

Original Article

Mathematics Teaching Assignment and Teacher Positive Well-Being in the Philippines: Evidence from SEA-PLM 2024

Rhiemar Jade Lagliba ¹, Christine Jean Bulalong ^{1,*}, Marie Grace Aparre ¹,
Nelda Nacion ¹

Received: 03 September 2026; Revised: 08 October 2026;

Accepted: 13 October 2026; Published: 20 October 2026

DOI: <https://doi.org/10.66074/M3F5T1H9Q>

Abstract

This study examined whether teacher positive well-being was associated with mathematics teaching assignment in the Philippine SEA-PLM 2024 teacher dataset while accounting for teaching experience and classroom problems. A retrospective observational design was used, drawing on data from 494 Grade 5 class teachers. Missing data were addressed through multiple imputation, and the primary analysis incorporated the SEA-PLM teacher final weight and 96 replicate weights using survey-weighted linear regression. Mathematics teaching assignment was not significantly associated with teacher positive well-being. Teaching experience was likewise not significantly associated with well-being, while classroom problems showed a negative but statistically uncertain association. Sensitivity analyses using square-root and natural-log transformations of the outcome, as well as a survey-weighted complete-case analysis, yielded the same overall conclusion. The findings indicate that none of the three variables independently distinguished teacher positive well-being in this dataset. For practice, the findings do not support differentiating teacher support solely by subject assignment or years of experience. A broader assessment of teachers' working conditions and available resources may provide a more appropriate basis for identifying support needs. The findings also demonstrate the importance of accounting for complex survey design and missing data in large-scale educational assessment research.

¹ University of the Immaculate Conception, Davao City, Philippines
*cjbulalong@gmail.com

Keywords: complex survey analysis, mathematics teaching assignment, Philippines, SEA-PLM 2024, teacher positive well-being

1. Introduction

Teacher well-being is an important concern in education because it is connected with teachers' professional functioning, retention, instructional quality, and the broader conditions in which teaching and learning occur. Teacher well-being is not determined by a single aspect of work. Rather, it reflects the interaction of personal characteristics, interpersonal relationships, job demands, and available resources. A recent meta-analysis involving 173 studies and 89,876 participants found that teacher well-being was associated with a wide range of personal and work-related factors, with the strength of these relationships varying across different forms of well-being and educational contexts (Zhou et al., 2024).

This issue is particularly relevant in the Philippine educational setting, where teachers work within a system characterized by ongoing concerns about workload, professional support, learning gaps, and disparities in school resources. The SEA-PLM 2024 regional context also reflects ongoing educational challenges following the COVID-19 pandemic, including persistent learning difficulties and inequalities in the conditions that support classroom instruction (UNICEF & SEAMEO, 2024). Philippine studies have likewise highlighted concerns related to teachers' workload and access to professional development (Rivera et al., 2025; Tarraya, 2024). These conditions suggest that teacher well-being should be understood not only as an individual characteristic but also in relation to the instructional and organizational environment in which teachers work.

One teaching context that warrants closer examination is mathematics. Mathematics teachers may encounter particular instructional challenges, including the need to explain abstract ideas, address misconceptions, accommodate differences in learners' prior knowledge, and sustain engagement in a subject that students may find difficult. Research among mathematics teachers has shown that well-being and stress can be related to more specific aspects of teaching, such as behavioral and cognitive engagement and technological-pedagogical mathematical knowledge (Jian et al., 2023). However, such evidence does not necessarily mean that mathematics teachers as a group experience lower well-being than teachers who do not teach mathematics. The mathematics teaching assignment may instead represent a broader instructional context in which different demands and resources are encountered. Whether positive well-being differs according to mathematics teaching assignment, therefore, remains an empirical question.

Other characteristics of teachers' work may also be relevant when examining this relationship. Classroom problems may represent one source of job demand because difficulties encountered in day-to-day teaching can require additional emotional,

cognitive, and instructional effort. Recent evidence based on the Job Demands-Resources (JD-R) model indicates that job demands are generally negatively associated with teacher well-being. However, the strength and direction of these associations vary according to the type of demand and the dimension of well-being examined (Li et al., 2025). Thus, classroom problems may be relevant to positive well-being, but their contribution should be examined empirically rather than assumed.

Teaching experience may also shape how teachers encounter their work. More experienced teachers may have had greater opportunities to develop classroom routines, instructional knowledge, professional confidence, and coping strategies. At the same time, years of service do not necessarily function as a resource in themselves. The potential benefits of experience may depend on the quality of professional relationships, organizational support, working conditions, and other resources available to teachers. Accordingly, teaching experience is treated in the present study as an important background characteristic that may account for variation in positive well-being rather than as an inherently protective resource.

The present study is informed by the Job Demands-Resources (JD-R) model developed by Bakker and Demerouti (2007, 2017). The JD-R framework posits that the relationship between job demands and the resources available to individuals at work shapes occupational well-being. Job demands require sustained effort and may contribute to strain, while job and personal resources can support motivation, coping, and positive functioning. Recent teacher-specific evidence supports the usefulness of this framework and shows that different demands and resources are not equally related to well-being. Li et al. (2025), for example, found considerable variation depending on the type of job demand and the well-being outcome. Similarly, recent evidence from the Philippines suggests that specific workplace resources may have different relationships with teacher well-being. Among 611 Philippine high school teachers, Haw et al. (2024) found that perceived relatedness support from school leaders was positively associated with well-being. In contrast, the relationships involving other forms of need support were not identical.

Within this framework, the present study does not assume that mathematics teaching assignment is itself a job demand or that teaching experience is automatically a personal resource. Instead, mathematics teaching assignment is considered an instructional context that may involve particular demands and resources; classroom problems are examined as potential indicators of classroom-level demands; and teaching experience is included as a teacher background characteristic that may be associated with positive well-being. This distinction allows the study to test the relationships among the variables without assigning theoretical effects that are not directly measured by the SEA-PLM indicators.

Despite increasing research on teacher well-being, relatively little evidence has examined whether positive well-being differs by mathematics teaching assignment in the Philippine context, using nationally derived large-scale assessment data. The Philippine SEA-PLM 2024 teacher dataset provides an opportunity to examine this question while also accounting for teaching experience and classroom problems.

Accordingly, this study examined whether teacher positive well-being was associated with mathematics teaching assignment among Philippine Grade 5 class teachers. Specifically, it sought to: (1) describe teacher positive well-being and the distribution of mathematics teaching assignment; (2) estimate the associations of teaching experience and classroom problems with teacher positive well-being; and (3) determine whether mathematics teaching assignment were associated with positive well-being after accounting for teaching experience and classroom problems.

2. Methodology

2.1 Research Design

This study used a retrospective observational design based on secondary data from the Philippine SEA-PLM 2024 teacher dataset. It examined whether teacher positive well-being was associated with mathematics teaching assignment while accounting for teaching experience and classroom problems. Because the variables were obtained from an existing observational dataset and were not manipulated or experimentally assigned, the analysis was intended to estimate adjusted associations rather than causal effects.

2.2 Data Source and Respondents

The study used the Philippine teacher dataset from the SEA-PLM 2024 main survey. The dataset contained 494 Grade 5 class teacher records. Teacher positive well-being had no missing observations, while mathematics teaching assignment had 14 missing observations, teaching experience had 3, and classroom problems had 1. In total, 17 teachers had at least one missing value among the study variables. Rather than excluding these records from the primary analysis, missing values were addressed using multiple imputation, allowing all 494 teacher records to be retained. A separate, complete case analysis involving 477 teachers was conducted as a sensitivity analysis. SEA-PLM provides a teacher final weight and teacher-level replicate weights specifically for the analysis of teacher data. The official data manual states that teacher data may be analyzed independently and that the teacher's final weight and the teacher replicate weights should be used to estimate teacher-level results and their sampling uncertainty (UNICEF & SEAMEO Secretariat, 2025).

2.3 Measures

Teacher Positive Wellbeing (T_POSWELLB) served as the outcome variable. It is a derived SEA-PLM 2024 teacher scale based on items TC09H-TC09K. Mathematics Teaching Assignment (T_MATH) indicated whether the teacher reported teaching mathematics. Teaching Experience (T_EXP) represented the teacher's teaching experience. Classroom Problems (T_PROBLEM) served as the

second covariate and is a derived SEA-PLM 2024 scale based on items TC16A to TC16E, described in the official scaling documentation as teacher-reported problems in their classes. T_PROBLEM is distinct from the separate T_ISSUES index, which is based on items TC15A to TC15G and represents teacher reports on issues affecting learning (UNICEF & SEAMEO, 2026).

The SEA-PLM contextual scale development process included confirmatory factor analysis, evaluation of cross-country measurement invariance, Rasch modeling, and the computation of weighted likelihood estimates for respondent scores. Scale reliability was also evaluated as part of the construct-validation process. For scales newly introduced in SEA-PLM 2024, including T_POSWELLB and T_PROBLEM, scores were transformed to a common regional reporting metric. These procedures provide the measurement basis for the derived well-being and classroom problems scales used in the present analysis (UNICEF & SEAMEO, 2026).

2.4 Data Preparation and Statistical Analysis

All data preparation and statistical analyses were conducted in R version 4.6.1. The analysis used the *haven*, *mice*, *survey*, and *mitools* packages. Missing data were handled using multiple imputation by chained equations (van Buuren & Groothuis-Oudshoorn, 2011). Fifty imputed datasets were generated using 20 iterations and a fixed random seed to support reproducibility. Binary logistic regression was used to impute missing values for the mathematics teaching assignment, while predictive mean matching was used for teaching experience and classroom problems. Teacher positive well-being and final weight were included as predictors in the imputation model, but were not themselves imputed. Observed values were retained unchanged. Convergence was examined using trace plots across the 50 imputation chains, and the imputation procedure recorded no computational events.

The primary inferential analysis used survey-weighted linear regression implemented through the R *survey* framework (Lumley, 2004). Teacher positive well-being was entered as the outcome, mathematics teaching assignment as the categorical predictor, and teaching experience and classroom problems as covariates. The analysis incorporated the SEA-PLM teacher final weight (FWGT_TQ) and all 96 supplied teacher replicate weights.

SEA-PLM uses a two-stage sampling design and employs Jackknife 2 replication to estimate sampling variance (UNICEF & SEAMEO Secretariat, 2025). The replicate weights represent subsamples that allow sampling variability to be estimated from the differences between the full-sample estimate and the replicate estimates. Accordingly, the regression model was estimated within each of the 50 imputed datasets using the teacher's final and replicate weights. The resulting coefficient estimates and design-based covariance matrices were then combined using Rubin's multiple imputation rules so that the final standard errors reflected both sampling uncertainty and uncertainty arising from missing data.

Survey-weighted descriptive statistics were also estimated across the 50 imputed datasets. These included the weighted mean teacher positive well-being score, weighted mean teaching experience, weighted mean classroom problems score, the weighted distribution of mathematics teaching assignment, and weighted well-being means within the mathematics teaching groups.

Model diagnostics included residual-versus-fitted plots and normal Q-Q plots. Because the residuals showed a departure from normality, sensitivity analyses were also conducted using square-root and natural-log transformations of teacher positive well-being. The same survey-weighted multiple imputation procedure was used for these transformed models so that conclusions could be compared with those obtained from the original SEA-PLM scale.

A survey-weighted, complete-case analysis using the 477 teachers with complete study data was additionally conducted to assess whether the conclusions were sensitive to the multiple imputation procedure. Statistical tests used a two-sided significance level of .05, and 95% confidence intervals were reported for the primary regression coefficients.

2.5 Ethical Considerations

The study used anonymized secondary data and did not involve direct contact with respondents. The analysis was limited to variables available in the SEA-PLM 2024 dataset, and results were reported only in aggregate form. The study maintained confidentiality, practiced responsible data use, and cautioned against causal interpretation given its observational design.

3. Results

3.1 Multiple Imputation and Model Diagnostics

The primary analysis included all 494 teacher records after addressing missing values via multiple imputation. Fifty imputed datasets were generated using 20 iterations. Trace plots showed no systematic drift or persistent separation among the imputation chains, and the imputation procedure recorded no computational events. The proportion of missing information in the pooled regression estimates was low, ranging from approximately 3.6% to 6.9% across the substantive predictors. Residual diagnostics for the survey-weighted regression model indicated a departure from normality. For the first completed dataset, used for diagnostic illustration, the Shapiro-Wilk test was statistically significant ($W = .933$, $p < .001$). The normal Q-Q plot likewise showed deviations from the reference line, particularly in the lower tail. The residual versus fitted plot, however, did not show a pronounced funnel-shaped pattern.

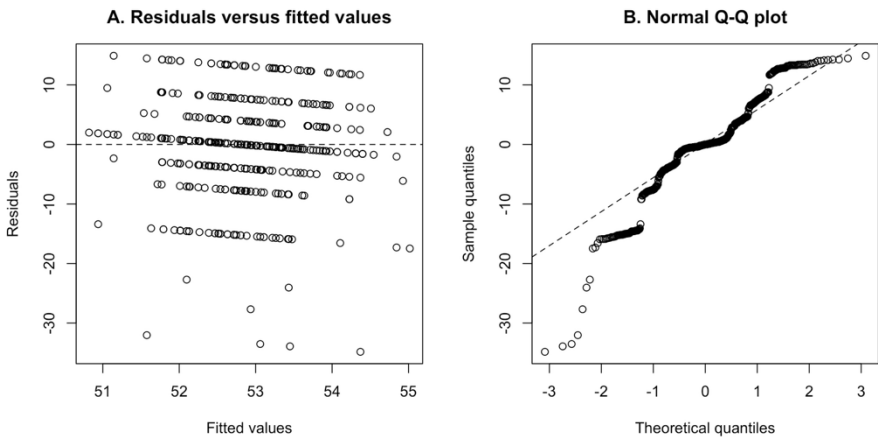


Figure 1. Residual diagnostics for the survey-weighted regression model.

Panel A presents residuals against fitted values, while Panel B presents the normal Q-Q plot. Diagnostics are shown for the first completed imputed dataset using the original SEA-PLM teacher positive well-being scale. Primary inferential estimates were pooled across 50 multiply imputed datasets.

Because of the observed departure from normality, the primary model was reestimated using square-root and natural-log transformations of teacher positive well-being. Neither transformation improved the residual distribution. The Shapiro-Wilk statistic decreased to $W = .899$ for the square root transformation and $W = .847$ for the logarithmic transformation, with both tests remaining statistically significant at $p < .001$. Importantly, the inferential conclusions were unchanged across all three specifications. Mathematics teaching assignment, teaching experience, and classroom problems remained statistically nonsignificant under both transformed models. The original SEA-PLM well-being metric was therefore retained for the primary analysis.

3.1.1 Survey-Weighted Descriptive Results

The pooled survey weighted mean for teacher positive well-being was 52.93, $SE = 0.36$, 95% CI [52.22, 53.64]. Mean teaching experience was 14.18 years, $SE = 0.50$, 95% CI [13.19, 15.17], while the mean classroom problems score was 52.69, $SE = 0.66$, 95% CI [51.37, 54.01].

After applying the SEA-PLM teacher weights and performing multiple imputation, an estimated 56.51% of teachers did not report teaching mathematics, while 43.49% reported teaching mathematics. The weighted mean positive well-being score was 52.63 among teachers who did not report teaching mathematics and 53.32 among those who did. The unadjusted weighted difference between the groups was therefore approximately 0.69 scale points.

Table 1. Survey weighted descriptive estimates after multiple imputation.

Measure	Estimate	SE	95% CI
Teacher positive well-being, overall mean	52.93	0.36	[52.22, 53.64]
Teaching experience, mean years	14.18	0.50	[13.19, 15.17]
Classroom problems, mean	52.69	0.66	[51.37, 54.01]
Mathematics assignment: No, weighted %	56.51	3.18	[50.17, 62.85]
Mathematics assignment: Yes, weighted %	43.49	3.18	[37.15, 49.83]
Positive well-being, mathematics No	52.63	0.43	[51.78, 53.49]
Positive well-being, mathematics Yes	53.32	0.60	[52.12, 54.52]

Note. Estimates incorporate the SEA-PLM teacher final weight and 96 teacher replicate weights and are pooled across 50 multiply imputed datasets.

3.1.2 Survey-Weighted Regression Results

The primary survey-weighted regression examined whether mathematics teaching assignment was associated with teachers' positive well-being, adjusting for teaching experience and classroom problems.

Mathematics teaching assignment was not significantly associated with teacher positive well-being, $B = 0.674$, $SE = 0.727$, $t = 0.927$, $df = 64.46$, $p = .357$, 95% CI [-0.779, 2.127]. The positive coefficient indicated that teachers who reported teaching mathematics had an estimated adjusted well-being score approximately 0.67 points higher than teachers who did not report teaching mathematics, but the confidence interval included zero.

Teaching experience was also not significantly associated with teacher positive well-being, $B = -0.011$, $SE = 0.044$, $t = -0.255$, $df = 63.37$, $p = .800$, 95% CI [-0.099, 0.077].

The coefficient for classroom problems was negative. However, the result did not meet the .05 significance criterion, $B = -0.065$, $SE = 0.036$, $t = -1.782$, $df = 65.63$, $p = .079$, 95% CI [-0.137, 0.008]. Thus, although higher classroom problem scores were associated with lower estimated positive well-being scores in the fitted model, the data did not provide sufficient evidence to conclude that this association differed from zero at the specified significance level.

Table 2. Survey weighted regression of teacher positive well-being after multiple imputation.

Predictor	B	SE	df	t	p	95% CI
Mathematics teaching assignment	0.674	0.727	64.46	0.927	.357	[-0.779, 2.127]
Teaching experience	-0.011	0.044	63.37	-0.255	.800	[-0.099, 0.077]
Classroom problems	-0.065	0.036	65.63	-1.782	.079	[-0.137, 0.008]

Note. Mathematics teaching assignment was coded with teachers who did not report teaching mathematics as the reference group. Estimates incorporate the SEA-PLM teacher final weight and 96 replicate weights and were pooled across 50 multiply imputed datasets using Rubin's rules.

3.2.3 Sensitivity Analyses

Two sensitivity analyses were conducted. First, transformation-sensitivity models were estimated using square-root and natural-log transformations of teacher positive well-being. Mathematics teaching assignment remained nonsignificant in both the square root model, $p = .323$, and the logarithmic model, $p = .290$. Teaching experience also remained nonsignificant, $p = .785$ and $p = .768$, respectively. Classroom problems remained nonsignificant in both transformed models ($p = .119$ and $p = .191$, respectively).

Second, the survey weighted regression was repeated using only the 477 teachers with complete data. This complete-case analysis produced the same overall substantive conclusion as the multiply imputed analysis: mathematics teaching assignment, teaching experience, and classroom problems were not statistically significant predictors of teachers' positive well-being. The consistency of these results indicates that the main findings were not materially dependent on either the treatment of missing data or the transformation of the outcome variable.

4. Discussion

The primary finding of this study was that mathematics teaching assignment was not significantly associated with teachers' positive well-being after accounting for teaching experience and classroom problems, and after incorporating the SEA-PLM teacher sampling weights and replicate weights. Teachers who reported teaching mathematics had a slightly higher survey-weighted mean well-being score than those who did not, and the adjusted regression coefficient was also positive. However, the difference was small and statistically uncertain. Thus, the findings do not provide evidence of a clear difference in positive well-being between teachers who reported teaching mathematics and those who did not.

This result does not imply that mathematics teaching is free from distinctive professional demands. Rather, a mathematics teaching assignment may be too broad an indicator to represent the specific demands and resources experienced by mathematics teachers. Jian et al. (2023), for example, found that well-being among mathematics teachers was associated with more specific factors such as behavioral and cognitive engagement and technological-pedagogical mathematical knowledge. Their study focused on variation among mathematics teachers rather than comparing them with teachers of other subjects. This distinction is important because being assigned to teach mathematics may not capture differences in instructional preparation, confidence, pedagogical knowledge, student difficulties, workload, or available support that could be more directly related to well-being.

This interpretation is also consistent with broader evidence that teacher well-being is shaped by multiple personal, interpersonal, and work-related factors rather than by a single occupational characteristic. In a meta-analysis of 173 studies

involving 89,876 participants, Zhou et al. (2024) found that teacher well-being was associated with a wide range of antecedents and that some relationships varied according to teacher and educational context. Their findings suggest that the factors associated with teacher well-being operate within a broader system of personal and workplace conditions. Therefore, the nonsignificant mathematics assignment result in the present study is better interpreted as an indication that subject assignment alone did not clearly distinguish positive well-being in this population, rather than as evidence that subject-specific working conditions are unimportant.

Classroom problems showed a negative coefficient, indicating that higher scores on the SEA-PLM classroom problems scale were associated with lower estimated positive well-being in the fitted model. However, this association did not reach the specified .05 significance level ($B = -0.065$, $p = .079$), and its 95% confidence interval included zero. The direction of the estimate is theoretically consistent with the Job Demands-Resources (JD-R) model, in which sustained job demands may contribute to poorer occupational well-being. However, the present result should not be interpreted as confirming an independent association between classroom problems and teacher positive well-being.

Recent evidence supports this more cautious interpretation of job demands. Li et al. (2025), in a meta-analysis of 58 studies and 494 effect sizes, found that job demands were negatively associated with teacher well-being overall, but also reported that the relationship varied by the type of job demand and the form of well-being examined. Similarly, Collie (2023) found that different job demands did not relate uniformly to different dimensions of teacher well-being. For example, time pressure was negatively associated with teachers' subjective vitality but positively associated with behavioral engagement. These findings show that the effects of work demands can depend on both the specific demand and the well-being outcome being considered.

The Philippine context provides further reason not to reduce teacher well-being to a single demand or resource. Haw et al. (2024), studying 611 high-school teachers from 14 schools in the Philippines, found that perceived relatedness support from school leaders was positively associated with well-being. In contrast, autonomy support and competence support were not significant predictors in their variable-centered analysis. This indicates that even theoretically relevant workplace resources may differ in their associations with teacher well-being. The present findings similarly suggest that understanding teachers' positive well-being may require attention to the specific combination of demands, resources, relationships, and school conditions they experience, rather than assuming that all theoretically relevant factors will independently predict well-being.

Teaching experience was also not significantly associated with teacher positive well-being. Its regression coefficient was close to zero, suggesting that years of teaching experience did not make a detectable independent contribution to positive well-being after accounting for the other variables. This finding calls for caution in treating experience itself as a personal resource. Years in the profession may provide opportunities to develop classroom routines, professional knowledge, and coping

strategies. However, these potential benefits may depend on the working conditions and resources available to teachers. Experience in itself does not necessarily indicate that such resources have been developed or are accessible.

Research examining teachers at different career stages supports this distinction. Using TALIS 2018 data from 24 European countries, Admiraal and Kittelsen Røberg (2023) found broadly similar patterns of job demands and resources among teachers across career stages. However, the relationships differed depending on the specific dimension of job satisfaction examined. Their results suggest that length of experience does not necessarily produce a simple progression toward more favorable occupational outcomes. In the present study, teaching experience may therefore be better understood as a background characteristic that can shape how teachers encounter and respond to their work rather than as a resource that automatically produces higher positive well-being.

Taken together, the findings provide a more nuanced application of the Job Demands-Resources (JD-R) model. The framework remains useful because it emphasizes that teacher well-being develops through the relationship between the demands teachers encounter and the resources available to address them. However, the present results suggest that mathematics teaching assignment should not itself be treated as a direct measure of job demand. It is better understood as a teaching context within which particular demands and resources may arise. Similarly, years of teaching experience may create opportunities for the development of personal resources without constituting a resource in itself. The nonsignificant coefficient for classroom problems also indicates that a theoretically plausible demand does not necessarily yield a statistically clear independent association when other variables, sampling uncertainty, and missing-data uncertainty are taken into account. This interpretation is consistent with recent JD-R evidence showing that different demands and resources have different relationships with teacher well-being.

These findings also differ meaningfully from the results obtained using the initial conventional complete-case analysis. In that analysis, classroom problems appeared statistically significant. Once the complex SEA-PLM sampling design was appropriately incorporated, the association was no longer statistically significant, and the multiple-imputation analysis produced the same general conclusion. This demonstrates the importance of accounting for the sampling structure of large-scale assessment data when estimating uncertainty. The revised analysis, therefore, supports a more cautious conclusion: none of the three predictors examined in this study showed a statistically clear independent association with teacher positive well-being.

The findings should nevertheless be interpreted within the scope of the variables available in SEA-PLM 2024. Mathematics teaching assignment was represented as a binary indicator and did not capture the intensity or nature of mathematics teaching demands. The analysis also did not include many resources identified in recent teacher well-being research, such as school leadership, collegial relationships, autonomy, professional support, coping resources, or teacher-student relationships. In addition, the cross-sectional and observational nature of the dataset prevents causal conclusions.

Future research could examine whether subject-specific demands interact with school and personal resources and whether these relationships differ across teachers, schools, and teaching contexts. Longitudinal studies would also help determine how changes in work demands and resources relate to changes in teacher well-being over time.

5. Conclusion

This study examined whether teachers' positive well-being differed by mathematics teaching assignment, while accounting for teaching experience and classroom problems, in the Philippine SEA-PLM 2024 teacher dataset. After incorporating the SEA-PLM teacher final weight, replicate weights, and multiple imputation for missing data, mathematics teaching assignment was not significantly associated with teacher positive well-being. Teaching experience was likewise not significantly associated with the outcome. Classroom problems showed a negative estimated association with positive well-being, but the confidence interval included zero, and the result did not reach the specified level of statistical significance. Taken together, the findings indicate that mathematics teaching assignment, teaching experience, and classroom problems did not independently distinguish teacher positive well-being in this dataset. This should not be interpreted as evidence that subject-specific demands, experience, or classroom conditions are unimportant. Rather, teacher well-being may reflect a broader combination of personal, interpersonal, instructional, and organizational conditions that were not fully represented by the variables included in the present model. Future studies may examine more specific dimensions of teachers' work, including workload, school leadership, collegial support, teacher-student relationships, instructional demands, autonomy, and access to professional resources. Longitudinal and multilevel research may also help clarify how teacher well-being develops across different school and teaching contexts. For practice, the findings do not support differentiating teacher support solely by subject assignment or years of teaching experience. A broader assessment of teachers' working conditions and available resources may provide a more appropriate basis for identifying support needs.

Acknowledgment

The authors acknowledge the Southeast Asia Primary Learning Metrics (SEA-PLM) initiative and the institutions responsible for making the SEA-PLM 2024 data available for secondary analysis. This research received no external funding.

Conflict of Interest Statement

The authors have no relevant financial or non-financial interests to disclose.

References

- Admiraal, W., & Kittelsen Røberg, K. I. (2023). Teachers' job demands, resources and their job satisfaction: Satisfaction with school, career choice and teaching profession of teachers in different career stages. *Teaching and Teacher Education*, 125, 104063. <https://doi.org/10.1016/j.tate.2023.104063>
- Bakker, A. B., & Demerouti, E. (2007). The job demands-resources model: State of the art. *Journal of Managerial Psychology*, 22(3), 309–328. <https://doi.org/10.1108/02683940710733115>
- Bakker, A. B., & Demerouti, E. (2017). Job demands-resources theory: Taking stock and looking forward. *Journal of Occupational Health Psychology*, 22(3), 273–285. <https://doi.org/10.1037/ocp0000056>
- Collie, R. J. (2023). Teacher well-being and turnover intentions: Investigating the roles of job resources and job demands. *British Journal of Educational Psychology*, 93(3), 712–726. <https://doi.org/10.1111/bjep.12587>
- Haw, J. Y., Nalipay, M. J. N., & King, R. B. (2024). Perceived relatedness-support matters most for teacher well-being: A self-determination theory perspective. *Teachers and Teaching*, 30(6), 745–761. <https://doi.org/10.1080/13540602.2023.2263736>
- Jian, X., Wijaya, T. T., & Yu, Q. (2023). Key factors affecting mathematics teachers' well-being and stress levels: An extended engagement theory. *International Journal of Environmental Research and Public Health*, 20(1), 548. <https://doi.org/10.3390/ijerph20010548>
- Li, Y., Chen, J., Lu, J., & Wang, X. (2025). A meta-analysis of teacher well-being: A job demands and resources perspective. *Educational Research Review*, 49, 100719. <https://doi.org/10.1016/j.edurev.2025.100719>
- Lumley, T. (2004). Analysis of complex survey samples. *Journal of Statistical Software*, 9(8), 1–19. <https://doi.org/10.18637/jss.v009.i08>
- Rivera, J. P. R., Sinsay-Villanueva, L. M., Tanyag, I. H., Berroya, J. D., Garcia, G. D. V., & Lim, V. L. (2025). *Revitalizing the Philippine education system: Facilitating access and participation to in-service training (INSET) and teacher professional development (TPD)* (PIDS Discussion Paper Series No. 2025-14). Philippine Institute for Development Studies. <https://doi.org/10.62986/dp2025.14>
- Tarraya, H. O. (2024). Teachers' workload policy: Its impact on Philippine public school teachers (Public policy analysis and review). *Puissant*, 5, 1614–1629. <https://puissant.stepacademic.net/puissant/article/view/246>
- UNICEF & SEAMEO Secretariat. (2025). *SEA-PLM 2024 data user manual*. SEA-PLM Secretariat. <https://www.seaplum.org/index.php/sea-plm-2024/datasets-and-questionnaires-2024>
- UNICEF & SEAMEO. (2024). *SEA-PLM 2024 main regional report: Children's learning in 6 Southeast Asian countries*. SEA-PLM Secretariat. <https://www.seaplum.org/index.php/sea-plm-2024/regional-results-2024>

UNICEF & SEAMEO. (2026). *SEA-PLM 2024 coding, scaling, and scoring*. SEA-PLM Secretariat. <https://www.seaplm.org/index.php/sea-plm-2024/frameworks-2024>

van Buuren, S., & Groothuis-Oudshoorn, K. (2011). mice: Multivariate imputation by chained equations in R. *Journal of Statistical Software*, 45(3), 1–67. <https://doi.org/10.18637/jss.v045.i03>

Zhou, S., Slemple, G. R., & Vella-Brodrick, D. A. (2024). Factors associated with teacher well-being: A meta-analysis. *Educational Psychology Review*, 36, Article 63. <https://doi.org/10.1007/s10648-024-09886-x>

Author Contributions: Lagliba, R. J., Bulalong, C. J., Aparre, M. G., and Nacion, N.; Study conceptualization, methodology design, data collection, formal analysis, original manuscript writing, critical review, and manuscript editing. All authors read and approved the final version of the manuscript and agreed to be accountable for the integrity and accuracy of the work.