Although there is considerable evidence that kindergartners in child-centered programs have more opportunities to increase prosocial behavior and are more internally motivated than children in basic skills programs, the efficacy of child-centered versus basic skills programs with regard to prosocial behavior has not been examined among preschool children. This study sought to determine whether children enrolled in child-centered preschools would demonstrate fewer anxiety behaviors and more prosocial behaviors compared to children in basic skills preschool programs.

Participating in the study were 20 children from a child-centered program and 20 children from a basic skills program. Observations of anxiety, disruption, and prosocial behavior frequency took place during free play and during a structured academic activity. Anxiety behaviors were operationally defined as nail biting, crying, frowning, avoiding new situations, and flat/negative affect. Prosocial behaviors were defined as stopping a quarrel, inviting another child to join the group, praising, comforting, or helping others.

Results from t-test analyses revealed significantly less frowning in the child-centered program. Also, children invited others to join the group more and praised each other more in the child-centered program than in the basic skills program. There were no other significant differences between the two types of schools. (Contains 14 references.) (KB)
The Prevalence of Anxiety and Pro-Social Behaviors in Child-Centered and Basic
Skills Preschool Classrooms

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Developmental psychologists have often argued over the long-term benefits of an early education. However, more recently the debate has been refined and the nature of the early educational experience has become the issue (Weikart, 1998). Weikart defines a high quality preschool experience as one that enriches the cognitive, social, and physical domains of the child by encouraging individual choice, initiative, decision-making, and active learning experiences.

The National Association for the Education of Young Children (NAEYC), arguably the most influential group guiding the field of early childhood education today, also proposes that early childhood education should allow children to have choices over their learning environment, opportunities to initiate activities, and to explore concrete materials (Bredekamp & Copple, 1997). Within this child-centered educational approach, many of Vygotsky's (1978) views of the ideal educational endeavor are supported, as the role of the teacher is thought to be to guide and scaffold the children's learning. Teachers are expected to respond in a sensitive and receptive manner with interactions that will both facilitate children's play and help guide the children's social and emotional development (de Kruif, McWilliam, Ridley, & Wakely, 2000).

Children provided with an enriched educational environment show marked short-term improvement across developmental domains. Specifically, they are physically healthier because they have better nutrition and have more access to healthcare through the school system (Stipek, Feiler, Byler, Ryan, Milburn, and Salmon, 1998). Additionally, within the cognitive domain, enhanced cognitive skills in the areas of math and literature are reported (Brigman, Lane, Switzer, Lane, & Lawrence, 1999). Within the socioemotional domain, children educated in these child-centered programs are more likely to exhibit increased self-confidence, self worth, social responsibility, and pro-social behavior, including working and playing cooperatively with others and forming and maintaining friendships (Stipek & Ryan, 1997).

In addition to the short-term benefits associated with a child-centered approach, researchers have identified long-term benefits for children who attended child-centered preschools compared to those who attended other types of preschool programs. The most significant long-term gains for children in a child-centered program were increases in attention and listening skills through at least the high school years (Brigman, Lane, Switzer, Lane, & Lawrence, 1999).

In contrast, there are researchers who believe that preschools should take a direct teaching approach that emphasizes learning basic academic skills (Stipek et al., 1998). This approach utilizes a commercially prepared curriculum that involves many worksheets and paper and pencil assignments. Nevertheless, concerns have arisen about the possible negative influences that a basic skills preschool might have on a child's social and motivational development because children may not have a chance for optimal development within the classroom (Schweinhart & Weikart, 1997; Schweinhart, Weikart, & Larner, 1986; Stipek et al., 1998; Weikart, 1998). Burts, Hart, Charlesworth, Fleege,
Mosley, and Thomasson (1992), for instance, compared basic skills kindergarten classrooms with child-centered kindergarten classrooms. They found that children in basic skills programs exhibited more anxiety behaviors, including: fingernail biting, stuttering, and destroying more worksheets than the other children did. The anxiety behaviors were displayed most frequently when the children were playing in large groups and when they were working on workbooks or worksheets. It is thought that this emphasis on academic skills will create anxiety about achievement and erode children's intrinsic interest to learn, perceptions of competence, willingness to take academic risks, and independence (Stipek et al., 1998).

Overall, child-centered programs promote development in all three developmental domains, whereas the basic skills program focuses primarily on advancing academic cognitive development. There is considerable evidence that children in child-centered programs have more opportunities to increase prosocial behavior and are more internally motivated than children in the basic skills programs. Prior research has examined the anxiety levels and frequency of prosocial behaviors of children attending either a child-centered or a basic skills kindergarten program. Importantly, however, the efficacy of child-centered versus basic skills programs has not been examined in preschool children (Burts et al., 1992). Thus, there is a clear need to study anxiety and prosocial behaviors in preschool children to identify the most useful teaching approach to decrease anxiety and increase prosocial behaviors. This area of research may help to distinguish the educational environment most optimal for children for acquiring not only academic skills, but social skills as well. The present study sought to determine if there was an effect of academic setting on behavior in preschoolers. Specifically, the two hypotheses tested in this study were as follows: 1) Children enrolled in child-centered preschools will demonstrate less anxiety behaviors compared to children in basic skills programs; and 2) Children enrolled in child-centered preschools will demonstrate more prosocial behaviors compared to children in basic skills programs.

Methods

Participants

The study included randomly selected 4-year-old children from a child-centered program and a basic skills program. Ten boys and 10 girls from both a child-centered program, and a basic skills program were observed for the final study. Permission was gained from school officials, parents, and teachers before the observations took place.

Materials

Three observation sheets were created and used to record the children's behavior. Observations of anxiety-related behavior and disruptive behavior were included on the first data sheet. The category of anxiety behavior was operationally defined as nail biting; crying; frowning; (Stipek et al., 1998); avoiding new situations (Ladd & Proffit, 1996); and flat or negative affect (La Freniere, Dumas, Capuano, & Dubeau, 1992; Normandeau & Guay, 1998). The category of disruptive behaviors was defined as calling out; talking
back; disobeying rules; and physically hurting another individual (Normandeau & Guay, 1998). The anxiety measures used to test the first hypothesis were based on the Preschool Socioaffective Profile (PSP) developed by La Freniere et al. (1992).

Prosocial behaviors were recorded during the free playtime period. This period of free playtime was chosen because it is the most opportune time to observe peers' interactions (La Freniere, et al., 1992). Prosocial behavior was defined as: stopping a quarrel, inviting another child to join the group, praising others, comforting others, sharing, and helping others (Tremblay, Vitaro, Gagnon, Piche, & Royer, 1992). Prosocial behaviors were also adapted from the PSP. All behaviors were recorded as frequency measures.

Procedures

Names of the children were never recorded. All data were collected through naturalistic observations in both educational settings. Two researchers observed each child: once during free play for five minutes and once during an academic structured activity for five minutes. The next child was then observed after a one-minute break that was used to prepare the observation sheets for the next child. Prosocial behaviors were observed during free play, and anxiety behaviors observed during the academic session. During the academic activity, the first minute of observation was used to obtain the affect of the child.

Results

Reliability

An average agreement of $r = .90$ was found for the child-centered observations. All inter-rater reliability coefficients in the child-centered group were satisfactory (values ranged from .86 to 1.0), with the exception of the variables affect, $r = .57$ and praise, $r = .67$. An average agreement of $r = .92$ was found for the basic skills school. The ratings were all significantly correlated (values ranged from .80 to 1.0) except the variable stop quarrels, $r = .66$.

Anxiety

A test of the first hypothesis that children enrolled in child-centered preschools would demonstrate less anxiety behaviors than children in the basic skills school was completed. The t-tests revealed significantly less frowning in the child-centered school, $t(19) = .01$, $p < .05$. All other dependent anxiety variables were not significantly different between the two types of schools.

Prosocial

To test the hypothesis that children enrolled in child-centered preschools will demonstrate more prosocial behaviors than children in basic skills programs, t-tests were again used. The variable joining the group was found to be significantly different
between the two schools, $t(19) = .003, p< .05$. Children invited others to join the group more times in the child-centered school. The amount of praise between the schools was also significantly different, $t(19) = .00, p< .05$, as the child-centered school children praised each other more than the basic skills school children. There were no other significant differences in prosocial behaviors between the two kinds of schools after the t-test analyses.

**Discussion**

The present study was designed to test the hypotheses that 1) children enrolled in the child-centered preschool would demonstrate less anxiety than children in basic skills programs, and 2) children enrolled in the child-centered preschool would demonstrate more prosocial behavior than children in the basic skills programs. The present findings showed partial effects of two preschool models on the display of children's anxiety and prosocial behaviors. The findings revealed that there were significant differences in both anxiety and prosocial behaviors when comparing the two programs.

The children observed in the child-centered program frowned less frequently, supporting the work of Stipek et al.(1998). In addition, children in the child-centered program invited others to join the group and gave praise to others more frequently than children in the basic skills program, corroborating the findings of Tremblay et al.(1992). These findings are also supported by Burts et al. (1992), who examined levels of anxiety and prosocial behavior in both child-centered and basic skills kindergarten classrooms.

Frowning, praise, and inviting others to join the group were found to be significantly different between the child-centered and basic skills schools. These differences between the two schools may have important implications. For example, increased frowning in the basic skills school may have been a result of a dislike for the academic task. It is also possible that the child was frowning because he or she felt the task was too difficult. Frowning could have also come as a result of the child's lack of control over the learning environment due to teacher-directed activities (Weikart, 1998). Excessive frowning in the classroom can lead to negative teacher and peer interactions. Walter and La Freniere (2000) observed preschool children's affect and social competence. Frowning in this study was defined as an expression of negative affect. This expression of negative affect has been found to negatively correlate with social competence and peer group status and positively correlate with teacher and peer group rejection. A behavior as innocuous as frowning during the preschool years may set the stage for future problems in school.

These childhood behavioral problems could be minimized if the preschool curriculum utilized is one that encourages social development and independence within the learning environment. Child-centered preschools have curriculums that foster the social and emotional growth of their students (Bredecamp & Copple, 1997). Consistent with the hypotheses, children in the child-centered program not only displayed less frowning, but also were more likely to praise their peers and to invite others to join the group than the children in the basic skills program. The increased frequency of these two prosocial
behaviors may facilitate positive peer interactions and could help a child make and maintain friendships in school (Ladd & Profilet, 1996).

To further test the differences between the expression of anxiety and prosocial behaviors in child-centered and basic skills preschool programs, more research needs to be conducted. Future studies should use a larger sample size to increase the power and the effect size of the results. To better generalize to the population, future samples should include participants who are matched for gender and participants that are racially diverse. Public school classrooms and schools that draw students from a lower socioeconomic level also need to be examined. In general, it is important, too, to determine the long-term effects of the preschool environment on children's anxiety and prosocial behaviors to ensure the optimal development of all three developmental domains: cognitive, physical and social.

References


**Title:** THE PREVALENCE OF ANXIETY AND PROSOCIAL BEHAVIORS IN CHILD-CENTERED AND BASIC SKILLS PRESCHOOL CLASSROOMS

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