The effect of participation in a preschool disabilities class on future academic placement

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THE EFFECT OF PARTICIPATION IN A PRESCHOOL DISABILITIES CLASS ON
FUTURE ACADEMIC PLACEMENT

by
Barbara E. Zuber

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ABSTRACT

Barbara E. Zuber

The Effect of Participation in a Preschool Disabilities Class on Future Academic Placement

1999

Dr. Kuder

Special Education Graduate Program

This research hypothesized that students who received help in a preschool disabilities program would be less likely to remain classified as eligible for special education services. The study looked at eleven children who had previously attended a preschool disabilities program. It was found that seven of the eleven children were still classified in special education. The functioning of the students was examined based on their scores on the BASC (Behavior Assessment Scale for Children) Teacher Rating scale. It was found that the majority of students scored high in the area of learning problems and had low scores in study skills. These scores were also compared to BASC scores of classified students who did not attend a preschool program. It was found that the children who did not attend preschool scored lower in the area of Adaptability, which deals with the child’s ability to adjust to changes in routine and to transition from one activity to another.
MINI-ABSTRACT

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This research hypothesized that students who received help in a preschool disabilities program would be less likely to remain classified as eligible for special education services. It was found that the majority of the children in the sample were still classified in special education. The students in the sample scored high in Learning Problems and low in Study Skills on the BASC Scale. It was found that the control group children who did not attend preschool scored lower in the area of Adaptability.
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I would like to thank Dr. Kuder for his guidance and insight that helped me to complete this study.

I would like to thank my parents for the love and support they have given me in my life.

I would like to thank my husband, Frank, for always believing in me and encouraging me to accomplish my goals.
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Chapter 1

In the past, kindergarten was the starting point of a child’s academic career. Kindergarten was the place to learn basic readiness skills, like colors, shapes, and the alphabet. However, today’s students enter kindergarten already expected to have these skills. The current trend in education is for children to get an earlier start. Most school districts now have a preschool program of some kind. More and more children are entering kindergarten after having taken part in a preschool program (public or private). Schools must develop programs to meet the needs of students with diverse backgrounds and experiences. This early start is especially important for children with special needs. Early childhood special education is used with children between birth and school age, who have been identified as having a handicapping condition or special need. Early childhood special education is seen by many as a way to prevent, or remediate students’ learning disabilities and thereby reduce the need for special education services in later years.

The preschool years are a time of great change and growth for a child. Early experiences and activities help to form who the child becomes in later years. Preschool can provide experiences that impoverished or special needs children may be lacking. Children who receive a headstart by attending a preschool program may have a more successful educational experience because they receive the extra help they need before they start falling behind. A positive preschool experience can increase a child’s self esteem, whereas having difficulties at school can lead to a lack of self-confidence or a fear of failure. Preschool attendance may increase a child’s motivation and shape his attitude towards school. Preschool also provides the foundation for future cognitive
Preschool is a place to learn positive social interactions. Many children, especially those with special needs, lack appropriate social skills. They don’t know how to share, take turns or get along with their peers. Preschool provides an opportunity for children to interact positively with others of different ability levels. Teachers are able to model and reinforce appropriate social interactions. A preschool environment encourages creativity, critical thinking, and problem solving skills.

The importance of a preschool program for children with special needs cannot be discounted. There are many factors that may cause a child to be “at-risk” or determined as eligible for special education. Many of these have to do with the child’s family background. Influencing factors may include: the family’s socio-economic level, the parents’ education level, or if it is a single parent home. The child’s development may also be affected by the lack of prenatal care or prenatal drug or alcohol abuse. Birth defects, diseases or other medical conditions may also hinder a child’s development. Whether a child is successful at school may also be affected by factors such as, good health and nutrition, a supportive home environment, positive social interactions and academic readiness.

Research on the effectiveness of preschool programs has produced mixed results. Primarily, because it is difficult to measure the intellectual ability and growth of a young special needs child. Many studies draw their data from parent or teacher questionnaires. There has been much debate over the significant benefits of early childhood education and if these benefits can be sustained over time.

This research will study the effect of participation in a preschool disabilities program on the students’ future academic success or placement. To be eligible for placement in a preschool disabilities program, a child must be between the ages of three and five years and have an identified disabling condition and/or a measurable developmental
impairment. A preschool disabilities program is very structured and focuses on preparing the children to function in a regular education program in the future. The teacher uses play, and many hands-on activities to increase the students' skills in the areas of speech and language, gross and fine motor, self-help, social and cognitive development.

It is hypothesized that students who received help in an early childhood program will be less likely to remain classified as eligible for special education and will be functioning as well as their peers. The research will examine three areas: 1. the current placement of students who have attended the preschool disabilities program. 2. how well these children function in their current academic setting. 3. the progress of the preschool disabilities students will also be compared to a group of students who did not attend the preschool program. In Chapter two of this paper, the current research on the effectiveness of preschool will be discussed. Chapter Three will detail the research design. The results of the study will be given in Chapter Four. In Chapter Five, the implications of this study will be discussed.
Chapter 2

In reviewing the research on the effectiveness of early childhood education, it was found that there are many variables to be considered. The characteristics of the student, their family, their environment and the type of preschool program they attend all contribute to a student’s success. Slavin, Madden, Karweit, Dolan, Wasik, Shaw, Mainzer and Haxby (1991) believe that educators should focus on the prevention of academic difficulties early in a child’s life. Once a child experiences failure and begins to fall behind his peers, it is much harder for him to catch up. If these children participate in an intensive early education program, difficulties can be prevented before they become real problems. Slavin et al. (1991) cite several programs such as Success for All, Reading Recovery, and Prevention of Learning Disabilities, as examples of intensive programs whose aim is to ensure that all children experience academic success. The Success for All program believes that success in the early grades is critical for future school success. Their goal is to prevent learning disabilities through intervention in preschool and the early grades, improved curriculum, more individualized attention and family support.

Burton (1994) states that a child who is experiencing cognitive and language delays at age three will be unlikely to possess average abilities upon entering school without early intervention. He stresses the importance of a child’s development in the first three years of life and advocates early education programs for all children. Current research on brain development also confirms the importance of early childhood experiences. Love (1997) states that the brain’s development is affected by the quality of a child’s early experiences. Children who receive little stimulation will have poorly developed skills. A child acquires about 70 percent of their language by the age of three. It would seem to
make sense to place children in early intervention programs to prevent academic difficulties before they start. If children with educational and developmental delays are identified early and remediation is given, then children may be able to remain in regular education classrooms.

There are many different types of preschool programs. Certain factors have been considered when assessing a program’s effectiveness, such as the child’s age at the start of the program, the involvement of the child’s parents and the structure of the program itself. In her review of research on several preschool programs, Frede (1995) found that successful programs had several common elements. These factors included, small class size with low pupil-to-student ratio, well trained teachers, parental support and the use of curriculum and classroom processes that are similar to what the child will encounter in traditional schooling. Gomby, Larner, Stevenson, Lewit and Behrman (1995) also found, in their analysis of early childhood studies, that participation in early childhood programs can affect a child’s later cognitive achievement and social interactions. They agree with research findings that propose a program’s success shouldn’t be judged by I.Q. scores, but rather by the child’s reading performance, retention in grade or special education placement. Gomby et al. describe what researchers have found to be two critical benefits of preschool, an improvement of a child’s critical thinking skills and an increase in their motivation. Both of these factors will help to make them better equipped to succeed in school.

Many different types of preschool programs have been studied. Perhaps, the most famous preschool study is the Perry Preschool Study. It is the longest and most researched evaluation to date. The Perry Preschool study was conducted in Ypsilanti, Michigan in the early 1960s. It was led by David P. Weikart. The subjects, 123 children from disadvantaged homes, were randomly divided into two groups. Fifty-eight children
attended the preschool program and sixty-five children were not involved in any program. This study is unique because it has followed the children’s progress into adulthood. Weikart (1985) states that his results show that attendance in a high quality preschool program can affect a child’s school success and how they function in society. The subjects of the study were interviewed again at age 19. Schweinhart and Weikart (1985) found that more members of the preschool group had finished high school, were less often classified as mentally retarded and spent fewer years in special education classes. Their results also showed that members of the preschool group were arrested less often, had fewer teenage pregnancies and were twice as likely to be employed. The Perry Preschool study continues to follow the progress of its “alumni”. Bracey (1994) in his review of the study, states that when the subjects were interviewed again at age 27, members of the preschool group were more likely to hold jobs, own homes and be married than their control group counterparts. A cost benefit analysis estimated that for every dollar spent on the program the public received $7.16 in benefits.

Schweinhart, Berrueta-Clement, Barnett, Epstein and Weikart (1985) found that a quality early childhood program can have long lasting benefits in a child’s life. They define a quality program as one that includes parent involvement, competent teachers, an effective curriculum, inservice training and program feedback. Parental involvement plays a major role in helping a child to be successful in school. Luster and McAdoo (1996), analyzed the Perry Preschool Study to find what factors contributed to individual differences in the educational attainment of the subjects. Children’s characteristics in kindergarten, were found to be predictive of their future academic success. There was also some evidence found to support the theory that parents who place a high value on education tended to have more successful children.

The findings of the Perry Preschool study show many long term benefits result from
attendance of a quality preschool program. However, Gomby et al (1995), states that one-third of the Perry subjects were arrested and one-third dropped out of high school. The subjects still performed much better than their control group counterparts. The children in this program may perform better than other poor children, but they still are far behind children from middle class backgrounds.

Buntaine and Costenbader (1997) studied the effectiveness of a transitional prekindergarten program on future academic achievement. The subjects were from a upper middle class school. Half of the children had attended a prekindergarten program and half went directly into kindergarten. No significant differences were found between the two groups on Stanford Achievement test scores given in the second grade.

Many other preschool programs have been studied. These programs differ in their timing, intensity and goals. The Family Development Research Program in Syracuse, New York worked with children during the first five years of their lives. This program was begun in 1969 and included home visits with the family, and educational daycare programs for children from ages six months to five years. The program included gross motor, fine motor, creative and sensory experiences. Honig (1989) states in her review of this program that when the subjects were interviewed ten years later, the biggest difference between the treatment and control groups was in delinquency rates. The children who did not attend the program had a delinquency rate almost four times greater. Their offenses were also more severe.

The Carolina Abecedarian Project worked with subjects from low education, low income black families in Chapel Hill, North Carolina. The children in this study were randomly assigned to the following group: preschool-early elementary treatment (infancy-8 years); preschool treatment only (infancy-5 years); early elementary school treatment only (5-8 years) and an untreated group. Campbell and Ramey (1995)
found that at age 15, children who had preschool treatment scored higher on tests of reading and mathematics and were less often retained in grade or assigned to special education. Honig (1989) states that the Abecedarian program also showed that babies who were born fetally malnourished and who participated in this program had a mean I.Q. of 96.4 at age three. Whereas, babies who were fetally malnourished and not enrolled, had an I.Q. of 70.6 by age three. This finding shows the impact an early childhood program can have on a child's health and intellect. The Harlem Study examined the effect of an early childhood program on boys age two or three. The children received short term intervention to improve their concept learning. Schweinhart and Weikart (1985) report that when these children were followed at age 13, only 24% of the treatment group had been retained in grade as compared to 45% of the control group.

Rothenberg (1990) studied the academic achievement of a group of at-risk students. She found that those students who had participated in an early intervention program scored higher on standardized achievement tests than those who did not. It was also noted that the treatment group's scores were also comparable to a group of their peers, who were not identified as at-risk. Roth, McCaul, and Barnes (1993) conducted a study to determine the predictive value of preschool assessment. They tested 161 kindergarteners and found that students who had been retained, referred to special education or placed in special education had scored significantly lower on the Early Prevention of School Failure Test. However, they do state that many factors need to be considered, such as family environment, preschool experiences and motivational factors.

Another aspect of preschool education that researchers have looked at is the transition to school. Do children who attend preschool have an easier time starting elementary school? Entwisle (1995) in her analysis of current research, found that because attending preschool can increase a child's I.Q. (even temporarily), it can have
many positive effects on their future school experiences. She also feels that school practices such as, ability grouping, retention and special education placement may be less likely to happen to children if they are able to successfully transition from preschool to elementary school.

A child’s feelings about school can affect their transition to school and future progress. In a study of 4,582 kindergarteners who had attended Headstart, Ramey, Lanzi, Phillips and Ramey (1998) found that most children (74%) had positive views of all aspects of school. They also found a small group (7%) who had a negative perception of school and who stated that both they and their parents did not feel school was important. The majority of this group were found to be boys with poor language skills. Ramey et al also interviewed the children’s parents and kindergarten, first and second grade teachers. They found that parents had very favorable perceptions of school and their children’s transition. Teachers also were found to have rated higher the performance of children with positive attitudes towards school. Ramey et al state that this shows the importance of early identification of children with negative perceptions to help minimize their risk of school failure.

The effects of preschool on a child’s future social functioning have also been studied. Yoshikawa (1995), in his review of the literature, found that there are certain early childhood factors that contribute to antisocial or delinquent behaviors. He identifies these factors as, perinatal difficulties, neurological and biological factors, low cognitive ability, history of antisocial behavior, parental criminality or substance abuse, low socioeconomic status, residence in a violent neighborhood, or exposure to media violence. Yoshikawa states that the strongest predictor may be antisocial behavior. Early childhood programs that work to reduce these risks have been shown to improve a child’s later social outcomes. It was also found that programs that included both early
education and family support had produced long term decreases in antisocial behaviors and delinquency.

The current research on the effectiveness of early childhood education seems to indicate that participation in a preschool program can have positive short term benefits such as, improved intellectual performance, better social skills, and an easier transition into elementary school. Participation in a preschool program that also involves the child’s family can help to improve the child’s health and socieoemotional functioning and provide help and support to parents who need it. It can also have more long lasting benefits such as, fewer retentions in grade, fewer placements in special education classes, and improved social functioning. Quality preschool programs have been found to help children deal with many of the disadvantages related to their home environment including, poverty, crime and drug abuse. Preschool has also been shown to improve children’s cognitive and social functioning. Disadvantaged and special needs children can use the support of an early intervention program to overcome or reduce many difficulties they may have. While some of the effects of preschool such as improved I.Q. have been shown to diminish with time, many positive effects remain and continue to influence a child’s future school success.

After gathering and reviewing the literature, it is hypothesized that participation in a preschool handicapped program will affect a child’s future academic placement. This research hopes to show that students who received help in an early childhood program will be less likely to remain classified as eligible for special education and will be functioning as well as their peers.
Chapter 3

This research will study the effect that participation in a preschool disabilities program has on a child’s future academic success or placement. It is expected that students who received help in an early childhood program will be less likely to remain classified as eligible for special education and will be functioning as well as their peers in all academic subject areas.

The Subjects:

For the purposes of this study, the sample was chosen from the population of a small rural school in an economically disadvantaged area. This sample was chosen on the basis of availability and consistency. The children had the same teacher and the same subject matter. However, the children’s academic experiences did change or differ after leaving the program. The school is a receiving district. The students may live in the district or be from surrounding sending districts in the area. Also, the children may attend the program for one or two years. Therefore, the children in this study were between the ages of three and five years when they participated in the PSD program.

The students attended the program for a possible 180 days. The class is two and a half hours long, five days a week. The children attended either the morning or afternoon program. The teacher and the aide were the same for both classes. The materials and curriculum were identical. Each child was instructed according to the goals and objectives developed in their Individual Education Plan (IEP).

Definitions:

A preschool disabilities program is for children, age three through five, who have an identified disabling condition and/or a measurable developmental impairment who
require or would benefit from special education and related services. A preschool disabilities program is very structured and focuses on preparing the children to function in a regular education setting in the future. The teacher uses play and many hands-on activities to increase the students’ skills in the areas of speech and language, gross and fine motor, self-help, social and cognitive development. Children may attend a preschool disabilities program for up to two years, depending on their age at the start of the program. When the child turns five years old, they are evaluated again and are given new placement in either a regular education setting or a special education class.

For this study, academic placement will be defined as the students’ current grade level or classification. It will be recorded in the following categories:

1. Regular education program
2. Regular education with some special services (basic skills)
3. Resource services
4. Self contained special education
5. Unknown/other

The first two categories are grouped as regular education. Categories three and four will be referred to as special education.

The Research:

The research will examine three areas: 1. the current placement of students who have attended the preschool disabilities program. This will be done by reviewing the children’s school records. 2. How well these children function in their current academic setting. This information will be obtained from the children’s current teacher. Each teacher will be asked to complete a BASC (Behavior Assessment System for Children) Teacher Rating Scale. 3. The progress of the PSD students will be compared to a group of students who did not attend the preschool disabilities program.

A group of former students was first selected as the research sample. These students
did not all attend the preschool disabilities class during the same school year. The students ranged in age from six to nine years old. Once their current academic placement was discovered, a BASC survey was sent to their current teacher to complete. This information would be used to identify how well the student is functioning in their current class. Finally the placement of the PSD students will be compared to a group of their peers who did not attend the PSD program.
This research studied the effect of participation in a preschool disabilities program on the students’ future academic success or placement. It was hypothesized that students who received help in an early childhood program will be less likely to remain classified as eligible for special education services and will be functioning as well as their peers. The research examined three areas: 1. the current placement of students who have attended the preschool disabilities program. 2. How well these children function in their current academic setting. 3. The progress of the preschool disabilities students as compared to a group of students who did not attend the preschool program.

For this study, a sample of eleven students was used. The students had all attended the preschool disabilities program in the past. The students ranged in age from six to nine years old. The students do not all currently attend the same school district. There were five girls and six boys in the sample.

The students’ current placement information was obtained by contacting their district’s Child Study Team. The current academic placement of the subjects is illustrated in Table 1. It was found that there were four students currently in regular education programs. The remaining seven students were classified as eligible for special education and are currently in self-contained special education classes.

This research also looked at how well these children were functioning in their current placements. To obtain this information, the child’s current teacher was asked to complete a BASC (Behavior Assessment System for Children) Teacher Rating Scale. The BASC survey asks teachers to rate on a four point scale of frequency, ranging from never to almost always, how often a child engages in certain behaviors.
These behaviors fall into the following categories: hyperactivity, aggression, conduct problems, anxiety, depression, somatization, attention problems, learning problems, atypicality, adaptability, withdrawal, social skills, leadership and study skills. The BASC is a norm referenced test so that the subjects scores can be compared to those of the general population.

After analyzing the data from the BASC teacher rating scales, it was found that the following trends occurred in the sample. Six out of eleven children in the sample scored high in the area of learning disabilities. These questions refer to reading, writing, mathematics, and organizational skills. Eight of the eleven children sampled scored low on the study skills section. These test items deal with problem-solving, note taking, motivation and organizational skills. Three of the eleven children scored high for hyperactivity. Three of eleven scored low on the adaptability scale. Only one child scored low on the social skills section of the test. (see Table 2).

The data from the BASC rating scales was also compared to data that was obtained from a control sample of children with special needs, who did not attend the preschool program. There were four children in the control group. They were all between nine and ten years of age (fourth grade level). These students were all classified as eligible for special education services. The BASC rating scales for these students showed the following trends: three of the four students scored low in adaptability. Two of the four students scored high in aggression. Two of the four students scored high in conduct problems.
Chapter 5

This research looked at the effect of participation in a preschool disabilities program on the students’ future academic success or placement. It was hypothesized that students who received help in an early childhood program would be less likely to remain classified as eligible for special education services and would be functioning as well as their peers. This study found the current placement of students who had previously attended the preschool disabilities program. It also examined how well these children are currently functioning as reported by their teachers on the BASC teacher rating scale. Finally the results of the BASC rating scales of the sample students was compared to those of a control group of students who did not attend the preschool program.

The study found that seven of the eleven students in the sample were classified as eligible for special education services. The remaining four students were in regular education placements. The study also examined how well these children were functioning in their current academic placements. This information was obtained by using the BASC (Behavior Assessment System for Children) Teacher Rating Scales. Two areas of the test were found to be significant. More than half of the students were found to have scored high on the Learning Problems section of the survey. This section samples the areas of reading, writing, mathematics and organizational skills. This trend seems to fit with subjects who have been identified as eligible for special education services. Eight of the eleven students also scored significantly lower in the area of Study Skills. This deals with problem-solving, note taking, achievement motivation, and organizational skills. T scores of 40 or below in this section may be a sign of more substantial behavior problems to come.
Surprisingly, only three of the eleven students sampled scored low in the area of adaptability. This deals with the child’s ability to adjust to changes in routine and to transition from one activity to another. According to the information in the BASC manual, adaptability scores tend to be low in many samples of children with disabilities. This study did not find that to be true. In fact, according to the information provided by the BASC scales, the behavior of the students in the sample did not appear to be significantly problematic. Only three of the eleven children sampled scored high for hyperactivity. Only one child scored low in the area of social skills. When the Behavioral Symptoms Index T scores were examined, it was found that only one child scored in the clinically high range. The BSI index is a combination of central scales of the BASC that reflects the overall level of problem behaviors.

The results of the BASC rating scales given to the children who did not attend preschool were also examined for significance. Three of the four students in the control group scored low in the area of Adaptability. Also two of the four children scored significantly high in the areas of aggression and conduct problems. There seemed to be a tendency within the control group to have difficulty adjusting to changes in their environment and to engage in hostile or antisocial behavior. When the BSI T scores of the children in the control group were examined, it was found that one of the four scored in the clinically high range.

The findings of this study do seem to agree with previous research in this area. For example, in the Perry Preschool study by Schweinhart and Weikart (1985), it was reported that a quality early childhood program can have long lasting benefits in a child’s life. However, they also found that while those students who attended the program performed better than those in the control group, but they were still behind their middle class peers. This seems to hold true for this research too. Although the majority of the children who attended the preschool program may still be classified, they seem to be
functioning well in their current placements.

There were several difficulties involved in the completion of this study. The main problem encountered by the researcher was in the area of confidentiality. Several of the sending districts were unable to provide placement data on students because they felt it would violate confidentiality laws. Attempts to get written permission from several parents to complete the study were unsuccessful. This factor greatly reduced the sample size. Also, the survey component of the study was difficult because of the eighteen surveys that were able to be sent out, only fourteen were returned. Another difficulty, was that additional students who were to be used in the study had moved from their previous district and could not be located. Time restrictions did not permit the addition of more students to increase the sample size.

Future research on this topic may be done using a different data collection method other than the surveys to avoid the issue of confidentiality. A larger sample size would also increase the validity and significance of the results. The role of teacher expectations about student progress may also warrant investigation. The results of the BASC survey were based solely on the opinions of the child’s current teacher. Another related topic of study may be how much support is given to students to help them transition into the regular education setting. There may be a need to develop additional support services to help children make the adjustment to a traditional classroom setting.

The implications of this study seem to be that children who are experiencing developmental delays at an early age benefit from participation in an early childhood program. If students with special needs are provided with extra help early in their lives, it may help to reduce the need for future assistance. It may also help to prepare the children to transition into the regular education school setting and alleviate behavior problems before they start.

This research hypothesized that students who received help in a preschool disabilities
program would be less likely to remain classified as eligible for special education services and would be functioning as well as their peers. The study looked eleven children who had previously attended a preschool disabilities program. It was found that seven of the eleven children were still classified in special education. The functioning of the students was examined based on their scores on the BASC (Behavior Assessment Scale for Children) Teacher Rating Scale. It was found that the majority of students scored high in the area of learning problems and had low scores in the area of study skills. These scores were also compared to BASC scores of classified students who did not attend a preschool program. It was found that the children who did not attend preschool scored lower in the area of Adaptability, which deals with the child’s ability to adjust to changes in routine and to transition from one activity to another.
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Table 1
Students' Current Academic Placement

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Table 2: BASC Test Scores

- Hyperactivity
- Adaptability
- Study Skills
- Learning Problems

Means Basic

- K
- F
- H
- G
- D
- C
- B
- A

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- Hyperactivity
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