

Analysis of Turnover and Retention in Early Childhood Education Teachers

Reni Windi Minarsih¹, Lilis Madyawati², Khusnul Laely³

^{1, 2, 3} Universitas Muhammadiyah Magelang, Indonesia

Article Info

Article history:

Received April 28, 2025

Revised June 19, 2025

Accepted June 23, 2025

Keywords:

Early Childhood Education;

Retention;

Teachers;

Turnover.

ABSTRACT

High turnover of early childhood education teachers is a challenge to the quality of education. This situation compels leaders to focus on retaining teachers to ensure the sustainability of early childhood education institutions. This study aims to determine the factors that influence the turnover and retention rates of early childhood education teachers in the Magelang Region. This study uses a quantitative descriptive method through a survey approach. Data were collected through questionnaires distributed to early childhood education respondents in the Magelang Region using a simple random sampling technique. This study was analyzed using descriptive analysis, namely analyzing the average, number, and percentage. The results of the study indicate that the factors that influence the rate of teacher turnover are the work environment, suitability to work, culture, and community; compensation and benefits; leadership; work management system; and mentoring and support from colleagues. These findings suggest that school policies should focus on specific factors in the teachers' work environment by creating a fun, calming, and prosperous atmosphere to help reduce the impact of high teacher turnover and improve retention in early childhood education.

Copyright © 2025 ETDCI.
All rights reserved.

Corresponding Author:

Reni Windi Minarsih,
Universitas Muhammadiyah Magelang, Indonesia
Email: pgpaud@unimma.ac.id

1. INTRODUCTION

Early childhood education helps develop human resources (Richther et al., 2017; Masood, 2024). Law Number 20 of 2003 concerning the National Education System states in Article 1, point 14, that preparing early childhood education starts from birth to six years by providing educational stimulation to help physical and spiritual growth and development so children are more ready for further education. Early childhood education is a milestone that must be carefully examined to generate a quality generation (Kagan & Roth, 2017). At this age, children reach their golden age, when they become receptive to stimulation and can accept educational attempts from their environment, both intentionally and unintentionally. From the key sensitive era of childhood, children will mature physical and psychological functions that can respond to developmental

tasks required in their daily behavior patterns (Mastorci et al., 2024). Quality early life requires parental and educator assistance in caring for, nurturing, and educating children.

In early childhood education institutions, teachers must stimulate student development (Ekaningtyas, 2020). As the front line in forming the next generation of the nation, early childhood education teachers must be able to create a learning environment that stimulates children's cognitive, emotional, and social development (Kirk & Jay, 2018; Denham & Liverette, 2019). Teachers contribute to educational excellence. Because teacher performance and human resources are strongly correlated, Fomba et al. (2023) states that quality teachers affect student growth and education quality. To provide great education and generate well-rounded students, teacher quality must be considered.

According to the discussion on early childhood teachers' qualifications, they are qualified if they meet national standards. According to the Ministry of National Education of Indonesia, early childhood education teachers must have a Diploma IV or Bachelor's degree in early childhood education from an accredited program or a Diploma IV or Bachelor's degree in other relevant education or psychology and a Teacher Professional Education. Teachers' academic skills and competency affect early childhood education quality (Yang et al., 2025). Teacher competency as the ability to perform duties appropriately. Teacher competence improves stimulation and teaching in all areas of child development. Rusilowati and Wahyudi (2020) state that educators must master and improve professional, pedagogical, social, and personality competences.

Based on their excellence, reputable schools have effective early childhood education management criteria (Durlak et al., 2022). As in the quantity of teachers to students can impact classroom success. Article 36 of Permendikbud Number 137 of 2014, National Standards for Early Childhood Education, specifies the appropriate teacher-student ratio. Each class should have an age-appropriate teacher-child ratio: a) Age 0-2 has a teacher-child ratio of 1:4, meaning one teacher serves four students. b) Age 2-4 has a ratio of 1:8, meaning one teacher serves eight students. c) Age 4-6 has a ratio of 1:15, meaning one teacher serves fifteen students. Classroom success depends on teacher-student ratio. If the school has too few teachers, the quality will suffer (Koc & Celik, 2015).

Every school strives to maintain quality. One goal is to reduce teacher turnover and retain talented teachers. However, teacher turnover is inevitable. Burkholder (2022) found that most early childhood education facilities have considerable teacher turnover. Kids First Day School in Ohio has over 30% teacher turnover after one year. Teacher turnover occurs when a teacher leaves an institution to teach elsewhere or to quit (Ingersoll & Tran, 2023). Several causes drive teacher turnover in schools. Grant et al. (2019) found that age, institutional management body, pay, number of working days per month, and work flexibility greatly affect early childhood education instructors' propensity to depart. Heilala et al. (2022) also noted that the motives for education personnel to become early childhood education teachers are still few, and he wonders if

it's a calling or a career stepping stone. The quality of instructor performance will determine this. As shapers of kids' character, instructors must have a vocation for their work (Schaack et al., 2022). Thus, it will perform well, have professional skills, and have mature planning in teaching and learning to effectively transfer knowledge to pupils (Vikaraman et al., 2017; Putri & Edwarman, 2023). However, if the teacher is incompetent, unprofessional, and doesn't plan learning, kids won't learn.

Educational institutions must retain talented teachers to maintain excellence (Yao et al., 2023; Meyer et al., 2024). Due to significant teacher turnover, many institutions struggle to retain teachers. Schwartz et al. (2019) said that poor salaries, low social status, difficult workloads, and lack of professional development routes contribute to the shortage of early childhood education teachers, especially in distant and underprivileged locations. Due to limited school budgets and complicated funding, raising teacher compensation is not always a practical solution to teacher loss, even though low teacher earnings are one reason young teachers quit the field. Although principals cannot boost teacher compensation, they can employ alternative techniques to improve teacher retention (Shuls & Flores, 2020; DeMatthews et al., 2022). Regular training and seminars can increase teacher skills and show that the institution prioritizes their professional growth (Steinert et al., 2019; Hayati et al., 2021).

Atika and Yulianti (2023) providing motivation and fulfillment of compensation in the form of comfort, pleasure, and satisfaction to teachers is more likely to prevent them from quitting their jobs if driven by high teacher commitment, while a teacher's workload intensity does not affect their desire to stay. Thus, teacher turnover hurts school and student performance (Mugizi et al., 2019). School-year teacher turnover also affects children's conduct (Markowitz, 2024). Schools must improve teacher retention. Teacher retention refers to the practice of keeping teachers in their positions (Kelchtermans, 2017; Zavelevsky & Lishchinsky, 2020). In educational institutions, teacher retention is crucial to teacher loyalty. Teachers underpin quality education for students and institutions. Therefore, this article investigates what causes turnover among early childhood education teachers and their retention.

2. METHOD

This study was conducted using a quantitative descriptive method through a survey approach. This study was conducted to determine teacher assessments of turnover and retention among early childhood education teachers. This survey targeted several areas, including the Magelang Region. In determining the number of subjects, the researcher then used a simple random sampling technique. After the random sample was selected, a total of 94 teachers were used. The data collection technique used a questionnaire on teacher retention. The retention questionnaire was adapted from Jeffrey Phillips's research Factors that Contribute to PK-12 Teacher Retention in One Midwest School District. The following presents a quantitative descriptive method through a survey approach in Figure 1.

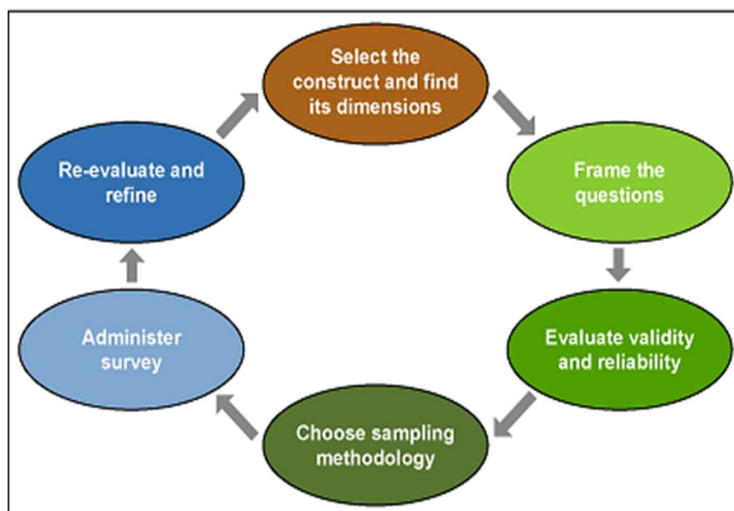


Figure 1. Survey Approach

Then the data collection technique used a questionnaire that would be distributed directly or indirectly. The distribution of the questionnaire used the help of Google Forms. The variables used in this study include early childhood education teacher turnover and retention. Furthermore, after the data was collected in this study, data analysis would be carried out using descriptive statistical analysis, namely calculating average, number, and percentage.

3. RESULTS AND DISCUSSION

Results

This study analyzes teacher surveys on turnover and retention in early childhood education institutions and identifies responders. This part explains the data, methods, analysis, primary findings, interpretation, and validity of the results. The following sections detail the data. The data in this study came from a questionnaire. Respondents were provided different replies based on gender, age, last education, teacher employment position, teaching institution, length of teaching, and certification.

Table 1. Respondent Identity

Item	Category	Frequency	Percentage
Gender	Female	94	100%
	Male	0	0%
Age	Under 20 years old	2	2%
	20 - 30 years old	33	35%
	30 - 40 years old	27	29%
	40 - 50 years old	28	30%
	Above 50 years old	4	4%
Last Education	High School	30	32%
	Diploma III	2	2%
	Bachelor of Early Childhood Education	43	46%
	Bachelor of Non-Early Childhood Education	17	18%
	Postgraduate in Early Childhood Education	2	2%
	Other	0	0%

Item	Category	Frequency	Percentage
Status	Permanent Foundation Teacher	72	77%
Kepegawaian	Temporary Teacher	20	21%
Guru	Government employees	2	2%
	Study groups	21	22%
Teaching	Kindergarten	68	72%
Institution	Daycare	2	2%
	Similar PAUD Units	3	3%
	1-5 years	27	29%
	5-10 years	28	30%
Teaching Time	11-15 years	21	22%
	16-20 years	11	12%
	21-25 years	4	4%
	> 25 years	3	3%
Certification	Not Yet Certified	76	81%
	Already Certified	18	19%

Table 1 demonstrates that 100% of survey respondents, 94 teachers, are female. Most respondents were 20-30 years old (35%), and 46% had graduated from S1 PG early childhood education. Then, 77% of Permanent Foundation Teachers, or GTYs, were at their kindergarten school (72%). Thirty percent had 5–10 years of teaching experience, and 80.85% were uncertified.

Description of early childhood education programs Teacher Turnover and Retention

The turnover and retention that occurred among early childhood education program teachers in this study can be identified from the analysis of questionnaire responses. The responses studied in this survey refer to the questionnaire instrument adapted from Jeffery Phillips with his research Factors that Contribute to PK-12 Teacher Retention in One Midwest School District. We conducted this survey to identify the factors that impact the turnover and retention of early childhood education teachers. The description of the results of this survey analysis can be seen in Table 2 below.

Table 2. Analysis of Teacher Turnover and Retention

Indicators	Criteria (%)	
	Agree	Disagree
Work Environment	86%	14%

The analysis found that 86% of 94 early childhood education teachers agreed with work environment indicators. According to Table 2, the work environment can affect early childhood education teacher turnover and retention. The following questionnaire statement states: teachers who resign will result in a shortage of educators in the school; recruiting new teachers quickly will reduce the impact on students; I feel that my teaching helps my students develop well; my school has high security, supporting facilities for learning, and an ideal number of students.

Table 3. Analysis of Teacher Turnover and Retention

Indicators	Criteria (%)	
	Agree	Disagree
Suitability for work, culture, and community.	98%	2%

Table 3 reveals that 98% of early childhood education instructors agreed with work, cultural, and community fit parameters. The questionnaire stated that I am happy working as a teacher, that my workplace is supportive, that I have a favorable relationship with my coworkers, that I am comfortable with my school, that I am loyal to my job, and that I do my job well, with 55-83% agreeing.

Table 4. Analysis of Teacher Turnover and Retention

Indicators	Criteria (%)	
	Agree	Disagree
Compensation and Benefits	53%	47%

Table 4 shows that 53% agreed and 47% disagreed on compensation and benefits metrics. The questionnaire statement about compensation and benefits: I obtain a salary that is in accordance with my work with 55%; the salary increases given by the institution makes me more persistent in teaching at school with 47%; and the allowance or bonus given by the institution makes me more diligent with 64% agreeing.

Table 5. Analysis of Teacher Turnover and Retention

Indicators	Criteria (%)	
	Agree	Disagree
Leadership	82%	18%

Table 5 demonstrates that 82% of early childhood education teachers agreed on leadership indicators. Leadership can affect a teacher's resignation. The questionnaire includes a statement about leadership, which indicates that I have a principal who manages the school well, that my school's management and administration are very satisfactory, and that my principal actively helps me succeed as a teacher; 68-72% of respondents agreed with these statements.

Table 6. Analysis of Teacher Turnover and Retention

Indicators	Criteria (%)	
	Agree	Disagree
Work Management System	91%	9%

Table 6 shows that 91% of teachers agreed with the metrics for the work management system. The following statements regarding the work management system received an agreement score of 73-81%: "I feel that the school where I work has done a good teacher performance evaluation," "The school's evaluation system will help me improve my teaching," and "The principal's evaluation makes me more confident in pursuing the teaching profession."

Table 7. Analysis of Teacher Turnover and Retention

Indicators	Criteria (%)	
	Agree	Disagree
Colleague Mentoring and Support	95%	5%

Table 7 demonstrates that 95% of early childhood education instructors agreed with peers' mentorship and support metrics. The questionnaire statement about mentoring and support from colleagues indicates that in my school, more experienced teachers help new teachers and that good teaching guidance makes me more enthusiastic about working, with 74% and 76% agreeing.

The study found that Magelang early childhood education instructors generally agreed with the survey on teacher turnover and retention. However, one responder disagreed with the statement that I prefer teaching since I'll receive a 53% pension in the compensation and benefits indication. Therefore, the researcher used open questions to investigate what influences instructors' decisions to quit or continue in teaching. The table below explains this.

Table 8. Analysis of Teacher Job Satisfaction

Category	Frequency	Percentage
Having many students	34	36%
Having a good relationship with parents	47	50%
Salary that matches the job	26	28%
Having a good relationship with coworkers	54	57%
Conducive school environment	66	70%
Able to improve the development of students	4	4%

Table 8 reveals that 70% of teacher job satisfaction is influenced by a good school environment. A good relationship with coworkers and parents can also influence teacher job satisfaction by 57% and 50%, respectively.

Table 9. Analysis of Teachers' Decisions to Quit Work

Category	Frequency	Percentage
Prioritizing family	20	21%
Having no reason to leave the teaching profession.	13	14%
Physical condition is starting to decline	10	11%
Experiencing discomfort in the school environment	24	26%
Having a better job	10	11%
Experiencing retirement	6	6%
Moving residence	1	1%

Table 9 demonstrates that 26% of teachers left due to classroom discomfort. About 21% of teachers quit to prioritize their families. However, 14% of instructors love their jobs and have no motive to leave.

Table 10. Factors Influencing Teachers to Continue Teaching

Category	Frequency	Percentage
Attachment to students	21	22%
Interest in teaching activities and student development	27	29%
Receive additional compensation in the form of allowances or bonuses from the teaching institution	3	3%
I have a high commitment to the profession as a early childhood education teacher	28	30%
Supportive work environment	37	39%
Social support from family	2	2%
Helping the family economy	2	2%

Table 10 demonstrates that 39% of instructors stay at the school because of a supportive work environment. Self-motivation, specifically a 30% commitment to early childhood education teaching, also affects this. Teacher passion in teaching and student development might also keep teachers in school (29%).

Discussion

This study examines early childhood education teacher turnover and retention factors. In underdeveloped nations, high teacher turnover is undervalued; therefore, concentrating on teacher retention can increase school sustainability, reduce losses, and improve learning results (Arthur & Bradley, 2023). Previous studies have found that low pay, poor working conditions, lack of school culture support, time and family demands, and limited professional development influence teacher turnover (Simon & Johnson, 2015).

In addition, understanding early childhood education teachers' intrinsic and extrinsic motives helps institutions retain them (Zhang et al., 2019). Intrinsic motivation can be a sense of responsibility, concern, and joy in teachers' work, while extrinsic motivation can be a sense of comfort in working together between the principal and teachers and a conducive environment that supports the learning process between the principal of early childhood education and teachers and parents. This study might add to the literature by analyzing early childhood education teacher turnover and retention in Magelang.

The research found that most Magelang teachers are female and that 94 persons are willing to take the poll. According to 94 responses, 33 culprits aged 20-30 (35.11%) filled out the study. Along with 43 teachers (45.74%) who have finished S1 early childhood education, 72 teachers (76.60%) are permanent foundation teachers. Kindergartens employ 68 instructors (72.34%). Next, 28 teachers with 5-10 years of experience make up 29.79% of the most experienced teachers. Most respondents—76 persons, 80.85%—are not teacher-certified. After identifying respondent data, respondent identification helps explain how teacher turnover and retention research results are affected. To avoid data duplication and deliver correct data.

Based on teacher responses to the early childhood education survey, six indicators were found that affect teacher turnover and retention. (1) work environment, (2) adaptability to work, culture, and community, and (3) remuneration and benefits (4) leadership, (5) work management, and (6) peer mentorship. Questionnaire answers like "disagree," "disagree," "agree," and "strongly agree" and open questions about early childhood education teacher turnover and retention inform this topic.

The research reveals that work environment factors can influence instructors' decisions to resign or continue in teaching. 86% of respondents believed that a good work environment may help instructors do their jobs. A nice workplace and good relationships between teachers and supervisors generate harmonious working conditions and improve teacher performance (Sahito & Vaisanen, 2020). The questionnaire statement also stated that teachers will give positive consideration if faced with the choice of quitting or staying in their jobs if the school has enough teachers, learning facilities, security, and students.

Suitability to work, culture, and community influences teachers' decisions to continue their profession, as 98% of respondents agreed with statements that make teachers perform well. This appropriateness helps retain teachers and prevent turnover. Teacher pays and perks affect turnover and retention. Respondents agreed with remarks about compensation or bonus allowances acceptable for institution employment. This supports earlier studies indicating that good and suitable compensation can boost teacher and employee retention (Colson & Satterfield, 2018).

Some 53% of respondents disagreed with the indicator's statement: "I like being a teacher because I will receive a pension." They said working for a pension has minimal impact on their decision to stay or leave their job. Because another study indicated that early childhood education teachers' impression of "*Sajuta*" (Patience, Honesty, Trust) motivated them to stay in the field (Ratnasari & Robandi, 2022). According to open-ended questionnaire answers, 70% of instructors said job satisfaction came from a good work environment.

Leadership in schools helps retain teachers and prevents turnover. This is because 82% of respondents agreed with comments about transformational leadership. The early childhood education principal can manage the vision and mission, be exemplary in carrying out duties, and solve problems. They can also provide examples and motivation to teachers and staff at the school. They can also provide real actions that spark new ideas. The school's work management system can also affect teacher turnover and retention. The teacher agreed with their institution's work management method with 91% trust. This suggests the work management system affects trust in the institution, allowing teachers to perform well. Colleague support makes teachers feel comfortable staying in the profession for a long period and discourages job changes. This is for instructors who agreed with 95% that mentors and peer assistance help their careers.

Job satisfaction also affects early childhood education teacher turnover and retention. About 70% (66 instructors) are happy with their teaching environment. Others are happy because they can build nice relationships with coworkers and students' parents. This study leaves unresolved concerns about why teachers quit. The result was 26% (24

instructors) feeling uncomfortable in school. However, some teachers in this study left their profession due to salary issues, better jobs, or age factors that prevented them from teaching. Researchers concluded that 39% (37 instructors) stayed in school due to supportive work environment elements in open questions.

These findings have major consequences for policymakers, especially in early childhood schooling. Teacher agreement on turnover and retention issues helps institutions retain and reduce teacher turnover. Teacher retention helps sustain organizational memory and reduce the detrimental effects of teacher turnover, according to Räsänen et al. (2020). Thus, policymakers and leaders in early childhood education institutions must create an environment pleasant, calming, and prosperous for teachers to reduce high teacher turnover and increase teacher retention.

In conclusion, this study highlights the important role of policymakers and leaders in early childhood education institutions to implement strategies that reduce rapid teacher turnover, ensuring that teachers remain in their positions. So, in practice, school institutions that pay attention to the influence of turnover and retention among early childhood education teachers will maintain their stability and can improve the quality of the institution.

4. CONCLUSION

This study examines the responses of early childhood education teachers in the Magelang region regarding factors that influence teacher turnover and teacher retention rates in early childhood education institutions. The research findings show that most early childhood education teachers agree with the factors that contribute to what makes teachers leave their profession and what makes teachers strive to stay in school. The indicators that influence the impact of teacher turnover and retention are as follows: The factors identified are: (1) Work environment, (2) Suitability to work, culture, and community, (3) Compensation and benefits, (4) Leadership, (5) Work management system, and (6) Mentoring and support from colleagues. The implications of the research findings emphasize that policymakers in schools should pay attention to factors that can trigger high teacher turnover and teacher retention, especially the teacher's work environment, by creating a 3M environment (pleasant, calm, and prosperous) for early childhood education teachers. Understanding the efforts leaders in early childhood education institutions must make will positively impact the institution's sustainability.

Although this study provides valuable insights, it is geographically limited to the Magelang area and relies on self-reported data, which may introduce bias. Future research can further explore the factors that affect teacher turnover and retention in early childhood education to provide broader knowledge as time goes by.

REFERENCES

- Arthur, L., & Bradley, S. (2023). Teacher retention in challenging schools: Please don't say goodbye!. *Teachers and Teaching*, 29(7-8), 753-771.
<https://doi.org/10.1080/13540602.2023.2201423>

- Atika, A. N., & Yulianti, N. (2023). Pengendalian Turnover Intention Guru Pendidikan Anak Usia Dini Melalui Penguatan Komitmen Organisasional. *AWLADY: Jurnal Pendidikan Anak*, 9(2), 103-118. <https://doi.org/10.24235/awlad.v9i2.14712>
- Burkholder, D. T. (2022). *An Action Research Study of Teacher Retention and Strategies to Mitigate Teacher Attrition in Early Childhood Education*. University of Dayton.
- Colson, T. L., & Satterfield, C. (2018). The effects of strategic compensation on teacher retention. *Power and Education*, 10(1), 92-104. <https://doi.org/10.1177/1757743818758782>
- Denham, S. A., & Liverette, K. H. (2019). The emotional basis of learning and development in early childhood education. In *Handbook of research on the education of young children* (pp. 43-64). Routledge.
- DeMatthews, D. E., Knight, D. S., & Shin, J. (2022). The principal-teacher churn: Understanding the relationship between leadership turnover and teacher attrition. *Educational Administration Quarterly*, 58(1), 76-109. <https://doi.org/10.1177/0013161X211051974>
- Durlak, J. A., Mahoney, J. L., & Boyle, A. E. (2022). What we know, and what we need to find out about universal, school-based social and emotional learning programs for children and adolescents: A review of meta-analyses and directions for future research. *Psychological Bulletin*, 148(11-12), 765. <https://psycnet.apa.org/buy/2023-55252-001>
- Ekaningtyas, N. L. D. (2020). Teacher's Method in Stimulating Psychosocial Development in Early Childhood. *Jurnal Pendidikan Anak Usia Dini Undiksha*, 8(1), 10-18. <https://doi.org/10.23887/paud.v8i1.23982>
- Fomba, B. K., Talla, D. N. D. F., & Ningaye, P. (2023). Institutional quality and education quality in developing countries: Effects and transmission channels. *Journal of the Knowledge Economy*, 14(1), 86-115. <https://doi.org/10.1007/s13132-021-00869-9>
- Grant, A. A., Jeon, L., & Buettner, C. K. (2019). Relating early childhood teachers' working conditions and well-being to their turnover intentions. *Educational Psychology*, 39(3), 294-312. <https://doi.org/10.1080/01443410.2018.1543856>
- Hayati, M., Yubaedi Siron, & Hermawati, E. (2021). Strategi Lembaga Pendidikan Anak Usia Dini dalam Melibatkan Guru Laki-Laki. *Golden Age: Jurnal Ilmiah Tumbuh Kembang Anak Usia Dini*, 6(1), 11-24. <https://doi.org/10.14421/jga.2021.61-02>
- Heilala, C., Kalland, M., Lundkvist, M., Forsius, M., Vincze, L., & Santavirta, N. (2022). Work demands and work resources: Testing a model of factors predicting turnover intentions in early childhood education. *Early Childhood Education Journal*, 50(3), 399-409. <https://doi.org/10.1007/s10643-021-01166-5>
- Ingersoll, R. M., & Tran, H. (2023). Teacher shortages and turnover in rural schools in the US: An organizational analysis. *Educational Administration Quarterly*, 59(2), 396-431. <https://doi.org/10.1177/0013161X231159922>
- Kagan, S. L., & Roth, J. L. (2017). Transforming early childhood systems for future generations: Obligations and opportunities. *International Journal of Early Childhood*, 49(2), 137-154. <https://doi.org/10.1007/s13158-017-0194-4>
- Kelchtermans, G. (2017). 'Should I stay or should I go?': unpacking teacher attrition/retention as an educational issue. *Teachers and Teaching: Theory and Practice*, 23(8), 961-977. <https://doi.org/10.1080/13540602.2017.1379793>
- Kirk, G., & Jay, J. (2018). Supporting kindergarten children's social and emotional development: Examining the synergetic role of environments, play, and relationships. *Journal of Research in Childhood Education*, 32(4), 472-485. <https://doi.org/10.1080/02568543.2018.1495671>

- Koc, N., & Celik, B. (2015). The impact of number of students per teacher on student achievement. *Procedia-Social and Behavioral Sciences*, 177, 65-70. <https://doi.org/10.1016/j.sbspro.2015.02.335>
- Markowitz, A. J. (2024). Within-Year Teacher Turnover in Head Start and Children's School Readiness. *AERA Open*, 10(1), 1–25. <https://doi.org/10.1177/23328584241245094>
- Masood, H. (2024). Helping early childhood educators thrive: insights from human resource management. *Qualitative Research Journal*. <https://doi.org/10.1108/QRJ-07-2024-0167>
- Mastorci, F., Lazzeri, M. F. L., Vassalle, C., & Pingitore, A. (2024). The transition from childhood to adolescence: Between health and vulnerability. *Children*, 11(8), 989. <https://doi.org/10.3390/children11080989>
- Meyer, M. S., Shen, Y., & Plucker, J. A. (2024). Reducing excellence gaps: A systematic review of research on equity in advanced education. *Review of Educational Research*, 94(1), 33-72. <https://doi.org/10.3102/00346543221148461>
- Mugizi, W., Tumuhaiseand, G., Samanya, B., & Dafiewhare, A. O. (2019). Leadership Styles and Retention of Teachers in Private Primary Schools in Bushenyi-Ishaka Municipality, Uganda. *Open Journal of Leadership*, 08(04), 167–187. <https://doi.org/10.4236/ojl.2019.84009>
- Putri, S., & Edwarman, E. (2023). Analisis Faktor-Faktor Yang Mempengaruhi Kinerja Guru PAUD Kabupaten Seluma. *EKOMBIS REVIEW: Jurnal Ilmiah Ekonomi Dan Bisnis*, 11(1), 971-982. <https://doi.org/10.37676/ekombis.v11i1.2123>
- Ratnasari, A., & Robandi, B. (2022). Sajuta: Persepsi Kesejahteraan Guru Pendidikan Anak Usia Dini Dalam Mempertahankan Profesi. *Jurnal Ilmiah Telaah*, 7(2), 158-165. <https://doi.org/10.31764/telaah.v7i2.8658>
- Räsänen, K., Pietarinen, J., Pyhältö, K., Soini, T., & Väisänen, P. (2020). Why leave the teaching profession? A longitudinal approach to the prevalence and persistence of teacher turnover intentions. *Social Psychology of Education*, 23(4), 837-859. <https://doi.org/10.1007/s11218-020-09567-x>
- Richter, L. M., Daelmans, B., Lombardi, J., Heymann, J., Boo, F. L., Behrman, J. R., ... & Darmstadt, G. L. (2017). Investing in the foundation of sustainable development: pathways to scale up for early childhood development. *The lancet*, 389(10064), 103-118. [https://doi.org/10.1016/S0140-6736\(16\)31698-1](https://doi.org/10.1016/S0140-6736(16)31698-1)
- Rusilowati, U., & Wahyudi, W. (2020). The significance of educator certification in developing pedagogy, personality, social and professional competencies. In *2nd Social and Humaniora Research Symposium (SoRes 2019)* (pp. 446-451). Atlantis Press.
- Sahito, Z., & Vaisanen, P. (2020). A literature review on teachers' job satisfaction in developing countries: Recommendations and solutions for the enhancement of the job. *Review of Education*, 8(1), 3-34. <https://doi.org/10.1002/rev3.3159>
- Schaack, D. D., Donovan, C. V., Adejumo, T., & Ortega, M. (2022). To stay or to leave: Factors shaping early childhood teachers' turnover and retention decisions. *Journal of Research in Childhood Education*, 36(2), 327-345. <https://doi.org/10.1080/02568543.2021.1955779>
- Schwartz, K., Cappella, E., Aber, J. L., Scott, M. A., Wolf, S., & Behrman, J. R. (2019). Early childhood teachers' lives in context: Implications for professional development in under-resourced areas. *American Journal of Community Psychology*, 63(3-4), 270-285. <https://doi.org/10.1002/ajcp.12325>
- Shuls, J. V., & Flores, J. M. (2020). Improving teacher retention through support and development. *Journal of Educational Leadership and Policy Studies*, 4(1), n1. <https://eric.ed.gov/?id=EJ1282763>

- Simon, N., & Johnson, S. M. (2015). Teacher turnover in high-poverty schools: What we know and can do. *Teachers College Record*, 117(3), 1-36. <https://doi.org/10.1177/016146811511700305>
- Steinert, Y., O'Sullivan, P. S., & Irby, D. M. (2019). Strengthening teachers' professional identities through faculty development. *Academic Medicine*, 94(7), 963-968. <https://doi.org/10.1097/ACM.0000000000002695>
- Vikaraman, S. S., Mansor, A. N., & Hamzah, M. I. M. (2017). Mentoring and coaching practices for beginner teachers—A need for mentor coaching skills training and principal's support. *Creative Education*, 8(01), 156. <https://doi.org/10.4236/ce.2017.81013>
- Yang, X., Abdul Rahman, M. N., & Sun, Y. (2025). The impact of teachers' qualifications on development outcomes in early childhood: a systematic literature review. *International Journal of Early Years Education*, 33(2), 426-445. <https://doi.org/10.1080/09669760.2025.2451301>
- Yao, J., Han, X., Qiu, X., Pi, W., Wang, A., Meng, X., & Wei, L. (2023). 'Keeping up with the times'. Core competencies of excellent primary and secondary school teachers in the internet plus era: a qualitative study on teacher education in China. *Teaching and Teacher Education*, 126, 104074. <https://doi.org/10.1016/j.tate.2023.104074>
- Zavelevsky, E., & Lishchinsky, O. S. (2020). An ecological perspective of teacher retention: An emergent model. *Teaching and Teacher Education*, 88, 102965. <https://doi.org/10.1016/j.tate.2019.102965>
- Zhang, L., Yu, S., & Liu, H. (2019). Understanding teachers' motivation for and commitment to teaching: profiles of Chinese early career, early childhood teachers. *Teachers and Teaching*, 25(7), 890-914. <https://doi.org/10.1080/13540602.2019.1670155>