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Anxiety During Covid 19 Pandemic- A Study Among Female College Students and Teachers in Kerala

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Abstract

COVID-19 is an ongoing global pandemic and it had a major effect in our lives. Since the start of the COVID-19 pandemic, teachers and students have been experiencing negative psychological symptoms stemming from the school closures and it was the need of the hour to adapt new methodological model of teaching learning, for which the teachers and students were not prepared. The uncertainties caused due to this drastic change could only aggravate their anxiety levels. In addition to the aforementioned circumstances, the new teaching method adopted through online classes and virtual classrooms failed to replace real classrooms. In the absence of an effective mode of learning in the present context, the anguish and anxiety caused by such disparities remain immeasurable. There is a considerable dearth in the research conducted in the field of the impact of pandemic and its influence on levels of anxiety in college students and teachers and about the expectations of academic self-efficacy during these hard times. This research analyzes the level of anxiety and perceived self-efficacy during COVID-19.

Keywords: COVID 19, pandemic, psychological symptoms, anxiety, Hamilton's assessment.

Introduction

The outbreak of COVID-19 pandemic has changed our understanding of the world. It prompted people to face a distressing and unexpected situation. Uncertainty of survival and social distancing changed people's behaviours, impacting on their feelings, daily habits, and social relationships, which are core elements in human well-being. In particular, restrictions due to the quarantine increased feelings of loneliness and anxiety. The strong measures of social distancing and lockdown that have been applied since the beginning of the pandemic have led to significant changes in social relationships, which, for many people, have created feelings of isolation and loneliness (Smith and Lim, 2020). Indeed, the rapid transmission of COVID-19 throughout the world has had health, social, psychological, economic and, of course, educational consequences. In fact, school closure has been, on a global scale, one of the most widely used measures for helping to maintain social distancing and to decrease infections (Sheikh *et al.*, 2020; Van Lancker and Parolin, 2020; Viner *et al.*, 2020). This was followed by a de-escalation phase in which the restrictions were gradually eased (Gobierno de España, 2020a). By this time, school and university teaching



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were transformed over night into a virtual modality and remained this way throughout the 2019–2020 academic year (Al Lily *et al.*, 2020; Besser *et al.*, 2020; Kim and Asbury, 2020). This major alteration in instruction and learning practices has impacted the vast majority of educational institutions worldwide (Alemany-Arrebola *et al.*, 2020; Rettie and Daniels, 2020; Toquero, 2020; UNESCO, 2020; Yan, 2020).

The pandemic has not only affected the mental state of students (Cachón-Zagalaz et al., 2020), but also the teachers who had been experiencing a high level of stress since the beginning of the crisis. Recent studies have pointed out that during lockdown, teachers have suffered stress from having to adapt in record time to provide online classes (Besser et al., 2020). This stress has often been accompanied by symptoms of anxiety, depression, and sleep disturbance as a consequence of the increased workload resulting from home teaching Ng (2007). Adolescents and high-school students seem to have been especially affected by these abrupt changes to daily life, predominantly due to school closures. On the one hand, the usual structure of school activities and daily routines has been lost; on the other hand, the multitudes of experiences that normally occur through intensive social interactions with peers and authorities outside of family have become scarce. Due to features specific to their developmental stage, late adolescents are probably the most sensitive to these various kinds of social deprivation (Wentzel, 1998; Anderman, 2002; Klem and Connell, 2004; Roviš and Bezinovic', 2011; Wentzel et al., 2018; Kuhfeld et al., 2020). Moreover, the schools are expected to foster students' cognitive, socioemotional, cultural, and physical growth in accordance with the capabilities and interests of each individual student. Significant changes to schooling arrangements due to the COVID-19 crisis have generally limited schools' opportunities and resources to provide psychological and other support to their students. In such circumstances, all parties involved in the schooling system need to understand students' experiences with distance learning and how they adapt to novel living and studying conditions.

Furthermore, the pandemic has seriously impacted student's mental health and continues to do so which can also affect their performance over time(Tang et al., 2020; Wang C. et al., 2020; Fruehwirth et al., 2021). Young people are particularly vulnerable to depression, anxiety, and loneliness (Groarke et al., 2020), which has been exacerbated by the COVID-19 pandemic (Liu et al., 2020). Thus, the accumulation of negative life events during this period, have deteriorated mental health and could increase the risk of underperformance. In addition to the risk of infection and possible death, an epidemic also exerts tremendous psychological pressure on people worldwide. Several studies have discussed the short- and long-term effects of epidemics on the social and psychological well-being in the population. The change in life to which they have been abruptly subjected forces us to understand the state of their mental health in order to adequately address both their present and future needs. The present study was carried out with the intention of studying the consequences of confinement on anxiety, tension, fear and other psychological aspects of students and teachers residing in Kollam. The results of this study give valuable insights into the psychological status of students and teachers at a crucial time, and this, of course, has its own merit. It is important to identify appropriate strategies that could help students and teachers not only cope with adverse effects of the current pandemics but that can also enhance students' and teachers' resilience to similar disasters in the future. Parents, educators, and the society as a whole should identify ways to enhance students' adaptability skills that will enable them to endure such situations. There were two objectives for the study., that were to assess the rate of anxiety among female college students and teachers in Kerala in



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the wake of the pandemic and the second one is to analyse the different variables and level of anxiety experienced by the subjects during the pandemic.

Methodology

The purpose of the study is to assess the rate of anxiety among female college students and teachers in Kerala in the context of the pandemic. The study also intends to analyse the different variables and levels of anxiety experienced by the subjects during the uncertainties emanating from the pandemic. The researcher finds out the validity and reliability of the study with the available statistics through observation method. In the present study a total 200 female students and teachers (100 of Students and 100 of Teachers) were selected as subjects. The subject is delimited to female students and teachers from higher education sector. The subjects were educated enough to understand the questionnaire through a Google Form. The questionnaire courtesy is to Dr. Max. R. Hamilton's assessment of Anxiety Scale developed in 1959. The Hamilton Anxiety Rating Scale is a clinician-rated evaluation; purpose is to analyze the severity of anxiety. The scale is intended for adults, adolescents, and children and should take approximately ten to fifteen minutes to administer. The scale is a public document. Since it is in the public domain, it is widely available for administration. The Hamilton Anxiety Rating Scale is composed of fourteen items. On the scale, each item is presented in a specific format. Following the item number, the item itself is listed along with a brief description of the criterion. This description is in the form of a short phrase that elaborates on the item and provides specificity to the clinician regarding the appropriate evaluation. Adjacent to each item is a fivepoint scale, displaying the numerals 0 to 4 outlined by a square. Each criterion on the scale is an independent emotion that is related to anxiety. The collaboration of each of these independently rated criteria is meant to evaluate a subject's anxiety severity.

Result

Responses to each question were numerically coded and entered. Data were sorted and compared in several different ways. Primarily the data was categorized based on individual questions. In addition to scoring individual questions, the researcher compiled a total, composite score based upon the summation of each of the 14 individually rated items. Figure.1. clearly reveals the extent to which the college students and teachers feel anxious about the various circumstances they have to confront in their life. Student's anxious mood ratings are presented here from a higher to lower rating - not present (32%), mild (22%), moderate (24%), Severe (16%) and very severe (6%). Teacher's anxious mood ratings are also presented here from a higher to lower rating - not present (4%), Mild (40%), moderate (24%), Severe (16%) and very severe (16%).



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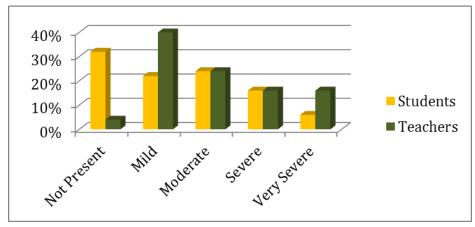


Figure – 1. Anxious mood. (Worries, anticipation of the worst, fearful anticipation, irritability).

Figure.2.clearly displays the magnitude of tension exhibited by college level students and teachers. Student's tension ratings are presented here from a higher to lower rating - not present (28%), mild (26%), moderate (24%), Severe (16%) and very severe (6%). Teacher's tension ratings are presented here from a higher to lower rating - not present (8%), Mild (28%), moderate (28%), Severe (28%) and very severe (8%).

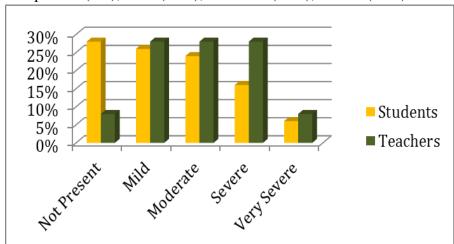


Figure .2. Feelings of tension, fatigability, startle response, moved to tears easily, trembling, feelings of restlessness, inability to relax.

Figure.3.exhibits the fears that will have an adverse impact on the health and well-being of the college level students and teachers. Student's fears ratings are presented here from a higher to lower rating - not present (44%), mild (28%), moderate (16%), Severe (6%) and very severe (6%). Teacher's fears ratings are presented here from a higher to lower rating - not present (44%), Mild (32%), moderate (24%), Severe (0%) and very severe (4%).



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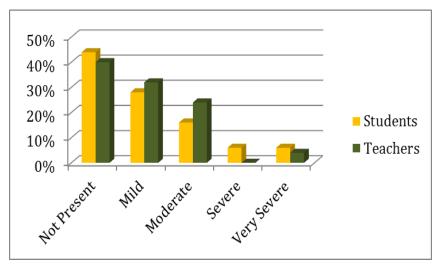


Figure.3. Fears (Of dark, of strangers, of being left alone, of animals, of traffic, of crowds).

Figure.4 reveals the extent to which insomnia affects the college level students and teachers. Student's insomnia ratings are presented here from a higher to lower rating - not present (54%), mild (12%), moderate (22%), Severe (8%) and very severe (4%). Teacher's insomnia ratings are presented here from a higher to low rating - not present (60%), Mild (16%), moderate (20%), Severe (0%) and very severe (4%).

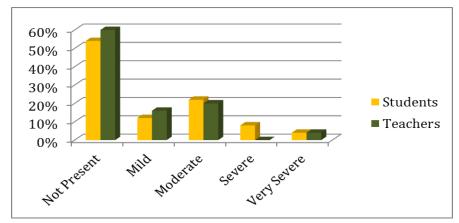


Figure.4. Insomnia(Difficulty in falling asleep, broken sleep, unsatisfying sleep and fatigue on waking, dreams, night terrors).

Figure.5. reveals the significant matters which adversely affect the intellectual level and growth of college level students and teachers. Student's intellectual ratings are presented here from a higher to lower rating - not present (28%), mild (30%), moderate (22%), Severe (18%) and very severe (2%). Teacher's intellectual ratings are presented here from a higher to lower rating - not present (32%), Mild (40%), moderate (24%), Severe (0%) and very severe (4%).



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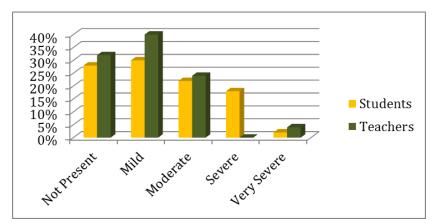
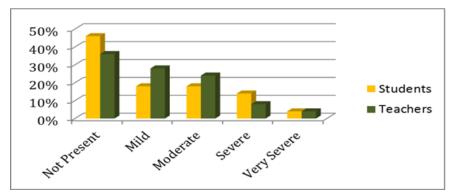


Figure.5. Intellectual.(Difficulty in concentration, poor memory.

Figure.6.reveals the rate and level of depression in college students and teachers. Student's depressed mood ratings are presented here from a higher to lower rating - not present (46%), mild (18%), moderate (18%), Severe (14%) and very severe (4%). Teacher's depressed mood ratings are presented here from higher to lower rating - not present (36%), Mild (28%), moderate (24%), Severe (8%) and very severe (4%).



<u>Figure. 6.Depressed Mood.Loss of interest, lack of pleasure in hobbies, depression, early waking, diurnal swing.</u>

Figure.7.reveals the level Somatic - muscular symptoms that causes major emotional distress in college level students and teachers. Student's Somatic - muscular ratings are presented here from higher to lower rating - not present (70%), mild (14%), moderate (14%), Severe (2%) and very severe (0%). Teacher's Somatic - muscular ratings are presented here from higher to lower rating - not present (56%), Mild (20%), moderate (12%), Severe (8%) and very severe (4%).



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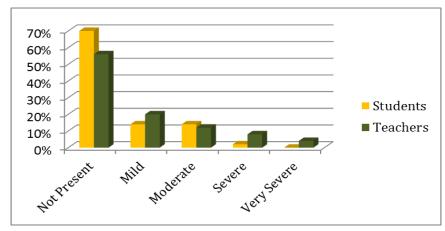
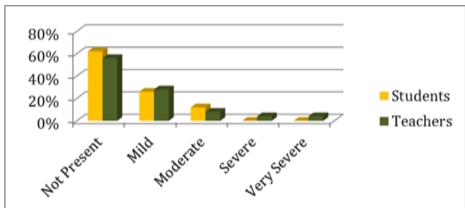


Figure.7.Somatic. Muscular - Pains and aches, twitching, stiffness, myoclonic jerks, grinding of teeth, unsteady voice, increased muscular tone.

Figure.8.reveals the Somatic – sensory issues faced by the college level students and teachers. Student's Somatic - sensory ratings are presented here from a higher to lower rating - not present (62%), mild (26%), moderate (12%), Severe (0%) and very severe (0%). Teacher's Somatic - sensory ratings are presented here from a higher to lower rating - not present (56%), Mild (28%), moderate (8%), Severe (4%) and very severe (4%).

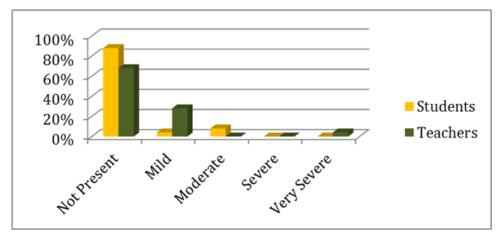


<u>Figure.8. SOMATIC Sensory - Tinnitus, blurring of vision, hot and cold flushes, feelings of weakness, pricking sensation).</u>

Figure.9.shows the rate of cardiovascular symptoms in college level students and teachers. Student's cardiovascular symptoms ratings are presented here from a higher to lower rating - not present (88%), mild (4%), moderate (8%), Severe (0%) and very severe (0%). Teacher's cardiovascular symptoms ratings are presented here from a higher to lower rating - not present (68%), Mild (28%), moderate 0%), Severe (0%) and very severe (4%).

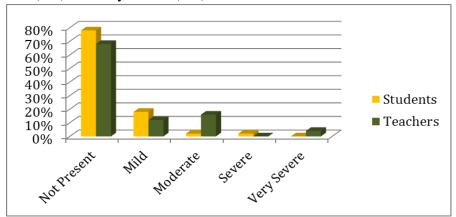


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<u>Figure.9.Cardiovascular symptoms.</u>(Tachycardia, palpitations, pain in chest, throbbing of vessels, fainting feelings, missing beat).

Figure.10.depicts the extent to which the selected subjects of study, suffers from respiratory symptoms. Student's Respiratory Symptoms ratings are presented here from a higher to lower rating - not present (78%), mild (18%), moderate (2%), Severe (2%) and very severe (0%). Teacher's Respiratory Symptoms ratings are presented here from a higher to lower rating - not present (68%), Mild (12%), moderate 16%), Severe (0%) and very severe (4%).



<u>FIGURE -10 RESPIRATORY SYMPTOMS.</u>(Pressure or constriction in chest, choking feelings, sighing, dyspnea).

Figure.11 clearly reveals the gastrointestinal problems faced by the majority of college level students and teachers. Student's gastrointestinal symptoms ratings are presented here from a higher to lower rating - not present (76%), mild (14%), moderate (6%), Severe (4%) and very severe (0%). Teacher's gastrointestinal symptoms ratings are presented here from a higher to lower rating - not present (56%), Mild (28%), moderate 8%), Severe (0%) and very severe (8%).



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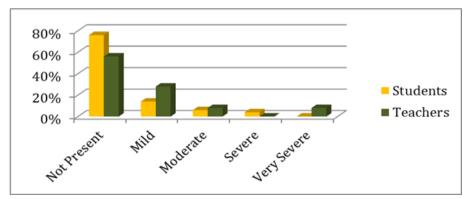


Figure.11. Gastrointestinal symptoms. (Difficulty in swallowing, wind abdominal pain, burning sensations, abdominal fullness, nausea, vomiting, borborygmi, looseness of bowels, loss of weight, constipation).

Table 12 clearly reveals the rate at which the genitourinary conditions affect the overall health condition of college level students and teachers. Student's genitourinary symptoms ratings are presented here from a higher to lower rating - not present (96%), mild (4%), moderate (0%), Severe (0%) and very severe (0%). Teacher's genitourinary symptoms ratings are presented here from a higher to lower rating - not present (72%), Mild (24%), moderate 0%), Severe (0%) and very severe (4%).

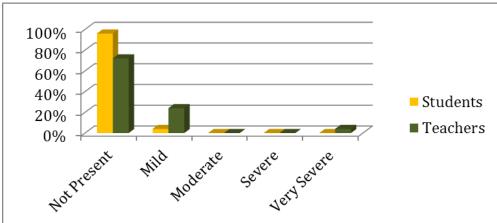


Figure – 12. Genitourinary symptoms.(Frequency of micturition, urgency of micturition, amenorrhea, menorrhagia, development of frigidity).

Figure.13.clearly shows the extent to which the autonomic symptoms can be observed in college level students and teachers. Student's autonomic symptoms ratings are presented here from a higher to lower rating - not present (72%), mild (16%), moderate (6%), Severe (6%) and very severe (0%). Teacher's autonomic symptoms ratings are presented here from a higher to lower rating - not present (48%), Mild (24%), moderate 12%), Severe (12%) and very severe (4%).



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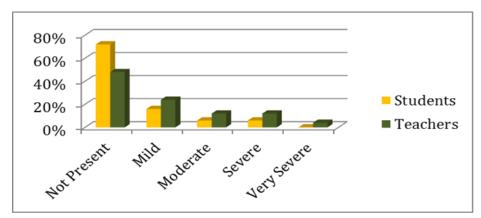


Figure.13. Autonomic symptoms.(Dry mouth, flushing, pallor, tendency to sweat, giddiness, tension headache, raising of hair).

Figure.14.clearly reveals the degree of abnormal behavioral changes in college level students and teachers. Student's behaviour ratings are presented here from a higher to lower rating - not present (74%), mild (18%), moderate (6%), Severe (2%) and very severe (0%). Teacher's behaviour ratings are presented here from a higher to lower rating - not present (60%), Mild (32%), moderate 4%), Severe (0%) and very severe (4%).

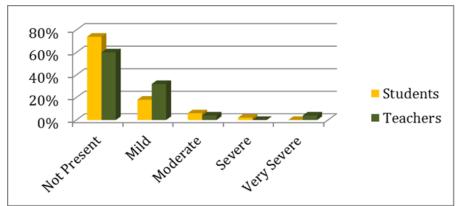


Figure – 14 Behaviour. (Fidgeting, restlessness or pacing, tremor of hands, furrowed brow, strained face, sighing or rapid respiration, facial pallor, swallowing).

Discussion

There are numerous works are there dealing with the impacts of COVID-19 on the health and mental fitness of the students and teacher. In the present works done a detailed effort to analyze the stress of students during COVID time. The researcher compiles a total, composite score based on the summation of each of the 14 individually rated items. This calculation will yield a comprehensive score. It may be concluded that the rate of anxiety among female college students and teachers in Kerala in the context of the pandemic is mild. Anxious mood and increasing tension can be seen mutually rising in all levels of anxiety. As far as the students' intellectual growth is concerned, their difficulty in concentration and poor memory falls on a Moderate level. It can be accessed from the study conducted that if the pandemic situation is going to persist in the same way, there will be a notable deterioration in the students' learning



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level. According to Janula Raju and Raju sirvatham (2022), the high school children are experiencing a considerable level of anxiety during lock down of COVID-19 pandemic period. There was a strong association of anxiety level of students, if any family members are tested positive for corona virus or any one is being quarantined for the symptoms of corona virus. An another work by Shrinath et.al., 2022 concluded that COVID-19 outbreak had significantly impacted students' mental health, education, and daily routine. New policies and guidelines in this direction would help mitigate some of the adverse effects to prepare educators and students for the future health crisis. Das et.al., 2020 evaluated the mental health status of pan-Indian frontline doctors combating the COVID-19 pandemic. Amid the ongoing coronavirus disease 2019 (COVID-19) pandemic, healthcare workers of multiple disciplines have been designated as frontline doctors. This unforeseen situation has led to psychological problems among these health careworkers. Brahma.B and Barman.P(2022) studied the level of academic anxiety among secondary school students in both private and government schools and also to compare the academic anxiety of the boys' and girls' students. For this a total of 200 secondary school students participated in this investigation. According to him Covid-19, negatively affected the students. The parents and teachers need to develop the potential intervention and appropriate strategy to help the students. Mathew. J.A(2021) aimed to study the prevalence of depression, anxiety and stress in medical students during the COVID-19 lockdown in Kerala along with the associated socio-demographic factors. The changing education aids and platforms were also created more deviations and stresses to the students(Naik.et.al;2021). Work by George.S.A(2022) showed that awareness was positively associated with hand washing, social distancing which are the parts of preventive activities. Health promotion activities in terms of health education can improve the behavioural change(Babu.L.S.;2021). Since varying amounts of stress are present in different groups, etiologic of perceived stress and measures to control it may be investigated in the future so as to avoid stress-related crisis in the health sector. Effective stress management measures like mindfulness are highly recommended.

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