



The Influence of School Climate on Teacher Innovation in Early Childhood Education Mediated by Teacher Self-Efficacy

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ABSTRACT

The research aims to analyze the influence of school climate on early childhood education teachers' innovation with teachers' self-efficacy as a mediating variable. This research uses a quantitative approach with an explanatory research design. The population of early childhood education (ECE) teachers in East Java Province, with a sample of 200 teachers selected using the multistage cluster random sampling technique. Data were collected thru a questionnaire using a five-point Likert scale. Data analysis was conducted using Structural Equation Modeling (SEM). The research results indicate that the research model fits well with the empirical data (CMIN/DF = 1.284; RMSEA = 0.038; GFI = 0.934; AGFI = 0.907; CFI = 0.976; TLI = 0.968). The school climate has a positive and significant effect on teachers' self-efficacy ($\beta = 0.620$; $p < 0.001$), teachers' self-efficacy has a positive and significant effect on teachers' innovation ($\beta = 0.540$; $p < 0.001$), and the school climate has a positive and significant effect on teachers' innovation ($\beta = 0.280$; $p = 0.001$). Additionally, teachers' self-efficacy partially mediates the effect of school climate on teachers' innovation with an indirect effect value of 0.335 ($p = 0.003$). These findings indicate that a conducive school climate can enhance teachers' innovation both directly and by strengthening teachers' self-efficacy.

INTRODUCTION

Early Childhood Education Teacher Education, is an important foundation in human resource development because during this period, children experience rapid development in cognitive, socio-emotional, language, physical motor skills, as well as religious and moral values. The quality of educational services at the early childhood education level is greatly determined by the quality of teachers as the main actors in the learning process (Cimino et al., 2025). Early Childhood Education (PAUD) teachers do not only play the role of educators but also serve as facilitators, motivators, mediators, and designers of learning experiences that align with the developmental characteristics of children. Therefore, teachers are required to have the ability to create learning experiences that are creative, flexible, and innovative in order to accommodate the diverse learning needs of children.

In the era of educational transformation and rapid technological development, teacher innovation has become one of the important factors in improving the quality of learning. Teacher innovation refers to the ability of teachers to generate, develop, promote, and implement new ideas in the learning process to enhance the effectiveness of education (Topçiu & Myftiu, 2015). According to the Innovative Work Behavior research, innovative teacher behavior includes the process of generating new ideas, developing those ideas, and applying them in teaching practices to achieve better educational outcomes (Dwi Ismiantri & Prabandini Muyana, 2021). In the context of Early Childhood Education (ECE), teacher innovation can be realized thru the use of creative learning media, the development of educational play



activities, the integration of learning technology, and the application of project-based and STEAM learning approaches that meet the needs of young children.

Along with the demands of 21st-century education that emphasize critical thinking, creativity, collaboration, and communication skills, the need for teacher innovation is increasing. Early Childhood Education (ECE) teachers must be able to create a learning environment that is not only enjoyable but also capable of optimally enhancing the development of various potentials in children (Dejarnette, 2018). However, research shows that some teachers are not consistently able to produce innovative behaviors. There are still teachers who prefer to use conventional teaching approaches, are less willing to try new methods, and have difficulty adapting to curriculum changes and advancements in educational technology. This shows that many variables, both from the individual and the organizational environment where the teacher works, influence teacher innovation (Suprianto & Agustina, 2021).

One of the organizational factors believed to have a strong influence on teacher innovation is the school climate (Voight & Nation, 2016). The school climate describes the perceptions of school members regarding the quality of the work environment, which includes interpersonal relationships, communication patterns, leadership, organizational support, and the work culture that develops within the school (Wang & Degol, 2016). A positive school climate is characterized by harmonious working relationships, supportive leadership, open communication, trust among organizational members, and a collaborative culture that allows teachers to develop professionally. Conversely, a negative school climate can create work pressure, interpersonal conflicts, and obstacles in the development of teachers' creativity and innovation. Research shows that a supportive school environment plays a crucial role in encouraging the emergence of innovative teacher behaviors because it provides space for teachers to experiment, take risks, and develop new ideas in teaching (Haynes et al., 1997).

The concept of school climate in this study refers to the model developed by Wayne K. Hoy, which consists of the dimensions of Collegial Leadership, Professional Teacher Behavior, Achievement Press, and Institutional Vulnerability (Mills, 2021). The Collegial Leadership dimension describes the principal's ability to build democratic working relationships, support teachers' professional development, and create a conducive working atmosphere. The Professional Teacher Behavior dimension indicates the quality of professional relationships among teachers, characterized by cooperation, mutual respect, and commitment to improving the quality of learning. Meanwhile, Achievement Press reflects a school culture that encourages the achievement of high academic quality, while Institutional Vulnerability describes the school's level of susceptibility to external pressures that can disrupt the execution of educational tasks. The four dimensions together form a work environment that can influence teachers' innovative behavior.

Previous research shows that schools with a positive organizational climate tend to have teachers who are more creative and innovative in implementing learning (Oloan & Dariyo, 2015). Research on the relationship between school climate and teacher innovation indicates that organizational support, a collaborative culture, and effective leadership significantly influence teachers' innovative behaviors. Teachers working in a supportive school environment feel safer to propose new ideas, try different teaching strategies, and participate in professional development activities. Thus, the school climate can be viewed as an external factor that contributes to the enhancement of teacher innovation.

Nevertheless, the relationship between school climate and teacher innovation does not always occur directly. There are psychological factors that can explain how the school environment influences teachers' innovative behavior. One of these factors is the self-efficacy of teachers. Self-efficacy is the individual's belief in their ability to perform specific tasks and achieve the desired outcomes. According to Albert Bandura, self-efficacy plays an important role in determining how individuals think, act, motivate themselves, and face various challenges (Prifti, 2020). Teachers with high self-efficacy tend to be more confident in managing learning, facing difficulties, and trying various new strategies to improve the quality of education.

In the context of education, teacher self-efficacy is one of the important predictors of the success of professional task implementation (Hidajat et al., 2023). Teachers with high self-efficacy believe that they are capable of managing the classroom effectively, engaging students in learning, and applying innovative teaching strategies. Conversely, teachers with low self-efficacy tend to avoid challenges, lack confidence in trying new methods, and are more likely to give up when facing obstacles. Various studies



show that self-efficacy has a positive relationship with creativity, innovation, performance, and the quality of learning produced by teachers.

The relationship between self-efficacy and teacher innovation can be explained thru social cognitive theory, which states that individuals with high levels of self-efficacy have stronger motivation to achieve goals, are willing to take risks, and are able to persist in their efforts when facing difficulties (Zimmerman, 2000). In the context of early childhood education (ECE), teachers who are confident in their abilities will find it easier to generate new learning ideas (idea generation), advocate for those ideas to be accepted by the school environment (idea promotion), and implement them in teaching practices (idea realization). Research shows that self-efficacy is one of the most consistent psychological factors in predicting innovative behavior among teachers.

In addition to directly influencing teacher innovation, self-efficacy is also suspected to play a mediating role in the relationship between school climate and teacher innovation. A positive school environment can enhance teachers' confidence in their abilities thru social support, successful experiences, professional recognition, and opportunities for growth (Eastman, C., Marzillier, 1984). When teachers receive support from the principal and colleagues, they tend to have higher self-confidence in carrying out their professional duties. That confidence then encourages the emergence of innovative behaviors in teaching. In other words, a good school climate not only creates conditions that support innovation but also shapes internal psychological factors that reinforce teachers' innovative behaviors. Recent research findings indicate that self-efficacy has been shown to mediate the relationship between school climate and teacher innovation in various educational contexts (Maxwell et al., 2017).

In the context of early childhood education (PAUD) in Indonesia, research on the relationship between school climate, teacher self-efficacy, and teacher innovation is still relatively limited. Most previous research has focused more on the levels of primary and secondary education, whereas the characteristics of early childhood education have different complexities. Early childhood education teachers face higher demands in creating learning that is creative, interactive, and appropriate for the developmental stages of children. Therefore, an empirical study is needed to explain the factors influencing teacher innovation in the context of early childhood education (PAUD) more comprehensively.

Based on the description, this research is important to examine the influence of school climate on early childhood education (ECE) teachers' innovation with teachers' self-efficacy as a mediating variable. This study is expected to provide theoretical contributions to the development of studies on teachers' innovative behavior from the perspective of social cognitive theory, as well as practical contributions for ECE managers in creating a school environment that can enhance teachers' self-efficacy and innovation. With the increase in teacher innovation, the quality of early childhood education is expected to develop more optimally and be able to meet the challenges of 21st-century education.

METHODS

This research focuses on testing the hypothesis formulated based on theory and previous research findings regarding the causal relationship between school climate, teacher self-efficacy, and teacher innovation in Early Childhood Education (ECE). Therefore, this research uses a quantitative approach with an explanatory research type. Explanatory research is used to explain the direct and indirect effects of the variables being studied. This allows for a deeper understanding of how school climate, teacher competence, and teacher innovation interact with each other. The Structural Equation Modeling (SEM) approach, aided by the AMOS application, is used to conduct data analysis. This method allows for the simultaneous testing of structural models and measurement, as well as the analysis of mediation relationships between variables in a larger model.

The research was conducted at Early Childhood Education (PAUD) institutions located in several regencies/cities in East Java. The selection of the research location was based on the consideration that East Java is the province with the largest number of early childhood education (PAUD) units in Indonesia, thus having representative characteristics in depicting the condition of PAUD teachers. The research population consists of all active PAUD teachers teaching in PAUD institutions in East Java. Considering the large and widely distributed population, the sampling technique was conducted using



multistage cluster random sampling. In the first stage, several districts/cities were selected as research clusters, then early childhood education institutions were randomly chosen, and subsequently, teachers were proportionally selected as research respondents. The number of samples used was 200 early childhood education (PAUD) teachers. This number meets the minimum requirements for SEM analysis as recommended by Hair et al., who state that SEM analysis requires a sample size of between 150 to 400 respondents depending on the complexity of the research model (Hair et al., 2014).

The variables studied consist of three main constructs, namely school climate as the exogenous variable, teacher self-efficacy as the mediating variable, and teacher innovation as the endogenous variable. The school climate variable is measured based on the Organizational Climate Index (OCI) concept developed by Hoy, Smith, and Sweetland, which consists of four dimensions: Collegial Leadership, Professional Teacher Behavior, Achievement Press, and Institutional Vulnerability (Wang & Degol, 2016). The Collegial Leadership dimension describes the support and leadership of the principal in creating a conducive work environment, Professional Teacher Behavior shows the professional relationships among teachers, Achievement Press describes the school's encouragement toward achieving high-quality education, while Institutional Vulnerability indicates the school's level of susceptibility to external pressures. The variable of teacher self-efficacy is measured based on the self-efficacy theory developed by Bandura, which consists of three dimensions: Magnitude (Level), Strength, and Generality (Bandura, 1994). Meanwhile, the teacher innovation variable is measured using the Innovative Work Behavior concept developed by Janssen, which consists of three dimensions: Idea Generation, Idea Promotion, and Idea Realization.

Data collection was conducted using a questionnaire instrument developed based on indicators from each dimension of the research variables. The research instrument uses a five-point Likert scale consisting of the answer choices Strongly Disagree, Disagree, Neutral, Agree, and Strongly Agree with a score range of 1 to 5. The questionnaire was distributed both directly and thru online platforms to preschool teachers who were the respondents of the study. Before being used in the main research, the instrument was first tested for validity and reliability thru a limited trial. The validity test was conducted using Confirmatory Factor Analysis (CFA) with a minimum standardized loading factor (SLF) value of 0.50. Meanwhile, the construct reliability was evaluated using the Construct Reliability (CR) value with a minimum criterion of 0.70 and Average Variance Extracted (AVE) of at least 0.50 to ensure that each construct has good internal consistency (Hair, J. F. Black. WC, 2010).

Data analysis is conducted thru several stages. The first stage is descriptive statistical analysis aimed at describing the characteristics of respondents and the distribution of research data. The second stage is the measurement model testing using Confirmatory Factor Analysis to ensure that each indicator can represent the measured construct. After the measurement model meets the criteria of validity and reliability, the structural model testing is conducted to examine the relationships between the research variables. The relationships tested include the influence of school climate on teacher self-efficacy, the influence of teacher self-efficacy on teacher innovation, and the influence of school climate on teacher innovation. Subsequently, the mediation effect of teacher self-efficacy is tested thru direct effect analysis, indirect effect analysis, and total effect analysis using the bootstrap procedure in SEM.

The feasibility of the research model is evaluated using several goodness of fit indices commonly used in SEM analysis. The model is considered to have a good fit if it meets the recommended cut-off values, namely Probability ≥ 0.05 , CMIN/DF ≤ 2.00 , RMSEA ≤ 0.08 , GFI ≥ 0.90 , AGFI ≥ 0.90 , CFI ≥ 0.90 , and TLI ≥ 0.90 . If most of the indices have met the criteria, then the research model is deemed suitable for testing the proposed hypothesis (Grande et al., 2022).

RESULTS AND DISCUSSION

Research Results Construct Validity

The results of the research analysis on The Influence of School Climate on Teacher Innovation in Early Childhood Education Mediated by Teacher Self-Efficacy show in Table 1.



Table 1. Results Of The Construct Validity

Variable	Dimension	Stansardized Loading Factor	Keterangan
School Climate	Collegial Leadership	0,82	Valid
School Climate	Professional Teacher Behavior	0,79	Valid
School Climate	Achievement Press	0,76	Valid
School Climate	Institutional Vulnerability	0,63	Valid
Teacher Self-Efficacy	Magnitude/level	0,81	Valid
	Strength	0,84	Valid
	Generality	0,78	Valid
Teacher Innovation	Idea Generation	0,85	Valid
	Idea Promotion	0,80	Valid
	Idea Realization	0,83	Valid

Based on the results of the construct validity test above, it is known that all dimensions have a standardized loading factor value > 0.5 . Thus, it indicates that the indicators/dimensions of all variables are declared valid in measuring their latent constructs.

Reliability Test Results

Table 2. Reliability Test Results

Variabel	Construct Realiability	AVE	Keterangan
School Climate	0,84	0,57	Reliabel
Teacher Self-Efficacy	0,85	0,65	Reliabel
Teacher Innovation	0,87	0,68	Reliabel

From the reliability in Table 2, it is known that the CR value > 0.7 and AVE > 0.5 , so all constructs have good reliability.

Model Feasibility Test Results

The purpose of the SEM model feasibility test is to determine whether the constructed SEM model is appropriate (feasible) or not. The SEM model feasibility test is divided into three types: absolute fit model, incremental fit model, and parsimonious fit model. The results of the model feasibility testing are in Table 3.

Table 3. Results of Goodness of Fit Indices Full Model Test

Goodness of Fit Index	Cut Off Value	Value	Explanation
Chi-Square	Diharapkan kecil	86,214	Fit
Probability	$\geq 0,05$	0,071	Fit
CMIN/DF	$\leq 5,00$	1,284	Fit
RMSEA	$< 0,08$	0,038	Fit
GFI	$\geq 0,90$	0,934	Fit
AGFI	$\geq 0,90$	0,907	Fit
CFI	$\geq 0,90$	0,976	Fit
TLI	$\geq 0,90$	0,976	Fit

Based on the model test results, it can be said that the theoretical model of teacher innovation aligns with empirical data, even tho the p-value from the chi-square is 86.214. This is because the chi-square value is very sensitive to large sample sizes. Therefore, to test the model's fit, it can be done by examining the results of other goodness of fit parameter tests. The goodness of fit test results above have met 8 fit index parameters. According to Hair et al. (2014), 4 to 5 goodness of fit criteria are sufficient to assess the feasibility of a model.

Hypothesis Test Results

Hypothesis testing aims to determine whether there is a significant influence between exogenous variables and endogenous variables. This testing is based on the criterion that if the probability value $\leq$ significance level (Alpha (α) = 5%) or marked with an asterisk (***) which is 0.000, it can be concluded that the exogenous variable has a significant influence on the endogenous variable. The results of the



hypothesis testing are presented in the following Table 3.

Table 4. The Results Of The Hypothesis Testing

Eksogen	Mediasi	Endogen	Path Coefficient	S.E.	C.R.	P Value	Keterangan
School Climate		Teacher Self-Efficacy	0,620	0,091	6,841	***	Significant
Teacher Self-Efficacy		Teacher Innovation	0,540	0,091	5,927	***	Significant
School Climate		Teacher Innovation	0,280	0,087	3,214	0,001	Significant
School Climate	Teacher Self-Efficacy	Teacher Innovation	0,335	0,112	2,991	0,003	Partial Mediation

This research uses two main theoretical foundations (grand theory), namely the Social Cognitive Theory developed by Albert Bandura (Bandura, 2020) and the Organizational Climate Theory (Wang & Degol, 2016). The organizational climate theory explains that a conducive work environment can influence the attitudes, behaviors, and performance of individuals within an organization, while the social cognitive theory explains that individual behavior is influenced by the reciprocal interaction between environmental factors, personal factors, and the behavior itself (triadic reciprocal determinism). Based on these two theories, this research examines the relationship between school climate, teacher self-efficacy, and teacher innovation in early childhood education.

H1: The Influence of School Climate on Teacher Self-Efficacy

The results of the SEM analysis show that the school climate has a positive and significant effect on teachers' self-efficacy, with a path coefficient (β) of 0.620, a C.R. value of 6.841, and a p-value < 0.001. These results indicate that the more positive the teachers' perception of the school climate, the higher the level of self-efficacy possessed by early childhood education teachers.

This finding can be explained thru Bandura's Social Cognitive Theory, which states that an individual's belief in their abilities does not emerge suddenly, but is shaped by the interaction between environmental factors and individual experiences (Bandura, 2002). A positive work environment provides various sources for the formation of self-efficacy, such as mastery experiences, vicarious experiences, social persuasion, and positive psychological conditions. When teachers work in schools with collegial leadership, good professional relationships, a high achievement culture, and low external pressure, they receive support that reinforces their belief that they can effectively carry out their teaching tasks.

From the perspective of Organizational Climate Theory, a positive school climate creates a work environment that supports the professional development of teachers. The Collegial Leadership dimension allows teachers to receive guidance and support from the school principal. The Professional Teacher Behavior dimension allows teachers to learn from their peers thru professional collaboration. The Achievement Press dimension encourages teachers to achieve higher learning standards, while low Institutional Vulnerability allows teachers to focus on their professional duties without excessive external pressure. These conditions ultimately enhance teachers' confidence in their teaching abilities, classroom management, and handling various learning challenges. The results of this study are in line with the research by Lazarides and Warner (2020), which found that a supportive school environment contributes to the improvement of teachers' self-efficacy thru the social and professional support provided by school organizations (Hettinger et al., 2021).

H2: The Influence of Teacher Self-Efficacy on Teacher Innovation

The analysis results show that teacher self-efficacy has a positive and significant effect on teacher innovation with a path coefficient (β) value of 0.540, a C.R. value of 5.927, and a p-value < 0.001. These findings indicate that teachers with high self-efficacy tend to exhibit higher innovative behavior compared to teachers with low self-efficacy. This result is very consistent with the Social Cognitive Theory, which states that self-efficacy is the main determinant of human behavior. According to Bandura, individuals who have high self-efficacy will be more courageous in facing challenges, have



high motivation, show perseverance in overcoming obstacles, and be more open to new experiences (Eastman, C., Marzillier, 1984). In the context of early childhood education, teachers with high self-efficacy will be more confident in trying new teaching strategies, developing creative learning media, and implementing various innovations aimed at improving the quality of learning.

This relationship can also be explained thru the dimensions of self-efficacy used in the research. The Magnitude (Level) dimension shows the teacher's confidence in facing the difficulty level of certain tasks (Bandura, 1994). Teachers with a high efficacy level are not afraid to face complex learning challenges. The Strength dimension indicates the strength of belief in one's own abilities, allowing teachers to persevere when facing failures in implementing innovations. Meanwhile, the Generality dimension allows teachers to apply their confidence to various different learning situations. In the perspective of innovative behavior, teachers with high self-efficacy will find it easier to carry out the three stages of innovation proposed by Janssen (2000), namely Idea Generation, Idea Promotion, and Idea Realization. Teachers are not only able to generate new ideas but also to advocate for and implement those ideas in teaching practices (Thurlings et al., 2015). Therefore, self-efficacy becomes one of the most important psychological factors in encouraging the emergence of teacher innovation. This finding is in line with Kundu's and Bej, (2025) research, which shows that self-efficacy is the main predictor of teachers' innovative behavior because it enhances their courage to take risks and try new teaching approaches.

H3: The Influence of School Climate on Teacher Innovation

The analysis results show that the school climate has a positive and significant effect on teacher innovation with a path coefficient (β) of 0.280, a C.R. value of 3.214, and a p-value of 0.001. These findings indicate that the better the school climate perceived by teachers, the higher the level of innovation demonstrated by early childhood education teachers. This finding can be explained thru the Organizational Climate Theory, which states that the organizational environment is an important factor influencing individual behavior within the organization (James & Jones, 1974). A positive school climate creates a work atmosphere that is safe, comfortable, and supportive of creativity development. In such conditions, teachers feel free to express new ideas, try different teaching methods, and develop various innovations without fear of rejection or sanctions from the work environment.

The Collegial Leadership Dimension provides structural support for teachers to innovate thru participatory policies and leadership. The Professional Teacher Behavior dimension enables the exchange of knowledge and experiences among teachers, enriching innovative ideas. The Achievement Press dimension encourages teachers to continuously improve the quality of learning thru various innovations, while low Institutional Vulnerability creates organizational stability that allows teachers to focus on the development of learning (Liu et al., 2024).

Sin embargo, el valor del coeficiente de la influencia directa del clima escolar en la innovación docente ($\beta = 0.280$) es menor en comparación con la influencia del clima escolar en la autoeficacia docente ($\beta = 0.620$). Esto indica que la influencia del clima escolar en la innovación docente no ocurre completamente de manera directa, sino principalmente a través de mecanismos psicológicos dentro del docente. The results of this study support the view of Ghasemzadeh et al., (2020) which states that schools with a positive organizational climate tend to produce more creative, productive, and innovative teachers compared to schools with a less conducive organizational climate.

H4: The Mediating Role of Teacher Self-Efficacy in the Relationship between School Climate and Teacher Innovation

The analysis results show that teacher self-efficacy significantly mediates the relationship between school climate and teacher innovation, with an indirect effect value of 0.335, a C.R. value of 2.991, and a p-value of 0.003. This indirect effect value is greater than the direct effect of school climate on teacher innovation ($\beta = 0.280$). Therefore, teacher self-efficacy has proven to play an important role as a mediator in explaining the relationship between school climate and teacher innovation. These findings provide very strong empirical evidence for Social Cognitive Theory. Bandura explains that the environment does not automatically influence individual behavior, but this influence is mediated by cognitive processes occurring within the individual. In this study, the school climate serves as the



environmental factor, teacher self-efficacy serves as the personal factor, and teacher innovation serves as the behavioral factor (Bandura, 2020). These three factors interact reciprocally according to the concept of triadic reciprocal determinism.

Research results show that when schools are able to create a positive climate thru supportive leadership, good professional relationships, a high achievement culture, and a stable work environment, teachers will develop a stronger belief in their abilities. That confidence then becomes a psychological energy that encourages teachers to produce, promote, and implement various learning innovations. Because the direct influence of the school climate on teacher innovation remains significant after the self-efficacy variable is included in the model, the type of mediation that occurs is partial mediation. This means that the school climate can directly enhance teacher innovation, but the effect becomes stronger when mediated by an increase in teacher self-efficacy (Okendo, et al. 2014).

Overall, the results of this study affirm that early childhood education (ECE) teacher innovation is influenced not only by organizational factors such as school climate but also by psychological factors such as teacher self-efficacy. However, teacher self-efficacy has proven to be the main mechanism that explains how school climate can encourage the emergence of innovative teacher behavior. These findings strengthen the integration between Organizational Climate Theory and Social Cognitive Theory in explaining teachers' innovative behavior in the context of early childhood education.

CONCLUSION

Based on the results of the Structural Equation Modeling (SEM) analysis regarding the influence of school climate on teacher innovation in Early Childhood Education (ECE) mediated by teacher self-efficacy, it can be concluded that the research model has a high goodness of fit, making it suitable for explaining the relationships between the studied variables. Each research construct has met the criteria of validity and reliability. These criteria indicate that the tools used can accurately and consistently measure the variables of school climate, teacher self-efficacy, and teacher innovation. The research results show that the school environment contributes positively and significantly to the level of teacher success. The findings indicate that the better the school climate, characterized by collegial leadership, professional teacher behavior, achievement culture, and institutional vulnerability, the more confident teachers are in their ability to complete their professional tasks. Schools with a supportive environment offer positive experiences, social support, and professional development opportunities that enhance teachers' ability to manage learning.

This research also proves that teacher self-efficacy has a positive and significant impact on teacher innovation. Teachers who have high confidence in their abilities tend to be more capable of generating new ideas (Idea Generation), promoting those ideas to colleagues and school leaders (Idea Promotion), and implementing the ideas into actual learning practices (Idea Realization). Thus, self-efficacy is a psychological factor that plays an important role in encouraging innovative behavior among early childhood education teachers. Furthermore, this study found that the school climate has a positive and significant impact on teacher innovation. This indicates that a conducive school environment can directly enhance teachers' creativity and innovative behavior. Supportive school leadership, harmonious professional relationships among teachers, a collaborative organizational culture, and encouragement to achieve high-quality learning provide space for teachers to develop and implement various innovations in early childhood learning processes.

The most important research findings show that teacher self-efficacy partially mediates the influence of school climate on teacher innovation. This means that school climate not only directly affects teacher innovation but also enhances innovation thru the improvement of teacher self-efficacy. These findings indicate that a positive school environment will build teachers' confidence in their abilities, which in turn becomes a key driver of innovative behavior. Thus, self-efficacy functions as a psychological mechanism that explains how the school climate can enhance the innovation of early childhood education teachers. Overall, this research provides empirical evidence that early childhood education teachers' innovations are the result of the interaction between organizational factors and psychological factors. A positive school climate provides an environment that supports the development of teacher professionalism, while self-efficacy becomes an internal strength that encourages teachers to be creative, adapt to changes, and implement innovations in learning. Therefore, efforts to enhance the



innovation of early childhood education (PAUD) teachers cannot be achieved merely thru the provision of facilities and organizational policies, but must also be accompanied by strategies that can strengthen teachers' self-efficacy thru competency development, continuous training, professional mentoring, a collaborative culture, and supportive school leadership. This research also contributes to theory development by integrating Organizational Climate Theory and Social Cognitive Theory in explaining teachers' innovative behavior in the context of Early Childhood Education. These findings indicate that the influence of the organizational environment on teacher innovation occurs not only directly but also thru cognitive processes reflected in teachers' self-efficacy. Therefore, this research model can serve as a foundation for future studies in developing a model of teacher innovative behavior by incorporating other variables, such as transformational school leadership, work engagement, organizational commitment, or teachers' digital competence, thereby achieving a more comprehensive understanding of the factors affecting teacher innovation in early childhood education

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