), parents (S2+S5) and teachers (S3) were screened for the presence of depression and anxiety using two short screening questionnaires, PHQ-2 and GAD-2. Accordingly, the number of students with symptoms of depression and anxiety is shown in the table.

	Students (1529)	Parents (2466)	Teachers (412)
Depression (PHQ 2)	338 (22.04%)	286 (11.6%)	53 (12.83%)
Anxiety (GAD 2)	224 (14.65%)	309 (12.53%)	49 (11.86%)

Levels of Depression and Anxiety: Detailed Analysis

A total of 691 high school and higher secondary students filled out a complete survey form (S1) that included long questionnaires (PHQ-9 and GAD-7) to assess levels of depression and anxiety.

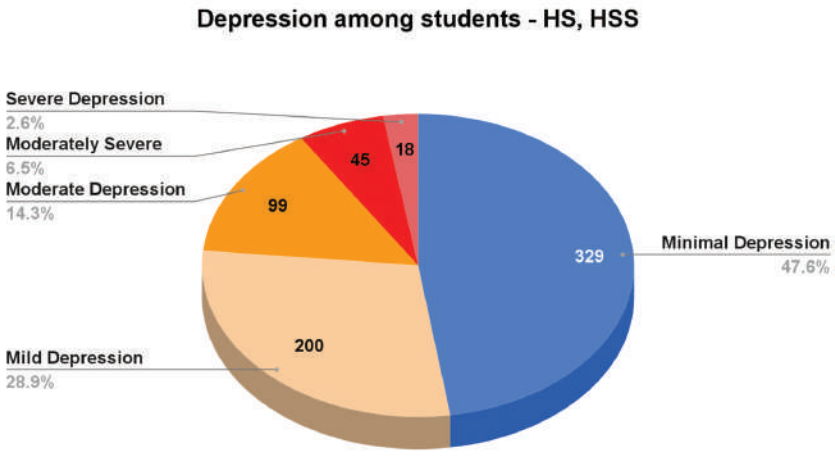
Among them, the number of students with depressive symptoms are similar, as 23.44% reported symptoms of moderate to severe depression and 2.6% may have severe depressive symptoms. 28.9% (200) students reported symptoms of mild depression, 14.3% (99) experienced symptoms of moderate depression, while 45 (6.5%) is categorized in the moderately severe category.

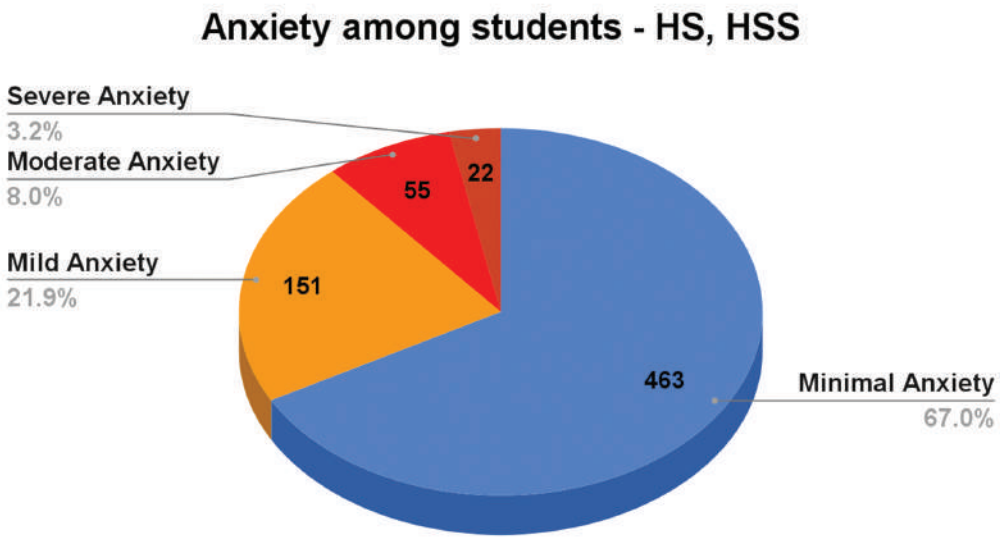
11.6% of the students reported moderate to severe levels of anxiety symptoms. 21.9% (151) reported symptoms of mild anxiety, 7.96% (55) experienced symptoms of moderate anxiety, and 3.18% (22) of the sample population reported symptoms of severe anxiety.

10.13% (70) students considered suicide atleast once, while 14 (2.03%) actually attempted it. (12.32% parents reported that they had considered suicide, and 2.74% had actually attempted it). The high school and higher secondary students who reported feeling 'better off dead' or considered to hurt themselves almost every day during the two weeks before the study were 2%. 4.8% of students had that feeling more than half of the days, while 15.3% students reported the occurrence on some days.

6.22% (43) of high school and higher secondary students tried to hurt themselves when they felt distress or severe discomfort in the last few months. (Percentage of parents who behaved in such a way is 3.49)

In response to the S1 and S4 questionnaires, 107 out of 1529 (7.49%) high school and higher secondary students felt that they needed the help of a counselor during the





COVID pandemic. 81 (75.7%) of those who sought help found it beneficial.

932 (60.95%) students had counselor help available in their schools. Of these, 810 (86.91%) were called by counselors during the school closure period. 41.87% of students who were called by counselors reported that the call was beneficial.

32.7% of high school and higher secondary students reported that some of their classmates were significantly worried for various reasons during the COVID pandemic. 12.3% felt that those classmates needed the services of a counselor.

3.6.3 Did mental health concerns increase during the time of COVID?

Detailed baseline data relating to the mental health of high school and higher secondary students in Kerala is not available. For that reason, it would not be easy to decide whether the mental health concerns of the students did increase during this time. In 2019, a study by SCERT in collaboration with Sanskrit University Kalady attempted to measure the level of psycho-social difficulties among students, using a standardized Strengths and Difficulties Questionnaire (SDQ). This study found that 10% of a sample of 368 high school students had emotional problems. (5.7% in the borderline category and 4.3% in the abnormal category). A comparison can be made with this previous study as there is some similarity in sample and variables. In the present study the rate of depressive symptoms was 23.44% and the rate of anxiety symptoms was 11.16%. Depression levels are significantly higher. Global figures indicate that 34.8% of students worldwide suffer from depression, while 28.2% display symptoms of anxiety disorder (Wu et al, 2020).

In comparison with those figures, the condition of the students of our state seems sunnier.

3.6.4 Psycho-Social Correlates of mental health

Based on the responses of the students to the S1 questionnaire various factors related to students' mental health were examined in the research study. Levels of depression and anxiety were analyzed using appropriate statistical methods like chi-square and correlation statistics, based on various social, educational, and psychological factors. Given below is a gist of the major findings:

A. Characteristics of students reporting high levels of Depressive symptoms

(Depression is statistically high among these categories / those with these characteristics. However, this does not mean that there exists a cause-effect relationship between these characteristics and depression.)

Sl No	Characteristics / Categories (N = 691)	χ^2 value	Sig.
1	Class XII students	9.388	.009
2	English medium students	7.778	.005
3	Students from APL category	10.386	.001
4	Children of Self-employed fathers	16.331	.012
5	Those who attended less than 25% of the classes on VICTERS channel	40.662	.000
6	Those who could not understand any of the VICTERS classes	19.703	.001
7	Students who have not followed a study routine	15.331	.000
8	Those who have not completed the follow-up activities at all	8.652	.013
9	Students who report they rarely receive feedback of follow up activities	7.083	.029
10	Those with an average study time of less than one hour	9.962	.019
11	Those who showed reduced interest in studies during June-October period	33.687	.000
12	Those who reported headaches while attending online classes	16.370	.000
13	Those who watched more TV during the COVID period	18.712	.000
14	Those who had high mobile phone usage during the COVID period	29.259	.000
15	Students who use mobile phone for more than 2 hours for nonacademic purposes	24.596	.000
16	Students who get upset when smartphone is not available whenever they desired	41.468	.000
17	Those who reported reduced love and consideration of teachers during COVID period	18.611	.000
18	Those who did not have a fixed daily routine	29.721	.000
19	Those who are very much worried about the future	10.432	.005
20	Students whose parents regularly use alcohol or drugs	6.152	.013
21	Those whose parents suffered from chronic illnesses requiring prolonged treatment	5.614	.018
22	Those who are worried that a family member or friend may be affected by the COVID	11.374	.003
23	Those who had frequent conflicts with their parents during the COVID period	56.227	.000
24	Those who experienced a breakup in family relationships or friendships	15.212	.000
25	Those whose close friends of family members fell ill	14.715	.000
26	Those whose close friends or family members passed away	10.521	.000
27	Those who experienced a feeling of loneliness	40.857	.000

B. Characteristics of students reporting high levels of anxiety symptoms:

(Anxiety is statistically high among these categories / those with these characteristics . However, this does not mean that there exists a cause-effect relationship between these characteristics and anxiety)

Sl No	Characteristics / Categories (N = 691)	χ^2 value	Sig.
1	Those who attended less than 25% of Victers classes	12.224	.016
2	Those who are unable to attend classes properly due to lack of smartphone	7.349	.007
3	Those who didn't attend Victers classes because they couldn't understand the classes	11.454	.001
4	Those who found it difficult to pay attention during follow-up classes	13.909	.000
5	Students who didn't follow a fixed study-routine	22.855	.000
6	Students who reported headaches while attending digital classes	9.192	.002
7	Those who watched more TV during COVID period	31.784	.000
8	Those whose mobile phone usage increased during COVID period	34.159	.000
9	Students who get upset when smartphone is not available whenever they desired	40.258	.000
10	Those mobile phone usage exceeds 2 hours per day	24.579	.000
11	Students whose parents regularly use alcohol or drugs	7.678	.006
12	Those who had frequent conflicts with their parents during the COVID period	73.684	.000
13	Those who reported reduced love and consideration from parents	10.694	.005
14	Those who reported increased parental monitoring during COVID period	29.876	.000
15	Those who have arguments due to financial difficulties of their parents	9.986	.002
16	Those who experienced breakup of friendship/ family relationship	7.802	.005
17	Those whose close friends/relatives became ill	8.802	.003
18	Those who experienced difficulties during COVID period which they did not wish to reveal	62.489	.000
19	Those who experienced a feeling of loneliness during COVID period	17.212	.000
20	Those who experienced reduced attention and concentration	17.738	.000

C. Characteristics of groups with higher rates of suicidal ideation:

(This means that the number of people with suicidal ideation is statistically higher among these categories / people with these characteristics. However, this does not mean that there exists a cause-effect relationship between these characteristics and suicidal ideation.)

Sl No	Characteristics/ Categories (N = 691)	χ^2 value	Sig.
1	Those whose parents suffered from chronic illnesses requiring prolonged treatment	4.958	.026
2	Those who tested COVID positive	10.500	.005
3	Students with laptops/ tabs/ PC	14.425	.025
4	Students in English medium schools	4.751	.029
5	Students in the APL category	5.027	.025
6	Those who attended less than 25% of Victers classes	20.576	.000
7	Those who did not have a fixed daily routine	8.547	.000
8	Students who get upset when smartphone is not available whenever they desired	18.430	.000
9	Those who have frequent arguments/ conflicts with their parents (for reasons like the lack of a proper daily routine, too much parental surveillance, over-use of the internet, lack of cooperation in daily chores, not studying enough etc.)	41.375	.000
10	Those who get distracted easily during class	16.165	.000
11	Students whose parents were mentally burdened due to financial or other problems	6.199	.000
12	Those who experienced breakup of friendship/ relationship	4.250	.000

D. Categories with high number of people who have attempted suicide at least once:

(This means that the number of suicide attempts among these categories / people with these characteristics is statistically higher. However, this does not mean that there exists a cause-effect relationship between these characteristics and suicide attempts.)

Sl No	**Characteristics / Categories (N = 691)**	**χ^2 value**	**Sig.**
1	Students with laptops/tabs/PC	7.748	.005
2	Those who could not understand the classes	8.564	.003
3	Those who get easily distracted during class	7.823	.005
4	Those who do relatively more physical exercise or games (those who are more physical active)	7.221	.007
5	Students who get upset when smartphone is not available whenever they desired	16.042	.001
6	Those who have frequent arguments/ conflicts with their parents (for reasons like the lack of a proper daily routine, too much parental surveillance, over-use of the internet, lack of cooperation in daily chores, not studying enough etc.)	30.573	.000

It is possible to classify the characteristics related to suicidal ideation, and suicide attempts in various categories:

- Not too low in socio-economic status
- Low involvement in learning activities
- Certain vulnerabilities in basic temperament (difficulty in focus/concentration, high levels of activity, the tendency to rebel against elders, the propensity to slip into bad habits such as mobile phone overuse)
- Family issues
- Break-up of relationships with friends or loved ones
- Parental pressure

Correlation analysis was undertaken to study the characteristics associated with mental health problems among students.

Correlation table of characteristics related to depression

Characteristics (N=691)	Correlation	Sig.
Negative Emotionality	.280	.001
Tendency to avoid problems	.408	.001
The tendency to harm oneself when problems arise	.354	.001
Difficulty in emotion regulation	.505	.001
The feeling of not being taken into consideration by parents	.237	.001
Harmony in the family unit	-.220	.001

Correlation of characteristics associated with anxiety among students

Characteristics (N=691)	Correlation	Sig.
Negative Emotionality	.282	.001
Tendency to avoid problems	.367	.001
The tendency to harm oneself when problems arise	.394	.001
Difficulty in emotion regulation	.454	.001
The feeling of not being taken into consideration by parents	.240	.001
Harmony in the family unit	-.205	.001

3.6.5. Analysis of Paired Data

Certain patterns were evident when the data of the students and their parents were paired.

Correlation table of children's proneness to depression and parental characteristics

Characteristics (N=691)	Correlation	Sig.
Depressive tendency of the parent	.297	.001
Parental tendency to anxiety	.237	.001
Negative emotionality of parents	.141	.001
Structure in parenting	-.115	.005
Coerciveness in parenting	.110	.005

Correlation table of children's proneness to anxiety and parental characteristics

Characteristics (N=691)	Correlation	Sig.
Depressive tendency of the parent	.267	.001
Parental tendency to anxiety	.309	.001
Negative emotionality of parents	.139	.001
Structure in parenting	-.099	.005
Coerciveness in parenting	.100	.005

Statistics indicate high levels of depressive tendency in children with parents having high prevalence of the following characteristics.

Sl No.	Characteristics / categories (N=416)	χ^2 value	Sig.
1	High levels of parental alcohol abuse	8.298	.001
2	Parent's lack of interest in child's studies	7.768	.021
3	Increased restlessness, anger, and sadness	16.736	.000
4	Difficulty in managing child discipline	20.401	.000

Statistics indicate high levels of anxiety in children with parents having high prevalence of the following characteristics.

Sl No.	Characteristics / categories (N=416)	χ^2 value	Sig.
1	High levels of parental smoking	11.982	.007
2	High levels of parental alcohol abuse	10.230	.017
3	Parent's lack of interest in child's studies	7.654	.22
4	Parent feels burdened by the child's studies	14.783	.001
5	Increased restlessness, anger, and sadness	12.670	.002
6	Difficulty in managing child discipline	20.401	.000

There is a high correlation between parents' depression and their children's depression. Likewise, when parents' anxiety increases, so does their children's anxiety.

Parenting styles also show significant statistical correlation with anxiety and depression among children. A more structured style of parenting correlates with lower levels of depression and anxiety among the children. When the element of coerciveness in parenting rises, there is a corresponding increase in the child's level of anxiety and depression. As negative emotionality (a trait that predisposes to emotional turmoil in maturity) rises, parental nurturing registers a fall (-.096), as well as in structured parenting (.196).** Moreover, in cases where this parental trait is high, children too display corresponding levels of negative emotionality.

It can be inferred from this that the mental well-being of children is closely linked to the mental well-being of the parents and the home environment. It is also obvious that parenting structure and nurturing need to be high and the element of coercive control low.

Some important determinants of mental health among students (heredity, certain types of family background, drug use, etc.) were not possible to include in this study. Therefore, such factors remain outside the purview of this study.

Data obtained from Mental Health Professionals

Apart from the data provided by students and their parents, data was collected from mental health professionals too. The analysis of this data is presented next.

3.6.6. The major difficulties reported among students or in their household:

A. Report by Teachers

80.1% of teachers reported that students have shared their emotional or behavioral difficulties with them during the time of the pandemic. Difficulties in learning (27.03%), loneliness and boredom (17.03%), financial difficulties (16.46%), and anxiety (11.04%) were the leading problems reported by students to teachers. In addition to this, anger and restlessness troubled 7.2% of the children, while 6.86% reported a tendency to depressive symptoms, 4.12% reported problems in the relationship with parents, and 3.65% reported frequent conflicts in the family unit.

Further details of the data obtained from teachers regarding student mental health are included in the section on studies conducted on teachers.

B. Survey of Student Counselors and Souhrida Club Coordinators

176 School Counselors who cater to the psychosocial needs of school students and 53 HSS teachers who work as Souhrida Club Co-ordinators providing a corresponding service to HSS students participated in the study, filling in the lengthy survey forms. Besides, certain selected Souhrida Club coordinators engaged in a preliminary discussion and a Focus Group discussion. Five School Counsellors were interviewed, and their responses noted. The topic of discussion was the mental health of the children during the time of COVID.

During the COVID period, school counselors were providing COVID related services for the health department. Along with this, they continued to provide counseling services to school students through telephone. 174 counselors who responded to the survey are currently working in the Department of Health's COVID telecounseling services. The average working experience of the counselors who participated in the study was six

years.

The Counseling and Guidance Cell under the Higher Secondary Directorate implemented a project named 'Oppam' (Together) to support students during this time. Accordingly, teachers trained to provide mental health support provided psychological services to students through online means. The average work experience of teachers who participated in this programme is 17 years. The average experience of Souhrida Club coordinators is six and a half years.

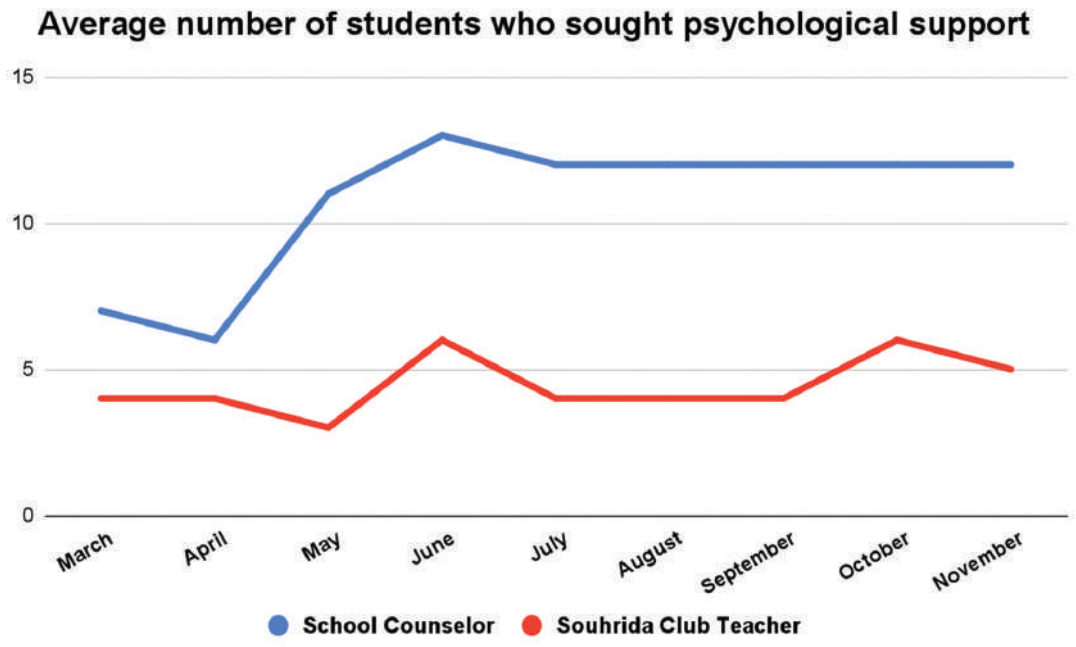
The gist of the data obtained from School Counselors and Souhrida Club Coordinators is given below.

The average number of students who sought psychological support:

The average number of students who sought the support of Counselors or Souhrida Club coordinators between March and November 2020 is given in the table below.

	School Counselor	Souhrida Club Coordinators
March	7	4
April	6	4
May	11	3
June	13	6
July	12	4
August	12	4
September	12	4
October	12	6
November	12	5

Most calls were received from students in the month of June. It can be seen that the phone calls for mental health needs of higher secondary students have increased in the month of October as well.



Besides the students, the parents too had called for psychological support. Between March and November, each school counselor received an average of 19.13 calls from parents to discuss student concerns. In the same period, each Souhrida Club Teacher received an average of 5.2 calls.

164 counselors and 41 Souhrida Club teachers reported that they had called or met students with or without their teacher's instructions. Given below is a chart of the support calls/visits provided by School Counselors or Souhrida Club Teachers.

The average number of calls made to students (on the suggestion of other teachers or otherwise)

Class	School Counselor	Souhrida Club Teacher
LP	12	Less than 1
UP	36	Less than 1
High School	138	4
Higher Secondary	74	36

Gender	School Counselor	Souhrida Club Teacher
Male	114	17
Female	146	25

Apart from this, support was also provided to a transgender student by a School counsellor.

Nature of the Difficulties Reported by Students

The various kinds of difficulties reported by students in the time of COVID were classified and analyzed. The average number of students who were provided support for each of these categories of difficulties is given the table below.

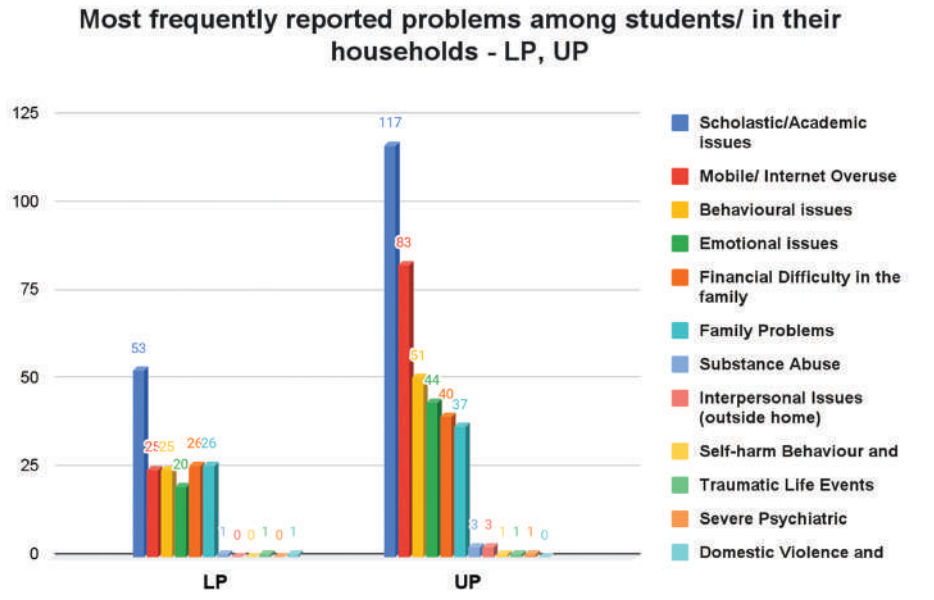
	School Counselor	Souhrida Club Teacher
Emotional issues	43	10
Scholastic / Academic issues	41	17
Mobile/ Internet Overuse and Cyber Problems	25	8
Financial Difficulty in the family	16	6
Behavioural issues	14	6
Family Problems	9	3
Interpersonal Issues (outside home)	5	2
Substance Abuse / Dependence	2	1
Self-harm Behaviour and Suicidal Tendency	1	1
Severe Psychiatric Problems	Less than 1	1
Domestic Violence and Abuse	1	Less than 1
Traumatic Life Events in the Recent Past	Less than 1	Less than 1

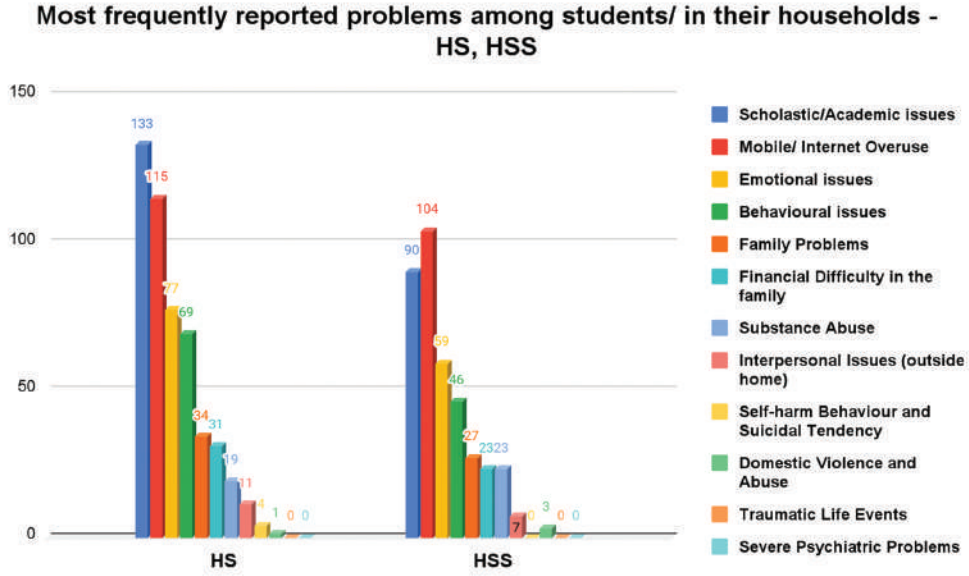
Most frequently reported problems among students

A. Data from School Counselors

The problems most frequently reported by LP students, according to the data from Student Counselors, are academic issues, financial difficulties at home, family problems, overuse of mobiles/internet, behavioral problems, and emotional issues, in that order.

The problems most frequently reported by UP students,



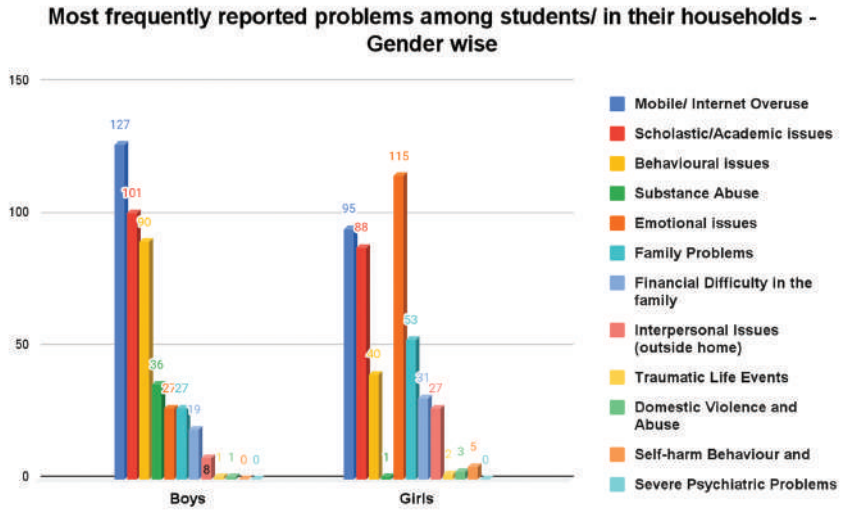


according to the School counselors, are academic issues, overuse of mobiles/internet, behavioral problems, emotional issues, financial difficulties at home, and family problems, in that order.

In both these groups, academic difficulties towered above all other kinds of problems. These include academic backwardness, difficulty in understanding the portions for study, lack of interest, difficulty in concentration, and lack of motivation. It should be noted that overuse of mobile phone/internet becomes a more pressing problem as the child enters the UP stage.

The problems most frequently reported by HS students, according to the School counselors, are academic issues, overuse of mobiles/internet, emotional issues, behavioral problems, family problems, and financial difficulties at home, in that order. This pattern is similar to that of UP students, to a large extent.

The problems most frequently reported by HSS students,



according to the School counselors, are overuse of mobile phones/internet, academic issues, emotional issues, behavioral problems, family problems, and financial difficulties at home, in that order. Overuse of mobile phones and internet becomes the most important problem when it comes to higher secondary.

When analyzed gender-wise, the overuse of mobile phones/internet is higher among boys than girls. For girls, overuse of mobile phones/internet is reported to be followed by emotional difficulties and academic difficulties.

For boys the three most frequently reported problems are overuse of mobile phones/internet, academic difficulties and behavioral issues, in that order. The three most frequently reported among girl students are emotional issues, academic difficulties and overuse of mobile phones/ internet.

B. Data from Souhrida Club Coordinators

The data provided by SCC reflect the same pattern of the data collected by the School Counselors.

The problems most frequently reported by the students, according to the data from SCCs, are overuse of mobile phones/internet, academic issues, emotional issues, financial difficulties at home, family problems, and behavioral problems, in that order.

The problems most frequently reported by male students, according to the data from SCCs, are overuse of mobile phones/internet, academic issues, emotional issues, behavioral problems, financial difficulties at home, and family problems, in that order.

The problems most frequently reported by female students, according to the data from SCCs, are academic issues, emotional issues, overuse of mobile phones/internet, family problems, and financial difficulties at home, in that order.

Follow-up

School Counselors (SCs) reported that around 23.86% of the cases that they encountered required follow-up, and SCCs reported that 12.35% of the cases they encountered needed follow-up measures. SCC's reported that 2.43% of difficulties were referred to mental health professionals outside the school and 2.88% of difficulties had to be reported to higher authorities. It was also noted that school counselors reported 5.37% of difficulties to their superiors. 4.5% of the cases handled by SCs required immediate crisis intervention measures, and the SCCs had to undertake such intervention in 4.06% of their cases.

Potential Factors Contributing to Student Difficulties - Counselors' Report

Psychosocial difficulties experienced by students can have various causes. Personal, familial, social, economic, and cultural factors may underlie these difficulties. SCs and SCCs were asked to identify the factors that may have contributed to students' difficulties from their experience.

Details of their responses are given below.

i. Individual Factors

	School Counselor	**Souhrida Club Teacher**
Emotion Regulation difficulties	75% (132)	79.25% (58)
Personal Characteristics - shy/withdrawn temperament, high activity levels, proneness to negative emotions - sadness, anxiety, fear etc.	63.64% (112)	60.38% (32)
Social skill deficits	55.68% (98)	52.83% (28)
Others	32.95% (58)	16.98% (9)

The most important of the 'Personal factors' among the students are their difficulty of exercising emotional self-control, their fundamental flaws of character/weaknesses, and social skill deficits.

ii. Familial factors

	School Counselor	Souhrida Club Teacher
Parenting styles - over strictness, lack of warmth, over-protectiveness, controlling	94.89% (167)	60.38% (32)
Conflicts - marital discord, fights between parents, extramarital relationship, abusive relationship, abusive attitude towards child	65.91% (116)	60.38% (32)
Communication issues - Less communication between family members, chaotic communication	64.77% (114)	67.92% (36)
Lack of family support, children feel misunderstood by parents	63.64% (112)	66.04% (35)
Invalidation, lack of appreciation, neglect, permissiveness	51.14% (90)	49.06% (26)
Socialization of emotions - punitive, supportive, dismissive	36.36% (64)	22.64% (12)

According to the School Counselor, parenting styles and conflicts within home are the most important among the familial factors. The Souhrida Club Coordinators report that, for HSS students, the most important familial factors are issues in communication and lack of family support.

iii. Social, economic and cultural factors

	School Counselor	Souhrida Club Coordinator
Job loss of parents during COVID period (in Current Scenario)	75.57% (133)	75.47% (40)
Financial Difficulties of family	73.30% (129)	79.25% (42)
Social backwardness of the family	53.98% (95)	56.60% (30)
Bad influences from the immediate environment	48.86% (86)	39.62% (21)
Lack of mentoring/ support	47.73% (84)	41.51% (22)
Social isolation	27.84% (49)	22.64% (12)
Other factors	13.07% (23)	9.43% (5)

The most important among the socio-economic and cultural factors are job loss of parents and financial difficulties in the family. Both School Counselor and Souhrida Club Coordinators report that in the present situation, financial factors are indeed of the utmost importance.

Number of Cases Reported in COVID time Compared with Previous Years

In comparison with previous years, the number of cases has increased in the time of COVID. This has been attested by 73 School Counselor (41.7%) and 32 Souhrida Club Coordinators (60.38%). 38 SCs (21.7%) and 5 SCCs (9.43%) reported no change in the number of cases they attended.

	School Counselor	Souhrida Club Coordinators
Increased	41.71% (73)	60.38% (32)
Remained the same	21.71% (38)	9.43% (5)
Decreased	21.14% (37)	7.55% (4)
Not sure	15.43% (27)	22.64% (12)

105 School Counselors (60%) and 34 Souhrida Club Coordinators (64%) reported that there was a change in the nature of the difficulties reported when compared with previous years. 70 School Counselors (40%) and 19 Souhrida Club Coordinators (36%), however, reported no change in the nature of the difficulties that they attended to.

Financial difficulties in the family, behavioral problems related to children spending more time at home, emotional difficulties, excessive mobile use, problems with lack of social contact and isolation were reported during this period compared to pre-COVID.

127 School Counselors (72.5%) and 36 Souhrida Club Coordinators (68%) reported that they had conducted online programmes for the children/ parents during the time of COVID. 74 School Counselors (42%) and 22 Souhrida Club Coordinators (41.5%) reported satisfactory participation in these programmes.

Self-confidence

123 School Counselors (68%) and 32 Souhrida Club Coordinators (60.4%) reported an increase in self-confidence as a result of their interventions between March and November. 6 School Counselors (3.43%) and 1.9% Souhrida Club Coordinators, however, reported a slight decrease of self-confidence.

Effectiveness

119 School Counselors (70.3%) and 34 Souhrida Club Coordinators (64.15%) reported an increase in overall

effectiveness with the interventions conducted during March to November. 20 (11.4%) School counselors and 9 (17%) Souhrida Club Coordinators reported no difference in effectiveness.

162 School Counselors (92.6%) reported an increase in level of strain due to increased workload of additional COVID-related activities since March, while 5 (2.85%) reported no change in the level of strain.

Self-efficacy of School Counselors and Souhrida Club Coordinators

The School Counselors and Souhrida Club Coordinators were asked to rate their confidence in dealing effectively with students with different types of difficulties on a scale of one to five.

Self Efficacy	School Counselors	Souhrida Club Coordinators
Scholastic/Academic issues	3.66	3.62
Emotional issues	3.48	3.17
Mobile/ Internet Overuse and Cyber Problems	3.49	2.96
Family Problems	3.37	2.68
Interpersonal Issues (outside home)	3.33	3.02
Behavioural issues	3.33	2.91
Domestic Violence and Abuse	3.21	2.47
Substance Abuse / Dependence	2.90	2.40
Traumatic Life Events in the Recent Past	2.86	2.43
Self-harm Behaviour and Suicidal Tendency	2.81	2.34
Financial Difficulty in the family	2.67	2.68
Severe Psychiatric Problems	2.24	1.79

Self-confidence in dealing with Scholastic/Academic issues, emotional issues, mobile/ internet overuse, interpersonal issues and behavioral issues is relatively high. However, SCs and SCCs are relatively less confident in dealing with Severe Psychiatric problems, Substance abuse, financial difficulties in the family, self-harm behavior, domestic violence, etc.

Suggestions from SCs and SCCs

SCs and SCCs have come out with certain suggestions to improve the prevailing situation of counseling in schools.

- Counselors should be provided additional training, online or offline.
- There should be opportunities to spend more time with students To facilitate this, other COVID related duties need to be reduced.
- The Department of Education should show greater consideration to the counselors.
- Digital classrooms should include life skills training.
- Students and parents should be made aware of the importance of counseling.

Suggestions from SCs and SCCs to improve counseling services when schools reopen after the COVID pandemic

- Due importance should be given to improving the mental health of the students.
- The basic infrastructure for counselling should be ensured and optimized.
- A counselling session should be part of the regular timetable.
- When school reopens students should be provided the opportunity to share their COVID-related experiences, and to dispel their anxiety.
- All the staff, including the heads of schools, should be made aware of the mental state of the children, and should be given instructions on how to proceed.

The discussion with SCs and SCCs has made it clear that in recent months, the mental burden on the children has increased considerably. SCs report that families with pre-COVID problems found the added burden of the pandemic very difficult to surmount. The younger children were especially hard-pressed by these issues which they could not at the time share with their friends, teachers or counselors.

Some mental health professionals practicing in various parts of Kerala were also consulted. Some of them reported that excessive use of the internet had led to an increased number of children in need of psychological services. However, the general consensus is that the feeling of alarm and anxiety that had set in with the lockdown had gradually lifted.

3.7. Survey Among Parents

A detailed questionnaire was circulated among 2466 parents of the students who participated in the study. A gist of their responses is provided below.

The long questionnaire S2 was completed by 876 respondents and S5, a shorter version (excluding sections of mental health and family functioning) was completed by 1590 parents. Among them, 1727 (69.87%) were mothers and 722 (29.28%) were fathers. 17 of the respondents were family members other than parents.

3.7.1 COVID and the Parents

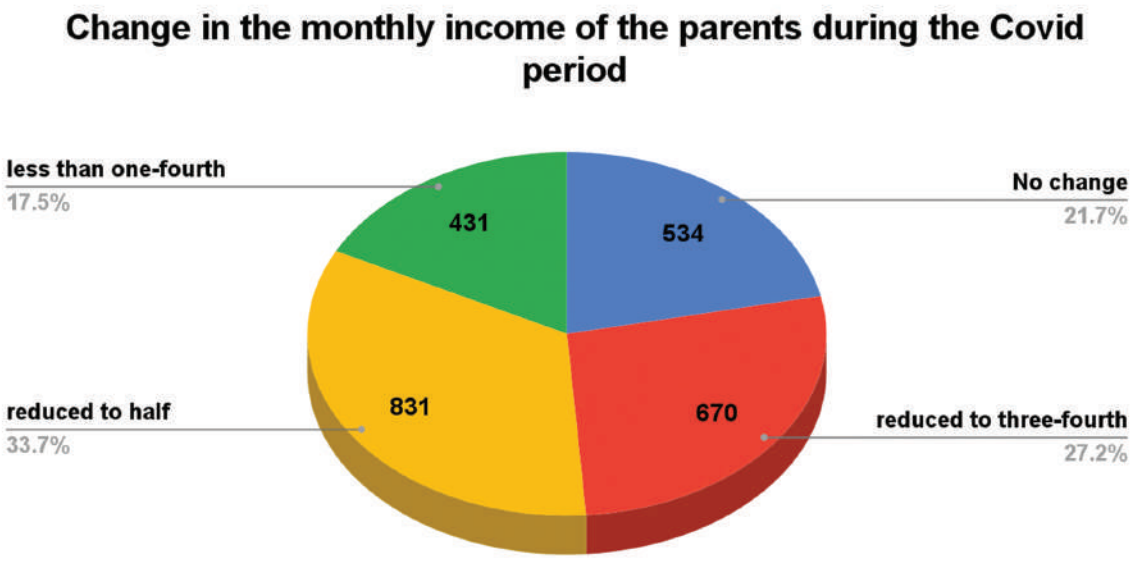
46 (1.9%) had tested positive for COVID at the time of survey participation. 55 (2.2%) were under observation. Close relatives of 706 (28.6%) respondents were under observation. 200 (8.1%) had family members who had tested positive. 286 (11.6%) among the respondents had been admitted to hospital. Close relatives of 56 (2.3%) parents had passed away.

185 respondents were actively engaged in frontline COVID duties.

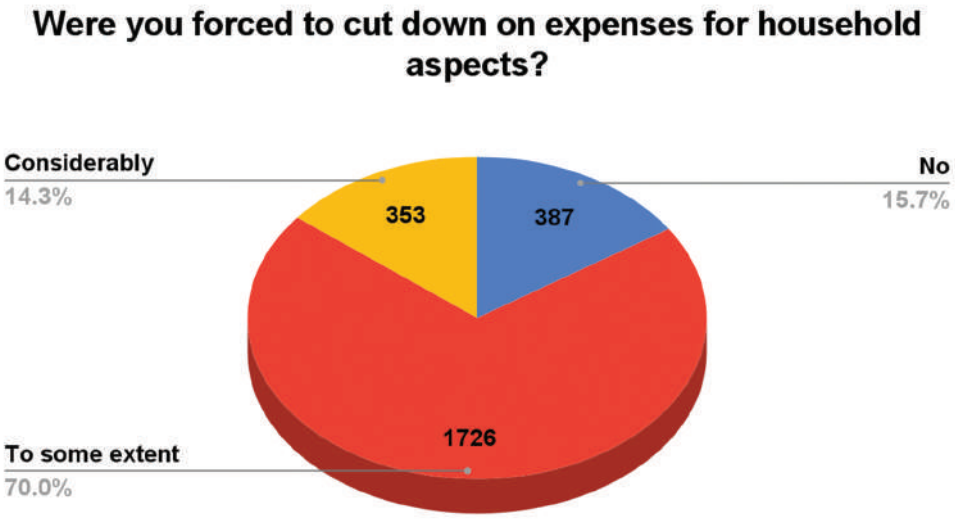
3.7.2 Social and economic security

The COVID pandemic has severely affected the socio-economic security of the people.

1932 (78.35%) of the parents who responded to the survey reported a decrease in income during the COVID pandemic. For as many as 1262 (51.18%) this drop was to the extent of half the income or even more. 889 (36.05%) of them had lost their jobs.



2079 (84.3%) were forced to cut down on their household expenses.



3.7.3. Mental Health of Parents

As many as 1068 parents (43.8%) reported high levels of anxiety about their children's exams and higher education.

Anxiety and Depression

Two short screening questionnaires, PHQ-2 and GAD-2, were used to assess the prevalence of depression and anxiety in parents. The results suggest that 286 (11.6%) show symptoms of depression while 309 (12.53%) have reported symptoms indicative of anxiety. Both the long (S2) and short version (S5) of survey forms for parents included the PHQ-2 and GAD-2.

12.32% of the parents (108) had considered the possibility of suicide at least once. 2.74% (24) had made the actual attempt. These questions were included only in the long questionnaire S2, which was completed by 876 parents.

Prevalence of Depression among Parents

Categories that reported high levels of Depression:

Sl No.	Characteristics / Categories	χ^2 value	Sig.
1	Daily wage-earners (lowest among government employees)	13.052	.023
2	Those whose income dropped by more than 25%	28.084	.000
3	Those who lost their jobs	9.797	.002
4	Those forced to reduce their expenses drastically	57.411	.002
5	Those who suffered job stress	100.045	.000
6	Those who have had suicidal ideation and attempted suicide in the past	47.305	.000
7	Those who have attempted suicide before	9.540	.002
8	Those who do not have a close friend	15.809	.000
9	Those who could not maintain contact with friends during the COVID period	15.756	.000

Depressive tendencies were found to be high among parents in the following categories:

1. Average / low academic performance of child
2. Child's heightened worry about the future
3. Increased levels of anger, anxiety and restlessness in the child
4. Child's reduced activity level
5. Additional burden of supporting child in studies
6. Difficult to discipline the child
7. Increased usage of social media among parents

Prevalence of Anxiety among Parents

Categories that reported high levels of Anxiety

Sl No.	Characteristics / Categories	χ^2 value	Sig.
1	Daily wage earners and self-employed (lowest among government employees)	15.916	.023
2	Those whose income were already less	14.827	.000
3	Those whose income dropped by more than 25%	20.473	.000
4	Those who lost their jobs	18.123	.000
5	Those forced to reduce their expenses drastically	37.759	.002
6	Those who suffered the deaths of loved ones during the COVID period	9.080	.003
7	Those who do not use social media	17.207	.000
8	Those who do not have a close friend	19.084	.002
9	Those who could not maintain contact with friends during the COVID period	16.405	.000

Anxiety tendencies were found to be high among parents in the following categories:

1. Average / low academic performance of child
2. Child's heightened worry about the future
3. Increased levels of anger, anxiety and restlessness in the child
4. Child's reduced activity level
5. Increased usage of social media among children
6. Difficult to discipline the child
7. Additional burden of supporting child in studies
8. Increased usage of social media among parents
9. Relationship with the child worsened during the time of COVID
10. Relationship with spouse worsened during the time of COVID

On a whole, 318 (12.9%) parents reported that they found it difficult over the past months to manage their emotions effectively.

381 (15.45%) parents reported that they engaged in 30 minutes of physical exercise at least five times a week, 752 (30.49%) parents reported that they rarely engaged in physical exercise.

1213 (49.19%) parents reported that they experienced changes in daily routine, and 1140 (46.23%) reported change in dietary habits during the COVID pandemic.

41 (1.66%) parents reported that they spend an average of more than five hours on social media per day and 87 (3.53%) parents stated that they spend 3-5 hours on social media. 1180 (47.85%) parents reported using social media for less than an hour a day on the average.

692 (28.06%) parents found it difficult to maintain close friendships during the time of COVID.

147 (5.96%) parents experienced strain related to household management to a large extent, during the COVID-19 pandemic.

In this period, 305 (12.37%) parents reported an increase in irritability, 217 (8.8%) reported higher levels of anger, and 341 (13.83%) reported an increase in sadness.

276 (11.18%) parents experienced a significant increase in job-related stress.

70 (2.84%) reported that they found it an additional burden to support their child in studies.

27 (1.09%) parents reported that their relationship with their child had worsened.

41 (4.68%) parents reported that they required the services of a counselor at the time of the pandemic (in response to the S2 questionnaire).Among those who sought help, 27 (65.85%) found it beneficial.

3.7.4. Job-loss, Financial Crisis and the Mental Health of Parents

The impact of job loss and financial difficulties on the mental health of parents was subjected to statistical analysis.

According to the data collected from the parents, 889 (36.05%) parents lost their job during the COVID period. 1932 (78.35%) had a decrease in income. 831 (33.70%) now have almost half the income they had before. 431 (17.48%) have income less than one fourth of normal income.

22.2% of those who reported financial difficulty are daily wage-earners. Of those who had lost their jobs, 310 (34.87%) were daily wage-earners. To put the figure in context, this means that 63.27% of daily wage-earners lost their jobs in COVID times.

From the data provided by HS/HSS students, it was found that 316 (45.73%) parents had lost their jobs in the time of COVID (S1 questionnaire). 72 (10.42%) students reported that their parents had suffered severe difficulties on account of job-loss while 161 (23.3%) reported that the consequences of job-loss had been felt only to a lesser extent.

379 students (24.8%) reported that the financial crisis was severe, while 570 (37.28%) considered its impact to be moderate.

Job-loss among Various Categories

174 (28.48%) parents in the General category lost their jobs. Among those in the OBC category, 551 (35.73%) suffered job-loss, while 140 (54.9%) among SCs and 14 (48.28%) STs lost their job. 326 (27.51%) in the APL category, and 553 (44.17%) in the BPL category lost their jobs in the time of COVID. It should be noted that more than half of parents in the SC category lost their job during the pandemic. This figure stands out as extremely high in the statistical analysis (Chi square value: 73.267; Sig: .000).

Job-loss and Mental health

Among those who lost their jobs, 159 (17.89%) reported high levels of irritability/ frustration, 99 (11.14%) reported an increase in anger-levels and 169 (19.01%) reported higher levels of sadness, more than usual.

175 parents who had lost their job (19.69%) reported that they struggled hard to manage their emotions during the period, while 471 (52.98%) reported that the struggle was not too hard.

Among those who lost their jobs, 127 (14.29%) parents are at risk of depression (with a score above the cut-off). Of those who did not lose their jobs, risk of depression was found to be among 159 (10.08%) parents.

Similarly, 145 (16.31%) parents who lost their job were at risk of anxiety . Of those who did not lose their jobs, only 164 (10.40%) had a score above the cut - off.

Change in monthly income among various categories

A. Parents whose income reduced to about less than one-fourth

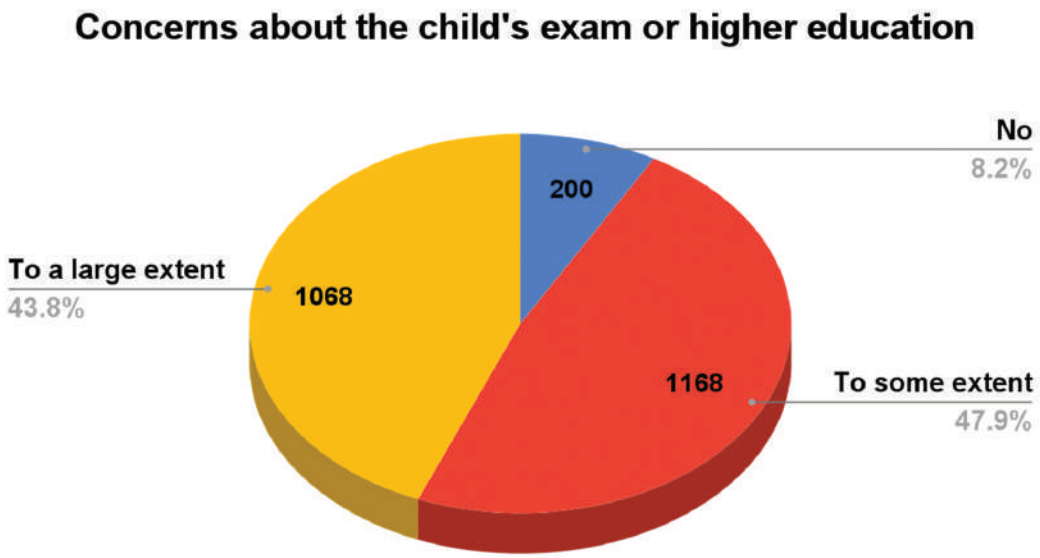
Monthly income was reduced to about less than one-fourth for 83 (13.58%) parents in the General category. The decline in income was also reported among 278 (18.03%) parents of OBC, 59 (23.14%) of Scheduled Caste and 6 (20.69%) of Scheduled Tribe. 174 (14.68%) parents in the APL category and 252 (20.13%) of the BPL category experienced this change in monthly income during the COVID period.

Among the parents belonging to the SC Category, the number of those with the lowest income is proportionally higher.

Change in monthly income and Mental Health

Among those whose income decreased by a quarter, 87 (20.19%) reported feeling irritable, 59 (13.69%) reported anger, and 102 (23.66%) reported sadness, more than usual.

Overall, 102 (23.66%) parents reported having difficulty



managing emotions over the past few months.

80 (18.56%) parents with reduced income are at risk of depression (score above cut-off). Of the total sample of parents, 11.6% reported signs of depression.

Among the parents whose income had reduced by one-fourth, 78 (18.1%) are at risk of anxiety. Of the total sample of parents, 12.53% reported symptoms of anxiety.

These figures indicate that those with income reduced to one-fourth have a higher risk of depression and anxiety than those with no income change.

B. Parents whose income reduced to about half

185 parents (30.28%) in the General category reported a 50% drop in income. 554 (35.93%) parents in the OBC category, 82 (32.16%) among SC and 6 (20.69%) among ST reported a similar drop in income. 363 (30.63%) of those in the APL category and 464 (37.06%) of those in the BPL category reported a drop in income of 50% during the COVID period.

Change in monthly income and Mental Health

108 (12.15%) of those who had suffered a 50% drop in income reported high levels of irritability, 78 (8.77%) reported an increase in anger-levels and 112 (12.6%) reported higher levels of sadness than usual .

Among those whose income had halved, 97 (11.67%) scored higher than the cut-off, revealing a tendency to depression. In the same income group, 111 (13.36%) showed signs of anxiety. These figures are not significantly different from those of the total sample.

The risk of depression and anxiety in those with half the income reduced was slightly higher compared to the total sample.

These figures highlight two major findings:

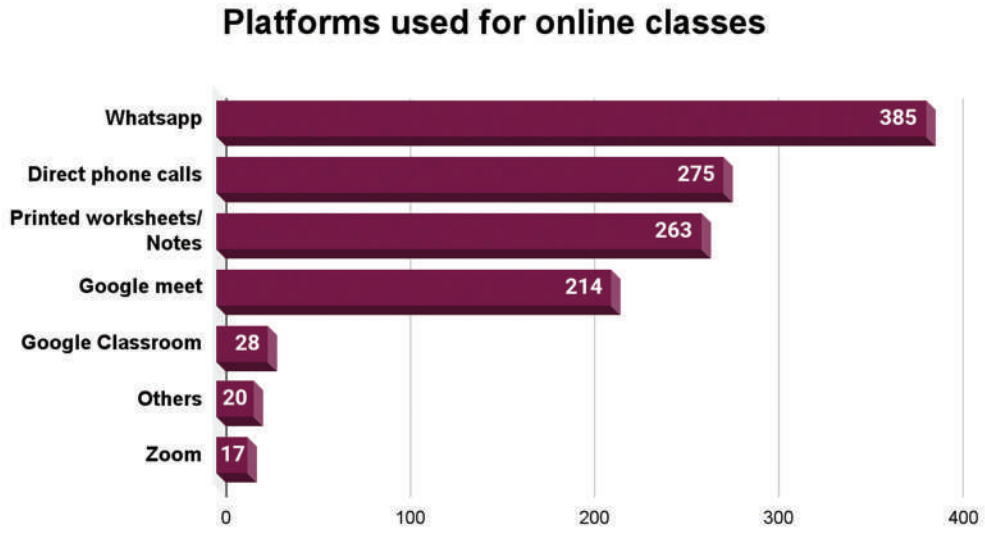
1. Parents from the SC category were the most affected by Job loss and change in monthly income
2. Parents who have lost their jobs and large amounts of income have a higher risk of depression and anxiety than others.

3.8 Survey among Teachers

412 school teachers participated in the survey. 162 (39.32%) hailed from Central Kerala, while 118 (37.86%) belonged to North Kerala and 94 (22.82%) belonged to the southern part of the state.

137 (33.3%) teachers teach in Malayalam medium and 85 (20.6%) in English medium. 190 (46.1%) are teaching using both mediums.

375 (91%) were class teachers. 226 (53.68%) were LP/UP school teachers, 102 (24.23%) were High school



teachers, and 93 (22.09%) taught Higher Secondary classes. The average teaching experience of those who participated in the survey is 15 years.

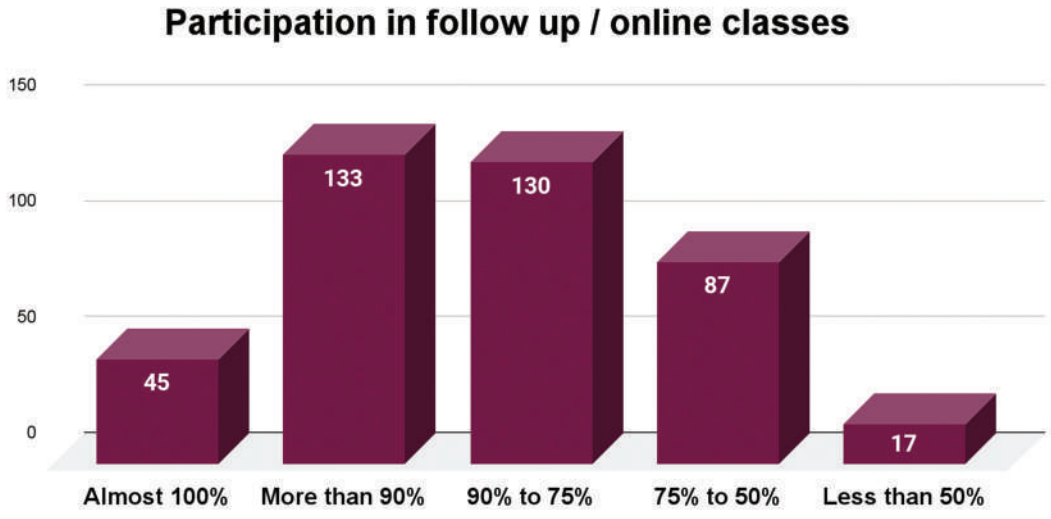
44 (10.7%) of the sample suffered from chronic illnesses or were on regular medication. 5 (1.2%) were differently-abled.

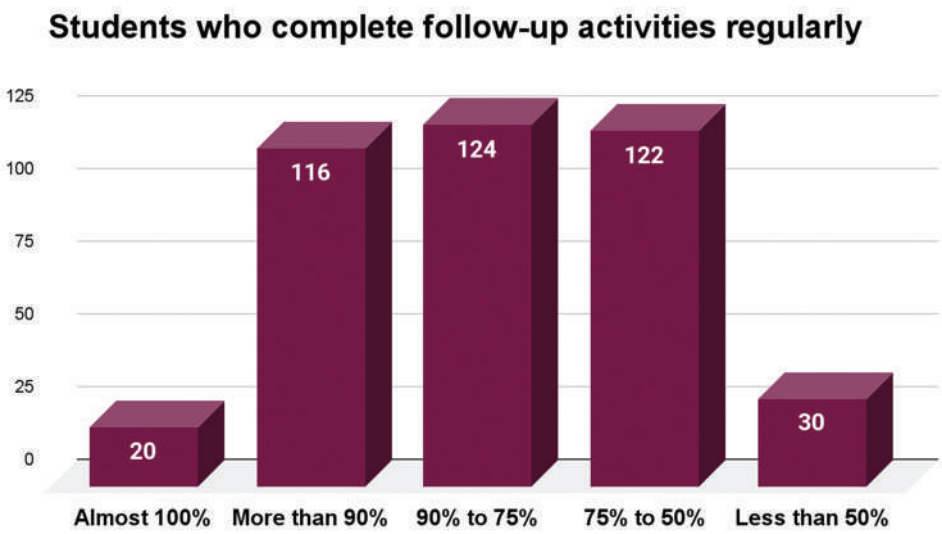
3.8.1. Teachers and the COVID Pandemic

Three (0.7%) of the teachers participating in the survey had tested positive for COVID 19.

6 (1.46%) had a resident family member and 23 (5.58%) had a non-resident family member who had been diagnosed with COVID-19. 93 (22.57%) had close relatives under observation, 3 (0.73%) were hospitalized and recovered and 5 (1.21%) were symptomatic. Close family members of 2 (0.49%) died due to COVID-19.

While 61 (14.8%) teachers indicated that they were very worried about getting infected with COVID, 269 (65.3%) said that they were a little worried and 82 (19.9%) were not very worried.





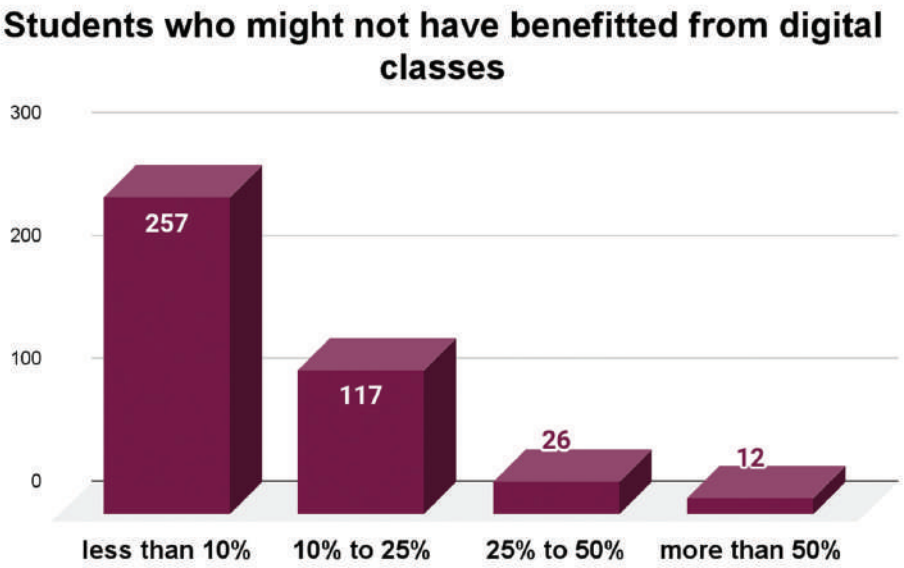
3.8.2 Assistance provided to needy students

351 (85.19%) teachers reported that they had, either on their own initiative, or through agencies such as the school authorities, the PTA, Government or Non-government organizations, purchased and provided gadgets such as smartphones or television sets to needy students. On an average, this initiative benefited 20.38 students per school.

3.8.3. Follow-up Online Classes

397 (96.36%) teachers provide follow-up (worksheets, activities, etc.) for the classes broadcasted on the Victers channel. Apart from this, 252 (61.17%) take extra/online classes. These teachers make use of platforms such as Whatsapp (93.45%), direct telephone calls (66.75%), printed worksheets (63.83%), and Google Meet (51.94%).

282 teachers (62.67%) upload teaching materials to



their digital learning platforms. 168 (37.33%) take live classes. Such materials include self-produced audio messages (26.89%) and notes (25.67%), notes or video clips produced by other teachers/authorities/agencies (19.98%), links to online materials discovered by personal search (16.98%), and self-produced video content (10.48%).

105 (25.49%) teachers take classes five days a week. 39 (9.47%) teachers take class one day a week. 6 (1.46%) teachers take classes seven days a week.

45 (10.92%) teachers reported that almost 100% of the students participate in the follow-up/online classes. 133 (32.28%) report an attendance of over 90% for these classes, and 17 (4.13%) record attendance below 50%.

260 (63.11%) teachers reported that more than 75% of the students who attend the classes participate in the activities that follow the classes.

A total of 141 (34.22%) teachers reported that they were able to provide consistent feedback to all students completing follow-up activities. While 23 (5.58%) teachers reported that they were only able to provide feedback to 50% of students. .

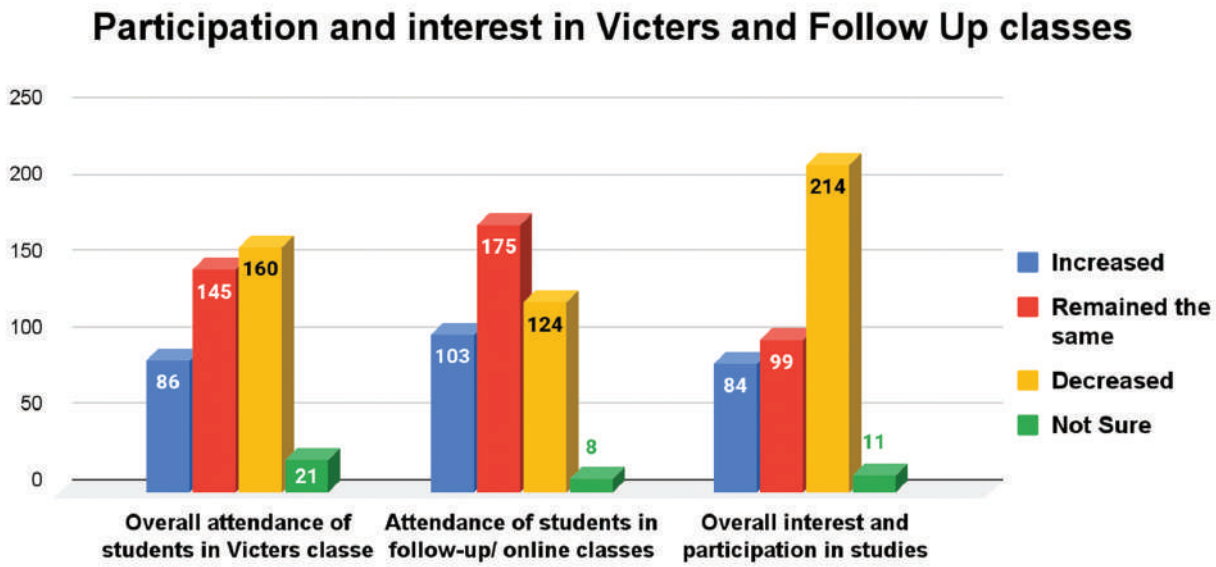
257 (62.38%) teachers indicated that there would be less than 10% of students who did not benefit from digital classes. 12 (2.91%) teachers reported that more than 50% of students do not benefit significantly from digital classes.

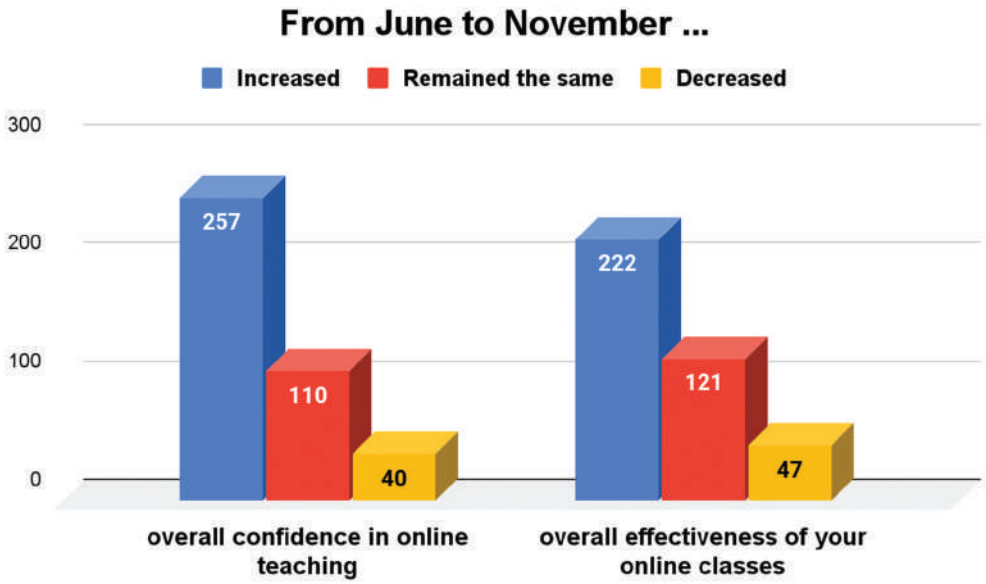
3.8.4. Participation and interest of students in Victers and Digital classes

160 (38.83%) teachers reported that between June and November, the participation of students in the classes on Victers channel had declined over time, while 145 (35.19%) reported no change in participation and 86 (20.87%) reported an increase in the level of participation.

124 teachers (30.24%) reported that between June and November, the participation of students in the follow-up/online classes had declined over time, while 175 (42.68%) reported no change in participation and 103 (25.12%) reported an increase in the level of participation.

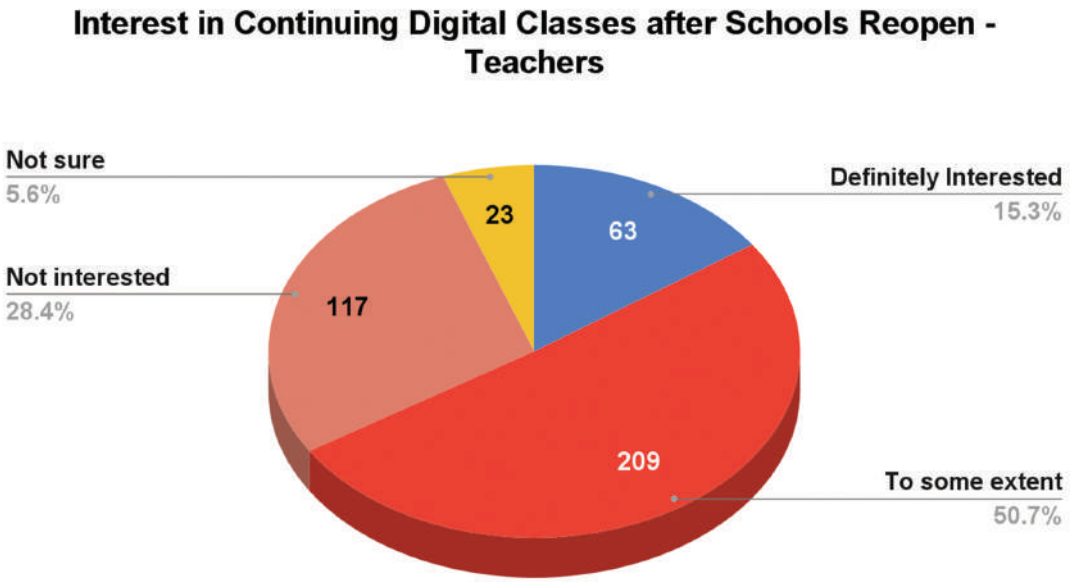
214 teachers (52.2%) reported that between June and November, the overall participation by students and their level of interest in studies had declined over time, while 99 (24.15%) reported no change and 84 (20.49%) reported an increase in the level of participation and interest.





The teachers also reported an increase in self-confidence in their teaching skills (63.14%) and effectiveness (56.92%).

63 (16.2%) teachers expressed a definite interest in continuing online classes even after schools reopen, while 209 (53.7%) recorded that they are somewhat interested. in the same. However, 117 teachers (30.1%) expressed a clear lack of interest in continuing with online classes after schools reopen.



3.8.5. Online teaching Self Efficacy

Teachers were asked to indicate on a 5-point scale how confident they were in activities related to digital teaching, where 1 represents 'least confidence' and 5 represents 'most confidence'.

Average Score

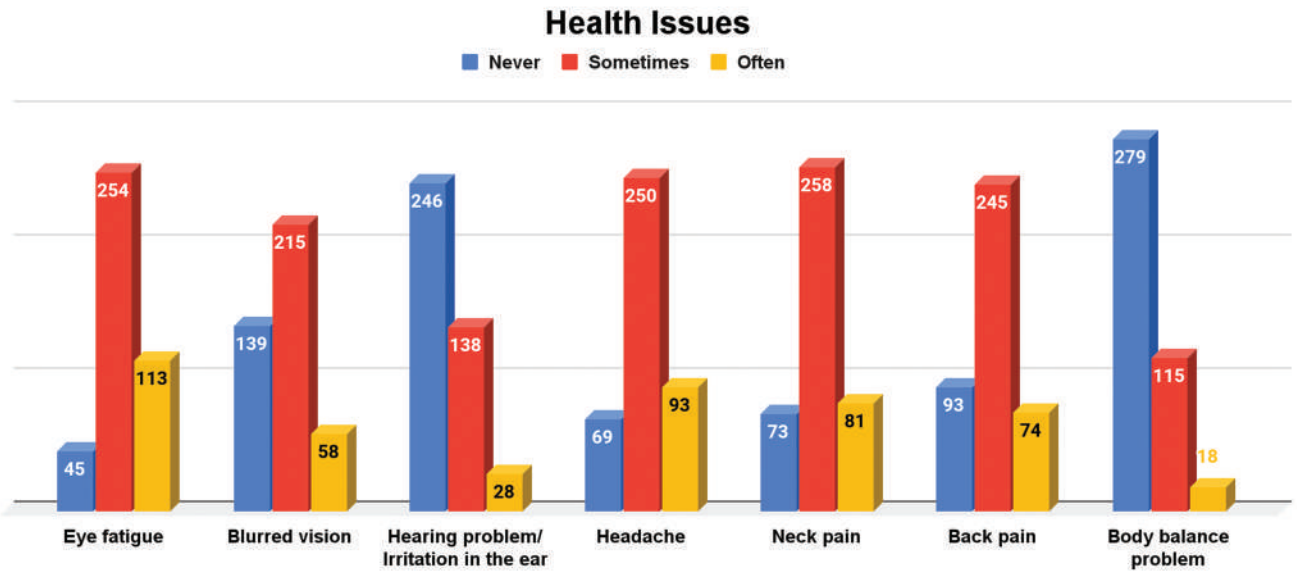
Encouraging students to ask doubts	3.76
Selecting appropriate activities to share with students	3.56
Conveying class content through online mode	3.55
Ensuring student attendance in the class	3.41
Providing feedback related to academic activities to each student	3.37
Clarifying students' doubts as you would do in a face-to-face mode	3.37
Handling online technolog	3.33
Managing time	3.32
Preparing assessments (such as exams) in the online format	3.32
Perceiving whether students have understood what you taught	3.29
Evaluating students' performances on class activities	3.27
Preparing teaching materials suitable for online formats	3.26
Managing your stress	3.24
Effectively expressing emotions in the online mode	3.02

The teachers display high levels of self-confidence in every aspect of digital teaching. Their confidence is especially high in areas such as encouraging students to clear their doubts, in selecting appropriate teaching materials, and in transacting the classes online. Where the levels are slightly lower are in matters such as expressing their own emotions online, managing their own stress, in preparing study materials suitable for online classes, and in evaluating the performance or participation of students in online classes.

These aspects need to be taken into consideration while designing the training programs for teachers.

3.8.6. Health Issues

After the process of online classes began, teachers have been experiencing various health issues such as blurred



vision, headache, neck pain, back pain, hearing problems / irritation in ears and body balance problems. 113 (27.43%) teachers frequently experience eye fatigue.

203 (49.27%) teachers reported that it was difficult to maintain a daily routine in the time of COVID, and 259 (62.86%) recorded that they had to make changes to their diet.

During the COVID pandemic, 125 (30.3%) teachers stated that they exercised daily for 30 minutes at least 4 times a week while 135 (32.77%) teachers reported that they rarely exercised. It cannot be said that the general level of exercise of the teachers is conducive to good health.

3.8.7. Screen-Use

402 (97.6%) teachers use social media (Whatsapp, Facebook, Youtube, Instagram, etc.) for non-academic purposes.

228 (58.2%) use social media for non-academic purposes for less than an hour a day. 120 teachers (30.6%) use social media for such purposes for between 1-3 hours a day, 33 (8.4%) use it for 3-5 hours a day, and 11 (2.8%) report that they are on social media for more than 5 hours.

3.8.8. Mental Health

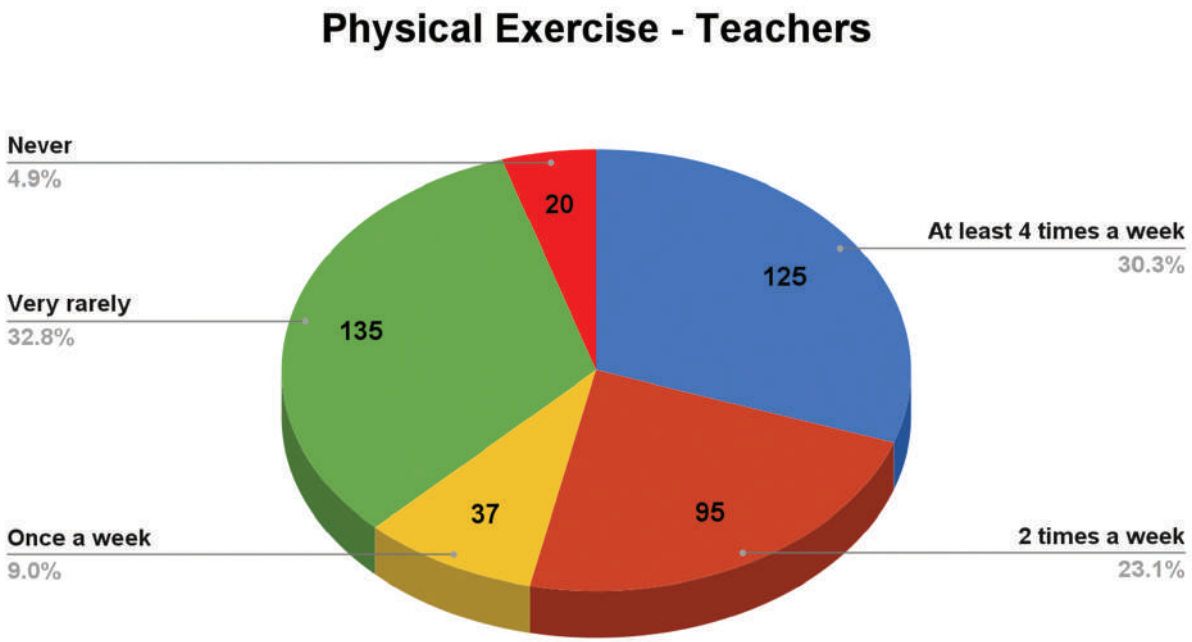
25.73% of the teachers experienced significant loneliness during the COVID pandemic.

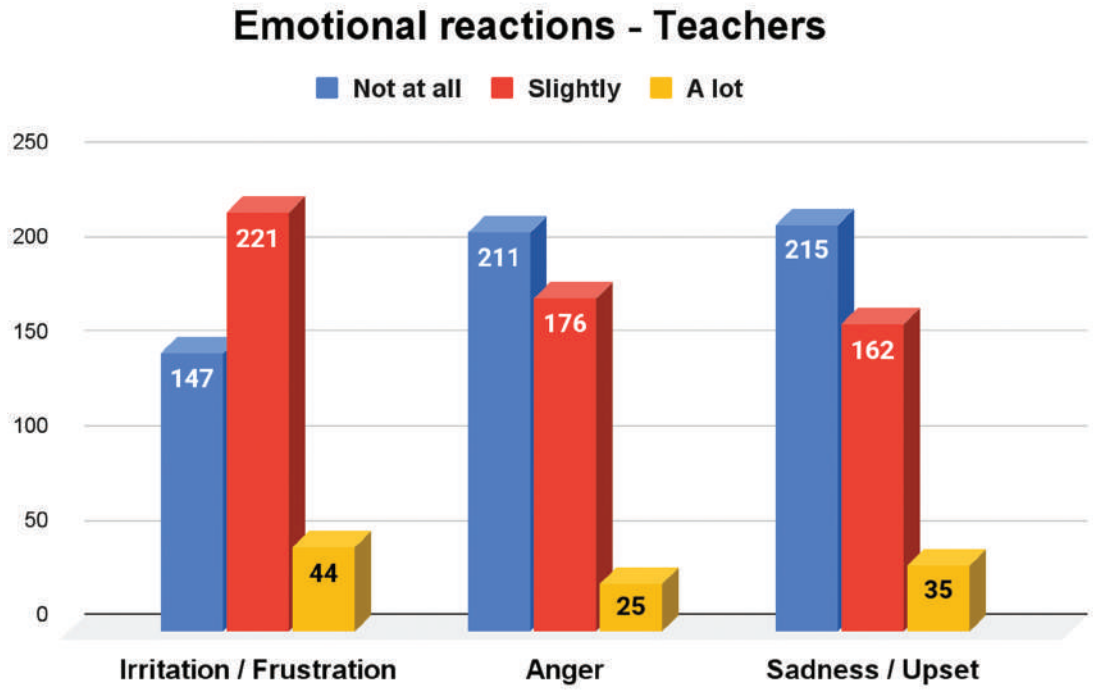
Teachers noted a change in irritation, anger, and sadness during this time. 221 (53.64%) teachers reported that irritation increased slightly and 44 (10.68%) teachers reported that it increased a lot. 176 (42.72%) teachers reported a slight increase in anger and 25 (6.07%) reported a large increase in anger. 162 (39.32%) teachers reported that sadness increased slightly and 35 (8.5%) reported that it increased significantly

High levels of irritation among teachers is a matter of concern, and needs to be noted as such.

Risk of Anxiety and Depression among Teachers

53 teachers (12.86%) showed a tendency to depression, with scores above the cut-off for that parameter. Similarly, 49 (11.89%) showed symptoms of being anxiety-prone.





3.8.9. Mental Support provided by Teachers to Students and Parents

330 teachers (80.1%) reported that during the COVID pandemic students had shared their emotional and behavioral problems with them.

Foremost among the problems shared by the students were those related to academic issues, loneliness, boredom, financial difficulties and anxiety. In addition to these, other common problems were those related to anger, irritation, depressive tendencies, relationship problems with parents, and differences of opinion within the family.

In addition, many parents have shared with teachers about the difficulties their children are experiencing. According to the information received from the parents by the teachers, the main difficulties found among the students are disinterest in studies, increased screen use for non-academic purposes, laziness and lack of routine. Depression, anxiety, anger, and restlessness also occurred among students.

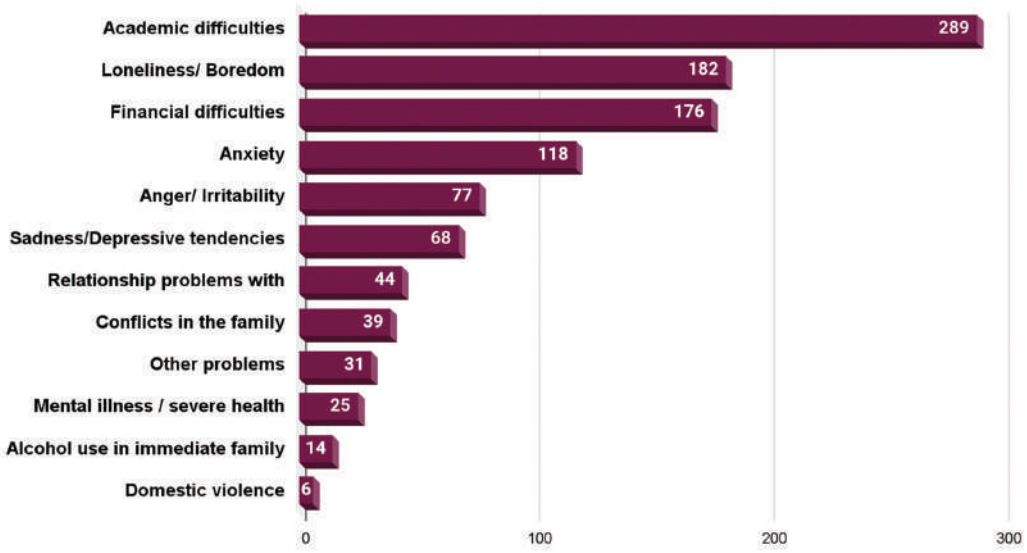
Parents have also shared their emotional/family or other personal issues with teachers during the COVID pandemic. Most of them shared inability to support their children in studies, financial crisis and inability to manage both work and household responsibilities. Some parents have also reported marital problems and problems related to domestic violence to teachers.

65.53% of the teachers reported that in such situations, they responded by offering advice and encouragement to the parents and the students, and 28.64% recorded that they both provide emotional support and counselling. 41.75% of the teachers reported that they had discussed these issues with their colleagues and Principals. Besides, 8.98% referred the students/parents to School Counselor or Souhrida club coordinators, while 3.98% referred them to mental health professionals outside the school. 0.73% of the teachers found it difficult to handle the issue.

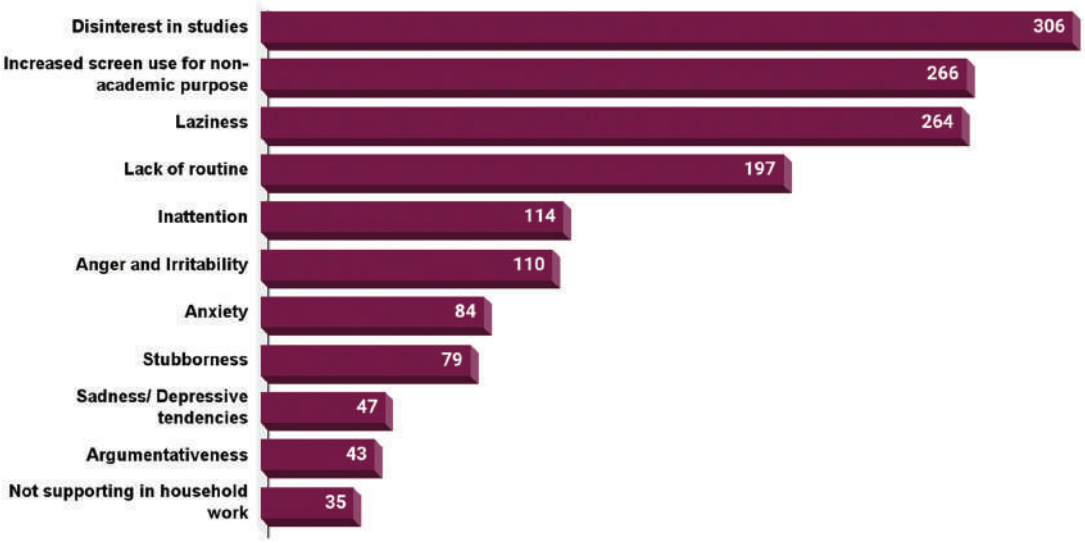
3.8.10 Teachers' Self-confidence in Providing Mental Support

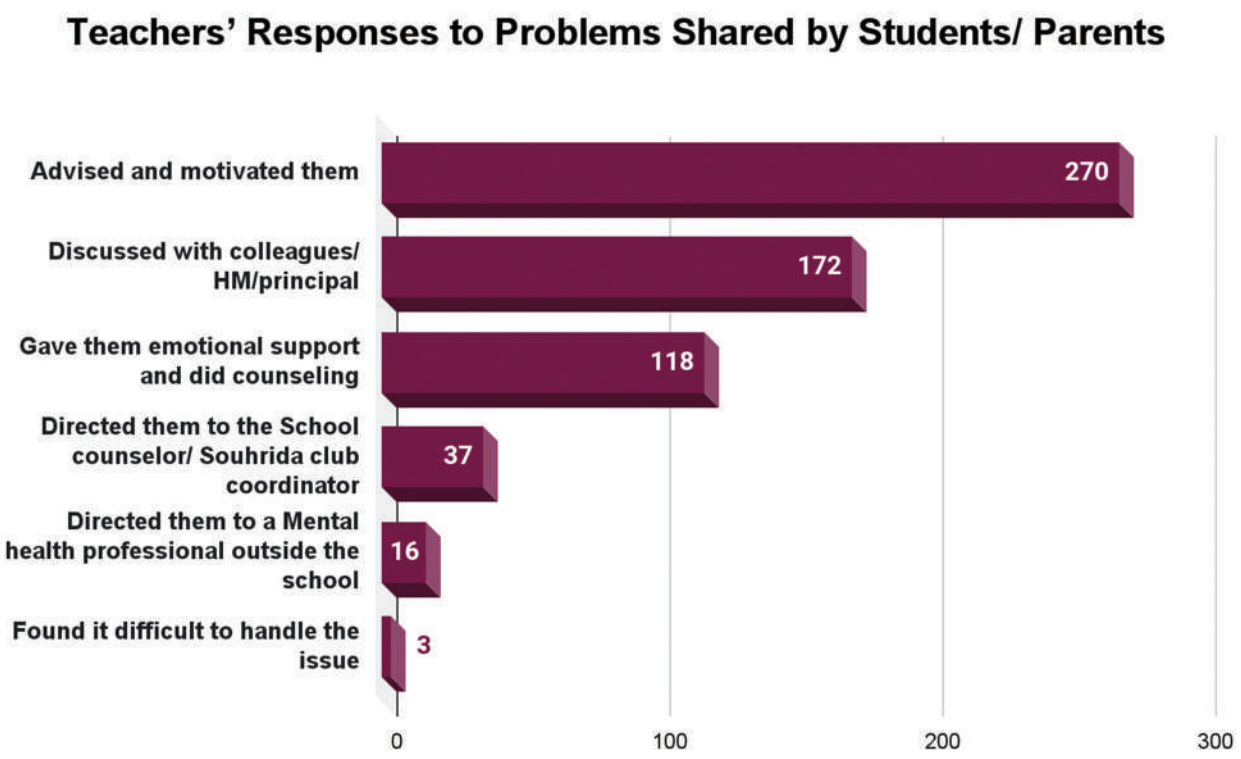
Teachers had been asked to rate their confidence in the ability to understand and respond to the emotional issues or concerns of students and their families. While 74 teachers (17.96%) reported very high levels of self-

Emotional or behavioral difficulties of students - Teacher overview



Emotional / Behavioral Problems of Children - Parent's report to teachers





confidence, 197 (47.82%) reported high self-confidence, and 1 (0.24%) indicated an extremely low level of self-confidence.

236 (57.28%) teachers have counselor services available in their schools. 41 (9.95%) teachers have referred students to the school counselor during the COVID pandemic.

3.8.11 Positive Changes in Students during the time of COVID

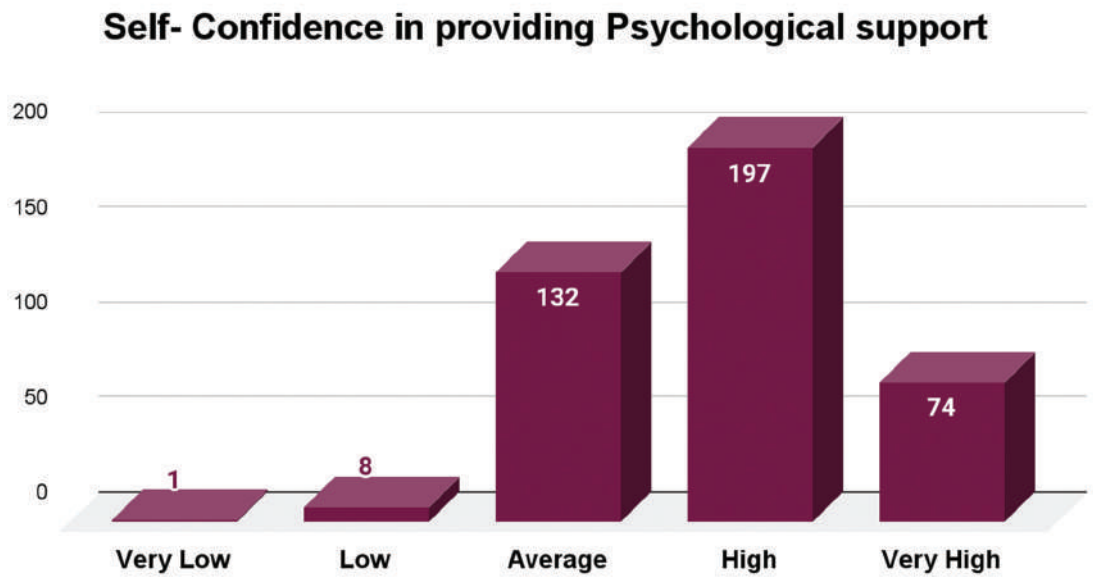
Teachers have reported certain positive changes in the life of the students and their parents during the time of COVID. The technical skills of the students improved (63.35%), they helped out more in the household duties (54.85%), their family time has increased (51.46%), they spent more time with their parents (49.27%), they learn on their own (46.84%), they initiated new technical / online activities (38.59%), they helped out in the household chores (37.86%), and communicate more with their families (33%).

96 (23.3%) teachers reported that, in their observation between June and November, the emotional functioning of the children had improved, while 132 (32.04%) reported no significant change, and 85 (20.63%) reported that the emotional functioning had worsened. 215 (52.18%) recorded an improvement in overall family functioning of the students, while 50 (12.14%) observed that this had worsened in the period, and 27 (6.55%) reported no significant change in the situation.

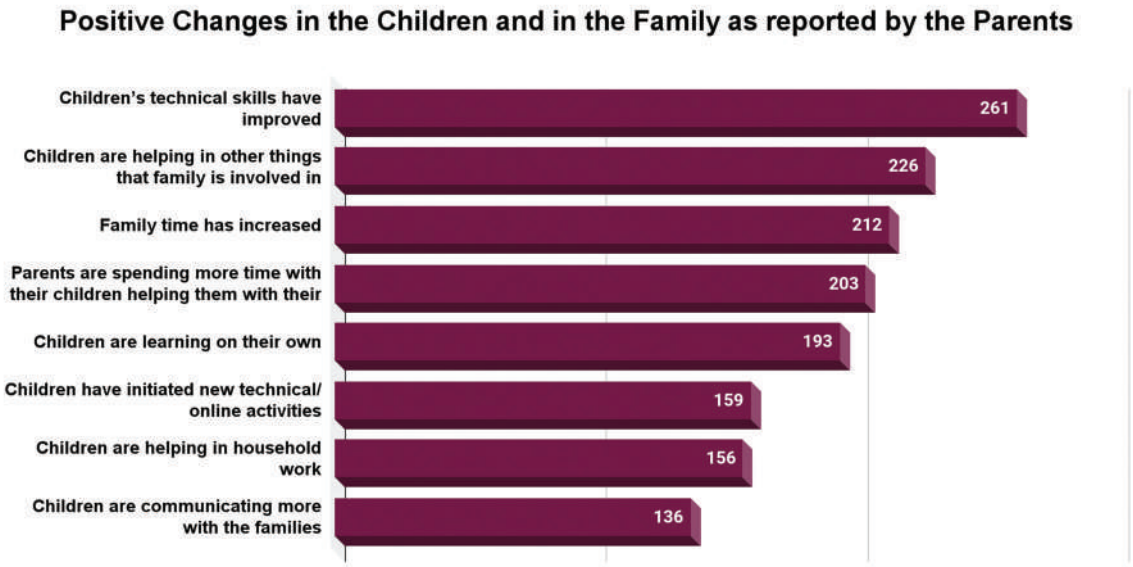
3.8.12. Other Issues Reported by the Teachers

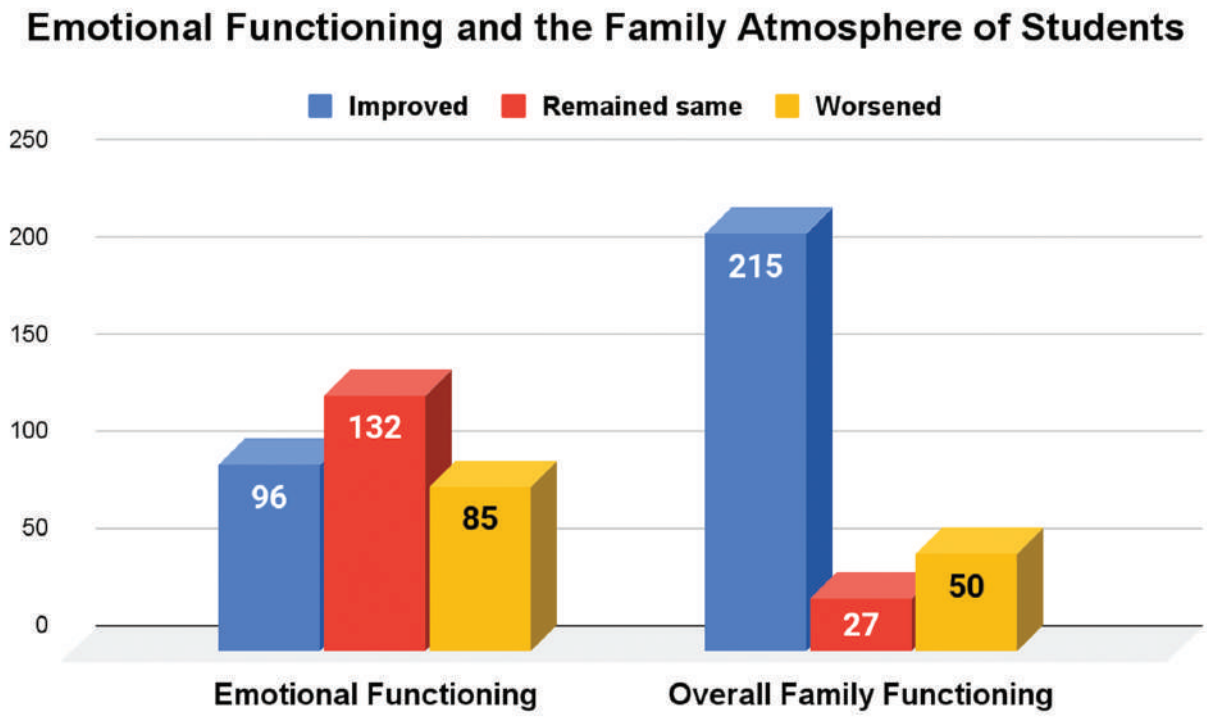
During the course of interviews conducted with them, teachers shared certain other issues that they faced during the pandemic.

1. In the initial stages, teachers underwent a significant dilemma in deciding how to make follow-up activities effective in the follow-up classes of Victers classes.
2. The teachers were distressed by the fact that a minority of students lacked access to or failed to participate in online classes. Many teachers were concerned if the follow up classes would stress them out.
3. Comparisons with private schools, which have been running online classes for hours similar to the regular timetable, have put pressure on some government schools



4. Despite the general directive against holding examinations, parents insisted on schools to conduct exams. Many teachers found it difficult to handle this pressure.
5. Many teachers found it difficult to reassure students who used to excel in sports and games.
6. At least in a few places there was a tendency for students to skip Victers and follow up classes and join private online tuition classes instead.
7. in the online classes of Lower Primary level, Language teachers who would get the children to read aloud and point out how they could do better, and Mathematics teacher who would give children time at the blackboard to solve problems found themselves





confused of how students can acquire such basic skills

8. Some of the parents, especially those who lacked formal education, had shared their dismay at not being able to help their children in the learning activities suggested by teachers. Teachers had a hard time striving to encourage and support these parents.

3.9 Field Studies and Case Studies

The field studies and case studies noted in the course of the research are given below.

3.9.1. Field Studies in the Tribal Region

To understand the psychological and academic functioning of the students in the tribal areas, field studies were conducted in ten centers located in two districts of the state. Two teams comprising of academicians and psychologists participated in the study, the reports of which are presented below:

Field work Report-1

District: Wayanad

Blocks: Manathavadi, Meenangadi, Panamaram, Batheri

Centres Visited:

- Ooru Vidya Kendras: 5
- School study Centre: 1
- Regional Prathibha Centre:1

Conclusions Based on Observation and Data Collected from Students, Parents, Local Residents

1. There were no issues relating to the non-availability of equipment. Electricity, TV sets and cable connections have been provided to the Ooru Study centres. In areas where the infrastructure is lacking, these facilities have been provided in nearby houses/ buildings.
2. During the course of the visit, it was found that the

tribal inhabitants who lived in huts in the forest area of Poothady panchayat in Panamaram block lacked access to electricity and TV sets. Problems relating to the non-availability of equipment persist only in such remote areas. However, even in such areas, cooked food from the local anganawadi is provided to the students.

3. Teachers from the BRCs, local schools and Mentor teachers are assigned the task of visiting Uruvidya Kendras and providing support as per the timetable. Students' Attendance Register and Visitors Diary are maintained at such centres.
4. Although teachers from the BRCs visit these centres, they spend very little time there. Students complain that they do not receive adequate academic support. School teachers too seldom visit these centres. In certain Ooru centres, there have been complaints that none have visited yet, or even phoned to enquire about the progress.
5. Mentor teachers alone provide a limited, but satisfactory support to these centres.
6. The majority of the students who interacted with the teams appeared to lack a clear idea about the lessons learnt, or even about their timetable of classes. The only difference to this situation was noted among those whose parents took an active interest in their education. Even these parents could do little to support their children in the higher classes.
7. The major factor that contributed to higher attendance and participation in the video classes was the presence and the encouragement provided by the Mentor teachers. Only a minority of students consistently attended these classes. Parents report that children spend time watching their favorite channel as adults are not often present.
8. Even those who attend the classes would find it difficult to follow the lessons without help. The follow up activities that should reinforce the lessons therefore remain undone. As they lack telephones, these children are not part of the class group system. Teachers have not been able to provide an adequate solution to this problem.
9. Though this is the general situation, there are some pockets of excellence wherein some schools provide models of active intervention and problem-resolution worthy of wider emulation. Such schools have transformed themselves into Study Centres, seating students in ten classrooms at an acceptable social distance from each other, and teachers take turns to relay the classes downloaded to their laptops with added explanations and assistance over the span of 2-3 hours per class. Even here the Head Teachers lament that the attendance and response of the students do not meet expectations.
10. The efforts of the SSK in providing classes in the tribal language to the students at the entry level was beneficial and laudable, but there has been no further progress.
11. Although classes began in June, there are students who have not attended a single class as yet. Even at the Plus One level there are seats vacant, and permanent absentees among those who did seek and gain admission.

In other words, except in places where adult intervention occurred, children in tribal areas did not benefit much from the video classes except to maintain a tenuous link with the school and the curriculum. Those who had not acquired the basics of reading and writing, and those such as the backward and the differently-abled who required additional time, support, and a more inclusive approach could not even be engaged by the programme, let alone benefit from it.

In a few places, the SSK has set up Local Prathibha Centres. This has provided some measure of comfort for those who had been in isolation. Although only a few households in the immediate vicinity are able to participate, those who do find the activities interesting and the counselling sessions provided at such centres useful. Their only regret is that their enjoyment is curtailed by the face-coverings that COVID protocol demands.

Field Work Report- 2

District: Thiruvananthapuram

Centres Visited:

- Njaraneeli Govt. U.P. School
- BRC Study Centre, Elanjiayam
- ITDP Study Centre, Alumood

Njaraneeli is a tribal area which figures significantly high on the scale of observed suicidal tendencies.

Njaraneeli Govt. U.P. School

- Student Strength: 156
- Strength of Scheduled Tribe students: 109

Data was collected from teachers, parents, local residents and students.

Not all the students have television sets at home. Those with TV sets are plagued by power outages and cable/dish connection issues. Less than 5% own smartphones. No dropouts from school have been reported as yet. All attend the classes beamed on Victers. A Study Centre has been set up by the BRC for this purpose in the Elanjiyam tribal settlement. 20 students visit this centre every day. However, the infrastructure is scanty. The local residents, parents of the students, and the sole teacher in charge chip in to collect/provide the money for the cable connection. The teacher does not receive her salary on time.

The students have reported that they like the classes on Victers. Still the speed of delivery and the medium of English are hurdles to understanding the content.

The students and the parents clamor for the school to reopen without delay. The main reason for this is their reluctance to leave the children alone at home. Moreover, the learning process away from school is not effective.

The Alumood Tribal settlement houses an ITDP Study centre. 59 students turn up there. None of them have TV sets or smartphones at home. 40 do not even have basic feature phones at home. Network connectivity ends at the checkpost to the forest area. Therefore, the follow-up classes cannot be attended. (Some of the students in the settlement follow the CBSE system of education. These students lack support of any kind. The teacher has been directed to follow only the state syllabus.) The students who come to the Alumood Study Centre are enrolled in the Njaraneeli UP School, the SKV School Nandiyode and the Iqbal School Peringammala. 3 students live deep in the thick forest. These students make only a rare appearance in the Centre. However, the centre has the basic infrastructure. The teacher draws a higher salary than the teacher in Elanjiyam, and she gets her salary on time.

The team held detailed discussions with her. Most of the children attend the classes on Victers regularly. But most of the houses lack the basic infrastructure. She reported that both students and parents wanted the schools to reopen. There have been no drop-outs from school as yet.

The team also held discussions with the parents in the Alumood Settlement. Their financial situation is dire. Many students fall prey to drug abuse. There are disagreements between the children and their parents. Children have to be compelled to study.

3.9.2. Differently-abled Children

The data collection and analysis was undertaken by a clinical psychologist with experience of working with the differently-abled. General information was collected from two centres providing therapy for the differently-abled. Therapists and teachers who work in this field were interviewed. Six differently-abled children and their parents were also interviewed to comprehend the stark reality of their situation. The conclusions relating to this study and analysis are provided below.

Differently abled children and their parents are among those worst affected by the lockdown. The COVID pandemic highlighted most of the drawbacks of the way the prevailing system of education fails in managing the issues facing the differently-abled.

Learning: The general consensus is that the Whiteboard classes organized by Sarva Shiksha helped the process of learning, to an extent. However in the absence of the emotional care and support that teachers and therapists could provide in person, the online methods of teaching were not particularly helpful in the opinion of the parents.

Interruptions in internet connectivity also posed a major challenge.

Pressure on Parents: In the time of COVID both education and therapy suddenly shifted to the online mode. Therapy centres, schools and daycare centres had worked in tandem to serve the needs of the differently

abled, and this had created a certain dependency among the parents of these children. When both schools and therapy centres closed down all of a sudden, the parents came under great stress. The parents found it difficult to rise to the challenge when therapy and education moved into the online mode, and both had to be managed from home. This challenge came close to overpowering parents of children who were burdened by more than one disability.

Behavioural Problems in the Children: The condition of Children who had already been plagued by such problems worsened with the pandemic. Many differently-abled children began to show signs of new behavioural issues at this time.

Paucity of Experts: The paucity of trained teachers and therapists caused problems in many parts of the state.

The Prevailing Situation: While this report was being prepared, a follow-up study was undertaken to better understand the prevailing situation regarding education for the differently-abled. Regular schools had opened their doors to the children for a brief period. At least some of the centres that had provided education and therapy facilities online for differently-abled children and their parents shut shop. A significant section of the differently-abled have no access to these facilities at present. They are caught in the unrelenting grip of this crisis.

3.9.3. Suicide among School children

This issue was discussed with the parents and teachers of five schoolchildren who took their own lives during the pandemic. Details regarding these children were first received from the State Crime Records Bureau. An academician and five clinical psychologists took part in the study.

This section of the study is only partially done. This preliminary analysis has been undertaken without the in-depth field studies that are necessary but cannot be conducted in the time of COVID protocol and sanctions. The findings are mentioned below.

1. A girl student of a high school in Northern Kerala: The behavioural patterns of the girl's father, a family background that could not provide adequate support, a household tending toward moral fault-finding, the girl's own proneness to feelings of rage—all these combined to make her mentally vulnerable, in the opinion of the child psychologist who had interviewed the family. All the factors mentioned above could make anyone mentally vulnerable. When this vulnerability is heightened by some sudden trigger, suicide turns out to be a real possibility. The trigger in this particular instance was a heated disagreement within the family.
2. A similar suicide occurred in another of the northern districts of the state. The social background of the family was weak. It is understood that the student was a perfectionist. Perfectionists often feel that a thing is undone if it has not been done perfectly. This is also known as thinking in 'black and white' terms. Teachers report that classmates revealed (after the event) the child's tendency to harm herself deliberately. It must be inferred that the financial crisis triggered by the lockdown might have caused this perfectionist girl child to doubt that things would ever improve.
3. Individual traits, family background and financial problems appear to be relevant factors in the suicide of a tribal child. It is understood that the novel experience of living an inmate in a Special hostel in the city had evoked certain desires and ambitions which could only end in grave disillusion when the lockdown compelled a return to the bleak surroundings at home.
4. A girl-child whose parents had divorced and whose father had then passed away, also committed suicide. She had to face great stress when the relatives with whom she stayed had differences of opinion with her mother. It appears that her obstinacy and proneness to rage were traits that combined with the factors mentioned above to make the child take her own life.
5. In the fifth case of suicide, the details available were too vague to be helpful.

It appears from these case-studies that a combination of several factors can lead to suicide. Various weaknesses in areas such as physical health, those pertaining to individual traits, or to the family, and to the social and economic background contribute to mental vulnerability.

Any incidental event could then become a trigger that activates the decision to take one's own life. In other words, a combination of factors could culminate in suicide. Therefore, it would require a combination of remedial measures to prevent or combat suicide. Students who are especially vulnerable in the areas mentioned earlier need to be given help and support. More field studies under professional guidance are needed to shed more light on this.

A mechanism needs to be in place to provide support to children whose families seek the services of mental health centres or family courts. Children in such vulnerable situations could easily slip into depression and possibly suicide.

Studies on suicide frequently rely on the cause of death mentioned in the FIRs prepared by the Police department. Most FIRs record the cause of death on the basis of unscientific diagnoses and colloquial hearsay. It would be illogical to base a scientific study on such dubious inferences. One should approach the question taking into consideration various factors such as those relating to the individual, the family, and social background—a scientific formulation, to be precise. To be effective, the investigation and data-collection has to be entrusted to trained professionals. This study opens the window to such an investigation.

During the COVID pandemic, the situation was not conducive to this kind of a field-study. The members of the team are however, determined to continue data collection and analysis to expand knowledge about adolescent suicide

3.9.4. Some Interesting Lockdown Experiences

During the lockdown, many teachers, parents and students had to pass through emotional experiences. A few of these are mentioned below.

At the beginning of the lockdown, some teachers shared their experiences of calling the students and often hearing that there is no food at home and having to deliver food to them. Such experiences during the lockdown endeared the teachers to students and their parents.

In certain schools the Head and the other teachers would take turns to visit the houses of the students.

In many schools, class-teachers would make weekly video calls with the parents. They felt that such calls had a very good effect.

Many parents reported during interviews that their relationship with teachers was extremely warm, and they empathised with each other as never before.

Many teachers mentioned that students who had opened up in person earlier to share confidences, now were constrained by the presence of parents at home from talking freely on the telephone. The teachers feel that issues within the family had worsened on account of the forced proximity. On the other hand, families that had already been calm and peaceful became even more tranquil and joyful during the lockdown.

There are also parents who are relieved that their teenage children are always at home and don't have to worry when they go out.

In a school in Idukki district where most of the students were the children of plantation-labourers, the teachers would hold follow-up classes at the time the parents returned from work, because only then would the mobile phones of the parents become available. As internet connectivity is weak in the High Ranges, several students had to venture far out of their homes late in the evening and seek signal connectivity, sometimes clambering up the boughs of tall trees to achieve this.

When enquired about the frequent absence of some Higher secondary students in online classes, it was revealed that they had begun working part-time or on daily wages. Such students have missed a number of classes. Some work during the day and attend private tuition classes in the evening. At least in some areas there may be a possibility of drop out at higher secondary level, especially because these students find it necessary to support themselves and their families financially.

The present academic year is set to close without class tests or term-end examinations. Parents and teachers believe that this has had an unfavourable effect on the students. This also reflects badly on the education system that is now largely governed by such periodic tests and examinations. It is interesting to note that the traditional factors like exams, fear of exams, praise for high marks

and quarrels for low marks still play a large role in the learning process.. Substantial effort is required to turn the process of learning into a natural and fulfilling life-experience.

3.10. Suggestions from the Study Participants

Suggestions offered by the students, parents and teachers who participated in the survey and the study are given below.

3.10.1 Victers Classes and Online Teaching

Students: Over 30% of the students felt that the pace of the classes should be slower. Classes for English medium students should be transacted in English. Many opined that the number of classes should be increased. Revision classes should be provided. As far as possible, each class should continue to be handled by the same teacher.

16% of the students opined that the online classes conducted by the teachers should be much more interactive. 10% suggested that the number of video classes might be increased.

Parents: 12% of the parents suggested that revision classes should be included. 4% asked for a reduction in the portions to be covered. Several called for a reduction in the syllabus, and for tests to be conducted even though the classes were digital. Some parents called for special attention to be provided to the academically weaker students.

Teachers: 16% of the teachers suggested that the technical infrastructure be upgraded to allow for greater interactivity. 17% called for the continuation of the classes on Victers even after COVID abates. 13% suggested that the syllabus might be reduced this year and 13% suggested that revision classes be provided and simple tests conducted. Some wondered whether the number of channels on Victers could be increased suitably.

3.10.2. Psychological Support

Parents: 21% of the parents opined that counselling sessions should be provided to both students and parents. 13% believed that a community of parents could collectively provide support for each other. 13% suggested that the students be given motivation classes, and classes in yoga, relaxation training, and the like. 9% suggested that the teachers pay individual attention to the students. Some parents put forward the suggestion that some financial assistance be provided to the students for recharging their phones and for ensuring internet connectivity.

Teachers: 31% of the teachers felt that teachers had to provide emotional support and individual attention to the students. The same number of teachers felt that counsellors should be appointed or counselling sessions made available to the students. 14% stressed the need for motivation classes and 9% suggested that counselling should be made available to the parents too. 10% felt that the family atmosphere of the students would benefit if counselling was provided to the family. 3% suggested that the families of students required financial assistance. Teachers also suggested that vocational training be provided to the students.

3.10.3. Suggestions regarding the reopening of Schools

HS/HSS Students: 43% suggested that the schools reopen at the earliest. 14% suggested opening in January and 15% suggested a partial reopening, adhering to COVID protocols. Around 72% favour reopening. 18% suggested that schools be reopened only after COVID abates.

Primary School Students: 82% of the primary school students favoured the reopening of schools at the earliest, saying that they were eager to meet their teachers and play with their friends. 4% had no opinion on the subject, while 5% said that they did not want to go back to school. 10% of the kids in the first standard responded to this by saying that schools need not reopen now, or that they were not interested in going back to school, or that their parents would not let them do so.

Parents: 39% of the parents felt that the schools could reopen without further delay. 12% suggested a partial reopening of schools, adhering to COVID protocols. 51% favoured reopening. 26% favoured delaying the reopening till COVID had abated, or all had been vaccinated. 3% said that they had serious concerns about the reopening

of schools.

Teachers: 22% suggested reopening at the earliest. 20% suggested that the HSS classes alone could reopen to 50% of the strength each day, and 12% suggested reopening with strict adherence to COVID protocol. 5% suggested that the schools reopen by January and 3% suggested seeking expert opinion before taking a decision. 62% favour reopening. 35% suggested reopening only after COVID abates and the situation reviewed.

Chapter 4

Summary and Findings of the Study

Chapter - 4

Summary and Findings of the Study

Contents:

4.1. Background and Methodology

The main topic of study is the academic condition of schoolchildren in the time of COVID, and their mental health as well as that of their family. Expert opinion suggests that the aftereffects of COVID-19 will linger for long in the academic, social and psychological fields. In this context, this study has taken shape from the considered impression that the research would be fruitful in helping to formulate the preventive and proactive action-steps in school education, in the time of COVID, and beyond.

4.1.1. Objectives of the study:

1. To find out the extent of availability of digital learning tools during the period of COVID pandemic.
2. To find out the accessibility and participation of school students in the digital classes.
3. To identify the academic and psychological needs of the students of weaker sections.
4. To find out the extent of anxiety and depression among High school and Higher Secondary students.
5. To find out the factors related to the feelings of depression, anxiety, worry about future and self harm tendency among students.
6. To find out the factors behind the suicide of students during the period of COVID pandemic.
7. To find out the economic and psychological difficulties faced by parents of school students during the period of COVID pandemic.
8. To find out the academic and psychosocial functioning of teachers during the period of COVID pandemic.
9. Based on above findings, suggest the planning of preventive measures related to mental health during school closures and reopens.

4.1.2 Duration of the study

1 September 2020 - 31 December 2020

4.1.3. Research Design

The research has been designed as a cross-sectional descriptive study cross-sectional descriptive study using quantitative and qualitative strategies based on extensive research review, pilot study, data collection and discussions with investigators, consultants, heads of various institutions under the Education Department and heads of various educational agencies.

The synopsis and protocol of the research along with the questionnaires were presented before the Research and Ethics committee of the SCERT on 24 September 2020 and permission obtained.

4.1.4. Sample of the Major Component of the Study— the Survey

The sampling method adopted was to select a school sample proportionate to the strata determined and to recruit a subsample of students from the schools. The strata for the school sample was determined by ensuring appropriate representation of geographical location (north/central/south), regional considerations (panchayat/municipal/corporation) and type of institutions (govt/aided, coeducational/gender-specific). due representation was also given to factors like gender, socio economic status, academic performance and category in recruiting subsample of students.

- Schools: 85 (across the 14 districts of the state). Representative schools were selected in consultation with SCERT experts, heads of sections in the Education department, and heads of educational agencies.
- Students: 2829. (Students from Classes 1, 3, 5, 7, 9, 10, 12)
- Parents: 2466
- Teachers: 412
- School Counsellors (176)
- Souhrida Club Coordinators (53)

Qualitative Methods

- Tribal Settlements (10)
- Case Studies (10)
- Discussions and Interviews (28)

4.1.5. Collection of Data

The study was conducted by 42 field investigators who were all either trained psychologists or students of psychology. The various forms provided for the survey included standardized questionnaires and a number of brief questionnaires. The questionnaires could be filled in online or in person. The field visits and qualitative studies were undertaken by expert professionals in the field of education and psychology.

4.2. Major Findings of the Research

4.2.1. Access to facilities and participation in digital classes

- Well-functioning TV set at home (84.62%)
- Access to a smartphone for studies (95.33%)
- Participation in Victers classes: LP/UP students (97.38%), HS/HSS students (94.18%)
- Those who attend classes in their own homes (96.68%)
- Those who attend classes in the homes of relatives (2.23%)
- Those who attend classes in learning centres (Less than 1%)

The main causes of missing Victers classes are power outages and loss of cable connectivity.

Student Academic Performance and Classroom Participation: Children with lower academic performance (as reported by teacher) have a statistically lower rate of attendance in the Victers class and follow-up classes.

SC/ST Students: Compared with other sections of students, students of this category report a somewhat limited access to gadgets along with a corresponding drop in the level of participation in the classes.The proportion of SC/ST students who lose access to Victers classes because of non-functional TV sets is high enough to be deemed statistically relevant. The proportion of general category students who face the impact of a similar problem is low. Likewise, the proportion of SC/ST students who lose access to classes because of non-availability of smartphones is also significantly high in comparison with other categories. The same is the case regarding the proportion of SC/ST

students who do not attend the follow-up classes because of financial problems posing a hurdle in recharging cable/ internet connections, problems of poor network coverage or of lack of access to a smartphone till their parents/ guardians have returned from work. However, power outages, inability to understand what is being taught and lack of interest are issues that are cross-sectional in nature.

The main cause reported by ST students for their absence from class is their difficulty in understanding the portions being taught. Special field studies among the ST students living in remote areas of tribal settlements suggest that their access to facilities is extremely limited. In certain areas, participation in class is almost non-existent.

Students living in the High Range have access to TV sets and smartphones mostly at par with the others, although network coverage is a serious issue. Access to equipment is not a pressing problem in the coastal areas too.

Interest in the Victers classes: 73.77% of the HS/HSS students rated the classes on Victers between 3-5 on a five-point scale. 85.61% of primary school students also gave a similar rating to the classes. Still, some students do find it difficult to understand the classes. The main reasons for this are the lack of opportunity to clear doubts, and the relatively fast pace of the classes. 28.45% of the students reported no difficulty in understanding the classes.

Follow-up classes: 95.62% of HS/HSS students report that the teachers offer follow-up classes. 89.4% of the primary school students too have made a similar report. The participation by the students in these classes and their rating of these classes exceed those of the Victers classes. HS/HSS students especially, greatly appreciated the feedback provided by the teachers during the follow-up classes. Primary school students loved the audio and video clips created by their teachers. The main cause of missing the follow-up classes is poor network connectivity. 34.5% of the students were consistently able to complete the activities suggested by the teachers.

65% of the students reported that their teachers provided additional online classes apart from the regular follow-up sessions. 48.33% had no difficulty in understanding the follow-up classes and the other online classes provided by their teachers.

46.44$ of HS/HSS students report that between June and November, their interest in studies had not changed at all, while 30.88% admitted to a drop in their interest and 22.8% report a rise in their interest in studies. The teachers estimate that over time, the students' interest in studies did wane gradually. According to the teachers, this lack of interest is most evident in the case of the Victers classes. However, 46.88% of primary school students recorded a rise in their liking for the Victers classes.

4.2.2. Some Psychosocial Factors Related to the Study

Worry about future: Some students were plagued by the fear of how the lockdown of schools would affect their studies and future prospects. The factors responsible for such fears have been traced back to the following: lack of access to functioning electronic equipment, lesser levels of participation in the classes, high levels of mobile overuse, the lack of a daily routine, an unfavourable atmosphere at home, and so on.

Students who lost interest in studies during the pandemic: The factors responsible for this include financial difficulties, the lack of a functional TV set, lesser levels of participation in the classes, the lack of a daily routine and fixed study routine, COVID positive cases in the family (including themselves), a lack of consideration on the part of teachers, lack of academic support from parents, high levels of mobile phone usage, an unfavourable atmosphere at home, and so on.

Students who found it difficult to complete the learning activities suggested by the teachers: Chief among the factors that correlate with this are medium of instruction (Malayalam), the male gender, low levels of academic performance, the lack of a fixed daily study routine, lack of academic support from parents, overuse of mobile phones, and an unfavourable atmosphere at home.

Support from Teachers and Parents: 55.92% of HS/ HSS students reported that in comparison with the past, they had received greater love and consideration from their teachers during the time of COVID. 61.67% reported that academic support from parents had also increased.

The advantages (if any) of COVID: Many students made productive use of the time of the COVID lockdown. 38.99% of the sample population (students at the primary level as well as HS/HSS) helped their parents in the household chores. 23.05% helped out in farming, and 22.87% helped manage the kitchen.

What irked the children most was the enforced home-isolation and the consequent boredom, with nowhere to go, outside the house. As many as 35% stressed this point. 56.6% of the students couldn't play outside during the lockdown. 23.4% lacked a suitable yard or other play-area. All their play had to be confined to the indoors

Should Digital Classes Continue? 34.19% of HS/HSS students favoured the continuation of digital learning in some form even after school reopened. 21.34% were adamant that digital classes should continue. 26.09% said that they did not wish digital classes to continue.

68.5% of primary school students did not wish to pursue learning in the digital mode.

4.2.3. Health Issues

36.05% of students complained of headaches brought on by digital learning and 28.25% were troubled by eye fatigue. Besides this, HS/HSS students reported symptoms such as neck pain (36.76%), back pain(24.72%) and blurred vision(15.57%). Only 25.5% of these young children engaged in a minimum of 30 minutes of physical exercise at least five days of the week.

4.2.4. Mental Health of the Students

15.3% of HS/HSS students reported that their use of mobile phones for non academic purposes exceeded two hours a day. 9.42% experienced severe discomfort / irritation if they were unable to access mobile phones when desired, while 42.97% recorded lower levels of discomfort / irritation. For 4.39%, the use of the internet is high enough to offer cause for concern.

26.88% of the students were unable to maintain contact with their close friends during the lockdown. 21.98% reported that the atmosphere at home had worsened in the period. 46.6% experienced a strong feeling of loneliness at this time. 10.9% struggled to deal with emotional turmoil. As high as 65.27% were oppressed by boredom, while 28.97% reported a significant drop in attention and concentration.

Symptoms of Depression: The responses to the detailed questionnaire designed to comprehend the levels of anxiety or depression suggest that 23.44% of HS/HSS students show depressive symptoms. 11.16% show symptoms that are indicative of anxiety. The baseline data for such prevalence studies in Kerala over the past three years is lacking. However, an SCERT-led study in 2019 had indicated that around 10% of the state's high school students suffer from emotional issues. In comparison with that figure, it appears that the level of depression is now somewhat high. However, global studies indicate that in COVID times, 34.9% of students showed symptoms of depression and 28.2% displayed signs of anxiety (Wu et al, 2020). Compared with these figures, Kerala appears to present a somewhat brighter picture.

The study reveals that difficulty with emotion regulation is an important factor associated with depression in students. Children of parents who regularly use alcohol or drugs, and children of those with chronic health conditions also have higher rates of depression. In addition, depression and anxiety in students are associated with depression and anxiety in their parents, parental personality characteristics, and certain types of parenting styles (coercive control).

Suicidal ideation and Suicide Attempts

10.13% of the students had considered suicide at some point. 2.03% had attempted suicide. (The corresponding figures for suicidal thoughts and suicide attempts by parents are 12.32% and 2.74%.)

The following traits abound in those who have had suicidal thoughts or have made suicide attempts.

Number of people with suicidal ideation is statistically higher among these categories / people with these characteristics. However, this does not mean that there exists a cause-effect relationship between these characteristics and suicidal ideation.

- Low participation in learning activities
- Certain vulnerabilities in basic temperament (difficulty in attention/concentration, high levels of activity, the

tendency to rebel against elders, the propensity to slip into bad habits such as mobile phone overuse)
- Family problems
- Break-up of relationships with friends or loved ones
- Parents who are troubled by financial or other difficulties

It is essential to identify these characteristics and provide adequate support while devising programs to prevent suicide among school students.

Studies show that students' mental health is related to parents' mental health and family environment. There is a high correlation between parents' depression and their children's depression. Likewise, when parents' anxiety increases, so does their children's anxiety. This study also underscores the need for two aspects of parenting, nurture and structure, to be prominent.

7.49% of HS/HSS students felt that they needed the help of a counsellor in the time of COVID. 75.7% of those who sought such assistance found it useful.

4.57% of parents felt they needed the support of a counsellor. 67.5% of those who sought such help found it beneficial.

61% of HS/HSS students had access to their school counsellor. 86.91% of these students had been contacted over phone by their counsellors during the lockdown. 41.87% of these students reported that the conversation with the counsellor had been helpful.

Emotional functioning of Primary school students: 79.72% were saddened by the fact that they were away from their close friends. 94.2% missed school. 66.62 % especially missed the games in school, 55.54% missed their classrooms and 22.54% missed the midday meals. The most 3.21% were sad throughout the period that began in June. 1.74% were troubled by anger and irritation and similar feelings since then. 11.45% said they consistently maintained happiness during the period, while 5.74% never found any happiness at all. 9.5% of primary school students have been increasingly troubled by boredom, anger and sadness since June. 37.3% reported a moderate increase in these feelings.

Information obtained from mental health professionals:

41.7% of School counsellors, 60.38% of Souhrida Club coordinators and HSS teachers noted that the number of psychological cases reported increased during the pandemic compared to the difficulties seen in previous years.

There is systematic variation in the nature of difficulties reported among students in LP, UP, High School and Higher Secondary categories. While academic problems are predominant in the lower classes, mobile and internet overuse and emotional problems become more prominent as we reach the higher classes.

During the COVID pandemic, the level of psychological distress among school students has increased. Significant crises have arisen in homes that had problems before. Adolescent students are under a lot of stress when they don't have the opportunity to talk to friends, teachers, or counselors. However, when the lockdown period started, the widespread concern and anxiety among students and adults gradually subsided.

Suggestions from School counselors/ Souhrida Club coordinators on how to improve counselling services after schools reopen:

- The need to improve the mental health of children should be given due importance.
- Essential infrastructure for counselling should be upgraded.
- A counselling session should be included in the time table.
- Program should be planned to provide opportunities to the children to share their COVID-time experiences, and to address their concerns
- All staff of the school, including the Head/Principal should be given awareness regarding the mental state of the children, and the necessary directions regarding this should be issued.

Case Analysis of Suicides by Children:

From the case analysis of a few students who committed suicide during the lockdown, it was understood that a combination of various reasons might have led to the suicide. Physical, personality, familial, economic, social and contextual developments all more or less determine a suicide. For that very reason, prevention of suicides demands a multi-dimensional approach.

4.2.5. Differently-abled children:

Field studies indicate that differently-abled children and their families face serious issues. The consensus is that online education and therapy are not sufficient to fulfil their varied needs.

4.2.6. Parents

Social and financial security of the parents: The COVID pandemic had a serious impact on the social and financial security of the populace. 75.35% of parents/guardians suffered a drop in income during the time. For 51.18%, this drop was as large as half their income or even more. 36.05% lost their jobs. 84.3% were compelled to reduce their household expenses. These twin difficulties—loss of jobs and drastic fall in income—impacted families belonging to the Scheduled Castes the most.

Mental health of the parents: 43.8% of the parents were anxious about the examinations and higher education prospects of the children. During the time of COVID, 12.37% experienced increased irritation/ frustration, 8.7% were troubled by rising levels of anger, and 13.83% reported an increase of sadness. 11.18% suffer a great deal of job stress. 12.9% recorded the fact that it was very difficult for them to manage their emotions during the last few months.

11.6% of the parents exhibit symptoms of depression. 12.53% show symptoms of anxiety. 12.32% considered suicide at least once. 2.74% actually attempted suicide.

Loss of jobs and drop in income troubled Scheduled Caste families the most. Those who experienced either of both of these difficulties are more prone to depression and anxiety than others.

4.2.7. Teachers

38.83% of the teachers reported that between June and November, the participation by students in the Victers classes had decreased. While 35.19% detected no change in the levels of participation, 20.87% felt that the participation had actually improved. 30.24% recorded a drop in levels of participation in the online follow-up classes, 42.68% detected no change, and 25.12% reported a rise in these levels between June and November. 52.2% of teachers reported a drop in the levels of student participation and interest in studies between June and November while 24.15% could detect no change and 20.49% reported that these levels had risen. 62.38% of teachers estimated that around 10% of the students might have received no benefit from the digital classes.

Teachers reported higher overall self confidence (63.14%) and efficacy (56.92%) in online teaching.

16.2% of teachers were definitely looking forward to online teaching even after schools reopen, while 53.7% retained a mild interest in the same and 30.1% had no interest in continuing with online teaching.

Teachers express self-confidence in all aspects of digital education. This is especially so in encouraging children to clear their doubts, in selecting and providing appropriate learning activities, and in transacting online education. However, their levels of self-confidence are slightly lower in effectively expressing their own emotions online, in regulating their stress, in preparing suitable materials for online teaching, and in assessing student performance and participation in class.

These findings must necessarily be borne in mind when organizing training in online teaching for teachers, if it is to continue after schools reopen.

Mental health of Teachers: 25.73% of the teachers experienced severe loneliness during the time of COVID. 10.68% recorded a rise in the levels of irritation / frustration, 6.07% were troubled by rising feelings of anger and 8.5% by a rise in sadness. 12.86% of teachers showed symptoms of depression. 11.89% show symptoms of anxiety.

4.2.8. Opinions (Students, Parents, Teachers)

The students, parents and teachers who participated in the survey offered various opinions and suggestions.

Reopening of schools: The students, parents and teachers who took part in the survey generally favoured reopening of schools in January. The community appears to favour a partial reopening.

Classes: 16% of the students opined that the online classes conducted by the teachers should be more interactive. Several parents suggested that academically backward children should be provided individual attention. 17% of teachers favoured the continuation of Victers classes after schools reopen. 16% of the teachers suggested the use of technology to make the classes more interactive.

21% of parents favoured access to counselling for both students and parents. 31% of teachers felt that teachers had to provide students with more emotional support and individual attention. The same percentage of teachers suggested providing more counselling sessions/appointing more counsellors for the students. 14% felt the need for motivation classes while 9% suggested counselling for the parents. 10% suggested that counselling be provided to the students to help create a better family atmosphere at home and for other reasons. 3% of the teachers suggested providing financial assistance to the families in need. Several teachers suggested that the students would benefit from vocational training.

4.3. Conclusions of the Study

It is obvious that the digital classes in the time of COVID help retain the students on the path of learning. It is notable that digital learning helped the students to continue with the process of education without a gap. The study also reveals that the bond between teachers and students (and the parents) strengthened during COVID. Digital learning has become an inseparable part of education. The self-confidence of teachers has increased on account of digital classes. Internet access is quite high. It might be surmised that with the next stage of upgradation of internet access in Kerala, digital/online classes would be seen as a natural part of the curriculum.

However, it cannot be said that digital education has been an all-round success. It needs to be borne in mind that the weaker sections of society lag slightly behind the others in the case of access to and participation in online classes.

The mental health of children of the weaker sections has not suffered a direct impact. However, the increased pressure on their parents would have had some effect on the children too.

The families of differently-abled children have faced severe stress on account of COVID. A significant section of this group still lacks access to facilities for learning and therapy.

During COVID, many children were able to spend plenty of time with their parents and other members of the family. In most cases this has helped strengthen the family bond. However, the lockdown had the undesired effect of exacerbating already existing problems in troubled families.

A large number of children have acquired a variety of life-skills. Many have begun to help their parents in the household chores and other duties. At the same time, isolation from society, and the lack of interaction with their classmates has affected their social skills development to an extent.

4.39% of high school and higher secondary students are likely to have problematic overuse of the Internet. Many psychologists offered the comfort of their opinion that after normal classes resume, and other forms of entertainment become available, most of these students would return to a more normal system of internet-use. Of course, elders need to monitor the situation. The two major factors that underlie the academic and psychological difficulties of children are overuse of mobile phones and the discomfort when mobile phones are not available when desired. However, it cannot be assumed that excessive use of mobile phones is the cause of these difficulties in children. It may be that students with these difficulties tend to rely far too much on mobile phones. Whatever be the case, it may be stated that the overuse of mobile phones carries with it risks of varied kinds.

23.44% of HS/HSS students show symptoms of depression. 11.16% display anxiety symptoms. Global studies indicate that in COVID time, 34.8% of students showed symptoms of depression and 28.2% showed symptoms that indicate high levels of anxiety. Detailed baseline data relating to the mental health of high school and higher secondary students in Kerala is not available. However, a somewhat similar study conducted by SCERT in 2019 estimated the percentage of high school students in Kerala with emotional problems to be 10%. Compared to that, the level of depression is significantly higher. Considering the importance of childhood and adolescent well-being, it is essential to state that the situation warrants immediate action for mental health care.

The study also highlights the fact that the child's mental state is linked to the parental mental health, alcoholism of the parents and the family atmosphere. In parenting,

if the characteristics of nurture and structure are high and the characteristic of coercive control is low, it may be possible to reduce the risk of depression in students..

The study also identified certain characteristics that were common among students with suicidal ideation and attempted suicide. These include reduced participation in academic activities, certain vulnerabilities in basic temperament (difficulty in focus/concentration, high levels of activity, the tendency to rebel against elders, the propensity to slip into bad habits such as mobile phone overuse), family issues, break-up of friendships or other relationships, and the pressure on parents on account of financial difficulties or other causes.

Similar conclusions are available from the case analysis of a few students who committed suicide during the lockdown. It is to be inferred that a combination of various reasons may have led to the suicide..

The job loss and drop in income of the parents had a serious impact on the children. The tendency to depression and anxiety is far greater among those who suffered such loss of job or income. The study indicated that the mental health of parents is closely linked to their financial condition. Experts in the field of psychology have expressed the concern that children in such families could also be susceptible to various kinds of psychological disorder. In Kerala the link between financial difficulties and concomitant psychological problems leading to suicide has always been obvious. However, the fact that the situation has not yet blown alarmingly out of control provides some comfort. This could be because parents, schools and society have taken certain precautions and because basic social and economic support has been extended to the families that need such help the most.

As the baseline data relating to depression and anxiety among teachers is not available, a comparative analysis is not possible. Still, it can be said without any doubt that the mental health of teachers should be a matter of prime concern.

It is worth noting that the findings of this study in the field of mental health should be explained in the context of the COVID pandemic.

4.4 Suggestions based on the Study

1. Academically weaker students have not benefited as much as the others from the classes on Victers or from the follow-up classes. Their participation too has been low. They should be given individual attention.
2. Students from the Tribal areas require special attention. True, there were some students who could not participate in the classes because of lack of cable/ internet connectivity, but even more distressing was the fact that some students kept away from the classes because they could not understand them. The Mentor Teachers might be able to help them surmount problems relating to preparation or motivation. Recorded classes may also be played back for their benefit rather than rely on irregular connectivity. Also, the teaching needs to be more closely related to their daily life-experiences, and giving them individual attention they should be encouraged to participate in all the learning activities.
3. The rate of participation and attendance of the Victers classes is lower among Scheduled Caste students than among those in the general category or among the OBC. The reasons for this include factors such as the lack of well functioning gadgets, constraints in recharging internet, and failure to understand the portions taught online. This deficit needs to be considered when planning the curriculum for next year.
4. As digital learning has progressed, the interest of students has decreased. The methodology of digital learning has to be modified in such a way as to sustain the interest of the students. The self-confidence of teachers is quite high. Still, certain class activities, notably the process of student evaluation, need to become more efficient and effective. These findings should be borne in mind in matters such as curriculum revision and teacher training, if digital learning is to continue.
5. As regular classes have come to a stand-still, the young children lack physical exercise too. This could turn out to be the cause of lifestyle diseases over the long term. The eyes and the spine need exercise as well as some respite from constant strain. A mechanism needs to be put in place to provide teachers and parents with

authentic information relating to age-appropriate screen-time, and the use of internet and mobile phones.

6. Prolonged digital learning has led to a fall in the attention spans and levels of concentration of the children. To remedy this situation brief exercises to stimulate attention and concentration could be provided along with each lesson. A range of diverse learning activities should be designed to provide opportunities to practice skills such as reading, as well as games and sports.
7. Excessive use of the internet and mobile phone, depressive symptoms, anxiety symptoms, loneliness and difficulty in emotional regulation are significantly present in students. Counselors, teachers, and parents need to be equipped to proactively intervene to counter these issues by giving them necessary awareness, training and orientation.
8. The service provided by school counsellors over the telephone is largely beneficial. But not all students have the opportunity to speak openly and seek help over the phone. School counsellors, Souhrida Club coordinators and class teachers should provide direct support to students of classes X and XII. To adapt to changing circumstances, School Counsellors should be provided adequate training and their services effectively utilised. The training should empower them to intervene when students show suicidal tendencies, or signs of severe emotional problems or when family problems become oppressive.
9. The study has found that depression and other mental health problems are linked to the children's difficulty in emotion regulation. Students need to be trained from an early age to help them identify and regulate their emotions. This should be implemented in the long run. It would be good to incorporate the current projects in this regard in the curriculum..
10. This study has identified some factors related to suicidal ideation in students. School mental health programs need to be restructured in such a way that such risk factors can be identified in a timely manner and adequate preventative measures can be implemented in advance.
11. Teachers and counsellors have to be equipped to recognize the basic temperament and vulnerabilities of the children through training and awareness programmes.
12. Depression and anxiety among the children are related to their parents personality traits, the parenting styles adopted by them, and depression and anxiety among them. The parenting clinics set up in recent times for the parents of schoolchildren, and other related programmes might need to be modified in the light of this finding.
13. The financial condition of the parents has suffered severe blows. The consequences could last a couple of years. This economic pressure on the parents could lead to even greater problems in the family. Such warnings have been issued by psychologists around the world. This study brings out the fact that the tendency to depression and anxiety is far greater among those who have lost their jobs or suffered a significant drop in income. Moreover, the study has shown that such pressure on parents is linked to suicidal tendencies in the children. A large section of the parents experience grave anxiety about the future of their children. All this could heighten the psychological pressure on the young in the coming months. The possibility of family-suicide pacts cannot be ruled out. Such problems need to be considered and solutions planned on various fronts. Other departments that have related responsibilities in this connection need to be forewarned. Steps to strengthen social security and to fight suicidal tendencies need to be initiated.
14. Programmes that ensure the physical and mental health of teachers need to be implemented. They should be encouraged to engage in physical exercise and other healthy habits of life, especially in this time of online classes. Psychological support too should be provided if required.
15. The case analysis of the children who committed suicide during the lockdown brought out the realization that a mix of various factors led to the suicides. These factors are, in varying measure and order, physical and/or related to the personality, the family, the social and

economic background, and certain incidental or even coincidental events. Therefore, the battle against suicide would need to be fought on many fronts. Programmes should be put in place to provide support to students whose background shows them to be at greatest risk. More field studies led by professionals are necessary. There should be a mechanism to locate students who require the assistance of mental health centres or family courts, and to provide them a lifeline before they slip away from the social safety nets.

16. At least a few HSS students have begun to work part-time or for daily wages, as reported by some school teachers. Most of these students are forced to miss the online classes. Some of them work by day and attend private tuition classes by night. In some regions at least, there is a possibility of drop-outs at the HSS level. Teachers need to take special care to bring such children back to school and on to the path of learning. Steps should be taken at the local level to provide social and economic support to their families.
17. The acclimatization problems of new students, especially those who have entered classes 1, 5, 8 and 11 during the lockdown need to be addressed, and the new school and teachers need to be familiarised. How this may best be accomplished could be explored. Class 1 students who are still unfamiliar with the school atmosphere require special attention in this regard.
18. Parents of differently-abled children should be given guidance and training on how to reduce the pressure on themselves and how best to encourage and assist their children. Their parenting styles need to be attended to professionally, and training provided to wean them out of excessive dependence on teachers and therapists. Hybrid measures of online learning and therapy have to be devised to suit the needs of the years to come. Services and facilities for differently-abled children need to be improved considerably. The shortage of trained therapists should be addressed.

Conclusion

This study has been undertaken after rigorous planning and preparation. It has been attempted to make the study as comprehensive as possible, in the context of COVID. At the same time, the study has been hampered by certain challenges. It is hoped that the findings of this study will prove beneficial in planning academic and socio-psychological programmes for the year 2021.

Appendix

Questionnaire

Of the Seven Questionnaires used for the Study,
the main questionnaire,
S1, is included in the Appendix.

Code no.....

Survey 1

Educational and Psychosocial Functioning of School Students of Kerala in Times of COVID 19

Research Conducted for the Kerala State Council of Educational Research and Training (SCERT)

by

Psychological Resource Center

October-November 2020

S1: HS and HSS Students
STUDENT INFORMATION SCHEDULE

Informed Consent and Assent

Dear Parent and Student,

The State Council of Educational Research and Training (SCERT), Kerala in technical collaboration with the Psychological Resource Center, Government College for Women, Trivandrum is conducting a study aimed at exploring the educational and psychosocial functioning of school students of Kerala in the times of COVID-19 pandemic. As part of this project, we would like to collect information from your child regarding the new online educational system as well as certain psychological variables like personality and parent-child interactions. This questionnaire contains many general questions commonly used to understand the educational and psychological aspects of students. Your child would be required to answer these questions according to what is personally true for her/him. There are no right or wrong answers. All the questions will have to be answered. Answering the questions may not personally benefit your child immediately, but will help improve our understanding of how this unprecedented situation is affecting children and thereby help the authorities to plan appropriate services both during this time and when the schools reopen.

Your child's participation in this study is voluntary. All the information collected from your child will be kept confidential. Only the research team will have access to the information shared and this information will not be revealed to persons of authority including teachers. This questionnaire does not collect the identification details of your child.

If you require any further clarifications and/or information regarding this study or require any kind of help from us, please contact the research supervisor Mr Shiju Joseph, Clinical Psychologist & Assistant Professor of Psychology, Govt College for Women, Thiruvananthapuram. Phone: 9539991643, Email: prc@gcwtvm.ac.in.

Thank you for your cooperation.

Consent:

I have read and understood the above information clearly. I permit my child to participate in this study.

Signature of the Parent (with date):

Name of the Parent (Not Mandatory):

Name of the student (Not mandatory):

Name and Signature of the Researcher

To be filled by the student

Dear Student,

This questionnaire seeks information related to your experiences during the COVID pandemic period. The questions included here cover aspects related to online learning experience, family interactions and personality. It is a rather long list of questions. All questions may not be equally applicable to you. However, try to answer each question.

Read each question carefully and give your responses.

A. Personal Information

1.	Class	:	9 / 10 / 12
2.	Medium of instruction	:	Malayalam/ English/ Tamil/ Kannada
3.	Age	:	
4.	Gender	:	Male/ Female/ Transgender
5.	Category	:	General/ OBC/ SC/ ST
6.	Socio-economic Category	:	APL / BPL
7.	Area	:	Corporation/Municipality/Panchayat
8.	Living in	:	Independent house/ flat/ housing colony/ line house
9.	District	:	

B. Family Structure

1. What is the living arrangement at home?

a. Living with both parents
b. Living with a single parent
c. Away from parents

If living with a single parent, ….

2.	..Is either of your parents working at a different place?	Yes	No
3.	..Is either of your parents working outside the state/ country?	Yes	No
4.	..Are your parents separated/divorced?	Yes	No
5.	..Is either of your parents deceased?	Yes	No
6.	How many siblings do you have?		
7.	Is any grandparent staying with the family?	Yes	No

8. Father's educational qualification

a. SSLC or Below SSLC
b. Pre-degree or Plus2
c. Graduate
d. Post-graduate or professional degree
e. Not applicable

9. Mother's educational qualification

a. SSLC or Below SSLC
b. Pre-degree or Plus2
c. Graduate
d.Post-graduate or professional degree
e. Not applicable

10. Father's occupation
    a. Not employed b. Daily wages
    c. Self employed/Business d. Agriculture
    e. Private f. Government or Semi-Government
    g. Not applicable
11. Mother's occupation
    a. Not employed b. Daily wages
    c. Self employed/Business d. Agriculture
    e. Private . Government or Semi-Government
    g. Not applicable

12. Do you have any health/medical condition that requires you to take regular medication (Example - Diabetes, Epilepsy, etc.)? Yes No
13. Are you differently-abled? Yes No
14. If Yes, mention the category of disability _
15. Does either of your parents or any sibling have any long term health/medical condition that requires treatment (E.g Diabetes, Epilepsy, Mental illness, differently abled etc.)?
    Yes No
16. Does any family member living with you use alcohol/tobacco regularly? Yes No

C. COVID-19 Related Experience

1. Has anyone in the family been diagnosed with COVID -19? Yes No
2. Has anyone in the immediate family been –
    a. Put into self-quarantine
    b. Hospitalized and now symptom-free
    c. Still symptomatic
    d. Passed away
    e. None of the above
3. Is either of your parents/siblings involved in COVID - 19 frontline work? Yes No
4. Have you been suspected of having COVID-19 infection?
    a. Yes, have been tested positive
    b. Yes, have been under observation
    c. No
5. In the last few months, have you been worried about you or your family/friends getting infected by COVID-19?
    a. Not at all b. Slightly c. A lot D. Academic Functioning

1. Do you have a regular schedule for studies? Yes No
2. When do you usually study for an examination?
   a. Well in advance
   b. A week before
   c. A day before
   d. Few hours before
3. How would you rate your overall academic performance / functioning?
   a. Excellent
   b. Very good
   c. Good
   d. Fair
   e. Poor
4. Are you worried that your future will suffer due to the indefinite school closure in the time of COVID - 19 pandemic?
   a. Not at all worried b. Worried to some extent c. Worried a lot

E. Interests, Abilities

1. Do you have a hobby?
   a. Sports b. Arts c. Literary activities d. Others e. No Hobby
2. Have you won any prizes or awards in arts/sports/literary/other competitions at District level or above? Yes No
3. What is your goal / career aspiration? ---------

F. Access to facilities

1. Do you have a television set at home that is functioning well? Yes No
2. Do you have a laptop, personal computer or tab? Yes No
3. Do you have a smartphone to attend online classes?
   a. Yes, for my exclusive use
   b. Yes, but I share it with siblings
   c. Yes, I have access to smartphone of family members
   d. No, I don't have access to a smartphone

4. Did your parents buy you any of these devices during the COVID -19 pandemic period?
   Television Internet access Computer/ PC/ Ta Did not buy anything new
   Smartphone

G. Digital Classes

1. Are you attending classes on Victers channel (First Bell)? Yes No
2. If Yes a. On TV b. On App/ YouTube

3. How often do you attend the classes?
   a. More than 90% of the classes
   b. Between 50% and 90% of the classes
   c. Between 25% and 50% of the classes
   d. Less than 25% of the classes
   e. Not able to attend any of the classes

4. Where do you attend the classes from?
   a. Home b. Relative's Home c. Community center / Public Library
5. If at home, do you have a separate quiet place/ room to sit for attending the classes?
   Yes No
6. If at home, are you alone at home
   while you attend classes? Yes No Sometimes
7. If you are unable to attend Victers classes, what are the reasons? Mark all that apply. If you are able to attend classes, please mark the option 'Not Applicable'.

- Not having a functional television set / phone
- Problems with electricity
- Cable connection problems (TV) / Network connectivity issues
- Financial Constraints to recharge data pack
- Difficulty in comprehending / understanding the portions covered
- Your teacher covers the same portions through online classes
- Having to do other work at home
- Not interested
- Other reasons including health problems, unexpected events etc.
- Not Applicable

On a 5-point scale, rate the classes on Victers channel. 1 represents the least and 5 represents the most.

		1	2	3	4	5
8.	How much do you like the classes?					
9.	How much do you find the classes useful?					
10.	How much do you understand the classes?					

11. If you have difficulty in understanding classes in Victers channel, what are the reasons? Mark all that apply. If you do not have any difficulty, please mark the option 'No difficulty at all'.

- Classes are fast paced
- Difficult-to-understand terminology
- Not familiar with the language style of the presenting teacher
- Medium of instruction is difficult to follow
- Lack of opportunity to clear doubts directly
- Frequently getting distracted during the class

- Other reasons including health problems, unexpected events etc.
- No difficulty at all

12. Do your teachers conduct follow-up classes of Victers classes (class, worksheets, activities etc.)?
    Yes No
13. If yes, are these classes conducted daily? Yes No
14. How often do you attend the classes?
    a. More than 90% of the classes
    b. Between 50% and 90% of the classes
    c. Between 25% and 50% of the classes
    d. Less than 25% of the classes
    e. Not able to attend any of the classes

15. If you are unable to attend teachers' classes, what are the reasons? Mark all that apply. If you are able to attend classes, please mark the option 'Not Applicable'.

- Problems with electricity
- Non-availability of smart phone
- The parent is not at home during the day when the classes are conducted
- Network connectivity issues
- Financial Constraints to recharge data pack
- Lack of knowledge to use gadgets
- Difficulty in comprehending / understanding the portions covered
- Having to do other work at home
- Not interested
- Other reasons including health problems, unexpected events etc.
- Not Applicable

16. Are you able to complete the activities? a. Always b. Often c.Rarely

17. Do your teachers provide feedback
    to your activities/ worksheets? a. Always b. Often c. Rarely
18. If Yes, how?
    - Whatsapp
    - Google meet
    - Phone Call
    - Printed worksheets
    - Others
19. Do your teachers conduct additional online classes
    (other than Victers class and follow up classes)? Yes No
20. If Yes, how are these online classes delivered?
    a. Whatsapp b. Google meet c. Other – specify

		1	2	3	4	5
21.	How much do you like the classes?					
22.	How much do you find the classes and activities useful?					
23.	How much do you understand the classes?					
24.	How much effective is the teacher's feedback?					

25. If you have difficulty in understanding teachers' classes, what are the reasons? Mark all that apply. If you do not have any difficulty, please mark the option 'No difficulty at all'.
    - Lack of opportunity to clear doubts directly
    - Classes are fast paced
    - Difficult-to-understand terminology
    - Frequently getting distracted during the class
    - Other reasons including health problems, unexpected events etc.
    - No difficulty at all
26. Do you attend tuition classes? Yes No
27. If Yes, what is the mode of attending?
    a. Online b. Going to tuition center c. Tuition teacher coming home
28. Do you attend coaching classes (preparation for entrance/ other competitive exams)? Yes No
29. If Yes, what is the mode of attending?
    a. Online b. Going to coaching center c. Other – specify
30. Are the school and tuition classes scheduled at overlapping times? Yes No
31. Do you use any apps (other than Victers) for academic purposes? Yes No
32. Average time (number of hours) you usually spend on studies/academics (including Victers, online, tuition, coaching class hours) each day?
    a. Less than one hour
    b. 1-3 hours
    c. 3-5 hours
    d. More than 5 hours
33. From June to October, has your interest in studies…. ?
    a. Increased b. Remained same c. Decreased
34. During the COVID pandemic period, has your teacher's affection and consideration when compared to last year…. ?
    a. Increased b. Remained the same c. Decreased
35. Does any of your parents or any other member of the family help you with your studies usually? Yes No
36. During the COVID pandemic period, has their help…. ?
    a. Increased b. Remained the same c. Decreased

37. Would you prefer online classes to continue even after the school reopens?
    a. Yes, certainly
    b. Yes, to some extent
    c. Not sure
    d. Not at all

Do you experience any of the following difficulties as a result of attending online classes?

	Difficulties	Yes	No
38.	Eye fatigue		
39.	Blurred vision		
40.	Headache		
41.	Neck pain		
42.	Back pain		
43.	Other difficulties (if any)		

H. Routine during the COVID pandemic period

1. Did your eating habits change during the COVID pandemic period? Yes No
2. Does your house have a courtyard or open space near it for playing? Yes No
3. During the COVID pandemic period, did you engage in any physical game with your siblings or others in the surroundings of your house? Yes No
4. During the COVID pandemic period, how often did you exercise for a minimum of 30 minutes daily (eg: brisk walking, running, playing etc)?
    a. Very rarely
    b. 2-3 times a week
    c. At least 5 times a week
5. Did you experience difficulty in maintaining a regular schedule for your daily activities during the COVID pandemic period? Yes No

I. Daily screen use during the COVID pandemic period

1. Has your TV watching time (not for the classes) increased during the COVID pandemic period?
    a. No b. Yes, Very little c. Yes, Significantly d. Yes, Highly
2. Has your mobile phone use (not for the classes) increased during the COVID pandemic period?
    a. No b. Yes, Very little c. Yes, Significantly d. Yes, Highly
3. If you cannot use or access your smartphone when you feel like, do you feel sad, moody, or irritable?
    a. Not at all b. To some extent c. Very much
4. How much time do you use mobile phones (not for the classes)?
    a. Less than 30 minutes
    b. 30 mts- 1 hour
    c. 1 hour- 2 hours
    d. More than 2 hours

(If your phone usage do not exceed 2 hours, please skip section J and go to section K)

J. Internet Use

Read the following statements and (√) what best describes how you have felt and behaved in the last 3 months.

	Respond based on your internet use other than for academic purposes	Very rarely	Rarely	Some times	Often	Very Often
1.	You spend a lot of time thinking about internet or planning how to use it					
2.	Feel an urge to use internet more and more					
3.	Use internet in order to forget about personal problems					
4.	Have tried to cut down on the use of the internet without success					
5.	Become restless or troubled if you are prohibited from using internet					
6.	Use internet so much that it has had a negative impact on your studies					

K. Free time activities during the COVID pandemic period

1. What do you do in your free time when you do not have classes? Put a tick mark for the appropriate responses.

1. Nothing in particular
2. Sleeping
3. Reading books
4. Talking to friends over phone
5. Chatting/texting friends
6. Doing physical activities
7. Cooking food
8. Watching TV (alone)
9. Listening to music (alone)
10. Playing video game
11. Using social media
12. Browsing the internet
13. Making and uploading videos on YouTube
14. Blogging
15. Video editing
16. Learning Computer skills
17. Taking up responsibilities at home
18. Agriculture

19. Assisting parents in their work/ shop
20. Any other - mention

2. Have you started any of these activities for the first time in the COVID pandemic period?

a. Yes, many of them b. Yes, some of them c. None of them

L. Socialization

1. Is there anyone with whom you can share your thoughts and feelings openly and freely?

Yes No

2. Have you been able to keep in touch with your friends during the COVID pandemic period ?

Yes No

M. Describe yourself and your family

This section contains a few questions about you and your family.

M1. The following are a few statements that describe people. Read each statement and indicate the extent to which each applies to you. Answer honestly.

	I am someone who…	Disagree Strongly	Disagree a Little	No opinion	Agree a Little	Agree Strongly
		1	2	3	4	5
1.	Tends to be quiet.					
2.	Worries a lot.					
3.	Is dominant, acts as a leader.					
4.	Tends to feel depressed, blue.					
5.	Is full of energy.					
6.	Is emotionally stable, not easily upset.					

M2. Read the following statements given below and rate the extent to which you agree to them.

	When compared to families I know, my family...	Strongly disagree	Disagree	Agree	Strongly Agree
1.	is happy				
2.	understands me				
3.	is supportive				
4.	is close to each other				
5.	has many problems				

6. During the COVID pandemic period, the general environment at your home ….?

a. Improved b. Remained the same c. Worsened

7. Did your family experience financial crises during the COVID pandemic period?
   a. Not much b. To some extent c. Very much
8. Have you had conflicts or arguments with parents during the COVID pandemic period?
   a. Nil / Rarely b. Occasionallly c. Frequently
9. If you have had conflicts or arguments with your parents, what were the common reasons for them? Tick all options applicable. If nothing happened, tick the option 'Not Applicable'.

- Not studying enough
- Overuse of mobile/ internet/ TV
- Not sharing responsibilities at home
- Increased monitoring by parents
- Not following routine
- Parents upset about financial or other reasons
- Other reasons
- Not Applicable

N. Responses to Emotions

Please think about the relationship you share with your parents on a regular basis and how they generally respond to your emotions/feelings of sadness, anger, disappointment, and/or excitement. Indicate how often these statements apply to you by using the following scale.

		Never	Rarely	Some of the time	Most of the time	Always
1	Either of my parents understands my feelings.					
2	When I share my feelings my parents seem like they do not want to hear what I have to say.					
3	When I share my feelings, my parents look down on me or judge me.					
4	When I share how I am feeling, my parents want me to forget about it and ask me to move on.					
5	When I express my feelings, my parents get upset or angry.					
6	When I express my feelings, my parents respond by asking "why are you feeling like this" or "what makes you so upset, angry or happy".					
7	My parents make fun of me or not take it seriously when I share my feelings.					

8	My parents blame me when I express my feelings.					
9	My parents make me feel my emotions are unimportant.					

O. Emotion Regulation

Please indicate how often the following statements apply to you by using the following scale.

		Never	Rarely	Some of the time	Most of the time	Always
1	I have difficulty making sense out of my feelings.					
2	When I'm upset, I have difficulty focusing on other things.					
3	When I'm upset, I feel ashamed with myself for feeling that way.					
4	When I'm upset, I have difficulty controlling my behaviors.					

P. Coping

The following questions ask how you have been seeking to cope with severe difficulties and challenges in your life usually. Read the statements and indicate how much you have been using each style of coping by putting a tick mark in the appropriate column.

	When I experience severe difficulties/ challenges in life …	Never	Some times	Often	Doing this a lot
1	I've been concentrating my efforts on doing something about the situation I'm in.				
2	I've been saying to myself "this isn't real".				
3	I've been using some drug to make myself feel better.				
4	I've been getting help and advice from other people.				
5	I've been trying to come up with a strategy about what to do.				
6	I've been getting comfort and understanding from someone.				
7	I've been giving up the attempt to cope.				
8	I've been looking for something good in what is happening.				

9	I've been doing something to think about it less, such as going to movies, watching TV, reading, studying, daydreaming, sleeping, or shopping.				
10	I've been expressing my negative feelings.				
11	I've been making jokes about it.				
12	I've been learning to live with it.				
13	I've been blaming myself for things that happened.				
14	I've been praying or meditating.				
15	I've been inflicting physical pain on myself.				
16	I've been consoling myself thinking that whatever happened is for the good.				
17	I've been trying to accept it as my fate.				

Q. Major Events during the COVID pandemic period

Given below is a list of some major events which can have a large effect on your life or lead to changes in how you feel about yourself, your health or well-being, your relationships with other people, or how well you do at studies. Indicate with a Y, if it has happened to you in this period and N, if it has not happened during this time. If it has happened in this period, then indicate by putting tick marks in appropriate boxes how stressful each event has been.

Have you experienced the following events during the COVID pandemic period?		Indicate severity		
		Somewhat severe	Moderately severe	Extremely severe
1	Job loss of parent/ parents due to COVID pandemic	Y	N	
2	Reduced family income due to COVID pandemic	Y	N	
3	Relationship breakup	Y	N	
4	Close friend or family member fell ill	Y	N	
5	Death of close family member/relative/friend	Y	N	
6	Any other distressing event that you do not want to reveal to anyone else?	Y	N	
7	Any other (mention)	Y	N	
8	Any other (mention)	Y	N	

R. Concerns

	During the COVID pandemic period….	Not at all	Some of the time	Often
1	How often did you feel that you lack companionship?			
2	How often did you feel left out?			
3	How often did you feel isolated from others?			

	From June to October, ….	Increased	Remained the same	Decreased
4	has your boredom…. ?			
5	has your general irritability…. ?			
6	has your attention and concentration…. ?			

S. Emotional Issues

Over the last 2 weeks, how often have you been bothered by any of the following problems? Place a (✓) against your answer.

		Not at all	Several days	More than half the days	Nearly every day
1	Little interest or pleasure in doing things				
2	Feeling down, depressed or hopeless				
3	Trouble falling or staying asleep, or sleeping too much				
4	Feeling tired or having little energy				
5	Poor appetite or overeating				
6	Feeling bad for yourself - or that you are a failure or have let yourself or your family down				
7	Trouble concentrating on things, like school work, reading or watching television.				
8	Moving or speaking so slowly that other people could have noticed. Or the opposite being so fidgety or restless that you have been moving around a lot more than usual				
9	Thoughts that you would be better off dead, or of hurting yourself in some way				
10	Feeling nervous, anxious, or on edge				
11	Not being able to stop or control worrying				
12	Worrying too much about different things				
13	Trouble relaxing				
14	Being so restless that it's hard to sit still				
15	Becoming easily annoyed or irritable				
16	Feeling afraid as if something awful might happen				

17. Have you ever in your life thought of ending yourself? No Yes
18. Have you ever made an attempt to end your life? No Yes

19. Did you think about seeking help from a counsellor during the COVID pandemic period for mental health support? No Yes
20. If help was sought, was it beneficial? a. No b.Yes c. Did not seek help
21. Is there a counsellor in your school? Yes No
22. Did your school counsellor contact you during the COVID pandemic period?
a. Yes b. No c. Not Applicable
23. Was it beneficial? a. Yes b. No c. Not Applicable

T. Peers

1. Do you think any of your classmates is significantly worried during the COVID pandemic period due to some reason? Yes No
2. If yes, what could be the probable reason for their worries?
   - Economic problems in the family
   - Relationship problems with parents
   - Relationship problems with girlfriend/ boyfriend/ peers
   - Difficulty accessing online class
   - Difficulty understanding the class
   - Probable depression due to some personal reason
   - Other reasons
   - Not Applicable
3. According to your understanding, do they need the help of a counsellor? Yes No

U. Experience during the COVID pandemic period

2. What you most liked about the experience during the COVID pandemic period?

…….

3. What you most disliked about the experience during the COVID pandemic period?

……

V. Suggestions

1. Kindly give your suggestions regarding improving the classes on Victers channel?

……...

2. Kindly give your suggestions regarding improving the online follow-up classes conducted by your teachers during the COVID pandemic period?

…….

3. What is your opinion regarding when and/or how schools should be reopened?

…….

4. What is your opinion regarding how classes should be conducted after schools reopen?

…….

Thank you for your time and cooperation.

If you require any further clarifications and/or information regarding this study or require any kind of help from us, please contact the researcher who contacted you
(Phone:) or the supervisor of this research (Phone: 9539991643, Email: prc@gcwtvm.ac.in.)

In case you need any general psychological support at any point of time, you can contact the Disha helpline (1056 or 0471- 2552056) or childline (1098).