HEAD START HELPS DISADVANTAGED STUDENTS PREPARE FOR KINDERGARTEN

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Abstract

This study examined the correlation between the DIAL-3 scores of disadvantaged students from Head Start, students from other preschools, and students that did not attend a preschool. The study consisted of 110 students who were currently attending kindergarten at an elementary school in Rockland County. The instrument used for this study was the Developmental Indicators for the Assessment of Learning (3rd Edition) or the DIAL-3. The students were separated based on three groups: 48 students from Head Start (HS), 45 students from other schools (OS), and 17 students from no preschool (NS). The researcher created line graphs to compare the three groups in their total, motor, concepts, and language scores through systematic sampling. The data confirmed that the students from other schools achieved higher scores than the students from Head Start and the students with no preschool in all three areas. The results suggest that although Head Start students achieved higher scores than the students with no preschool. The study implies that administrators of Head Start need to implement new techniques to help students achieve higher raw scores on the DIAL-3. These techniques can range from longer class days to increase of technology in the classrooms. In the end, most students from Head Start are prepared for kindergarten; however, there is always room for improvement.

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Problem Statement

According to the National Education Association, the term English Language Learner (ELL) indicates a person who is in the process of acquiring the English language and whose first language is not English. English Language Learners need to increase their proficiency in English, but differ in language, cultural background, and socioeconomic status (Arias & Morillo-Campbell, 2008). There are five stages in language acquisition which include: pre-production, early production, speech emergent, intermediate fluency, and advanced fluency. Children of parents who lack these basic literary skills are less likely to have access to reading and writing materials at home, to have educational opportunities outside of the home, and are less likely to be enrolled in pre-kindergarten programs. They also are less likely to observe role models who are reading and writing throughout the day.

A home environment that encourages learning is more important to student achievement than income, education level or cultural background. According to research, schools with a high ELL population face the challenge of communicating with parents, many of whom have comparatively low levels of literacy in their native language, in addition to not speaking or reading in English (Arias & Morillo-Campbell, 2008). In several studies, parents played an integral role in their child's education when there was active involvement. Parents are their children's primary teachers; therefore it

is essential for programs that serve young ELL's to build collaboration between parents and teachers (Coltrane, 2003).

There has always been some controversy surrounding the effectiveness of early childhood programs. Some studies state that these programs have positive short and long term effects; however, other studies question the effectiveness of an early childhood program. In order to help create an even advantage between low income families and families that are more affluent, federal programs have been established to meet the needs of those in need. In 1965, Head Start was created to help disadvantaged preschoolers and families around our country. Head Start offers school readiness and cognitive development, health screenings and nutritional assistance, referral services for children with disabilities, and parental involvement in the decision making process.

Zill, Collins, West, and Hausken (1995) state that "low maternal education and minority-language status are most consistently associated with fewer signs of emerging literacy and a greater number of difficulties in preschoolers." Students that are from disadvantaged backgrounds have several obstacles to face in their lifetime. Those from low socioeconomic households are exposed to situations that can be catastrophic to their cognitive, emotional, and social development. For example, some uncontrollable scenarios include: exposure to prenatal drugs, disease, low birth rate, poor nutrition, injuries, and accidents. Also, these students can easily become a part of abuse, neglect, and domestic violence. Struggles for these students are lack of proper housing, little or

no healthcare, low income, lack of parental involvement, uneducated family members, larger families, and single parent households. As a result of these barriers at a young age, student's achievement levels are notably lower than students from more affluent families.

In order to help students from various backgrounds, educators need to investigate the effectiveness of programs for students. Head Start is a program that meets the needs of low socioeconomic community members including parents and preschoolers. Head Start is not just an agency that focuses on the children; their secondary purpose is to help families that are struggling in the community. They offer services that include: literacy courses (English as a Second Language), food banks, clothing drives, nutritional training, parent group meetings for involvement, prenatal care for pregnant mothers, information about finding jobs in the community, and overall family work services. The goal of the program is to help families get up and running while educating the future of our country. These students are given opportunities that they would not normally have if they were left at home. How can educators prove that Head Start is effective in preparing students for kindergarten?

Purpose Statement

Head Start is a federally funded program for students and families that are disadvantaged. Head Start offers services for pregnant mothers, infants, toddlers, preschoolers and parents. The goal of the program is to help families become more

involved in educating their children as well as themselves. The purpose of this study is to investigate effects of the Head Start program on the skills of kindergarten students in the following areas: motor (fine and gross), concepts (numbers, letters, and directional words), as well as language (word recognition, articulation, and sounds). For the purpose of this study, skills will be measured using Developmental Indicators for the Assessment of Learning (3rd Edition) or the DIAL-3.

Review of Literature

Over recent years, there has been much attention placed on early childhood development. As a way to help students from underprivileged backgrounds, programs were comprised to help meet the growing demands. Head Start is a program that was established to meet the needs of students, parents, and community members. The goal of the program is to help those with low socioeconomic backgrounds. The majority of students that attend Head Start are from various ethnic backgrounds with limited income.

Bryant et al (1994) preformed a two year study of children that attended a Head Start program. Participants of this study were residents of the Metropolitan area of the South. The study included 32 teachers that had agreed to participate in the experience with consent from the Head Start Advisory Board. In terms of students, the researchers had a random selection that was dependent on parental consent. Also, 146 parents agreed to participate in the study between the first and second year. The purpose of

this study was to investigate the questions related to classroom quality and developmental outcomes.

The researchers chose several avenues to investigate for this study. For instance, they focused on teacher assessments, student developmental outcomes, classroom quality, and parental input. In order to conduct this study, the Head Start classrooms were evaluated by an assessor. The role of the assessor was to visit the classrooms for three to four hours. The five assessors that were used collected similar data in an earlier statewide study. The assessments of the students were arranged through the Head Start center directors and classroom teachers. Interviews with the parents were scheduled over the phone or through notes home from the center. These interviews were then conducted in homes, workplaces, or in the Head Start center.

The methods of data collection spanned to cover several areas. The Early Childhood Rating Scale (ECERS) was used to describe activities, organization, and overall organization of Head Start classes. Also, teachers were asked to complete a questionnaire that was composed to obtain information about knowledge and attitudes regarding developmentally appropriate teaching practices (Bryant, Clifford, & Peisner, 1991). The parent interview and home screening questionnaire focused on gathering information about the quality of home environment. Next, data was collected from the Kaufman Assessment Battery for Children to measure students' verbal and nonverbal intelligence and achievement. Also, the Vineland Communication Domain was

completed by teachers to rate students' language development in receptive, expressive, and written skills. Lastly, the Adaptive Social Behavior Inventory was also completed by the teachers to assess the students' social development.

As a result of data collected from the study, the researchers concluded children in higher quality Head Start classroom tended to perform better on the information processing and the more verbal cognitive measures, as well as the pre-academic skills measure, even after adjusting for the quality of the home environment (Bryant et al., 1994). The results were considered a positive sign that there were no classrooms that received an inadequate score according to the ECERS.

Head Start is a federal preschool program that is designed for disadvantaged children with low socio-economic backgrounds. The goal of this program is to close the achievement gap and to improve the skills of underprivileged children. Head Start provides health practices, nutrition, services for parents and the community and a wide-ranging learning environment. The above study focused on finding results through the classroom evaluations and observations. On the other hand, Soriano, Duenas, and LeBlanc (2006) studied the long and short term effects of Head Start education through research and literature.

The study involved meta-research in that the authors based their findings on data taken from various studies. The researchers concluded that Head Start is not an evidence-based program nor does it implement evidence based practices. This

conclusion was drawn from the information gathered in the review of literature. On the other hand, there were positive effects on students and the community mentioned in the meta-research. The short term effects included increased cognitive outcomes and preparation for school based on the No Child Left Behind goals. Whereas, the long term effects included lower crime rates and increased earnings for Head Start participants. Although there isn't any research on Head Start as an evidence-based program, the authors of this study noticed that there are benefits to participating in such a program through studies found in their search (Soriano, Duenas, and LeBlanc (2006). Head Start provides health practices, nutrition, services for parents and the community and a wide-ranging learning environment.

The researchers recommended that integration practices from the No Child Left Behind's evidence-based programs may further enhance the Head Start program outcomes. Towards the end of the meta-research, the researchers also expressed that additional information and research on Head Start is needed, in order to pursue such a study, they recommended: formation of groups, sample size, and attrition.

After investigating the effectiveness of the Head Start program, the previous studies focused on short term and long term effects, effectiveness of the teachers in the classrooms, and student's cognitive skills. However, in the study listed below, the researchers focused on discussing results of language ability in students that were Bilingual learners.

A study completed by Hammer, Lawrence, and Miccio (2007), focused on finding a correlation between bilingual children's language ability and early reading outcomes in Head Start and Kindergarten. The subjects included eighty-eight bilingual children who attended Head Start programs for two years in urban centers. The students were divided into two groups based on information provided by the parents at the home visits. One group consisted of students that received home English communication (HEC). The second group had students that were not expected to speak in English until they entered school. These students were classified as school English communication (SEC).

Students were assessed two times throughout their two year experience with Head Start by a trained examiner. These assessments were administered based on the students group. If the students were in the HEC group, then their test was administered in English. On the other hand, the students in the SEC group were given the test in their native language. Hammer, Lawrence, and Miccio (2007) stated that students in the HEC were assessed with the Peabody Picture Vocabulary Test (PPVT-111), the Test of Early Language Development (TELD-3), and the Test of Early Reading (TERA-2). Whereas, the students considered SEC were tested with Test de Vocabulario Imagenes Peabody (TVIP) and the Preschool Language Scale (PLS-3). However, the primary tool used to examine information collected from the data was the growth curve model. The purpose of the model was to show the relationship between children's

language abilities during the two years in Head Start and reading outcomes at the end of kindergarten.

The results of the study concluded that the children's growth in their English and Spanish language abilities during Head Start predicted their early reading abilities in English and Spanish (Hammer, Lawrence, Miccio, 2007). With that being said, the researchers implied that preschool programs are needed that target children's growth in language not their performance. Also, there is a need for further evaluation of bilingual children's development in both languages in order to monitor growth in dual languages.

According to the studies listed, Head Start has its advantages and disadvantages. The key idea is that although there may be loop holes in the program, studies have identified that there is improvement in student's language outcomes, self efficacy, home environment, and the quality of teachers in such a program.

The studies listed above, spotlights the benefits or effectiveness of Head Start. Each study included a component that was dedicated to getting feedback or information from the parents. In the following studies, parental involvement is noticeably crucial for early language development.

Zarate (2007) investigated the importance of understanding parental involvement in education. This study was conducted in three cities (New York, Miami, and Los Angeles) with parents of Latino backgrounds. The subjects involved in this

study included: parents, students, teachers, school administrators, counselors, policy makers, and coordinators of parental involvement programs. The purpose of this study was to investigate several factors such as, Latino parents' perceptions of their participation in the education of their children, schools' and teachers' expectations of parental involvement, programmatic initiatives addressing parental involvement in education and Latino students' perceptions of the role of parental involvement in their education.

According to the researcher, Zarate, data was collected based on interviews done on various focus groups with Latino parents of middle and high school students, students, as well as coordinators of parental involvement organizations. These thirty minute interviews had open-ended questions that examined perceptions of parental involvement in education. Interviews were conducted by a total of two counselors, two teachers, and one school administrator from each participating city. There were ten high school students involved in a focus group that were recruited from an outreach program. Another focus group involved fourteen directors or coordinators of sample parent-involvement programs.

As a result of this study, Zarate concluded that schools lack clear organizational goals and objectives on how best to involve parents in the schools. Parents view language as a barrier between home and school involvement. Also, parents associated involvement with being a part of their child's life rather than in academics. An

important issue that arose was that schools and administrators need to find other methods of involving parents in the classroom. There needs to be discussions about how to encourage, acknowledge, and increase parental involvement in the schools.

The home environment, parenting, and the perceived value of education are important predictors of school success, and interventions may improve these factors. As parents acquire skills that improve their children's chances for success, they may enhance their parenting self-efficacy (Beach et al., 2008; Pelletier & Brent, 2002). As mentioned in the above study, there is a need of communication amongst school districts and parents in order to help students.

A study was conducted by Nievar, Jacobson, and Dier (2008), which focused on the outcomes of early educational and parenting intervention in the homes of Spanish-speaking families. The parents that participated in this study were born outside of the United States; however, they resided in a large Southwestern city.

The researchers used a quasi-experimental design for this study. Families in the experimental group were randomly selected from a list of active families in the program. The participants in the control group were randomly selected from a list of interested families who had not received program services. This study was based on the HIPPY (Home Instruction for Parents of Preschool Youngsters) program which serves mostly Latino families with children between the ages of three and six years old.

First the participants were randomly selected to participate in the study. Then, trained bilingual research assistants contacted the families via telephone. After making contact, the researchers had initial consents and demographic forms for the parents that were interested in being a part of the study. There were several measures used in the data collection process. Nievar, Jacobson, and Dier (2008) listed the measures/instruments in their study: Parenting Stress Index, Parental Involvement and Efficacy, Center for Epidemiological Survey-Depression, Marital Conflict Scale, Marital Satisfaction, and Home Observation for Measurement of the Environment, Child Behavior Checklist, and the Peabody Picture Vocabulary Test. These tests and assessments measured the differences between the active participants in the program and the inactive participants that were waitlisted. The researchers assessed the students as well as their parents.

As a result of collected data, the researchers concluded that there were no significant differences between the groups in terms of demographics. However, there were significant differences between the program participants and the control group measures of the home environment, martial satisfaction, and parental efficacy. There was a positive effect of the intervention on the home environment when income and maternal depression are controlled. Children in the HIPPY program exhibited higher ratings of contextual factors. These participants in such a program showed more learning materials, increased language stimulation, increased academic stimulation,

more role modeling, and a greater variety of learning experiences than the control group (Nievar, Jacobson, and Dier, 2008). In this study, the connection between the home life and the home visitors allowed for parents and students to be positively affected. The home visitors have played an important role in motivating Latino families to participate in programs and take an active role in their relationships with students. When interventions teach successful parenting skills, they may improve children's academic performance (Baker, Piotrkowski, & Brooks-Gunn, 1998; Miller-Heyl, Macphee, & Fritz, 1998).

As mentioned in the studies above, parental involvement can be vital in success for students and families. A study conducted by Vonda Scipio (2006), focused on the relationship between early literacy developments in minority, middle class families. This is a qualitative study that included parents and preschool children. The students were 3-5 years old and attended a private early childhood center in New Jersey. The researcher mentioned 5 subjects in her study.

The researcher arranged home visits and library visits that were in one hour intervals for the first three months of the study. During the visits, data was observed and recorded. The materials implemented for this study included workshops, surveys, observations, and interviews. The study began with a parent workshop that had five families. These families received information about the visits and a literacy toolkit with thirteen items for the preschool child. During each visit, the researcher observed

parents using materials from to toolkit as well as strategies. Some tools/strategies implemented during these visits included: a coconut tree prop with the twenty-six letters that correlated with the story *Chicka, Chicka, Boom Boom* by Bill Martin and John Archambault, the Alphabet Song, and videotaped story sessions. At the end of the three months, the parents were asked questions about their preschoolers.

The researcher concluded that as a result of documentation and observation, homes were found to have many practices. Scipio (2006) stated that literate environments that the parents created were instrumental in the development of literacy in their preschool children. According to the researcher, parents need to understand the importance of using strategies to help their preschooler understand a concept such as the alphabet. Overall, parents need to understand that they are the first teachers to their children. In order to strengthen literacy, the community needs to be involved in educating parents and students.

Scipio felt that a limitation to her study was that the subjects represented a small amount of preschoolers versus the large population. Also, some parents that volunteered were already using literacy strategies in their homes. In the future, the author expressed that research should address how different minorities' perception of literacy shape their teaching of preschool children.

According to these three studies, there is an overall consensus that leads to the importance of parent involvement in the homes and in the lives of students. These

studies recognized that there were language barriers, socio-economic differences, and cultural barriers; however, with community involvement in education, students will have a greater chance of succeeding in the future. Each study focused on a different aspect of literacy. The first study mentioned the lack of involvement and understanding among schools and parents, whereas, the second study focused on the outcomes of parent involvement on early childhood education. It proved that the students who attended an early childhood program showed significant positive differences than in students that did not participate in such a program. Lastly, the third study emphasized that students benefit from any intervention in the home and in the community.

The early childhood years are a critical point for language development (White, 2008). As part of Head Start's High Scope Curriculum, there is a lot of attention focused on the connection between language and literacy. An assessment administered to students that attend a Head Start is the Child Observation Record (COR), which includes components that are strongly linked to language and literacy.

According to the researcher of a recent study, whole language approach has strengths and weaknesses that can supported through literature. Whole language is an approach to teaching written language that focuses on the oral language experiences of the child, and the communication of meaning through print, rather than emphasizing the teaching of reading skills such as word recognition, sound symbol associations, or

sound blending (Chaney, 1989). This study is based on a small sample group that includes five professionals in the field of early literacy. The professionals were asked ten questions in an interview held in person at a school site or through electronic mail. When the interviews were completed, the researcher gathered the information for review and analysis. The researcher looked for commonalities among the answers to the questions. Those common answers became a theme for the researcher to further analyze.

As a result of the data collected and the review of literature, the researcher concluded that the whole language approach is most effective when taught in conjunction with phonics. Also, there are several benefits that result from implementing the whole language approach. These benefits include: student motivation, the use of high quality literature, and an authentic reading experience (LeDoux, 2007). A weakness of the whole language approach is that the whole language approach cannot stand alone in teaching early literacy. According to the researcher, a limitation to this study was the size of the participants. Also, the participants were located in the same geographic region and were the same gender. LeDoux (2007) stated that research would benefit from inclusion of a large participant population.

Although there may have been limitations with the size and backgrounds of the participants, the researcher felt that this was a significant study. The whole language

approach can be beneficial if used with other methods or strategies. This study is important to early childhood literacy development because it targets a method that can be useful in the classroom. In a program like Head Start, literacy is a primary domain. The teachers focus on teaching students language skills due to their backgrounds and developmental needs.

Being that literacy is a key factor in early childhood, Elissa Seeman (2008) studied the significance of implementing music activities to increase language skills in the at-risk early childhood population. The participants involved in this study included: 10 students ages three to five that attended an at-risk preschool program at a public school. The students were considered at-risk because of academic deficiencies and diagnosis of special needs. The staff was comprised of seven teachers, 21 teacher assistants, case manager, parent coordinator, speech, nurse, lunchroom manager; speech, occupational, and physical therapists.

There were three instruments used in this study. These include: Peabody Picture Vocabulary Test (PPVT), Teacher Rating of Literacy and Language (TROLL), and Journals & Commentary. The PPVT determined the baseline of receptive language skills. Next, the TROLL, which was a rating scale filled out by teachers to measure language and literacy. This qualitative method of data collection was completed during the fifth week of the study. Lastly, data was collected by teachers, parents, and participants.

The study was implemented based on a ten week intervention. During the first week, the students were introduced to a song. The following day, the PPVT was administered. The next six weeks, the students learned/heard a new song with a combination of strategies. Towards the end of the study, the PPVT posttest was administered for four weeks. Throughout the weeks, the students were exposed to different mediums of music. They used the guitar, musical instruments, CD accompaniment, movement, and visual aids.

This study was meant to investigate the effectiveness of using music interventions in the early childhood classrooms that contained students that were labeled as "at-risk." Based on the interventions, instruments, strategies, there was an increase in student's receptive language skills. Although this was a thorough study, Seeman recommended that future research should occur during a full school year to increase data accuracy and intensity.

Many early childhood programs include music as part of their curriculum. In Head Start, the teachers are required to cover creative arts in every lesson plan. This study proved that it is important to introduce music to students that are learning about language and literacy.

This last study was based on the literacy outcomes of a program that is similar to Head Start. Even Start Family Literacy Program was established to help eliminate the cycle of poverty and illiteracy for low-income families by improving the literacy skills

of parents and their young children (U.S. Department of Education 2003). In order to measure the accuracy of this program, researchers developed the Even Start Classroom Literacy Interventions and Outcomes (CLIO) Study. The hypothesis underlying the CLIO study was that an increased focus on literacy in preschool and parenting instruction would improve parent and child outcomes for Even Start families (Judkins et al., 2008). This was a two year study that highlighted four instructional components. These components include: Childhood Education, Parenting Education, Parent-Child Literacy Activities, and Adult Education.

The subjects used for this study were students between 36 and 60 months that didn't attend kindergarten. Also, parents were involved in the study through a random sampling based on the project size. Participants were recruited from 120 Even Starts that were located in 33 states throughout the country. The data in this study was collected from students, their parents, classrooms, and projects. Trained professionals administered tests on a one-to-one basis to the preschoolers. The assessments measured expressive language, receptive vocabulary, phonological awareness, syntax, grammar, and print knowledge (Judkins et al., 2008). The teachers had to complete a Teacher-Child Rating (TCR) which gave researchers information on the child's behavior and social skills during each data collection cycle. Information was gathered from the parents through a one-to-one assessment and a parent interview. The assessment included: receptive vocabulary, basic reading skills, and comprehension. After

collecting data, the researchers separated the information into three groups (child outcomes, parent outcomes, and instructional outcomes).

In conclusion, it was founded by the researchers that there was no evidence which proved that the combined curricula for the CLIO was effective in improving language and literacy. In fact, there was no proof that the existing programs were not effective. Some positive effects of this study were that there improved parenting skills, greater instructional support for literacy development in preschool classrooms, and greater instructional focus on child literacy in PE classes (Judkins et al., 2008).

Overall, based on the studies, there is a need for further investigation in the implementation of literacy in early childhood classrooms. In order to effectively introduce language, the researchers have broadened the field to find alternative methodologies that may help. In the first study, the researcher investigated the strengths and weaknesses of the whole language approach. In the second study, the researcher tired to implement music intervention in the classrooms to increase receptive skills. The third study focused on several projects that could possibly increase students and family outcomes in an early childhood program. Educators have been noticing that language development in crucial at a young age. Research has repeatedly documented the strong connection between the development of literacy and oral language skills (Shaughnessy, Sanger, Matteucci, & Ritzman, 2004).

Subjects

The subjects used in this study have and have not attended preschools in Rockland County, NY. For this study, data was collected from a primary school that is located in the urban fringe of a large city in Rockland County. According to schooltree.org, the school offers pre-kindergarten to second grade. There are 39 teachers and 495 students enrolled with a 1:13 teacher/student ratio. The kindergarten consists of 158 students. In reference to ethnicity, 80% are Hispanic, 13% are African American, 5% of the students are White, and 2% are Asian. Of the total population, 54% of students are eligible for free lunch and 17% of students are eligible for reduced lunch.

The subjects in this study were between the ages of five and six years old. However, when the test was administered, the students were between the ages of four and five. The subjects included in the data were from similar socioeconomic backgrounds and ethnicities. The study included a total of 110 students. Each student was placed in a group based on his/her pre-kindergarten education. Of the total population of students, 48 students had attended a Head Start program in Rockland County. There were 45 students that had attended a pre-kindergarten program, other than Head Start, and 17 students that had not attended any pre-kindergarten program. The schools that were a part of this study were labeled by "L"and a number (i.e. L1, L2, L3, L4, L5, etc).

The researcher used a stratified method of sampling. Of the 110 students, the researcher created three sub-groups. The first group consisted of 48 students from Head Start. The second group was comprised of 17 students that had not attended any preschool programs prior to entering kindergarten. The third group included 45 students that had attended preschool programs before starting kindergarten. There was a big difference in the number of students for those who had gone to Head Start or other schools versus the students that had not attended a school. In order to create similar sized groups for accuracy, the researcher used a systematic method of sampling. The researcher chose every third student from the HS and OS column to compare with the students under the NS column.

Instrument

The instrument used in this study to collect data was called the Developmental Indicators for the Assessment of Learning or the DIAL. The screening implemented in this school is called the DIAL-3 or Developmental Indicators for the Assessment of Learning (3rd Edition). This assessment was developed by Carol Mardell and Dorothea S. Goldenberg. The test includes: a manual, four handbooks, one-piece dials, separate zippered bags for the area materials, training materials, Parent Questionnaire that provides information about the child's health history, background, and self-help and social development. The DIAL-3 is suggested for early childhood specialists, preschool and kindergarten teachers, Head Start programs, and child development centers. It is

used on students that range in ages from three through 11. It takes approximately 20-30 minutes to administer, but there is a speed DIAL which can take 15-20 minutes to administer. Before starting the DIAL-3, the coordinator must be aware of the criteria for obtaining results: the type of cutoffs and the overall screening decision. This information can be found in the Setting the Parameters for a Screening Program section of the manual.

At the end of the test, results are obtained within minutes of scoring the DIAL-3. When the test is completed, the coordinator can figure out the student score based on the standard deviation and percentile cutoff points by age at two-month intervals for total and area scores. The DIAL-3 results are recorded in the Score Summary on the front cover of the student's record form. The student record form includes: the score summary, student information, overall screening decision, behavioral observations total, intelligibility rating, and vision and hearing results. Overall screening decisions are made based upon three criteria: the Score Summary Box, the Behavioral Observations, and the Intelligibility Rating. There are Normative Tables within the instructional manual of the DIAL-3. If the student scored below 35%, then the subject area is seen as a weakness. If the student scored above 90%, then the area is considered a strength. Whereas, students that score anywhere in between 35% and 90% are considered to be average.

There are five areas addressed in this preschool assessment. They are motor, concepts, language, self-help, and social. The motor component of the test incorporates fine motor and gross motor. For gross motor, the students are assessed on their ability to catch, jump, hop, and skip. The students are measured based on the amount of times they perform the task (i.e. amount of times they catch or hop). For fine motor, the students must build structures with blocks. The blocks vary in difficulty. Next, the students are asked to twiddle their thumbs and touch their fingers to their thumbs. Another task on this assessment is the cutting. The students are asked to cut lines that are different shapes and sizes. They are then asked to cut out an object. After the cutting, the students are asked to copy different symbols and shapes (i.e. letters, numbers, shapes, and symbols). The last section in the motor component is the student's ability to write his or her own name.

Language is the next section that's a part of the DIAL-3. The students are responsible for answering five simple and personal questions (i.e. "What is your name?") They are also assessed on their articulation by repetition of 13 listed words (i.e. cup, ring, cheese). The students are then asked to name and identify seven objects which include: plane, car, clock, pencil, etc. Another component of language is naming seven actions (i.e. fly it, drive it, tell time, and write). Also, the students must complete phonemic awareness tasks (i.e. alphabet song, letter naming, letter-sound correspondence). The students are also asked to rhyme five words (i.e. cat, bake, and

wag), and then they must find five letters during I Spy. The last component in the language area is the problem solving where the students answer three questions (i.e. what do you do what you are thirsty?).

Another early childhood component is the concepts area. In this section of the assessment, the students must point and name body parts, identify colors, perform rote counting, count of blocks, follow directional cues (putting a block in named relative to a little house), identify concepts in pictures, and sort shapes. This area is scored based on the number of tasks performed by the student. For example, if the student names three body parts, then the student will receive a score of three. Each area of the test has a different score with a different number of answers.

Next, the students complete a self-help area. This section focuses on the child's development of personal care skills related to dressing, eating, and grooming. The person administering the screening uses information based on observations. However, the majority of this area is scored by the results of the parent's questionnaire. This section of the DIAL-3 is not included in the total score.

Another area that is emphasized on the DIAL-3 is social development. This component is scored based on a parent questionnaire as well as teacher observations. In this particular area, the students are encouraged to display social skills that include: interaction with parents and other students, following the rules, sharing, self-control, and empathy. This portion of the assessment is scored similar to the other sections. The

student's answers and the teacher observations combined to create the overall raw score. This score is then added to the student record form although the overall total doesn't include social development or self-help skills.

This assessment is available for most schools in Rockland County. The DIAL-3 is used primarily because of its positive and natural set up. The students are presented with several activities that are neither stressful nor invasive; instead, the children are having fun while being stimulated. The DIAL-3 is administered during April, May, and June depending on the school district's transitioning schedule. Schools use the DIAL-3 to access students' abilities during their enrollment and transition into the schools.

Procedure

The researcher contacted the vice principal of a local school. He was given information about the study via e-mail. He was able to give the researcher scores from the DIAL-3. The DIAL-3 or Developmental Indicators for the Assessments of Learning (3rd Edition), is a kindergarten assessment administered to incoming students. The test measures five areas of development (motor, language, concepts, self-help, and social). The vice principal gave the researcher information on five kindergarten classrooms. He printed out the data on a spreadsheet from the school year 2008-2009. There were five columns labeled #, TOT, LAN, CON, and MTR. Because of confidentiality he changed the student names and replaced them with numbers. After speaking with the current kindergarten teachers, he called the researcher and listed 15 numbers. Of the

kindergarten classes, 15 numbers were from students that had attended a Head Start and 67 were from other preschool programs. Due to the limited number of Head Start students, the researcher decided to once again contact the other administrators.

The researcher got in touch with a neighboring elementary school. The researcher called the school and left a message for the vice principal. On the following day, the assistant principal returned the phone call. She was willing to obtain the results of the DIAL-3 as well. The assistant principal's secretary asked for a prepared list of student names from Head Start. She had agreed to give the data out; however, she wanted to protect the identities of the other students by using first names rather than first and last names. The secretary gave the researcher a spreadsheet that included students from Head Start and students that had not attended Head Start. It also had motor, concepts, language, and total scores from the school year 2008-2009. Of the list, seven students were from Head Start and 42 students attended early childhood programs other than Head Start. Once again, the researcher noticed that the sample of Head Start students was insufficient.

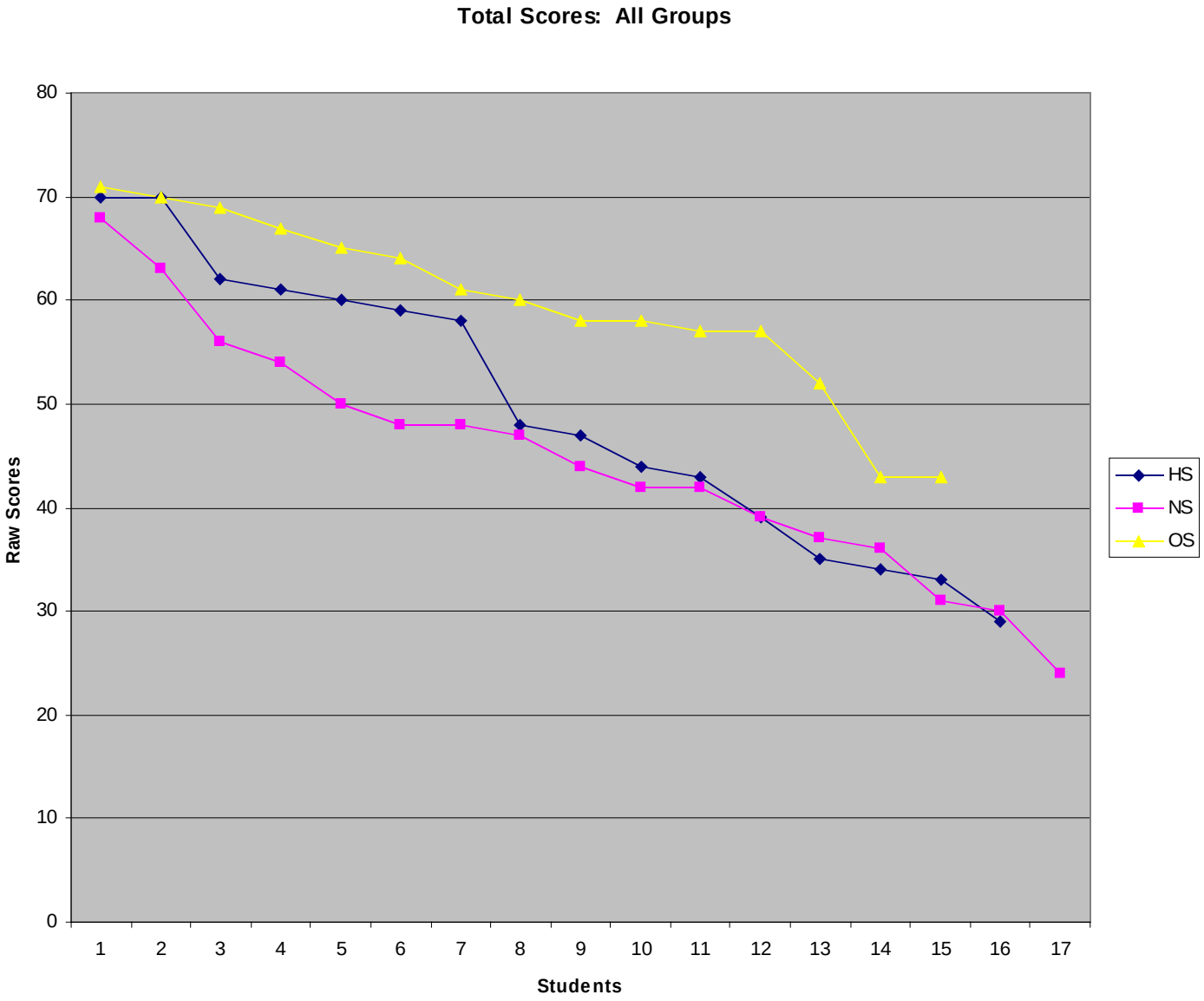
As a last attempt, the researcher went back to the principal of the first school. She had already been informed of what was needed to complete the study. The researcher visited the principal and compiled the necessary data of the DIAL-3. The researcher was given data on a spreadsheet that included motor, language, concepts, and total scores from the school year of 2008-2009. Also included in the spreadsheet

was the students' previous schooling background. In order to remain confidential, the principal changed the names of the preschools and kept the first names of the students. On the spreadsheet there were 110 students. The students were identified based on four different titles: Head Start, Other Schools, and None. For the purposes of this study, the researcher used information from all three groups. Of the 110 students, 48 students had attended a Head Start, 45 students had attended an early childhood program and 17 students had no previous schooling.

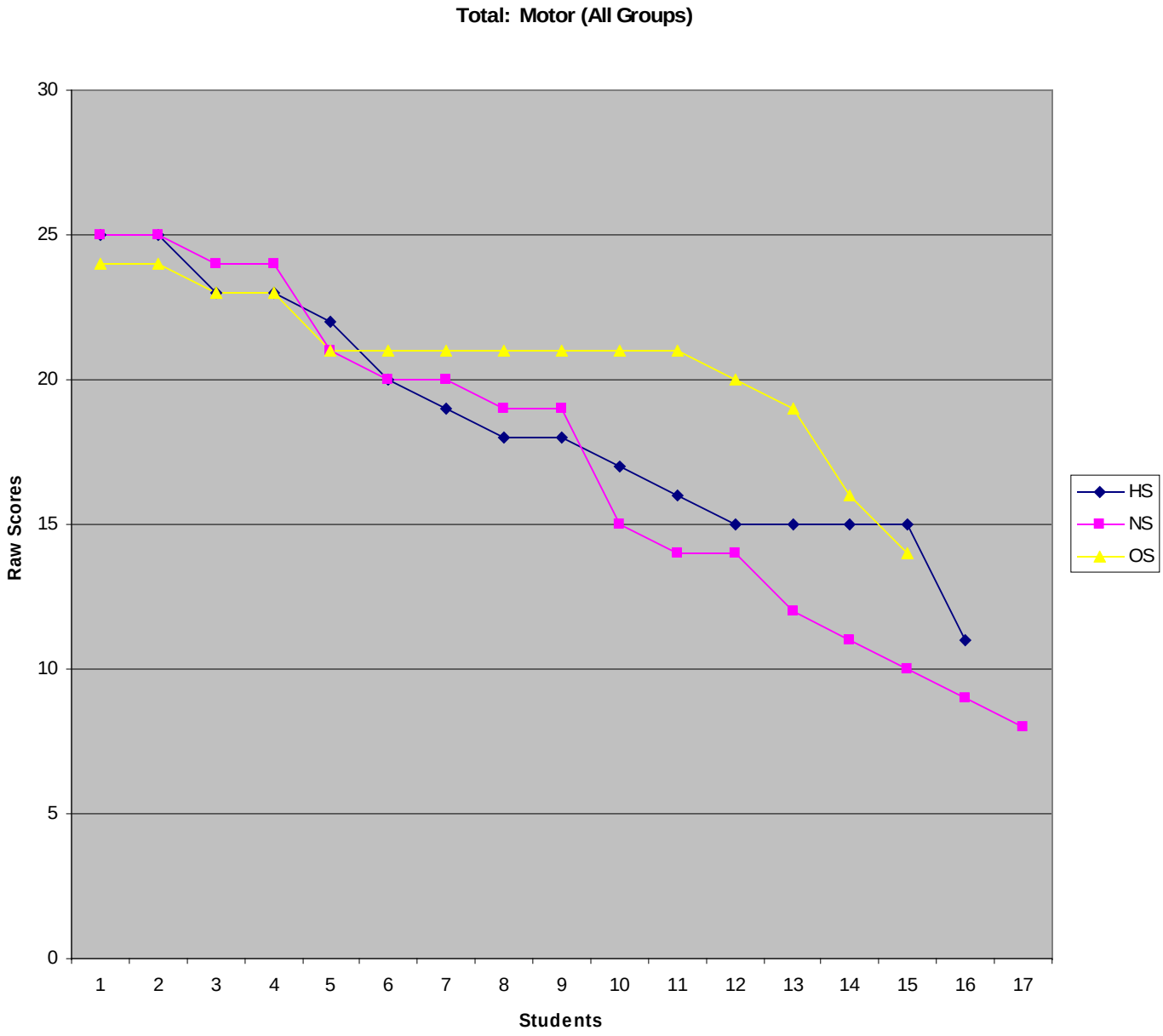
With the new data, the researcher created three sub-groups. The groups were labeled Head Start (HS), No School (NS), and Other School (OS). The total score from the DIAL-3 was entered on the spreadsheet under the appropriate column. The scores were then organized in descending order. The researcher compared and graphed the total scores between HS and NS, then HS and OS. At this particular school, most incoming students are from the local Head Start program. Of the 110 students, 48 were from Head Start (44%), which accounted for the biggest group. In order to compare the students from Head Start and other schools to the students that had no prior schooling, the researcher used a systematic method of sampling. The researcher selected every third student to compare with the students that had no school. After using a systematic method of sampling, the researcher had three groups with similar numbers (HS=16, NS=17, and OS=15). However, while comparing HS and OS, the researcher used the total number of subjects in each group with 48 students in HS and 45 students in other

schools. The researcher created 12 line graphs based on the raw scores from the students in the three groups.

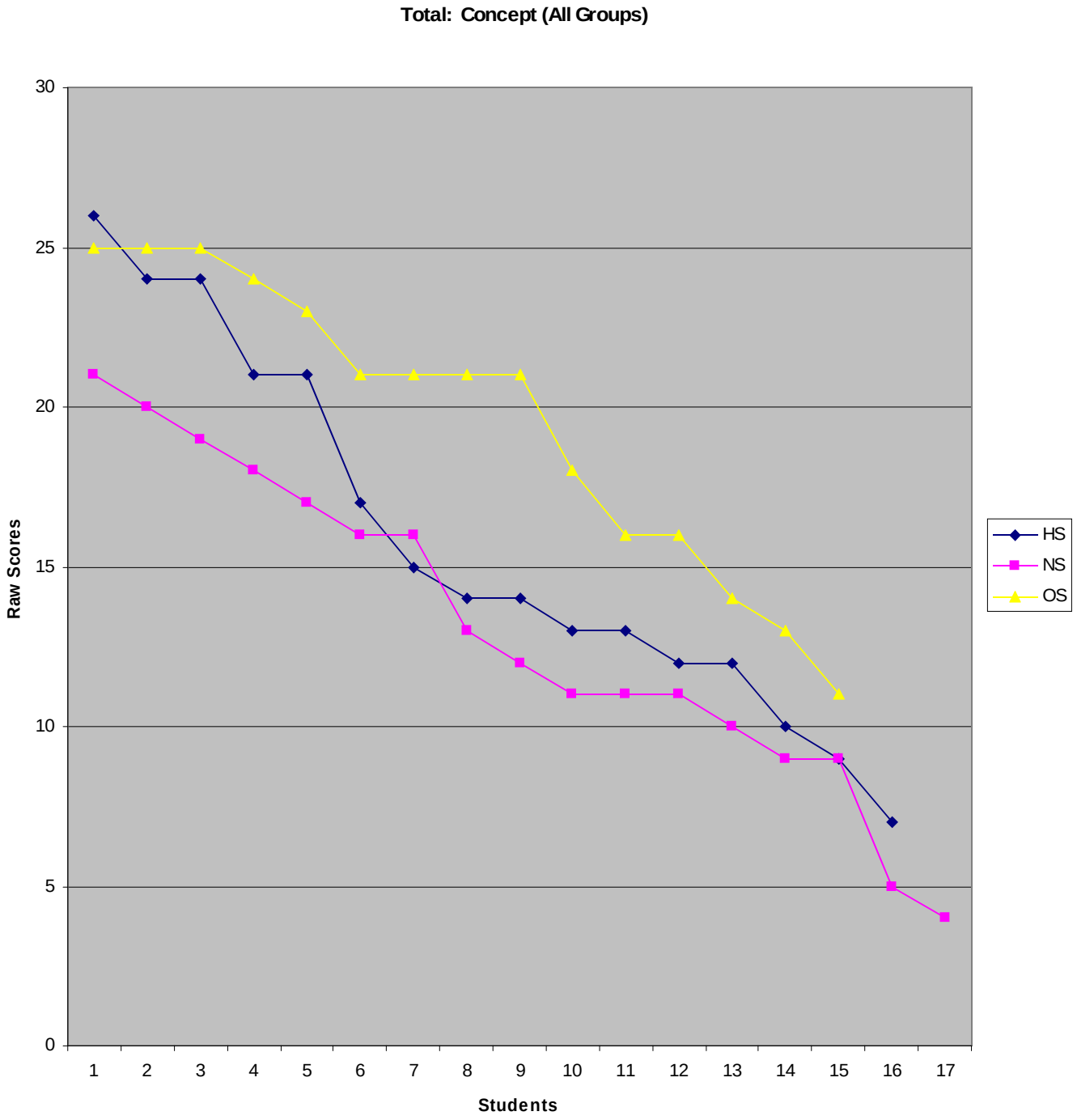
Results



This graph illustrates the total scores among the three groups (HS, NS, and OS). It shows that the students from other schools have higher raw scores than the other two groups. However, the students from Head Start have higher scores than the students with no preschool.



The motor scores confirmed that the students from all three groups had similar scores on the DIAL-3; however, the students from other schools had higher raw scores. The students from Head Start had scores that were below the other schools and above the no preschools.



This line graph demonstrates that the students from other schools remained above the other two groups with higher raw scores. The students from Head Start scores lower than the students from other schools; however, their scores did not have significant differences. The students with no school achieved the lowest raw scores among the three groups.

Discussion of Results

After creating line graphs with the numerical data from the DIAL-3, the researcher discovered that the students from other schools preformed better than other two groups in all three areas. Second, the researcher compared the students' motor scores. The line graph illustrated that the students from the three groups started out equal; however towards the end of the graph, HS and NS had lower motor scores. HS managed to stay above the students with NS, but they were below the students from OS. Third, the researcher compared the students' concepts scores. This graph confirmed that the students from other schools are achieving higher scores than students from Head Start and those with no pre-school. The last line graph was based on language skills. Again, it was confirmed that the students from other schools scored higher than the other two groups.

The students from Head Start achieved higher scores in the concepts, motor, and language portion of the DIAL-3 compared to the students that did not attend a pre-school. Although the students from Head Start did not exceed the students from other schools, they managed to stay relatively close behind. The differences between all the scores can be due to various factors.

Unfortunately, there were time constraints due to miscommunication between the school administrators and district officials. The administrators did not get back to the researcher right away, causing a delay in the results. Also, the researcher wanted to

use the scores from this year (2008-2009); however, they were not available. The DIAL-3 scores given to the researcher were from the students that had attended preschool last year.

The students that have parental guidance and involvement are more likely to succeed in learning. Zarate's study concluded that parent's feel as though they were more involved in their child's life rather than in their academics. This is a clear misunderstanding between schools and parents. If parents are involved in both aspects of their child's life, then there is a positive connection between parental involvement and home life (Nievar, Jacobson and Dier (2008). Students that are not a part of any early childhood programs are not exposed to many concepts with varied methods of exposure. These concepts could be related to math, science, or ELA. Also, the students with no preschool may not have experience with following verbal directions. In other preschools and Head Start, music is a required area in the curriculum. According to Elissa Seeman (2008), music helps increase the students' receptive skills. Most student that are home have less opportunities to increase gross and fine motor skills, concepts, and language skills.

A factor that affected the study was the students' primary and secondary language. For instance, according to data from Head Start National Reporting System (NRS), 60% of students from Head Start are English Language Learners (ELLs). The researcher asked the kindergarten teachers, "How is the language of the DIAL-3

determined?" The teachers responded by stating that the test is primarily given in English unless the parents request that their child be given the test in Spanish. The miscommunication between the parents and the teachers can negatively impact the students' scores on the DIAL-3 because the students may understand directions in English; however, abstract concepts may need to be further described in the home language. Also, students that are ELL's are characterized as being "shy." These students may know the answers to the questions; however, it might take a while for them to feel comfortable enough to answer. Their shyness is attributed to the inferiority they feel in the English language.

The next limitation was based on the demographics of the students. All students in this study are from similar socioeconomic and cultural backgrounds; however, financial responsibility may be a determining factor is the student's results. The parents of students that attend Head Start are not responsible for any financial contribution. Head Start enrolls students primarily based on family income levels. In order to be eligible for Head Start, the families must be considered at or below poverty level based on the number of people in each family (i.e. a family of four must make no more than $22,050). Head Start has a limited number of spots to fill in their program, although many apply only some will be accepted. A large portion of students from Head Start face obstacles which include: lack of parental involvement, exposure to domestic violence, illiterate parents, unsafe living environments, limited English exposure, and

an increased intake of non-nutritional foods. Parents of students in Head Start are unavailable to reinforce skills based on language barriers and work schedules. Although the program encourages parental involvement, most parents are working odd hours at more than one job or do not speak English. The parents of these students may be working several jobs at a time in order to make ends meet. Other parents in the program are unemployed and dependent on government aid. These students spend most of their time in the care of others despite having their parents at home. Some parents work at night and sleep during the day and others are out running errands during the daytime.

On the other hand, the parents of the students from other schools are responsible for paying tuition regardless of their income levels; therefore there is more of an interest in learning due to their financial responsibility. The students and teachers at the other preschools are more inclined to speak English. Therefore, the students are more exposed to the language by the time they are administered the DIAL-3. The students that attended other preschools, however, may have been a part of the universal pre-kindergarten (UPK) program that was available to families in the district. The parents of students that are enrolled in a UPK program are not required to pay for 2.5 hours, however, if the preschool offers an extended day, they would have to compensate. The UPK programs are located within the local schools and are funded by the district. The teachers of these programs are qualified with a degree in early childhood education.

The teachers are responsible for covering topics and content that is included in their curriculum map that was derived based on the preschool standards of New York. The teachers of Head Start follow the High Scope curriculum. This curriculum focuses on hands-on experiences with adults and peers. The High Scope incorporates main content areas: approaches to learning, language/literacy, social/emotional development, physical development, art, math, and science. The students that did not attend a preschool are unfamiliar with following a structured curriculum.

The next step in this study would be to analyze the DIAL-3 scores throughout Rockland County in order to have a higher sample group for the study. There are eight Head Start schools throughout the county. The researcher would have to be sure that the students involved in the study were from similar backgrounds and socioeconomic status. By increasing the sample size, the researcher will have more concrete and meaningful data with a broader range.

Implications

It is recommended that further research be done on this topic. In the future, a larger sample group would create a more accurate measure of student skills from Head Start, other schools, and no schools. The raw scores of the students from Head Start remained below the students from other schools and above the students from no preschool. Therefore, changes can be made to Head Start's program in order to better prepare students for kindergarten. These changes include: full day sessions for all

students, training for teachers and staff, curriculum that aligns with the NYS standards, more exposure to technology, implementation of an assessment that can measure student's incoming and outgoing performances in the three major areas (motor, concepts, and language). If the student attend school during a full day session, then he/she would be exposed to more concepts and learning experiences. Staff development is a key factor in creating innovative ideas and teaching styles in the classrooms. Trainings can be based on curriculum development or classroom situations. The researcher compared the technological resources of other schools as compared to Head Start. The results show that some of the other schools had newer technological advances such as Smart Boards or required daily computer practices. The technology found in Head Start was limited to a color television with a DVD player and a computer in each room with no internet connection. Also, if the teachers tracked students' progress from the beginning of the year to the end of the year, then it would be evident if their students were prepared for kindergarten. Administrators and supervisors can use these pre and post tests to evaluate how well a teacher is performing in the classroom.

At the end of the study, the researcher proved that Head Start is effectively preparing students for kindergarten. However, their performance on the DIAL-3 was below students that attended other schools.

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