

Environmental Factors in Play: Space, Materials, and Time

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Abstract

Environmental variables have received scant attention in play research, largely because they have been overshadowed by attention given to play's role in children's development. This lack of interest in context variables tends to narrow the range of play inquiry and limit the generalizability of play research findings. For this reason, the purpose of this article is to review of existing research on effects of environmental factors on children's play behavior. Our review focuses on three key environmental variables: space (amount and arrangement), quantity of play material, and time. As we review the research on each of these important topics, we discuss how teachers can use research findings to provide children with richer classroom play environments and observation and flexibility as a key. Suggestions for future research studies are also provided.

It is commonly acknowledged that settings have a considerable influence on children's play behavior (Smith & Connolly, 1980). Children tend to play differently in a space filled with blocks than they do in a setting containing dress-up clothes and dolls. Their play will likely be different in large, open areas compared to their play in small, confined settings. However, these types of environmental variables have received scant attention in play research, largely because they have been overshadowed by attention given to play's role in children's development (King, 1992). This lack of interest in context variables tends to narrow the range of play inquiry and limit the generalizability of play research findings.

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effects of environmental factors on children's play behavior. Our review focuses on three key environmental variables: space (amount and arrangement), quantity of play material, and time. As we review the research on each of these important topics, we discuss how teachers can use research findings to provide children with richer classroom play environments. Suggestions for future research studies are also provided.

THEORETICAL FOUNDATIONS

Roger Barker (1978), a pioneer in the field of ecological psychology, proposed the theory that a behavior setting is comprised of two main elements: (1) the typical ways people act and (2) the milieu which is made up of physical things and time boundaries. Many branches of environmental psychology emerged from this model, including Bronfenbrenner's (1979) ecological system theory. According to this theory, the process of child development is affected by the relations between settings, and by the larger contexts in which the settings are embedded. Bronfenbrenner distinguished several different environments of child: the microsystem, mesosystem, exosystem, macrosystem and chronosystem. At the inner-most level is the child's immediate microsystem which refers to a patterns of activity, roles and interpersonal relations experienced by a developing person in a given setting with particular physical and material features (e.g., a home, parents, and activities such as feeding, bathing, play). The mesosystem refers to interrelationships among microsystems such as relationships between home, school, and neighborhood. The exosystem comprises the linkage and processes taking place between two or more settings, at least one of which does not contain the developing person, but in which events occur that indirectly influence process within the immediate setting in which the developing person lives (Thomas, 1996). The examples include workplaces of parents, school boards, etc. At the outermost level, the macrosystem includes factors such as cultural norms and values, the economy, and politics. The last environmental system is the chronosystem which refers to the influence of time.

The implication of this model is that we should contemplate all of these environmental aspects — the behavior setting of microsystem, mesosystem, exosystem, macrosystem, and chronosystem — to understand factors influencing any child's