**Title:** Targeting the Transition to Kindergarten: Academic and Social Outcomes for Children in the Gearing Up for Kindergarten Program

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Abstract Body

Background / Context:
Description of prior research and its intellectual context.

Entry into school is a common life transition for young children which represents a significant developmental step and the beginning of a formal learning process for children. A child beginning school encompasses several important components of a young person’s development and care. First, school entry involves a major social transition for a child, with extension from the circle of family and kin into the larger world of peers and other adults. Second, beginning school typically moves a child from a learning environment that is more informal and open to an atmosphere that is more structured and focused on formalized learning processes. Third, a child’s entry into school signifies a step toward developmental maturity and involves emphasis on a child’s social and academic skills. Fourth, school entry indicates a child’s inclusion in the broader community as a developing citizen and interest in that child’s overall physical, cognitive, social, and emotional well-being and development.

In the world of early childhood care and education, the preparation of children to enter school successfully and perform well in their learning environments has become a subject of significant interest and concern (McLanahan, 2005). The term “school readiness” is generally used to describe the process of ensuring that children are prepared by parents and society for a successful school experience. Clearly defined, school readiness embraces the combination of knowledge, skills, and behaviors that a child should learn and be able to do as they enter the school environment. Areas of a child’s growth and well-being that receive attention in school readiness include physical abilities and motor development; social and emotional development; motivation and desire for learning; cognitive development and early academic skills; creativity and imagination; and language and literacy development (Minnesota Department of Education, 2007).

While a variety of early education programs exist ranging from Head Start to other models, we are interested in the outcomes associated with a family-centered intervention that brings parents and pre-kindergarten children together to advance school readiness and parent education. This program is entitled the Gearing Up for Kindergarten program and to date only a single study has examined its influence on parent outcomes.

Purpose / Objective / Research Question / Focus of Study:
Description of the focus of the research.

Parent and family interventions targeted at younger ages have great potential to generate cumulative benefits by altering a child’s future developmental trajectory (Heckman, 2000; Schweinhart et al., 2005). Parents and their knowledge and involvement have a key role in preparing children for a successful transition into school (Epstein, 2001). Assessment of educational programs meant to assist parents and children can provide needed insights on how individuals perceive a program and what aspects of the program are working (DeBord, Roseboro, & Wicker, 1998).

The purpose of this study was to gather information on basic demographics of program participants, parent perceptions of the general value and impacts of the program related to child school readiness, and teacher perceptions of the impacts of the program related to child school
readiness. The essential question for study was how program participants in Gearing Up for Kindergarten compare to children in a non-experimental group on selected school readiness outcomes as assessed by both parents and teachers.

**Setting:**
*Description of the research location.*

The program was developed by the NDSU Extension Service at North Dakota State University and the Region V Parent Resource Center (NDSU Extension Service) in Fargo, ND, in collaboration with Fargo, West Fargo, and Northern Cass Public Schools; and SENDCAA Head Start. The program intervention operated at public school sites located across North Dakota during the research period. Research was conducted at 15 school locations located across the state of North Dakota during a two-year period.

**Population / Participants / Subjects:**
*Description of the participants in the study: who, how many, key features, or characteristics.*

Participants in the study consisted of parents with a child in the year prior to kindergarten (4-year-old children) who participated in the Gearing Up for Kindergarten program, as well as parents in a similar context that enrolled in a comparison group. A total sample of 573 participants from all program sites and the control group completed the evaluation survey, resulting in a 69% response rate to the survey. Eighty-five percent of respondents in the experimental group were women and 15% were men. The mean age for parents in the study was 33.8 years ($SD=7.12$ years). The average number of children these parents reported having was 2.29 children ($SD=1.23$). The majority of respondents (96.6%) reported themselves as Caucasian, followed by Native Americans and African Americans (1.7% each). The majority of respondents (93.2%) reported being currently married, followed by single and never married (5.1%) and cohabiting (1.7%). Forty-seven percent (47.5%) of participants reported having a 4-year college degree or higher, followed by a 2-year college degree (22%), “some college” (22%), high school degree/GED (6.8%), and “some high school” (1.7%). A majority of participants (64.4%) indicated they held full-time employment, with most others working part time or remaining at home with children. Seventy-eight percent of parents lived in an urban setting, followed by 22% in a rural setting. There were not substantial differences between the two groups with regard to basic characteristics, although children in the comparison group had parents with a slightly higher education level and financial status than children in the Gearing Up for Kindergarten group.

**Intervention / Program / Practice:**
*Description of the intervention, program, or practice, including details of administration and duration.*

The Gearing Up for Kindergarten program provides families with an intensive educational experience that combines preschool learning activities for pre-kindergarten children with parent education opportunities for adults. The curriculum has been piloted and refined over a multi-year period. The early learning curriculum focused on children consists of a flexible, adaptive set of parent-child learning and activity sessions. The parent education curriculum consists of a series of structured educational sessions that focus on child development, school readiness, and healthy parenting. The program typically lasts 90 minutes to 2 hours. Parents and
children participate together in 45-minute sessions at different learning stations with activities that are designed to address knowledge and skills in math, science, early literacy, sensory awareness, motor ability, imagination, and social-emotional ability. Parents and children then spend 15 minutes in a preschool-style “circle time” for reading. Children then spend the remainder (30 to 45 minutes) of the session in additional early learning activities that are planned by the program facilitators using the curriculum guide. Parents spend the remainder of the time in parent education sessions.

Each site has two contracted facilitators for the child and parent sessions and these are typically kindergarten teachers, as well as a classroom assistant, who are providing training and support in the program. Typically, the program model has been delivered in two 8-session split semesters (fall and spring sessions), a single 16-session program (spring prior to kindergarten), or a single 10-session program.

Research Design:
Description of the research design.

The research design for this project was a comparison study of an experimental and control group of pre-kindergarten children utilizing measures of perceived school readiness assessed at two time periods. In order to further understand how children in the year prior to kindergarten and then during kindergarten progress with regard to ability level on key items of school readiness, parents assessed the child’s ability level on selected indicators at the beginning of the program and the end of the program. The same measures were completed by parents at these two points in time separated by a period of several months. In addition, for children in the experimental group, teachers in the program similarly assessed those children on key indicators of school readiness at both the beginning and end of the program.

Data Collection and Analysis:
Description of the methods for collecting and analyzing data.

To gather information on how parents perceived their children with regard to school readiness, a brief assessment tool called the Practical Parent Assessment for School Readiness (PPASR) was utilized. This survey asks parents to rate their children on a 5-point scale in several key areas of development related to school readiness (a total of 52 items). Parents are asked to rate how their child typically thinks and behaves for each item. The range of responses that parents can give in rating their children goes from 1 to 5, with 1 = “hardly ever,” 2 = “once in a while,” 3 = “sometimes,” 4 = “often,” and 5 = “almost always.” Data collection required that parents fill out the PPASR survey twice, once prior to the program and once again at the end of the program. In addition, teachers in the program also conducted an independent teacher evaluation of a child’s school readiness in key areas. The evaluation tool selected for this was the School Entry Profile, a measure that allows children to be evaluated regarding their school readiness in several domains with key indicators. Teachers were asked to complete the assessment tool twice for each child, once at the start of the program after they had come to know the child and once at the end of the program.

To further understand impacts of the program and differences in outcomes for participants, a series of analyses of existing program data were conducted. Data for these analyses were from two years of the Gearing Up for Kindergarten program, from 2008 to 2010. Respondents included 461 program participants and 112 controls (non-participants in the
program). All respondents participated in the program in the state of North Dakota. Parents were the key informants about themselves and about their children. They completed questionnaires both before and after participating; the control parents completed questionnaires separated by a similar time interval. Analyses were conducted using both the experimental and control groups to examine the statistical differences on school readiness outcomes for children.

Findings / Results:
Description of the main findings with specific details.

- Adjusting for differences in preschool attendance and parent education, differences in outcomes over time were tested. The program group was assessed before beginning the program (“pre”) and at the completion of the program (“post”); the control group was assessed twice using a similar time interval. Results showed that the control group respondents scored at a more advanced level at pretest than did the program group and generally stayed more advanced at post-test.
- The children who participated in the program group showed significantly greater improvement over time on academic skills than did the children who did not participate (control group), as reported by parents.
- Parents of children in the program reported increasing the time they spent reading with their child, whereas control parents did not show any increase over the same period of time. Thus, the program assists parents in increasing their early literacy activities with children prior to kindergarten, while parents without the program did not show any increase in this area.
- Children who participated in the program also improved at a greater rate than children outside the program in their familiarity with school, as reported by parents. These outcomes also held for children from families with low socioeconomic status.
- Within the group of children participating in the program, we compared post-test scores of those with low SES to the scores of all the rest. On all but one measure of child outcomes, there were no differences, meaning that the program had as strong an effect for those with low SES as it did for everyone else.
- To compare the program models, a comparison was made between outcomes for children in the differing program types. Participants in the 16-week program that was split into two 8-week sessions fared better on most outcomes than participants in the 10-week program that ran continuously. This is logical considering the fact that more time is spent with children in the 16-week program and there is more opportunity for program impacts to occur.

Conclusions:
Description of conclusions, recommendations, and limitations based on findings.

The Gearing up for Kindergarten program appears to be effective at increasing the academic skills of children, making them better prepared to start kindergarten. The program is also related to increases in the amount of reading parents do with their children, which undoubtedly plays a role in the increased academic readiness seen in their children. The program also helps children become more familiar with the school before the first day of kindergarten. These gains in academic skills and parent reading were the same for those with low SES as for others. A key component of the program may be its focus on literacy skills and its promotion of parental involvement in guiding their child.
Appendices
Not included in page count.

Appendix A. References
References are to be in APA version 6 format.


Appendix B. Tables and Figures
Not included in page count.

Figure 1. Change in Basic Academic Skills for Participants versus Non-Participants

![Academic Skills Graph](image)

Figure 2. Change in Parent Reading Practices for Participants versus Non-Participants

![Parent Practices: Read with Child Graph](image)
Figure 3. Change in Child’s School Familiarity for Participants versus Non-Participants