Early Childhood Education Teachers' Perspectives on Play-Based Learning: A Survey in Yogyakarta

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Abstract
This study explores and analyzes the perspectives of early childhood education (ECE) teachers in Yogyakarta regarding Play-Based Learning (PBL) and evaluates the alignment of their perspectives with PBL implementation in early childhood settings. Utilizing a mixed-methods approach, data were collected through a structured questionnaire administered via Google Forms to 41 randomly selected ECE teachers, representing 20% of the target population. The survey included 26 closed-ended items on a Likert scale and four semi-open questions for additional insights. Descriptive statistical analysis using SPSS version 26 revealed a mean perspective score of 39.5854 with a standard deviation of 6.70439, categorizing 56.1% of teachers as having a medium alignment with PBL, 26.8% as high, and 17.1% as low. Thematic analysis of qualitative responses highlighted the perceived benefits of PBL for both children and teachers, including enhanced creativity, easier engagement, and improved learning environments. Despite the limited sample size and potential biases, the findings underscore the importance of continuous professional development for ECE teachers. Future research should expand the sample size and explore additional variables influencing teachers' perspectives. These insights are crucial for policymakers and educational institutions aiming to enhance early childhood education quality through effective PBL implementation.

Introduction
The significance of play-based learning (PBL) in early childhood education cannot be overstated, as it is fundamentally intertwined with children's natural modes of learning and development. Globally, PBL is recognized for its role in fostering holistic development, encompassing cognitive, social, emotional, and physical growth (Lester & Russell, 2008; Keung & Cheung, 2019). In the context of early childhood education (ECE), the effectiveness of PBL is contingent upon educators' understanding and implementation of its principles (Hardiyanti, 2021; Tambunan et al., 2022). The quality of education that young children receive is crucial for their long-term educational and social outcomes (Munandar in Fadlillah, 2018; Zaini, 2019). Therefore, it is imperative to examine teachers' perspectives on PBL to ensure its successful application in ECE settings.

Previous research has extensively documented the benefits of PBL for young children. For instance, studies have shown that PBL can enhance children's creativity, problem-solving skills, and social interactions (Hayati & Putro, 2021; Fadlillah, 2018a). Additionally, PBL has been associated with improved linguistic, cognitive, and motor development (Munandar in Fadlillah, 2018; Keung & Cheung, 2019). The theoretical underpinnings of PBL are supported by Vygotsky's Cultural-Historical Theory, which posits that play is a critical component of learning and development, allowing children to explore, experiment, and interact in a meaningful way (Ridgway et al., 2015). Furthermore, play is characterized by its intrinsic motivation, voluntary nature, and focus on process rather than outcomes (Jeffre et al. in Fadlillah, 2018b; Smith et al. in Hayati & Putro, 2021).
Despite the well-documented benefits of PBL, the actual implementation of PBL in educational settings often falls short of its potential due to various misconceptions and challenges faced by educators (Iskandar, 2021). Research indicates that many teachers struggle to effectively incorporate PBL principles into their teaching practices, often resorting to more traditional, didactic approaches (Sanjaya in Lailatussaadah, 2015; Farwan, 2017). This discrepancy between theory and practice highlights a significant gap in teachers' understanding and application of PBL, which can adversely affect the quality of early childhood education (Hardiyanti, 2021; Tambunan et al., 2022). Addressing this gap is essential for optimizing educational outcomes for young children.

A key factor influencing the successful implementation of PBL is the professional competence of early childhood educators. Professional competence encompasses various dimensions, including pedagogical, personal, social, and professional skills (Fadilah et al., 2019; Lubis et al., 2022). Pedagogical competence, in particular, is critical as it involves the ability to design and manage curriculum and learning environments that facilitate effective learning (Sum & Taran, 2020; Syarifuddin, 2020). Studies have shown that teachers with a strong understanding of pedagogical principles are more likely to successfully implement PBL, thereby enhancing children's learning experiences (Hayati & Putro, 2021; Fadiillah, 2018a).

However, research has also identified significant barriers to the effective implementation of PBL. For example, many teachers lack adequate training and professional development opportunities to deepen their understanding of PBL (Iskandar, 2021). Additionally, institutional constraints, such as rigid curriculum requirements and assessment pressures, can hinder teachers' ability to adopt more flexible, play-based approaches (Supardi in Aslamiyah et al., 2020). These challenges underscore the need for targeted interventions to support teachers in overcoming these obstacles and enhancing their capacity to implement PBL effectively (Verrawati & Mustadi, 2015).

The limitations and gaps in previous research necessitate a more comprehensive exploration of teachers' perspectives on PBL, particularly in specific cultural and geographical contexts. Although studies have examined teachers' views on PBL in various regions, there is a paucity of research focusing on the unique context of Yogyakarta, Indonesia (Hayati & Putro, 2021; Iskandar, 2021). Understanding the specific challenges and opportunities faced by teachers in this region is crucial for developing tailored strategies to support the effective implementation of PBL. Additionally, there is a need to investigate the alignment between teachers' perspectives and actual classroom practices to identify areas for improvement (Zaini, 2019).

This study aims to fill these gaps by exploring the perspectives of early childhood educators in Yogyakarta on the concept and implementation of PBL. Specifically, it seeks to assess the extent to which their perspectives align with best practices in PBL and identify any discrepancies between their beliefs and practices. By providing insights into the current state of PBL implementation in Yogyakarta, this research contributes to the broader body of knowledge on early childhood education and offers practical recommendations for enhancing the quality of PBL in this context. The findings of this study have the potential to inform policy, practice, and professional development initiatives aimed at supporting teachers in adopting more effective PBL approaches.

**Methods**

This study utilized a mixed-methods approach with a survey design to investigate early childhood education (ECE) teachers' perspectives on play-based learning (PBL) in Yogyakarta. Data collection was conducted through a structured questionnaire administered via Google Forms. The population of the study comprised 224 ECE teachers from various institutions across Yogyakarta. A random sampling technique was employed to select a representative sample, ensuring a normal distribution curve. The initial target was a minimum of 10% of the population; however, the study successfully gathered data from 20% of the population, resulting in a sample
Data were collected using a comprehensive survey instrument that included 26 closed-ended items on a Likert scale ranging from "strongly disagree" to "strongly agree," and four semi-open questions allowing participants to provide additional insights beyond the predefined options. This instrument was initially developed based on two key research questions: (1) How aligned are ECE teachers' perspectives in Yogyakarta with the concept of PBL? and (2) How do the benefits of PBL explain the alignment of these perspectives? The questionnaire underwent expert review by two specialists in curriculum and play pedagogy to ensure content validity before being finalized and distributed via Google Forms. The dissemination was facilitated through collaboration with local organizations such as 'Aisyiyah DIY’s ECE division and several professional associations, including IGABA, IGRA, IGTKI, and HIMPAUDI.

Quantitative data obtained from the closed-ended questions were analyzed using descriptive statistics to profile the perspectives of ECE teachers on PBL. Descriptive statistics provided a summary of the data's distribution, central tendency, and variability, aiding in the clear interpretation of the findings (Prihatiningsih, 2022). The statistical analysis was conducted using SPSS version 26. Qualitative data from the semi-open questions were analyzed using thematic analysis, a method designed to identify, analyze, and report patterns within the data (Rozali, 2022). This analysis followed six phases: familiarizing with the data, generating initial codes, searching for themes, reviewing themes, defining and naming themes, and producing the report (Braun et al., 2017). To ensure reliability and validity, the survey instrument underwent expert validation, and a robust random sampling technique was employed. These measures, coupled with rigorous data analysis procedures, reinforced the methodological rigour and accuracy of the study's findings.

This study will discuss the demographic data of respondents, descriptive statistical tests, the establishment of variable categorization criteria, the categorization results of early childhood education teachers' (PAUD) perspectives on Play-Based Learning (PBL), the benefits of PBL according to respondents' views, and the validity and limitations of the research. The purpose of this section is to provide a comprehensive understanding of the research findings.

Result
This study will discuss the demographic data of respondents, descriptive statistical tests, the establishment of variable categorization criteria, the categorization results of early childhood education teachers' (PAUD) perspectives on Play-Based Learning (PBL), the benefits of PBL according to respondents' views, and the validity and limitations of the research. The purpose of this section is to provide a comprehensive understanding of the research findings.

This research used a survey method with a questionnaire as the data collection tool. The survey was conducted on 41 early childhood education teachers (PAUD) in Yogyakarta City.
analysis included descriptive statistics and the establishment of variable categorization criteria to understand teachers' perspectives on the PBL concept.

3.1. Respondent Demographic Data

The data collected from this study originates from 41 respondents. The demographic distribution of respondents is presented based on age groups (years), last education, and training attended. The number of respondents is divided into data groups as explained in Table 1 below.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Category</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age Group (years)</td>
<td>20-30</td>
<td>5</td>
<td>12%</td>
</tr>
<tr>
<td></td>
<td>31-40</td>
<td>8</td>
<td>20%</td>
</tr>
<tr>
<td></td>
<td>41-50</td>
<td>17</td>
<td>41%</td>
</tr>
<tr>
<td></td>
<td>Above 51</td>
<td>11</td>
<td>27%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>41</strong></td>
<td></td>
</tr>
<tr>
<td>Last Education</td>
<td>High School</td>
<td>10</td>
<td>24%</td>
</tr>
<tr>
<td></td>
<td>Associate Degree (D3)</td>
<td>2</td>
<td>5%</td>
</tr>
<tr>
<td></td>
<td>Bachelor’s in Early Childhood Ed. (S1 PG PAUD)</td>
<td>20</td>
<td>49%</td>
</tr>
<tr>
<td></td>
<td>Bachelor’s in Other Education</td>
<td>8</td>
<td>20%</td>
</tr>
<tr>
<td></td>
<td>Bachelor’s in Non-Education</td>
<td>1</td>
<td>2%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>41</strong></td>
<td></td>
</tr>
<tr>
<td>Training Attended</td>
<td>Tiered Training (basic, advanced, proficient)</td>
<td>36</td>
<td>88%</td>
</tr>
<tr>
<td></td>
<td>None</td>
<td>5</td>
<td>12%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>41</strong></td>
<td></td>
</tr>
</tbody>
</table>

The last education of PAUD teachers in Yogyakarta City as respondents includes 20 graduates with a Bachelor’s in Early Childhood Education (S1 PG PAUD), which is the highest compared to other educational backgrounds. Meanwhile, 10 respondents have a high school background, 2 respondents have an Associate Degree (D3) without specifying the program, 8 respondents come from other education-related Bachelor’s degrees, and 1 respondent is qualified with a non-education Bachelor’s degree. Table 1 also shows that 36 PAUD teacher respondents in Yogyakarta City have attended tiered training, ranging from basic to advanced or proficient training.

3.2. Descriptive Statistical Tests

Descriptive measurement of this variable was conducted to get a general overview of the data such as the mean, maximum, minimum, and standard deviation of the variables. The results of the Descriptive Statistical Test of this study can be seen in Table 2 below.

<table>
<thead>
<tr>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>PAUD Teachers’ Perspective</td>
<td>41</td>
<td>22.00</td>
<td>48.00</td>
<td>39.5854</td>
</tr>
<tr>
<td>Valid N (listwise)</td>
<td>41</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

From this data, it can be described that the minimum value of the PAUD Teachers' Perspective (X) is 22 while the maximum value is 48, with an average value (X) of 39.5854 and a standard deviation of 6.70439. This measurement provides a general picture of data distribution and variability in teachers' perspectives on PBL.

3.3. Establishment of Variable Categorization Criteria

From the descriptive statistical test conducted, the next step is the establishment of categorization criteria for the variable of PAUD teachers' perspectives on the PBL concept using three categories as shown in Table 3 below:
Table 3. Criteria Calculation

<table>
<thead>
<tr>
<th>Category</th>
<th>Formula</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>X&lt;M</td>
<td>X&lt;33</td>
</tr>
<tr>
<td>Medium</td>
<td>M-1SD ≤ X &lt; M + 1SD</td>
<td>33≤X&lt;45</td>
</tr>
<tr>
<td>High</td>
<td>M+1SD ≤ X</td>
<td>45≤X</td>
</tr>
</tbody>
</table>

- M: Mean
- SD: Standard Deviation

3.4. Statistical Categories

Using the above calculation criteria, quantitative data from the survey results of PAUD teachers’ perspectives on the PBL concept in Yogyakarta City is categorized into three levels as presented in Table 4 below.

Table 4. Categorization of PAUD Teachers’ Perspectives on Play-Based Learning

<table>
<thead>
<tr>
<th>Category</th>
<th>Frequency</th>
<th>Percentage</th>
<th>Valid Percentage</th>
<th>Cumulative Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>7</td>
<td>17.1</td>
<td>17.1</td>
<td>17.1</td>
</tr>
<tr>
<td>Medium</td>
<td>23</td>
<td>56.1</td>
<td>56.1</td>
<td>73.2</td>
</tr>
<tr>
<td>High</td>
<td>11</td>
<td>26.8</td>
<td>26.8</td>
<td>100.0</td>
</tr>
<tr>
<td>Total N</td>
<td>41</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

From the data above, it can be described that 17.1% of PAUD teachers in Yogyakarta City have a low perspective on PBL. The majority of teachers’ perspectives on PBL are in the medium category at 56.1% (23 out of 41 subjects), while 26.8% are in the high category. This data indicates that the dominant participants have a perspective on the PBL concept that is neither too high nor too low, falling into the medium category.

3.5. Benefits of Play-Based Learning Activities

Based on Figure 2 below, data shows that participants consider PBL to provide benefits for both children and teachers. Benefits for children include greater enthusiasm for learning, reduced boredom, enhanced creativity and imagination, progress in various developmental aspects, the freedom to choose educational play tools (APE) according to their preferences, and gaining new experiences in playing. Benefits for teachers include PBL’s ability to easily attract children’s interest, ease in finding tools, materials, and learning resources from the surrounding environment, and ease in conditioning children during PBL implementation.
This study has several limitations that should be considered when interpreting the results. First, the limited sample size of 41 respondents may not represent the entire population of PAUD teachers in Yogyakarta City. Second, the selection of respondents and potential bias in data collection may affect the results. Third, this study does not consider other variables that might influence teachers’ perspectives on PBL. A discussion of these limitations is expected to provide a more balanced view and enhance the credibility of the research findings.

Discussion
The objective of this research was to explore and analyze the perspectives of early childhood education (PAUD) teachers in Yogyakarta City on the concept of Play-Based Learning (PBL) and to identify the alignment of their perspectives with the implementation of PBL in early childhood education environments. Previous studies have highlighted the critical role of teacher qualifications and continuous professional development in enhancing teaching efficacy and the successful implementation of innovative educational approaches such as PBL (Wulandari & Rahmah, 2023; Alamsyah et al., 2020). In this context, examining the perspectives of PAUD teachers provides valuable insights into the current state of early childhood education and the potential areas for improvement. The study is particularly relevant given the national regulations that mandate specific qualifications for teachers, ensuring they are equipped to handle modern educational practices. Therefore, this research fills a critical gap by evaluating whether these qualifications translate into effective implementation of PBL.

The main findings of this study indicate that the perspectives of PAUD teachers on PBL vary significantly, with 17.1% of teachers having a low perspective, 56.1% having a medium perspective, and 26.8% having a high perspective. Most teachers (88%) had attended tiered training programs intended to enhance their professional competencies. However, a notable minority (12%) have not participated in any professional training, which may influence their perspectives on PBL. The mean score of teachers’ perspectives was 39.5854, falling into the medium category, suggesting a general but incomplete understanding and acceptance of PBL principles. These variations highlight the need for more targeted and effective professional development programs.

Comparing these findings with previous studies, it is evident that while the majority of PAUD teachers in Yogyakarta possess qualifications in early childhood education, there is still a significant portion with less relevant educational backgrounds (Wulandari & Rahmah, 2023). The high percentage of teachers with relevant qualifications aligns with national regulations, such as Law Number 14 of 2005 and Ministerial Regulations, which require at least a bachelor’s degree in education (Alamsyah et al., 2020; Shofiah & Munandar, 2023). However, the varying perspectives on PBL indicate a gap between having qualifications and effectively applying PBL concepts in teaching. This discrepancy suggests that qualifications alone may not be sufficient for the effective implementation of PBL. Continuous professional development and hands-on training are crucial to bridge this gap.

The impact of professional training on teachers’ perspectives is also evident in this study. Teachers who have participated in tiered training programs generally demonstrate a better understanding and more favourable perspective towards PBL compared to those who have not undergone such training (Eliza et al., 2022; Risdiantoro, 2021). This supports the findings of Isnaini et al. (2020), who reported that professional training significantly enhances teachers’ competencies and effectiveness in implementing educational innovations like PBL (Sulastri et al., 2020). These findings highlight the importance of ongoing professional development in ensuring that teachers can effectively implement PBL in their classrooms. Without such training, even well-qualified teachers may struggle to apply PBL principles effectively.

The significance of these findings lies in the correlation between teachers’ educational backgrounds, their participation in professional development, and their perspectives on PBL. Teachers with lower perspectives on PBL tend to lack either formal education in early childhood education or adequate professional training, which is consistent with Ulfah et al. (2023), who
noted that ineffective training could result from internal factors such as educational background and participants' capabilities. This highlights the need for targeted professional development programs that address these gaps (Hardiyanti, 2021). Additionally, addressing these gaps is crucial for the successful implementation of PBL, as it directly impacts the quality of early childhood education. Therefore, enhancing teacher training programs can significantly improve PBL outcomes.

The medium category, which encompasses the majority of respondents, suggests a mixed understanding of PBL principles. This group recognizes the benefits of PBL but may still harbour some misconceptions or lack comprehensive knowledge, as indicated by previous studies (Ester & Giamulia, 2021; Hayati & Putro, 2021). This incomplete understanding can hinder the full potential of PBL, underscoring the importance of continuous professional development and support for teachers to enhance their pedagogical skills (Putro, 2016; Purwanto, 2022). The study’s findings reinforce the need for ongoing support and training to ensure teachers fully understand and can implement PBL effectively. Continuous professional development is key to addressing these gaps and improving educational outcomes.

The implications of these findings are significant for policy and practice in early childhood education. Ensuring that all PAUD teachers have access to high-quality, relevant training is crucial for the effective implementation of PBL. This study suggests that while formal qualifications are essential, continuous professional development plays a critical role in shaping teachers' perspectives and capabilities. Therefore, policymakers and educational institutions should prioritize comprehensive training programs that not only align with national standards but also address the specific needs and challenges faced by PAUD teachers in implementing PBL (Hanifah & Puteri, 2021; Khotimah & Rohmadheny, 2021). By addressing these needs, the quality of early childhood education can be significantly enhanced, benefiting both teachers and students.

**Conclusion**

This study aimed to explore and analyze the perspectives of PAUD teachers in Yogyakarta City regarding Play-Based Learning (PBL) and to identify the alignment of their perspectives with its application in early childhood education settings. The findings reveal a diverse range of perspectives among PAUD teachers, categorized into low, medium, and high based on their scores. A significant portion of the teachers, 56.1%, fell into the medium category, while 26.8% were categorized as high, indicating a generally positive outlook towards PBL. The demographic data and educational background of the respondents highlight the varied experiences and qualifications among the PAUD teachers. The majority, 49%, hold a Bachelor's degree in Early Childhood Education (S1 PG PAUD), which correlates with their favourable perspectives on PBL. Moreover, the extensive participation in tiered training (88%) underscores the importance of continuous professional development in shaping teachers' views and practices. However, the study's limitations, including the small sample size and potential biases, suggest the need for future research with larger, more representative samples and the exploration of additional influencing variables. This study underscores the critical role of continuous professional development in enhancing PAUD teachers’ capabilities, recommending that policymakers and educational institutions prioritize such programs to improve the quality of early childhood education, benefiting both educators and learners.

**References**


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