

**FACILITATOR ASSISTANCE BECOMES A MEDIATOR THE INFLUENCE  
OF PRINCIPAL LEADERSHIP AND MOTIVATIONAL TEACHER  
LEARNING MOTIVATION ON THE QUALITY OF EARLY CHILDHOOD  
EDUCATION UNITS ANALYSIS STUDY WITH JEFFREYS AMAZING  
STATISTICS PROGRAM**

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**Abstract**

Quality PAUD units should provide services according to the standard level of achievement of child development, content standards, process standards and assessment standards. This study aims to analyses the effect of Principal leadership and teacher learning motivation on the quality of PAUD units mediated by facilitator assistance, both directly and indirectly, even though analyzing the total effect between variables. This quantitative research with the type of comparative causal research was conducted in PAUD units incorporated in the driving school in East Java, involving 92 respondents with a purposive random sampling technique. Primary data were obtained through the distribution of questionnaires with a Likert scale, then analyzed with the Jeffreys Amazing Statistics Program series 17.3 application. The results showed that (1) Principal leadership positively and significantly influences facilitator mentoring. (2) Teacher learning motivation positively and significantly affects facilitator assistance. (3) Facilitator assistance has a positive and significant effect on the quality of PAUD units.

(4) Principal leadership has no significant effect on the quality of PAUD units mediated by facilitator assistance. (5) There is a positive and significant effect of teacher learning motivation on the quality of PAUD units mediated by facilitator assistance.

**Keywords:** PAUD unit, leadership, motivation

## Introduction

The Early Childhood Education Unit, from now on referred to as the PAUD Unit, is the most basic level of education to form Indonesian people who are believers, devoted to God Almighty, and have noble character, independence, critical reasoning, creativity, cooperation and global diversity within the framework of the Pancasila student profile.[1][2][3][4]. To realize the intended student character, it is necessary to strengthen school resources through optimizing ecological theory with active involvement between parents, the PAUD Unit and the community. As a driving element of learning, the PAUD Unit has a strategic portion in shaping the nation's generation, even though the PAUD Unit is developed and managed independently by the community. Therefore, the existing PAUD Unit is a form of society's real contribution to making the nation's life more intelligent. Because it is managed independently by the community, its development requires serious support from all parties, including the government, in the form of policies oriented towards improving the quality of learning and the quality of PAUD units through providing unique numbers for educators and education personnel, providing school operational assistance and other assistance. Thus, in managing PAUD Units, the government should significantly contribute to the continuity and development of the institution's quality. Therefore, a quality PAUD Unit is the hope of the community as regulated in [5] that PAUD standards include standards for child development achievement levels, content standards, process standards and educational assessment standards. To realize these standards, the PAUD Unit provides quality services by providing a learning environment as a playground that is safe, comfortable, and able to facilitate children's growth and development in a holistic and integrated manner. As a playground, the PAUD Unit ideally has a variety of learning resources, learning facilities and infrastructure that are appropriate, adequate, and appropriate to the number of children and is well managed, involving collaboration between the leadership of the school principal, teachers, and even facilitators in supporting learning.

The principal's leadership is one of the determining factors in achieving the quality of the PAUD Unit because the principal has the main task of formulating, establishing and developing the vision, mission, goals, strategic targets and targets of the PAUD Unit program in a comprehensive and integrated manner. The principal serves as a formal official, as a manager, as a supervisor, as an administrator, as an educator and even as staff [6]. The facts show that the Head of the PAUD Unit has not optimally carried out his duties and functions due to, among other things: (1) The Head of the School also holds the position of teacher and is even responsible for managing the school's

operational assistance, (2) The ratio of teachers to students is not adequate due to the problem of limited costs making it difficult getting teachers, (3) the welfare and clarity of the fate of teachers is not yet clear, resulting in low community motivation to become teachers. In this regard, the head of the PAUD Unit has not been optimal in carrying out his duties as an educator, manager, administrator, supervisor, leader, innovator and motivator.(Library, 2019).

In this context, the government issued a Decree [8] Nomor 371/M/2021 regarding the Driving School Program with the consideration that to improve the quality of education through learning with a new paradigm so that it can improve student competence and character with the target of ensuring equal distribution of educational quality, and the quality of educational services in building a quality early education ecosystem. In this context, an active role is needed to drive school facilitators with adequate qualifications and competencies in accordance with their scientific discipline. The facilitators in question come from academics and practitioners whose main task is to facilitate the PAUD Unit over a certain period and activities to create a quality-oriented PAUD unit. Driving school facilitators encourage teachers and principals to innovate in providing quality education services. However, along the way, not all facilitators can carry out their duties and functions well, and sometimes facilitators are found unable to carry out their duties well. Therefore, principals need great foresight and discipline in involving their teachers in driving schools. Despite this, there are still many PAUD teachers who do not understand the direction of the driving school policy; this is indicated by the high number of resignations of teachers who are accepted into the school program. This is very rational when referring to the tasks of PAUD teachers in learning, namely that preschool teachers must be able to plan education, implement knowledge, preschool teachers must be able to evaluate children's growth and development, and even PAUD teachers must be careful in other additional tasks.

Thus, PAUD teachers face a classic problem, namely between carrying out professional duties professionally or being charged more with additional work that consumes energy. Due to this, high work motivation is needed for teachers, both from internal and external factors [9]. Internal motivation usually takes the form of an attitude of sincerity in carrying out one's duties as a teacher and a high level of concern and commitment in carrying out the mandate of continuing the struggle for the character of the nation's children. Meanwhile, external factors are more identified with clarity of social status in terms of becoming a professional teacher with an identity and welfare that meets the appropriate words and in accordance with needs. Uniquely, in PAUD units, teachers are highly motivated to provide quality educational services to students; this is proven by an above-average work ethic and ethic born from PAUD unit teachers, a high sense of cooperation and togetherness with the formulation diversity.

In this regard, this study is very relevant to the issue of Principal leadership, teacher learning motivation, and the involvement of facilitators in establishing quality PAUD unit services, so this study is different from previous studies where the Principal leadership variable is specifically for PAUD Unit Heads who are registered and involved

in Driving schools in the last two years, then motivating teachers, especially teachers with private teacher status who have not yet received teacher certification, as well as involving facilitators who have contributed to driving schools with assignment periods in the second and third years. Referring to the advantages of this study, several research problems were formulated as follows: (1) Is there an influence of the principal's leadership on facilitator assistance? (2) Is there an influence of teacher learning motivation on facilitator assistance? (3) Is there an influence of facilitator assistance on the quality of PAUD units? (4) Is there an influence of the principal's leadership on the preschool unit's quality mediated by the facilitator's assistance? (5) Does teacher learning motivation influence the quality of PAUD units mediated by facilitator assistance?

## Literature review

### Quality of PAUD Units

PAUD Unit Quality is the minimum service PAUD units provide to the community as a form of commitment to quality education. The quality of PAUD units must at least meet the standard level of achievement of child development, which contains six aspects of child development, including religious and moral values, cognitive, language, social-emotional, motor and artistic aspects. These six aspects must be realized in learning activities that occur both in the PAUD unit and family environments. To fulfil quality, the PAUD unit at least provides services by ensuring the availability of curriculum content to meet student needs, the relevance of the content to contextual, comprehensive, and adaptive learning processes and the ability to apply authentic assessments by student growth and development. In this regard, the quality of a PAUD unit can be interpreted as the fulfilment of minimum services by the expectations and learning needs of the community so that the institution has a reputation and becomes an example for other institutions and plays service centers for the community.

A quality PAUD unit is characterized by the high level of support and active role of PAUD unit residents together with the community in each PAUD unit service so that the unit becomes a children's play center, a model unit for community play so that it has an impact on community awareness in each PAUD unit program. For example, in developing a PAUD unit curriculum that is contextual by the characteristics of the unit, apart from that, there is also an active role of school principal resources, teachers and parent involvement in preparing learning plans, carrying out learning in a fun way accompanied by various projects according to needs, growth and development. Student development, as well as the availability of varied services with active involvement of all elements of the PAUD unit. Aspects of teacher involvement in extracurricular extracurricular activities, character projects, and teachers' accurate contributions in solving problems in the social environment are part of quality-oriented unit services so that integration in quality activities can directly improve the quality of PAUD units.

So, the quality of the PAUD unit is a unit service by national education standards so that it becomes a playground for the community. The indicators for measuring the quality of

PAUD units include service programs for child growth and development, capable human resources, curriculum according to local wisdom, appropriate and adequate learning tools, innovative learning projects, monitoring and evaluation programs according to student needs, and reputation. High school so that it becomes a play center for the community.

### **Mobilization School Facilitator**

The driving school facilitator is an individual who accompanies the PAUD unit at a particular time and works on assignments from the ambitious teacher center.[10] A facilitator is a person who acts as an intermediary between fellow participants to formulate a narrative/concept jointly. The driving school facilitator is essential for PAUD Unit Heads, teachers, and Supervisors to implement quality PAUD units with student-centered learning. A facilitator is tasked with designing a quality institution to fulfil the vision, mission, goals, and strategies and evaluating and reporting each program developed. Driving school facilitators are assistants to school principals, supervisors, and teachers in PAUD units in creating schools that have student-centered services. The role of the facilitator in the mentoring process in PAUD units includes: (1) encouraging collaboration throughout the school education ecosystem and stakeholders in the district/city. (2) facilitating the development of competence of school principals and supervisors in aspects of self and other development, learning leadership, managerial and school development. (3) Facilitate the development of PAUD unit teacher competency in professional knowledge mastery, professional learning practices, and continuous professional development. (4) facilitating the development of a community of practitioners for principals, school supervisors and PAUD teachers at the educational unit level driven by a learning committee. (5) Monitoring and evaluating the progress of the development of learning competencies of School Principals, School supervisors and PAUD teachers [11].

So, facilitators have a significant role in analyzing the needs of PAUD units, planning programs, implementing programs, supervising, and evaluating programs, and even in advisory programs involving school principals and teachers so that PAUD units have quality services and human resources for PAUD units. Contribute to solving social problems and a sustainable partnership between PAUD units and the community. Driving school facilitators are individuals tasked with assisting PAUD units based on capacity and competence, ability in planning, implementation, reflection, and ability in realizing learning committee partnerships. The indicators for measuring facilitator assistance include Academic qualifications, Competence, Work ethic, Work ethic, Office management skills, carrying out workshops, Carrying out field visits, Skills in coordination and communication forums, Harvest work, and Real action.

## Teacher Learning Motivation

Every teacher is an educator who has the drive to educate, teach, direct, develop, care for, nurture and facilitate student learning so that there is good growth and development. In essence, teachers and students have the same interests in learning, where teachers as learning facilitators expect changes in students' learning behavior so that teachers are motivated to increase their capacity. Conversely, students as learning subjects expect the proper stimulus from teachers so that it becomes a good learning experience. Influential in his life [12]. The occurrence of this learning interaction is based on the exact needs of both teachers and students. This is relevant to the opinion [13][14][15][16] that humans are motivated by several needs, both primary and higher needs, in the form of physiological needs, security needs, belonging and love needs, esteem needs, and self-actualization needs. Motivation can also come from within and outside [17]. In this regard, motivation is part of existence, relationships and growth, which every human being can freely fulfil, not based on the order of needs from primary to high. [18][12][19]. This opinion is supplemented by [20][21], that every human being has potential advantages that need to be honed and developed in the development process it depends on the fighting power and encouragement of each individual based on the learning experiences they have had so that human self-development needs are influenced by the need to achieve something desired, the need for power, and even the need for self-development through social affiliation. Research results [22] show that career support positively impacts academic achievement and quality.

So, activities to achieve goals that are oriented towards growth and development are the core components of motivation. In this case, motivation is intrinsic and extrinsic encouragement to educate, teach, direct, develop, care for, nurture and facilitate student learning so that there is good growth and development with indicators to measure it, including (1) The ability to design a curriculum. (2) Ability to set learning goals. (3) Ability to apply learning strategies. (4) Ability to assess student growth and development. (5) Ability to compile learning tools. (6) Involvement in self-capacity improvement activities. (7) Teacher partnership in learning, and (8) Teamwork in maintaining the quality of learning.

## Principal Leadership

The principal's leadership is a critical factor in the PAUD unit. This is because leadership is always present within the principal in the form of personality, ability, and ability to create a quality institution. Various studies, such as [23][24], show that improving the quality of PAUD units is influenced by the principal's leadership. Practically, the principal as a leader has strategic planning so that the PAUD unit has a vision, mission, goals, human resources, facilities and infrastructure resources and other school managerial elements. [25][26][27]. Quality-oriented principal leadership seeks to provide its students with the best service and support school resources such as teachers and educational staff. [28][29]. In creating a quality unit, the principal's leadership is

always oriented towards the needs, relevance and challenges of future changes so that the PAUD unit is of high quality [30][31].

Effective school principal leadership is always present in leaders who can be leaders in various ways, including quality of direction, quality of skills to create a climate and innovation, quality of skills to create learning conditions, quality of skills to create an environment to maintain professional behavior [32]. Principal leadership Always carries out organizational analysis both internally and externally. Internal conditions are characterized by stories about strengths and weaknesses in running the PAUD unit, while external conditions always talk about opportunities and threats.

Principal leadership is an essential character inherent in the principal in carrying out the innovator function, motivator function and supervisor function to achieve the institution's strategic vision [33]. To measure the leadership of a school principal, the following indicators can be developed: Quality reformer, teacher coach, strategic partnership, model/exemplary, leadership style, work culture, program supervision, program monitoring, and program evaluation

## Method

This research uses a quantitative research approach with a comparative causal research type [34][35]. Research conducted at PAUD units that are members of driving schools in East Java Province involving all driving teachers and selected using a purposive random sampling technique [36][37]. The criteria for PAUD teachers selected as samples include: (1) Active teachers who have been involved in the driving school for at least one year, (2) teachers who have additional duties as School Principals, (3) have passed the Driving School Training. Based on these considerations, 92 PAUD teachers were selected from 327 PAUD units who were part of the second-year Driving School program, then filled out the questionnaire digitally via e-questionnaire. The data that has been collected is then analyzed using part analysis techniques using the Jeffreys Amazing Statistics Program (JASP) series 17.3 application [38][39][40].

## Research result

Female teachers dominated the characteristics of the respondents in this study, with an average of more than five years of teaching experience. The PAUD units where the respondents worked were all accredited institutions A, B, or C. Research questionnaires were distributed purposively directly to all PAUD institutions spread across East Java, but the data returned only amounted to 92 questionnaires, which were then processed inferentially. Each respondent completed a questionnaire measuring the principal leadership variables, teacher learning motivation, facilitator assistance and PAUD unit quality, totaling 100 statements for each of the 25 questions on each research variable. Referring to expert opinion, the research sample ranges from at least 10% to 25% of the research population, and Roscoe even believes that the minimum selection is 30 respondents to 500 respondents. Thus, the 92 data collected can be processed into research results as follows.

## Direct Influence Between Variables

The research results show that the principal's leadership and teacher motivation directly influence the quality of the PAUD unit. This is characterized by the strength of its influence being in the range of 21.2% and 23.2%, with a significance level below 5%. These results indicate that the two variables of leadership and teacher learning motivation directly influence the PAUD unit quality variable. For more details, see Table 1 below.

Table 1. Direct Effect Between Variables

Direct effects

		Estimate	Std. Error	z-value	p	95% Confidence Interval	
						Lower	Upper
Principal Leadership	→ Quality of PAUD Units	0.212	0.064	3.308	< .001	0.086	0.337
Teacher Motivation	→ Quality of PAUD Units	0.232	0.076	3.028	0.002	0.082	0.381

*Note.* Delta method standard errors, normal theory confidence intervals, ML estimator.

## Indirect Influence Between Variables

The results of the research show that there is a positive mediating influence from the facilitator mentoring variable between the principal's leadership and teacher learning motivation on the quality of the PAUD unit, with a mediating influence range of between 3.6% for the principal's leadership and 11.2% for the teacher learning motivation variable. Although there is a positive influence, especially mediation from facilitator assistance, between the principal's leadership on the quality of the PAUD unit, the significance value is above 5%, meaning that there is a mediating influence, but it is not significant. For more details in reading research data, see Table 2 below.

Table 2. Indirect Influence Between Variables

Indirect effects

		Estimate	Std. Error	z-value	p	95% Confidence Interval		
						Lower	Upper	
Principal Leadership	→ Facilitator Assistance	→ Quality of PAUD Units	0.036	0.023	1.564	0.118	-0.009	0.082
Teacher Motivation	→ Facilitator Assistance	→ Quality of PAUD Units	0.112	0.043	2.628	0.009	0.029	0.196

*Note.* Delta method standard errors, normal theory confidence intervals, ML estimator.

Based on the results of research on direct influence and indirect influence, the level of influence between the independent and dependent variables can be seen in Table 3 below.

Table 3. Total Effect of Independent Variables on Dependent Variables

**Total effects**

		Estimate	Std. Error	z-value	p	95% Confidence Interval	
						Lower	Upper
Principal Leadership	→ Quality of PAUD Units	0.248	0.066	3.761	< .001	0.119	0.377
Teacher Motivation	→ Quality of PAUD Units	0.344	0.070	4.908	< .001	0.207	0.481

*Note.* Delta method standard errors, normal theory confidence intervals, ML estimator.

Based on the calculation results, the total influence between the independent variables influences the dependent variable significantly positively, where the overall power level ranges from 12.2% to 37.9% at a significance level of 5%. However, from the results of this research, there is an influence between the variables above 5% such as the total influence of the principal's leadership variable on facilitator assistance with an influence level of 12.2%, so it is not significant. The results of this research can be seen in Table 4.

Table 4 Influence between variables based on path coefficient

Path coefficients

		Estimate	Std. Error	z-value	p	95% Confidence Interval	
						Lower	Upper
Facilitator Assistance	→ Quality of PAUD Units	0.296	0.098	3.019	0.003	0.104	0.488
Principal Leadership	→ Quality of PAUD Units	0.212	0.064	3.308	< .001	0.086	0.337
Teacher Motivation	→ Quality of PAUD Units	0.232	0.076	3.028	0.002	0.082	0.381
Principal Leadership	→ Facilitator Assistance	0.122	0.067	1.829	0.067	-0.009	0.253
Teacher Motivation	→ Facilitator Assistance	0.379	0.071	5.338	< .001	0.240	0.519

*Note.* Delta method standard errors, regular theory confidence intervals, ML estimator.

The Path coefficient analysis results show that the influence level between variables is quite positive. The positive average z-value also indicates this. This means that at a significant level of 5%, the variables leadership, teacher learning motivation, and facilitator assistance significantly influence the PAUD unit quality variables. The explanation of the research results can be clarified by looking at the following path image.

Path plot

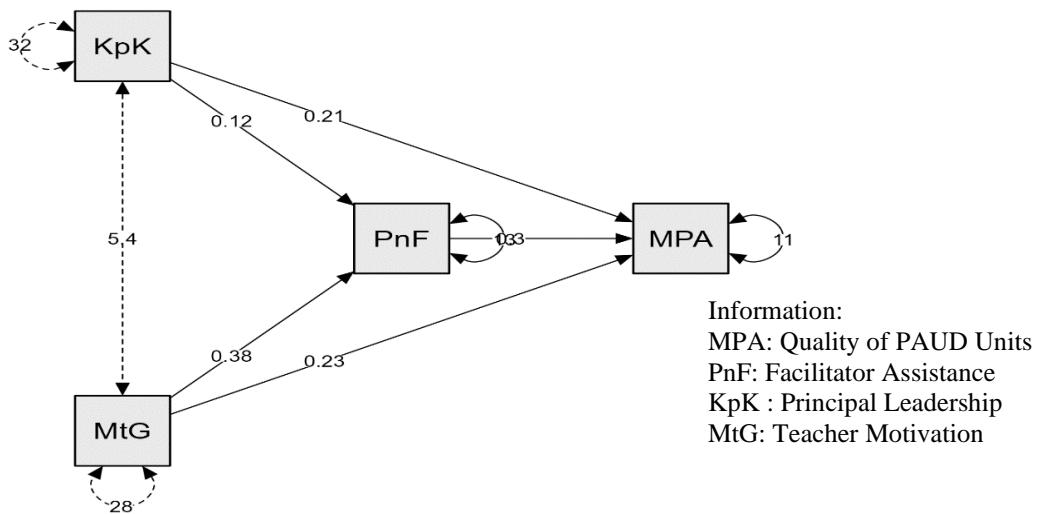


Figure 1. Path Plot between Research Variables

## Discussion

### 1. The direct influence of the principal's leadership on facilitator assistance

The research results have indicated a positive influence of the principal's leadership on facilitator assistance. Although this data is positive, it is not significant. This means there is still a leadership style that is not yet adaptive to the facilitator's mentoring pattern. On that basis, in the future development process, the strategic, practical and humanist leadership of the principal will have an impact on the technical, strategic, innovation and creation of facilitators to assist the principal in creating a PAUD unit that is safe, comfortable, and becomes a children's playground that in the future Eventually it became a children's learning service center. Apart from that, a school principal who can implement functions as an innovator, a motivator, and even a supervisor can speed up the performance of facilitators in assisting. The leadership factor is the key to increasing the role of facilitators in assisting so that intensive mentoring occurs in the form of training in implementing learning with a new paradigm, learning leadership training, in-house training, workshops, learning communities, and even coaching.

### 2. Direct influence of teacher learning motivation on facilitator assistance

The teacher's willingness to learn also influences the facilitator's mentoring process. This means that as a learning companion, a facilitator must be able to identify teacher learning needs in carrying out professional duties. The needs of teachers that are generally known together are in designing and implementing the PAUD unit curriculum, even to assessing the process and growth and development of student learning. This needs to be done considering that teachers professionally design and evaluate learning every day per the learning objectives set. A form of teacher learning motivation, among others, is that the average level of teacher attendance in facilitator

mentoring activities is very high and enthusiastic. Such facts indirectly impact the facilitator's motivation, creation and adaptive assistance.

### 3. Direct influence of facilitator assistance on the quality of PAUD units

Facilitators are professional staff tasked with assisting PAUD units so that there are changes in the quality of their services. The research results show a relatively strong influence of 29.6% of the facilitator's mentoring process on the quality of the PAUD unit. This fact proves that in the first year of implementation of the Driving School program, the quality of the PAUD unit was influenced by the intensity of the facilitator's assistance starting from assistance with curriculum preparation, unit management, group assistance and so on. The mentoring process is carried out periodically and adjusted to the institution's needs based on its level; this is done in person and online. The facilitator assistance process is changed to the readiness of school principals, teachers, supervisors, parents and even the government through the teacher mobilization centre in East Java province.

### 4. The influence of the principal's leadership on the quality of the PAUD unit, which is mediated by the the assistance of the facilitator

Improving the quality of PAUD units can be done with leadership training and capacity training for driving school facilitators. This is done because the principal and facilitator have almost the same role in realizing the quality of the institution, for example, in terms of encouraging collaboration both internally and externally in the PAUD unit, facilitating the development of teacher and Principal competency through self-development, facilitating the development of leadership character and teacher competency, developing a community of practitioners and carrying out monitoring, supervision and evaluation of learning competencies. The assistance provided by facilitators takes the form of group assistance within educational units. This can be realized through field visits, reflections on PAUD units, and operational management working group forums. Meanwhile, group assistance within the city/district scope can take the form of workshops for school principals and driving teachers, workshops. Leadership. The conditions of group mentoring activities at the city/district level include learning planning workshop 1, learning planning workshop 2, assessment results processing and reporting workshop, tolerance workshop, leadership workshop, school supervisor and practitioner community workshop, school supervisor workshop, and forums stakeholders.

### 5. The influence of teacher learning motivation on the quality of PAUD units mediated by facilitator assistance

Teachers are the main factor who can nurture, develop, and accompany students' growth and development. Creative teachers trigger the realization of quality learning and ultimately improve the institution's quality. The research results show a positive and significant influence of facilitator assistance, which can mediate the effect of teacher motivation on the quality of PAUD units. This means that teachers who

participate in the Driving School program gain new knowledge and learning experiences, where students and teachers become strategic learning partners, thereby realizing a learning approach that starts from learning to learning. This means that teachers act as learning facilitators for their students and gain knowledge and experiences based on student learning developments. Facilitators also significantly contribute to changing teachers' perspectives by providing knowledge through PMO activities, workshops, reflections, and even assessing Pancasila student profile projects. This series of scheduled activities will directly impact increasing teacher competence and capacity in understanding the curriculum, learning objectives, learning projects, assessments, and good institutional governance.

## Conclusion

Based on the research and discussion results, this research can be concluded as follows: (1) There is a positive and significant influence of the principal's leadership on facilitator assistance. (2) There is a positive and significant influence of teacher learning motivation on facilitator assistance (3) There is a positive and significant influence of facilitator assistance on the quality of PAUD units (4) There is no significant influence of Principal leadership on the quality of PAUD units which is mediated by facilitator assistance. (5) There is a positive and significant influence of teacher learning motivation on the quality of PAUD units, which is mediated by facilitator assistance. The results of this research can be used as a reference in other relevant research activities. However, we are very aware that the number of research samples involved still needs to be increased, which is also part of the shortcomings of this study. Therefore, it is necessary to apply many respondents so that the representation of the research population is significant.

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