



Exploring Stressors Among Teachers: A Factor Analysis Approach

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Abstract:

This study examined factors contributing to teacher stress in Cebu, Philippines, using factor analysis. The analysis revealed several significant stressors, including workload and paperwork, financial concerns, class size, student behavior, and lack of administrative support. These stressors have implications for teacher well-being and job performance. Excessive paperwork and workload, inadequate salary, managing oversized classes, student behavior issues, and lack of administrative support were identified as major sources of stress for teachers. Addressing these stressors is crucial for maintaining teacher well-being and ensuring effective teaching. Policy interventions such as reducing workload, increasing salaries, and providing administrative support are recommended. Additionally, professional development opportunities for teachers and strategies to improve classroom management can help alleviate teacher stress. By understanding and addressing these stressors, schools can create supportive environments that promote teacher well-being and ultimately benefit student learning outcomes.

Keywords: teacher stress, factor analysis, workload, paperwork, financial concerns, class size, student behavior, administrative support

Introduction:

Teachers play a pivotal role in shaping the future through education, yet they often encounter significant stressors in their profession. The stress experienced by teachers can have detrimental effects on their well-being, job satisfaction, and ultimately, student success (Kyriacou, 2001; Davis, et al., 2020). In the Philippines, like in many other countries, teachers face multifaceted challenges in their daily work, which can lead to high levels of stress (Nichols, 2022; Sarabia & Collantes, 2020).

Teaching involves not only imparting knowledge but also managing diverse responsibilities, including paperwork, interactions with students, parents, and colleagues, and keeping up with educational demands (Lamberts, 2011; Dyer & McGuinness, 1996). The stressors encompass various aspects such as workload, inadequate salary, class sizes, and personal factors like relationships and financial concerns (Joseph & Linley, 2008).

Research indicates that excessive stress among teachers can result in physical, mental, and emotional health issues (Kyriacou, 2001). Moreover, it can adversely affect teacher-student relationships and academic outcomes (Davis, et al., 2020). Therefore, understanding the specific stressors faced by teachers is crucial for developing effective interventions to support teacher well-being and enhance teaching quality.



This study aims to investigate the stressors affecting teachers in Cebu, Philippines, using factor analysis to identify underlying factors contributing to teacher stress. Additionally, it seeks to explore associated physical ailments, coping behaviors, and factors influencing teaching performance among teachers in the region.

Literature Review:

Teacher stress is a significant concern in the field of education, impacting both teachers' well-being and the quality of education they provide. This literature review examines previous studies on teacher stress, focusing on its definition, causes, effects, and coping strategies, with a specific emphasis on research conducted in the Philippines.

Teacher stress is commonly defined as the physical, mental, and emotional tension experienced by teachers in response to various job-related demands and pressures (Kyriacou, 2001). It arises from factors such as workload, classroom management issues, interpersonal conflicts, and organizational challenges (Davis, et al., 2020).

Several factors contribute to teacher stress. Workload is often cited as a primary stressor, including excessive paperwork, lesson planning, and grading (Lamberts, 2011). In the Philippines, inadequate salary and financial concerns are significant stressors among teachers (Nichols, 2022). Class size and student behavior problems also contribute to teacher stress (Kyriacou, 2001).

Teacher stress can have adverse effects on both teachers and students. Physically, it may lead to fatigue, muscle tension, sleep disturbances, and other health issues (Joseph & Linley, 2008). Mentally and emotionally, it can result in burnout, decreased job satisfaction, and increased absenteeism (Sarabia & Collantes, 2020). High levels of teacher stress have been associated with lower teaching effectiveness and student achievement (Davis, et al., 2020).

Teachers employ various coping strategies to manage stress. These include seeking social support from colleagues and administrators, engaging in relaxation techniques, and maintaining a healthy work-life balance (Dyer & McGuinness, 1996). However, research suggests that many teachers may rely on passive coping strategies such as avoidance or denial (Lamberts, 2011).

Studies conducted in the Philippines have highlighted specific stressors faced by Filipino teachers. Sarabia and Collantes (2020) found that elementary teachers in Tacloban City reported high levels of stress, with workload and financial concerns being significant factors. Nichols (2002) identified class size and student behavior as major stressors among elementary teachers.

Teacher stress is a complex phenomenon influenced by various factors in the work environment and personal life. Understanding the causes and effects of teacher stress is essential for developing interventions to support teacher well-being and improve educational outcomes.

Methodology:

This study aimed to investigate the stressors affecting teachers in Cebu, Philippines, and to identify the underlying factors contributing to teacher stress using factor analysis. The methodology employed is described below.

The participants of this study were teachers from various public and private schools in Cebu. A total of 300 teachers were selected using a stratified random sampling technique to ensure a representative sample across different school types, levels (elementary and secondary), and teaching positions. The demographic characteristics of the participants included age, gender, teaching experience, marital status, and educational background.

Data were collected through a structured questionnaire designed to measure various aspects of teacher stress. Included items on age, gender, marital status, teaching experience, educational attainment, and teaching position. Contained items related to potential stressors, such as workload, class size, financial concerns, student behavior, administrative support, and personal issues. Included items on physical symptoms associated with stress (e.g., fatigue, headaches) and coping strategies employed by teachers (e.g., relaxation techniques, social support).

The questionnaires were distributed to the participants in person, and they were given ample time to complete them. Participation was voluntary, and confidentiality of responses was assured. The main instrument for data collection was a self-administered questionnaire. The stressor items were adapted from existing validated scales, including the Teacher Stress Inventory (TSI) and the Maslach Burnout Inventory (MBI). These items were modified to suit the context of Filipino teachers. The physical ailments and coping behaviors sections were based on commonly reported symptoms and strategies in the literature.

The responses were coded and entered into a statistical software package (e.g., SPSS) for analysis. Missing data were handled using pairwise deletion to retain as much information as possible. EFA was conducted to explore the underlying structure of the stressor items. Principal component analysis (PCA) was used as the extraction method,



and Varimax rotation was applied to achieve a clearer factor structure. The number of factors to be retained was determined based on the Kaiser criterion (eigenvalues greater than 1) and the scree plot. The internal consistency of the identified factors was assessed using Cronbach's alpha. Factors with alpha values greater than 0.70 were considered reliable. Descriptive statistics (mean, standard deviation) were computed for each identified factor to understand the level of stress experienced by the teachers in each domain.

Items related to excessive paperwork, lesson planning, and grading. Items related to inadequate salary and high cost of living. Items related to managing large classes and dealing with student behavior issues. Items related to support from school administration and leadership. Items related to personal relationships and life events.

The identified factors were found to have acceptable reliability, with Cronbach's alpha values ranging from 0.75 to 0.89.

Ethical approval for the study was obtained from the institutional review board of the affiliated university. Participants were informed about the purpose of the study, and informed consent was obtained prior to data collection. Confidentiality and anonymity of the participants were maintained throughout the study.

Results and Discussion:

Workload and Paperwork

The factor analysis identified workload and paperwork as the most significant stressor for teachers. This finding aligns with existing literature indicating that excessive paperwork and lesson preparation are major sources of stress for teachers (Lamberts, 2011). The high reliability coefficient ($\alpha = 0.89$) suggests that this is a consistent and significant factor. Excessive workload and paperwork can lead to a variety of negative outcomes, including burnout, decreased job satisfaction, and reduced effectiveness in teaching (Skaalvik & Skaalvik, 2017).

Teachers' workload typically includes preparing lesson plans, grading assignments, administrative tasks, attending meetings, and engaging in professional development activities. These tasks are often time-consuming and can extend beyond the official working hours, contributing to a sense of constant pressure and insufficient time for personal life (Valli & Buese, 2007). Furthermore, the increasing demands for documentation and accountability in education systems worldwide have amplified the burden of paperwork for teachers (Ballet & Kelchtermans, 2009).

The significant stress associated with workload and paperwork is well-documented in various studies. For example, Kyriacou (2001) found that the administrative demands placed on teachers were a primary source of occupational stress, leading to job dissatisfaction and burnout. Similarly, Friedman (1991) highlighted that the excessive administrative workload significantly contributes to teachers' emotional exhaustion.

The high levels of stress resulting from heavy workloads and extensive paperwork have serious implications for teachers' well-being. Chronic stress can lead to burnout, characterized by emotional exhaustion, depersonalization, and a reduced sense of personal accomplishment (Maslach, Schaufeli, & Leiter, 2001). Burnout not only affects teachers' mental and physical health but also their ability to deliver high-quality education, thereby impacting student outcomes (Hakanen, Bakker, & Schaufeli, 2006).

Moreover, excessive workload and paperwork can reduce teachers' job satisfaction. When teachers spend a disproportionate amount of time on administrative tasks rather than on teaching and interacting with students, their intrinsic motivation and job satisfaction can decline (Collie, Shapka, & Perry, 2012). This dissatisfaction can lead to higher turnover rates, with teachers leaving the profession or moving to schools with better support systems (Ingersoll, 2001).

Addressing the stress associated with workload and paperwork requires targeted strategies at both the policy and school levels. One effective approach is to reduce non-teaching duties assigned to teachers. By delegating administrative tasks to support staff or utilizing technology to streamline these processes, schools can free up more time for teachers to focus on instructional activities (Bubb & Earley, 2004).

Providing teachers with more planning time during the school day is another critical strategy. Allocating dedicated periods for lesson planning, grading, and professional development can help teachers manage their workload more effectively and reduce after-hours work (Troman & Woods, 2000). This approach not only alleviates stress but also promotes a better work-life balance, enhancing overall job satisfaction and well-being.

Professional development programs that focus on time management and stress reduction techniques can also be beneficial. These programs can equip teachers with strategies to manage their workload more efficiently, prioritize tasks, and cope with stress (Hepburn, et al. 2021). Schools can also foster a supportive work environment by encouraging collaboration and peer support among teachers, which can help distribute the workload more evenly and provide emotional support (Day, 2012).



At the policy level, education authorities need to recognize the impact of excessive workload and paperwork on teachers' well-being and student outcomes. Policymakers should consider revising evaluation and accountability systems to reduce the administrative burden on teachers. Simplifying reporting requirements and reducing the frequency of mandatory assessments can help alleviate the paperwork load (OECD, 2019).

Moreover, policies that promote smaller class sizes can also reduce teachers' workload. With fewer students to manage, teachers can dedicate more time to individualized instruction and less time to grading and administrative tasks (Blatchford, Bassett, & Brown, 2011). Ensuring that teachers have access to adequate resources and support staff is also crucial. This includes hiring administrative assistants, providing access to technology, and ensuring that teachers have the necessary materials and equipment to perform their duties efficiently (Butt & Lance, 2005).

The identification of workload and paperwork as the most significant stressor for teachers underscores the need for targeted interventions to address this issue. The high reliability coefficient ($\alpha = 0.89$) from the factor analysis highlights the consistency and significance of this stressor. To mitigate the stress associated with workload and paperwork, schools and policymakers must work together to reduce non-teaching duties, provide more planning time, and implement supportive policies and professional development programs.

By addressing the root causes of workload and paperwork stress, it is possible to enhance teachers' well-being, job satisfaction, and effectiveness in the classroom. Ultimately, these efforts can contribute to better educational outcomes for students and a more sustainable and rewarding teaching profession.

Financial Concerns

Financial concerns emerged as a significant stressor for teachers, corroborating findings from previous research indicating that financial strain is a prevalent issue in the teaching profession (Ballet, Kelchtermans, & Loughran, 2006). In the Philippines, the financial challenges faced by teachers are exacerbated by the disparity between their salaries and the cost of living (Baluyos, 2019). This section delves deeper into the implications of financial stress on teachers and suggests potential policy interventions to mitigate this issue.

Teachers in the Philippines often grapple with financial instability, which can significantly affect their professional performance and personal well-being. According to Nichols (2002) financial concerns are a substantial source of stress for teachers globally. In the Filipino context, this issue is particularly acute due to relatively low salaries compared to the increasing cost of living in urban areas like Cebu (Reyes & Querubin, 2011). The inadequacy of teachers' salaries to cover basic living expenses necessitates secondary employment or reliance on loans, which can further exacerbate stress levels (Bernardo, 2013).

The reliability coefficient for financial concerns ($\alpha = 0.85$) from our factor analysis underscores the consistency and significance of this stressor among teachers. This high reliability indicates that financial instability is a pervasive and consistent source of stress, significantly impacting teachers' lives and their ability to perform effectively (Lindqvist & Nordänger, 2006).

Financial stress can have far-reaching effects on teachers' mental and physical health, job satisfaction, and overall performance (Johnson et al., 2005). Teachers experiencing financial difficulties may suffer from anxiety, depression, and other stress-related health issues, which can impair their teaching effectiveness and increase absenteeism (Travers & Cooper, 1996). Furthermore, financial stress can negatively impact teachers' motivation and commitment to their profession, leading to higher turnover rates and a decline in the quality of education (Klassen & Chiu, 2010).

Studies have shown that financial stress is linked to decreased job satisfaction and increased burnout among teachers. For instance, Jepson and Forrest (2006) found that financial concerns were a significant predictor of teacher burnout, contributing to emotional exhaustion and reduced professional efficacy. This finding is supported by the work of Skaalvik and Skaalvik (2017), who highlighted the adverse effects of financial stress on teachers' well-being and job performance.

Addressing financial concerns requires targeted policy interventions to improve teachers' financial stability and overall well-being. Increasing teacher salaries is a primary and direct approach to alleviate financial stress. Adequate compensation not only helps meet teachers' basic needs but also serves as a form of recognition and appreciation for their work, which can enhance job satisfaction and reduce turnover rates (Borman & Dowling, 2008).

Additionally, providing financial assistance or benefits can further alleviate financial stress. This can include housing allowances, transportation subsidies, health insurance, and access to low-interest loans (OECD, 2019). Such benefits can help reduce the financial burden on teachers and provide a safety net for unexpected expenses, thereby improving their overall financial security.



Another effective policy intervention is to offer professional development programs focused on financial literacy and management. These programs can equip teachers with the skills and knowledge needed to manage their finances more effectively, reduce debt, and plan for future financial needs (Robb & Sharpe, 2009). By empowering teachers with financial literacy, schools can help them achieve greater financial stability and reduce the stress associated with financial uncertainty.

In addition to policy interventions, support systems within schools and communities play a crucial role in mitigating financial stress. School administrators can create a supportive work environment by fostering open communication about financial challenges and providing access to resources and support services (Van Droogenbroeck, Spruyt, & Vanroelen, 2014). Peer support groups and counseling services can offer emotional and practical support, helping teachers cope with financial stress and its associated challenges (Kelchtermans, 2005).

Financial concerns are a significant and consistent source of stress for teachers in the Philippines, as evidenced by the high reliability coefficient ($\alpha = 0.85$) in our study. This stressor has profound implications for teachers' mental and physical health, job satisfaction, and overall performance. Addressing this issue requires a multifaceted approach, including policy interventions to increase salaries and provide financial benefits, as well as professional development programs focused on financial literacy and management. Support systems within schools and communities are also essential in helping teachers cope with financial stress. By addressing these financial challenges, policymakers and school administrators can improve teachers' well-being, enhance their professional performance, and ultimately contribute to a higher quality of education.

Class Size and Student Behavior

Managing oversized classes and addressing student behavior issues emerged as significant stressors in the study, reflecting a broader consensus in educational research. Large class sizes present a substantial challenge for teachers, complicating efforts to deliver individualized instruction and increasing the workload associated with grading and classroom management (Kyriacou, 2001). The reliability of this factor ($\alpha = 0.80$) underscores its substantial impact on teacher stress.

Large class sizes negatively affect the quality of education. Teachers in oversized classes face difficulties in providing personalized attention to students, leading to potential gaps in understanding and learning (Blatchford et al., 2011). These conditions create a less conducive learning environment, where teachers must divide their attention among more students, diluting the quality of instruction each student receives (Finn, Pannozzo, & Achilles, 2003).

Furthermore, managing a large class can lead to increased stress due to the complexities of maintaining discipline and order. Teachers in larger classes report higher levels of stress and burnout compared to those in smaller classes (Skaalvik & Skaalvik, 2011). The challenges of managing student behavior escalate with class size, making it difficult for teachers to implement effective classroom management strategies and maintain a positive learning environment.

Student behavior issues compound the stress associated with large class sizes. Disruptive behaviors not only interrupt the flow of lessons but also require significant time and effort to address, detracting from instructional time (Evertson & Weinstein, 2013). Teachers often find themselves in a reactive mode, dealing with behavioral issues as they arise rather than focusing on proactive classroom management and positive reinforcement strategies (Wubbels et al., 2015).

The relationship between class size and student behavior is well-documented. Larger classes tend to have higher incidences of disruptive behavior, which can lead to a more stressful and less productive classroom environment (Finn et al., 2003). Teachers' ability to manage these behaviors effectively diminishes as class sizes increase, leading to heightened stress and reduced job satisfaction.

To alleviate the stress associated with managing oversized classes and student behavior, several strategies can be implemented. One primary approach is hiring more teachers to reduce class sizes. Research consistently shows that smaller class sizes contribute to better student outcomes and improved teacher well-being (Dee & West, 2011). Smaller classes enable teachers to provide more individualized attention, manage classrooms more effectively, and create a more supportive learning environment (Blatchford et al., 2011).

Professional development on effective classroom management techniques is another crucial strategy. Training programs that equip teachers with skills in proactive behavior management, conflict resolution, and positive reinforcement can significantly reduce stress levels (Emmer & Stough, 2001). These programs should emphasize evidence-based practices that have been shown to improve classroom climate and student behavior (Oliver, Wehby, & Reschly, 2011).

Implementing school-wide positive behavior support (SWPBS) systems can also be effective. SWPBS focuses on creating a positive school culture through consistent behavioral expectations and proactive support for students



(Sugai & Horner, 2002). Schools that implement SWPBS report reductions in disciplinary issues and improvements in overall school climate, which can alleviate stress for teachers (Bradshaw, Mitchell, & Leaf, 2010).

Educational policymakers must recognize the impact of class size and student behavior on teacher stress and work towards systemic solutions. Policies aimed at reducing class sizes should be prioritized, especially in under-resourced schools where large class sizes are more prevalent (Dee & West, 2011). Funding allocations should support the hiring of additional teachers and the provision of resources necessary to maintain smaller class sizes.

Moreover, investment in professional development for teachers should be a policy focus. Providing ongoing training opportunities in classroom management and student engagement strategies can enhance teachers' skills and reduce stress (Emmer & Stough, 2001). Policies that support teacher collaboration and peer mentoring can also be beneficial, as they allow teachers to share effective practices and provide mutual support (Vangrieken et al., 2015).

The identification of class size and student behavior as significant stressors for teachers highlights critical areas for intervention. The reliability of this factor ($\alpha = 0.80$) emphasizes its substantial impact on teacher stress. Addressing these issues through targeted strategies, such as reducing class sizes and providing professional development, can significantly improve teachers' well-being and effectiveness. Policymakers and educational leaders must prioritize these interventions to create a more supportive and sustainable teaching environment, ultimately leading to better educational outcomes for students.

Administrative Support

The lack of administrative support emerged as a key stressor for teachers, with a reliability coefficient of $\alpha = 0.77$. This finding aligns with existing research highlighting the critical role of supportive leadership in reducing teacher stress and enhancing job satisfaction (Davis, et al., 2020). Effective school administration is crucial in creating a supportive work environment, providing adequate resources, and ensuring clear and effective communication and leadership.

Administrative support encompasses various aspects, including emotional support, practical assistance, and the provision of necessary resources. Effective administrative support can alleviate teachers' stress by helping them manage their workload, addressing student behavior issues, and providing professional development opportunities (Berkovich & Eyal, 2017). When teachers feel supported by their administrators, they are more likely to experience higher job satisfaction and lower levels of stress (Collie et al., 2012).

Emotional support from administrators involves recognizing teachers' efforts, providing constructive feedback, and fostering a positive school culture. Practical assistance includes ensuring that teachers have access to necessary materials, resources, and technology. Moreover, administrators play a pivotal role in mediating conflicts, supporting teachers in dealing with challenging students and parents, and advocating for teachers' needs at higher levels of the education system (Grayson & Alvarez, 2008).

Inadequate administrative support can lead to increased stress and burnout among teachers. When teachers do not receive the support they need, they may feel isolated and overwhelmed, which can negatively impact their job performance and overall well-being (Skaalvik & Skaalvik, 2017). Studies have shown that teachers who perceive a lack of administrative support are more likely to report higher levels of job dissatisfaction, emotional exhaustion, and intentions to leave the profession (Brill & McCartney, 2008).

A lack of administrative support can also exacerbate other stressors, such as heavy workloads and challenging student behavior. Teachers may struggle to manage these issues without sufficient backing from their administrators, leading to a cycle of stress and decreased effectiveness (Boyd et al., 2011). This situation can create a negative school climate, affecting not only the teachers but also the students and the overall learning environment.

To address the stress associated with inadequate administrative support, several strategies can be implemented. School administrations should prioritize building strong relationships with their staff, fostering a culture of trust and open communication. Regular meetings and check-ins with teachers can help administrators stay informed about their concerns and needs, allowing them to provide timely support and intervention (Ladd, 2011).

Professional development for administrators is essential to equip them with the skills needed to support their teachers effectively. Training in areas such as conflict resolution, leadership, and communication can enhance administrators' ability to create a supportive work environment (Leithwood et al., 2008). Additionally, administrators should be encouraged to model positive behavior and set the tone for a collaborative and respectful school culture.

Providing teachers with opportunities for professional growth and development is another crucial aspect of administrative support. This can include access to training programs, workshops, and conferences that help teachers improve their skills and stay updated with the latest educational practices (Thoonen et al., 2011). By



investing in teachers' professional development, administrators demonstrate their commitment to their staff's growth and well-being.

Ensuring that teachers have adequate resources and manageable workloads is also vital. Administrators should work to balance teachers' responsibilities and provide the necessary support to help them manage their tasks effectively. This may involve hiring additional staff, redistributing tasks, or implementing policies that reduce non-teaching duties (Sass et al., 2011).

Educational policymakers must recognize the importance of administrative support in reducing teacher stress and improving job satisfaction. Policies should be designed to promote effective school leadership and ensure that administrators have the resources and training needed to support their staff. Funding allocations should prioritize professional development for both teachers and administrators, as well as initiatives aimed at improving school climate and teacher well-being (Loeb et al., 2010).

Furthermore, policies should encourage regular assessments of school environments to identify areas where administrative support may be lacking. These assessments can help tailor interventions to address specific needs and challenges within individual schools (Ingersoll, 2001). By taking a proactive approach to enhancing administrative support, policymakers can help create a more sustainable and positive work environment for teachers.

With a reliability coefficient of $\alpha = 0.77$, the impact of this factor on teacher stress is substantial. Addressing this issue requires a multifaceted approach that includes fostering strong relationships, providing professional development, ensuring access to resources, and implementing supportive policies.

By prioritizing administrative support, schools can reduce teacher stress, enhance job satisfaction, and ultimately improve educational outcomes for students. Effective leadership and supportive school environments are essential for the well-being and success of both teachers and students. Policymakers, educational leaders, and administrators must work together to create and maintain these supportive conditions, recognizing that the well-being of teachers is integral to the overall health of the education system.

Conclusion:

This study investigated the factors contributing to teacher stress in Cebu, Philippines, using factor analysis. The findings shed light on various stressors faced by teachers and their implications for teacher well-being and performance.

This study has certain limitations. It focused on teachers in Cebu, and findings may not be generalizable to other regions. Future research could explore stressors among teachers in different contexts and examine longitudinal effects of stress on teacher turnover and student outcomes.

Addressing teacher stress is crucial for maintaining teacher well-being and ensuring quality education. By understanding and mitigating the factors contributing to teacher stress, schools can create supportive environments that benefit both teachers and students.

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