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Developmental Assessment Practices in Early Childhood Education: An Analysis of Teacher Approaches and Strategies¹

Gizem EKER² Yakup YILDIRIM³

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Abstract:

This study focused on the importance of developmental assessment in early childhood and the approaches used by teachers in this process. This study examined how teachers conduct assessment processes based on individual differences and child-centered approaches. This study used a mixed-method design and was conducted with 181 preschool teachers in Turkey. Data were collected using the "Child Recognition and Assessment Techniques Attitude Scale," a semi-structured interview form, and personal information forms. According to the results, teachers frequently used methods such as observation, portfolio, play-based assessment, and family interviews. However, methods such as drama and sociometry are less preferred. While teachers generally pay attention to individual differences in developmental assessment processes, elements such as confidentiality, language use, and developmental integrity are less emphasized.

Female teachers were found to be more positive towards developmental assessment processes, however, variables such as age, professional seniority, and class size did not have a significant effect on their attitudes. The findings revealed that professional development programs should be organized to include evaluation processes, and that teachers should be supported with digital tools. This study offers suggestions for the development of a more comprehensive and holistic understanding of assessment in preschools.

Keywords: Preschool period, preschool education, developmental assessment

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¹This research is derived from the first author's master's thesis titled "An Investigation of Preschool Teachers' Views on Developmental Evaluation Practices".

²Master's Degree Graduate, Akdeniz University, Institute of Educational Sciences, Antalya, Türkiye.

¹ekergizem@gmail.com, https://orcid.org/0000-0002-0461-3221
3Assist. Prof. Dr., Akdeniz University, Education Faculty, Antalya, Türkiye. yakupyildirim1986@gmail.com, https://orcid.org/0000-0001-5319-5487

INTRODUCTION

Development is a lifelong process involving both quantitative and qualitative changes. This process reflects how an individual's innate characteristics interact with environmental factors. In particular, the 0-6 age range, which is called the "early childhood period," is when development and learning are the most rapid and fundamental. Scientific studies have shown that children's positive environmental conditions significantly affect their cognitive, emotional, and social development during this critical period, and this process forms the basis of their future social and academic lives (MoNE, 2015; Bayhan, 2017). In this context, the developmental assessment of children in early childhood is of great importance for the implementation of effective and individualized education processes.

Early Childhood and Assessment Process

The education and assessment processes carried out in early childhood are considered a time during which the foundations of basic knowledge, skills, and habits that individuals will need throughout their lives are laid (Aral, Can Yaşar, & Kandır, 2002). The correct understanding of a child's cognitive, motor, language, social, and emotional developmental characteristics and the development of appropriate educational strategies are based on developmental assessments made during this period (Bayraktar, 2018). Developmental assessment guides the organization of learning environments and the design of educational materials in accordance with the child's needs and individual differences.

According to the Ministry of National Education (2015), the process of recognizing and assessing children refers to the objective, flexible, and consistent collection of information about children through a wide variety of tools, as well as recording this information and transforming these findings into meaningful decisions. This process is critical for understanding children's learning and developmental characteristics, discovering their strengths and weaknesses, and planning appropriate educational interventions. However, this process is not limited to measuring a child's performance. It also includes a multifaceted function, such as revealing the child's individual potential, shaping educational programs, and strengthening cooperation with families (Bayhan, 2017; McAfee, Leong & Bodrova, 2015).

Functions of the Evaluation Process

The functions of developmental assessment primarily include understanding children's pre-instructional levels and supporting their individual developmental processes. Assessments enable teachers to prepare individualized teaching plans tailored to their students by utilizing detailed information about the child (MoNE, 2015). Additionally, the feedback provided to families offers a broader perspective on the child's developmental trajectory. For instance, children's portfolios and developmental files serve as valuable tools for both teachers and parents in terms of long-term monitoring and evaluation. Recent research has emphasized that developmental assessment in early childhood should not only

focus on observable behaviors but also consider children's emerging metacognitive awareness, which is often shaped through teacher–child dialogue and collaborative problem-solving activities. This perspective broadens the traditional scope of assessment and underlines the importance of enculturating thinking through purposeful classroom interactions (Gómez-Barreto, Lara, & Pinedo-González, 2023).

In this context, one of the most important elements of developmental assessment is to consider assessment tools from a multisource and diverse perspective. Standardized tests are used in the assessment process, as well as methods such as observation, anecdotal recording, interviews, and home visits (McAfee, Leong & Bodrova, 2015). These methods enable a deep understanding of not only the child's academic performance but also the child's social, emotional, and psychological structures. As a result, teachers can create strategies to support children's holistic development.

The Role of Preschool Teachers

Preschool teachers are at the center of both developmental assessments and educational practices. In early childhood, teachers are responsible for understanding children's individual differences, organizing learning environments, and developing educational materials appropriate to their needs (MoNE, 2015). Individualized educational approaches, especially with sociocultural differences, require the use of the right tools and methods for assessment. Bayraktar (2018) and other studies show that to fulfill this role successfully, it is essential to improve teachers' assessment skills in terms of both theory and practice.

Research has shown that teachers' effective use of assessment techniques can lead to significant progress in children's learning (McAfee, Leong & Bodrova, 2015). However, whether teacher training programs and existing professional development training meet current needs is another important question to investigate.

In recent years, there has been a significant expansion in international literature on digital assessment processes in early childhood. Su and Yang's (2023) systematic review revealed that teachers' digital competencies should be assessed through multidimensional building blocks such as pedagogical content knowledge, cultural awareness, and digital safety. Similarly, Darling-Hammond and Oakes (2019) emphasized that teacher preparation processes should focus not only on technical skills but also on deep learning, critical thinking, and the capacity to use digital tools in a cultural context. Al-Mansour's (2022) study suggests that culturally responsive teaching approaches contribute to assessment processes that take into account individual differences in early childhood. In this context, children's cognitive, social, emotional, and cultural competencies can be monitored through digital environments, necessitating the development of an assessment approach compatible with international frameworks for teacher competencies.

Problem Statement and Importance of the Study

The literature comprises a wide range of studies highlighting the complexities, challenges, and pedagogical opportunities that arise in the developmental assessment practices of early childhood education. While many of these studies offer valuable insights, they are predominantly rooted in international contexts, with a strong emphasis on policy implementation, interdisciplinary collaboration, and equity-oriented assessment approaches (Bascopé, Perasso & Reiss, 2019). In contrast, research conducted specifically within the Turkish context remains relatively limited. This gap underscores the need for locally grounded yet globally informed studies that can both enrich the diversity of perspectives and contribute to the international discourse on inclusive and developmentally appropriate assessment. In particular, sociocultural dynamics and regional disparities in Turkey necessitate a closer examination of how teachers interpret and adapt assessment strategies in varying contexts. For instance, Yavuzer (2021) emphasizes that teachers' assessment practices differ significantly across socioeconomic settings, which has direct implications for ensuring equity in educational opportunities and developmental outcomes. Therefore, comparative research that contextualizes Turkish findings within the broader international framework is essential for enhancing the generalizability and transformative potential of national educational policies and teacher education programs.

This study aimed to shed light on teachers' approaches to developmental assessment practices in preschools in Turkey. The findings of this study are important in providing a better understanding of teachers' assessment strategies and to contribute to policy and program development processes in this regard.

Purpose of the Study

The overall aim of this study is to understand preschool teachers' attitudes towards developmental assessment practices, to identify the strategies used, and to assess how these practices differ according to various variables (e.g., professional experience, class size, gender). The study also aims to understand the areas of use for the assessment data obtained, and the needs and challenges teachers face in this process.

This study seeks answers to the following sub-problems:

- Is there a significant difference between preschool teachers' developmental assessment practices and gender?
- Is there a significant difference between preschool teachers' developmental assessment practices and their age?
- Is there a significant difference between preschool teachers' developmental assessment practices and professional seniority?
- Is there a significant difference between preschool teachers' developmental assessment practices and number of children in their classes?

- What are preschool teachers' developmental assessment strategies?
- What are the points preschool teachers pay attention to in developmental assessment activities?
- How do do preschool teachers use the data obtained as a result of developmental assessment?
- What are the thoughts of preschool teachers about the appropriateness of the strategies they use in the developmental assessment process for the developmental assessment objectives they set?

METHOD

Research Model

Using a mixed research method, in which qualitative and quantitative data collection techniques were used together to conduct the study, this study aimed to examine the knowledge of preschool teachers working in preschool education institutions on developmental assessment and their views on practices. The mixed methods aim to obtain more detailed information using both qualitative and quantitative methods.

Mixed-method research is defined as a research method in which the researcher collects, analyzes, and makes inferences using qualitative and quantitative methods together (Tashakkori & Creswell, 2007). As the research design, "sequential-explanatory design," one of the four dimensions of the mixed research model, was used. In sequential-exploratory design, the process of collecting and analyzing quantitative and qualitative data takes place in two stages. In the first stage, quantitative data were collected through the answers the study questions, and, the data obtained were analyzed. In the next stage, qualitative data were collected and analyzed to complement data (Creswell & Clark, 2018).

Qualitative and quantitative models offer two different research perspectives. In studies conducted in the social sciences, both models possess characteristics that cannot be adequately explained by other methods. Therefore, these two research models complement each other (Yıldırım & Şimşek, 2011).

Participants

The study group consisted of preschool teachers working in private and public preschool education institutions affiliated with the Ministry of National Education in Turkey in the 2022-2023 academic year. The 181 teachers who had these characteristics and were included in the study group participated in line with the principles of voluntariness and accessibility. In the study aiming to examine preschool teachers' attitudes towards developmental assessment practices, the participants were determined according to the purposive sampling method.

Data Collection Tools

In the study, the "Child Recognition and Assessment Techniques Attitude Scale" (CRATAS) developed by Ulusoy (2019), the semi-structured Teacher Interview Form, which is largely based on open-ended questions, and the "Personal Information Form," prepared by the researcher, were used to measure teacher attitudes towards child recognition and assessment. The "Personal Information Form" was designed to obtain information about the participants' gender, age, faculty of graduation, education level, professional seniority, and the number of students in their classes.

Child Recognition and Assessment Techniques Attitude Scale

The Child Recognition and Assessment Techniques Attitude Scale (CRATAS) was developed by Ulusoy (2019) to measure the attitudes of preschool teachers working in preschool education institutions towards child recognition and assessment techniques. The 38-item scale was a five-point Likert-type scale. The responses to the items in the scale consist of "Strongly Agree," "Agree," "Undecided," "Disagree," "Strongly Disagree" options.

Personal Information Form

A personal information form prepared by the researcher was designed to obtain information about the teachers participating in the study. In this form, there were questions regarding demographic information on the teacher's gender, age, faculty of graduation, level of education, professional seniority, and number of students in the class.

Teacher Interview Form

The interview form prepared by the researcher consisted of semi-structured questions to determine preschool teachers' views on recognizing and evaluating preschool children. To ensure the reliability of the interview form, expert opinions were consulted, the interview questions were rearranged according to the opinions received from the experts, and the final version was created. The Teacher Interview Form was administered to the five teachers with the highest scores and the five teachers with the lowest scores on the Child Recognition and Assessment Techniques Attitude Scale (CRATAS).

Data Analysis

Quantitative and qualitative data analysis techniques were applied to the research data. Quantitative data were analyzed using SPSS 22. Kruskal-Wallis H Test was used for comparisons between three or more groups due to non-normally distributed data; independent t-test was used for comparisons between paired groups due to normally distributed data; and ANOVA was used when comparing three or more groups with normally distributed data. Descriptive statistics were used to evaluate the data. 0.05 was used as the significance level. A significant difference or correlation was observed when p<0.05, and no significant difference or correlation was observed when p>0.05.

The qualitative data were analyzed using descriptive statistics. First, the researcher transcribed the data obtained from interviews with the teachers. The coding process was then included in the analysis. Quotations from the information obtained from the participants were included to ensure validity and reliability and the data were presented to the readers in a straightforward manner with minimal changes.

Ethical considerations

In the course of this research, we paid scrupulous attention to ethical guidelines, ensuring that the integrity and reliability of the study were never compromised.

For the quantitative phase, data was meticulously harvested electronically, ensuring the privacy and anonymity of respondents. The absence of demographic data collection further cemented this confidentiality. Moving onto the qualitative portion, every interviewee was formally apprised of the research's objectives, methodologies, and potential implications. Importantly, they were reassured in writing about their right to withdraw from the study without any repercussions. All data acquired, including the interview tools and participants' consent documents, were securely housed on the researcher's personal computer, fortified by stringent password protection measures.

In alignment with the overarching commitment to ethics, this study stringently adhered to all provisions delineated in the "Higher Education Institutions Scientific Research and Publication Ethics Directive." It is imperative to note that there were zero instances of activities which might infringe upon the clauses stated under the "Actions Against Scientific Research and Publication Ethics."

Ethical Review Board: Akdeniz University Social Sciences and Humanities Scientific Research and Publication Ethics Committee

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FINDINGS

In this section, the findings obtained for the solutions to the sub-problems of the research are systematically analyzed. First, quantitative data were presented, and then qualitative data were analyzed.

Findings Related to the First Sub-Problem

Table 1. Results of the Analysis Showing the Difference of the Mean Scores of the Child Recognition and Assessment Techniques Attitude Scale According to the Gender of the Teachers

Gender	n	Mean	Median	Minimum	Maximum	SS	t	p
Female	169	157,53	158,00	116,00	190,00	14,77		
Male	12	146,25	149,00	122,00	167,00	14,23		
Total	181	156,78	157,00	116,00	190,00	14,97	2,562	0,011

When the findings in Table 1 were analyzed, it was found that the scores of 'Child Recognition and Assessment Techniques Attitude Scale' showed a significant difference between male and female preschool teachers (p<0.05). The scores of female preschool teachers on the "Child Recognition and Assessment Techniques Attitude Scale" were significantly higher than those of their male counterparts.

Findings Related to the Second Sub-Problem

Table 2. Results of the Analysis Showing the Difference in the Mean Scores of the Child Recognition and Assessment Techniques Attitude Scale According to the Age of the Teachers

Age	n	Mean	Median	Minimum	Maximum	SS	F	P
22-28 age	79	158,42	159,00	119,00	190,00	14,47		
29-35 age	45	155,76	158,00	122,00	186,00	14,93		_
35-40 age	32	155,06	151,50	135,00	185,00	15,87		
41 and over age	25	155,68	154,00	116,00	188,00	15,78		
Total	181	156,78	157,00	116,00	190,00	14,97	0,567	0,637

When the findings in Table 2 are analyzed, it is found that the scores of the "Child Recognition and Assessment Techniques Attitude Scale" do not show a significant difference according to the age variable of preschool teachers (p>0.05). Although not statistically significant, the "Child Recognition and Assessment Techniques Attitude Scale" scores of teachers in the 22-28 age group were higher than those of other age groups.

Findings Related to the Third Sub-Problem

Table 3. Results of the Analysis Showing the Difference of the Mean Scores of the Child Recognition and Assessment Techniques Attitude Scale According to the Professional Seniority of the Teachers

Seniority	n	Mean	Median	Minimum	Maximum	SS	F	p
1-5 year	96	157,69	159,50	119,00	190,00	14,33		_
6-10 year	34	153,76	151,50	129,00	186,00	14,51		
11-15 year	28	158,36	159,00	135,00	188,00	16,55		
16 and over year	23	155,57	154,00	116,00	185,00	16,47		
Total	181	156,78	157,00	116,00	190,00	14,97	0,729	0,536

Analysis of the findings in Table 3 revealed that the scores of the "Child Recognition and Assessment Techniques Attitude Scale" did not show a significant difference according to the professional seniority of preschool teachers (p>0.05). Although not statistically significant, the scale scores of those with 11-15 years of experience were higher.

Findings Related to the Fourth Sub-Problem

Table 4. Results of the Analysis Showing the Difference of the Mean Scores of the Attitude Scale for Child Recognition and Assessment Techniques According to the Average Number of Children in Teachers' Classes

Child	n	Mean	Median	Minimum	Maximum	SS	T	p
10-20 Child	139	156,93	157,00	119,00	190,00	15,05		
21 and over child	42	156,31	159,00	116,00	183,00	14,85		
Total	181	156,78	157,00	116,00	190,00	14,97	0,234	0,815

When the findings in Table 4 were analyzed, it was found that the scores of the "Child Recognition and Assessment Techniques Attitude Scale" did not show a significant difference according to the average number of children in preschool teachers' classes (p>0.05).

Findings Related to the Fifth Sub-Problem

Theme 1. Developmental Assessment Strategies Used

In this study, the developmental assessment strategies used by teachers working in preschool education institutions were determined: including observation, interviews, portfolios, home visits, play, anecdotal records, development reports, child pictures, drama, and sociometry techniques. According to the findings, observation and interviews were the most frequently used methods, while drama and sociometry were among the least frequently used techniques. Table 5 presents the frequency distributions.

Table 5. Distribution of developmental assessment strategies used by preschool teachers working in preschool education institutions

Theme 1: Developmental Assessment Strategies Used	f	%
Sub-themes		
Observation	10	100
Interview	9	90
Portfolio	6	60
Home Visit	5	50
Play	5	50
Anecdotal Record	5	50
Development Report	3	30
Child Pictures	2	20
Drama	1	10
Sociometry	1	10

Observation stood out as a strategy used by all the teachers. Teachers generally use observation as the first step in understanding children's behaviors in learning processes. For example, teacher 10 emphasized this with the statement, "I usually observe my children during classroom activities."

Interviewing is a method frequently mentioned by teachers, especially who attach importance to exchanging information with their families. Teacher 1 explained this method by saying, "We call a family to school every week and talk about the child."

Portfolio was defined as another important strategy, preferred by six teachers that enabled the recording of the individual development of children. Teacher 4 stated, "Portfolio file is one of the most effective methods for us."

Home visits are frequently preferred to collect individual information. Teacher 4, one of the interviewed teachers, stated: "I get important information about the child and the family through home visits."

Play and anecdotal recordings are among the methods used by teachers to monitor children in the natural environment, and record the information obtained. For example, teacher 5 stated, "I observe children's behavior during free play and record anecdotes."

Less frequently used strategies included development reports, photos of children, dramas, and sociometry. For example, teacher 5 stated, "I use drama in group activities to observe children's behaviors in accordance with their roles."

As a result, it was determined that observation and interview techniques were widely preferred, whereas techniques such as drama and sociometry were used less frequently. The findings showed that teachers use various methods to understand children's development.

Findings Related to the Sixth Sub-Problem

Theme 2. Considerations in Developmental Assessment Practices

Table 6. Distribution of the points that preschool teachers working in preschool education institutions pay attention to in developmental assessment practices

Theme 2: Points Considered in Developmental Assessment Practices	f	%
Sub-themes		
Individual Differences	7	70
Child-Centered Approach	5	50
Family Participation	4	40
Natural Environment	3	30
Language Used	2	20
Confidentiality	2	20
Integrity in Development	1	10
Objectivity	1	10

In this study, the following subthemes were identified: individual differences, child-centered approach, family involvement, natural environment, language used, confidentiality, integrity in development, and objectivity. When Table 6 is examined, one can see that teachers emphasized individual differences (70%) and a child-centered approach (50%), whereas they mentioned integrity in development (10%) and objectivity (10%).

Individual Differences

The majority of teachers who participated in the interviews (n=7) stated that they considered individual differences in developmental assessment processes. Teachers stated that they

were aware of children's unique developmental rates and learning characteristics, and shaped their assessments accordingly.

One of the teachers explained this situation by saying, "I do not apply it to every child in the same way." For example, one of my children grew up without a family. Therefore, I direct the questions accordingly. I ask questions without hurting him/her." Another teacher said, "Each child is unique, and an appropriate method should be followed in his or her development." These statements show that teachers place children's individual differences at the center of their assessment practices.

Child-Centered Approach

When we analyzed the opinions of the teachers, it was observed that five participants adopted a child-centered approach. Teachers emphasized that putting children at the center of the assessment process enables them to make the best use of their abilities.

One teacher summarized this situation by saying, "I usually put the child at the center, I give them the opportunity to showcase what they can do uniquely, and I encounter incredible results in this process." Another teacher emphasized the child-centered assessment approach by saying, "I try to understand what the child needs and focus on their individual interests."

Family Engagement

The importance of involving families in the evaluation process was also emphasized. According to *four* teachers, family involvement is an important element that integrates education, provides more information about the child, and strengthens the evaluation processes.

One of the teachers emphasized the importance of family involvement by saying, "We definitely involve parents in the process, because it is not right to associate children's development only with the school." Another teacher said, "One of my students had a speech problem. We strengthened this learning process by continuously working with the family and demonstrated the results of effective collaboration."

Natural Environment

Three teachers (n=3) stated that they preferred to observe children in their natural environment while assessing them. Teachers stated that the observations made in children's natural environments were more reliable.

One teacher emphasized the importance of this method by saying, "I make sure that the children are in a comfortable environment during the assessment. I obtain more accurate results if they do not feel that I am observing them."

Language Used

Two teachers (n=2) specifically mentioned that they paid attention to the correct choice of language used during the assessment. Teachers emphasized that the words used in communication with both children and parents should be carefully chosen.

One teacher explained, "I avoid calling my students naughty or using harsh expressions." Instead, I describe the student's behavior in a constructive way."

Confidentiality

Among the participants, two teachers (n=2) stated that confidentiality of information about children is very important, especially in assessment studies. This requires the protection of the privacy of both children and families.

One teacher said, "I never share information about the child with parents or other students. This is a sensitive issue that emphasizes the principle of confidentiality."

Integrity and Objectivity in Development

Some teachers stated that they paid attention to holism and objectivity in development during the assessment process, but these elements were among the lesser emphasized categories (n=1).

One teacher expressed this holistic perspective by saying, "I carefully evaluate all areas of development; development is not just about one area." Another teacher stated, "I approach my observations with complete transparency and try to collect unbiased data about the child."

The findings of the study show that teachers attach particular importance to individual differences, a child-centered approach, and family involvement in the developmental assessment process. They believe that assessments conducted in a natural environment yield reliable results, and that details such as confidentiality and language also affect the process. However, integrity and objectivity in development were less emphasis on integrity and objectivity in development suggests that more awareness should be raised regarding these issues.

Findings Related to the Seventh Sub-Problem

Theme 3. Areas of Use of Developmental Assessment Data

In this study, it was found that preschool teachers used the data obtained during developmental assessment processes, mostly in the areas of informing families, directing families to the necessary units, supporting development, and planning activities. These areas enable teachers to identify individual differences in children, provide appropriate support, and collaborate with stakeholders.

Table 7. Distribution of the areas in which preschool teachers working in preschool education institutions use the data obtained from developmental assessment practices

Theme 3: Areas where Developmental Assessment Data are Used	f	%
Sub-themes		
Informing Families	8	80
Referral to Necessary Units	6	60
Supporting Development	6	60
Planning Activities	4	40
Collaborating with Stakeholders	1	10
Preparation for Primary School	1	10

Informing Families

Most of the teachers (80%) stated that they use the data obtained during developmental assessment processes to share with families. Teachers stated that they held regular

meetings with families in order to both support children's strengths and draw the attention of families to problem areas.

One teacher explained her practice in this process as follows:

"As a result of home visits and all my developmental assessments, I inform the family appropriately, emphasize the child's strengths, and offer support."

Another teacher expressed the importance of families as follows:

"If the child has a tendency to hit others, I talk to the family and try to understand the source of the behavior so that we can develop solutions together."

In addition, some teachers emphasized that family information is not only about problems, but that it is also important to share positive behaviors

"Every child and every parent deserves to receive positive feedback. I inform the family about the child's success not only when there are problems but also in positive situations."

Referral to Necessary Units

60% of the teachers stated that they use assessment data to refer children with special education needs, or in need of guidance services, to appropriate units.

One teacher expressed this situation as follows:

"In some cases, we need to refer to our guidance service or CRC. For example, we recommended that a child with violent tendencies receive psychological support after meeting with the family."

Another teacher explained the process as follows:

"If there is a situation beyond my capacity, we first coordinate with the guidance service and then with the GRC to determine the child's needs."

Supporting Development

Another important area emphasized by teachers was the use of the data obtained to support children's development (60%). At this point, teachers stated that they identified individual differences and deficient areas, and made effective interventions.

One teacher explains:

"For a child with poor language development, I try to increase their practice with rhymes and storytelling activities."

Another teacher's opinion is as follows:

"I have a child diagnosed with atypical autism. I worked in cooperation with the special education teacher to support the student's language development. The process is progressing positively."

Planning Activities

40% of the teachers stated that the data were regularly used for planning activities. Teachers were reported to use the information obtained from the children to plan daily long-term activities.

One teacher expressed this situation as follows:

"When determining the activities we will do during the semester, I make adjustments in accordance with the developmental levels of the children."

Another teacher shared the following about this process:

"With the results I obtain, I determine which activity will be most appropriate for children and plan accordingly."

Collaboration with Stakeholders

Some teachers (10%) use assessment data on children in collaboration with stakeholders. These stakeholders include special education teachers and guidance counselors.

One teacher stated the following in this regard:

"We are in constant communication with the special education teacher at the GRC. Together, we plan which steps to take. This sharing makes the process much more effective."

Preparation for Primary School

Some of the teachers indicated that they use the data to support preparation for primary school. This includes guiding children to acquire basic skills.

The statements of one teacher in this regard are as follows:

"According to the report cards and development reports that I obtain, I plan activities that will help the child better prepare for primary school."

Findings Related to the Eighth Sub-Problem

In this study, preschool teachers' opinions on the fitness for the purpose of the developmental assessment strategies they used were categorized under three headings: 'they are fit for purpose', 'they are fit for purpose but can be better', and 'they may vary according to practices'. According to the data in Table 8, 80% of the teachers think that "the strategies they use serve the purposes they set." A smaller number of teachers (10%) stated that the strategies were generally appropriate but could be improved, whereas another group (10%) stated that the strategies showed variable effects depending on the practices.

Table 8. Distribution of preschool teachers' opinions on the appropriateness of the strategies they use in developmental assessment practices

Theme 4: Opinions on the Purposefulness of the Strategies Used	f	%
Sub-themes		
Purposeful	8	80
Purposeful but Could Be Better	1	10
May Vary According to Applications	1	10

Purposeful

In this theme, the majority of the interviews showed teachers believed the strategies they used achieved their goals. Teachers emphasized that these strategies were effective in achieving the targeted outcomes.

The sample teachers' statements were as follows:

Teacher 1: "Yes, I think the strategies match the objectives. If they do not, I prefer different methods.

Teacher 2: "I always receive positive feedback from my children in my practice." I see that it really serves my purpose."

Teacher 3: "The strategies I use allow me to observe differences in the development of my students. For example, there can be significant differences between the child at the beginning of the year and the child at the end of the year

Teacher 4: "The portfolio method is incredibly effective. The parents and we can see very clearly, where the child has come from.

Teacher 6: "I think these techniques are suitable for this purpose." I develop appropriate strategies to move forward in a goal-oriented way."

These statements show that teachers choose strategies in line with the goals set, they think these strategies support children's development in general.

Purposeful but Could Be Better

Another theme, "it is suitable for the purpose but it can be better" reveals that although some strategies serve the purpose, they need to be improved. One teacher expressed the following opinions on this issue:

Teacher 8: "Yes, the strategies serve their purpose because I can observe children's development, but they can be better, of course."

This statement shows that teachers maintain a critical perspective of current strategies and are open to better methods.

May Vary According to Applications

Some teachers (n=1) stated that the practice varied. This view reveals that sometimes the strategies are effective fail to achieve their objectives.

Teacher 9: "Sometimes, I make observations, and I can see very clearly that the strategy achieves the goal." However, in other cases, I do not obtain the expected result. The effect of these strategies can vary depending on the practice.

This view shows that assessment strategies do not always achieve the set objectives and that other techniques or methods may be needed in some cases.

DISCUSSION

The study aimed to understand preschool teachers' approaches to developmental assessment practices, the main points they considered, and how the data obtained from the assessment results were used. While these findings significantly overlap with existing literature, they offer new conclusions about the practical implications of educational processes.

The study revealed that female teachers had more positive attitudes towards developmental assessment strategies than male teachers. This suggests that empathy and attention to detail in developmental assessment processes may be more intense among female teachers. This finding is in line with that of Türkeç Aktaş's (2012) study, which indicates that female teachers may exhibit a more detailed approach to assessment

processes. However, to better understand the effect of gender on assessment processes, it is recommended to conduct qualitative research on this subject.

The finding that variables related to teachers' professional characteristics, such as professional seniority, age, and education level, did not make a significant difference in evaluation attitudes is a striking result. This suggests that teachers may have adopted similar strategies, regardless of their level of experience. However, it should be noted that these findings contradict Bakioğlu's (1996) view that professional seniority can affect different assessment practices. Although more comprehensive strategies can be developed, especially with increasing experience, the lack of a significant difference in this study can be explained by the fact that teachers do not adequately follow the developments in the field after graduation.

In this study, it was observed that observation, portfolio, play-based assessment, and interviews were among the developmental assessment methods frequently preferred by teachers. These results are consistent with the findings of McAfee, Leong and Bodrova (2015) that observational assessment methods are practical and effective for understanding children's natural learning processes. At the same time, it is seen that the use of portfolios is a powerful tool to ensure effective communication with families and make concrete the development process of children. Özkan's (2015) findings on this issue explain the reasons for teachers' widespread adoption of portfolios.

Criteria such as individual differences, family involvement, a child-centered approach, and observations in the natural environment that teachers consider in their assessment processes are other important parts of the findings. These elements are in line with Gullo and Hughes's (2011) view that assessment processes should be understood within the child's own context. Moreover, these findings, which emphasize family involvement, are in line with Taner's (2005) findings on the importance of family teacher collaboration. This should be supported by more comprehensive activities that involve families in schools. Integration with UDL principles is recommended to make the developmental assessment processes inclusive. The UDL recommends providing flexible and individualized instructional materials and assessment tools that are accessible to every child (CAST, 2018; Boysen, 2024). In this study, teachers' sensitivity to individual differences reflected an approach in line with UDL; however, there is a need for systematic implementation.

This study found that teachers actively used data obtained after the assessment of family information, educational planning, and guidance processes. This finding is in line with Gullo's (2005) study, which stated that evaluation serves a critical function in determining individual educational needs as well as guiding children's learning processes. Developmental assessment data constituted the basis for referrals that were made, especially for individuals with special educational needs.

Finally, teachers commented that the strategies they use are appropriate for supporting the main outcomes of the study. In addition to tools such as portfolios and observations being found to be effective, teachers' suggestions for improving strategies can enrich work by Yılmaz Topuz and Erbil Kaya (2016) and guide future practices. For example, suggestions such as reducing the number of forms used and organizing them in a more practical manner may lead to results that favor both teachers and students.

The findings of this study highlight the importance of developmental assessments in preschool education. However, it is also clear that factors such as class size shape assessment processes, and teachers need more support. It should be taken into account that intense workload and crowded classroom environments may affect teachers' individual assessment processes. Therefore, it is important to support teachers, using digital tools and materials,.

Based on this research, a series of recommendations has been developed for teachers to continue their professional development and manage their assessment processes more effectively. These recommendations include developmental assessment in teachers' professional development programs, encouraging practices that increase teacher-parent collaboration in these processes, and supporting teachers with material provision. In addition, the data show that teachers need in-service training to be more effective in assessment processes.

In conclusion, this study has provided us with an understanding of preschool teachers' current practices and attitudes towards developmental assessment, and revealed certain deficiencies observed in the field. New practices and policy recommendations in light of these results can make important contributions to improving the quality of early childhood education.

CONCLUSION AND RECOMMENDATION

This study has provided valuable insights into preschool teachers' developmental assessment practices, emphasizing the approaches, strategies, and challenges encountered in early childhood education. By examining a diverse range of assessment techniques and teacher attitudes through a mixed-method design, this study underscores both the strengths and areas of improvement in current practices. This study is one of the first in Turkey to provide a holistic view of preschool teachers' use of developmental assessment in both quantitative and qualitative terms. It makes a unique contribution to the Turkish context, especially in terms of teachers' understanding of assessment; it focuses on individual differences and their reservations about creative but rarely used methods, such as drama and sociometry.

Key findings suggest that teachers predominantly rely on methods such as observation, portfolios, play-based assessment, and family interviews. While these approaches effectively support child-centered and individualized assessments, less frequent use of methods like drama and sociometry highlights missed opportunities for a more

creative and holistic understanding of child development. Teachers prioritize individual differences, family involvement, and child-centered approaches but place comparatively less emphasis on developmental integrity, objectivity, and confidentiality, signaling a need for greater awareness and training in these areas.

The study also highlights gender differences in teacher attitudes, with female teachers showing more positive perspectives on assessment processes. Variables such as age, professional seniority, and class size showed no statistically significant impact on teachers' attitudes, suggesting potential uniformity in assessment practices across professional demographics. However, this uniformity may also reflect constraints such as limited access to professional development and inadequate resources, as suggested by the study.

Importantly, developmental assessment data were found to play a central role in informing families, planning educational strategies, and referring children to appropriate support services. These findings reflect the pivotal role of assessment in shaping individualized educational pathways and enhancing teacher-parent collaboration. However, practical challenges such as large class sizes, heavy workloads, and limited access to technological tools inhibit the broader application of these practices.

To address these challenges and foster more effective assessment processes, the study outlines several recommendations. These include integrating developmental assessment training into professional development programs, providing teachers with digital tools and resources, and enhancing teacher-parent collaboration through structured, school-wide strategies. In particular, policymakers should ensure that tools such as portfolios, digital observation apps (e.g., Seesaw and ClassDojo), and progress reports are made available to preschool teachers, and that digital competency-based in-service training programs are implemented. Furthermore, reducing teacher workload and ensuring smaller class sizes can enable more time-intensive and child-centered assessments, thereby improving educational outcomes.

In conclusion, this study emphasizes that developmental assessment is a cornerstone for quality education during the early childhood period. However, realizing its full potential requires systemic efforts to address resource and training gaps, alongside greater support for teachers in their multifaceted roles. Given its focus on the Turkish context, future research could broaden the scope by exploring cross-cultural comparisons or longitudinal studies on the impact of improved assessment practices on child development. Such efforts will pave the way toward more inclusive, efficient, and innovative early childhood education systems globally.

Recommendations

Widen the Scope of Future Research

Future studies should aim to include more diverse participant groups from various regions or nations to better contextualize and compare findings across different settings.

Additionally, researchers should explore a wider range of demographic and contextual variables, such as socioeconomic status, school funding levels, and teachers' prior experiences with developmental assessment, to gain a more comprehensive understanding of influencing factors.

Enhanced Professional Development

It is essential to design and implement comprehensive, ongoing professional development programs for educators. These should focus on advanced assessment techniques, such as drama and sociometry, while also incorporating holistic approaches that emphasize developmental integrity and language appropriateness. Reflective practice and critical thinking should be encouraged through peer learning workshops or collaborative communities of practice, fostering a culture of continuous improvement.

Resource and Infrastructure Support

Teachers should be provided with ready-to-use digital tools and user-friendly materials to streamline the assessment process. Centralized platforms should also be developed to give teachers access to valuable resources, such as video tutorials, assessment templates, and data analysis software, ensuring they are well-equipped to perform effective evaluations.

Increased Focus on Family Collaboration

Strategies for strengthening family-teacher partnerships should be embedded into teacher training programs. Family-centered interventions, including awareness programs and joint workshops, should be developed to emphasize the importance of developmental integrity and collaborative efforts between families and educators.

Policy Interventions

Advocacy for reduced teacher workloads is critical to allow educators more time for individualized developmental assessments. Policies that encourage smaller class sizes should also be promoted, as this would enable more personalized and effective evaluations of children's developmental needs.

Evaluation and Technology Integration

New assessment tools and technologies should be piloted in preschool settings, with their impact on teachers' practices and children's outcomes carefully evaluated. Furthermore, it is important to study the digital readiness of schools and develop guidelines for integrating these tools effectively, taking into account local needs and technical constraints.

Promote Cross-Disciplinary Collaborations

Efforts should be made to strengthen partnerships between educators and other professionals, such as psychologists and special educators, to comprehensively address children's developmental needs. Schools should establish protocols for referring students

to relevant units, such as guidance and research centers, when necessary to ensure appropriate support.

Focus on Systemized Holistic Practices

There should be a strong emphasis on maintaining integrity across all developmental domains, including cognitive, emotional, and social aspects. The systematic inclusion of these domains in the design of assessments will ensure a more holistic approach to evaluating and supporting children's development.

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Data Availability Declaration

Data Availability Upon Formal Request:

While the primary datasets utilized in this study are not publicly accessible due to certain constraints, they are available to researchers upon a formal request. The authors have emphasized maintaining the integrity of the data and its analytical rigor. To access the datasets or seek further clarifications, kindly reach out to the corresponding author. Our aim is to foster collaborative academic efforts while upholding the highest standards of research integrity.

Author Contributions

Author Contributions: All authors, [Gizem Eker], [Yakup Yıldırım], contributed equally to this work. They collaboratively handled the conceptualization, methodology design, data acquisition, and analysis. Each author played a significant role in drafting and revising the manuscript, ensuring its intellectual depth and coherence. All authors have thoroughly reviewed, provided critical feedback, and approved the final version of the manuscript. They jointly take responsibility for the accuracy and integrity of the research.

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Biographical notes:

Gizem EKER: She completed her master's degree in Preschool Education at Akdeniz University in 2024. She works as a preschool teacher in a special education institution affiliated to the Ministry of National Education. She conducts studies on developmental planning and evaluation and social development in preschool period.

Scopus Author Identifier Number: None

Web of Science Researcher ID: None

Google Scholar Researcher ID: None

Yakup YILDIRIM: He completed his doctorate in the field of Preschool Education at Gazi University Institute of Educational Sciences. He is a faculty member at Akdeniz University, Faculty of Education, Department of Preschool Education. He has studies on life skills, developmental planning and evaluation in preschool period.

Scopus Author Identifier Number: 58751410600

♥ Web of Science Researcher ID: IAQ-4611-2023

Google Scholar Researcher ID:

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