

## **Professional Characteristics Influencing Work Engagement of Rural Early Childhood Teachers**

**Cao Yuping<sup>1,2\*</sup>, Lydia Yoke Yean Foong<sup>3</sup>, Zhang Chengjun<sup>1</sup>, ZhangYu<sup>2</sup>**

<sup>1</sup> Faculty of Teacher Education, Yuxi Normal University; Yuxi, Yunnan, China

<sup>2</sup> Faculty of Education, Languages, Psychology & Music, SEGi University, Malaysia

<sup>3</sup> Taylor's University, Malaysia

1121614569@qq.com, lydia.foong@taylors.edu.com, 908056202@qq.com, zy195643303@163.com  
Tel: +60 1116401813

---

### **Abstract**

Rural early childhood teachers' work engagement directly impacts their professional development and significantly influences the quality of the early childhood education system. However, rural early childhood teachers in China face numerous challenges in maintaining high levels of work engagement. This study used the Utrecht Work Engagement Scale (UWES) to examine the relationship between professional characteristics and work engagement among 530 rural early childhood teachers. The results showed that teaching tenure, educational level, professional background, and other factors significantly affected their work engagement.

**Keywords:** Rural Early Childhood Teachers; Work Engagement; Professional Characteristics

eISSN: 2398-4287 © 2025. The Authors. Published for AMER by e-International Publishing House, Ltd., UK. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>). Peer-review under responsibility of AMER (Association of Malaysian Environment-Behaviour Researchers). DOI: <https://doi.org/10.21834/e-bpj.v10i31.6523>

---

### **1.0 Introduction**

China, with over 1.4 billion people, has more than 500 million living in rural areas. Rural preschool education remains a weak link due to slower economic and social development. Strengthening rural preschool education and schools is essential to meeting educational needs, improving workforce quality, and transforming the rural population into valuable human resources.

Teachers are vital for educational development, and a stable, high-quality teaching force is crucial for improving preschool education. As key contributors to rural preschool education, rural early childhood teachers play a foundational role but face significant challenges in work engagement, requiring urgent attention. Firstly, teacher occupational stress has become a global phenomenon (Skaalvik & Skaalvik, 2016). Studies have shown that teachers experience more significant stress than white-collar professionals (Munir et al., 2014). The teaching profession involves cynicism, occupational stress, and sadness nearly twice as high as other professions (Baig et al., 2016). A study by Lau et al. (2022) on 336 teachers in Hong Kong revealed that 87.6% reported significant stress. A mental health survey in the United Kingdom involving 26 professions ranked educators among the six most stressful occupations (Johnson & Johnson, 2005). In Malaysia, Pau et al. (2022) found through a study of 776 secondary school teachers that the majority experienced burnout, characterized by reduced personal accomplishment, increased sources of job stress, and challenges in time management, with fatigue being a primary symptom. Secondly, low willingness to continue teaching is a common issue among rural early childhood teachers. For instance, a survey of 165 teachers from eight rural kindergartens in Shanxi Province, China, found that 42.4% intended to leave their

teaching positions. In contrast, only 28.8% expressed a desire to remain in the profession (Zhang, 2020). Similarly, another study involving 503 rural kindergarten teachers in Jiangsu Province showed that only 38% intended to continue their teaching careers (Guo, 2020). Challenges in occupational stress and career stability among rural early childhood teachers negatively affect their work engagement and threaten the sustainable development of rural preschool education.

Given the importance of teacher work engagement and the challenges faced, it is essential to explore the factors influencing rural early childhood teachers' work engagement. Particular attention should be given to professional characteristics related to work engagement, such as teaching tenure, educational level, specialization, employment status, and recognition as an excellent teacher. However, a review of the literature reveals that, although research on work engagement has matured internationally, studies explicitly focusing on rural early childhood teachers' work engagement are relatively scarce, both in China and globally.

This study aims to address this research gap by examining how the professional characteristics of rural early childhood teachers (e.g., teaching tenure and educational level) influence their work engagement. By analyzing these factors in-depth, this study seeks to provide theoretical insights and practical guidance to promote the development of rural preschool education.

## 2.0 Literature Review

Work engagement refers to an individual's active participation in and dedication to their work role (Kahn, 1990). High levels of work engagement not only bring positive changes at the individual level, such as improved efficiency and increased job satisfaction, but also positively influence organizational outcomes. Teacher work engagement is essential for enhancing educational quality, as it directly impacts teachers' performance, well-being, and productivity. Moreover, it acts as a bridge, linking various forms of support—such as managerial, organizational, and peer support—to task performance, underscoring its critical role in converting resources into effective teaching strategies (Korsakienė et al., 2024).

A review of the literature reveals that current research on teacher work engagement primarily focuses on psychology and management. For example, Simbula et al. (2012) applied the Job Demands-Resources model to examine the interplay between job demands and resources. Their research emphasized that job resources, such as a supportive work environment and opportunities for professional development, are crucial for enhancing teachers' work engagement and satisfaction. Additionally, a study conducted by De Carlo et al. (2019) and his team demonstrated that various job resources, including managerial support and involvement in decision-making processes, can alleviate the harmful effects of job stressors like heavy workloads on the balance between professional and personal life. Providing abundant job resources can lead to more favorable work outcomes, such as improved balance between professional and personal life. These findings highlight the importance of creating resource-rich environments to foster higher engagement levels among teachers.

Despite these findings, research on work engagement by both Chinese and international scholars tends to focus predominantly on corporate employees, while studies involving teachers, particularly preschool teachers, remain relatively scarce (Wang, 2024).

Yunnan Province, in southwestern China, presents a distinct context for research due to significant disparities in educational development between urban and rural areas. As of 2022, the rural population accounted for 48.28% (22.66 million) of the total, with preschool education in rural areas notably underdeveloped, particularly in teacher and resource allocation. These challenges may significantly impact the work engagement of rural early childhood Teachers, making this region an ideal focus for exploring how their professional characteristics influence work engagement.

## 3.0 Research Methodology

### 3.1 Research Population

In Yunnan Province, the population of rural preschool educators surpasses the 20,000 mark. Recognizing that probability-based samples typically offer a more accurate reflection of the population than non-probability samples, as noted by Babbie (2020), this investigation opted for a probability sampling framework. However, considering the expansive geography and administrative constraints within Yunnan, compiling a comprehensive roster of all individuals is impractical. Under these circumstances, cluster sampling emerges as a suitable technique, as suggested by Babbie (2020). Consequently, the researchers employed cluster sampling to gather data from 530 rural preschool educators spread throughout the province.

### 3.2 Research Instrument

In this study, the Utrecht Work Engagement Scale (UWES), developed by Schaufeli and Bakker (2010), was employed to assess work engagement. The UWES includes three sub-dimensions: vigor, dedication, and absorption. Six items evaluate "vigor," such as "At my work, I feel bursting with energy." Five items determine "dedication," including "My job inspires me." The remaining six items assess "absorption," for example, "Time flies when I'm working." The Cronbach's alpha coefficients for these sub-dimensions are 0.83, 0.92, and 0.82, respectively, indicating high internal consistency. Additionally, the overall reliability of the scale is 0.93, demonstrating its robustness and suitability for evaluating work engagement (Schaufeli & Bakker, 2010).

### 3.3 Data Analysis

The researchers distributed a total of 530 questionnaires to gather insights into the rural preschool education sector in Yunnan Province.

Following a thorough data cleaning process—a crucial step to ensure data quality and reliability—data from 523 questionnaires were retained for statistical analysis. This process involved removing duplicates, addressing missing values, and filtering out any outliers or inconsistent responses. The data analysis was conducted using SPSS software.

## 4.0 Findings

### 4.1 Professional Characteristics Information

The study examines five professional characteristics of the respondents: teaching tenure, educational level, specialization, excellent teacher reward, and employment status. Table 1 provides a detailed summary of the professional characteristics of the early childhood teachers who participated in the study (n = 523).

	Group	Frequency	Percent
Teaching Tenure	under 10 Years	340	65
	10-20 Years	67	12.8
	21-30 Years	90	17.2
	over 30 Years	26	5
Educational Level	High School Graduate and below	104	19.9
	Associate Bachelor	232	44.4
	Undergraduate	187	35.8
	Master's Degree	0	0
	Doctor's Degree	0	0
Specialization	Preschool Education Major	377	72.1
	Non-preschool Education Major	146	27.9
Excellent Teacher Reward	Yes	94	18.0
	No	429	82.0
Employment status	Full-time	383	73.2
	Part-time	140	26.8

According to Table 1, the majority of teachers had teaching tenures of less than 10 years (65%), followed by those with 10-20 years (12.8%), and the fewest had over 30 years of experience (5%). In terms of educational level, most teachers held an associate bachelor's degree (44.4%), followed by undergraduate degrees (35.8%) and high school graduates or below (19.9%). None of the participants held a master's or doctoral degree. From a specialization perspective, the proportion of teachers majoring in preschool education (72.1%) was significantly higher than those from non-preschool education backgrounds (27.9%). Similarly, the number of teachers recognized as "excellent teachers" (18%) was much lower than those not recognized as excellent (82%). Full-time teachers (73.2%) significantly outnumber part-time teachers (26.8%).

### 4.2 Analysis of Influencing Factors

The researcher utilized one-way ANOVA and independent samples t-tests through IBM SPSS Statistics 26.0 to analyze the factors influencing work engagement.

#### 4.2.1 Teaching Tenure

Based on teaching tenure, rural early childhood teachers in this study were categorized into four distinct groups. An ANOVA was conducted to examine whether there were significant differences in work engagement among teachers with different teaching tenure.

		N	Mean	Std. Deviation
Work Engagement	under 10 years	341	4.179	.879
	10-20 Years	66	4.201	.842
	21-30 Years	90	4.624	.919
	over 30 Years	26	4.222	1.016
	Total	523	4.260	.901

Table 2 shows that rural early childhood teachers with different teaching tenures had different mean values of work engagement. The group with 21–30 years of teaching tenure had the highest mean value.

		Sum of Squares	df	Mean Square	F	Sig.
Work Engagement	Between Groups	14.412	3	4.804	6.088	.000
	Within Groups	409.532	519	.789		
	Total	423.944	522			

The results of the one-way ANOVA indicate that the F value for work engagement was 6.088 ( $p = 0.000 < 0.05$ ). This suggests a significant relationship between teaching tenure and work engagement.

Table 4 Post Hoc Comparisons Across Teaching Tenure

Dependent Variable (I) Teaching Tenure	(J) Teaching Tenure	Mean Difference (I-J)	Sig.	95% Confidence Interval	
				Lower Bound	Upper Bound
Work Engagement under 10 years	10-20 Years	-.023	.998	-.331	.285
	21-30 Years	-.445*	.000	-.716	-.173
	over 30 Years	-.043	.995	-.509	.423
10-20 Years	21-30 Years	-.422*	.018	-.793	-.051
	over 30 Years	-.020	1.000	-.550	.510
21-30 Years	over 30 Years	.402	.178	-.108	.912

\* The mean difference was significant at the 0.05 level.

The post hoc multiple comparison results showed that the work engagement levels of the groups with under 10 years and 10–20 years of teaching tenure were significantly lower than that of the group with 21–30 years (Table 4). This indicates a significant relationship between teaching tenure and work engagement.

#### 4.2.2 Educational Level

Based on educational level, rural early childhood teachers in this study were categorized into three groups. ANOVA was conducted to examine whether there were significant differences in work engagement among teachers with different educational level.

Table 5 A Description of Work Engagement about Educational Level

	Group	N	Mean	Std. Deviation
Work Engagement	High School Graduate and below	104	3.357	0.574
	Associate Bachelor	232	4.242	0.849
	Undergraduate	187	4.786	0.684
	Total	523	4.26	0.901

Table 5 shows the work engagement levels of rural early childhood teachers with different educational levels. Among them, the group with high school graduates and below has the lowest average, while the group with undergraduates has the highest average.

Table 6 One-Way ANOVA: Differences Across Educational Level

		Sum of Squares	df	Mean Square	F	Sig.
Work Engagement	Between Groups	136.595	2	68.297	123.594	.000
	Within Groups	287.349	520	.553		
	Total	423.944	522			

The results of the ANOVA showed that the F value for work engagement was 123.594 ( $p = 0.000 < 0.05$ ), indicating a significant result (Table 6).

Table 7 Post Hoc Comparisons Across Educational Levels

Dependent Variable	(I) Educational Level	(J) Educational Level	Mean Difference (I-J)	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Work Engagement (Tamhane)	High School Graduate and below	Associate Bachelor	-.885*	.000	-1.075	-.695
		Undergraduate	-1.429*	.000	-1.610	-1.248
	Associate Bachelor	Undergraduate	-.544*	.000	-.724	-.365

\* The mean difference was significant at the 0.05 level.

Post hoc multiple comparison results show that the work engagement level of the high school graduate and below group is significantly lower than those of the assistant bachelor and undergraduate groups, and the work engagement level of the associate bachelor group is significantly lower than that of the undergraduate group (Table 7). This indicates a significant relationship between educational level and work engagement. As educational attainment increases, so does the level of work engagement.

#### 4.2.3 Specialization

Based on specialization, rural early childhood teachers in this study were categorized into two distinct groups. T-test examined whether there are significant differences in work engagement support of rural early childhood teachers of different specialization, and the results are shown in the tables below.

Table 8 T-test: Differences Across Specialization

	Group	N	Mean	SD	T-value	Sig. (2-tailed)
Work Engagement	Preschool Education Major	377	4.346	.898	3.538	.000***
	Non-preschool Education Major	146	4.039	.875		

Note. \* $p < 0.05$ , \*\* $p < 0.01$ , \*\*\* $p < 0.001$

The t-test results show that in terms of work engagement, there was a significant difference between the preschool education major and the non-preschool education major after the test ( $t = 3.538$ ,  $p = 0.000 < 0.001$ ) (Table 8). The level of work engagement of early childhood teachers is significantly higher than that of non-early childhood teachers.

#### 4.2.4 Excellent Teacher Reward

The t-test was used to test whether there was a significant difference in work engagement between excellent and non-excellent rural early childhood teachers. The results are shown in Table 9.

Table 9 T-test: Differences Across Excellent Teacher Reward						
	Excellent Teacher Reward	N	Mean	SD	T-value	Sig. (2-tailed)
Work Engagement	Yes	94	4.809	.722	7.772	.000***
	No	429	4.140	.893		

Note. \* $p < 0.05$ , \*\* $p < 0.01$ , \*\*\* $p < 0.001$

The t-test results show significant differences in overall self-efficacy between excellent teachers and non-excellent teachers ( $t = 7.772$ ,  $p = 0.000 < 0.001$ ) (Table 9). It can be concluded that the work engagement level of excellent teachers is significantly higher than that of non-excellent teachers.

#### 4.2.5 Employment Status

The T-test was conducted to examine whether there are significant differences in work engagement based on the employment status of rural early childhood teachers. The results are presented in Table 10.

Table 10 T-test: Differences Across Employment Status						
	Employment type	N	Mean	SD	T-value	Sig. (2-tailed)
Work Engagement	Full-time	383	4.312	.908	2.177	.030*
	Part-time	140	4.119	.870		

Note. \* $p < 0.05$ , \*\* $p < 0.01$ , \*\*\* $p < 0.001$

The t-test results show that there are significant differences between full-time and part-time teachers for work engagement ( $t = 2.177$ ,  $p = 0.030 < 0.05$ ) (Table 10). The work engagement level of full-time early childhood teachers is significantly higher than that of part-time teachers.

## 5.0 Discussion

### 5.1 Overall Findings on Work Engagement

The study found that work engagement of rural preschool teachers is significantly influenced by education level, specialization, excellent teacher reward, and employment status. These findings align with previous research. Petrou et al. (2017) demonstrated that employees' educational levels significantly influence their work engagement. Similarly, Urbano (2021) highlighted that receiving appreciation enhances work engagement, which aligns with the recognition of outstanding rural preschool teachers through honorary titles for exceptional performance in educational practice, contributing to their higher engagement levels. In contrast, part-time teachers, due to their non-staff status, often experience a lower sense of professional identity (Jiang, 2021), making them more susceptible to turnover (Wang, 2016) and subsequently leading to lower work engagement.

### 5.2 The Relationship Between Teaching Tenure and Work Engagement

The data reveal that rural early childhood teachers with teaching tenure of less than 10 years and those with 10–20 years of experience exhibit significantly lower levels of work engagement compared to teachers with 21–30 years of teaching experience. This suggests that as teaching tenure increases, teachers accumulate more experience and confidence, enabling them to devote more energy to their work.

### 5.3 The Relationship Between Educational Level and Work Engagement

The study found that as educational levels increase, teachers' work engagement significantly improves. This indicates that teachers with higher educational levels may possess richer theoretical knowledge and stronger professional beliefs, allowing them to handle work-related challenges more effectively.

### 5.4 The Relationship Between Specialization and Work Engagement

Rural early childhood teachers with a preschool education specialization exhibit significantly higher levels of work engagement compared to teachers without such specialization. This suggests that strengthening professional training for non-preschool education teachers or attracting more professionals with preschool education backgrounds to rural teaching positions could be an effective strategy for improving overall work engagement.

### 5.5 The Relationship Between Professional Achievement and Work Engagement

Rural early childhood teachers recognized as "Excellent Teachers" demonstrate significantly higher levels of work engagement compared to those without this recognition. This indicates that improving teacher evaluation systems and enhancing recognition and reward mechanisms can inspire teachers' positivity, thereby boosting overall work engagement.

### 5.6 The Relationship Between Employment Status and Work Engagement

The significant difference in work engagement between full-time and part-time early childhood teachers highlights the impact of employment status on teachers' commitment. Full-time teachers show higher work engagement due to greater involvement in teaching, professional development, and stronger workplace connections. In contrast, part-time teachers face limited participation in decision-making and job instability.

## 6.0 Conclusion and Recommendations

The study highlights several key factors influencing work engagement among rural early childhood teachers. Teachers are generally young, with most holding associate or undergraduate degrees and a significant proportion (72.1%) specializing in preschool education. However, limited professional recognition, with only 18% receiving the "Excellent Teacher" title, and financial challenges, with 30.6% earning less than 4,000 CNY per month, may hinder their engagement. Work engagement is significantly influenced by educational level, specialization, professional recognition, teaching tenure, and employment status.

To enhance work engagement among rural early childhood teachers, several key measures should be prioritized. Novice and mid-career teachers, who show lower engagement levels, require targeted support through mentorship and professional development. Expanding professional training for non-specialized teachers and recruiting professionals with preschool education backgrounds are crucial steps, as specialized knowledge equips teachers with the confidence and skills needed for success. Recognizing and rewarding teachers for their achievements can further boost morale and motivation. Additionally, part-time teachers should receive greater support, including access to resources, participation in school activities, and improved job stability, to ensure equitable engagement across all employment types.

In summary, this study demonstrates that the professional characteristics of rural early childhood teachers have a significant impact on their work engagement. In particular, teaching tenure, educational level, professional background, professional achievement, and employment status play critical roles in enhancing work engagement. Based on these findings, it is recommended to provide differentiated support and guidance for teachers with varying teaching tenure, encourage teachers to pursue higher educational qualifications, strengthen professional training and development, and implement recognition and reward mechanisms to further enhance teachers' professional achievement and enthusiasm. These measures aim to comprehensively improve the work engagement of rural early childhood teachers.

In this study, while noteworthy findings were achieved, there are methodological limitations. The cross-sectional design does not capture dynamic changes in teachers' work engagement over time. Future research could adopt a longitudinal design to better understand the evolving relationships among these variables.

## References

- Babbie, E. R. (2020). *The practice of social research*. Cengage learning.
- Baig, J., Soon, N. K., Elmabrok, A. A., Shanker, S., Sirisa, N. M. X., & Ahmad, A. (2016). Causes of organizational cynicism and its consequence on teaching staff in Malaysia. *Indian Journal of Science and Technology*, 9(1), 1-4.
- De Carlo, A., Girardi, D., Falco, A., Dal Corso, L., & Di Sipio, A. (2019). When does work interfere with teachers' private life? An application of the job demands-resources model. *Frontiers in Psychology*, 10, 1121.
- Guo, F. X., Chen, W. (2020). Research on the current situation, influencing factors and support strategies of professional development of rural kindergarten teachers - A case study of Y City, Jiangsu Province. *Education Guide (Second Half Month)*, 05, 58-63. <https://doi.org/CNKI:SUN:YJYE.0.2020-05-011>
- Johnson, D. W., & Johnson, R. T. (2005). New developments in social interdependence theory. *Genetic, social, and general psychology monographs*, 131(4), 285-358.
- Jiang. (2021). A comparative study on the professional identity of regular and non-regular teachers in public kindergartens [Master's degree thesis, Anshan Normal University] <https://kns.cnki.net/KCMS/detail/detail.aspx?dbname=CMFD202202&filename=1021856669.nh>
- Kahn, W. A. (1990). Psychological conditions of personal engagement and disengagement at work. *Academy of management journal*, 33(4), 692-724.
- Korsakienė, R., Stankeviciene, A., & Nawal, A. (2024). Work engagement and individual performance of teachers: The role of job demands and job resources. *Problems and Perspectives in Management*, 22(3), 528.
- Lau, S. S., Shum, E. N., Man, J. O., Cheung, E. T., Amoah, P. A., Leung, A. Y., Okan, O., & Dadaczynski, K. (2022). Teachers' well-being and associated factors during the COVID-19 pandemic: A cross-sectional study in Hong Kong, China. *International Journal of Environmental Research and Public Health*, 19(22), 14661.

- Munir, Y., Khalifah, Z. B., Asif, T., & Khan, H. (2014). Interactive effect of organizational cynicism on perception of organizational politics and citizenship behaviour. *International Journal of Information Processing and Management*, 5(1), 18.
- Pau, K., Ahmad, A. B., Tang, H.-Y., Jusoh, A. J. B., Perveen, A., & Tat, K. K. (2022). Mental health and wellbeing of secondary school teachers in Malaysia. *International Journal of Learning, Teaching and Educational Research*, 21(6), 50-70.
- Petrou, P., Demerouti, E., & Xanthopoulou, D. (2017). Regular versus cutback-related change: The role of employee job crafting in organizational change contexts of different nature. *International journal of stress management*, 24(1), 62.
- Schaufeli, W. B., & Bakker, A. B. (2010). Defining and measuring work engagement: Bringing clarity to the concept. *Work engagement: A handbook of essential theory and research*, 12, 10-24.
- Simbula, S., Panari, C., Guglielmi, D., & Fraccaroli, F. (2012). Teachers' well-being and effectiveness: The role of the interplay between job demands and job resources. *Procedia-Social and Behavioral Sciences*, 69, 729-738.
- Skaalvik, E. M., & Skaalvik, S. (2016). Teacher stress and teacher self-efficacy as predictors of engagement, emotional exhaustion, and motivation to leave the teaching profession. *Creative Education*, 7(13), 1785.
- Wang, M. (2024). Research on the work engagement issues and improvement strategies of preschool teachers [Master's thesis, Heilongjiang University]. <https://kns.cnki.net/KCMS/detail/detail.aspx?dbname=CMFDTEMP&filename=1024056901.nh>
- Wang, Y. (2016). Research on the living conditions of "non-staff" teachers in public kindergartens in Tangshan City [Master's degree thesis, Hebei University]. . <https://kns.cnki.net/KCMS/detail/detail.aspx?dbname=CMFD201801&filename=1017971960.nh>
- Zhang, P. N., & Bai, W. F. (2020). The current situation and optimization strategies of teacher resource allocation in rural kindergartens in western China: A case study of Dingbian County, Shaanxi Province. *Journal of Xianyang Normal University*(04), 111-114. <https://doi.org/CNKI:SUN:XYSF.0.2020-04-026>