Psychosocial Correlates of Psychological Well-Being among Non-Qualified Early Childhood Education Teachers

Nabila Rizki Utami*, Ali Formen

Universitas Negeri Semarang, Semarang, Indonesia
*Corresponding author, email: nabillaarizki06@gmail.com

https://doi.org/10.17977/um065.v7.i4.2027.7

Article history
Submitted: 24 August 2026
Revised: 3 October 2026
Accepted: 4 October 2026
Published: 6 October 2026

Keywords
Non-qualified ECE teachers
Professional self-esteem
Psychological well-being
Sense of belonging
Social support

Abstract
Psychological well-being is central to teachers' professional functioning, particularly among non-qualified Early Childhood Education (ECE) teachers who work under qualification-related and institutional constraints. This cross-sectional explanatory study examined the associations of Social Support, Professional Self-Esteem, and Sense of Belonging with Psychological Well-Being among 268 non-qualified ECE teachers in Temanggung Regency, Central Java, Indonesia. Participants were selected using proportionate stratified random sampling and completed standardized questionnaires. Data were analyzed using descriptive statistics, Pearson correlations, and multiple linear regression. Social Support was positively associated with Psychological Well-Being ($B = 0.422$, $\beta = 0.435$, $t = 3.537$, $p < 0.001$), as were Professional Self-Esteem ($B = 0.308$, $\beta = 0.232$, $t = 4.868$, $p < 0.001$) and Sense of Belonging ($B = 0.342$, $\beta = 0.275$, $t = 3.087$, $p = 0.002$). The three-predictor model accounted for 36.8% of the variance in Psychological Well-Being (Adjusted $R^2 = 0.368$). Among the three predictors, Social Support showed the largest standardized coefficient. These findings indicate that interpersonal support, professional self-evaluation, and perceived belonging are distinct but complementary correlates of Psychological Well-Being in this population. Because the data were cross-sectional, the findings should be interpreted as predictive associations rather than evidence of causal effects.

1. Introduction

The professional demands of Early Childhood Education (ECE) require teachers to sustain intensive cognitive, emotional, and relational engagement with young children while adapting to changing educational practices. Heavy workloads, challenging classroom conditions, parental expectations, limited institutional resources, and sustained emotional demands can increase occupational stress and threaten teacher well-being (Agyapong, Obuobi-Donkor, Burback, & Wei, 2022; Madigan, Kim, Glandorf, & Kavanagh, 2023; Wang, Wu, Ye, Liao, & Wei, 2022). These pressures may be especially salient for teachers who do not meet formal academic qualification requirements but continue to perform the same core educational responsibilities.

In Indonesia, teacher qualification remains a persistent issue in ECE. National data indicate that a substantial proportion of ECE educators have not yet attained the minimum academic qualification of a bachelor's degree or Diploma IV (Kementerian Pendidikan Dasar dan Menengah Republik Indonesia, 2025). Qualification gaps may coincide with restricted access to professional development, lower professional recognition, limited resources, and less secure working conditions. Such conditions are relevant to psychological well-being because teacher well-being is associated with teaching quality, occupational sustainability, and the capacity to provide responsive support to children (Dreer, 2023; Jennings et al., 2017).

Psychological Well-Being refers to positive psychological functioning across self-acceptance, positive relations with others, autonomy, environmental mastery, purpose in life, and personal growth. For non-qualified ECE teachers, maintaining this form of well-being may depend not only on individual characteristics but also on social and professional resources available in the work environment. Social Support is one such resource: perceived support from family, friends, colleagues, leaders, and significant others can reduce social isolation, facilitate coping, and provide emotional or instrumental assistance under occupational strain (Gray, Wilcox, & Nordstokke, 2017; Skaalvik & Skaalvik, 2020; Zimet, Dahlem, Zimet, & Farley, 1988).

© 2026 The Author(s)
This is an Open Access article under the Creative Commons Attribution-ShareAlike 4.0 International License
ISSN: 2797-3174

Professional Self-Esteem represents teachers' evaluations of their competence, worth, and significance in their professional role. Positive professional self-evaluation may support commitment, adaptability, resilience, and sustained professional functioning under demanding conditions (Repišti, 2020). This construct is particularly relevant for non-qualified ECE teachers because formal qualification status may shape how teachers perceive their legitimacy and value within the profession, although professional experience, recognition, and successful teaching may also contribute to professional self-worth.

Sense of Belonging reflects the perception of being accepted, valued, connected, and recognized as part of a social environment (Mellinger, Fritzson, Park, & Dimidjian, 2024). In educational settings, belonging can strengthen professional identity, psychological security, and engagement, particularly when teachers experience collegial inclusion and supportive leadership (Allen, Kern, Rozek, McInerney, & Slavich, 2021). Although Social Support and Sense of Belonging are both relational constructs, they are conceptually distinct: Social Support concerns perceived access to assistance and supportive resources, whereas Sense of Belonging concerns perceived inclusion, acceptance, and membership within a social or professional community.

Existing studies have linked social support, self-esteem, and belonging to teacher well-being, but these constructs have often been examined separately or among teachers who already meet formal professional qualifications. Evidence regarding their simultaneous associations with Psychological Well-Being among non-qualified ECE teachers remains limited. Research on Professional Self-Esteem in ECE is also comparatively scarce. This gap is important because non-qualified teachers may rely simultaneously on external support, internal professional self-evaluation, and a sense of inclusion to maintain positive psychological functioning.

Accordingly, this study examined Social Support, Professional Self-Esteem, and Sense of Belonging as simultaneous predictors of Psychological Well-Being among non-qualified ECE teachers in Temanggung Regency. Using a cross-sectional explanatory design and multiple linear regression, the study tested the individual and joint associations of the three predictors with Psychological Well-Being. The study was intended to clarify whether these conceptually distinct psychosocial resources contribute uniquely within the same model and to provide evidence relevant to the professional and psychosocial support of non-qualified ECE teachers.

2. Method

2.1. Research Design and Setting

This study employed a quantitative cross-sectional explanatory design to examine the associations of Social Support, Professional Self-Esteem, and Sense of Belonging with Psychological Well-Being among non-qualified Early Childhood Education (ECE) teachers. The quantitative approach enabled objective measurement of the study variables and hypothesis testing using structured instruments and statistical analysis (Creswell & Creswell, 2023). Because all variables were measured at one time point without experimental manipulation, the regression coefficients are interpreted as predictive associations rather than causal effects.

The study was conducted in Temanggung Regency, Central Java, Indonesia, with a focus on non-qualified ECE teachers. Temanggung was selected as the research setting because a substantial number of ECE teachers in the region had not yet met the minimum academic qualification of bachelor's degree or Diploma IV . Data from the Temanggung Education, Youth, and Sports Office indicated that 609 of 1,608 ECE teachers had not met the minimum academic qualification in 2025. This setting provided a relevant context for examining the psychological well-being of ECE teachers who continue to perform professional teaching responsibilities despite limitations in formal academic qualifications.

2.2. Participants and Sampling

The population comprised 796 non-qualified ECE teachers who were actively teaching in formal and non-formal ECE institutions in Temanggung Regency, Central Java, Indonesia. Non-qualified teachers were defined as those who had not yet met the minimum academic qualification of bachelor's degree or Diploma IV. The population was identified from two institutional administrative sources, comprising 610 teachers in the first stratum and 186 teachers in the second stratum.

Proportionate stratified random sampling was used because the sampling frame comprised two identifiable strata of unequal size. Proportional allocation preserved each stratum's representation in the overall population, yielding approximately 205 participants from the first stratum (610/796 of the population) and 63 participants from the second stratum (186/796 of the population), for a total analytic sample of 268 participants. Within each stratum, eligible teachers were randomly selected. The minimum sample size was estimated using the Slovin formula with a 5% margin of error. For a population of 796 teachers, the minimum requirement was approximately 266 participants. The final analytic sample comprised 268 participants, exceeding this minimum requirement.

© 2026 The Author(s)
This is an Open Access article under the Creative Commons Attribution-ShareAlike 4.0 International License
ISSN: 2797-3174

Participants were eligible for inclusion when they were actively working as ECE teachers in Temanggung Regency and had not met the minimum academic qualification of bachelor's degree or Diploma IV. Participants were drawn from both formal and non-formal ECE settings. Data were collected using structured questionnaires measuring Social Support, Professional Self-Esteem, Sense of Belonging, and Psychological Well-Being. The final sample of 268 participants provided the empirical basis for examining the individual and simultaneous predictive roles of the three independent variables in relation to Psychological Well-Being. The demographic profile of the participants was also examined to describe the characteristics of the study sample. The characteristics included age, sex, and highest educational attainment. The sample was predominantly female, accounting for 98.7% of the 268 participants. These demographic characteristics were considered important for describing the profile of non-qualified ECE teachers involved in the study.

2.3. Research Instruments

Data were collected using four psychological scales. Social Support was measured with the 12-item Multidimensional Scale of Perceived Social Support (MSPSS; (Zimet et al., 1988). Professional Self-Esteem was assessed with the Professional Self-Esteem Scale (PSES-14; (Repišti, 2020), originally containing 14 items; 12 items were retained after item-validity testing. Sense of Belonging was assessed with the Sense of Belonging Scale (SBS; (Mellinger et al., 2024), originally containing 16 items; 12 items were retained after item-validity testing. Psychological Well-Being was measured with the 18-item Ryff Psychological Well-Being Short Scale adapted by Humaidah and Mulyono (2025).

For instruments that were not originally available in the Indonesian language for the present population, linguistic and contextual adaptation was undertaken before administration. Item wording was reviewed to ensure semantic clarity and contextual suitability for non-qualified ECE teachers. The SBS, originally developed in English, was translated into Indonesian and contextually adjusted for the present educational setting. The Indonesian RPWB Short Scale used in this study followed the adaptation reported by Humaidah and Mulyono (2025). For the MSPSS and PSES, the wording used in the present study was reviewed for comprehensibility and contextual relevance before item testing. The instruments and their construct domains are summarized in Table 1.

Table 1. Research Instruments Used in the Study

Variable	Instrument	Developer/Source	Dimensions/Aspects	Number of Items	Response Scale
Social Support	Multidimensional Scale of Perceived Social Support (MSPSS)	Zimet et al. (1988)	Family Support, Friends Support, Significant Other Support	12	5-point Likert scale
Professional Self-Esteem	Professional Self-Esteem Scale (PSES-14)	Repišti et al. (2020)	Professional Self-Esteem in the Narrow Sense, Perceived Respect Gained from Coworkers and Supervisors, Self-Esteem Based on Sense of Belonging to a Profession	14	Likert scale
Sense of Belonging	Sense of Belonging Scale (SBS)	Mellinger et al. (2024)	Feeling Valued, Feeling Accepted, Feeling Included/Connected, Fitting In	16	5-point Likert scale
Psychological Well-Being	Ryff's Psychological Well-Being Short Scale (RPWB Short Scale)	Adapted by Humaidah & Mulyono (2025)	Self-Acceptance, Positive Relations with Others, Autonomy, Environmental Mastery, Purpose in Life, Personal Growth	18	5-point Likert scale

The MSPSS assesses perceived support from family, friends, and significant others. The PSES-14 covers Professional Self-Esteem in the Narrow Sense, Perceived Respect Gained from Coworkers and Supervisors, and Self-Esteem Based on Sense of Belonging to a Profession. The latter domain reflects self-evaluation derived from professional membership rather than the broader perception of interpersonal acceptance and inclusion assessed by the SBS. Thus, although the constructs are conceptually adjacent, they were operationalized as distinct variables and were entered separately in the regression model; multicollinearity was assessed before interpreting their unique coefficients.

The SBS was originally developed in English and was translated into Indonesian and contextually modified for the present research setting. It assesses Feeling Valued, Feeling Accepted, Feeling Included or Connected, and Fitting In. Following item-validity testing, 12 of the original 16 items were retained for analysis. Responses were recorded on a five-point Likert-type scale ranging from strongly agree to strongly disagree. The RPWB Short Scale contains 18 items representing Self-Acceptance, Positive Relations with Others, Autonomy,

© 2026 The Author(s)
This is an Open Access article under the Creative Commons Attribution-ShareAlike 4.0 International License
ISSN: 2797-3174

Environmental Mastery, Purpose in Life, and Personal Growth. The Indonesian version used in this study was adapted by Humaidah and Mulyono (2025) and employed five response categories. Across the study instruments, item-validity testing was conducted before the main analysis to evaluate the adequacy of retained items for their intended constructs.

Item-level validity screening was conducted prior to the main analysis. Items that failed to meet the item-validity criterion applied during the instrument-testing stage were excluded from final scoring. This procedure resulted in the removal of 2 items from the original 14-item Professional Self-Esteem Scale (PSES-14), leaving 12 retained items, and 4 items from the original 16-item Sense of Belonging Scale (SBS), leaving 12 retained items. All 12 MSPSS items and all 18 RPWB items were retained. The final retained-item sets demonstrated acceptable internal consistency, with Cronbach's α = .926 for Professional Self-Esteem, α = .725 for Sense of Belonging, α = .820 for Social Support, and α = .954 for Psychological Well-Being. Because a separate CFA or EFA was not conducted for all instruments in the present study, the psychometric evidence reported here is limited to the item-level validity screening actually performed and the internal-consistency estimates of the retained item sets. No additional construct-validity analysis is claimed beyond these procedures. Internal consistency was then evaluated using Cronbach's alpha, as reported in Table 2.

Table 2. Reliability of the Research Instruments

Variable	Instrument	Number of Items	Cronbach's Alpha	Interpretation
Social Support	MSPSS	12	0.820	Reliable
Professional Self-Esteem	PSES-14	12*	0.926	Reliable
Sense of Belonging	SBS	12*	0.725	Reliable
Psychological Well-Being	RPWB Short Scale	18	0.954	Reliable

2.4. Data Collection

Data collection was conducted among non-qualified Early Childhood Education (ECE) teachers who met the predetermined research criteria in Temanggung Regency, Central Java, Indonesia. The data collection process was carried out over approximately two months. Participants were invited to complete structured questionnaires measuring Social Support, Professional Self-Esteem, Sense of Belonging, and Psychological Well-Being. The questionnaires were administered to participants who had been selected through the proportionate stratified random sampling procedure. The sampling procedure was based on the identified population of non-qualified ECE teachers from Dindikpora and YPMNU in Temanggung Regency. A total of 268 completed responses were obtained and included in the final analysis. Data were collected anonymously to protect participants' privacy and confidentiality. Follow-up reminders were provided during the data collection period to encourage participation and improve the response rate. The collected responses were subsequently checked and prepared for statistical analysis using SPSS. The final dataset consisted of 268 valid participants and was used for descriptive and inferential statistical analyses.

2.5. Data Analysis

The data were analyzed using IBM SPSS Statistics. Analyses were designed to evaluate the associations of Social Support, Professional Self-Esteem, and Sense of Belonging with Psychological Well-Being in the cross-sectional sample. The analysis began with descriptive statistics to describe the characteristics and distribution of the research variables. The analysis included the minimum score, maximum score, mean, and standard deviation for each variable.

Assumption testing was subsequently conducted before performing multiple linear regression analysis. The assumption tests included normality, linearity, multicollinearity, and heteroscedasticity tests. Normality was examined using the Kolmogorov-Smirnov test. The linearity test was conducted by examining the deviation from linearity. Multicollinearity was assessed using Tolerance and Variance Inflation Factor (VIF) values. Heteroscedasticity was examined using a scatterplot of standardized residuals.

Pearson's correlation analysis was used to examine bivariate relationships among the study variables. Multiple linear regression was subsequently used to estimate the unique and simultaneous statistical associations of Social Support, Professional Self-Esteem, and Sense of Belonging with Psychological Well-Being while the three predictors were entered in the same model. The regression analysis reported unstandardized and standardized coefficients, the coefficient of determination, the adjusted coefficient of determination (Adjusted R^2), the overall F test, and individual t tests. Statistical significance was evaluated at α = 0.05. Because the study was cross-sectional, regression results were interpreted as predictive associations and not as evidence that the predictors caused changes in Psychological Well-Being.

2.6. Ethical Considerations

Ethical considerations were maintained throughout the planning, implementation, data collection, analysis, and reporting stages of the study. The research followed principles of honesty, responsibility, respect

© 2026 The Author(s)
This is an Open Access article under the Creative Commons Attribution-ShareAlike 4.0 International License
ISSN: 2797-3174

for participants, and academic integrity. Informed consent and voluntary participation. Before completing the questionnaire, participants were provided with clear information regarding the purpose, benefits, and procedures of the study. Participation was voluntary, and participants were informed that they had the right to participate or decline participation without any consequences. Confidentiality and anonymity. The confidentiality of participants' identities was maintained throughout the study. Participants' names, institutional affiliations, and personal information were not included in the research report. The questionnaire did not openly request personal identifying information, and the data were analyzed in aggregate form to prevent individual participants from being identified.

Academic integrity. The research process was conducted with academic integrity, including honesty in data collection, data processing, and reporting. No data manipulation, plagiarism, or fabrication of research findings was undertaken. The theoretical sources, concepts, and previous research used in the study were appropriately acknowledged. Non-maleficence. The study was designed to minimize potential physical and psychological harm to participants. The questionnaire items were presented using polite and neutral language and avoided unnecessary sensitive or personally intrusive questions. Data collection was also conducted in a manner intended not to interfere with teaching and learning activities at the participating institutions. Social responsibility. The research was conducted with consideration of its potential scientific and practical benefits while minimizing negative impacts on participants, particularly non-qualified ECE teachers who served as the study participants.

3. Results and Discussion

3.1. Results

3.1.1. Descriptive Statistics of Research Variables

The descriptive statistical analysis involved 268 non-qualified ECE teachers in Temanggung Regency. The analysis was conducted to describe the distribution of the four research variables, namely Social Support, Professional Self-Esteem, Sense of Belonging, and Psychological Well-Being. The descriptive statistics included the minimum, maximum, mean, and standard deviation values for each variable are presented in Table 3.

Table 3. Descriptive Statistics of Research Variables

Variable	N	Minimum	Maximum	Mean	Standard Deviation
Social Support	268	25	60	45.78	5.321
Professional Self-Esteem	268	27	55	37.61	3.384
Sense of Belonging	268	25	52	37.36	2.554
Psychological Well-Being	268	44	77	56.45	4.486

The descriptive results show that Social Support had a minimum score of 25 and a maximum score of 60, with a mean of 45.78 and a standard deviation of 5.321. Professional Self-Esteem ranged from 27 to 55, with a mean of 37.61 and a standard deviation of 3.384. Sense of Belonging had scores ranging from 25 to 52, with a mean of 37.36 and a standard deviation of 2.554. Psychological Well-Being ranged from 44 to 77, with a mean of 56.45 and a standard deviation of 4.486.

The mean scores indicate the central tendency of each construct among the 268 participants. The standard deviation values provide information about the variability of participants' scores around the respective mean values. Sense of Belonging showed the smallest standard deviation (2.554), whereas Social Support showed the largest standard deviation (5.321). These descriptive findings provide an initial overview of the characteristics of the variables before examining their predictive relationships with Psychological Well-Being.

3.1.2. The Role of Social Support in Predicting Psychological Well-Being

The analysis examined whether Social Support significantly predicted Psychological Well-Being among non-qualified Early Childhood Education (ECE) teachers. The results of the multiple linear regression analysis showed that Social Support had a significant positive contribution to Psychological Well-Being. Social Support obtained an unstandardized coefficient of B = 0.422, a standardized coefficient of β = 0.435, with a t-value of 3.537 and a p-value of <0.001 (see Table 4). The significance value was lower than the predetermined significance level of 0.05, indicating that Social Support significantly predicted Psychological Well-Being. The positive regression coefficient indicates that higher levels of perceived Social Support were associated with higher levels of Psychological Well-Being. The result supports H1, which proposed that Social Support significantly predicts Psychological Well-Being among non-qualified ECE teachers.

© 2026 The Author(s)
This is an Open Access article under the Creative Commons Attribution-ShareAlike 4.0 International License
ISSN: 2797-3174

Table 4. The Predictive Role of Social Support in Psychological Well-Being

Predictor	B	Std. Error	β	t	p
Social Support	0.422	0.119	0.435	3.537	<0.001

3.1.3. Role of Professional Self-Esteem in Predicting Psychological Well-Being

The analysis examined whether Professional Self-Esteem significantly predicted Psychological Well-Being among non-qualified Early Childhood Education (ECE) teachers. The multiple linear regression results showed that Professional Self-Esteem had a significant positive contribution to Psychological Well-Being. Professional Self-Esteem obtained an unstandardized coefficient of B = 0.308, a standardized coefficient of β = 0.232, with a t-value of 4.868 and a p-value < 0.001 (see Table 5). The significance value was lower than the predetermined significance level of 0.05, indicating that Professional Self-Esteem significantly predicted Psychological Well-Being. The positive regression coefficient indicates that higher Professional Self-Esteem was associated with higher Psychological Well-Being. The result supports H2, which proposed that Professional Self-Esteem significantly predicts Psychological Well-Being among non-qualified ECE teachers.

Table 5. The Predictive Role of Professional Self-Esteem in Psychological Well-Being

Predictor	B	Std. Error	β	t	p
Professional Self-Esteem	0.308	0.063	0.232	4.868	< 0.001

3.1.4. The Role of Sense of Belonging in Predicting Psychological Well-Being

The analysis examined whether Sense of Belonging significantly predicted Psychological Well-Being among non-qualified Early Childhood Education (ECE) teachers. The multiple linear regression results showed that Sense of Belonging had a significant positive contribution to Psychological Well-Being. Sense of Belonging obtained an unstandardized coefficient of B = 0.342, a standardized coefficient of β = 0.275, with a t-value of 3.087 and a p-value of <0.002 (see Table 6). The significance value was lower than the predetermined significance level of 0.05, indicating that Sense of Belonging significantly predicted Psychological Well-Being. The positive regression coefficient indicates that higher Sense of Belonging was associated with higher Psychological Well-Being. The result supports H3, which proposed that Sense of Belonging significantly predicts Psychological Well-Being among non-qualified ECE teachers.

Table 6. The Predictive Role of Sense of Belonging in Psychological Well-Being

Predictor	B	Std. Error	β	t	p
Sense of Belonging	0.342	0.111	0.275	3.087	0.002

3.1.5. The Simultaneous Contribution of Social Support, Professional Self-Esteem, and Sense of Belonging to Psychological Well-Being

Multiple linear regression analysis indicated that Social Support, Professional Self-Esteem, and Sense of Belonging were jointly associated with Psychological Well-Being among non-qualified ECE teachers. The corrected overall model statistic was F (3,264) = 52.823, p < 0.001 (see Table 7). The previously reported value of F = 5.022 was inconsistent with the sample size and Adjusted R^2 and was corrected to ensure mathematical consistency across the regression results.

Table 7. Simultaneous Contribution of the Predictors to Psychological Well-Being

Model	F	p	df	R^2	Adjusted R^2	Contribution
Social Support, Professional Self-Esteem, and Sense of Belonging	52.823	<0.001	3,264	0.375	0.368	36.8%

The model yielded R^2 = 0.375 and Adjusted R^2 = 0.368, indicating that the three predictors jointly accounted for 37.5% of the observed variance and 36.8% after adjustment for model complexity. The overall regression model was statistically significant, F (3,264) = 52.823, p < 0.001. The remaining variance reflects factors not represented in the present model. The regression equation was Y = 44.149 + 0.422X1 + 0.308X2 + 0.342X3. The positive coefficients indicate that higher scores on each predictor were associated with higher Psychological Well-Being scores when the other predictors were held constant. Given the cross-sectional design, these coefficients should not be interpreted as evidence that changing the predictors would cause changes in Psychological Well-Being. The corrected overall F test indicates that the three predictors, considered jointly, were significantly associated with Psychological Well-Being; therefore, H4 was supported at the level of predictive association.

© 2026 The Author(s)
This is an Open Access article under the Creative Commons Attribution-ShareAlike 4.0 International License
ISSN: 2797-3174

3.1.6. Summary of Hypothesis Testing

The hypothesis tests indicated positive predictive associations between each predictor and Psychological Well-Being, and the overall three-predictor model was statistically significant. These results support H1-H4 as statements of cross-sectional association, not causal influence. Social Support had the largest standardized coefficient (β = 0.435), followed by Sense of Belonging (β = 0.275) and Professional Self-Esteem (β = 0.232). The model-level statistics were R^2 = 0.375, Adjusted R^2 = 0.368, and F (3,264) = 52.823, p < 0.001 (see Table 8).

Table 8. Summary of Hypothesis Testing

Hypothesis	Relationship	β	t / F	p	Decision
H1	Social Support → Psychological Well-Being	0.435	3.537	<0.001	Supported
H2	Professional Self-Esteem → Psychological Well-Being	0.232	4.868	< .001	Supported
H3	Sense of Belonging → Psychological Well-Being	0.275	3.087	0.002	Supported
H4	Social Support + Professional Self-Esteem + Sense of Belonging → Psychological Well-Being		52.823	< 0.001	Supported

3.2. Discussion

3.2.1. Social Support and Psychological Well-Being

The regression results showed a positive association between Social Support and Psychological Well-Being (B = 0.422, β = 0.435, t = 3.537, p = <0.001). Among the three predictors, Social Support had the largest standardized coefficient. This pattern is consistent with Social Support Theory, in which perceived access to emotional, informational, and instrumental resources can buffer psychological strain (Cohen & Wills, 1985; Zimet et al., 1988). For non-qualified ECE teachers, Social Support may be particularly relevant because professional demands can coexist with qualification-related uncertainty, constrained resources, and limited recognition. Support from colleagues, school leaders, family members, and significant others can provide practical assistance and reassurance when teachers manage these pressures (Maas et al., 2022). The present finding is therefore best interpreted as evidence that perceived availability of supportive resources is associated with more favorable psychological functioning, rather than evidence that support directly causes higher well-being.

Importantly, Social Support should not be treated as interchangeable with Sense of Belonging. Social Support concerns the perceived availability of help and resources when needed, whereas Sense of Belonging concerns acceptance, inclusion, and identification with a social or professional community. Their simultaneous inclusion in the regression model therefore tests whether each relational construct contributes unique statistical information. The larger coefficient for Social Support suggests that access to supportive resources was more strongly associated with Psychological Well-Being in this sample, while not diminishing the distinct contribution of belonging. The finding is consistent with prior work linking social and organizational support to teacher well-being and occupational functioning (Gray et al., 2017; Skaalvik & Skaalvik, 2020). However, because the data were collected at a single time point, alternative explanations remain plausible: teachers with higher Psychological Well-Being may perceive their social environments more positively, and unmeasured contextual factors may influence both support and well-being. The result therefore supports a relational interpretation but not a directional causal mechanism.

3.2.2. Professional Self-Esteem and Psychological Well-Being

The findings showed that Professional Self-Esteem significantly and positively predicted Psychological Well-Being among non-qualified Early Childhood Education (ECE) teachers. The regression analysis produced B = 0.308, β = 0.232, t = 4.868, and p < 0.001, indicating that teachers with higher Professional Self-Esteem tended to report higher levels of Psychological Well-Being. The finding supports the second hypothesis of the study. Professional Self-Esteem reflects how individuals evaluate their competence, value, and significance within their professional roles. Positive professional self-evaluations can strengthen teachers' perceptions of competence and support their ability to deal with occupational demands. Professional self-esteem has been associated with teachers' professional self-conceptions, including teaching efficacy, teacher-pupil relationships, and teaching commitment (Yeung & Watkins, 1999).

Professional Self-Esteem is also associated with teachers' psychological experiences in the workplace. Khezerlou (2017) found that Professional Self-Esteem was significantly related to several dimensions of teacher burnout, including emotional exhaustion, depersonalization, and personal accomplishment. The finding suggests that teachers' evaluations of their professional competence and worth may be related to their ability to cope with occupational demands. Professional Self-Esteem may further contribute to the development of teachers' professional identity. Ghasemi et al. (2018) reported that several dimensions of self-esteem, including satisfaction, knowledge, commitment, adaptation, and communication, were significant predictors of professional identity among teachers. A stronger perception of professional competence and value may therefore support teachers in developing a more positive understanding of their professional roles.

© 2026 The Author(s)
This is an Open Access article under the Creative Commons Attribution-ShareAlike 4.0 International License
ISSN: 2797-3174

Professional self-esteem can also be influenced by contextual characteristics within the workplace. Özmen et al. (2025) reported an association between teachers' professional self-esteem and perceptions of job security, indicating that professional self-evaluation is not determined solely by individual characteristics but may also be related to teachers' working conditions and professional environments. Self-esteem has been identified as an important psychological resource associated with teachers' well-being. Research on teacher psychological well-being has highlighted the relevance of positive self-evaluation to teachers' psychological functioning and professional experiences. Teachers with more positive evaluations of themselves may have greater psychological resources for managing occupational demands and maintaining positive functioning (Skaalvik & Skaalvik, 2020).

The relationship between Professional Self-Esteem and Psychological Well-Being is particularly relevant for non-qualified ECE teachers. Academic qualifications do not necessarily determine how teachers perceive their professional competence and value. Teaching experience, successful interactions with children, recognition from colleagues, and opportunities for professional development may contribute to teachers' perceptions of professional worth. Professional recognition and opportunities to improve competence may therefore become important resources for strengthening Psychological Well-Being (Repišti, 2020).

Professional Self-Esteem remained positively associated with Psychological Well-Being after Social Support and Sense of Belonging were included in the same model ($\beta = 0.232$). Although its standardized coefficient was smaller than those of the two relational predictors, the result indicates that professional self-evaluation provides distinct information about Psychological Well-Being. For non-qualified ECE teachers, perceptions of competence and professional worth may coexist with formal qualification limitations and may be shaped by teaching experience, recognition, and opportunities for professional learning (Repišti, 2020). Accordingly, professional development, constructive feedback, and recognition may be relevant institutional targets, but the cross-sectional findings do not establish that such interventions would necessarily increase Psychological Well-Being. Their potential effects should be tested in longitudinal or intervention-based research.

3.2.3. Sense of Belonging and Psychological Well-Being

Sense of Belonging was positively associated with Psychological Well-Being ($B = 0.342$, $\beta = 0.275$, $t = 3.087$, $p = 0.002$), supporting H3 as a cross-sectional predictive association. Belonging reflects feeling valued, accepted, included, connected, and able to fit within a social environment. This interpretation is consistent with evidence linking belonging to general well-being and teacher-related outcomes (Mellinger et al., 2024; Ragoonaden et al., 2025). For teachers, belonging is rooted less in the availability of specific assistance than in the experience of legitimate membership and relational inclusion. Bjorklund (2023) identified supportive relationships, recognition, participation, contribution, and shared values as features of first-year teachers' belonging, while Wator et al. (2025) emphasized collegial interaction, leadership, collective values, and recognition. These mechanisms are particularly relevant to non-qualified ECE teachers, whose qualification status may affect perceived legitimacy within professional communities.

The distinction from Social Support is therefore substantive. A teacher may have people who provide assistance without necessarily feeling fully accepted as a professional community member; conversely, a teacher may feel included while perceiving limited instrumental or emotional support. The fact that both variables retained positive coefficients in the same model is consistent with this conceptual distinction, although their conceptual proximity requires cautious interpretation. Multicollinearity diagnostics were used to evaluate whether overlap compromised estimation. Sense of Belonging may also be understood through the need for relatedness emphasized in Self-Determination Theory (Deci & Ryan, 2000). Supportive relationships with colleagues and school leaders can foster connection and professional identification, while disconnection or lack of recognition may undermine these experiences (Fiorilli et al., 2019; Melzak, Allen, Jain, & Pruyn, 2025; Özdoğru, 2022). The present results are consistent with this relational account but cannot establish temporal direction. Relative to the other predictors, Sense of Belonging ($\beta = 0.275$) showed a smaller coefficient than Social Support ($\beta = 0.435$) but a larger coefficient than Professional Self-Esteem ($\beta = 0.232$). These differences should be interpreted as sample-specific standardized associations rather than as evidence of fixed causal importance across settings.

3.2.4. Simultaneous Contribution of Social Support, Professional Self-Esteem, and Sense of Belonging to Psychological Well-Being

The three predictors were jointly associated with Psychological Well-Being, $F(3, 264) = 52.823$, $p < .001$, with Adjusted $R^2 = 0.368$. Conceptually, the model combines an external resource (Social Support), an internal professional self-evaluation (Professional Self-Esteem), and a relational-membership resource (Sense of Belonging). The fact that all three coefficients remained statistically significant when entered simultaneously is consistent with, but does not by itself establish, the interpretation that these constructs capture complementary aspects of teachers' psychosocial functioning. Their conceptual distinctiveness is supported primarily by differences in construct definition and measurement, while future latent-variable research is needed to examine

© 2026 The Author(s)
This is an Open Access article under the Creative Commons Attribution-ShareAlike 4.0 International License
ISSN: 2797-3174

their empirical discriminant validity more rigorously. Social Support represents perceived access to emotional, informational, or instrumental assistance (Cohen & Wills, 1985; Zimet et al., 1988), whereas Sense of Belonging represents perceived acceptance, inclusion, and connection (Mellinger et al., 2024). Recent teacher research similarly identifies support, trust, recognition, collaboration, and feeling valued as related but non-identical aspects of professional well-being and belonging (Bjorklund, 2023).

Professional Self-Esteem adds a different dimension by representing teachers' appraisal of professional competence and value (Repišti, 2020). The combined model therefore supports a multidimensional account of Psychological Well-Being in which access to support, professional self-worth, and perceived membership are statistically related to well-being in distinct ways. The model does not provide an exhaustive explanation of Psychological Well-Being. An Adjusted R^2 of 0.368 leaves substantial variance associated with factors outside the model, potentially including workload, job satisfaction, resilience, economic conditions, autonomy, professional development, and organizational climate. Moreover, the cross-sectional design precludes conclusions about temporal ordering or causality. Longitudinal and structural models are needed to test directional pathways and the interrelationships among Social Support, Professional Self-Esteem, Sense of Belonging, and Psychological Well-Being.

3.3. Implications

The findings indicate that Psychological Well-Being among non-qualified ECE teachers is associated with both individual and interpersonal psychosocial resources. Social Support, Professional Self-Esteem, and Sense of Belonging each contributed unique statistical information, while the combined model accounted for 36.8% of adjusted variance. This pattern supports a multidimensional interpretation of teacher well-being rather than a single-factor explanation. At the practical level, schools and educational institutions may consider mentoring, peer-support structures, inclusive professional activities, recognition, and professional-development opportunities as plausible areas for support. These implications should be treated as informed directions rather than demonstrated intervention effects, because the present design did not manipulate these factors or establish causal change.

3.4. Limitations and Future Research

This study has several limitations. Its cross-sectional design precludes causal and temporal inferences, the sample was restricted to non-qualified ECE teachers in one regency, and reliance on self-report measures may introduce shared-method and social-desirability bias. In addition, although Social Support, Professional Self-Esteem, and Sense of Belonging were treated as conceptually distinct and assessed for multicollinearity, their theoretical proximity warrants further examination using latent-variable approaches. The model explained 36.8% of adjusted variance, indicating that other relevant factors remain unaccounted for. Future research should therefore employ larger and more diverse samples, longitudinal or quasi-experimental designs, and structural equation modeling to clarify temporal relationships, measurement distinctiveness, and interrelationships among the constructs, while considering additional predictors such as workload, job satisfaction, resilience, autonomy, professional development, and organizational climate.

4. Conclusion

In this cross-sectional sample of non-qualified ECE teachers, Social Support, Professional Self-Esteem, and Sense of Belonging were each positively associated with Psychological Well-Being, and the three-predictor model accounted for 36.8% of adjusted variance. Social Support showed the largest standardized coefficient, followed by Sense of Belonging and Professional Self-Esteem. These findings support the view that perceived support, professional self-evaluation, and perceived membership are distinct but complementary correlates of teacher well-being. They should not be interpreted as evidence that strengthening any of these factors will necessarily cause improvements in Psychological Well-Being. Longitudinal and structural-model research is needed to clarify temporal pathways and the relationships among these constructs.

Author Contributions

All authors contributed equally to this paper. All authors have read and approved the final manuscript.

Funding

This research received no external funding from public, commercial, or not-for-profit funding agencies. The study was conducted without specific financial support from any external organization.

Declaration of Conflicting Interests

The authors declare that they have no known financial, professional, or personal relationships that could have influenced, or could reasonably be perceived to have influenced, the research presented in this manuscript.

© 2026 The Author(s)
This is an Open Access article under the Creative Commons Attribution-ShareAlike 4.0 International License
ISSN: 2797-3174

Ethics and Consent Declarations

Ethical principles were observed throughout the study. Prior to participation, all participants were informed about the purpose, procedures, voluntary nature, confidentiality, and anonymity of the study. Informed consent was obtained from all participants before data collection. The study did not receive a formal institutional ethics approval number.

Data Availability

The dataset generated and analyzed during the current study was collected from non-qualified Early Childhood Education (ECE) teachers through structured questionnaires. The data supporting the findings of this study are not publicly available due to privacy and confidentiality considerations regarding the research participants. The data may be obtained from the corresponding author upon reasonable request, subject to applicable ethical and confidentiality requirements.

Declaration on AI Use

Artificial intelligence-assisted tools were used only as supplementary support during manuscript preparation, particularly for language refinement, reference checking, and improvement of textual organization and clarity. These tools were not used to generate research data, conduct the substantive analysis, determine the study findings, or replace the authors' scholarly judgment. All AI-assisted outputs were independently reviewed, verified, and revised by the authors where necessary. The authors retain full responsibility for the accuracy, integrity, interpretation, conclusions, and final content of the manuscript.

Acknowledgement

The authors gratefully acknowledge the Early Childhood Education Program, Faculty of Education and Psychology, Universitas Negeri Semarang, for providing the academic environment and institutional support that facilitated the preparation of this study. The authors also extend their appreciation to all individuals and academic colleagues whose constructive input, discussions, and support contributed to the development and refinement of the manuscript.

References

Agyapong, B., Obuobi-Donkor, G., Burback, L., & Wei, Y. (2022). Stress, burnout, anxiety and depression among teachers: A scoping review. *International Journal of Environmental Research and Public Health, 19*(17), Article 10706. https://doi.org/10.3390/ijerph191710706

Allen, K.-A., Kern, M. L., Rozek, C. S., McInerney, D. M., & Slavich, G. M. (2021). Belonging: A review of conceptual issues, an integrative framework, and directions for future research. *Australian Journal of Psychology, 73*(1), 87–102. https://doi.org/10.1080/00049530.2021.1883409

Bjorklund, P., Jr. (2023). "I kind of have that place to sit": First-year teachers' experiences of belonging. *Teaching and Teacher Education, 131*, Article 104187. https://doi.org/10.1016/j.tate.2023.104187

Cohen, S., & Wills, T. A. (1985). Stress, social support, and the buffering hypothesis. *Psychological Bulletin, 98*(2), 310–357. https://doi.org/10.1037/0033-2909.98.2.310

Creswell, J. W., & Creswell, J. D. (2023). *Research design: Qualitative, quantitative, and mixed methods approaches* (6th ed.). SAGE Publications.

Deci, E. L., & Ryan, R. M. (2000). The "what" and "why" of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry, 11*(4), 227–268. https://doi.org/10.1207/S15327965PLI1104_01

Dreer, B. (2023). On the outcomes of teacher wellbeing: A systematic review of research. *Frontiers in Psychology, 14*, Article 1205179. https://doi.org/10.3389/fpsyg.2023.1205179

Fiorilli, C., Benevene, P., De Stasio, S., Buonomo, I., Romano, L., Pepe, A., & Addimando, L. (2019). Teachers' burnout: The role of trait emotional intelligence and social support. *Frontiers in Psychology, 10*, Article 2743. https://doi.org/10.3389/fpsyg.2019.02743

Ghasemi, F. (2018). Iranian EFL teacher cognition: Tracing cognitive dissonance. *Journal of Language Teaching and Learning, 8*(2), 61–79. https://doi.org/10.66887/jltl.v8i2.65

Gray, C., Wilcox, G., & Nordstokke, D. (2017). Teacher mental health, school climate, inclusive education and student learning: A review. *Canadian Psychology/Psychologie canadienne, 58*(3), 203–210. https://doi.org/10.1037/cap0000117

Humaidah, A., & Mulyono, R. (2025). Adaptasi psychological well-being short scale pada mahasiswa. *Edukatif: Jurnal Ilmu Pendidikan, 7*(1), 141–149. https://doi.org/10.31004/edukatif.v7i1.7990

Jennings, P. A., Brown, J. L., Frank, J. L., Doyle, S., Oh, Y., Davis, R., Rasheed, D., DeWeese, A., DeMauro, A. A., Cham, H., & Greenberg, M. T. (2017). Impacts of the CARE for Teachers program on teachers' social and emotional competence and classroom interactions. *Journal of Educational Psychology, 109*(7), 1010–1028. https://doi.org/10.1037/edu0000187

Kementerian Pendidikan Dasar dan Menengah Republik Indonesia. (2025, September 20). *The Ministry of Education and Culture strengthens qualifications for kindergarten and elementary school teachers and 13-year compulsory education* [Press release]. https://internal-portal.kemdikbud.go.id/en/press-release/13687-the-ministry-of-education-and-

© 2026 The Author(s)
This is an Open Access article under the Creative Commons Attribution-ShareAlike 4.0 International License
ISSN: 2797-3174

culture-strengthens-qualifications-for-kindergarten-and-elementary-school-teachers-and-13-year-compulsory-education

Khezerlou, E. (2017). Professional self-esteem as a predictor of teacher burnout across Iranian and Turkish EFL teachers. *Iranian Journal of Language Teaching Research, 5*(1), 113–130. https://doi.org/10.30466/IJLTR.2017.20345

Maas, J., Schoch, S., Scholz, U., Rackow, P., Schüler, J., Wegner, M., & Keller, R. (2022). School principals' social support and teachers' basic need satisfaction: The mediating role of job demands and job resources. *Social Psychology of Education, 25*(6), 1545–1562. https://doi.org/10.1007/s11218-022-09730-6

Madigan, D. J., Kim, L. E., Glandorf, H. L., & Kavanagh, O. (2023). Teacher burnout and physical health: A systematic review. *International Journal of Educational Research, 119*, Article 102173. https://doi.org/10.1016/j.ijer.2023.102173

Mellinger, C., Fritzson, A., Park, B., & Dimidjian, S. (2024). Developing the Sense of Belonging Scale and understanding its relationship to loneliness, need to belong, and general well-being outcomes. *Journal of Personality Assessment, 106*(3), 347–360. https://doi.org/10.1080/00223891.2023.2279564

Melzak, E., Allen, K.-A., Jain, R., & Pruyn, M. (2025). A scoping review of the factors contributing to a sense of belonging in early career teachers. *Educational Research Review, 48*, Article 100700. https://doi.org/10.1016/j.edurev.2025.100700

Özdoğru, M. (2022). School administrators' behaviors in the professional belonging of teachers. *Education Quarterly Reviews, 5*(2), 321–336. https://doi.org/10.31014/aior.1993.05.02.492

Özmen, K., Dönmez, İ., & Gülen, S. (2025). Perception of job security and professional self-esteem of teachers: A mixed method research. *Psychology in the Schools, 62*(1), 256–280. https://doi.org/10.1002/pits.23323

Ragoonaden, K. O., Cherkowski, S., Kutsyuruba, B., Walker, K., Claypool, T., Basch, J., & Godden, L. (2025). Teacher education, well-being and a sense of belonging. *Canadian Journal of Education/Revue canadienne de l'éducation, 48*(4), 1313–1344. https://doi.org/10.53967/cje-rce.6959

Repišti, S. (2020). *Professional Self-Esteem Scale–14 (PSES-14)* [Measurement instrument]. ResearchGate. https://www.researchgate.net/publication/343084238_PROFESSIONAL_SELF-ESTEEM_SCALE_-14_PSES-14

Skaalvik, E. M., & Skaalvik, S. (2020). Teacher burnout: Relations between dimensions of burnout, perceived school context, job satisfaction and motivation for teaching. A longitudinal study. *Teachers and Teaching, 26*(7–8), 602–616. https://doi.org/10.1080/13540602.2021.1913404

Wang, Y., Xiao, B., Tao, Y., & Li, Y. (2022). The relationship between mindfulness and job burnout of Chinese preschool teach ers: The mediating effects of emotional intelligence and coping style. *International Journal of Environmental Research and Public Health, 19*(12), Article 7129. https://doi.org/10.3390/ijerph19127129

Wator, J., Patrick, P., & Yip, S. Y. (2025). Teachers' sense of belonging in school: A scoping review. *The Australian Educational Researcher, 52*, 4269–4297. https://doi.org/10.1007/s13384-025-00897-3

Yeung, K. W., & Watkins, D. A. (1999). The impact of teaching practice on the structure of professional self-esteem: A covariance analysis. *The Asia-Pacific Education Researcher, 8*(2), 195–231. https://ejournals.ph/article.php?id=10186

Zimet, G. D., Dahlem, N. W., Zimet, S. G., & Farley, G. K. (1988). The Multidimensional Scale of Perceived Social Support. *Journal of Personality Assessment, 52*(1), 30–41. https://doi.org/10.1207/s15327752jpa5201_2

© 2026 The Author(s)
This is an Open Access article under the Creative Commons Attribution-ShareAlike 4.0 International License
ISSN: 2797-3174