Factors Predicting Stress and Burnout of Filipino Teachers Engaged in Remote Learning

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Abstract

This study explores the different factors that predict stress and burnout in 219 Filipino online teachers during the COVID-19 pandemic. Filipino workers are noted to have the highest stressors in Southeast Asia according to the 2022 Gallup Survey. This research is deemed relevant since the International Labour Organization's Declaration on Fundamental Principles and Rights at Work (2022) states that all member states must have a safe and healthy working environment for all workers. Further, the high workload demands of teachers are also said to be contributory to the country's Learning Poverty Index. Given this, Philippine education officials should focus on the safety and health of Filipino teachers by addressing their stress and burnout issues. Several findings of this study give support to the literature on teacher burnout and working conditions. Specifically, results showed that on average, each teacher works 12.17 hours a day, handles five classes, and teaches

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141 students. These contribute to very high stress and high emotional exhaustion, moderate depersonalization, and moderate personal accomplishment. It was revealed that factors of gender, educational attainment, educational stage of teaching, type of school, province, work setup, age, and years in teaching interplay with stress and burnout.

Keywords: Teacher Burnout; Teacher Stress; Filipino Teachers; Remote Learning

Introduction

Remote learning has enabled schools to teach students even at home through virtual classrooms. The sudden shift to remote learning tested the level of experience of teachers in fully integrating technology in their classes, which they are not used to. Teachers are forced to alter their teaching practices due to the transition, along with the expectations from their students and themselves. With this, the nature of learning and instruction is affected due to the school closures caused by the COVID-19 pandemic.

With the global health crisis, several psychological and mental health issues were reported (Salari et al., 2020), and teachers are no exception. But even before the COVID-19 pandemic, teaching had already been recognized as one of the most demanding and stressful professions (Griffith et al., 1999). Teacher stress is defined as the experience of unpleasant negative emotions related to the pressures of their job and their ability to cope (Kyriacou, 2001). Due to their general working conditions, teachers experience occupational stress associated with psychological discomfort (Schonfeld, 1990). Working conditions are known to play an essential role in the effectiveness of a teacher. Teachers are not only effective by their ability for instruction but also because of the environment where they work. The teachers' working conditions are also known to be factors that can affect student achievement and teacher retention, such as professional development, empowerment, leadership, facilities and resources, and time (Allen, 2014). Overall, teacher stress has resulted in negative outcomes such as ill health, lack of sleep, low quality of life, poor teaching performance, lack of engagement, job dissatisfaction, increased absenteeism, and

high turnover (Greenberg et al., 2016). Moreover, teacher stress and lack of well-being have negative implications on student outcomes, such as poor academic performance (Herman et al., 2018; Ramberg et al., 2020), development of disruptive behaviors, and discipline issues (Eddy et al., 2020).

Meanwhile, with the enforcement of strict social distancing and safety protocols, schools in the Philippines began to enforce distance learning. Distance learning refers to the delivery of instructional content and support services to students in the absence of physical spaces (Dela Pena-Bandalaria, 2009). Students study at home and classes are held remotely - synchronously or asynchronously. The shift from traditional classrooms to online classes is difficult and overwhelming for teachers, especially with the lack of preparation (d'Eca & Gonzales, 2013), support, and resources. The responsibilities that come with the transition to digital learning and the pressure to meet the technological demands add to the complexity of the situation and the burden of what the teachers experience in their personal and work conditions. The increased pressure and abrupt changes in teaching practices induced a great degree of worry, fear, and stress that directly affected the work-related well-being of teachers (Li & Zhang, 2019). Consequently, teachers experienced high levels of stress because of the high demands of the job and little control over the situation (Rao & Chandraiah, 2012). Furthermore, it has also been recognized that change in working conditions and work overload (Laurence et al, 2016), which include higher demands, lower resources, and lower adaptive organizational attitudes, are associated with the development of burnout (Alarcon, 2011).

Burnout is often the final stage of a chain of reactions linked to chronic occupational stress or strong emotions that are job-related (Droogenbroeck et al., 2014). It is multi-causal and influenced by personal, professional, emotional, and social aspects, among others (Carvalho de Sousa et al., 2020). It includes a wide range of psychological symptoms (i.e., fatigue, low self-esteem, lack of self-confidence, and depression) as well as physiological symptoms (i.e., headache, muscle pain, and hypertension) (Maslach & Pine, 1977).

Specifically, burnout is defined as a state of fatigue or frustration from failures in producing expectations in professional relationships

(Freudenberger, 1974). It is a psychological syndrome of three dimensions: emotional exhaustion, depersonalization, and reduced personal accomplishment. Emotional exhaustion includes feelings of being emotionally exhausted with responsibilities at work. The increased feeling of emotional exhaustion and limitations on affective levels is because of the depletion of emotional resources. Depersonalization refers to the prevalence of negative attitudes or impersonal responses and behavior toward recipients of the services or the students, parents, and the workplace. Meanwhile, reduced personal accomplishment refers to the tendency to evaluate self negatively on their tasks or the feeling of being incompetent and unsatisfied with their accomplishments (Maslach & Jackson, 1984). As a result of the lack of personal involvement at work, work performance also declines. Burnout is likely to be experienced among individuals in human service professions, such as people working in an educational setting. It leads to decreased service quality, which results in job turnover, absenteeism, low morale, and personal dysfunction (Maslach et al., 1997). In the case of teachers, burnout threatens the quality of education given and the subsequent academic achievement of students (Steinhardt et al., 2011).

Indeed, there are many motivating factors for teachers, including personal utility (job security, time for family, job transferability), altruistic/social utility (shaping the future of children, enhancing social equality, making a social contribution, working with children/adolescents), perceived teaching abilities, teaching as "fallback" career, social influences, prior teaching and learning experiences, perceptions of task demand (expert career, high demand), perceptions of task return (social status, salary), experiences of social dissuasion, and satisfaction with the choice of teaching as a career (Watt & Richardson, 2007). These positive dimensions help in lessening the possibility of burnout or developing a stress condition. The ability of teachers to respond to their work demands can also be sustained due to improvement in their mental well-being while coping with work-related stressors (Sottimano et al., 2017). Factors can vary depending on the teachers' personal experiences, which can be related to their work, personal life, and even relationship with their colleagues and students (Buonomo et al., 2017). However, teaching requires a large amount of empathy and emotional involvement in addition to the workload and demand in both teaching-related (i.e., class preparation

and actual teaching) and non-teaching-related (i.e., paperwork and meeting); thus burnout is very likely (Droogenbroeck et al., 2014).

Teachers who experience burnout have higher negative affectivity and lower self-directedness with their work. They also have a misfit between their perceived expectations of themselves and their work environment. Those who experience emotional exhaustion were found to have a high level of mismatch between their expectations and perceived workplace situation in terms of workload and control. Meanwhile, teachers who experience depersonalization exhibit misalignment between their expectations of fairness and perceived fairness (Mojsa-Kaja et al., 2015). Nonetheless, having effective and active coping strategies for teachers with stress-inducing situations was found to be negatively related to burnout (Yeung & Liu, 2007; Garcia-Arroyo & Segovia, 2019).

Research on teacher stress and burnout has been done in numerous studies. However, most focused only on the cause and effect of teacher stress and burnout during face-to-face teaching; with the added pressures and adjustments needed with remote learning, the need to investigate teacher well-being and working conditions arises. There also have been few studies about teacher burnout in the Philippine context and the remote learning setup. Moreover, a comparison of burnout among teachers from different educational stages and settings has not yet been explored.

High levels of stress, anxiety, and burnout plagued Filipino teachers during the COVID-19 pandemic (United Nations Office on Drugs and Crime, 2022; Rabacal et al. 2020). Various contributors to teacher stress and burnout include learning the ropes of remote learning, the poor business performance of private schools because of students transferring to the public schools due to parental unemployment, and fear of contagion while reporting to work (Rabacal et al, 2020; Carreon et al., 2021; Mendoza, 2022). Workload adversities increased due to the influx of students (Banal & Ortega-De la Cruz, 2022). Emotional exhaustion and disengagement were present among teachers because of the demanding workload (Bravo, et al., 2021). Teacher burnout was also present because of the teacher's workload (Carreon et al., 2021). The Gallup Survey noted that the Philippines has the highest workplace stress in Southeast Asia wherein employees experience poor work-

life balance, unhappiness, misery, anger, and work disengagement (Royandoyan, 2022). The high workload demands of teachers are said to be contributory to the Philippines' Learning Poverty rate (Magsambol, 2022).

This research is deemed timely and significant as teachers have suffered from the ill effects of the COVID-19 pandemic (Taylor & Frechette, 2021; Alves et al., 2021) and are now in the process of going back to face-to-face instruction. However, due to the uncertainties in the COVID-19 virus mutations, reverting to remote instruction from time to time is inevitable. Noting this, the Philippine Department of Education (DepED) officials must create educator support programs for teachers to ease their burdens, lest they burnout. As duty bearers, education officials must adhere to the International Labour Organization's (ILO) *International Labour Standards on Occupational Safety and Health,* which establishes the principle that workers are to be protected from sickness, disease, and any injury that may arise from employment (ILO, 1985). The ILO Declaration on Fundamental Principles and Rights at Work, amended in 2022, stipulates that all member-states should provide a safe and healthy working environment (ILO, 2022). Due to the fact that the Philippines has ratified 38 ILO Conventions, including the Occupational Health and Safety Convention in 1982 (ILO, 2022), Philippine education officials and school administrators are duty-bound to fulfill the provisions of occupational health and safety. In addition, Article 168 of the Philippine Labor Code stipulates that there should be mandatory occupational safety and health standards to eliminate or reduce occupational safety and health hazards in all places and institute new and update existing programs to ensure safe and healthful working conditions in all areas of employment (Department of Labor and Employment, 2022, p.56). Moreover, as mental health is a part of physical health, access to psychosocial care is also supported by the Philippine Mental Health Act of 2017 (Philippine Congress, 2017). Given these provisions, the education duty-bearers must create programs on teacher well-being and support to manage stress and avoid burnout.

The main objective of this study is to describe the stress and burnout level and working conditions of teachers in the Philippines during remote learning across different educational stages and setups. It gives recommendations for potential teacher support programs that can

be instituted to manage stress and avoid burnout, pursuant to the *International Labour Standards on Occupational Safety and Health, the Philippine Labor Code, and the Philippine Mental Act of 2017.*

Methodology

Research Design

This qualitative study analyzes burnout and working conditions of teachers in the Philippines in relation to their teaching effectiveness. These data were collected from a survey questionnaire as it best served to answer the research questions in an efficient and flexible manner (Mathers et al., 2000). An introduction and informed consent at the beginning of the survey were included, serving as a guide to the respondents about the purpose of the study.

Research Participants

This study has 219 Filipino teacher research participants from different parts of the Philippines with at least one month of remote teaching and one year of face-to-face teaching experience. Teachers came from public and private schools. In choosing the participants for the survey questionnaire, the researcher used a simple random sampling technique to allow every person in the population to have an equal probability of inclusion in the study. Table 1 presents the profile of the research participants.

Table 1. Profile of the Research Participants

Age	n	%
20 to 25 years old	63	28.8
26 to 30 years old	72	32.9
31 to 35 years old	30	13.7
36 to 40 years old	19	8.7
41 to 45 years old	15	6.8
46 to 50 years old	5	2.3
51 to 55 years old	9	4.1
56 to 60 years old	6	2.7
Total	219	100

Table 1. Profile of the Research Participants (cont.)

Gender	**n**	**%**
Male	62	28.3
Female	157	71.7
Total	219	100
Highest Educational Attainment	**n**	**%**
College/Undergraduate	139	63.5
MA/Graduate	67	30.6
PHD/Postgraduate	13	5.9
Total	219	100
Type of School	**n**	**%**
Public	88	40.2
Private	131	59.8
Total	219	100
Area	**n**	**%**
NCR	143	65.3
Laguna	17	7.8
Rizal	13	5.9
Pampanga	12	5.5
Bulacan	11	5.0
Cavite	8	3.7
Ilocos Norte	2	.9
Nueva Ecija	2	.9
Albay	1	.5
Batangas	1	.5
Bukidnon	1	.5
Davao	1	.5
Ilocos Sur	1	.5
Isabela	1	.5
Oriental Mindoro	1	.5
Palawan	1	.5
Pangasinan	1	.5
Samar	1	.5
Zamboanga del Norte	1	.5
Total	219	100
Grade Taught/Educational Stage	**n**	**%**
Early Childhood Education	21	9.6
Primary Education	67	30.6
Secondary Education	104	47.5
Tertiary Education	27	12.3
Total	219	100
Years in Service	**n**	**%**
1 to 3 years	45	20.5
4 to 6 years	85	38.8
7 to 9 years	33	15.1
10 years up	56	25.6
Total	219	100

From the table, majority of the participants are 26 to 30 years old (n=72, 32.9%), have a college degree (n=139, 65.5%), come from private schools (n=131, 59.8%), from the National Capital Region (NCR) (n=143, 65.3%), teach at the secondary level (n=104, 47.5%), and have rendered 4 to 6 years in service (n=85, 38.8%).

Data Gathering and Analysis Procedure

An online survey questionnaire was used for a more convenient and feasible method of gathering data given the pandemic and enforcement of physical distancing. They answered the Maslach Burnout Inventory - Educators Survey (MBI-ES) to assess their burnout according to three components: emotional exhaustion, depersonalization, and personal accomplishment. The scale includes 22 statements about personal feelings specifically designed for teachers (e.g., "I feel burned out from my work," "I deal very effectively with the problems of my students") and answered in terms of frequency on a 7-point basis (Maslach et al., 1996). The teachers were also asked to rate their current work-related stress level from 1 to 5, with 5 being the highest. Their scores in burnout and ratings in their stress level were analyzed according to their gender (male or female), highest educational attainment (undergraduate, graduate, or postgraduate), grade level they are teaching (early childhood, primary, secondary, or tertiary education), type of school (public or private school), province (in or outside NCR), work setup (work from home or work from school), age, and the number of years in teaching (1-3, 4-6, 7-9, and 10 and above years). In addition, the teachers were asked to rate the conduciveness of the place where they work and the stability of their internet connection from 1-5, with 5 being the highest. The hours they spent working and the number of classes and students that they are handling were collected. Moreover, self-evaluation on teaching effectiveness according to their commitment, knowledge of the subject, teaching for independent learning, management of learning, and fulfillment of other duties was also done. Collected data were organized and analyzed in SPSS with Chi-Square Test of Independence, Phi-coefficient, Pearson Correlation, Analysis of Variance, Multiple linear regression, and Tukey Honestly Significant Difference (HSD) Post Hoc Analysis. The significance level of .05 was used for all statistical tests conducted.

Results and Discussion

The teacher participants reported the number of hours they worked per day, the number of classes they had, and the students they were handling. On average, teachers spend 3.87 hours a day (*SD* = 1.86) for actual remote teaching or conducting synchronous classes. To prepare for the lessons, i.e., creation of instructional materials, they spend an average of 3.73 hours (*SD* = 1.91). On top of that, teachers also spend an average of 4.58 hours (*SD* = 2.02) a day doing other teaching-related work and activities such as checking papers, attending meetings, training, and accomplishing paperwork. In total, teachers work an average of 12.17 hours a day (*SD* = 3.67), or they spend half of the day working. Teachers have an average of five classes (*M* = 4.59, *SD* = 3.066) and 141 students (*M* = 141.31, *SD* = 129.08). The long working hours and the high number of students they spend teaching explain why the participants of this study reported a high-stress level. Those numbers reflect their many duties and responsibilities as a teacher, not including their personal problems and circumstances, especially in times of a pandemic. Undoubtedly, when asked to rate the stress level they are experiencing during remote learning, 71% reported high to very high stress (*M* = 3.96, *SD* = 0.98), as seen in Table 2**.**

Table 2. Frequency Table of Rating of Teachers for their Current Work-Related Stress during Remote Learning

Perceived Stress Level	n	%
1 - Very low stress	2	.9
2 - Low stress	18	8.2
3 - Average Stress	43	19.6
4 - High stress	80	36.5
5 - Very high stress	76	34.7

As for burnout based on the three dimensions, the teachers reported to have high emotional exhaustion (*M* = 29.5, *SD* = 13.71), moderate depersonalization (*M* = 8.05, *SD* = 6.71), and moderate personal accomplishment (*M* = 34.19, *SD* = 8.8) as can be seen in Table 3. The basis for interpreting the scores for MBI-ES can be found in Table 4. For both emotional exhaustion and depersonalization, higher scores

correspond to higher degrees of burnout. In contrast, higher scores on the personal accomplishment subscale correspond to lower degrees of experienced burnout (Maslach et al., 1997).

Table 3. Frequency Table of Categories for of Emotional Exhaustion, Depersonalization, and Personal Accomplishment

Category	Emotional Exhaustion		Depersonalization		Personal Accomplishment	
	n	%	n	%	n	%
Low	47	21.5	113	51.6	64	29.2
Moderate	44	20.1	55	25.1	80	36.5
High	128	58.4	51	23.3	75	34.2

Table 4. Categorization of Emotional Exhaustion, Depersonalization, and Personal Accomplishment based on Scores

Category	Emotional Exhaustion	Depersonalization	Personal Accomplishment
	Frequency	Frequency	Frequency
Low	0-16	0-6	0-31
Moderate	17-26	7-12	32-38
High	27 or over	13 or over	39 or over

Many factors contribute to the stress and burnout of teachers. In this study, the interaction of the following factors to the stress level and the three dimensions of burnout of the teachers were investigated: gender (male or female), highest educational attainment (undergraduate, graduate, or postgraduate), the educational stage where they are teaching (early childhood, primary, secondary, or tertiary education), type of school (public or private school), province (in or outside NCR), work setup (work from home or work from school), age, and the number of years in teaching (1-3, 4-6, 7-9, and 10 and above years). The alpha level of .05 was used for all statistical tests conducted.

Gender. According to the frequencies cross-tabulated in Table 5, there is a significant relationship between stress level and gender X^2 (4, N = 219) = 21.7, p = .00. The effect size for this finding, phi-coefficient, was moderate, .32 (Yule, 1912). One-way ANOVA also demonstrated

a significant difference in the stress level between female and male teachers. Female teachers experience higher a stress level (M = 4.14, SD = .87) than male teachers (M = 3.5, SD = 1.08), F (1, 217) = 20.76, p = .00. Most female teachers (40%) reported experiencing a very high-stress level compared to just 21% of male participants.

Table 5. *Crosstabulation of Perceived Stress Level and Gender*

Gender	Perceived Stress Level						
	1 - Very Low	2 - Low	3 - Average	4 - High	5 - Very High	X^2	Φ
Male	1	12	17	19	13	21.7**	.32
	(1.6%)	(19.4%)	(27.4%)	(30.6%)	(21%)		
Female	6	26	61	63	6		
	(.6%)	(3.8%)	(16.6%)	(38.9%)	(40.1%)		

Note. **= $p \leq .05$. Percentage across the row appears in parentheses below group frequencies.

On the other hand, burnout levels show no significant differences between male and female teachers: emotional exhaustion, F (1, 217) = 1.85, p = .18, depersonalization, F (1, 217) = .2, p = .66, and personal accomplishment, F (1, 217) = .5, p = .48.

Table 6. Perceived-Stress Level and Burnout (Emotional Exhaustion, Depersonalization, and Personal Accomplishment) Means for Male and Female Teachers

	Gender		F
	Male	Female	df (1, 217)
Stress Level	3.5	4.14	20.76**
	(1.08)	(.87)	
Emotional Exhaustion	27.5	30.29	1.85
	(13.71)	(13.67)	
Depersonalization	8.37	7.92	.2
	(6.7)	(6.73)	
Personal Accomplishment	34.85	33.92	.5
	(8.59)	(8.89)	

Note. **= $p \leq .05$. Standard Deviations appear in parentheses below means.

Highest Educational Attainment. A significant relationship was found between educational attainment, and stress, X^2 (8, N = 219) = 19.9, p = .011, with a moderate effect size (φ = .3). There are also significant differences in the stress levels among teachers who earned an undergraduate (M = 4.09, SD = .88), graduate (M = 3.78, SD = 1.07), and postgraduate (M = 3.46, SD = 1.2) degrees, F (2, 216) = 4.29, p = .015, but Post Hoc analyses using Tukey HSD showed no significance. Nonetheless, the means show that the stress level is lower among those with higher educational attainment. Frequencies also show that 39% of those who finished college experience very high stress compared to just 28% of holders of master's degrees and 23% of Ph.D. degree holders.

Table 7. Crosstabulation of Perceived Stress Level and Highest Educational Attainment of Teachers

Highest Educational Attainment	Perceived Stress Level					X^2	Φ
	1 - Very Low	2 - Low	3 - Average	4 - High	5 - Very High		
College/ Under-graduate	1 (.7%)	4 (2.9%)	30 (21.6%)	50 (36%)	54 (38.8%)	19.9**	.3
MA/Graduate	1 (1.5%)	10 (14.9%)	11 (16.4%)	26 (38.8%)	19 (28.4%)		
PhD/Post-graduate	0 (0%)	4 (30.8%)	2 (15.4%)	4 (30.8%)	3 (23.1%)		

Note. **= $p \leq .05$. Percentage across the row appears in parentheses below group frequencies.

Meanwhile, with burnout, there are no significant differences in the levels of depersonalization, F (2, 216) = .41, p = .67, and personal accomplishment, F (2, 216) = .34, p = .71, among teachers with different educational attainment but there is a significant difference in the levels of emotional exhaustion, F (2, 216) = 5.21, p = .006. Pairwise comparisons of the means using the Tukey HSD procedure indicated only one significant comparison. The emotional exhaustion levels of those who obtained an undergraduate degree (M = 31.21, SD = 12.11) were higher than postgraduate degree holders (M = 19.46,

SD = 13.25), *p* = .008. More educational experience shows lower stress and burnout. Teachers with higher educational attainment can adapt more to changes and can better handle the responsibilities that come with remote learning.

Table 8. Perceived-Stress Level and Burnout (Emotional Exhaustion, Depersonalization, and Personal Accomplishment) Means for Highest Educational Attainment of Teachers

	Highest Educational Attainment			*F* *df* (2, 216)
	Undergraduate	Graduate	Postgraduate	
Stress Level	4.09_{a}	3.78_{a}	3.45_{a}	4.29**
	(.88)	(1.07)	(1.2)	
Emotional Exhaustion	31.21_{a}	27.91_{ab}	19.46_{b}	5.21**
	(13.11)	(14.16)	(13.25)	
Depersonalization	8_{a}	8.43_{a}	6.62_{a}	.41
	(6.58)	(7)	(6.9)	
Personal Accomplishment	34.31_{a}	34.31_{a}	32.23_{a}	.34
	(8.42)	(8.71)	(12.92)	

Note. **= $p \leq .05$. Standard Deviations appear in parentheses below means. Means with different subscripts within rows are significantly different at the $p \leq .05$ based on Tukey HSD post hoc paired comparisons.

Educational Stage. There is a significant relationship between stress level and the educational stage the teachers are handling, X^2 (12, N = 219) = 36.11, *p* = .00, with a strong effect size (φ = .41). There are also significant differences in the stress levels and educational stage of teachers, *F* (3, 215) = 5.6, *p* = .001. Tukey HSD revealed a significantly higher stress level for early childhood education teachers (*M* = 4.33, *SD* = .73), primary (*M* = 3.91, *SD* = .85), and secondary education teachers (*M* = 4.08, *SD* = .98) than tertiary education teachers (*M* = 3.33, *SD* = 1.18). Crosstabulation shows that 76% of preschool teachers reported experiencing high to very high-stress levels, which is the highest among the teachers from different educational stages, while 33% of college teachers reported experiencing very low to low-stress levels, which is the highest percentage among other groups. The high contact level

between teachers and students that preschool requires for teaching and learning made remote learning difficult for this educational stage, thus requiring a lot of preparation and planning as well. However, college teachers seem to easily adapt more to the remote learning setup as they are more familiar with the lecture type and their previous educational materials require not too many adjustments to execute online. Activities for older students may be easier to execute remotely than for younger students, especially in preschool.

In contrast, there are no significant differences in the burnout levels of emotional exhaustion, F (3, 215) = .9, p = .44, depersonalization, F (3, 215) = .97, p = .41, and personal accomplishment, F (3, 215) = .26, p = .84, among teachers teaching in early childhood, primary, secondary, and tertiary education.

Table 9. Crosstabulation of Perceived Stress Level and Educational Stage of Teacher

Educational Stage	Perceived Stress Level					X^2	Φ
	1 - Very Low	2 - Low	3 - Average	4 - High	5 - Very High		
Early Childhood Education	0 (0%)	0 (0%)	3 (14.3%)	8 (38.1%)	10 (47.6%)	36.11**	.41
Primary Education	0 (0%)	3 (4.5%)	18 (26.9%)	28 (41.8%)	18 (26.9%)		
Secondary Education	2 (1.9%)	6 (5.8%)	16 (15.4%)	38 (36.5%)	42 (40.4%)		
Tertiary Education	0 (0%)	9 (33.3%)	6 (22.2%)	6 (22.2%)	6 (22.2%)		

Note. **= $p \leq .05$. Percentage across the row appear in parentheses below group frequencies.

Type of School. For the type of school where the respondents are teaching, there is no significant relationship, X^2 (4, N = 219) = 5.84, p = *.21,* and no significant difference in the stress level between public school (M = 3.84, SD = .99) and private school teachers (M = 4.04, SD = .96), F (1, 217) = 2.15, p = .144. Both public and private school teachers undergo

the same process of preparation and execution of remote learning. The setup may be different, but the challenges remain the same.

Table 10 Perceived-Stress Level and Burnout (Emotional Exhaustion, Depersonalization, and Personal Accomplishment) Means for Different Educational Stages where Teachers Teach

	Educational Stage of Teacher				F df (3, 215)
	Early Childhood Education	Primary Education	Secondary Education	Tertiary Education	
Stress Level	4.33_a	3.91_a	4.08_a	3.33_b	5.6**
	(.73)	(.85)	(.98)	(1.18)	
Emotional Exhaustion	30.76_a	29.96_a	30_a	25.48_a	.9
	(13.71)	(12.83)	(14.02)	(14.64)	
Depersonalization	6.86_a	7.66_a	8.82_a	7_a	.97
	(6.63)	(6.25)	(7.1)	(6.29)	
Personal Accomplishment	32.86_a	33.96_a	34.38_a	35.04_a	.28
	(9.37)	(8.71)	(9.07)	(7.75)	

Note. **= $p \leq .05$. Standard Deviations appear in parentheses below means. Means with different subscripts within rows are significantly different at the $p \leq .05$ based on Tukey HSD post hoc paired comparisons.

Likewise, there is no significant difference in the levels of depersonalization, F (1, 217) = .001, p = .97. Significant differences were found in the levels of emotional exhaustion, F (1, 217) = 6.76, p = .01, and personal accomplishment F (1, 217) = 4.59, p = .033 between teachers in public and private schools. Private school teachers have higher emotional exhaustion (M = 31.45, SD = 12.73) and personal accomplishment level (M = 35.22, SD = 8.13) than public school teachers (M = 26.6, SD = 14.64; M = 32.65, SD = 9.53). Nonetheless, the workload of private school teachers may be more complicated than public school teachers as the school administration decides on the track of conducting classes and formatting instructional materials for remote learning. Most

private schools require the teachers to report physically in schools and do other tasks to ensure quality education standards.

Table 11. Crosstabulation of Perceived Stress Level and Type of School

Type of School	Perceived Stress Level					X^2	Φ
	1 - Very Low	2 - Low	3 - Average	4 - High	5 - Very High		
Public	0	11	18	33	26	5.84	.16
	(0%)	(12.5%)	(20.5%)	(37.5%)	(29.5%)		
Private	2	7	25	47	50		
	(1.5%)	(5.3%)	(19.1%)	(35.9%)	(38.2%)		

Note. **= $p \leq .05$. Percentage across the row appear in parentheses below group frequencies.

Table 12. Perceived-Stress Level and Burnout (Emotional Exhaustion, Depersonalization, and Personal Accomplishment) Means for Public and Private School Teachers

	Type of School		*F* *df* (1, 217)
	Public	Private	
Stress Level	3.84	4.04	2.15
	(.99)	(.96)	
Emotional Exhaustion	26.6	31.45	6.76**
	(14.64)	(12.73)	
Depersonalization	8.07	8.04	.00
	(6.9)	(6.6)	
Personal Accomplishment	32.65	35.22	4.56**
	(9.5)	(8.1)	

Note. **= $p \leq .05$. Standard Deviations appear in parentheses below means.

Place of School. There is a significant relationship between the location of school, whether in or outside NCR, and stress level, $X^2(4, N = 219) = 12.95$, $p = .012$, and a weak effect size ($\varphi = .24$). There is also a significant difference between stress level and place of school, $F(1, 217) = 8.61$, $p = .004$. Teachers in NCR experience a higher stress level ($M = 4.1$, $SD = .95$) than those outside NCR ($M = 3.7$, $SD = .98$). Most cases of coronavirus infection were reported in NCR which was considered the epicenter of the COVID-19 outbreak in the Philippines. People in NCR will probably and naturally be more anxious and worried than those outside the country's capital region. While some teachers report to their schools, transportation, and safety become concerns.

With burnout, there are no significant differences in levels of depersonalization $F(1, 217) = 4.14$, $p = .04$, and personal accomplishment $F(1, 217) = .08$, $p = .78$, between teachers in and outside NCR but there is a significant difference in the levels of emotional exhaustion $F(1, 217) = 4.15$, $p = .043$. Specifically, higher emotional exhaustion level ($M = 30.87$, $SD = 13.41$) is observed in teachers working in NCR compared to people working outside NCR ($M = 26.93$, $SD = 13.98$).

Table 13. Crosstabulation of Perceived Stress Level and Place of School

Place of School	Perceived Stress Level						
	1 - Very Low	2 - Low	3 - Average	4 - High	5 - Very High	X^2	Φ
Inside NCR	2	7	25	50	59	12.95**	.24
	(1.4%)	(4.9%)	(17.5%)	(35%)	(41.3%)		
Outside NCR	0	11	18	30	17		
	(0%)	(14.5%)	(23.7%)	(39.5%)	(22.4%)		

Note. **= $p \leq .05$. Percentage across the row appear in parentheses below group frequencies.

Table 14. Perceived-Stress Level and Burnout (Emotional Exhaustion, Depersonalization, and Personal Accomplishment) Means for Teachers in NCR and Outside NCR

	Place of School		*F* *df* (1, 217)
	Inside NCR	Outside NCR	
Stress Level	4.1	3.7	8.61**
	(.95)	(.98)	
Emotional Exhaustion	30.87	26.93	4.15**
	(13.41)	(13.98)	
Depersonalization	8.02	8.11	.01
	(7.03)	(6.09)	
Personal Accomplishment	34.31	33.96	.08
	(8.71)	(9)	

Note. **= $p \leq .05$. Standard Deviations appear in parentheses below means.

Work Setup. Majority of schools are physically closed because of the imposition of social distancing, and 79% of teacher participants (n = 173) work from home, but 21% still physically report to school (n = 46) for work. These teachers either have a choice or are forced to comply with the guidelines set by the school about where they will conduct remote classes. For some participants, there is a difference in the place where they are teaching and the place where they prefer to teach. About one-fourth of those who work from home (25%) and those who work at school (24%) have opposite preferences of where they will teach, as seen in Table 14. However, home is still the most preferred place of work by the teachers (64%) than school (36%). Results show that there is no significant relationship between stress level and the place where classes are conducted, X^2 (4, N = 219) = 8.77, $p = .07$. However, there is a significant difference in the current stress level rating on the place where they teach, $F(1, 217) = 4.12$, $p = .044$. Teachers working at school have higher stress level (M = 4.22, SD = 0.96) than teachers working from home (M = 3.89, SD = 0.97) and it may be caused by the added anxiety or worry of getting infected or bringing home the coronavirus. The following are the themes of the

responses of teachers who prefer to work from home: (1) health and safety concerns, (2) convenience, (3) comfort, and (4) stable internet. Although working from home entails setting up the environment and providing all equipment needed for teaching, it minimizes the risk of COVID-19 infection. On the other hand, teachers who prefer to work at school stated the following reasons: (1) conducive, (2) provided with equipment and stable internet, and (3) less distraction. Most schools that require teachers to work on-site have converted their classrooms to suit the demand of remote learning and set up all the needed equipment for the teachers. True to that, teachers working at school reported to have a more conducive environment for teaching when asked to rate from 1-5 the place where they teach (M = 4.43, SD = .69) over teachers who work from home (M = 3.75, SD = 0.83), F (1, 217) = 26.73, p = .000. There is no significant difference in the reported internet stability rating in terms of place of work, F (1, 217) = .31, p = .581, and the average for all participants was 3.81 (SD = 0.85) or having somewhat stable internet. In terms of equipment, teachers reported having the minimum required equipment for conducting remote learning, such as a PC/Personal Computer (laptop, desktop, tablet), sound/audio equipment (headphone, earphone, or microphone), and a webcam/video device. Some also have a spotlight/ring light (42%) to enhance the lighting of their place, while some also use a digitizer input device (20%) to hand-draw and write on a screen.

Table 15. Crosstabulation of Actual Place of Teaching and Preferred Place of Teaching

Actual Place of Teaching	Preferred Place of Teaching	
	Home	School
Home	130 (75%)	43 (25%)
School	11 (24%)	35 (76%)

Note. Percentage across the row appears in parentheses below group frequencies.

Nonetheless, there are no significant differences in the levels of emotional exhaustion, F (1, 217) = 2.98, p = .86, depersonalization, F

(1, 217) = .31, p = .58, and personal accomplishment, F (1, 217) = .01, p = .93, between teachers working from home and from school.

Table 16. Crosstabulation of Perceived Stress Level and Work Setup

Work Setup	Perceived Stress Level						
	1 - Very Low	2 - Low	3 - Average	4 - High	5 - Very High	X^2	Φ
Work from Home	1 (.6%)	17 (9.8%)	35 (20.2%)	67 (38.7%)	53 (30.6%)	8.77	.2
Work from School	1 (2.2%)	1 (2.2%)	8 (17.4%)	13 (28.3%)	23 (50%)		

Note. **= $p \leq .05$. Percentage across the row appear in parentheses below group frequencies.

Table 17. Perceived-Stress Level and Burnout (Emotional Exhaustion, Depersonalization, and Personal Accomplishment) Means for Teachers Working from Home and from School

	Work Setup		F df (1, 217)
	Work from Home	Work from School	
Stress Level	3.89 (.97)	4.22 (.07)	8.12**
Emotional Exhaustion	28.68 (13.57)	32.59 (13.92)	2.98
Depersonalization	7.92 (6.67)	8.54 (6.88)	.31
Personal Accomplishment	34.16 (8.64)	34.28 (9.44)	.01

Note. **= $p \leq .05$. Standard Deviations appear in parentheses below means.

Number of Years in Teaching and Age. For stress level and the number of years in teaching, there exists no significant relationship, X^2 (12, N = 219) = 15.52, p = 0.21. However, significant differences were demonstrated in stress level across groups, F (3, 215) = 2.64,

p= .05. However, F (3, 215) = 2.64, p = .05. Tukey HSD Post Hoc Test showed significance between teachers having 4-6 years of teaching experience (M = 4.13, SD = .9) and those with 10 years or more of teaching experience (M = 3.68, SD = 1.1), the latter having lower stress levels. The means in the different categories of years in teaching (1-3, 4-6, 7-9, 10, and up) show that lower stress levels happen with more years of experience in teaching. The regression model shows that the age and years of teaching significantly predict stress level, b = 4.77, t(216) = 5.22, p = .00, and explained a significant proportion of variance, R^2 = .05, F (2, 216) = 5.22, p = .01.

Table 18. Crosstabulation of Perceived Stress Level and Number of Years in Teaching

Number of Years in Teaching	Perceived Stress Rating					X^2	Φ
	1 - Very Low	2 - Low	3 - Average	4 - High	5 - Very High		
1-3 years	0	2	12	13	18	15.52	.27
	(0%)	(4.4%)	(26.7%)	(28.9%)	(40%)		
4-6 years	0	5	14	31	35		
	(0%)	(5.9%)	(16.5%)	(36.5%)	(41.2%)		
7-9 years	1	2	7	13	10		
	(3%)	(6.1%)	(21.2%)	(39.4%)	(30.3%)		
10 years and above	1	9	10	23	13		
	(1.8%)	(16.1%)	(17.9%)	(41.1%)	(23.2%)		

Note. **= $p \leq .05$. Percentage across the row appear in parentheses below group frequencies.

On the other hand, there are no significant differences at the levels of depersonalization, F (3, 215) = .85, p = .47, and personal accomplishment, F (3, 215) = .49, p = .69, among teachers with different years of teaching. However, there is a significant difference at the levels of emotional exhaustion, F (3, 215) = 5.62, p = .01 and post hoc analyses show that teachers in their early years of teaching, 1-3 (M = 32.29, SD = 13.64) and 4-6 (M = 32.52, SD = 12.81), have higher emotional exhaustion levels than senior teachers or with 10 or more years of experience (M = 24.02, SD = 14.01).

Table 19. Perceived-Stress Level and Burnout (Emotional Exhaustion, Depersonalization, and Personal Accomplishment) Means for Different Years of Teaching Categories

	Number of Years in Teaching				*F*
	1-3 years	4-6 years	7-9 years	10 years and above	*df* (3, 215)
Stress Level	4.04_{a} (.93)	4.13_{a} (.9)	3.88_{ab} (1.02)	3.68_{b} (1.06)	2.64**
Emotional Exhaustion	32.29_{a} (13.64)	32.52_{a} (12.81)	27.24_{a} (12.75)	24.02_{a} (14.01)	5.62**
Depersonalization	9_{a} (6.87)	8.36_{a} (6.62)	6.79_{a} (5.96)	7.55_{a} (7.13)	.85
Personal Accomplishment	32.84_{a} (10.09)	34.75_{a} (7.77)	34.03_{a} (8.24)	34.5_{a} (9.54)	.49

Note. **= $p \leq .05$. Standard Deviations appear in parentheses below means. Means with different subscripts within rows are significantly different at the $p \leq .05$ based on Tukey HSD post hoc paired comparisons.

Teaching Effectiveness. Effective teachers strive to help their students achieve success in learning. A consensus on measures of teacher quality has not yet been established, but some teaching attributes can be determined. A study enumerated four dimensions to characterize an effective teacher: instructional effectiveness, use of assessment for student learning, positive learning environment, and personal quality of the teacher (Stronge et al., 2011). In the online setting, effective teachers facilitate student learning, aim to feel connected with students, share experiences, are approachable, establish mutual comfort, and are responsive to students' needs (Frazer et al., 2017).

Meanwhile, the Commission on Higher Education defines instruction as the "teaching effectiveness and its delivery that eventually results in academic excellence" in their guidelines of quality contribution evaluation of NBC 461**.** Teaching effectiveness can be evaluated using the following assessment areas: commitment, knowledge of the subject matter, teaching for independent learning, and management of learning. Commitment refers to the deep sense of responsibility to

provide service for the well-being of students and the advancement of the discipline. Knowledge of subject matter refers to the expertise of the teacher in the field of discipline. Teaching for independent learning includes the ability to organize teaching and learning processes to help students maximize their potential. Lastly, the management of learning refers to the ability of the teacher to create and manage a conducive learning environment and to be able to guide, monitor, and evaluate the learning of the students (Pada & Alcala, 1998).

Table 20. Correlation Table of Burnout Dimensions and Teacher Effectiveness Self-Rating

Teacher Effectiveness	Burnout Dimensions		
	Emotional Exhaustion	Depersonalization	Personal Accomplishment
Commitment	-.064	-.164*	.177**
Knowledge of subject	-.108	-.185**	.172*
Teaching for independent learning	-.135*	-.213**	.151*
Management of learning	-.218**	-.279**	.139*
Fulfillment of other duties	-.115	-.190**	.136*

Note. ** = Correlation is significant at the 0.01 level (2-tailed). * = Correlation is significant at the 0.05 level (2-tailed).

Results of this study show some significant correlations of different burnout dimensions to the five assessment areas enumerated by the Commission on Higher Eeducation, as seen in Table 19. For both emotional exhaustion and depersonalization, correlations are negative, while for personal accomplishment, correlations are positive, indicating that higher degrees of burnout affect teaching effectiveness.

Conclusion

The current pandemic has drastically shifted the ways of teaching and learning. Teachers thrive with the added challenges and responsibilities of remote learning. They are coping with heightened

stress levels that may lead to burnout. In this study, factors predicting stress and burnout among teachers in the Philippines engaged in remote learning were explored.

The 219 Filipino teachers' rating on a 5-point scale of the stress level they experience with remote learning shows that they experienced high-stress levels (M = 3.96, SD = 0.98). Seventy-one percent reported experiencing high to very high stress. Unsurprisingly, they spend half of their day working (M = *12.17* hours, SD = 3.67). This includes their actual conduct of remote classes (M = 3.87, SD = 1.86), preparation for lessons (M = 3.73, SD = 1.91), and other teaching-related work and activities (M = 4.58, SD = 2.02). On average, teachers also handle five classes (SD = 3.066) and 141 students (SD = 129.08). Their scores from MBI-ES show that they have high emotional exhaustion (M = 29.5, SD = 13.71), moderate depersonalization (M = 8.05, SD = 6.71), and moderate personal accomplishment (M = 34.19, SD = 8.8) which correspond to a degree of burnout.

The factors of gender, educational attainment, educational stage of teaching, type of school, province, work setup, age, and number of years in teaching were found to interplay with the level of stress and burnout of teachers.

The reported stress level of teachers has a significant relationship with gender (p = .000), highest educational attainment (p = .011), educational stage of teachers (p = .001), and place of school (p = .012). Significant differences were also found in stress levels based on different factors. On gender, female teachers experience higher stress levels than male teachers (p = .000). Stress level is lower for teachers with higher educational attainment (p = .015) and for those with older students or handling higher educational stages (p = .001). Teachers working in the NCR, the epicenter of COVID-19 in the Philippines, experience higher stress levels (p = .012). Although the majority of teachers prefer to work from home, the school remains to be the most conducive place for teaching (p = .000). Meanwhile, teachers who physically report to their schools experience higher stress levels (p = .044). Those who spent more years in teaching reported lower stress levels than those who were younger and new to teaching (p = .05).

When it comes to burnout, significant differences were found, and the result showed higher emotional exhaustion for teachers with lower educational attainment (p = .006), private school teachers (p = .01), teachers working in NCR (p = .043), and teachers who are in early years of teaching (p = .01). Significant difference for reduced personal accomplishment was only found with teachers from private schools (p = .033). No significant differences were found with the dimension of depersonalization. Correlations show, however, that higher degrees of burnout negatively affect perceived teaching effectiveness.

The limitations of this study in terms of the number of participants and the nature of gathered data can pave the way for extending this research through conducting interviews with other teachers in the Philippines for a qualitative take on the study. In addition, a thorough probe of the responsibilities and challenges that teachers encounter during remote learning could shed light on and provide a better understanding of the stress and burnout of teachers. In general, the study will have implications for the formation of well-being programs for teachers, improvement of work conditions, and provision of technical support, which may be applicable not just during remote learning but even when the situation goes back to normal. The findings of this study could help similar studies on probing teacher stress, burnout, and remote learning.

Recommendations

Teacher stressors and burnout are the results of the heavy workload given to them that cannot be finished within the typical 8-hour workday. Given this, the DepEd, as the primary duty bearer, should be able to give guidelines on class size and modify the job description of teachers for them to focus solely on teaching tasks. Republic Act 7880 (An Act Providing for the Fair and Equitable Allocation of the Department of Education, Culture and Sports' Budget for Capital Outlay) clearly stipulates in Section 3B that class size should be limited to 45 students (Philippine Congress, 1995). Since the class size is mandated by law, the researchers recommend that schools adhere to the stipulation. It is important that this is followed as it prevents teacher stress and burnout and at the same time, promotes learning among the students as the teachers will be able to better focus on

their class. The teachers' workload should focus on the recommended schedule of eight hours per day so they can have time to rest and relax. Principals and other school heads should also abide by the mandates created by the national government.

Educational leaders should recognize that occupational safety and health (OSH) is now among the fundamental principles and rights at work. In support of this, psychosocial programs are also recommended, as stress and burnout can contribute to mental health issues like depression and anxiety. Since creating a safe and healthy workplace is supported by the ILO's *International Labour Standards on Occupational Safety and Health and the Labor Code of the Philippines,* training programs on self-care, enhancing protective factors, wellness, work-life balance, and even mental health programs should be made available to teachers. School activities that promote these must be done on a regular basis so that the teachers will be able to manage stress and avoid burnout. The school's guidance counselor can spearhead such programs.

The DepEd can also coordinate with the Department of Health on free consultations with mental health professionals when signs of severe stress and burnout are observed to help avoid burnout. These services can be made available to them with the support of the Philippine Health Insurance Corporation. Provisions for mental health services are stipulated in the Mental Health Act of 2017.

Implementation of OSH programs and institutional arrangements must be enforced by the DepEd, pursuant to the joint memorandum circular of the Civil Service Commission, Department of Health, and Department of Labor and Employment (CSC-DOH-DOLE JMC No1, 2020). This memorandum states that agency heads of public institutions should ensure comprehensive dissemination of OSH information through a communication plan which includes the publication of pertinent information on the agency website. In line with this, strategies for stress management and wellness activities can be posted on the websites of educational institutions. Further, these materials can also be published on the social media pages of the respective institutions.

The memo also stipulates the participation of employees in OSH information and education programs and training. Given this, seminars,

webinars, brown-bag discussions, and short video materials can be given to the teachers to help them cope.

The memo states that employees shall report OSH related illness and accidents to the management for it to act and intervene. Noting this, the heads of educational institutions can network with mental health and wellness professionals to address the issue. In addition, mental health issues can openly be discussed in Learning Action Cells of the school to de-stigmatize the condition. Some teachers who are suffering from mental health issues might be reluctant to get help for fear of being stereotyped.

These stress-reduction and wellness programs must be reported in the Annual Work and Financial plan of the agency. In the educational sector, such programs can be embedded in the School Improvement Plan. These activities can be spearheaded by the Safety and Health Committee of the schools. Since there are health education teachers employed by the school, they can also advocate for wellness programs to address the stress and burnout problems encountered by teachers.

On the other hand, the labor unions or teachers' organizations of private schools can lead activities on teacher wellness and management of stress. The heads of the school can coordinate with the school president, the parent-teacher association, and even alumni to conduct programs for teachers.

The officers of the school parent-teacher association can help teachers avoid stress and burnout by setting guidelines for parent consultations. There are parents who consult teachers after office hours, and this matter contributes to the problem. Consultation time and other pertinent guidelines can be drafted to help the teachers cope with their work.

College professors in the pre-service training level should teach work-life balance in Educational Psychology and Guidance classes. The discussion on work hours to be rendered by the teachers as stipulated by Republic Act 4670 (The Magna Carta for Public School Teachers) in the Philippine educational system classes should also discuss the work provisions by the Philippine Labor Code and perhaps, the

International Labour Standards on Occupational Safety and Health so that the students will be aware of their rights.

Lastly, the teachers should advocate for themselves. The teacher labor groups can lobby for just working hours, a just workload, and perhaps, reducing the number of students per class. The teachers should have the agency to lobby for favorable working conditions. They can also collectively disagree with assigned work that is not aligned with their job description.

The support given to the teachers to manage stress and avoid burnout will enable them to perform their duties at the optimum level. The teachers deserve good working conditions as they are molding the youth of the land.

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