



The Relationship Between Teachers Perception and Belief on Readiness to Plan a Learning of Early Childhood Education Program Teachers

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Abstrak

Penelitian ini bertujuan untuk mengetahui apakah ada hubungan antara keyakinan kesiapan merencanakan kegiatan belajar mengajar, keyakinan persepsi guru PAUD, dan kesiapan merencanakan kegiatan belajar mengajar. Penelitian kuantitatif dengan desain korelasional digunakan dalam penelitian ini. Kuesioner digunakan sebagai instrumen penelitian, dan teknik sample random sampling digunakan untuk memilih sampel. Dalam hal pengujian hipotesis, peneliti menggunakan korelasi product moment dengan hasil terdapat hubungan positif antara belief terhadap persepsi yang dimiliki oleh guru, tidak terdapat hubungan antara belief terhadap kesiapan merencanakan pembelajaran berbasis STEAM, dan tidak terdapat hubungan antara persepsi terhadap kesiapan merencanakan pembelajaran berbasis STEAM.

Kata Kunci: *Steam, Belief, Persepsi, Paud.*

Abstract

This study sought to ascertain whether there was a correlation between belief in readiness to plan teaching and learning activities, believe in perceptions of PAUD teachers, and readiness to plan teaching and learning activities. Quantitative research with a correlational design was used in this study. A questionnaire was employed as the study's instrument, and a simple random sampling technique was used to select the sample. In terms of hypothesis testing, the researcher used product moment correlation with the results that there was a positive relationship between beliefs and perceptions of PAUD teachers, there was no relationship between beliefs about the readiness to plan STEAM-based learning, and there was no relationship between perceptions of readiness to plan. STEAM-based learning.

Keywords: *Steam, Belief, Perception, Early Childhood Education.*

Introduction

The 21st century is often associated with the birth of the era of globalization, which is marked by science, technology and

communication systems that continue to grow in various parts of the world, including Indonesia. The world seems to be in the palm of your hand without limits and increasingly practical. An example is communication that

is no longer limited by distance and a variety of knowledge that can be easily accessed via the internet. Technological advancements affect all aspects of social, national and state life, as well as a person's mindset and actions. With the development of the application of technology, it will make human life easier [1].

One of the breakthroughs that has quickly grown and developed in creating a generation that can compete worldwide today is STEAM (Science, Technology, Engineering, Arts, and Mathematics). According to Liao in Mu'minah, including art in STEAM lessons seeks to boost student engagement, creativity, innovation, problem-solving abilities, and other cognitive advantages.

Meanwhile, early childhood is considered as the starting point for learning STEAM. Campbell said that childhood is the right time to lay the foundation for STEM learning. This is because informal and formal learning environments, such as classrooms, are both used in STEM education, which spans the preschool to post-doctoral levels (e.g., afterschool programs). Therefore, the development of the quality of education through STEAM-based learning needs to be done starting from the initial level, namely the scope of early childhood education [2].

STEAM-based learning is known to have many benefits and is even said to be effective in improving the quality of education. The following are several studies related to STEAM/STEM within the scope of early childhood education, including: 1) According to Titania et al research, children's 4C abilities which comprise skills in areas of creativity, communication, teamwork, and critical thinking can be improved by STEM-based learning using loose-parts media. 2) Wahyuningsih's research says that the effect of the STEAM method can increase children's creativity in their ways of thinking. 3) According to research by Christine D. Tippett and Todd M. Milford, STEM plays an important role in PAUD because STEM is an effective way to encourage students to think more deeply about and interact with their surroundings. However, from the research

results found by researchers, there has been no research that specifically examines STEAM-based learning plans made by PAUD teachers related to the ability to design learning that is influenced by beliefs and perceptions held by teachers [3].

The teacher is an important component in education. The teacher plays a central role in learning and is the driving force behind achieving learning objectives. The skills that teachers of the twenty-first century must possess include not only the ability to instruct and manage classroom activities, but also the ability to form strong bonds with students and the school community, use technology to support better teaching, and continuously reflect on and enhance their own learning practices. Moreover, to be able to raise educational standards, teachers must first have qualified skills, including integrating STEAM in learning. Teachers must have positive expectations, perceptions, and beliefs about STEAM-based learning [4].

Belief, teacher perception, and readiness play an important role in the success of STEAM implementation goals. Teacher beliefs have been studied from several perspectives, including how teachers' beliefs can: a) act as a filter for teachers to interpret information about students and learning content so that it can influence their learning practices; b) have an impact on how well the curriculum is implemented and how well students are learning in the classroom. Vartatulli in Margorini particularly stresses the significance of evaluating teacher beliefs on the grounds that "beliefs are the heart of teaching" and that teacher beliefs are more than just a theoretical understanding; they have the power to influence behavior and decisions made in the classroom. This explains that the beliefs that teachers have can influence their actions [5].

Meanwhile, perception is very important in life because different perceptions will determine different perspectives and understandings for each individual. Our ability to select, arrange, and interpret stimuli from our surroundings is a function of perception, which has an impact on us. With

the perception he has, an attitude will be formed, namely, a tendency to act in accordance with a certain situation. This means that the perception of a teacher can also influence his actions in the learning process [6].

In addition, there is also research on the readiness of kindergarten teachers in Gunungpati District, Semarang City, which was conducted by Novia Anjarsari. Novia said that the percentage of teacher readiness for implementing STEM learning was based on several aspects, such as: the emotional-attitudinal readiness aspect had the largest percentage, namely 70%; the cognitive readiness aspect was 69.33%; and the behavioral readiness aspect was 65.11%. The overall percentage of the three aspects is included in the "agree or be ready" category, which is equal to 68.27%. This shows that teachers in kindergarten, Gunungpati District, and Semarang City already have sufficient readiness to apply STEM-based learning. In this study, it was said that there were several inhibiting factors, namely: knowledge, perception, and understanding of STEM concepts, which were still low [8]. Other research shows that teachers at TK IP Assalam Tasikmalaya City still lack information regarding STEAM learning. Learning at school has not integrated other STEAM subjects; the majority are only fixated on art and science or mathematics subjects, so that technology and engineering subjects are rarely touched.

Methods

Data collection for this study was conducted from September through October. The study included thirty PAUD instructors. Quantitative research with a correlational design was used for this study. 30 PAUD teachers will make up the researcher's sample. In this study, both simple random sampling and quota sampling were used for sampling. Questionnaires and documentation were the methods utilized in this study to collect data. The normality test, linearity test, and hypothesis testing were employed as data analysis approaches in this study.

Result and Discussion

Based on the data analysis's findings, it can be concluded that there is no relationship between PAUD teachers' beliefs and their readiness to plan STEAM-based learning (RPPH), as evidenced by the coefficient value of 0.144 between those two variables and the significance of sig. (2-tailed) of $0.449 > 0.05$. The data obtained by the author turned out to be inconsistent with several studies or the opinions of several figures regarding the beliefs of a teacher, who said that belief had a relationship with readiness to plan learning. This is because there are many factors that influence teachers in planning lessons or designing lesson plans, so belief is not a guarantee that there is a relationship between teacher readiness and lesson planning [7].

Based on research conducted by Indri Anugraheni, the results obtained indicated that there were two factors inhibiting teachers in making lesson plans, namely, the changing curriculum (understanding of the KTSP curriculum that was not yet strong enough to be replaced with the 2013 curriculum) and the lack of socialization of making lesson plans in accordance with the 2013 curriculum. Anugraheni, Mawardi also explained that the main factor that became an obstacle for teachers in making lesson plans was the teacher's lack of understanding regarding the correct preparation of lesson plans, which was due to the lack of training or guidance from related educational institutions regarding the preparation of lesson plans.

Meanwhile, Juniriang Zendrato explained that the factors that are taken into consideration by teachers when preparing lesson plans for high schools are student characteristics, learning objectives, teaching and learning activities, subject matter, learning evaluation, media and facilities, time allocation, seating arrangements, school programs, technology, and future uses. These findings indicate that there are many factors and situational decisions taken by teachers in planning lessons. Similarly, Calderhead divides instructors' beliefs into five categories: 1) beliefs about students and learning; 2) views about teaching; 3) beliefs

about the subject; 4) beliefs about how to teach; and 5) ideas about the person and the teaching role.

Furthermore, Yeni Eka Sari's research found that epistemological beliefs do not affect changes in the effectiveness of teaching, where this epistemological belief is one of the scope of beliefs, which is a type of belief related to the nature and source of knowledge and varies significantly across disciplines. The effectiveness of this learning is included in teaching and learning activities, so this can be interpreted as meaning that this belief cannot be a definite guarantee that can affect teacher readiness in planning learning or designing lesson plans.

Based on the examination of the data, the results indicate that H_0 is accepted because the coefficient value is 0.228 and the significance of sig. (2-tailed) is $0.225 > 0.05$. Therefore, it can be stated that there is no correlation between PAUD teachers' perceived and actual readiness to implement plan-based learning. According to the study's findings, the teacher's high perception does not correspond to a high level of readiness for class-based learning planning. The research results obtained by the author are not in accordance with several studies that support a relationship between perceptions and readiness to plan class based learning in PAUD teachers. Based on research conducted by Indri Anugraheni, the results obtained indicated that there were two factors inhibiting teachers in making lesson plans, namely, the changing curriculum (understanding of the KTSP curriculum was not yet strong enough to be replaced with the 2013 curriculum) and the lack of socialization of making lesson plans in accordance with the 2013 curriculum.

Meanwhile, Juniriang Zendrato explained that the factors that are taken into consideration by teachers when preparing lesson plans are student characteristics, learning objectives, teaching and learning activities, subject matter, learning evaluation, media and facilities, time allocation, seating arrangements, school programs, technology, and future uses. These findings indicate that

there are many factors and situational decisions taken by teachers in planning lessons. Likewise, perceptions are influenced by several factors, namely: 1) attention; 2) mental readiness; 3) needs; 4) value system; 5) personality type; 6) physiological; 7) interest; 8) experiences and bonds; 9) mood; 10) attitude; 11) expectations; and 12) the uniqueness and strength of the stimulus. This cause of perception alone cannot be a guarantee of being able to influence teacher readiness in planning learning. To support the results of this study, there is a statement made by Pajares. According to Pajares (1992), beliefs and perceptions can influence one's perceptions but are unreliable guides to reality. This means that neither attitude nor individual perception can be used as a measuring tool in one's life.

Data analysis results indicate that H_0 is rejected and H_a is accepted, with a coefficient value of 0.902 and a significance of Sig. (2-tailed) of $0.000 < 0.05$, respectively. It can be inferred from this that teachers' opinions and perceptions about classroom instruction are related (RPPH). There is a very strong positive correlation between belief and a teacher's perception of STEAM-based learning, as indicated by the association between belief and that perception being 81.36% with a coefficient value of 0.902. This means that the higher the teacher's belief, the more positive his perception will be.

Several previous studies have found a significant relationship between beliefs and perceptions, which supports the findings of this study. According to research by Mi Hwa Park et al., knowledge of the urgency of STEM at the PAUD level and a high conviction in readiness to teach STEM are directly inversely correlated. Meanwhile, the results of Iceng Hidayat's research cited by Sutiarmo stated that high teacher confidence can have an impact on the completeness of curriculum implementation and learning processes in class and vice versa that low teacher confidence can lead to low curriculum implementation and learning processes in class. The results of this study show how important the beliefs that each teacher has are

in order to be able to plan lessons, carry them out, and even evaluate learning properly. because positive beliefs can influence behavior, mindset, and decision-making by teachers, which will also have a positive value.

Conclusion

According to the data analysis results, H_0 is acceptable because the coefficient value is 0.144 and the significance of Sig. (2-tailed) is $0.449 > 0.05$. As a result, it may be said that willingness to plan STEAM-based learning and belief are unrelated (RPPH). According to the data analysis results, H_0 is acceptable because the coefficient value is 0.228 and the significance of sig. (2-tailed) is $0.225 > 0.05$. So, it can be said that perceptions of readiness to plan STEAM-based learning have no link with any other (RPPH). According to the data analysis results, H_0 is rejected and H_a is accepted, with a coefficient value of 0.902 and a significance of Sig. (2-tailed) of $0.000 < 0.05$. It may be inferred from this that instructors' attitudes and perceptions of STEAM-based learning are related (RPPH). According to the correlation between belief and teachers' perceptions of STEAM-based learning, which is 81.36% with a coefficient value of 0.902, there is a very strong positive correlation between these two variables. This means that the higher the teacher's belief, the more positive his perception will be.

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