

Developmental Environments in Preschool Educational Organizations and Their Types

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ABSTRACT

This study investigated the diverse types of developmental environments prevalent in preschool educational organizations and their impact on children's learning and development. Employing a mixed-methods approach, we conducted classroom observations, teacher and administrator interviews, and utilized standardized environmental rating scales to assess the quality of preschool environments across various settings. Qualitative data analysis revealed key characteristics of effective developmental environments, highlighting the interplay of physical space, materials, social interactions, and pedagogical approaches. Quantitative data analysis using the ECERS-R scale and questionnaire data provided objective measures of environmental quality and explored relationships between environmental features and perceived impact on children's learning. The findings offer valuable insights for educators and policymakers seeking to optimize preschool environments to foster holistic child development.

Keywords: educators and policymakers, effective developmental environments, environmental rating scales

INTRODUCTION

The preschool years (ages 3-5) are a critical period of rapid physical, cognitive, social, and emotional development. The environment in which children spend these formative years significantly impacts their development and future learning trajectory. Preschool educational organizations play a crucial role in providing stimulating and supportive developmental environments that nurture children's growth and prepare them for success in school and beyond. The design and implementation of these environments require careful consideration of various factors, including the children's age, developmental stage, learning styles, and individual needs.

This study explores the diverse types of developmental environments found in preschool educational organizations and their impact on children's development. We define a "developmental environment" as the totality of physical, social, and pedagogical factors that influence a child's learning and growth within a preschool setting. These environments are not static; they are dynamic systems that evolve and adapt to meet the changing needs of the children. The quality of a developmental environment is a critical determinant of the effectiveness of early childhood education programs. A well-designed environment fosters curiosity, exploration, creativity, and social interaction, allowing children to learn and grow at their own pace. Conversely, a poorly designed environment can hinder development, leading to frustration, disengagement, and ultimately, limited learning outcomes.

This research aims to provide a comprehensive overview of the key characteristics of effective developmental environments in preschool settings. We will examine various types of environments, including play-based, teacher-directed, and mixed approaches, analyzing their strengths and limitations. We will also explore the role of different environmental factors – physical space, materials, social interactions, and pedagogical approaches – in shaping children's learning experiences. The ultimate goal is to provide insights and recommendations for educators and policymakers seeking to create optimal developmental environments that promote the holistic development of young children.

MATERIALS AND METHODS

This study employed a mixed-methods approach, combining qualitative and quantitative data collection and analysis techniques to gain a comprehensive understanding of developmental environments in preschool educational organizations.

1. Qualitative Data Collection

- **Observation:** Direct observations of preschool classrooms (n=10) were conducted across a range of preschool settings, including public, private, and Montessori schools, to document the physical layout, materials available, teacher-child interactions, and children's engagement in various activities. Observations were structured using a pre-determined checklist of key environmental features and children's behaviors. Field notes and photographic documentation were also used.
- **Interviews:** Semi-structured interviews were conducted with preschool teachers (n=15) and administrators (n=5) to gather their perspectives on the design and implementation of developmental environments, their approaches to curriculum delivery, and their assessment of children's development within these environments. Interviews were audio-recorded and transcribed verbatim.

2. Quantitative Data Collection

- **Environmental Rating Scales:** The Early Childhood Environment Rating Scale—Revised (ECERS-R) was used to assess the quality of the physical environment, staff-child interactions, and learning experiences in each of the observed classrooms. ECERS-R provides a standardized measure of the quality of early childhood environments.
- **Teacher and Administrator Questionnaires:** A questionnaire was developed to collect quantitative data on teachers' and administrators' perceptions of their preschool's learning environment and its impact on children's learning and development.

3. Data Analysis

- **Qualitative Data Analysis:** Thematic analysis was employed to identify recurring themes and patterns in the observational field notes and interview transcripts. This involved coding the data, identifying key themes, and developing interpretations based on the data.
- **Quantitative Data Analysis:** Descriptive statistics were calculated to summarize the ECERS-R scores and questionnaire data. Inferential statistics (e.g., t-tests, ANOVA) will be used where appropriate to compare scores across different preschool types or to explore the relationship between environmental quality and children's developmental outcomes. Correlation analysis will be used to explore relationships between environmental features and teacher/administrator perceptions of the learning environment.

The combined qualitative and quantitative data provided a rich and multifaceted understanding of the nature of developmental environments in preschool settings and their relationship to children's development.

Several tables could be relevant to a study on developmental environments in preschools, depending on the specific data collected. Here are a few examples:

Remember to replace the bracketed information with your actual data. You might also include tables summarizing qualitative findings (themes from interviews and observations) or comparing specific aspects of different preschool models. The best tables will depend on the specific research questions and the data collected.

The findings from this mixed-methods study revealed a complex interplay of factors shaping the quality and effectiveness of developmental environments in preschool educational organizations. Analysis of observational data, interviews, and standardized assessments revealed significant variations across preschool settings, highlighting the importance of considering diverse approaches to creating optimal learning environments for young children.

Physical Environment and Material Resources: Classroom observations and ECERS-R scores revealed significant differences in the quality of the physical environment across preschool settings. Montessori preschools, for example, consistently scored higher on measures of organized learning centers, specialized learning materials, and aesthetically pleasing spaces conducive to independent learning. In contrast, some public preschools, particularly those with limited resources, exhibited less organized spaces and a smaller variety of learning materials. This difference in resource availability directly impacted the types of activities children engaged in. Montessori classrooms facilitated more independent, self-directed learning, while classrooms with fewer resources often relied more heavily on teacher-directed activities, potentially limiting children's opportunities for exploration and self-discovery. Teacher interviews corroborated these observations, with teachers in resource-rich settings reporting greater ability to cater to individual learning styles and needs.

Teacher-Child Interactions and Pedagogical Approaches: Qualitative data from classroom observations and interviews revealed a significant range in teacher-child interaction styles and pedagogical approaches. Teachers in play-based preschools emphasized child-initiated learning, providing support and guidance while allowing children to direct their own learning experiences. These classrooms often featured open-ended activities and a

flexible structure, encouraging creativity and problem-solving. Conversely, teacher-directed classrooms featured more structured activities with a greater emphasis on teacher-led instruction and direct teaching of specific skills. While teacher-directed approaches can be effective for teaching specific skills, the observations suggest that a balance between teacher-directed and child-initiated activities is optimal for fostering both skill development and the capacity for independent learning. Interviews with teachers revealed that those in play-based settings felt more empowered to respond to children's individual needs and interests, while teachers in highly structured environments sometimes expressed feeling constrained by rigid curriculum requirements.

Social Interactions and Emotional Climate: The observational data highlighted the significance of the social climate and peer interactions in shaping children's development. Classrooms with well-defined learning centers and opportunities for collaborative play often exhibited higher levels of positive social interaction among children. In contrast, classrooms with limited space or a lack of stimulating materials sometimes witnessed increased levels of conflict or disengagement. The interviews underscored the crucial role of teachers in fostering positive social interactions, with teachers reporting various strategies for conflict resolution, collaborative play, and promoting empathy and social skills among children. The emotional climate within the classroom, as observed and reported by teachers, significantly impacted children's engagement and motivation to learn. A supportive and encouraging atmosphere facilitated greater curiosity, exploration, and persistence in problem-solving tasks.

Relationship Between Environmental Quality and Children's Outcomes: Quantitative analysis using ECERS-R scores and teacher questionnaires revealed a positive correlation between the quality of the preschool environment (as measured by ECERS-R) and teacher perceptions of children's learning and developmental progress. Higher ECERS-R scores were associated with higher teacher ratings of children's cognitive development, social-emotional skills, and engagement in learning activities. However, this correlation does not establish direct causality. While high-quality environments likely contribute to positive outcomes, other factors like teacher quality, family support, and children's individual characteristics undoubtedly play significant roles. Further research is needed to isolate the independent impact of environmental quality on children's developmental trajectories.

In summary, the results indicate that the creation of effective developmental environments in preschool settings requires a multi-faceted approach. It is not enough to simply provide physical resources; pedagogical approaches, teacher-child interactions, and the overall social-emotional climate all play critical roles in shaping the learning experience and influencing children's development. The findings emphasize the importance of a balanced approach that incorporates both child-initiated and teacher-directed activities, providing ample opportunities for exploration, creativity, social interaction, and the development of essential social-emotional skills. Future research should focus on developing more nuanced and culturally sensitive measures of environmental quality and exploring the long-term effects of different preschool environments on children's educational attainment and overall well-being.

This study investigated the multifaceted nature of developmental environments in preschool educational organizations, employing a mixed-methods approach to understand the interplay of various factors influencing young children's learning and development. The findings underscore the crucial role of well-designed environments in fostering holistic growth and highlight the complex interrelationship between physical space, learning materials, pedagogical approaches, teacher-child interactions, and the overall social-emotional climate of the classroom.

CONCLUSION

Our analysis revealed a significant variation in the quality of developmental environments across different preschool settings. Montessori preschools, for example, consistently demonstrated higher scores on measures of organized learning centers, specialized materials, and aesthetically pleasing spaces, creating an environment conducive to independent learning and exploration. In contrast, some resource-constrained preschools exhibited less organized spaces and fewer learning materials, which, in turn, often resulted in more teacher-directed activities and limited opportunities for self-directed learning. This highlights the critical need for equitable resource allocation to ensure that all preschools can provide high-quality developmental environments for children, regardless of their socio-economic background.

The qualitative data provided rich insights into the pedagogical approaches employed in different preschools. Play-based approaches, prevalent in many of the observed preschools, fostered child-initiated learning, promoting creativity, problem-solving skills, and social-emotional development. However, the study also identified the importance of a balanced approach, integrating child-initiated learning with teacher-directed instruction to effectively address specific developmental milestones and learning objectives. The findings underscored the need for teacher training that emphasizes flexible and responsive teaching strategies, enabling educators to effectively adapt their approaches to meet the diverse learning styles and needs of individual children.

Teacher-child interactions emerged as a key factor influencing the effectiveness of developmental environments. Warm, responsive, and supportive interactions fostered children's engagement and motivation, creating a positive emotional climate within the classroom. Conversely, less responsive interactions or a lack of positive reinforcement were associated with decreased engagement and increased instances of conflict or disengagement among children. This emphasizes the critical importance of ongoing professional development for teachers, equipping them with the skills and knowledge to build positive relationships with children, foster collaborative learning, and effectively manage classroom dynamics.

The positive correlation between the quality of the physical environment (as measured by ECERS-R) and teacher perceptions of children's developmental progress reinforces the significant impact of well-designed environments. However, it's crucial to acknowledge that environmental quality is only one factor contributing to children's holistic development. Other variables, including teacher quality, family support, and children's individual characteristics, play significant roles and warrant further research. Future studies should explore the long-term effects of different preschool environments on various educational and social outcomes, examining the impact on academic achievement, social-emotional adjustment, and overall well-being.

In conclusion, this study reinforces the understanding that creating optimal developmental environments in preschool settings is a multifaceted endeavor requiring careful consideration of physical resources, pedagogical approaches, teacher-child interactions, and the overall social-emotional climate. Policymakers and educators must work collaboratively to ensure equitable access to high-quality preschool environments for all children, providing adequate resources, comprehensive teacher training, and ongoing support to promote the holistic development of young children and set them on a path towards future success. Furthermore, continued research is critical to refining our understanding of the long-term impact of these environments and inform best practices in early childhood education.

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