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# The Relationship Between Calling and Early Childhood Teacher Engagement: An Analysis of Generational Differences

Nurmeida Sainstiani<sup>1</sup>, Florence Yulisinta<sup>2</sup>, Yulia Pratiwi<sup>3</sup>

<sup>1,2,3</sup> Sekolah Tinggi Pendidikan Holistik Berbasis Karakter, Indonesia.

## Keywords:

Teacher, Early childhood education, Calling, Work engagement, Generation gap.

## Correspondence to

Florence Yulisinta,  
Department of Early  
Childhood Teacher  
Education, Sekolah Tinggi  
Pendidikan Holistik Berbasis  
Karakter, Depok, Indonesia

## e-mail:

[florence.yulisinta@phbk.ac.id](mailto:florence.yulisinta@phbk.ac.id)

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## Abstract

This study investigates the relationship between a sense of calling and work engagement among Early Childhood Education (ECE) teachers in Indonesia, underscoring the pivotal role of teachers in the educational transformation of the 21st century. A non-experimental, quantitative approach using correlational research methods was employed. Data were collected from 355 ECE teachers across Indonesia using the Early Childhood Teachers' Calling Scale (ECTCS) and the Utrecht Work Engagement Scale (UWES) to measure their sense of calling and work engagement, respectively. Spearman correlation, Mann-Whitney U, and Kruskal-Wallis tests were conducted for statistical analysis. The results showed a significant positive association between the sense of calling and work engagement among ECE teachers ( $r = 0.60$ ,  $p < 0.0001$ ). Specifically, higher levels of calling were associated with increased work engagement. The presence of family members in the teaching profession did not significantly affect teachers' sense of calling or work engagement ( $p = 0.07 > 0.05$ ). The study revealed significant generational differences in calling and work engagement among ECE teachers, with notable variations across Generations X, Y, and Z. These findings contribute to understanding the factors influencing teachers' work engagement and highlight the importance of calling in educational settings. The results suggest that fostering a sense of calling could effectively enhance ECE teachers' work engagement, potentially improving educational outcomes and retention rates. However, the study's geographical focus on Indonesia may limit the generalizability of the findings to other cultural contexts. The results emphasize how intrinsic motivation shapes teacher engagement and commitment, suggesting implications for professional development and retention strategies. Future research should include longitudinal studies, broader geographic sampling, and investigations into interventions that strengthen teachers' sense of calling. This study contributes to the literature by emphasizing the role of intrinsic motivation in ECE teacher engagement, providing a foundation for future research in this critical educational domain.

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## Introduction

In the rapidly evolving 21st-century landscape, characterized by complex technological changes and global challenges, teachers play a critical role in educational transformation (Mumtazah et al., 2023). Research on calling and engagement among Early Childhood Education (ECE) teachers directly addresses these demands by exploring how teachers' intrinsic motivations and generational differences impact their ability to develop high-quality human resources. By examining teachers' sense of calling and engagement levels, the study offers insights into how educators can create learning environments that foster essential 21st-century skills such as creativity, critical thinking, collaboration, and communication, ultimately preparing students to navigate the complex, technology-driven modern world (Haug & Mork, 2021; Imtiyas & Simatupang, 2022; Yuliani et al., 2023). By exploring generational differences in these constructs, the study also provides insight into how teachers adapt to and implement contemporary educational approaches required for 21st-century learning.

Early childhood education (ECE) is crucial for educational transformation, coinciding with a critical period of brain development that shapes comprehensive child growth. High-quality ECE significantly enhances cognitive, social-emotional, and developmental aspects (Mubaroroh et al., 2023; Santrock, 2020), while poor-quality education can adversely affect a child's overall development (Cash et al., 2019; Manning et al., 2019). To ensure optimal outcomes, ECE teachers must serve as skilled mentors, facilitators, and guides, equipped with diverse competencies, including personal, social, pedagogical, and professional skills (Aziz, 2017; Rakhmania et al., 2023). This holistic approach, combining high-quality teaching, diverse competencies, and adaptation to technological advancements, is vital for laying a strong foundation for children's future learning and success in the 21st century.

ECE teachers now face an expanded professional landscape that requires adaptive pedagogical skills and the management of increasingly complex responsibilities. These include advanced learning strategies, developmental insights, and multifaceted professional expectations (Adawiah & Romadona, 2021; Dung & Zsolnai, 2021). Moreover, ECE teachers in Indonesia face several persistent challenges, including low income—often below the minimum wage (CNN Indonesia, 2019)—and a lack of public recognition (Eadie et al., 2021; Kwon et al., 2020; Yulisinta, Setiadi, et al., 2023). The profession is frequently perceived as less prestigious, largely associated with caregiving tasks (Faulkner et al., 2016). These factors contribute to high teacher turnover rates (Hur et al., 2023; Sutchter et al., 2016), which significantly threaten early childhood development by negatively affecting students, parents, and fellow educators (Kwon et al., 2020).

Despite these challenges, many ECE teachers in Indonesia remain committed to their profession, driven by a strong sense of calling (Ratnasari & Robandi, 2022; Yulisinta, Setiadi, et al., 2023). Viewing teaching as a calling fosters long-term commitment and a deeper appreciation of the profession (Herman et al., 2023). This intrinsic motivation influences teachers' decisions to stay in the field, as they find meaning and fulfillment in their work (Jain & Kaur, 2021). A calling-oriented mindset thus contributes to greater stability within the profession, which is crucial for delivering high-quality early childhood education amid ongoing challenges.

A sense of calling is closely linked to various aspects of organizational productivity, including career development and work engagement (Pangesti & Riasnugrahani, 2022), job satisfaction (Cain et al., 2018), perceptions of meaningful work (Oktovani & Riasnugrahani, 2022), and organizational commitment (Duffy et al., 2019). Jain and Kaur (2021) emphasize that teachers are more productive when they are deeply committed to their work—a commitment that is notably stronger among those who perceive teaching as a calling. This perspective is particularly relevant in ECE, where educators often confront obstacles such as low pay and limited societal recognition. Yet, despite these hurdles, teachers who view their profession as a calling demonstrate extraordinary dedication to their careers and to the broader teaching community (Kwon et al., 2021; Turner, 2019; Yulisinta, Marta, et al., 2023).

Work engagement, as defined by Schaufeli et al. (2002), refers to enthusiasm and commitment to one's work. Active engagement—characterized by vigor, dedication, and absorption—is essential for professional performance. According to Xie (2021), individuals who are engaged in their roles exhibit higher levels of energy, commitment, and enthusiasm. For teachers, this engagement manifests in devoted energy toward instruction, positive emotional responses, and strong relationships with students and colleagues (Kristiana & Simanjuntak, 2021). Engaged educators are better prepared to manage work-related stress (Yerdelen et al., 2018), overcome challenges (Irina & Riasnugrahani, 2022; Xie, 2021), and are less likely to leave the profession (Eldor & Shoshani, 2016). A study on ECE teachers in Japan found that work engagement was the sole predictor of the intention to remain in the profession, underscoring its importance in teacher retention and job satisfaction (Tayama et al., 2018).

This research addresses a critical knowledge gap in understanding the relationship between calling and work engagement among ECE teachers in Indonesia. Although research on

teacher motivation has grown, limited empirical evidence exists regarding how a sense of professional calling influences work engagement in ECE contexts specifically. Previous studies suggest that a sense of calling contributes to work engagement, potentially mediated by career commitment (Pangesti & Riasnugrahani, 2022). For example, Irina & Riasnugrahani (2022) found that career commitment partially mediates the relationship between calling and work engagement among junior high school teachers. Similarly, other studies have identified a sense of calling as a key factor influencing both work engagement and job satisfaction (Fatharani & Riasnugrahani, 2022). Teachers who display dedication, enthusiasm, and job satisfaction often view their profession as a calling (Yulisinta et al., 2024; Yulisinta, Setiadi, et al., 2023). However, these studies have not comprehensively examined these constructs within the context of early childhood education.

Given the vital role of ECE in shaping children's cognitive, social, and emotional development, ensuring sustained teacher engagement and commitment is essential for maintaining high-quality learning environments. ECE teachers face unique professional challenges such as inadequate compensation, limited professional recognition, and heightened risk of burnout. These systemic issues create formidable barriers to long-term engagement (Kwon et al., 2021; Turner, 2019; Yulisinta, Marta, et al., 2023). Without a clear understanding of how a sense of calling impacts ECE teachers' work engagement, efforts to enhance teacher motivation and retention will remain insufficient. Addressing this gap is crucial for informing interventions that promote teacher well-being, reduce turnover, and ultimately improve the quality of early childhood education in Indonesia.

This study aims to explore the relationship between a sense of calling and work engagement among ECE teachers, shedding light on the psychological and motivational factors that sustain educators in this demanding profession. The findings will offer valuable insights for policymakers, school administrators, and educational institutions seeking to develop targeted strategies that foster teacher commitment, enhance professional satisfaction, and strengthen Indonesia's early childhood education system. Ultimately, this research contributes to the development of robust early education systems, ensuring that children receive high-quality learning experiences that prepare them for academic and personal success in the 21st century.

## Methods

### Research Design

This study employed a non-experimental quantitative approach using a correlational research design to examine the relationship between a sense of calling and work engagement among Early Childhood Education (ECE) teachers in Indonesia. This approach was selected as it aligns with the study's objective of exploring relationships between psychological variables without manipulation (Creswell & Creswell, 2018). The correlational method enables researchers to observe the tendency and strength of natural associations between variables within real-world educational contexts.

### Participants and Sampling

The study involved 355 ECE teachers aged between 19 and 64 years, selected through purposive sampling. Participants met two inclusion criteria: (1) teaching children aged 0–6 years, and (2) having a minimum of one year of teaching experience. The purposive sampling technique was chosen based on theoretical considerations, ensuring that participant characteristics were relevant to the research focus (Creswell & Creswell, 2018). The majority of respondents were from the island of Java (59.50%), indicating a geographically concentrated distribution, which constitutes a noted limitation in terms of generalizability.

### Research Instruments

The first instrument used was the Early Childhood Teachers' Calling Scale (ECTCS) (Yulisinta & Suwartono, 2024), designed to measure the sense of calling among ECE teachers. This instrument comprises 15 items rated on a 6-point Likert scale (1 = strongly disagree to 6 =

strongly agree) and covers three main dimensions: challenge, perseverance, and meaningfulness. The total ECTCS score demonstrated good reliability ( $\omega = .84$ ,  $M = 76.24$ ,  $SD = 8.31$ ). However, the construct validity of the scale has not been thoroughly discussed, indicating a need for further investigation in future research.

The second instrument was the Indonesian version of the Utrecht Work Engagement Scale (UWES) (Schaufeli et al., 2002; adapted by Kristiana et al., 2019), consisting of 9 items measured on a 7-point frequency scale. The UWES assesses three dimensions of work engagement: vigor, dedication, and absorption. This instrument has been widely used internationally and has undergone linguistic and psychometric adaptation within the Indonesian context, although its construct validity in the context of ECE teachers has not been explicitly reported.

Table 1. Research Instruments

Instrument	Purpose	Number of Items	Dimensions	Scale
Early Childhood Teachers' Calling Scale (ECTCS)	Measures teachers' perceptions of their sense of calling	15	Challenge, Perseverance, Meaningfulness	6-point Likert scale
Utrecht Work Engagement Scale (UWES)	Assesses work engagement levels	9	Vigor, Dedication, Absorption	7-point frequency scale

### Data Collection

Data were collected online via Google Forms, distributed through social media, WhatsApp, and email. At the beginning of the survey, participants received detailed information about the study's purpose and were asked to provide informed consent. Confidentiality and anonymity were assured in accordance with ethical principles in social and educational research (Creswell & Creswell, 2018).

### Data Analysis

All data analyses were conducted using JASP version 0.18.3. Normality was tested using the Shapiro–Wilk test, which indicated that the data were not normally distributed ( $p < 0.05$ ). Consequently, non-parametric statistical techniques were applied. The relationship between sense of calling and work engagement was analyzed using Spearman's rank-order correlation (Creswell & Creswell, 2018). To examine differences in sense of calling and work engagement between teachers with and without family members in the teaching profession, the Mann–Whitney U test was used. Additionally, generational differences (Generations X, Y, and Z) in both constructs were assessed using the Kruskal–Wallis test, which is appropriate for ordinal data and non-normal distributions. Homogeneity of variance was tested using Levene's test, which indicated homogenous variances across groups ( $p > 0.05$ ). Post-hoc comparisons using the Scheffé test were then conducted to identify significant differences among generational groups in terms of sense of calling and work engagement.

## Result

### Demographic Data

The study included 355 Early Childhood Education (ECE) teachers from Indonesia, ranging in age from 19 to 59 years ( $Mean = 39.86$ ,  $SD = 9.40$ ). The largest age group consisted of 115 individuals (32.12%) aged 41–50 years, followed by the 31–40 age group with 110 individuals (30.73%).

In addition to age, the study collected demographic information on gender, place of residence, teaching experience, educational background, and family background (specifically whether the respondents had relatives working as teachers). The demographic data showed that the vast majority of participants were female (97.46%). Most respondents resided on the island of Java (59.50%).

In terms of teaching experience, the majority (51.40%) had between 1 to 10 years of experience. Regarding educational qualifications, most participants held a bachelor's degree (S1). Of these, 34.36% had a degree specifically in Early Childhood Education, while another

34.08% had related qualifications. The full distribution of demographic data is presented in Table 2.

Table 2. Demographic Data of Research Respondents (N = 355)

Category	Group	Frequency	Percentage
<b>Gender</b>	Male	9	2.54
	Female	346	97.46
<b>Age</b>	19 – 29 years	85	23.74
	30 – 43 years	110	30.73
	44 – 59 years	115	32.12
	51 – 60 years	48	13.41
<b>Teaching Experience</b>	≤10 years	184	51.40
	11 – 20 years	135	37.71
	21 – 30 years	33	9.22
	≥30 years	6	1.68
<b>Education Level</b>	Bachelor's Degree in Early Childhood Education	123	34.36
	Bachelor Degree (S1)		
	< S1	122	34.08
	> S1	90	25.14
		23	6.42
<b>Total</b>		<b>355</b>	<b>100</b>

Source: Research Data (2022)

### Correlation Test

Table 3. Results of External Validity Test of PTSCS with UWES

Variable	Challenge	Resilience	Meaningfulness	Calling	Work Engagement
<b>Challenge</b>	—				
<b>Resilience</b>	0.51***	—			
<b>Meaningfulness</b>	0.41***	0.53***	—		
<b>Calling</b>	0.85***	0.85***	0.68***	—	
<b>Work Engagement</b>	0.52***	0.48***	0.44***	0.60***	—

Note. \*\*\* Significant correlation at  $p < 0.001$

Due to the non-normal distribution of the data, Spearman's rank-order correlation test was used, as it is suitable for non-parametric data. As shown in the correlation results above, total calling showed a significant positive correlation with total work engagement ( $r = 0.60$ ,  $p < 0.001$ ).

Regarding the dimensions of calling, all three showed significant correlations with work engagement at the 0.001 significance level. Among them, the challenge dimension exhibited the highest correlation ( $r = 0.52$ ), followed by resilience ( $r = 0.48$ ), and meaningfulness ( $r = 0.44$ ).

These findings suggest that teachers with higher work engagement are more resilient and better equipped to navigate the challenges they encounter in their professional roles. Likewise, a strong sense of calling is positively associated with higher levels of work engagement, reinforcing the motivational importance of intrinsic values in sustaining teachers' commitment to their profession.

### T-Test

A data normality test is a statistical procedure used to evaluate the distribution or flow of information within a sample. In this study, normality was assessed using the Shapiro–Wilk test, conducted with JASP version 0.18.3, to determine whether the data followed a normal distribution, as shown in Table 4. The Shapiro–Wilk test indicates significance when the p-value is greater than 0.05.

Based on the results, the data for calling and work engagement—when grouped by whether participants had family members working as teachers—were not normally distributed, as indicated by p-values less than 0.05.



Table 4. Shapiro–Wilk Normality Test

Variable	Group	W	p
<b>Calling</b>	Has teacher family member	0.98	0.10
	Does not have teacher family member	0.98	< .001
<b>Work Engagement</b>	Has teacher family member	0.95	< .001
	Does not have teacher family member	0.91	< .001

Note. Significant results suggest deviation from normality.

Following this, a homogeneity test was conducted to determine whether the two groups—those with and without a family member in the teaching profession—originated from a single, homogeneous population. The results of this test are shown in Figure 1.

Table 5. Results of the Homogeneity Test  
Test of Equality of Variances (Levene's)

	F	df <sub>1</sub>	df <sub>2</sub>	p
Calling	1.44	1	356	0.23
Work Engagement	1.79	1	356	0.18

The Levene's test indicated equal variances between the two groups for both calling ( $p = 0.23$ ) and work engagement ( $p = 0.18$ ), both exceeding the 0.05 threshold. These results confirm that the data were homogeneous.

Table 6. Results of the Independent Samples T-Test

Independent Samples T-Test

	W	df	p	Hodges-Lehmann Estimate	Rank-Biserial Correlation	SE Rank-Biserial Correlation
<b>Calling</b>	11293.00		$7.61 \times 10^{-3}$	-3.00	-0.18	0.07
<b>Work Engagement</b>	11265.50		$6.84 \times 10^{-3}$	-2.00	-0.18	0.07

Note: For the Mann–Whitney test, effect size is given by the rank biserial correlation.

Note: Mann–Whitney U test.

Given the non-normal distribution of the data, a non-parametric test—the Mann–Whitney U test—was employed to assess differences between the groups. The test produced a significance value of 0.07, which is greater than 0.05, indicating no significant difference in calling or work engagement between teachers with and without family members in the teaching profession.

### Kruskal–Wallis Test

Table 7. Results of the Normality Test

Descriptive Statistics

	Calling			Work Engagement		
	1	2	3	1	2	3
<b>Std. Deviation</b>	7.89	7.81	8.90	6.22	5.90	7.30
<b>Shapiro-Wilk</b>	0.96	0.98	0.98	0.86	0.94	0.97
<b>P-value of Shapiro-Wilk</b>	< .001	0.02	0.35	< .001	< .001	0.17

A p-value greater than 0.05 in the Shapiro–Wilk test indicates normality. However, the results for both calling and work engagement across generational groups showed p-values less than 0.001, confirming that the data were not normally distributed.

Table 8. Test for Equality of Variances Levene's).

Variable	F	df1	df2	p
<b>Calling</b>	0.22	2.00	355.0	0.80
<b>Work Engagement</b>	2.68	2.00	355.0	0.07

Note. Significant results suggest a deviation from normality.

Levene's test results showed that the p-values for both variables were above 0.05, suggesting that the variances of calling and work engagement were homogeneous across generations.

Table 9. Kruskal–Wallis Test Results

Factor	Calling			Work Engagement		
	Statistic	df	p	Statistic	df	p
Generation	25.32	2	< .001	26.41	2	< .001

The Kruskal–Wallis test revealed significant differences in both calling and work engagement scores across generations, with p-values less than 0.001. This indicates that generational background significantly affects teachers' calling and engagement levels.

Table 10. Post Hoc Test – Calling by Generation

		Mean Difference	SE	t	p <sub>scheffe</sub>
Generation X	Generation Y	2.80	0.92	3.03	0.01*
	Generation Z	6.44	1.26	5.13	< .001***
Generation Y	Generation Z	3.64	1.25	2.90	0.02*

\*p < .05, \* p < .01, \*\*\*p < .001

Note. P-value adjusted for comparing a family of 3

The Scheffé post hoc test indicated that significant differences in calling existed between all generational groups. Specifically, differences were observed between Generation X and Y (p = 0.01), Generation X and Z (p < .001), and Generation Y and Z (p = 0.02). These findings demonstrate distinct differences in the perceived sense of calling among generational cohorts.

Table 11. Post Hoc Test of Work Engagement Based on Generation.

		Mean Difference	SE	t	p <sub>scheffe</sub>
Generation X	Generation Y	1.76	0.72	2.43	0.05
	Generation Z	5.27	0.98	5.37	< .001***
Generation Y	Generation Z	3.52	0.98	3.59	1.77×10 <sup>-3</sup> ***

\*p < .05, \* p < .01, \*\*\*p < .001

Note. P-value adjusted for comparing a family of 3

Similarly, the Scheffé test for work engagement showed significant differences among generations. A significant difference was observed between Generation X and Y (p = 0.05), X and Z (p < .001), and Y and Z (p = 1.77 × 10<sup>-3</sup>). These findings indicate meaningful variations in work engagement across generational lines, with Generation Z scoring notably higher than the other groups.

## Discussion

The study sample comprised 355 Early Childhood Education (ECE) teachers in Indonesia, aged 19 to 59 years (M = 39.86, SD = 9.40). The age distribution indicated that most respondents fell within the 41–50 year age group (32.12%, n = 115), followed closely by the 31–40 year age group (30.73%, n = 110). This suggests a predominantly middle-aged workforce in ECE, which may influence both teaching experience and adaptability to new pedagogical methods.

Demographic data revealed a stark gender imbalance, with 97.49% of respondents identifying as female. This reflects a global trend in early childhood education, where the profession is overwhelmingly dominated by women. Additionally, the geographical distribution was heavily skewed toward Java (59.50%), which may limit the generalizability of the findings to other Indonesian regions.

In terms of professional experience, more than half of the respondents (51.40%) reported having 1 to 10 years of teaching experience. This relatively early-career demographic may indicate either a rapidly expanding field or suggest high turnover rates among ECE teachers. Educational qualifications were evenly split between respondents with bachelor's degrees in

ECE (34.36%) and those with degrees in other related fields (34.36%), raising important questions about the diversity of pathways into the ECE profession and the potential differences in pedagogical practices between these groups.

The Spearman correlation test revealed a significant positive relationship between a sense of calling and work engagement ( $r = 0.60$ ,  $p < 0.0001$ ). This finding suggests that ECE teachers who perceive a stronger sense of calling are more likely to exhibit higher levels of work engagement. This relationship is particularly noteworthy given the challenging conditions in which many ECE teachers operate. The high correlation between calling and engagement underscores the motivational power of intrinsic values in sustaining teachers' professional dedication.

Teachers with a strong sense of calling may be more resilient in coping with common challenges in the field—such as heavy workloads, low pay, limited public recognition, and the widespread perception that their work lacks prestige. These factors are often associated with high turnover rates and teacher shortages, both of which threaten the continuity and quality of ECE (Kwon et al., 2020). However, this study suggests that a strong sense of calling may act as a buffer against these challenges. The results align with previous findings indicating that calling contributes to greater job satisfaction and professional enthusiasm (Fatharani & Riasnugrahani, 2022; Yulisinta, Setiadi, et al., 2023). This intrinsic motivation may help explain why some educators remain committed to their roles despite significant adversity (Yulisinta et al., 2024).

From a practical perspective, the results highlight the importance of fostering and supporting a sense of calling among ECE teachers as a strategy to enhance work engagement, potentially reduce attrition, and improve educational outcomes. Promoting calling through institutional support, professional development, and recognition of teachers' contributions could be key to strengthening Indonesia's early education system.

Interestingly, the study found that having family members in the teaching profession did not significantly influence either a teacher's sense of calling or work engagement ( $p = 0.07 > 0.05$ ). This suggests that these attributes may be shaped more by individual factors than by familial influence. The formation of professional identity and engagement in ECE may involve a complex interplay of motivations, experiences, and contextual factors (Brown & Heck, 2018; Yulisinta, Marta, et al., 2023).

Several possible explanations support this interpretation. First, the intrinsic desire to work with young children may be a stronger determinant of calling and engagement than family background. Second, professional experiences, training, and workplace conditions may play more significant roles in shaping these outcomes. Finally, societal values and the increasing recognition of early childhood education's importance may independently foster a sense of calling and commitment in teachers, regardless of their family histories.

This study also examined generational differences among ECE teachers, who were grouped into Generations X, Y, and Z. Each generation carries distinct values, expectations, and work styles shaped by their unique socio-economic and cultural contexts (Christina, 2016). The results revealed significant differences in both calling and work engagement across generations. Notably, Generation Z consistently reported lower levels of calling and work engagement than their older counterparts. These findings are consistent with previous research highlighting that generational identity influences professional attitudes and behaviors (Dwidienawati & Gandasari, 2018).

Born into a highly connected, digital environment, Generation Z tends to favor flexible and technology-integrated workplaces over traditional and rigid structures (Wijoyo et al., 2020). Their lower engagement and calling levels may reflect differences in career expectations and early career exposure. Research by Irina and Riasnugrahani (2022) suggests that Generation Z teachers' lower sense of calling may also be linked to their younger age and relatively short tenure in the profession. Age and experience often correlate with stronger professional identity and commitment. Teachers with a deep sense of calling are more likely to engage meaningfully with their work and to invest in acquiring competencies necessary for 21st-century education—



such as STEAM integration and digital pedagogy (Haug & Mork, 2021; Mumtazah et al., 2023; Suhendro et al., 2024).

Such intrinsic motivation drives teachers to exceed basic job expectations, embracing continuous professional growth and innovative practices (Fatharani & Riasnugrahani, 2022; Jain & Kaur, 2021; Shang et al., 2022). A strong sense of calling, coupled with high engagement, allows teachers to respond effectively to evolving educational demands and deliver high-quality instruction aligned with 21st-century learning goals (Haug & Mork, 2021; Kim et al., 2019).

### Research Contributions

This study adds to the growing body of literature on Early Childhood Education by highlighting the significant positive correlation between a sense of calling and work engagement among ECE teachers in Indonesia. It underscores the role of intrinsic motivation in shaping professional commitment and sustaining engagement. The research also sheds light on generational differences, with Generation Z reporting lower calling and engagement levels than older generations. These insights are crucial for policymakers and educational institutions seeking to design strategies that enhance teacher motivation, retention, and performance. Furthermore, the study explores demographic variables such as gender and family background, offering a nuanced perspective on the factors influencing teachers' professional identity and commitment.

### Research Limitations

Several limitations should be acknowledged. The study's cross-sectional design prevents the establishment of causal relationships between calling and work engagement. The use of self-report instruments may introduce social desirability bias. Additionally, the sample was predominantly female (97.49%) and geographically concentrated on the island of Java (59.50%), limiting the generalizability of the findings to male educators and other regions in Indonesia. The study also did not examine potentially influential contextual variables such as leadership style, institutional culture, and organizational support.

### Suggestions for Future Research

Future research should employ longitudinal designs to explore causal relationships between calling and work engagement over time. Expanding the sample to include more diverse regions—including rural and underrepresented areas—would enhance the generalizability of findings. A mixed-methods approach could provide deeper insights into teachers' experiences, motivations, and challenges. Future studies should also investigate the effects of specific interventions, such as mentorship programs and professional development, as well as contextual factors like school leadership and support systems. Comparative cross-cultural studies would offer a broader understanding of how these constructs manifest in various educational and cultural contexts.

### Research Implications

The findings suggest several actionable strategies for enhancing ECE teacher development and retention. Policymakers should design professional development programs that cultivate a sense of calling, particularly for younger teachers. Mentorship initiatives and reflective practices can help new educators build strong professional identities. Educational institutions should strive to create supportive work environments tailored to generational preferences by offering flexibility, recognition, and opportunities for continuous growth. These efforts can strengthen teacher engagement and professional competence, ultimately contributing to improved quality in early childhood education across Indonesia.

### Conclusion

This study investigated the relationship between a sense of calling and work engagement among Early Childhood Education (ECE) teachers in Indonesia. The results revealed a strong positive correlation between these two constructs ( $r = 0.60$ ,  $p < 0.001$ ), emphasizing their

interconnected role in the teaching profession. Interestingly, whether teachers had family members in the education sector did not significantly affect their sense of calling or level of work engagement. However, generational differences were found to be a significant factor, with Generation Z teachers reporting lower scores than those in Generations X and Y.

While these findings offer valuable insights, the study's limitations must be acknowledged. The cross-sectional design restricts causal interpretations, and the sample's geographical concentration—primarily in Java—may limit generalizability to other regions of Indonesia. Additionally, reliance on self-reported measures introduces the possibility of response bias. Despite these limitations, the study underscores the importance of fostering a sense of calling and promoting work engagement among ECE teachers. These intrinsic motivations not only contribute to enhancing the quality of education but also play a critical role in improving teacher retention and enriching students' educational experiences. The findings can inform educational policy and institutional practices aimed at creating supportive work environments that prioritize teacher well-being and long-term commitment.

Future research would benefit from employing longitudinal designs to capture dynamic changes over time, expanding geographical sampling to ensure broader representation, and adopting mixed-method approaches to gain deeper insights into the complex motivations of ECE teachers. Further exploration into generational differences and other influencing factors beyond family background will be crucial for developing effective strategies to support the ECE workforce in Indonesia.

## Declarations

### Author Contribution Statement

Florence Yulisinta conceptualized the study and conducted the analytical methodology. Nurmeida Sainstiani developed the theoretical framework and performed the literature review. Yulia Pratiwi validated the analytical procedures and translated the manuscript into English. All authors participated in the interpretation of results and contributed to the final manuscript.

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### Data Availability Statement

The datasets generated and/or analyzed during the current study are available from the corresponding author upon reasonable request.

### Declaration of Interests Statement

The authors declare no known competing financial interests or personal relationships that could have influenced the work reported in this paper.

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