



## Empowering Asian educators: Decoding the factors of 21st-century teacher well-being

Lynard Bobby L. Asirit<sup>1</sup>, Jocelyn H. Hua<sup>2</sup>, Lemuel John A. Rama<sup>3</sup>

<sup>1</sup>Hamamatsu City Board of Education, Japan

<sup>2</sup>Kolehiyo ng Pantukan, Philippines

<sup>3</sup>ACES Polytechnic College, Panabo, Philippines

lynard.asirit@gmail.com

### ARTICLE INFO

### ABSTRACT

E-ISSN: 2961-3809

In the fast-paced landscape of 21st-century education, global attention turns to understanding teacher well-being. This research utilizes a Sequential Exploratory Mixed Method design to explore the factor structure of well-being across randomly selected Asian public-school teachers. Initial qualitative interviews with 10 participants and 5 focus group members inform the development of a 78-item quantitative construct. An open sampling technique yields 1,987 online scale respondents, with subsequent Exploratory and Confirmatory Factor Analyses involving 800 participants each. Six latent factors emerge: Occupational Well-being, Organizational Struggles, Work Resources, Supportive School Climate, Enabling Leadership, and Teacher Support Initiatives. The model demonstrates a good fit, emphasizing the multifaceted nature of teacher well-being. Acknowledging limitations, future research should diversify samples and explore the impact on student outcomes, with implementation of the well-being scale empowering institutions for a supportive teaching environment.

Keywords: 21st-century education, Asian public schools, factor structure analysis, teacher well-being, teaching profession, work-life balance

### How to cite:

Asirit, L.B.L., Hua, J.H., & Rama, L.J.A. (2023). Empowering Asian educators: Decoding the factors of 21st-century teacher well-being. *Polaris Global Journal of Scholarly Research and Trends*, 2(2), 33-57. <https://doi.org/10.58429/pgjsrt.v2n2a151>

## INTRODUCTION

In the landscape of modern education, teachers are the cornerstone of a thriving society. They bear the responsibility of moulding young minds, shaping future leaders, and fostering the growth of a knowledgeable and empathetic generation (Windle et al., 2022). However, the invaluable role they play often comes with significant challenges, leading to a pressing concern - teacher well-being in public schools. A well-supported and contented teaching workforce is vital for creating a nurturing learning environment that benefits both educators and students alike.

The transformative role of teachers in shaping students' character, fostering a positive mindset, instilling confidence, and cultivating a drive for excellence has been widely acknowledged (Adams, 2016). This study examined the growing prevalence of occupational stress among schoolteachers in the past two decades, highlighting its significance in their pivotal role. The last two decades have been characterized by a focus on survival rather than growth for many teachers (Greenhill, 2017). Research from various cultures bared that this stress is often attributed to factors such as excessive workload, student behavior issues, poor relationships with colleagues, lack of resources, frequent changes in the profession, inadequate salary, and challenging interactions with parents (Stoeber & Rennert, 2018). The Health & Safety Executive report highlights that teachers experience significantly higher levels of stress, reaching 42%, which is more than double the average. The three-year estimate (2008 to 2011) of the Self-reported Work-related Illness Questionnaire Module in the National Labor Force Survey of the United Kingdom revealed significantly higher rates of self-reported stress, depression, and anxiety for the teaching profession compared to other occupations (Hse, 2012).

The financial implications of stress are concerning. Indeed, the global annual incidence of work-related diseases amounts to nearly 160 million cases. These diseases are accountable for approximately 80% of the annual 2.2 million work-related fatalities. At the individual level, stress has the potential to result in significant health impairments, a diminished ability to effectively manage job demands, reduced work performance (including job loss), social withdrawal, and even mortality. The costs associated with stress for an organization encompass various negative outcomes such as increased rates of absenteeism, elevated medical expenses, diminished productivity, and efficiency, as well as higher staff turnover (International Labor Organization, 2018).

Given the potential for both positive and negative experiences in the field of teaching, it is crucial to promptly ascertain the factors that contribute to the overall well-being of educators. This inquiry is essential as it establishes connections with effective instructional practices (Duckworth et al., 2019) and the motivation of students to engage in the learning process (Pakarinen et al., 2017). This study examines the work-related experiences of teachers and investigates the ways in which these experiences influence their overall well-being. While there are existing global indicators of well-being, it is necessary to develop measures that are derived from a practice-oriented approach, focusing on the fundamental aspects of teachers' work that either support or impede their well-being. There has been a scarcity of research conducted on the construct of teacher well-being, with a predominant focus on Western contexts.

To further develop the understanding of the overall welfare of teachers, it is imperative to conduct research that specifically investigates the concept of teacher well-being. This research enabled a more comprehensive understanding of the factors within the teaching profession that contribute to or hinder the well-being of teachers. This study employed a sequential exploratory mixed-method approach to identify the various domains that contribute to teacher well-being. The aim was to develop a scale that is highly reliable and appropriate for Asian norms, specifically within the context of public schools in basic education. The collective results of this study served to raise awareness regarding the significant matter of teacher well-being, influencing the way teachers engage in their instructional practices, interact with their students, and ultimately, carry out their work with the highest level of enthusiasm.

## Objectives

The purpose of this study was to ascertain the factor structure of teacher well-being, as perceived by a randomly selected sample of public school teachers in the Philippines, Thailand, Malaysia, Indonesia, and India.

This study aimed to address the following research questions:

### *Qualitative*

1. How would Asian educators describe their perceptions and experiences regarding the factors influencing their empowerment and well-being in the 21st-century educational context?

### *Quantitative*

1. What are the underlying factors and their loadings that explain the variation in teacher well-being scores based on the responses obtained from the developed scale?
2. Do the underlying dimensions of teacher well-being exhibit a parsimonious fit?
3. What measurement tool is suitable for the evaluation of teacher well-being?

## METHODS

### Design

This study investigated the various aspects of teacher well-being within the setting of basic education public schools in Asia. The research approach employed in this study is based on the principles outlined by Creswell and Plano Clark (2007). These authors advocate for the use of a Sequential Exploratory Mixed Method when traditional measures or instruments are not accessible, the variables under investigation are not well-defined, or when there is a lack of an established theoretical or conceptual framework. Therefore, the present study employed a combination of qualitative exploration, employing thematic analysis and quantitative investigation, specifically utilizing factor analysis. The purpose of this approach was to condense the numerous variables derived from the qualitative phase into a more concise set of variables, also known as factors, pertaining to teacher well-being (Gorsuch, 1983). Additionally, the objective of this study was to identify the fundamental dimensions that exist between the observed variables and the unobserved constructs, thus facilitating the development and improvement of the theoretical framework employed to elucidate the concept of teacher well-being (Tabachnick & Fidell, 2007). Furthermore, the utilization of self-reporting scales, specifically a teacher well-being scale, offers valuable evidence for construct validity (Thompson, 2004).

The qualitative findings played a crucial role in the development of the quantitative approach, necessitating the implementation of a two-phase data collection process. Consequently, the researcher conducted a qualitative exploration of teacher well-being, which served as the basis for the development of a quantitative tool. The study aimed to qualitatively explore the experiences of public-school teachers regarding teacher well-being. The themes and statements derived from this phase were used to develop a survey instrument. This was achieved through a content analysis of the teachers' responses. The study conducted by Wilkonson (2008) involved categorizing participants' beliefs into collective and coherent groups based on the domains of the constructs being investigated. This categorization was then used to collect quantitative data from a larger sample of public-school teachers.

In contrast, the utilization of Factor Analysis was necessary for the implementation of the quantitative approach. Initially, the utilization of Exploratory Factor Analysis (EFA) was employed to ensure the construct validity of the survey instrument. This was achieved by identifying the factor

structure of teacher well-being and determining the minimal number of factors that influence these constructs. Furthermore, the analysis aimed to identify the interrelationships among these factors, as indicated by Decoster (2018) and McDonald (1985). Additionally, the fitness of the model generated by the Exploratory Factor Analysis (EFA) was assessed and validated through Confirmatory Factor Analysis (CFA).

### Participants/Respondents

The initial phase of the study utilized purposive sampling as a method for selecting participants from public schools in Asia namely, the Philippines, Thailand, Malaysia, Indonesia, and India. The participants were deliberately chosen according to specific inclusion criteria to ensure that they could provide the necessary data for the study (Cohen et al., 2000). Concerning this matter, the selection of participants for the in-depth interview and focus group discussion was based on the following criteria: (a) individuals who are currently engaged in full teaching responsibilities in a public school system in Asia, (b) individuals who are assigned with ancillary services aside from being a teacher, and (c) individuals who have accumulated a minimum of five (5) years of experience in the field. As a result, ten (10) participants were chosen for the in-depth interview, while five (5) participants were selected for the focus group discussion (Graham, 2022).

In the quantitative stage of the study, an open or voluntary sampling technique where participants self-select to take part in the survey. In such a sampling approach, individuals have the freedom to decide whether they want to participate in the survey, and they opt-in willingly without being randomly selected by the researcher. There were 1,987 respondents who answered the online scale which was subjected to data screening. The Exploratory Factor Analysis phase had a total of 800 respondents, while the Confirmatory Factor Analysis phase had 800 respondents. Having a sufficiently large sample size is crucial for conducting factor analysis with reliability (Bryman & Cramer, 2005). However, there is a lack of agreement regarding the specific number of participants needed for this purpose. To ensure an appropriate sample size within the constraints of the study, two criteria were taken into account. Firstly, the Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy and Bartlett's Test of Sphericity were considered. Secondly, the factor loadings and the correlation between a variable and a factor, as outlined by Hayes (2002), were examined.

### Data Analysis

The initial stage of the study utilized thematic analysis to analyze the interview responses of the participants. This analysis focused on identifying classifications and themes that emerged from the data and interpreting these patterns in relation to the research objectives (Boyatzis, 1998). Thematic analysis has the capacity to identify and discern the factors that impact the well-being of teachers through the comprehensive elucidation of participants' actions and thoughts (Creswell, 2003). Therefore, the researcher was required to extract significant statements from the narratives of the participants. These statements were then used to identify cluster themes, which were subsequently utilized as item statements for the survey tool.

During the process of creating the survey tool, the quantitative phase involved employing factor analysis as a method for developing the instrument. This included categorizing items into distinct factors, interpreting each factor based on the items that had a strong association with it, and condensing the items into a limited number of factors (Bryman & Cramer, 2005). To study the associations between variables without settling on a specific hypothetical model, exploratory factor analysis (EFA) was utilized. The utilization of exploratory factor analysis (EFA) enabled the researcher to establish a precise definition of the construct known as teacher well-being. Additionally, EFA facilitated the identification of the factors that accounted for the highest amount of variance in the scores, while utilizing the fewest number of factors possible, as demonstrated by previous research (DeVon et al., 2007; Delaney, 2005). Principal Axis Factoring (PAF) was employed in this study, as it was anticipated that the assumption of multivariate normality may be significantly compromised (Fabrigar et al., 1999) due to the limited sample size of the population under investigation. There are two criteria commonly employed to determine the appropriate number of factors to retain: the Kaiser Criterion and the Scree Plot. In this study, the Scree Plot was selected due

to its ability to readily provide the researcher with several factors. This is achieved by examining the descending variances that account for the extracted factors, which are presented in graph form along with their corresponding eigenvalues.

In accordance with Cattell's (1966) scree test, the researcher examined the eigenvalue plot for the presence of a discernible point of inflection commonly referred to as a "break" or "hinge." The factors preceding the point at which eigenvalues start to decrease can be preserved. The scree plot revealed that the dataset consists of six factors, which contradict the four factors indicated by the emergent themes identified through qualitative exploration. Following this, the researcher proceeded to streamline and elucidate the data structure by means of rotation. In this instance, the Promax method was employed to generate factors that exhibit correlation, a practice commonly regarded as yielding more precise outcomes in studies pertaining to human behaviors or situations where data does not conform to predetermined assumptions (Costello & Osborne, 2005). Confirmatory Factor Analysis (CFA), which was used to confirm the factor structure of a collection of observed variables, was the main goal of the study after the exploratory phase. During this stage, the latter half of the participants were utilized. The CFA methodology was employed by the researcher to assess the adequacy of the factor structure obtained through exploratory factor analysis (EFA), with the aim of determining if it represents the most optimal fitting model or if further improvements can be made. The study permitted latent variables to exhibit correlations, but with careful consideration given to negative and high correlations. The inclusion of covariance within the same factor was not permitted. This phase aimed to determine if the latent dimensions derived in the initial phase would demonstrate a parsimonious fit. In addition, various statistical tools were utilized to determine the most appropriate model fit, including the Chi-square test, Comparative Fit Index (CFI), Tucker-Lewis Index (TLI), Root Mean Square Error of Approximation (RMSEA). The final stage of the study involved assessing the dependability of the factor structure that was obtained. Each item within the factors underwent analysis to determine their inter-item correlation and to calculate the Cronbach's alpha coefficient.

### **Ethical Consideration**

The individuals involved in this study were provided with information and given the opportunity to make an autonomous choice regarding their participation, motivated by their interest in contributing to the existing body of knowledge in the domain of human resources. Additionally, participants were verbally informed and provided with a written letter of consent that outlined the nature and objectives of the study. The study's objectives were elucidated to the participants at their respective workplace, which also served as the location for data collection. The welfare and confidentiality of each participant were prioritized throughout the entirety of the process, with great emphasis placed on their safety and overall well-being.

In accordance with the voluntary nature of their involvement, the participants were afforded the opportunity to withdraw from the study at any given point. Furthermore, every participant possessed the autonomy to decide whether to respond to a posed inquiry, with the guarantee that their answers would be handled with the utmost level of confidentiality. The data collected in this research were maintained in a confidential manner. In the event of publishing a report, it is imperative to refrain from incorporating any data that could potentially lead to the identification of the individuals involved. The research records were securely stored, and access is restricted solely to the researcher. To confirm that interpretation and reflection were actually in line with their replies, a member-checked was undertaken. Throughout the study, the principle of anonymity was consistently upheld, ensuring that the opinions, choices, and actions of the participants were treated with the utmost respect (U.S. Department of Health & Human Services, 2013).

## RESULTS/FINDINGS AND DISCUSSION

### *Qualitative Phase*

The qualitative investigation revealed the emergence of four distinct themes pertaining to the constructs that constitute the concept of well-being among public school teachers. These findings highlighted the emergence of themes, namely work demands, workplace interactions, work-related benefits, and work context.

*Work Demands.* The participants' responses indicate that the demands of teaching elicit a range of emotions. In general, educators commonly report engaging in various tasks on a regular basis, such as delivering instruction, completing administrative tasks, assessing student work, managing student behavior, being responsible for student conduct and academic progress, participating in monitoring and evaluation processes, and organizing the physical environment of the classroom. These responsibilities are consistently addressed by teachers daily. Teachers contend with multifaceted demands in their professional roles, presenting ongoing challenges in effective management. Work demands encompass several sub-themes, elucidating the intricate nature of teachers' responsibilities. Heavy workloads, inclusive of tasks like lesson planning, grading assignments, and administrative duties, contribute to time constraints, inducing stress and impacting overall work-life balance (McRae et al., 2023). Classroom management poses a significant challenge, requiring teachers to navigate disciplinary matters and address diverse student behaviors while maintaining an optimal learning environment (Eslit, 2023). The pressure to meet assessment targets and be accountable for student outcomes adds an additional layer of stress (Glassow, 2023). Moreover, differentiated instruction, aimed at meeting diverse learning needs, demands meticulous planning and adaptability to various student abilities and backgrounds (Dube & Nkomo, 2023). Inclusion and special education further intensify the workload, necessitating support for students with diverse learning abilities (Eslit, 2023). Continuous professional development, imperative for staying current with teaching methodologies, technology, and educational trends, adds to the time demands on teachers (Li et al., 2023). Administrative responsibilities, including paperwork, report writing, and documentation, contribute to the burdensome nature of teachers' work (McRae et al., 2023). Building and sustaining effective communication with parents or guardians, a crucial aspect of student progress, requires dedicated time and effort (Pennington et al., 2023). Involvement in extracurricular activities, such as clubs and sports teams, while rewarding, extends teachers' workload beyond regular teaching hours (Fujiyama et al., 2021). Emotional demands, stemming from teachers' investment in students' well-being and academic success, contribute to the overall challenges they face (Paceley et al., 2022). Furthermore, teachers may grapple with resource limitations, including insufficient teaching materials, outdated technology, and constrained classroom space (Hennessy et al., 2022). Frequent changes in education policies and curricula present an additional layer of complexity, demanding teachers align their methods with evolving educational standards (Hodge & Stosich, 2022).

*Workplace Interactions.* Teaching involves fostering relationships, facilitating exchanges, and promoting collaborations. Educators commonly engage with diverse individuals within educational settings, such as classrooms, faculty rooms, hallways, and other communal areas, on a regular basis. Students could engage in conversations or collaborate on topics related to their individual lessons, challenges encountered in the classroom, familial matters, or even shared experiences such as movies they have watched. Therefore, these interactions have the potential to either enhance or diminish the enthusiasm that educators possess for their teaching responsibilities. The well-being of public school teachers is significantly shaped by their experiences in work interactions. Several themes are integral to understanding how these interactions influence teacher well-being. Positive and supportive relationships among colleagues contribute to a nurturing work environment, enhancing job satisfaction and overall well-being (Dreer, 2021). Collaborating within professional learning communities fosters a shared sense of purpose and growth, facilitating the exchange of ideas and emotional support (Dreer, 2021). Effective communication between teachers and school leadership is crucial for cultivating a positive school culture and fostering a sense of

belonging within the school community (Stronge & Xu, 2021). Positive teacher-student relationships play a vital role in teacher satisfaction and well-being, leading to increased engagement and motivation in their role (Paceley et al., 2022). Constructive interactions with parents positively influence teacher well-being, fostering mutual understanding and support (Pennington et al., 2023). Conflict resolution skills are essential to preventing negative interactions from impacting teacher well-being, reducing stress and promoting a harmonious work environment (Paceley et al., 2022). Feeling appreciated and recognized for their efforts significantly impacts a teacher's well-being, with positive feedback from colleagues, school leadership, and parents boosting morale and job satisfaction (Anastasiou & Garametsi, 2021). Collaboration in workload sharing and support during challenging times reduces stress and prevents feelings of isolation among teachers (McRae et al., 2023). A school climate promoting inclusivity, respect, and empathy contributes to increased teacher well-being (Eslit, 2023). Access to relevant professional development enhances teacher confidence and job satisfaction, positively influencing well-being (Li et al., 2023). Addressing and preventing bullying and harassment in the school environment creates a safer and more supportive workplace for teachers (Hjalmarsson & Odenbring, 2021). Positive interactions between teachers and school administrators, characterized by trust, respect, and clear communication, are essential for a supportive work culture and overall teacher well-being (Dreer, 2021).

*Work-related Benefits.* Educators articulate their perspectives on the enduring examination of their commitment and devotion to their profession, which has been challenged by the lack of competitive remuneration or incentives to sustain their motivation. Nevertheless, this does not indicate that they have ceased to desire the government to address their request for incentivized compensation packages and opportunities to enhance their remuneration either within their current positions or through promotions. Work-related benefits can play a vital role in enhancing the well-being of public school teachers. Teachers' well-being is intricately linked to various work-related benefits that significantly impact their overall satisfaction and fulfilment. Competitive compensation, as advocated by Zakaria et al. (2021), is foundational for well-being, recognizing the value of teachers' contributions and alleviating financial stressors. Comprehensive health insurance coverage, encompassing both physical and mental health services, promotes teacher well-being by ensuring access to necessary medical support (Lackey et al., 2019). Secure retirement and pension plans play a pivotal role in providing teachers with financial stability and peace of mind regarding their future, reducing anxiety about post-retirement finances (Zakaria et al., 2021). Generous paid time off and leave policies, including sick leave and family leave, contribute to teacher well-being by allowing them to address personal matters without financial concerns or repercussions. Work-related benefits also extend to professional development opportunities, fostering career growth, increasing job satisfaction, and enhancing teaching effectiveness (Li et al., 2023). Initiatives supporting work-life balance, such as flexible work arrangements, telecommuting options, and flexible hours, contribute to improved overall well-being and job satisfaction (McRae et al., 2023). Employee Assistance Programs (EAPs), offering confidential counseling and mental health support, address stress and burnout concerns among teachers (Li et al., 2023). Recognition programs and performance-based incentives, as highlighted by Zakaria et al. (2021), positively impact teacher well-being by acknowledging their efforts and accomplishments. A collaborative and supportive work environment itself is a valuable benefit, promoting teamwork, respect, and appreciation within a positive school culture (Anastasiou & Garametsi, 2021). Professional advancement opportunities, including leadership roles and mentorship programs, contribute to teacher well-being by recognizing their expertise and providing new challenges (Li et al., 2023). Having sufficient resources, materials, and classroom support is essential for effective teaching, reducing stress and enhancing job satisfaction (Hennessy et al., 2022). Job security and tenure, according to Salas-Vallina et al. (2020), offer teachers a sense of stability, positively influencing their well-being and commitment to the teaching profession.

*Work Context.* The participants also articulated various aspects that characterize the nature of their working environment. The work context in Asia can significantly impact the well-being of its public-school teachers. The work context significantly influences the well-being of teachers in some Asian countries, with various themes playing a crucial role in shaping their professional experiences.

Cultural expectations and norms, as highlighted by Hodge and Stosich (2022), may subject teachers to pressures stemming from the reverence for authority figures and high societal expectations for educational achievement. These cultural factors influence teachers' perceptions of their roles and responsibilities, thereby impacting their overall well-being. Teachers in many Asian countries face challenges related to high workloads and large class sizes, as pointed out by McRae et al. (2023). The demands of handling numerous students can be physically and emotionally draining, further contributing to the complexities of teacher well-being. Moreover, the examination-oriented education systems prevalent in many Asian countries, emphasizing academic performance and high-stakes testing, create additional stress and pressure for both teachers and students, as noted by Glassow (2023). Insufficient resources, inadequate infrastructure, and limited access to technology pose substantial challenges for teachers in Asia, hindering their ability to deliver quality education and leading to frustration and job dissatisfaction (Hennessy et al., 2022). Cumbersome administrative processes and bureaucratic demands within education systems add to teachers' workload and stress levels, diverting time away from essential tasks. Limited access to professional development and training opportunities, as observed by Li et al. (2023), can hinder teachers' growth and advancement, contributing to feelings of stagnation in their careers and impacting overall well-being. The level of teacher autonomy and empowerment in the workplace also plays a crucial role, with empowered teachers who have a say in decision-making being more likely to experience job satisfaction. The effectiveness of school leadership and the level of support provided to teachers are critical factors influencing well-being, as noted by Stronge and Xu (2021). Socioeconomic challenges faced by students and their families can impact the work context for teachers, particularly in areas with high levels of poverty or social issues, creating unique challenges that affect their well-being (Pennington et al., 2023). Recognition and appreciation from school administrators, parents, and the community are essential components of teacher well-being, providing a morale boost and contributing to job satisfaction (Anastasiou & Garametsi, 2021). Balancing personal and professional life is a challenge for teachers in Asia due to cultural expectations and high work demands, making supportive work policies and flexible arrangements crucial for improving work-life balance and overall well-being (McRae et al., 2023).

*Quantitative Phase*

Exploratory Factor Analysis

Construction of the Teacher Well-Being Scale. The teacher well-being scale items presented in Table 1 were selected based on their frequency of occurrence in the qualitative interviews, as reported by the participants. The 80-item questionnaire underwent data reduction through the application of exploratory factor analysis (EFA).

**Table 1.** Teacher Well-Being Scale Items

Items
<p><i>My well-being as a teacher is affected by ...</i></p> <ul style="list-style-type: none"> <li>• heavy workloads.</li> <li>• managing multiple administrative tasks.</li> <li>• having a limited time to complete asks.</li> <li>• maintaining and managing diverse student behaviors.</li> <li>• balancing student demands and learning environment</li> <li>• the pressure to meet assessment targets.</li> <li>• being held accountable for my student performance outcomes.</li> <li>• makinog lessons to meet the diverse learning needs of my students.</li> <li>• the demands of inclusive education that requires me to accommodate varied learners.</li> <li>• the expectation to stay updated with the current teaching techniques, technology, and educational trends.</li> </ul>



---

**Items**

---

- engaging in continuous professional development that is time-consuming.
  - administrative workload, including report writing and meeting documentation
  - organizing and supervising extracurricular activities.
  - investing emotionally in my students' well-being and academic success.
  - supporting my students through challenges and navigating their sensitive issues.
  - facing challenges due to inadequate resources.
  - the limited teaching materials, outdated technology, and insufficient classroom space.
  - the frequent changes in education policies and curricula.
  - the interactions and collaboration among colleagues.
  - being feel valued, respected, and supported by peers.
  - collaborating with fellow teachers in professional learning communities.
  - an effective communication between teachers and school leadership.
  - the transparent and open communication school channels.
  - fostering a sense of belongingness within the school community.
  - a supportive and respectful teacher-student relationship.
  - a constructive interactions with parents or guardians.
  - the strong parent-teacher partnerships.
  - the ability to resolve conflicts constructively.
  - employing effective conflict resolution strategies.
  - feeling appreciated and recognized for my efforts.
  - receiving feedback from my colleagues, school leadership, and parents.
  - by collaboration in workload sharing.
  - providing support during challenging times.
  - a school climate that promotes inclusivity, respect, and empathy.
  - having access to relevant and meaningful professional development.
  - having opportunities for growth and skill development through workshops, training, and conferences.
  - a school environment that actively addresses and prevents bullying and harassment.
  - having positive interactions between teachers and school administrators.
  - having trust, respect, and clear communication between teachers and administrators.
  - a fair and competitive salaries received.
  - an adequate compensation recognizes the value of teachers' work and reduces financial stress.
  - having access to comprehensive health insurance coverage, including physical and mental health services.
  - having reliable health coverage.
  - having necessary medical support when needed.
  - securing better retirement and pension plans for financial stability and peace of mind about the future.
  - reducing anxiety and stress about post-retirement finances.
-

---

**Items**

---

- having a generous paid time off and leave policies, such as sick leave and family leave.
- allowing me to take care of my own health or address personal matters without worrying about losing income or facing repercussions.
- having access to continuous professional development opportunities.
- having a flexible work arrangements, such as telecommuting options and flexible hours.
- balancing personal and professional responsibilities.
- having confidential counseling, mental health support, and resources for personal and work-related challenges.
- having recognition programs and performance-based incentives.
- being appreciated and valued.
- having a collaborative and supportive work environment.
- the positive school culture that fosters teamwork, respect, and appreciation.
- the opportunities for career advancement, such as leadership roles or mentorship programs.
- the provision of sufficient resources, materials, and classroom support.
- having the necessary teaching tools at my self- disposal.
- the job security and tenure policy which provide teachers with a sense of stability and reduce the fear of job loss.
- the cultural expectations and norms of the school.
- the reverence for authority figures and high societal expectations for educational achievement.
- facing high workloads due to large class sizes and increasing demands on my time and resources.
- handling a large number of students.
- having an examination-oriented education systems that emphasize academic performance and high-stakes testing.
- the insufficient resources, inadequate infrastructure, and limited access to technology.
- the cumbersome administrative processes and bureaucratic red tape in education systems.
- navigating complex educational bureaucratic systems.
- the limited access to professional development and training opportunities.
- the lack of ongoing support and skill development.
- the level of my autonomy and empowerment in the workplace.
- having a say in decision-making and feel empowered in my roles.
- the effectiveness of school leadership and the level of support provided to me.
- the strong leadership that values and supports me as a teacher.
- the quality of teacher-student relationships.
- the positive and supportive relationships with students.
- the socioeconomic challenges faced by my students and their families.
- the recognition and appreciation from school administrators, parents, and the community I received.
- feeling valued for my efforts.
- by balancing my personal and professional life.

---

**\*Scale**

- 5- the item exerts a significantly positive impact on my overall well-being as a teacher.
- 4- the item exerts a positive impact on my well-being as a teacher.
- 3- the item exerts neither positively nor negatively impact on my well-being as a teacher.
- 2- the item exerts an adverse impact on my well-being as a teacher.
- 1- the item exerts a significantly adverse impact on my overall well-being as a teacher.

### *Initial Evaluation of the 80-item Construct*

Before proceeding with the extraction of factors using methods like Principal Axis Factoring (PAF), it is essential to analyze and interpret the preliminary results of Bartlett's Test of Sphericity and the Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy (Frey, 2022). The results of the preliminary analysis indicate that the data is suitable for factor analysis, as evidenced by the significant result of Bartlett's Test of Sphericity,  $\chi^2$  value is 63724, and the degrees of freedom (df) is 3160. The p-value is less than 0.001 ( $< .001$ ), which indicates that there are significant correlations between variables in the correlation matrix. While the overall KMO value obtained was high at MSA = 0.978, which is close to 1.0. A KMO value close to 1.0 indicates that the data is highly suitable for factor analysis. Based on the findings presented, it is recommended to proceed with the extraction of factors utilizing the suitable factor analysis technique. The obtained KMO value indicates that the dataset exhibits a high degree of suitability for conducting factor analysis. Additionally, the observed correlations between variables provide a valid rationale for employing factor analysis methodologies to uncover latent factors (Watkins, 2021).

**Table 2.** The KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy	0.978
Bartlett's Test of Sphericity	
<i>Approx. Chi-Square</i>	63724
<i>df</i>	3160
<i>p-value</i>	$< .001$

### *Factor Extraction*

After assessing the appropriateness of the respondent data for factor analysis. The key question for Exploratory Factor Analysis (EFA) is how to best estimate the number of factors to retain to prevent under- or over-extraction which may lead to erroneous conclusions. As mentioned in the methodology section, this study made use of Cattell's (1966) scree test as cited in (Mangale, 2020), which involves eye-balling the plot of the eigenvalues for a break or hinge. Considering that the interpretation of data and the identification of themes in the thematic analysis includes some subjectivity (Braun & Clarke, 2020). Based on their opinion, researchers may opt to collapse or combine some topics, resulting in the identification of four primary themes in the qualitative analysis. While in this study, the eigenvalues of the correlation matrix in EFA reflect how much variation is explained by each extracted component (Sürücü et al., 2022). The scree plot is widely used to analyze the eigenvalues visually and determine the "break" or "hinge" point, which indicates the ideal number of components to keep. In this study, it generated six (6) factors.

**Table 3.** Teacher Well-Being Construct Pattern Matrix

ITEM	Factors					
	1	2	3	4	5	6
ITEM1	0.968					
ITEM2	0.904					

ITEM3	0.888					
ITEM4	0.887					
ITEM5	0.864					
ITEM6	0.843					
ITEM7	0.834					
ITEM8	0.82					
ITEM9	0.758					
ITEM10	0.745					
ITEM11	0.733					
ITEM12	0.732					
ITEM13	0.693					
ITEM14		0.907				
ITEM15		0.873				
ITEM16		0.87				
ITEM17		0.861				
ITEM18		0.844				
ITEM19		0.829				
ITEM20		0.816				
ITEM21		0.813				
ITEM22		0.812				
ITEM23		0.807				
ITEM24		0.781				
ITEM25		0.74				
ITEM26		0.73				

	1	2	3	4	5	6
ITEM27			0.881			
ITE28			0.877			
ITEM29			0.875			



ITEM30			0.849			
ITEM31			0.847			
ITE32			0.841			
ITEM33			0.828			
ITE34			0.809			
ITEM35			0.791			
ITEM36			0.786			
ITEM37			0.764			
ITEM38			0.745			
ITEM39			0.655			
ITEM41				0.924		
ITEM42				0.881		
ITEM43				0.861		
ITEM44				0.851		
ITEM45				0.818		
ITEM46				0.811		
ITEM47				0.796		
ITEM48				0.794		
ITEM49				0.779		
ITEM50				0.758		
ITEM51				0.737		
ITEM52				0.727		
ITEM53				0.706		

ITEM	Factors					
	1	2	3	4	5	6
ITEM54					0.883	
ITEM55					0.875	
ITEM56					0.836	

ITEM57					0.828	
ITEM58					0.821	
ITEM59					0.815	
ITEM60					0.815	
ITEM61					0.791	
ITEM62					0.776	
ITEM63					0.768	
ITEM64					0.746	
ITEM65					0.736	
ITEM66					0.700	
ITEM67						0.932
ITEM68						0.868
ITEM69						0.864
ITEM70						0.861
ITEM71						0.857
ITEM72						0.849
ITEM73						0.785
ITEM74						0.783
ITEM75						0.746
ITEM76						0.703
ITEM77						0.700
ITEM78						0.671
ITEM79						0.652

*Note. 'Minimum residual' extraction method was used in combination with a 'promax' rotation*

The inclusion of rotation techniques enhances the optimization of high item loadings while minimizing low item loadings, thereby resulting in a more comprehensible and streamlined solution. The utilization of oblique rotation using Promax was described in the methodology section, as it is commonly acknowledged to yield more precise outcomes in studies about human behaviors or when data does not conform to a priori assumptions (Finch, 2020). However, irrespective of the specific rotation method employed, the primary goals are to enhance the interpretability of the findings and generate a more concise solution (Thompson, 2004). The preliminary findings of the six-factor

analysis are presented in Table 3. The analysis reveals concern regarding the face validity of the factors. As indicated by the loadings, Tabachnick and Fidell (2001) asserted that a loading of at least 0.40 is considered a suitable guideline for the minimum loading of an item. Considering this, the analysis excluded cross-loading items, a decision that was found to be appropriate given the presence of numerous items with satisfactory to high factor loadings (.60 or higher) on each factor.

*The Nomenclature of The Factors*

The process of labeling factors is subjective, theoretical, and inductive (Plonsky, 2015). According to Henson and Roberts (2006), the significance of latent factors is ultimately contingent upon the operational definition employed by the researcher. In this instance, Table 4 presents six (6) factors that have been operationalized and labeled descriptively as *Occupational Well-being, Organizational Struggles, Work Resources, Supportive School Climate, Enabling Leadership, and Teacher Support Initiatives*. These constructs align with the theoretical and conceptual objectives of the study and the items they represent.

**Table 4.** The 79-item Teacher Well-Being Scale

Factor 1	My well-being as a teacher is affected by ...
Occupational Well-being	1. heavy workloads.
	2. maintaining and managing diverse student behaviors.
	3. balancing student demands and learning environment
	4. making lessons to meet the diverse learning needs of my students.
	5. investing emotionally in my students' well-being and academic success.
	6. supporting my students through challenges and navigating their sensitive issues.
	7. the cultural expectations and norms of the school.
	8. facing high workloads due to increasing demands on my time and resources.
	9. having oversized class.
	10. the socioeconomic challenges faced by my students and their families.
	11. my inability to resolve conflicts constructively.
	12. the provision of insufficient resources, materials, and classroom support.
	13. the denial of necessary teaching tools at my self- disposal.
Factor 2	<i>My well-being as a teacher is affected by ...</i>
Organizational Struggles	14. managing multiple administrative tasks.
	15. the pressure to meet assessment targets.
	16. being held accountable for my student performance outcomes.
	17. administrative workload, including report writing and meeting documentation
	18. organizing and supervising extracurricular activities.
	19. the frequent changes in education policies and curricula.
	20. the reverence for authority figures and high societal expectations for educational achievement.
	21. having an examination-oriented education systems that emphasize academic performance and high-stakes testing.
	22. the cumbersome administrative processes and bureaucratic red tape in education systems.
	23. navigating complex educational bureaucratic systems.

	24. the lack of ongoing support and skill development.
	25. the level of my autonomy and empowerment in the workplace.
	26. lack of a say in decision-making and feel empowered in my roles.

Factor 3	<i>My well-being as a teacher is affected by ...</i>
Work Resources	27. having a limited time to complete asks.
	28. the demands of inclusive education that requires me to accommodate varied learners.
	29. the expectation to stay updated with the current teaching techniques, technology, and educational trends.
	30. engaging in continuous professional development that is time-consuming.
	31. facing challenges due to inadequate resources.
	32. the limited teaching materials, outdated technology, and insufficient classroom space.
	33. the insufficient resources, inadequate infrastructure, and limited access to technology.
	34. the bias selection on professional development and training opportunities.
	35. lack of support during challenging times.
	36. having undependable health coverage.
	37. having inadequate necessary medical support when needed.
	38. the rare opportunities for career advancement, such as leadership roles or mentorship programs.
	39. feeling undervalued for my efforts producing classroom materials.

Factor 4	<i>My well-being as a teacher is affected by ...</i>	
Supportive Climate	School	41. the interactions and collaboration among colleagues.
		42. being feel valued, respected, and supported by peers.
		43. collaborating with fellow teachers in professional learning communities.
		44. an effective communication between teachers and school leadership.
		45. feeling appreciated and recognized for my efforts.
		46. by collaboration in workload sharing.
		47. having positive interactions between teachers and school administrators.
		48. having trust, respect, and clear communication between teachers and administrators.
		49. being appreciated and valued.
		50. having a collaborative and supportive work environment.
		51. the positive school culture that fosters teamwork, respect, and appreciation.
		52. the quality of teacher-student relationships.
		53. the positive and supportive relationships with students.

Factor 5	<i>My well-being as a teacher is affected by ...</i>
Enabling Leadership	54. the transparent and open communication school channels.
	55. fostering a sense of belongingness within the school community.



	56. a constructive interaction with parents or guardians.
	57. the strong parent-teacher partnerships.
	58. receiving feedback from my colleagues, school leadership, and parents.
	59. a school climate that promotes inclusivity, respect, and empathy.
	60. a school environment that actively addresses and prevents bullying and harassment.
	61. the effectiveness of school leadership and the level of support provided to me.
	62. the strong leadership that values and supports me as a teacher.
	63. the recognition and appreciation from school administrators, parents, and the community I received.
	64. employing effective conflict resolution strategies.
	65. having a flexible work arrangement, such as telecommuting options and flexible hours.
	66. balancing personal and professional responsibilities.

Factor 6	<i>My well-being as a teacher is affected by ...</i>
Teacher Support Initiatives	67. a supportive and respectful teacher-student relationship.
	68. having access to relevant and meaningful professional development.
	69. having opportunities for growth and skill development through workshops, training, and conferences.
	70. a fair and competitive salaries received.
	71. an adequate compensation recognizes the value of teachers' work and reduces financial stress.
	72. having access to comprehensive health insurance coverage, including physical and mental health services.
	73. having reliable health coverage.
	74. securing better retirement and pension plans for financial stability and peace of mind about the future.
	75. reducing anxiety and stress about post-retirement finances.
	76. having a generous paid time off and leave policies, such as sick leave and family leave.
	77. allowing me to take care of my own health or address personal matters without worrying about losing income or facing repercussions.
	78. having confidential counseling, mental health support, and resources for personal and work-related challenges.
79. having recognition programs and performance-based incentives.	

*Confirmatory Analysis*

*Confirmatory Testing.* The 79-item construct underwent Confirmatory Factor Analysis (CFA) to assess the final dimensions, item representation within each factor, and the goodness of fit for the six-factor model. The magnitude of item loadings of each latent factor explains a substantial amount of unique variance, leading Tabachnick and Fidell (2022) to propose more stringent cut-off values, such as 0.32 (poor), 0.45 (fair), 0.55 (good), 0.63 (very good), or 0.71 (excellent). In the model, it is evident that the selected indicators or items for the first latent factor, namely "occupational well-being," demonstrate substantial factor loadings, all of which exceed the threshold of 0.70. The factors encompass the following aspects: heavy workloads ( $\beta = 0.7871$ ), maintaining and managing diverse student behaviors ( $\beta = 0.8621$ ), balancing student demands and learning environment ( $\beta =$

0.7871), making lessons to meet the diverse learning needs of my students ( $\beta = 0.815$ ), investing emotionally in my student's well-being and academic success ( $\beta = 0.7421$ ), supporting my students through challenges and navigating their sensitive issues ( $\beta = 0.7891$ ), the cultural expectations and norms of the school ( $\beta = 0.8131$ ), facing high workloads due to increasing demands on my time and resources ( $\beta = 0.7901$ ), having oversized class ( $\beta = 0.8621$ ), the socioeconomic challenges faced by my students and their families ( $\beta = 0.8341$ ), my inability to resolve conflicts constructively ( $\beta = 0.7041$ ), the provision of insufficient resources, materials, and classroom support ( $\beta = 0.7731$ ), and the denial of necessary teaching tools at my self-disposal ( $\beta = 0.8321$ ).

The second latent factor, "organizational struggles", also demonstrated strong factor loadings exceeding .60. The items that remained in this factor are as follows: managing multiple administrative tasks ( $\beta = 0.84701$ ), the pressure to meet assessment targets ( $\beta = 0.70101$ ), being held accountable for my student performance outcomes ( $\beta = 0.67601$ ), the administrative workload, including report writing and meeting documentation ( $\beta = 0.67601$ ), organizing and supervising extracurricular activities ( $\beta = 0.84701$ ), the frequent changes in education policies and curricula ( $\beta = 0.80201$ ), the reverence for authority figures and high societal expectations for educational achievement ( $\beta = 0.83401$ ), having an examination-oriented education systems that emphasize academic performance and high-stakes testing ( $\beta = 0.83501$ ), the cumbersome administrative processes and bureaucratic red tape in education systems ( $\beta = 0.71001$ ), navigating complex educational bureaucratic systems ( $\beta = 0.79801$ ), the lack of ongoing support and skill development ( $\beta = 0.75801$ ), the level of my autonomy and empowerment in the workplace ( $\beta = 0.76501$ ), and lack of a say in decision-making and feel empowered in my roles ( $\beta = 0.71101$ ).

The third latent factor, "work resources" encompassed 13 items which show strong factor loadings except for 1 item. The items are as follows: having a limited time to complete asks ( $\beta = 0.8521$ ), the demands of inclusive education that requires me to accommodate varied learners ( $\beta = 0.7611$ ), the expectation to stay updated with the current teaching techniques, technology, and educational trends ( $\beta = 0.7061$ ), engaging in continuous professional development that is time-consuming ( $\beta = 0.7971$ ), facing challenges due to inadequate resources ( $\beta = 0.7441$ ), the limited teaching materials, outdated technology, and insufficient classroom space ( $\beta = 0.8671$ ), the insufficient resources, inadequate infrastructure, and limited access to technology ( $\beta = 0.7141$ ), the bias selection on professional development and training opportunities ( $\beta = 0.8471$ ), lack of support during challenging times ( $\beta = 0.7181$ ), having undependable health coverage ( $\beta = 0.7491$ ), having inadequate necessary medical support when needed ( $\beta = 0.7351$ ), the rare opportunities for career advancement, such as leadership roles or mentorship programs ( $\beta = 0.5331$ ), feeling undervalued for my efforts producing classroom materials ( $\beta = 0.833$ ).

The fourth latent factor, "supportive school climate", also showed strong factor loadings exceeding .60. These items are: the interactions and collaboration among colleagues ( $\beta = 0.8721$ ), being feel valued, respected, and supported by peers ( $\beta = 0.8771$ ), collaborating with fellow teachers in professional learning communities ( $\beta = 0.8711$ ), an effective communication between teachers and school leadership ( $\beta = 0.7851$ ), feeling appreciated and recognized for my efforts ( $\beta = 0.7051$ ), by collaboration in workload sharing ( $\beta = 0.7861$ ), having positive interactions between teachers and school administrators ( $\beta = 0.7371$ ), having trust, respect, and clear communication between teachers and administrators ( $\beta = 0.8691$ ), being appreciated and valued ( $\beta = 0.7671$ ), having a collaborative and supportive work environment ( $\beta = 0.8021$ ), the positive school culture that fosters teamwork, respect, and appreciation ( $\beta = 0.8361$ ), the quality of teacher-student relationships ( $\beta = 0.8741$ ), the positive and supportive relationships with students ( $\beta = 0.7921$ ). Moreover the fifth latent factor, "enabling leadership", also demonstrated high factor loadings. This comprises the following items: the transparent and open communication school channels ( $\beta = 0.8371$ ), fostering a sense of belongingness within the school community ( $\beta = 0.8241$ ), a constructive interaction with parents or guardians ( $\beta = 0.8451$ ), the strong parent-teacher partnerships ( $\beta = 0.7941$ ), receiving feedback from my colleagues, school leadership, and parents ( $\beta = 0.8061$ ), a school climate that promotes inclusivity, respect, and empathy ( $\beta = 0.8191$ ), a school environment that actively addresses and prevents bullying and harassment ( $\beta = 0.8231$ ), the effectiveness of school leadership and the level of

support provided to me ( $\beta = 0.7861$ ), the strong leadership that values and supports me as a teacher ( $\beta = 0.8281$ ), the recognition and appreciation from school administrators, parents, and the community I received ( $\beta = 0.8301$ ), employing effective conflict resolution strategies ( $\beta = 0.8331$ ), having a flexible work arrangement, such as telecommuting options and flexible hours ( $\beta = 0.8971$ ), and balancing personal and professional responsibilities ( $\beta = 0.8491$ ). Lastly, the sixth latent factor “teacher support initiatives”, demonstrated excellent values namely: a supportive and respectful teacher-student relationship ( $\beta = 0.8061$ ), having access to relevant and meaningful professional development ( $\beta = 0.8291$ ), having opportunities for growth and skill development through workshops, training, and conferences ( $\beta = 0.7861$ ), a fair and competitive salary received ( $\beta = 0.7901$ ), an adequate compensation recognizes the value of teachers' work and reduces financial stress ( $\beta = 0.8611$ ), having access to comprehensive health insurance coverage, including physical and mental health services ( $\beta = 0.8111$ ), having reliable health coverage ( $\beta = 0.8111$ ), securing better retirement and pension plans for financial stability and peace of mind about the future ( $\beta = 0.7481$ ), reducing anxiety and stress about post-retirement finances ( $\beta = 0.8711$ ), having a generous paid time off and leave policies, such as sick leave and family leave ( $\beta = 0.7411$ ), allowing me to take care of my own health or address personal matters without worrying about losing income or facing repercussions ( $\beta = 0.8331$ ), having confidential counselling, mental health support, and resources for personal and work-related challenges ( $\beta = 0.7611$ ), and having recognition programs and performance-based incentives ( $\beta = 0.8391$ ).

*Goodness of Fit of the Conceptual Model.* The researcher conducted a test to assess the goodness of fit of the conceptual model derived from the teacher well-being scale (Goretzko et al., 2023), which consists of six factors. Presented in Table 5 are the results of the Confirmatory Factor Analysis (CFA) goodness of fit indicates that the model has been assessed for its fit to the observed data. The chi-square statistic ( $\chi^2$ ) is 9241, with 2987 degrees of freedom (df), and the associated p-value is 0.66. A p-value greater than 0.05 for the chi-square test suggests that the discrepancies between the model and data are not statistically significant, indicating that the model provides an acceptable fit to the observed data (Biswal, 2023). The fit measures used to further assess the goodness of fit include the Comparative Fit Index (CFI), Tucker-Lewis Index (TLI), and Root Mean Square Error of Approximation (RMSEA). The CFI value is 0.904, and the TLI value is 0.9010. Both CFI and TLI values exceed the commonly recommended threshold of 0.90, indicating that the model fits reasonably well to the data (Xia & Yang, 2018). Regarding RMSEA, the reported value is 0.0566. The RMSEA value represents the extent to which the model's predictions deviate from the observed data, and in this case, the value of 0.0566 suggests a reasonably good fit. An RMSEA value below 0.08 is considered an indicator of a good fit, and the reported value falls within this acceptable range (Shi et al., 2018). Additionally, the Akaike Information Criterion (AIC) and Bayesian Information Criterion (BIC) are used for model comparison. The AIC value is 37403, and the BIC value is 38583. Lower values of AIC and BIC suggest better model fit compared to alternative models, and in this case, the derived model performs relatively well (Dziak et al., 2017). Overall, the results of the CFA goodness of fit indicate that the model provides an acceptable fit to the data based on the CFI, TLI, and RMSEA values. The non-significant chi-square test further supports the adequacy of the model fit. However, it is essential to interpret the fit indices in conjunction with the research objectives, theoretical background, and specific context of the study. Additionally, conducting sensitivity analyses and exploring alternative model specifications can provide further insights into the model's performance and robustness.

**Table 5.** Model Fit Values

Index	Criterion	Model Fit Value
p-value	> 0.05	0.660
CFI	> .90	0.904
TLI	> .90	0.901
RMSEA	< 0.08	0.0566

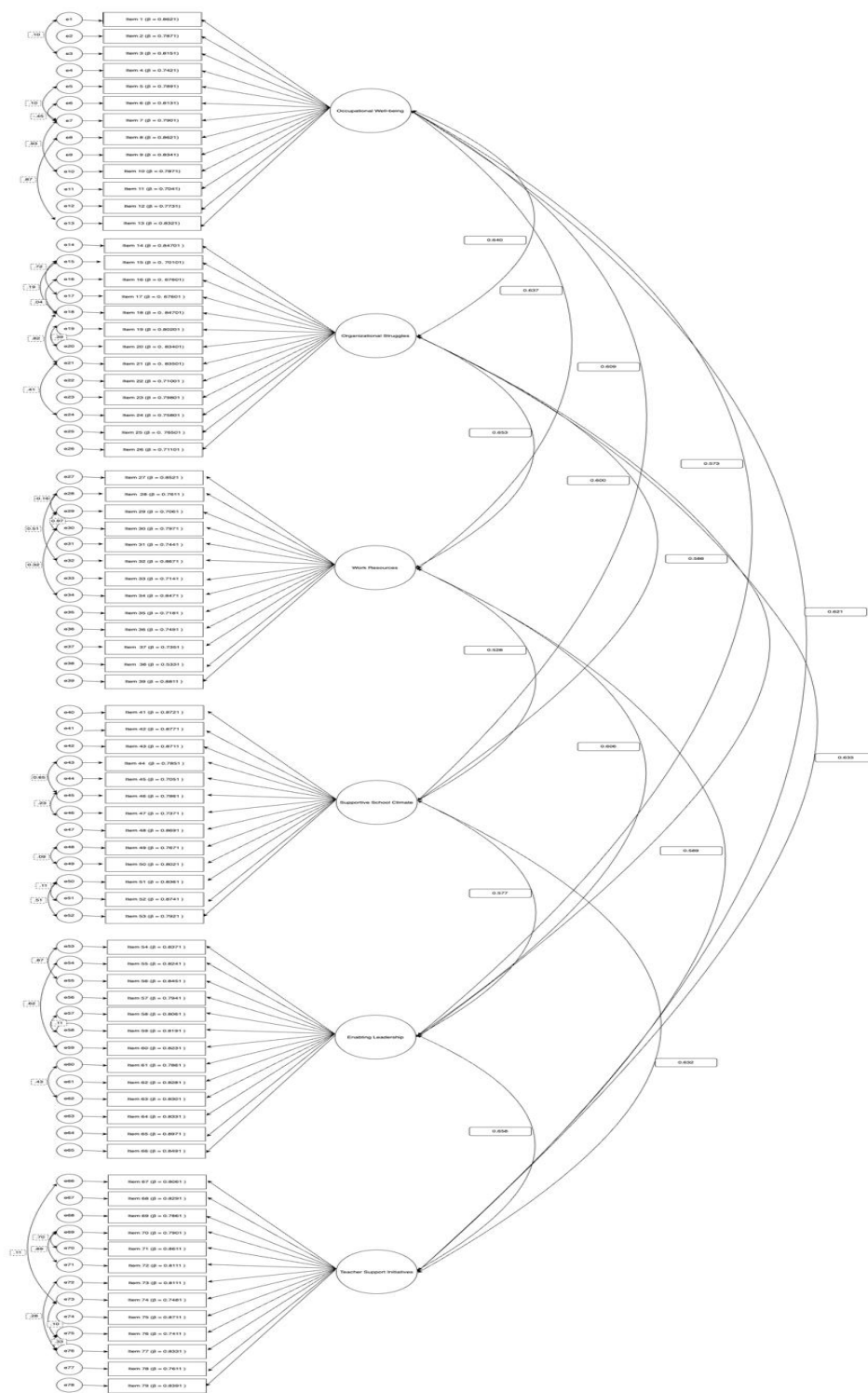


Figure 1. CFA Model of the Asian Teacher Well-Being in the 21<sup>st</sup> Century

*Reliability Test.* A reliability test was conducted to assess the internal consistency of the scale. The evaluation aimed to determine the extent to which the items within the instrument consistently measure the construct of interest. Table 6 presents the scale's reliability which was assessed using Cronbach's alpha values for each factor. The results indicate high internal consistency and good reliability for most factors: Occupational Well-being ( $\alpha = 0.92$ ), Organizational Struggles ( $\alpha = 0.91$ ), and Work Resources ( $\alpha = 0.92$ ). The factor Supportive School Climate showed acceptable internal consistency with  $\alpha = 0.86$ , while Enabling Leadership demonstrated good internal consistency with  $\alpha = 0.88$ . Notably, Teacher Support Initiatives exhibited very high internal consistency and high reliability with  $\alpha = 0.95$ . Overall, the entire scale demonstrated excellent internal consistency, with an overall alpha value of  $\alpha = 0.961$ , indicating a highly reliable measurement instrument. These findings indicate that the tool maintains good consistency in measuring the intended constructs. The reliability assessment aligns with Nunnally's (1978) guidelines, as cited in Woodruff et al. (2023) which suggest that instruments used in fundamental research should possess a reliability coefficient of .70 or higher. In this context, the scale demonstrates a robust level of internal consistency, bolstering its credibility and effectiveness as a research tool (Kamis & Lynch |, 2020).

**Table 6.** Reliability Test

Factor	Cronbach's alpha
a. Occupational Well-being	$\alpha = 0.92$
b. Organizational Struggles	$\alpha = 0.91$
c. Work Resources	$\alpha = 0.92$
d. Supportive School Climate	$\alpha = 0.86$
e. Enabling Leadership	$\alpha = 0.88$
f. Teacher Support Initiatives	$\alpha = 0.95$
<i>Overall <math>\alpha</math></i>	$\alpha = 0.961$

<p>Teacher Well-Being Scale</p> <p><i>My well-being as a teacher is affected by ...</i></p> <p><b>A. Occupational Well-being</b></p> <ol style="list-style-type: none"> <li>heavy workloads.</li> <li>maintaining and managing diverse student behaviors.</li> <li>balancing student demands and learning environment</li> <li>making lessons to meet the diverse learning needs of my students.</li> <li>investing emotionally in my students' well-being and academic success.</li> <li>supporting my students through challenges and navigating their sensitive issues.</li> <li>the cultural expectations and norms of the school.</li> <li>facing high workloads due to increasing demands on my time and resources.</li> <li>having oversized class.</li> <li>the socioeconomic challenges faced by my students and their families.</li> <li>my inability to resolve conflicts constructively.</li> <li>the provision of insufficient resources, materials, and classroom support.</li> <li>the denial of necessary teaching tools at my self- disposal.</li> </ol> <p><b>B. Organizational Struggles</b></p> <ol style="list-style-type: none"> <li>managing multiple administrative tasks.</li> <li>the pressure to meet assessment targets.</li> <li>being held accountable for my student performance outcomes.</li> <li>administrative workload, including report writing and meeting documentation</li> <li>organizing and supervising extracurricular activities.</li> <li>the frequent changes in education policies and curricula.</li> <li>the reverence for authority figures and high societal expectations for educational</li> </ol>
--

achievement.

8. having an examination-oriented education systems that emphasize academic performance and high-stakes testing.
9. the cumbersome administrative processes and bureaucratic red tape in education systems.
10. navigating complex educational bureaucratic systems.
11. the lack of ongoing support and skill development.
12. the level of my autonomy and empowerment in the workplace.
13. lack of a say in decision-making and feel empowered in my roles.

**C. Work Resources**

1. having a limited time to complete asks.
2. the demands of inclusive education that requires me to accommodate varied learners.
3. the expectation to stay updated with the current teaching techniques, technology, and educational trends.
4. engaging in continuous professional development that is time-consuming.
5. facing challenges due to inadequate resources.
6. the limited teaching materials, outdated technology, and insufficient classroom space.
7. the insufficient resources, inadequate infrastructure, and limited access to technology.
8. the bias selection on professional development and training opportunities.
9. lack of support during challenging times.
10. having undependable health coverage.
11. having inadequate necessary medical support when needed.
12. the rare opportunities for career advancement, such as leadership roles or mentorship programs.
13. feeling undervalued for my efforts producing classroom materials.

**D. Supportive School Climate**

1. the interactions and collaboration among colleagues.
2. being feel valued, respected, and supported by peers.
3. collaborating with fellow teachers in professional learning communities.
4. an effective communication between teachers and school leadership.
5. feeling appreciated and recognized for my efforts.
6. by collaboration in workload sharing.
7. having positive interactions between teachers and school administrators.
8. having trust, respect, and clear communication between teachers and administrators.
9. being appreciated and valued.
10. having a collaborative and supportive work environment.
11. the positive school culture that fosters teamwork, respect, and appreciation.
12. the quality of teacher-student relationships.
13. the positive and supportive relationships with students

**E. Enabling Leadership**

1. the transparent and open communication school channels.
2. fostering a sense of belongingness within the school community.
3. a constructive interaction with parents or guardians.
4. the strong parent-teacher partnerships.
5. receiving feedback from my colleagues, school leadership, and parents.
6. a school climate that promotes inclusivity, respect, and empathy.
7. a school environment that actively addresses and prevents bullying and harassment.
8. the effectiveness of school leadership and the level of support provided to me.
9. the strong leadership that values and supports me as a teacher.
10. the recognition and appreciation from school administrators, parents, and the community I received.

11. employing effective conflict resolution strategies.
12. having a flexible work arrangement, such as telecommuting options and flexible hours.
13. balancing personal and professional responsibilities.

**F. Teacher Support Initiatives**

1. a supportive and respectful teacher-student relationship.
2. having access to relevant and meaningful professional development.
3. having opportunities for growth and skill development through workshops, training, and conferences.
4. a fair and competitive salaries received.
5. an adequate compensation recognizes the value of teachers' work and reduces financial stress.
6. having access to comprehensive health insurance coverage, including physical and mental health services.
7. having reliable health coverage.
8. securing better retirement and pension plans for financial stability and peace of mind about the future.
9. reducing anxiety and stress about post-retirement finances.
10. having a generous paid time off and leave policies, such as sick leave and family leave.
11. allowing me to take care of my own health or address personal matters without worrying about losing income or facing repercussions.
12. having confidential counseling, mental health support, and resources for personal and work-related challenges.
13. having recognition programs and performance-based incentives.

<b>Scale</b>	<b>Description</b>	<b>Interpretation</b>
5	Very High Positive Impact	<i>The item exerts a significantly positive impact on my overall well-being as a teacher.</i>
4	High Positive Impact	<i>the item exerts a positive impact on my well-being as a teacher.</i>
3	Neither Positive nor Negative Impact	<i>the item exerts neither positively nor negatively impact on my well-being as a teacher.</i>
2	High Negative Impact	<i>the item exerts an adverse impact on my well-being as a teacher.</i>
1	Very High Negative Impact	<i>the item exerts a significantly adverse impact on my overall well-being as a teacher.</i>

## CONCLUSION

The study aimed to ascertain the factor structure of teacher well-being among public school teachers in Asian countries. The qualitative interviews revealed significant themes related to work demands, workplace interactions, work-related benefits, and work context. Through exploratory factor analysis (EFA) and confirmatory factor analysis (CFA), six distinct factors were identified: Occupational Well-being, Organizational Struggles, Work Resources, Supportive School Climate, Enabling Leadership, and Teacher Support Initiatives. The model exhibited a good fit to the observed data, with high factor loadings and satisfactory fit indices. The scale demonstrated high internal consistency, with Cronbach's alpha values ranging from 0.86 to 0.95, and an overall alpha of 0.961, indicating a highly reliable measurement instrument. While the study's findings are promising, several limitations should be acknowledged. The sample consisted of teachers from selected Asian systems, which may limit the generalizability of the results to other regions or educational systems. Additionally, the self-report nature of the questionnaire may introduce

response bias. Future research could incorporate a more diverse and representative sample and employ additional methods, such as observation and interviews, to complement self-reported data.

## IMPLICATION

The findings of this study hold several implications for educational policymakers, school administrators, and teachers themselves. First, the identified factors offer a comprehensive understanding of teacher well-being, emphasizing the multifaceted nature of this construct. Addressing specific aspects within each factor can help education authorities design targeted interventions to enhance teacher well-being. By reducing work-related stressors, improving the school climate, and providing adequate support, schools can foster a positive and conducive environment, ultimately benefiting both teachers and students. Additionally, recognizing the role of enabling leadership and teacher support initiatives can lead to the creation of mentorship programs and professional development opportunities, further bolstering teacher satisfaction and effectiveness.

## RECOMMENDATION

To build upon the study's findings, future research should expand the sample to include a broader representation of Asian countries and possibly include other regions to assess the generalizability of the scale. Additionally, exploring the relationship between teacher well-being and student outcomes would be valuable for understanding the broader impact of teacher well-being on education quality. Longitudinal studies could also be conducted to track changes in teacher well-being over time and the potential effects of interventions. Moreover, considering cultural nuances and context-specific factors could provide deeper insights into the factors influencing teacher well-being in various educational settings. Furthermore, integrating the teacher well-being scale into routine school evaluations can facilitate ongoing monitoring and assessment of teacher satisfaction and engagement. By regularly measuring and responding to teachers' needs, educational institutions can prioritize the well-being of their teaching staff and create a sustainable and supportive work environment. Additionally, developing targeted teacher training programs that address the identified factors can equip educators with effective coping strategies and foster a sense of empowerment and resilience in their roles. This part provides the summary of results and discussion which refers to the research aims. Thus, the new principal ideas, which are an essential part of the research findings, are developed.

## REFERENCES

- Anastasiou, S. & Garametsi, V. (2021). Perceived leadership style and job satisfaction of teachers in public and private schools. *International Journal of Management in Education*, 15(1), 58. <https://doi.org/10.1504/ijmie.2021.111817>
- Dreer, B. (2021). Teachers' well-being and job satisfaction: The important role of positive emotions in the workplace. *Educational Studies*, 1–17. <https://doi.org/10.1080/03055698.2021.1940872>
- Dube, B. & Nkomo, D. (2023). Innovative Inclusive Education Schools for persons experiencing barriers in learning. Using African Epistemologies in Shaping Inclusive Education Knowledge, 329–354. [https://doi.org/10.1007/978-3-031-31115-4\\_18](https://doi.org/10.1007/978-3-031-31115-4_18)
- Eslit, E.R. (2023). Striking the Balance: An in-Depth Examination of the Blended Learning Challenges for Students, Teachers, and Parents. <https://doi.org/10.20944/preprints202307.0779.v1>
- Finch, W.H. (2020). Exploratory factor analysis. Sage.
- Frey, B.B. (2022). The Sage Encyclopedia of Research Design. <https://doi.org/10.4135/9781071812082>
- Fujiyama, H., Kamo, Y., & Schafer, M. (2021). Peer effects of friend and extracurricular activity networks on students' academic performance. *Social Science Research*, 97, 102560. <https://doi.org/10.1016/j.ssresearch.2021.102560>
- Graham, D. (2022). How many focus groups are enough: Focus Groups for Dissertation Research. Faculty Focus | Higher Ed Teaching & Learning.





- <https://www.facultyfocus.com/articles/academic-leadership/how-many-focus-groups-are-enough-focus-groups-for-dissertation-research/>
- Glassow, L.N. (2023). Inequitable teacher turnover and performance-based appraisal: A global trend? *Journal of Education Policy*, 1–27. <https://doi.org/10.1080/02680939.2023.2189753>
- Goretzko, D., Siemund, K., & Sterner, P. (2023). Evaluating model fit of measurement models in confirmatory factor analysis. *Educational and Psychological Measurement*, 001316442311638. <https://doi.org/10.1177/00131644231163813>
- Hennessy, S., D'Angelo, S., McIntyre, N., Koomar, S., Kreimeia, A., Cao, L., Brugha, M., & Zubairi, A. (2022). Technology use for teacher professional development in low- and middle-income countries: A systematic review. *Computers and Education Open*, 3, 100080. <https://doi.org/10.1016/j.caeo.2022.100080>
- Henson, R.K. & Roberts, J.K. (2006). Use of exploratory factor analysis in published research. *Educational and Psychological Measurement*, 66(3), 393–416. <https://doi.org/10.1177/0013164405282485>
- Hodge, E.M. & Stosich, E.L. (2022). Accountability, alignment, and coherence: How educators made sense of complex policy environments in the Common Core Era. *Educational Evaluation and Policy Analysis*, 44(4), 543–566. <https://doi.org/10.3102/01623737221079650>
- Kamis, C. & Lynch, S.M. (2020). Cronbach's alpha. SAGE Research Methods Foundations. <https://doi.org/10.4135/9781526421036917133>
- Mangale, S. (2020). Scree plot. Medium. <https://sanchitamangale12.medium.com/scree-plot-733ed72c8608>
- McRae, E.R., Aykens, P., Lowmaster, K., & Shepp, J. (2023). 9 trends that will shape work in 2023 and beyond. Harvard Business Review. <https://hbr.org/2023/01/9-trends-that-will-shape-work-in-2023-and-beyond>
- Paceley, M., Jen, S., Riquino, M., Cole, S., Carr, K., & Wright, K. (2022). Trauma-informed approaches to teaching students with marginalized identities during times of crisis. *Trauma-Informed Pedagogies*, 93–104. [https://doi.org/10.1007/978-3-030-92705-9\\_8](https://doi.org/10.1007/978-3-030-92705-9_8)
- Pennington, R.C., Ault, M.J., Courtade, G., Jameson, J.M., & Ruppard, A. (2023). High leverage practices and students with extensive support needs. Routledge, Taylor & Francis Group.
- Plonsky, L. (2015). Advancing Quantitative Methods in Second language research.
- Sürücü, L., Yikilmaz, İ., & Maslakçlı, A. (2022). Exploratory Factor Analysis (EFA) in Quantitative Researches and Practical Considerations. <https://doi.org/10.31219/osf.io/fgd4e>
- Tabachnick, B.G. & Fidell, L.S. (2022). Using multivariate statistics. Pearson India Education Services.
- Waller, N. & Revelle, W. (2023). What are the mathematical bounds for coefficient  $\alpha$ ? *Psychological Methods*. <https://doi.org/10.1037/met0000583>
- Windle, J., Morrison, A., Sellar, S., & Squires, R. (2022). Teachers at breaking point: Why working in south Australian schools is ... Research Gate. [https://www.researchgate.net/publication/368830181\\_Teachers\\_at\\_breaking\\_point\\_Why\\_working\\_in\\_South\\_Australian\\_schools\\_is\\_getting\\_tougher](https://www.researchgate.net/publication/368830181_Teachers_at_breaking_point_Why_working_in_South_Australian_schools_is_getting_tougher)
- Zakaria, Z., Don, Y., & Yaakob, M.F. (2021). Teachers' well-being from the Social Psychological Perspective. *International Journal of Evaluation and Research in Education (IJERE)*, 10(2), 641. <https://doi.org/10.11591/ijere.v10i2.21115>