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Personal Research Agenda

My primary area of interest involves preschoolers and early childhood education. In particular, I am interested in the relationships between young children's interactive play behaviors and social competence and how these aspects of early development relate to school readiness and success. Because school readiness and educational reform are important national goals for our country, along with the belief that "all children will start school ready to learn by the year 2000" (National Education Goals Panel, 1991), there exists a serious need to understand the relationships between early developmental competencies and future success in school.

Previous research indicates relationships between early peer relations, social skills, academic performance and adjustment to school (Kupersmidt, Coie, & Dodge, 1990; Ladd, 1990; Ladd & Price, 1987). Many children and families endure negative experiences early in their educational careers, resulting from children's lack of appropriate social and/or academic skills and/or educators' inadequate comprehension of how to best meet students' diverse needs. Many aggressive children are rejected by their peers and eventually end up dropping out of school, being involved with the police, and/or being retained and suspended (Kupersmidt & Coie, 1990). Given the numerous accounts of violence reported in our schools in recent years, addressing these problems during early childhood serves as an important preventative measure. Enhancing our understanding of the constructs that contribute to school success is the first step in a prevention and intervention approach.

Although previous studies have examined the relationships between early developmental competencies and school adjustment, few have included children's play behaviors among the predictors of school success. Play is essential for the development of cognitive, social, linguistic

and academic skills and should be included in such investigations. My previous research examined the relationships between preschoolers' peer play behaviors and their "success in school," which included cognitive abilities, social-emotional skills and concept knowledge/understanding. Within a sample of four year-old children considered at-risk for academic difficulties, I established an initial understanding of these associations.

Previous studies have only recently examined the reciprocal nature of the relationships between social and academic competence (Welsh, Parke, Widaman, & O'Neil, 2001; Chen, Rubin, & Li, 1997) and few have followed children throughout the early elementary years (Kupersmidt & Coie, 1990). The goal of my future research is to better delineate the nature and direction of the relationships between early social competence and academic success, including interactive play behaviors among the indicators of social competence. Through a longitudinal study, I will assess the relationships between parent-child and peer interactive play and determine how these relate to school readiness and success. Play behaviors, cognitive abilities, social emotional and behavioral skills will be assessed from preschool through third grade.

In terms of the implications of this study, the results of this research will further develop the extant literature in the area of early childhood education, providing a clearer understanding of the early competencies that are most likely to predict school readiness and eventual school success. The findings will inform prevention and intervention efforts and guide educators in targeting the appropriate skills during early childhood. Second, knowledge of these outcomes will increase school psychologists' and educators' awareness of the value of children's play and peer interactions during the preschool and early elementary years and encourage them to consider these constructs when evaluating children and developing interventions. Finally, the educational experiences of young children and families will be enhanced by our improved

awareness of the competencies necessary for school success, such that we will be better prepared meet the diverse needs of all children.

ABSTRACT

With school readiness and educational reform at the forefront of our national priorities for children, there exists a serious need to understand the relationships between early developmental competencies and future success in school. This need exists in tandem with concerns about the increases in violent acts reported in our schools in recent years. Although previous research reveals relationships between early peer relations, social skills, academic performance and adjustment to school, educators often feel ill-prepared to meet the diverse needs of students who display deficits in social and/or academic competence.

Through a longitudinal design, this study will examine the relationship between early social and academic competence. Although previous studies have investigated this relationship, few have included children's play behaviors among the predictors of school success. Because play is essential for the development of cognitive, social, linguistic, and academic skills, it will be included as an indicator of early social competence in this study. Children will be initially evaluated at age 4 and followed through third grade. Evaluations will be ecological and multifaceted, including measures of parent-child and peer interactive play behaviors, social-emotional and behavioral functioning, cognitive ability and academic achievement. Observations, peer nominations and sociometric techniques will also be employed.

The study will be a collaborative, multi-site project involving approximately 500 students. The context for the study will be the public schools, with the earliest evaluations possibly taking place in students' homes or daycare centers. Multivariate techniques will be used to analyze the data. A large, multi-site study will provide robust data that will allow for reliable generalizations.

Results will provide important information about the relationships between social and academic competence, allowing for conclusions about the nature, direction and stability of this relationship. Such an conclusions will promote an understanding of the early competencies that are most likely to predict school readiness and eventual school success. The findings will inform prevention and intervention efforts and guide educators in targeting the appropriate skills for remediation during early childhood. Second, knowledge of these outcomes will increase school psychologists' and educators' awareness of the value of children's play and peer interactions during the preschool and early elementary years and encourage them to consider these constructs when evaluating children and developing interventions. Finally, the educational experiences of young children and families will be enhanced by an improved awareness of the competencies necessary for school success, such that we will be better prepared meet the diverse needs of all children.

Proposal

In line with my Personal Research Agenda, I am proposing a longitudinal study to investigate the relationships between children's interactive play behaviors and their future success in school. The specific questions to be addressed will include: What is the nature and direction of the relationship between children's social competence, including their early play behaviors with their caregivers and peers, and their academic competence? Specifically, do interactive play behaviors and social competence predict readiness for school and/or future performance in school? Conversely, does academic ability predict social competence and/or peer interactions? Are these relationships stable over time or do they change from one year to the next? Studying the progress of a group of children through the early elementary years should provide answers to these questions and reveal patterns of relationships between the various constructs.

The context for this study will be the public school and perhaps for the earliest evaluations, the home. Although I am not aware of the existence of pre-kindergarten classes in all states, in the Carolinas children considered to be at risk for academic difficulties are eligible to enroll in 4 year-old early intervention programs. This is the group I would like to target, with alternatives being Head Start programs or daycare centers. Evaluations and observations would take place in the classroom and on the playground with observations of parent-child play conducted in the children's homes.

In previous research I recruited approximately 30 percent, or 85 children, from the total number of children in the 4 year-old program in one school district. Based on that experience, I anticipate the need for multiple sites in order to obtain an adequate sample size. After reviewing

other similar studies (Welsh, et al, 2001; Coolahan et al., 2000), in order to attain the most robust findings and make reliable generalizations from the sample, I anticipate needing at least 500 participants. A multi-site program of research would be appropriate for this study as it would help increase the sample size and allow for geographic diversity.

The greatest challenges I anticipate in employing a multi-site program involve establishing and maintaining consistency among the procedures. Most of the measures I anticipate using are either rating scales or norm-referenced and standardized, making the developmental assessment procedures relatively easy to standardize. The procedures for conducting sociometric techniques and peer nominations would also be relatively easy to standardize. In contrast, observations of children's play may produce more subjective results. However, if careful guidelines and training were provided, reliable results should be attainable. An additional difficulty involves the coordination and timing of the procedures. This potential challenge can be managed by involving faculty and graduate students from other programs in the research project. For students, this type of participation provides a valuable opportunity for involvement in a comprehensive research project.

In terms of the budget, I will provide estimates based on the products and services I anticipate the project requiring. First will be the one-time cost involved with purchasing the necessary assessment instruments, which I estimate to be approximately \$2000-3000 per site. A second cost involves stipends for the graduate students involved. Stipends would be provided for specific academic terms or years and would serve as students' source of funding during that period of time. Depending on the number of participants in a particular site, one or two graduate assistants may be required. In my experience, graduate students working 20 hours per week could expect to make approximately \$10,000 per year. A third cost involves incentives for the

participants, including the children, parents, and teachers. Because the risk of attrition is a major concern, particular emphasis must be placed on incentives. Monetary incentives may encourage parents to remain in the study throughout the 5 years. Additional incentives for the children would be included, such as restaurant coupons, movie tickets, or admission to a local attraction. In order to reduce attrition, I anticipate the need to increase the amount given to parents each year. Parents may also appreciate feedback on their children's performance on the developmental measures, which can serve as a non-monetary incentive. For the teachers, incentives might take the form of money or classroom assistance. If approved by the school, graduate assistants might spend part of their work time assisting the teachers in the classroom with instructional activities or clerical work or providing periodic breaks by reading or playing with the children. This would not only provide a break for the teachers but would also give the graduate assistants classroom-based experiences with children. Because each of the teachers would only participate for one year, any monetary incentives for them would remain the same for each year. If parents were provided a total of \$75 each, to be divided among each year of the study and increased by increments of \$5 each year (starting with \$5 the first year, \$10 the second year, etc.), each site would need \$37500 for the entire course of the study. An additional \$2500 per site should cover incentives for the teachers and children. Finally, I anticipate that funds for administrative and clerical activities would require approximately \$500 per year for each site.

The following table provides a breakdown of the estimated budget based on having 5 sites with 100 participants in each site. While somewhat expensive to carry out, a study of this magnitude represents a worthy endeavor with great potential to influence the field of education.

Equipment/Services	Frequency	Cost
Testing Materials	One time cost of \$3000 per site	\$15000
Stipends	\$10000 X 5 sites X 5 years	\$200000
Incentives	\$40000 X 5 sites for all 5 years	\$200000

Administrative/Clerical	\$500 X 5 years X 5 sites	\$12500
	<i>TOTAL ESTIMATED COST</i>	<i>\$427500</i>