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RESEARCH ARTICLE

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## TEACHER'S EFFICACY AND BURN-OUT LEVELS DURING & AFTER COVID-19 PANDEMIC

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### ABSTRACT

The COVID-19 pandemic has led to an immediate need for a complete, unplanned change in schooling and education system. As the campuses in schools all over the world were closed to protect the students and teachers, many educators have shifted to remote teaching involving technology. Educators have continuously emphasized on the need of teachers as mainstream workers in educational reform, and the dedicated and consistent behavior of teachers will be necessary to a successful educational response to the current COVID-19 pandemic. However, to get a clearer understanding of the teachers' behavior about the pandemic, various models of planned behavior have shown that teachers' attitudes must be considered too. The aim of this research is to understand how attitudes of teachers are changing, their self-efficacy is altering and their approach towards technology related to resilience and burnout while online teaching during the current times of COVID-19 pandemic. This study aims to ascertain the association between teachers' self-efficacy and burnout reports in Bangalore, India. Using two questionnaires, data was collected, which was then concerted to numerically comprehensible formats using the SPSS Software. Correlational analysis was used to establish the link between self-efficacy and teacher burnout. The findings demonstrated a direct correlation between participant self-efficacy and exhaustion. This paper also aims to understand the burnout levels experienced by the teachers and the self-efficacy levels separately too. How this has changed over the pre pandemic phase is also an aspect which will be covered in the study.

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## INTRODUCTION

Due of the COVID-19 epidemic, there were school shutdowns for both teachers and children worldwide between spring 2020 and summer 2021. The duration and global scope of school closures during this pandemic were historically unprecedented, even though they have happened before—during the polio pandemic in 1916 and the influenza pandemic in 2009 (Meyers and Thomasson, 2020), for instance. Around 1.5 billion pupils were impacted by school closings at the height of the pandemic (UNESCO, 2021). Empirical studies have emphasized the significant effects that the COVID-19 pandemic has had on students' well-being (Absury *et al.*, 2020). Less focus has been placed on the issue of how teachers have dealt with the COVID-19 outbreak, the ensuing school closings, and the necessary switch to online instruction (Kim and Absury, 2020). While the COVID-19 pandemic has presented unique challenges for teachers, it is important to note that teacher burnout was a problem prior to the pandemic as well. However, COVID-19 epidemic brought about unimaginable difficulties and produced new demands and pressures, even though teaching was already one of the most demanding professions. In addition to the challenges of teaching during a global health crisis, teachers have also had to adapt to new technologies and approaches to teaching, such as online learning.

Even though research from before COVID-19 suggests that online teaching is not necessarily more difficult than traditional teaching (Martinez *et al.*, 2019), the abrupt change, which came with little to no training, may have exacerbated existing stressors and contributed to an increase in teacher burnout. Research on teacher burnout during and after COVID-19 is still in its early stages, but some studies have already begun to explore the impact of the pandemic on teacher well-being. Teachers were concerned about their pupils' health as well, particularly that of high-risk students, in addition to their own physical and mental wellbeing (Carreon *et al.*, 2021). Additionally, studies examining the effects of COVID-19 found that teacher rates of stress, anxiety, and depression were much greater than pre-COVID-19 rates (Oliveria *et al.*, 2021). The mounting evidence demonstrates unequivocally that COVID-19 has a significant impact on teachers' health and wellbeing. However, it is unclear how long these detrimental consequences persisted. Most of the research on COVID-19's effects on teachers that have been published are based on information gathered in the early months of the pandemic (Matiz *et al.*, 2020). Less research has been done and data collected to examine COVID-19's effects later in the pandemic. As teachers finally adjusted and established a new rhythm and schedule, it's possible that the negative impacts were only temporary while they initially struggled to adapt to the move to online learning. On the

other hand, given that the pandemic induced changes in teaching methods as kids returned to school, and was accompanied by uncertainty about its longevity, the negative impacts might be more long-lasting. The purpose of the current study was to ascertain whether COVID-19 continues to worsen teacher stress, burnout, and wellbeing after the pandemic.

**Statement of the research problem:** The teaching profession has the greatest yearly turnover rate because one in three instructors feel that teaching can be very or extremely stressful (Pressley, 2021). The pandemic's online education has made matters worse. Because of the severe stress, the teachers' output has decreased because of self-doubt (Chitra, 2020). Due to the pandemic, the levels of self-efficacy have changed. Teachers' yearly turnover is 15.7%, compared to the average annual turnover rate of 11% for occupations other than teaching (Prasojo *et al.*, 2020). The TSES scale is used in the study to gauge the proportion of instructors who are facing low levels of self-efficacy and experiencing burnout. The study also seeks to determine whether there is any relationship between burnout and teachers' efficacy. This study compares the teacher's perspectives from during and after the COVID-19 outbreak to better understand their ideals.

**Significance of the study:** According to (Kim and Absury, 2020), the pandemic has influenced both teachers and students' psychological well-being. Teachers have developed high levels of stress, anxiety, and low self-efficacy since the pandemic commencement. According to studies, teachers were stressed out during the lockdown because they had to quickly adjust to deliver online lectures (Alves *et al.*, 2021). Additionally, it's crucial to protect teachers' emotional wellbeing because, as a study by Carillo and Flores (2020) points out, teacher-student interactions can be stressful for students, and teachers' behaviour affects how emotionally healthy and committed their students are—both of which are crucial for lowering stress levels. According to Ma *et al.* (2021), self-efficacy also affects a teacher's level of perseverance and resilience when confronted with obstacles, making it a good indicator to look at in the context of switching to a new online learning environment. Therefore, this study becomes significant to understand the relationship between self-efficacy and burnout levels of teachers, during and after the COVID-19 pandemic.

## LITERATURE REVIEW

**Historical Context of 'Burnout':** In 1974, burnout was first defined by Freudenberg as a state of emotional and physical depletion caused mainly due to working conditions (1974). The concept of burnout was popularized as a social phenomenon rather than under the microscope of medical research and hence never found a place in the Diagnostic and Statistical Manual of Psychiatric Disorders (DSM) (Seppala and King, 2017). The focus of his concept of burnout was the physical and psychological depletion of individuals due to stresses from their jobs. The area of study around burnout has developed a more diverse and varied definition today. As burnout was developed as a social issue, there was great subjectivity and many loose ends in the definitions of burnout. While various methods were being tested in the 1900's the Malsch Burnout Inventory (MBI) (Maslach and Jackson, 1981) was developed to measure burnout, as a popular method and was later made specific for teacher burnout. He defined burnout as a situation when individuals experience stress in context of their social relationships. He identifies 2 main components within the MBI – depersonalization, emotional exhaustion as well as reduced personal achievements. By adding multiple dimensions, Maslach, Schaufeli and Leiter (2001) were able to move away from the one-dimensional understanding of stress and differentiate between stress and burnout effectively. Also, by looking at different components, he did not classify individuals as “burned out” or “not burned out”, rather looked at them in continuum of each component. Years later, the concept of burnout was defined as one in which an individual's high expectations and energy to work is approaching the end and compares it to a dying battery (González-Romá *et al.*, 2006 p. 75). This idea was built upon, and new definition was given by saying that

“the energy to work has been burned out” (Schaufeli, Leiter and Maslach, 2009, p.37). The study in the area became more prominent with increasing number of studies and research being conducted and development of multiple definitions. While the study of “burnout” as social and psychological issue continued to develop, the negative economic and financial effects of burnout on organizations across various countries also began gaining popularity. The American Institute of Stress calculated an amount of \$300,000 million as being borne by companies due to work stress amidst employees in the form of absenteeism and other health costs (Levi *et al.*, 2000). According to the European Commission (2022), the European Union considers job stress as costing them 20,000 million. This gave rise to the pressing need to draw up prevention and intervention tools and strategies to cope with work stress, failing which the stress could become chronic and fatal. The burnout amidst individuals is not a sudden occurrence (Jimenez *et al.*, 2014), rather a cyclical and continuous process that repeats itself multiple times in different contexts and situations, and thus must be mitigated. Thus, over the years, through the several research and studies conducted, the concept of burnout has moved ahead from being fictional (Schaufeli, Leiter and Maslach, 2009, p.37) and now is an important indicator of the need for recognition, prevention, and intervention in people's relationships with their jobs.

**Teacher Burnout:** Teachers play an essential role in the advancement of our society's workforce. Our society's progress is driven by the competence of teachers. Montgomery & Rupp (2005) stated that teaching profession is currently a matter of concern due to the high-stress and related emotional problems. Teachers are tested and tasked with the responsibility of assuring that the next generations of students attain a higher set of standards, just as our students' academic abilities are questioned and tested by extensive standardized examinations. This pressure adds to the stress and pressure of a job that is already one of the most demanding in the world. While teaching as a career is associated with high levels of stress (Montgomery and Rupp, 2005), teachers also struggle with major emotional issues because of their work. Teachers' burnout has been identified as an issue that persists globally (Aloe, Amo and Shanahan, 2013) and effects of which are being researched and studied in a variety of countries, like USA, Korea, Turkey, etc. Jennett, Harris and Mesibov (2003) stated that a prolonged state of stress and anxiety leads to a condition that can be defined as a condition of burnout. They further added that a variety of reasons, may contribute towards teachers' experiencing stress at work. While most teachers can deal with such pressures well, prolonged periods of stress could result in a failure to cope and eventually lead to burnout (Jennett, Harris and Mesibov, 2003). Teaching is a difficult job (Kyriacou, 2001), and it is considerably more difficult for new instructors. Ingersoll (2012) found that around 50% of teachers who joined the education field recently leave the profession within 5 years of their joining. Additionally, according to Habermen (2005), urban area teachers are more likely to feel stressed than rural teachers because they are not able to connect with students, can't reach the impoverished and diversified community, or they spend their time managing rather than teaching. Teacher burnout is thus a large concern in education, and it should be handled seriously by teachers, administrators, and school systems. If signs of teacher burnout are not addressed properly, teachers may become overwhelmed or severely stressed, weakening performance and eventually leading to their eventual exit from the profession. Teachers do not have a single role to play while teaching, whereas they must fulfil duties and responsibilities and be answerable to their administration as well as students and their families. On a somewhat personal level, student misbehavior, additional duties from administration, a lack of control, a sense of isolation, stress from colleagues and extra challenges like the stress of managing household activities and tasks at work place a huge strain on teachers, which can worsen the phenomenon and lead to burnout (Moore, 2007). Teachers' relationships with students are likely to suffer when they are overwhelmed and unable to cope, resulting in unfavorable academic and behavioral consequences for students (Wentzel, 2010). Emotional exhaustion and inefficacy are the main characteristics of professional teacher burnout which is due to the overwhelming demand of the job

or the lack of resources (Maslach *et al.*, 2001). This indicates the multidimensional and interrelatedness of efficacy and exhaustion with teacher burnout. Geving (2007) found that teacher burnout has negative impacts on student well-being, academic performance and could also instigate behaviors such as bullying, back answering the teacher, etc. Antisocial and defiant behavior such as bullying, physical damage to property, etc. are immensely associated with teacher burnout (Kokkinos, 2007). Additionally, according to the Prosocial Classroom Model (Jennings & Greenberg, 2009), the ability of teachers to effectively direct educational instruction and control classroom conduct is influenced by their socioemotional health. These elements will consequently have an impact on student outcomes including performance and motivation.

Literature points towards burnout being responsible for several major difficulties plaguing the teaching profession. Burnout can drive a teacher to leave the profession entirely in some situations. Although this addresses concerns about student engagement, it has an impact on the greater issue of retaining teachers within the field of education. The trend of teachers quitting and rising need to better teacher retention has been gaining importance over the years as the situation is just growing worse. Rates at which teachers have exited the teaching profession have steadily increased after 2004-2005 (Marvel *et al.*, 2007). Various research studies indicate that teachers irrespective of their years of experience tend to exit from stressful working conditions (Podgursky, Monroe, & Watson, 2004) as teacher burnout will result in other visible withdrawal actions, such complete absence from the classroom (Taris, 2006). However, not all teachers who leave the education field do so because of burnout. Goddard and Goddard's (2006) study results regarding teachers' intentions and reasons for leaving their jobs showed that 11.6 percentage of the sample population reported that they were seriously considering quitting their jobs as they depicted high levels of exhaustion and inefficacy. The results of this study points towards the increasing trend of teachers leaving their jobs and the education field, due to burnout. Burnout has been demonstrated to affect teachers' capacity to work effectively with students as well as their ability to resolve disruptive student actions in the classroom (Brouwers & Tomic, 2000). Grayson & Alvarez (2008) stated that according to a survey by the Ohio Department of Education (ODE), 7-8 percent of teachers leave the profession each year, primarily due to job dissatisfaction attributed to the school type and student population (p. 1351). Kokkinos's (2007) study of the relationship between personality and teacher burnout looked at the personalities of teachers, job pressures, emotional exhaustion, depersonalization, and personal accomplishment. The transactional model of burnout allowed this study to gain importance, which describes how environmental triggers interact with one's personality. A study investigated the link between teacher burnout and psychological and psychosomatic disorders (Bauer *et al.*, 2005). What was particularly intriguing is the gender-specific similarities between the results of the Kokkinos (2007) study and the outcomes of this investigation. According to their findings, female teachers were more likely to be burned out. According to Bauer *et al.*, marital and job statuses were also found to influence burnout: single teacher and part-time teachers displayed higher degrees of burnout. As a result, burnout has become an important aspect of the teaching climate, affecting both individual teachers' personal stability and the teaching field. On various levels of teaching, several variables contribute to burnout. Teachers' stress levels rise because of these variables as it pushes them to work harder. Iancu *et al.*, (2017) stated that once this phenomenon of burnout sets in, the main elements that emerge are - emotional exhaustion, personal successes, and depersonalization. These findings have also been explored in several studies aimed at determining the root causes of teacher burnout. This data can then be used to generate prospective ideas and programmes for reducing or preventing teacher burnout.

**Teacher Burnout Factors:** As mentioned earlier, teaching is, at its foundation, a very stressful profession. According to studies done in numerous nations, the teaching profession suffers from high levels of stress, anxiety, and depression (Ryan *et al.*, 2017). In fact, primary

and secondary educators as well as university professors have investigated psychological symptomatology (Abdullah and Ismail, 2019). Although elementary school instructors had lower levels of psychological symptomatology than senior educators do (Arias *et al.*, 2019), other aspects including remuneration, interactions with students, and relationships with colleagues are also crucial. Moreno *et al.*, (2004) in their study discovered that health problems were unavoidable due to the high levels of stress, which could lead to an increase in sick days, absenteeism, and subpar work output. A study by De la Fuente *et al.* (2020) points out how and why teacher-student interactions can be stressful for students and that the behavior of the teacher influences students' emotional commitment and well-being, both of which are crucial for lowering stress levels. This indicates how crucial it is to protect teachers' emotional wellbeing. Additionally, the belief that least stressed teachers are those who teach in the early years of pre-school and primary education was put to test. Earlier research done in non-pandemic circumstances, which found that high school teachers were most likely to experience signs of burnout (Arias *et al.*, 2019). This could be because these teachers feel a greater responsibility for the younger children who, due to their age, require more care and protection. They carry out these duties diligently and effectively as they also feel under a great deal of pressure to couple with the worries of the students' families. Numerous variables contribute to and intensify this strain. These variables, either considered independently or in combination with other variables, can cause burnout and force teachers to leave the field of education. The factors leading to teacher burnout have been classified into -

**Individual Factors:** I believe that individuals who exhibit a significant sense of control of their lives are most successful in affecting their life outcomes, whereas those with an external reliance for control believe that everything that happens around them is by chance. Similarly, when a person begins teaching, certain individual stressors arise because of their employment, which influence them on a personal level – such as the teacher's own worldview, the environment the teacher experiences at school along with how the teacher manages her personal successes and failures. If teachers begin to feel that they have no control over the unfavorable aspects of their jobs, they will feel dismal about their accomplishments, which will heighten the stress (Bevis, 2008, p. 14). On an individual level, a teacher's self-esteem as well as the satisfaction they attach with the work they provide were found to be the best indicators of burnout (De Stasio *et al.*, 2017). As the matter of satisfaction and dissatisfaction is subjective, on a human level, dissatisfaction is thought to be the liminal space (Grayson & Alvarez, 2008) that exists between the ambitions and the achievements of a teacher. When thoughts such as these accumulate over time, they can alter your level of happiness and satisfaction at work. Despite the popular belief that stress builds up over time and eventually leads to burnout, studies on the impact of individual teacher characteristics have found no consistent results (Bataineh&Alsagheer, 2012, p. 8). No relationship was established between burnout of teachers and self-efficacy across the different parameters of gender, race, and ethnicity (Pas *et al.*, 2012). Some studies showed that regardless of how long a teacher has been in the education field or their educational qualification, burnout can be caused by a variety of reasons that can affect them anytime on a personal level. However, several other studies that have been conducted pointed towards how younger teachers, teachers with very little experience and teachers with extensive experience (more than 25 years) face greater feelings of burnout than the rest (Leithwood, Jantzi, & Steinbach, 2001). There is a need for additional and adequate research to understand the correlation between teacher burnout and the numbers of teaching experience years, education levels, and to understand this across various race, ethnicity, and age. Apart from teaching experience and education, studies have also investigated the possible effect characteristics such individual personality traits, perception of rewards and attitude towards job, have on the extent of teacher burnout (Alarcon, 2009).

**Work-related Factors:** Maslach *et al.*, (2001) distinguished individual and situational factors. Unlike individual personality traits, he said

that stress could be induced by occupational and organization characteristics. The stress induced within teachers can be attributed to various work-related matters such as workload, student behaviors, administration, classroom quality, school climate, specific demand of the job, etc (Dworkin, 2008). Teacher burnout has been found to be strongly associated to student characteristics. Student behavior tendencies and misconduct have been demonstrated to be a substantial leading cause of teacher turnover (Pas *et al.*, 2010). Teachers who are burned out may see and behave differently to students with behavioral issues than teachers who are not burned out (Balles, 2007). According to Lambert *et al.* (2009), the hardest aspect of teaching, according to teachers, was dealing with student behavior. A teacher may find problems in dealing with a problematic student themselves and thus opt for someone else to deal with the child (Egyed and Short, 2006, p.464). This can affect students and their academic performance if the teacher lacks coping skills and is unable to adequately teach the class owing to the disruption. Herman *et al.* (2017) in their research concluded that classrooms with disruptive children that required severe focus on behavior management contributed to higher chances of burnout amongst teachers than classes with low academic performance. Teachers' workload is yet another contributing reason of burnout, as it may quickly pile up and become a continual source of stress for them. Even though kindergarten to primary school teachers do not participate in the high-stakes testing, their stress levels are affected by their workplace, management, and pressure from higher grades to prepare children (Saeki *et al.*, 2018). Teachers may experience stress when their routines are disrupted or sudden changes, such as curriculum changes, transition to hybrid/online learning, increased documentation, etc. When teachers are not prepared for such changes, it can contribute to increased workload and major stresses in their daily routines. The school administration thus can also be an additional cause of teacher burnout because changes such as these without much notice can worsen the stressful conditions of teachers' daily routines. School administrations must thus be cautious while making changes and adding tasks to teacher routine and must also provide teachers with training and resources to develop their efficacy and prevent them burning out of the education sector Pas *et al.* (2012). Another contributing factor to teacher burnout could be the quality of the class environment. Teachers within positive classroom environments experience a greater sense of belonging and success as they are more motivated towards their work and it enables academic excellence (Hogland *et al.*, 2015). The need to manage student behavior has been associated with symptoms that lead to burnout thus calling for effective support systems (Bataineh&Alsagheer, 2012, p. 7).

**Social Factors:** While individual characteristics play a role in a teacher's well-being, social influences can also contribute towards mounting up unnecessary stress. External sources include staff relationships, the support provided by their teaching colleagues and student interactions. Lack of communication and coordination between the members of teaching fraternity is one of the primary inhibitors to classroom effectiveness (Howson, 2016, p. 12). Co-worker animosity or disinterest, like any other workplace problem, can make individuals less productive. Collaboration among several professionals who each bring something unique to the table is essential for effective education and academic excellence. Students will not benefit fully from their education if there is no exchange of ideas and input between experts. This brings us back to the viewpoint of teachers relying internally on their achievements but losing out of them if improper communication between the teacher and their peers persists. Alternatively, another perspective of social factors contributing to teacher stress and burnout is if a teacher is uncomfortable reaching out to other members of staff for whatever reason. This could in turn inhibit them from receiving feedback which prevents them from understanding multiple perspectives on how to handle stressful situations. In the absence of such kind of security and support net, teachers may succumb to stress and burnout, while all of this could have been averted by effective communication with a teacher who has faced and surpassed comparable challenges. Additionally, student interactions could also contribute as a social factor increasing the propensity of the teacher towards burning out.

The teachers within the field of special education experience burnout at high levels and more signs of emotional exhaustion and depersonalization as compared to their colleagues due to the extensive number of hours spent with such students (Nuri *et al.*, 2017). Teachers belonging to this domain of special education encounter a range of challenges during the school day. It's also worth noting that these teachers with strong support networks depicted less inclination towards burnout and quite often exhibited a sense of personal satisfaction (Bataineh&Alsagheer, 2012). The exact relationship between a teacher's stressors and student strain cannot be confirmed, but it does pose more questions as to how much student interactions affect a teacher's mental state.

*Interplay of Teacher Self-Efficacy and Teacher Burnout:* Self-efficacy, according to Albert Bandura (2001), is "people's judgement of their capabilities to organize and execute courses of action required to attain designated types of performances" (Bandura, 1986, p. 391). Four mechanisms, according to Bandura (1977), contribute to self-efficacy. Since success is by-product of high levels of self-efficacy, the first mechanism, experience, denotes an elevated sense of self-efficacy due to the associated success in tasks. The term "vicarious experiences," also known as "modelling," is when one received or experiences a high level of self-efficacy by observing and internalizing the success of others around them. The mindset of "If they can do it, I can do it" boosts self-efficacy. By giving someone the confidence that she will be successful in completing the task at hand, verbal persuasion boosts self-efficacy. Finally, anxiety may be exacerbated by physiological variables like oversteering in stressful situations. While the idea of finishing a task could make one feel satisfied, low efficiency can lead to unpleasant emotions like worry and anxiety, which can either adversely or positively impact a person's efficiency. According to Robbins and Judge (2013) and Sürgevil (2006), teachers with high self-efficacy are also more resilient and motivated under trying circumstances.

Educators, researchers, and academicians have been in continuous discussions about unpleasant work-related attitudes linked to the exhaustion of psychological resources (Kim and Asbury, 2020). Such a phenomenon of exhaustion wears teachers out by undermining their confidence in their capacity to do their duties and making it more challenging for them to regulate student behavior (Buri and Kim, 2020). It is worthy to note that the teaching profession has always been linked to increased stress because of enormous workloads, difficulties with interpersonal interactions, a lack of training, and job instability (Pérez, 2003). Teachers who displayed an elevated sense of self-efficacy showed greater interest and performance within the teaching profession (Klassen and Tze, 2014), as well as advanced and proficient teaching quality (Holzberger *et al.*, 2013). From several years, the concept of teacher self-efficacy has been unclear (Tschannen-Moran and Woolfolk Hoy, 2001). However, in the recent years, teacher self-efficacy has been divided into three subparts – teacher strategies, management of students and their behavior within the learning environment (Tschannen-Moran and Woolfolk Hoy, 2001). Numerous studies have identified potential burnout predictors with the help of the JD-R model (Bakker & Demerouti, 2007) of burnout, particularly in terms of burnout resources (Pas *et al.*, 2012). Research has revealed that teacher self-efficacy has a stress-buffering impact (Bakker *et al.*, 2005), and some researchers have asserted that it is a resource of protective nature (Dicke *et al.*, 2015). Researchers have concentrated on the correlation and association between teacher burnout and self-efficacy (Brouwers and Tomic, 2000). Additionally, there has been no study that has analyzed the changes and relationship between teacher self-efficacy and burnout during and post the COVID-19 pandemic. Lin and Zheng (2015) investigated professional development for online primary and secondary teachers who were transitioning to online teaching. The study discovered a stark difference between self-efficacy – both instructional and technology related. This study, along with earlier research on online education, validated teachers' need for professional development in technology (Horvitz *et al.*, 2015; Robinia& Anderson, 2010). According to Corry and Stella (2018) the relationship between teacher self-efficacy and student achievement was to yet be confirmed.

**Impact on COVID-19 on teachers:** Both teachers and students experienced significant amount of mental and emotional effects during the pandemic which contributed to high levels of stress (Cachón-Zagalaz *et al.*, 2020). Studies during the pandemic focused on the changes in teachers stress levels and their leaning process. Information and communication technologies were the only resources available to teachers during the COVID-19 pandemic, and prior research has shown that utilizing Information and communication technologies while working from home causes emotions of strain, worry, weariness, and decreased job satisfaction (Cuervo *et al.*, 2018). Teachers faced increasing amount of stress due to the sudden need to shift to online class delivery (Besser *et al.*, 2020). This stress has frequently been accompanied by signs of hysteria, despair, and sleep problems due to the additional strain brought on by online classes (Cachón-Zagalaz *et al.*, 2020). Studying the prevalence of hysteria among teachers during the pandemic in three Chinese cities revealed a prevalence of 13.67 percent, with older teachers being more symptomatic and women experiencing greater anxiety than males (Li *et al.*, 2020). Zhou and Yao (2020) conducted another study in China which revealed that 9.1% of instructors had symptoms of stress, highlighting the emerging need for providing them with psychological support. Another study undertaken in Spain at the beginning of the COVID-19 pandemic found that teachers there were overworked, experiencing psychosomatic issues, and feeling exhausted (Prado-Gascó *et al.*, 2020). For more than 40 years, the literature has documented teacher burnout. Rather than being eradicated, the issue is becoming more prevalent among teachers, and it is a major contributor to high attrition and turnover in school staffing. This causes issues within schools, particularly in terms of establishing stability for teachers, students, and the community at large. Due to the lack of research on the effects of burnout and self-efficacy among teachers, there was a need to undertake a systematic study of stress and burnout among teachers working in various types of secondary schools in India during the COVID-19 pandemic, to identify the major causes, suggest preventive measures and understand the relationship between the same. No explicit study was done in Bangalore that identified the comparative study during and post the pandemic, which makes this research unique.

## RESEARCH METHODS

This section of the study reinstates the role of researcher, the methodology used for selection of the sample population as well as the instruments used to collect data and analyze it. It also includes the ethical considerations and measures that had to be taken to ensure protection of the participants identity.

**Design:** To this study on teacher burnout, the research design chosen was of quantitative and qualitative nature. Each of these study design methods have their own ways of collecting and analyzing data. Even though the two approaches have different logic and strengths, they are tools used to accomplish the same objective using various methods and procedures (Maxwell, 2004). Qualitative data tools such as interviews with open-ended questions and observation were used to collect information from participants, which were accompanied with field notes. The techniques used to acquire the data provide an in-depth description of the study's participants. Consequently, using a qualitative research approach allows for a deeper knowledge of behavior and yields a wealth of information on actual individuals and situations (Leedy and Ormrod, 2014). While the purpose of the study rested upon understanding and defining the stressors/factors that contributed towards teacher burnout, it also aimed at studying how it affected teacher's self-efficacy. Implicitly, the use of quantitative research methods might be considered scientific. However, utilizing a quantitative technique will make it very difficult to provide a thorough examination of the phenomenon in its natural contexts (Berg, 2007). The researcher will not be able to appreciate or comprehend the team or people he is working with. Case study was the qualitative method that suited this investigation on teacher burnout the most, as each teacher was examined as an individual case. The goal of this study was to identify the factors that led to

teacher burnout and its effects on teacher self-efficacy and student learning. Case studies enable a better understanding and deconstruction of complex phenomenon (Patten, 2012). It enables the researcher to explore and explain thoughts and opinions of the sample of the study. The study of teacher burnout and self-efficacy is a study regarding human behavior and thoughts which may make it difficult to simplify findings as there are many perspectives of the social world, therefore making explanations reliant on the researcher's interpretations (De Vaus, 2014). This means that the study cannot be conducted again at a different location by a different researcher and provide the same outcomes. Despite these challenges, instead of testing data produced by other researchers, this method enables the researcher to build and reconstruct ideas based on the data he generates first-hand. At the time of the study, I was working as a senior school educator within the research site. I had developed a sense of trust and comfort with the fellow educators within the school community. This allowed me to collect a fair amount of candid and natural responses. Patton (2014) stated that it was essential for researchers to build a positive relationship with their participants. However, it is often believed that researcher bias is a probable outcome when a researcher conducts a study within her own work setting or organization (Creswell, 2012). This could give rise to an interviewer bias, which refers to when interviewers tend to project their opinions, thoughts, and feelings into the interview, leading to distortion of authentic data (Maxwell, 2012). Adequate checks were put in place to avoid such biases and errors – however, it is not uncommon for researcher to administer questions in a regular conversational tone. Aspects that have been previously discussed in interactions at work may also be covered in interview questions. Therefore, a crucial tactic for insider researchers may be to start the interview with a disclaimer, noting that even though the topics may have been discussed earlier, they must nonetheless reply as if they were discussing it for the first time (Chavez, 2008). To avoid this, questions were asked in several different ways, to cross check, the responses and establish connections/patterns to provide a more definite picture. When expectations for the results seem to be validated, there is occasionally a risk of jumping to conclusions (Mercer, 2007). To maintain credibility, insider researchers must ensure that the data is thoroughly analyzed. To ensure that honest and reliable insider research is undertaken to provide the intended results, it is crucial to recognize and handle the risks, difficulties, and conflicts that may arise during the research process, which will be discussed in the following sections.

**Participants:** The questionnaire was disseminated to 150 teachers from Indus International School, Bangalore out of which the response rate was 98 in-service teachers across Primary, Middle school, and High school levels. I selected the research site as a place that was accessible as well as familiar to me. A mix of Snowball sampling and convenience sampling was used to collect the data. As a lack of representative population can point towards weak sampling procedures and possible sampling bias (Rohrig *et al.*, 2010), the decision to cover all school years was made deliberately to avoid selection of all participants within the same programs. These variables were established within the literature review as factors that affected an individual's job satisfaction and his/her likelihood to burnout. Thus, as the participants belong to the same school but different schooling year programs, the variables would be distinct and similar in several ways, making the differences in results dependent on an individual's personality traits. Additionally, for the purpose of the case study, 3 teachers from the sample population of the questionnaire were chosen through purposeful sampling, a method by which a specific set of participants is chosen to take part in a study (Creswell, 2012). The following criteria were used as the basis for choosing the teachers for this study:

1. Acknowledging their own or previous symptoms of burnout as a teacher
2. Acknowledging the negative effects because of burnout
3. Consent to participate in the study



I held a very formal and professional relationship with these colleagues and maintained the same for the entirety of the research. I ensured minimize the influence of "insider" research by maintaining the rigor and transparency in my methods of data collection. The inherent bias and subjectivity (Mercer, 2007) was taken care of as I avoided sharing personal experiences even if the participant may have begun to converse due to the relationship we share. I informed the participants that even if the matters of the interview have been discussed by him/her in other workplace conditions, he/she will respond as if it were the first time. Considering "power relations" (Dwyer & Buckle, 2009) was also crucial as methodological issues could have arisen when I collected data from those who are more powerful than me (e.g., higher levels of management or more experienced teachers) as I am a fresher teacher. I ensured anonymity of the interviewees by using numbers and pseudonyms (Maxwell, 2012) and changing small details or characteristics to protect the identity of the participants. I voluntarily informed and sought ongoing consent such that the participants understand and agree to their participation and the terms and practicalities of it. The participants were also told why their participation is necessary, what their role will be, what they will be required to do as well as how the information they provide will be stored and used. I verbally presented the study's goal, procedures, risks, advantages, and available alternatives to participation to the participants, and I gave them plenty of time to ask questions or express any concerns. After giving the participant a verbal explanation, I gave them the written consent form or information sheet and gave them enough time to read it over and understand it before letting them decide whether to participate in the study. I also provided the participants with a lenient waiting period of 12 days to confirm their interest - to avoid any potential coercion and obligation.

## MATERIALS AND METHODS

To truly gauge the essence of the study, the data collection method was by means of two questionnaires that was sent across the teachers via google forms. The data then collected consisted of both during and post pandemic aspects and it captured the real idea of the comparison aspect of the study (Appendix A).

>**The Teachers' Sense of Efficacy Scale** (Moran and Hoy, 2001) is a self-assessment tool meant to help teachers better understand the kind of challenges they face in their daily work. Three subscales of teacher efficacy are included in two forms: one with 24 items and a shorter form with 12 items: instructional strategies, classroom management, and student engagement that includes a nine-point Likert scale ranging from 1 to 9 and ranges from nothing to a great deal. The Instructors' Sense of Efficacy Scale is used to determine what challenges teachers face in their everyday educational activities. To the study, this tool was used with the 12-point scale questionnaire and the data was collected. Although several studies do suggest that too brief surveys might have a negative impact on response rates (Beebe *et al.*, 2010), the shorter version of the scale was used to ensure a high-response rate as longer surveys have a relatively higher non-response rate (Galesic and Bosnjak, 2009). Thus, the shorter version was chosen, because lower response rates raise questions about whether the respondents was properly sampled (Dirameir *et al.*, 2007).

>**Stress and Burnout Questionnaire:** This short questionnaire is intended to assist in identifying the warning signs of excessive stress. The questions are related to the last three to six months of the teacher's life. It looks for changes in coping strategies, rather than the usual behavior. This tool assists in determining whether one is burnt out. It helps to examine how one feel about their job and work experiences to see if they are at risk of burnout. This technology was used to solve the study's goal, and data was collected in the process.

>**SPSS Software:** After administering the questionnaires and going through the responses, 3 teachers were purposefully sampled for the interview, and they were asked a totally of 6 open-ended questions

that was same across all the interviewee's (Appendix B) to bring out in-depth responses (Clandinin, 2013). Apart from the questionnaire, an interview was essential as the questionnaire primarily focused on understanding teacher burnout and self-efficacy with respect to the COVID-19 pandemic, whereas the interviews would primarily be focused on answering the 2 following research questions –

- What are the factors that contribute to teacher burnout?
- How do the teachers think their burnout is affecting the way they teach in the classroom?

The interviews were conducted on the research site within the participants comfort space lasted for around 20-25 minutes. The time for the interview was mutually arranged in a manner that it was during the free time during working hours. While the participants answered the open-ended questions, the researcher recorded the responses by taking field notes. Apart from the fact that note taking was a less intrusive way than a digital recorder to make a source feel more comfortable (Rapely, 2004), note-taking for interview notes was preferred as, while recording interviews, attention is drawn to the interview data rather than the larger study experience, which includes observation and interpersonal interactions (Glaser, 2002). The interview questions were framed in a manner to elucidate responses to the themes such as feeling overwhelmed, overworked, deterioration in performance, etc. Each of the interview enabled the researcher to develop a strong individual case narrative because it provides deep and rich understanding of human behavior, thoughts, and perceptions (Yin, 2013). This required me to listen attentively, display emotional maturity, adopt an empathetic outlook, and stay within my ethical framework.

### Data Analysis

The data analysis of the study will be divided into 2 main sections, the questionnaire and interview results, respectively.

**Section 1:** It is divided into 4 sub sections, where each section will explain the results and interpretation of each research objective in detail.

**Section 1.1:** Data Analysis, results, and interpretation for Research Objective 1

**Objective 1-** To determine the teacher burnout and self- efficacy levels pre & during COVID-19 pandemic. The study considered 98 teachers as respondents who have participated and responded to the study. The following analysis focuses on the burnout levels of the respondents individually. According to the individual scores of the respondents, the burnout levels have been plotted in a line graph below (Figure 1). According to the tool scores, a score of 55 and above on 75, accounted for high burnout levels at an individual level.

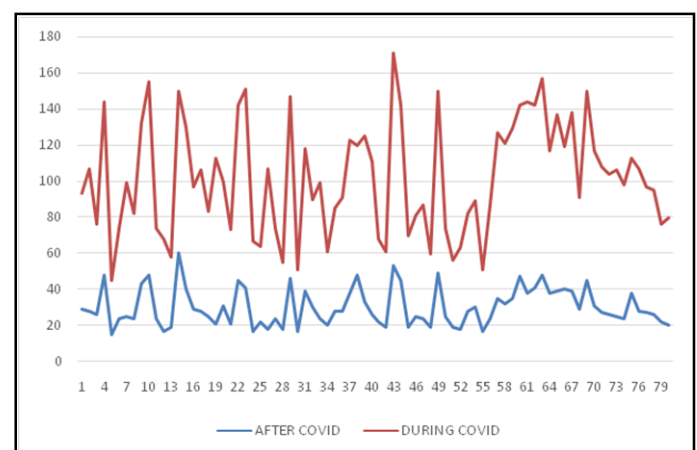


Figure 1. Line graph showing the average burnout scores of the respondents during and after COVID- 19 pandemic

As seen in figure 1, we see that on plotting a line graph of the individual burnout scores of the respondents during and after the pandemic a peak in the scores is shown in red, for the burnout levels during COVID- 19 times. It is clearly seen that the average score during pandemic is way higher than after pandemic. The peak in the burnout levels clearly indicates how the stress levels increased over the duration of online teaching and its evident and immediate effects. High levels of demands and expectations of parents and technology coupled with minimal resources and time management problems were linked to higher emotional weariness (Sokal *et al.*, 2020). Additionally, high burnout level during the pandemic could be associated with the imbalance between teaching job and family life. Preparing online classes while taking care of their own children at home, many teachers had to juggle many duties (Hong *et al.*, 2021), which frequently led to increased parental stress and work overload. The lockdown had contributed to changes in social interactions, particularly close relationships, while also negatively affecting teachers' ability to properly deal with crisis situations which as a result could have led to very high burnout levels compared to pandemic. It is not wrong to them assume that multiple teachers may have also had to look after and tend to sick family members given the high occurrence of COVID-19 in many nations. It's possible that some teachers had to deal with the passing of friends, family members, or coworkers. Many teachers had to deal with these difficulties during the months of lockdown while being separated from friends and family. Earlier the stress and workload were due to physical paper corrections of teachers or travelling etc, relatively different from the challenges posed by the pandemic and online teaching as it was "likely to be cognitively and emotionally taxing for teachers" (Kim and Asbury, 2020, p.1063).

Based on the scoring table of the burnout scale, the following table was tabulated of the mean scores of burnout levels.

**Table 1. Table showing mean values of burnout scores in terms of grade levels and experience levels during and after the pandemic**

PERIOD	MEAN SCORES (in terms of grade levels)	MEAN SCORES (in terms of grade levels)	MEAN SCORES (in terms of grade levels)	MEAN SCORES (in terms of experience)	MEAN SCORES (in terms of experience)	MEAN SCORES (in terms of experience)	MEAN SCORES (in terms of experience)
	Diploma Program (DP)	Middle Year Program (MYP)	Primary Year Program (PYP)	LESS THAN 5 YEARS	BETWEEN 5 - 10 YEARS	BETWEEN 10- 20 YEARS	MORE THAN 20 YEARS
DURING COVID	44.17	45.15	44.82	37.69	43.88	40.46	40.91
AFTER COVID	30.73	33.62	26.82	33	29.44	31.25	17.66

Table 1 shows the comparative values of the mean scores of the respondents in terms of various grade levels and experiences. We can see that during COVID- 19 pandemic, the burnout levels have been close to borderline 40 and above, whereas before the pandemic it was relatively lesser. Keeping the scoring key (Appendix 2) in mind we can say that MYP school teachers with an experience of 5 to 10 years bracket faced the maximum burnout, with DP and PYP facing equivalent levels of burnout. Apart from the challenges posed by online learning such as lack of inter-personal communication and relationship, difficulty in providing feedback (Davis *et al.*, 2019), the possible main reason for the high burnout scores amongst MYP teachers is that the MYP demands that students be more conceptual and inquiry-focused than content-focused (Perry *et al.*, 2018) unlike the other two schooling programs. The biggest difference between the burnout levels during and post the pandemic was seen by the scores of senior teachers with more than 20 years' experience, the scores dropped from 40.91 to 17.66 which are indicative of the worrisome scores during the pandemic. The Diploma Program within the IB board requires children to complete a 4000-word Extended Essay, a Theory of Knowledge Essay, successfully pursue activities revolving around Creativity, Action, and Service along with maintaining

academic records of 6 subjects within different subject groups (International Baccalaureate Organization). The main challenges faced by senior-school teachers can be categorized into compatibility (Leszczyński *et al.*, 2018), assessment (Flaherty, 2020) and curriculum mandated issues. Firstly, while subjects within the social sciences discipline was much more compatible and effective within the online setting, compatibility of mathematics and science-related senior school subjects was contested (Iqbal *et al.*, 2015). This poses a challenge for senior-school teachers within the Diploma Program as opting for mathematics and a science subject was mandated by the IB board. By giving pupils the chance to test their own hypotheses and put together their own understanding, science instruction engages kids (Duit *et al.*, 2018). Additionally, the Theory of Knowledge and Extended Essay elements of the DP curriculum required teachers to enable students to take agency of their learning, research and reflect on their knowledge and understand the origin of such knowledge (International Baccalaureate Organization). These requirements are indicative to the fact that to help students develop their own knowledge and to understand the origin of their knowledge, a teacher must be able to provide authentic experience activities (Anderson, 2007), educate and promote students' learning, as well as support students in engaging in hands-on and mind-on learning, which was relatively unachievable in an online setting. Thus, the high levels of burnout among senior school instructors may have been considerably influenced by the demands of the IB board and internal school targets for each student's achievement in addition to the difficult nature of the instruction and lesson delivery.

On the other hand, as seen in Table 1, the younger teachers with experience between 0 to 5 years were relatively less affected, with burnout scores in the 30s range during and after the pandemic even though they had to execute the same requirements as the others. These findings can be attributed to the findings of the Teaching and Learning International Survey (TALIS 2018) by the OECD which indicated that 40 percent of experienced and old teachers did not receive any professional development in using technology and nearly majority of them also stated that more training was urgently needed. The same survey also pointed out that younger teachers who received in-service training were more adept in using technology more frequently than their older colleagues. Thus, the differences in burnout levels between younger and old teachers was probably due to the technologically knowledgeable and adaptive nature of young teachers which helped them cope up with the online mode of teaching faster than senior teachers. However, these results contrast with results established in other studies that found that even though young teachers may have higher years of experience with computers, the years of classroom experience played a significant role in enabling older teachers for faster implementations (Meskil *et al.*, 2002).

Lastly, we also see that equivalent levels of burnout are experienced by primary school teachers. The problem may arise because elementary school pupils lack the independence and self-discipline necessary to manage technical issues and other emergencies (Gallagher and Cottingham, 2020). These kids are also still learning self-regulation and attention control abilities. These factors contribute to lower disposal to burnout in a school setting due to the ability of teachers to monitor students face-to-face in comparison to an online setting where the teacher has limited control of the environment and constant need for parental supervision and support (Kim, 2020). Along with monitoring and disciplining children in a classroom setting, several parents may have also had to continuously supervise and monitor their own children who were attending school, which may have contributed to parental burnout along with teacher burnout, negatively impacting well-being of the teacher, his/her own children and the young children and parents of the school (Griffith, 2020). Thus, it is evident that the burnout levels faced by teachers belonging to different school years correlated with their daily responsibilities, mandates, and requirements of the curriculum as well the different requirements and challenges faced within each schooling program. The efficacy levels were divided into 3 subcategories. The first was student engagement, which is a gauge of a teacher's relationship with students and others. It also increases participation in, and effort put

forth for activities that encourage perseverance and completion. (Abla and Fraumeni, 2019). Secondly, the instruction strategies are tools, strategies, and procedures that teachers use in a classroom setting (whether physical or virtual) to assist students in achieving the desired learning outcomes specified by the curriculum's objectives. (Prakasha, 2022). Lastly was classroom management, the steps instructors take to create and maintain a climate that supports students' academic success as well as their moral, emotional, and social development (Ababneh, 2012). The self-efficacy levels and scores of the teachers determine to what extent they can give justice to their students and contribute fully for the same. In table 2, the efficacy levels of the teachers according to the TSES (teacher sense of efficacy scale) scale are determined and tabulated.

**Table 2. Table showing the mean efficacy levels under the three categories – during and after COVID- 19 pandemic**

SHORT FORM (12-point questionnaire)	MEAN SCORES					
	MEAN (According to the tool)	MEAN (After COVID) (result from study)	MEAN (During COVID) (result from study)	STANDARD DEVIATION (according to the tool)	Standard deviation (after covid) result from study	Standard deviation (during covid) result from study
TSES	7.1			0.98		
Student engagement	7.2	5.62	6.26	1.2	1.11	1.59
Instruction strategies	7.3	6.45	5.91	1.2	1.01	1.27
Classroom Management	6.7	6.61	5.09	1.2	0.74	1.07

Under the student engagement, the mean value during pandemic is 6.26 score with standard deviation of 1.59 which reduced to 5.62 after COVID- 19 with a standard deviation of 1.11. It is clear how during the pandemic the teachers' experienced high levels of self-efficacy with respect to student engagement. High Self-efficacy reflected in the scores during pandemic explains confidence in the ability to exert control over their own motivation, behavior, and student engagement of the online class. This could also be attributed to the fact that students who were engaged in online learning demonstrated excellent skills in interacting with peers in collaborative online settings without the pressure of speaking face-to-face (Bedenlier *et al.*, 2020) which contributed to successful classroom discussions and students taking agency of their learning. Compared to traditional teaching techniques, online instruction has many advantages, including raising student engagement, communication, and motivation (Amasha *et al.*, 2018). However, there challenges and obstacles that exist alongside these advantages. As seen in Table 2, the instructional strategies mean during COVID-19 is 5.91 with standard deviation of 1.27 which increased to a mean of 6.45 after COVID-10 with a standard deviation of 1.01. Lastly the classroom management efficacy mean score during COVID-19 was 5.09 with standard deviation 1.07 which increased to a mean score of 6.61 with standard deviation of 0.74 after the pandemic. In an online setting, one of the main responsibilities of a teacher is to establish favorable conditions for learning. Since it involves the attitude, intentions as well as personality traits of the teacher along with his/her interactions with the students, this is not a simple task. He or she needs specific organizing abilities and tactics to establish, construct, and maintain a positive learning environment in the classroom (Scrivener, 2011). Effective classroom management is frequently supportive of instructional practises and students' involvement (Sugai and Horner, 2002). We also see that the results are on the lower end of the bracket when it comes to comparing with the original TSES scale values (in red). This can be due to many factors such as, different teaching systems, results conducted in a different time, and individual teacher preferences vary.

**Section 1.2 - Data Analysis, results, and interpretation for Research Objective 3**

**Objective 2- To find out the correlation between teacher efficacy and burnout levels pre & during COVID- 19 pandemic**

To find out the correlations between the burnout levels during Covid and teacher efficacy levels during COVID, the Pearson's correlation was run, and the data presented below was seen to be normal.

**Correlations**

		Efficacy_during covid	Burnout_during covid
Efficacy_during covid	Pearson Correlation	1	-.254*
	Sig. (2-tailed)		.021
	N	99	83
Burnout_during covid	Pearson correlation	-.254*	1
	Sig. (2-tailed)	.021	
	N	83	83

\*.Correlation is significant at the 0.05 level (2-tailed).

In the above data for the burnout and efficacy levels during the pandemic, we can observe that the p-value is -.254 which is less than 0.05, thus we reject the null hypothesis which states that there is no correlation between self-efficacy levels and burnout. The data indicates a relatively higher negative correlation between burnout and efficacy during COVID. When burnout is higher the teacher's self-efficacy is less. Similarly, when we see the correlation between the two variables after COVID we see that-

**Correlations**

		Burnout teacher after covid	Efficacy teacher after covid
Burnout teachers after covid	Pearson Correlation	1	-.233*
	Sig. (2-tailed)		.034
	N	83	83
Efficacy teachers after covid	Pearson Correlation	-.233*	1
	Sig. (2-tailed)	.034	
	N	83	99

\*. Correlation is significant at the 0.05 level (2-tailed).

The correlation between burnout and efficacy levels after the pandemic, has a p-value of -.233 which is less than 0.05, thus we can yet again reject the null hypothesis, which states that there is no correlation between self-efficacy levels and burnout. The data indicates a negative correlation between burnout and efficacy after COVID, but relatively lower than the correlation during the pandemic.

**Section 1.3 - Data Analysis, results, and interpretation for Research Objective 4**

**Objective 3- To explore the influence (impact) of burnout on teacher efficacy pre & during COVID- 19 pandemic**

To explore the influence of teacher burnout on teacher self-efficacy during and post the COVID- 19 pandemic, a regression analysis was conducted, and the results have been indicated below.

**During COVID-19 pandemic**

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.254 <sup>a</sup>	.64	.053	1.285

a. Predictors: (Constant), Burnout during covid

**Coefficients**

Model	Unstandardized Coefficients		Standardized coefficients	t	Sig.
	B	Std. Error	Beta		
1 (constant) burnout during covid	6.777	.416		16.284	.000
	-.022	.009	-.254	-2.361	.021

a. Dependent variable: efficacy during covid.



The  $R^2$  value indicates how much of the total variation in the dependent variable, which is self-efficacy during COVID, can be explained by the independent variable, teacher burnout levels during COVID. In this case, 6.4 % can be explained, which is not very much but higher than after pandemic times, as will be shown below. The value is greater by 1 percent than the post COVID times. The coefficient table finally tells us that the significance is 0.021 which is less than 0.05 which means we reject the null hypothesis. We can say that teacher's efficacy affected burnout levels of teachers by 6.4% during the pandemic.

#### After COVID-19 pandemic

##### Model Summary

Model	R	R square	Adjusted R Square	Std. Error of the Estimate
1	.233 <sup>a</sup>	.054	.042	1.373

a. Predictors: (constant), Burnout teacher after covid

##### Coefficients

Model	Unstandardized Coefficients		Standardized coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	7.351			15.45	.000
Burnout teacher after covid	-.032			-2.153	.034

a. Dependent Variable: efficacy teacher after covid

The  $R^2$  value indicates how much of the total variation in the dependent variable, which is efficacy after COVID, can be explained by the independent variable, burnout levels after COVID. In this case, 5.4 % can be explained, which is relatively lower than the values during the pandemic. The coefficient table finally shows us that the significance value is 0.034 which is less than 0.05 which means we reject the null hypothesis. We can say that teacher's efficacy affects burnout levels of teachers by 5.4%, which is 1 percent less than during COVID times. Since the null hypothesis is rejected in both cases, we can conclude by saying that there is a significant impact on efficacy levels on the teacher due to burnout both during and post the COVID-19 pandemic.

## Section 2

This section will explain the results and interpretation of each interview in detail, in the form of a case narrative. The background information for each participant is presented before each unique case narrative that follows. To identify specific patterns from the raw data, each participant's responses were examined and arranged. The following study questions was addressed during the interviews –

- What are the factors that contribute to teacher burnout?
- How do the teachers think their burnout is affecting the way they teach in the classroom?

Participant 1 was a new teacher, and her initial periods at the school was challenging. After watching her mother develop into a seasoned teacher, she made the decision to explore the prospect of becoming a teacher. She thought of teaching as a natural progression and a steady employment, but she was unaware of the amount of workload that would be involved, particularly within the IB board. She had earned enough credits in her undergraduate programme and had a master's degree in economics to be eligible to become a certified teacher. Within her first several years of teaching, she had to do 150 hours of course work, have a mentor, and be mentored. She was recruited in 2020 and has completed 3 years in the organization.

Participant 2 was an experienced teacher who felt at ease with her workload but stressed and weary about having to follow the mandates set by the school administration. She entered the business sector with great excitement after earning a degree in business administration from university, but she was unable to find her place there because the environment did not satisfy her. She was an extremely sociable

person. Her students were consistently engaged, and because she was an effective problem solver, her colleagues frequently sought her counsel. Prior to beginning her teaching career, Participant 3 worked in the corporate world for 12 years. He has been a teacher for 14 years, but in the last three years, he has been experiencing feelings of stress and burnout. Participant 3 started his career as a teacher at another high school. He enjoyed working with students of various academic levels, and they were respectful and eager to learn. When he was transferred to the current organization, she believed her administration was not available and that they were stringent in their ways and felt that her student's displayed disruptive behaviors.

The data gathered in all these interviews was consistent with a recurring theme in the research—namely, that there are a variety of causes for teacher burnout. Participant 1 reported feeling of burnout due to excessive workload, student misconduct, and a lack of autonomy within the organization. For instance, she had no prior experience in developing lesson plans, testing, or editing papers when she was first recruited, but she eventually picked it up. She, however, felt disorganized, overworked, and resentful of how much time she had spent creating lesson plans and marking numerous end-of-lesson tests. She said, *"I often feared how I could fit everything into the allotted class time. There was always a lot to do and a lot of material to cover, but online classes frequently encountered unforeseen difficulties like problems with internet connectivity"*. This is in line with literature which states that high levels of workload which were perceived as unmanageable were significantly correlated with burnout among teachers (Klassen *et al.*, 2012). Participant 3 also bemoaned the workload, saying, *"with an average of 75 students in my class, it is simply too much work for me to evaluate all their end-of-lesson tasks on top of their classwork"*. He reported spending most of his free time preparing lesson plans, robot scripts, and assessment forms. He considered the school's requirement that each instructor enter data following each class for a third-party data analysis to be a waste of time because it was repetitious, laborious, and rarely resulted in the analysis teachers were looking for. According to Participant 3, giving each student one assessment at the end of each lesson amounted to nothing more than busywork for the students and a waste of his time. Fisher (2011) supported Participant 1's thoughts, which indicated that a lot of the time, students and teachers feel overworked because education places an excessive amount of focus on homework for the sake of homework rather than on important projects that help students prepare for careers.

While workload was relatively a lesser stressor for Participant 2, she felt that teachers given little guidance or support in the transition to online learning and that she felt overwhelmed by the additional responsibilities and workload that it brought. She described feeling a lack of support from her school administration and feeling unsupported in the transition to online learning. She claimed that her feelings of burnout were also exacerbated by the lack of autonomy and cooperation from the administration, which was a common theme amongst all 3 interviewees. This may be due to the additional time and energy that is required to compensate for a lack of resources, which can lead to feelings of overwhelm and a lack of control (Klassen *et al.*, 2012). While Participant 2 perceived online teaching as a challenge with minimal support, Participant 3 reported feeling a moderate level of confidence in his ability to effectively teach online. He cited his previous experience with technology and his willingness to seek out additional training and support as contributing to his high self-efficacy. Additionally, Participant 2 stated that apart from online teaching, *"the school's technology, service in action and student behavior mandates"*, contributed to her burnout. Since online teaching involved the use of technology and online platforms, she was compelled in a face-to-face setting to include technology into her lessons as well. This concerned her because, in her opinion, using technology did not guarantee improvement in her student's learning opportunities and she reported that she disliked *"being instructed how to teach"*. Kouzes and Posner (2013) state that it is common for people to feel that way because, like Participant 2, they believe they have no control over the situation. She additionally stated, *"the administration mandates teachers teaching the same grade level to*

follow the same pedagogical strategies" which according to her, leaveteachers feeling that they are required to follow a prescribed pedagogy. According to her, she has been encouraging her students to think beyond the box for years and it takes away a great deal of autonomy, as teachers that did not enjoy the freedom to design their own lessons and assessments usually led to high levels of burnout (Shan *et al.*, 2016) and teachers who do not have control over their workload may feel overwhelmed and unable to manage their responsibilities (Shan *et al.*, 2016). Similarly, lack of autonomy according to Participant 1, acts as a deterrent to motivation as well and inhibits creativity and new pedagogy. "As a grade lead you are assigned with the duty of making the lesson plans for the grade level and teachers teaching the same grade level parallelly were to strictly adhere to the teaching strategies and plan mentioned in the lesson plan." Thus, in addition to workload, the quality of work can also impact teacher burnout (Shan *et al.*, 2016) as her response is indicative of the stringent structure and lack of autonomy teachers could exercise within their classroom setting.

Although adept with technology, Participant 3 found it difficult to get along with students as he thought they had a negative attitude contributing to increasing burnout levels since a positive classroom environment was essential for achieving academic excellence (Hoglund *et al.*, 2015). He noticed a change in student and parent attitudes during the online setting; pupils were dismissive to authority figures, and parents did not reprimand children for this behavior. He claimed that his pupils frequently opposed him and were hostile. It is important to consider that while student behaviour may be a factor that contributes to teacher burnout for some teachers, it may not be a significant factor for all teachers. There may be other variables that influence the relationship between student behaviour and burnout, such as the teacher's coping strategies and resilience (Gorrese *et al.*, 2018). Similarly, Participant 2's feelings of burnout were also influenced by student misconduct and the time she had to spend dealing with discipline issues. She said "when it was an online setting, students engaged in disruptive behavior such as scribbling on the collaborative whiteboard, removing other students from the meeting, or even muting me at times. The disruptive behavior did not change much in an offline setting as they indulged in whispering, laughing, doodling and other distractions". She was felt frustrated quite often when she had to interrupt a lesson to correct inappropriate behavior. While research has found that other factors, such as workload and lack of support, were more strongly related to burnout than student behaviour (Dong *et al.*, 2017), Participant 2 and 3 recognized, that their burnout was a result of the absence of administrative support and student misconduct.

Additionally, Participant 3's admission that he was aware of how his burnout affected classroom instruction was highlighted as a recurring theme. Academically, burnout can show up as teacher absenteeism, whether the absence is due to physical absence or teacher disengagement. He said that he had mentally checked out and no longer cared whether his students learned. Participant 1 acknowledged poor classroom instruction during online classes due to a heavy workload and dealing with disruptive behaviour. He felt that this workload and behaviour negatively impacted his ability to teach and his students' learning. He also mentioned feeling burnt out and lacking patience during online classes. As she demonstrated, teachers can become irritable, defensive, or just start to shut down when they feel ineffective, according to Reeves (2012). In the beginning, she got along well with her students, but as her stress level rose, she changed. She started to lose patience; her attitude and morale were suffering. When her students didn't grasp a concept after she taught it, she became irate, raised her voice, and repeated the explanation in a more assertive manner. Major themes arose from the study of the raw data in successive interviews. First off, there are numerous causes of teacher burnout; it is impossible to pinpoint just one of them. For instance, the narratives mention the following as contributing factors to burnout: a lack of autonomy, being overworked, issues with student discipline, and issues with school mandates. Second, teachers' perceived exhaustion had a detrimental effect on how they taught in the classroom. For instance, they can lose patience and yell or act

sarcastically, which would discourage their students from learning. Additionally, some participants noted a rise in absenteeism, resulting in a lack of consistency in the way students were taught. The three teachers who were interviewed were open and honest in their explanations of their experiences, and all of them had at some point in their teaching careers experienced the signs of burnout. There was a lot of consensus among the participants about the causes of the stress they experienced and how various types of stress affected their performance, despite individual differences.

## CONCLUSION

The current study looked at the association between teacher self-efficacy and burnout among teachers in a school in Bangalore, India. We began by doing a normality test on the variables, followed by an ANOVA test. The association between these variables was first tested using correlation analysis, and a strong correlation was discovered. Regression analysis was carried out after the correlation had been established. According to the findings of the correlation study, teachers' self-efficacy levels negatively predicted their burnout levels. To put it another way, instructors with poor personal efficacy were more likely to burnout than their colleagues with low teacher efficacy. Upon running the regression analysis to see the impact on burnout, efficacy was seen to be 5.4% before the pandemic and it increased to 6.4% during. The findings of this research on teacher burnout during and after the COVID-19 pandemic have important implications for my future practice. The research findings provide insight into challenges and stressors faced by teachers during the pandemic and shift to online learning and can be used to identify and address areas of concern in my own practice. The study aims to understand factors that contribute to burnout, to develop strategies such as better planning, self-care, and workload management. The findings can also be used to advocate for changes in school policies and practices to improve teacher support and student learning environment. Thus, it is important to consider that while the COVID-19 pandemic has exacerbated the issue of burnout and self-efficacy, these issues were present prior to the pandemic and will continue to be a concern in the future (Klassen *et al.*, 2012). Therefore, it is necessary to address these issues in a proactive and ongoing manner. Overall, the research on teacher burnout and self-efficacy during and after the COVID-19 pandemic highlights the need for ongoing support and resources for teachers (Unterbrink *et al.*, 2014). By addressing these issues, it may be possible to improve teacher well-being and ultimately, student learning outcomes (Klassen *et al.*, 2012).

## LIMITATIONS

The following limitations should be considered when interpreting the results of the study -

1. The sample size of 90 respondents may not accurately represent all teachers, results may not generalize to larger population.
2. The study relied on self-report measures to assess burnout and self-efficacy. While these measures are commonly used in research on burnout and self-efficacy, they may be subject to biases such as social desirability.
3. The study used SPSS to analyze data using ANOVA, correlation, and regression. These techniques have limitations and assumptions to consider when interpreting results.
4. Interviews as a data collection method may have biases such as interviewer effects and recall bias, where interviewees may not accurately recall experiences and may be influenced by interviewer's questions and expectations.
5. The study used a small number of case studies, which may not fully capture the range of experiences and perspectives among teachers. More case studies or other methods of data collection may be needed for a more comprehensive understanding of the issues.
6. The study offers insights on the effects of COVID-19 on teacher burnout and self-efficacy, but more research is needed to fully understand these issues

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