

Influences of Early Childhood Educational Intervention

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Abstract

This mixed methods research study examined the long-term influences of early educational intervention by surveying former preschool students who attended the Opportunity School in Amarillo, Texas. To examine the lasting impact of this experience through different perspectives, information was also collected from the parents of these previous preschool students. After locating potential participants, 98 surveys were completed and returned (68 from former students, 30 from parents). The quantitative data provided information about the participants' age, race, employment, educational attainment, felony or conviction rates, and the overall impact of the Opportunity School preschool experience. Conclusions drawn from the qualitative data documented the themes of caring teachers, home visits, family connections and support, effective learning environments, engaging school activities, and early literacy experiences. The evidence supported the claim that quality early childhood educational interventions can influence lifelong success for at-risk students and provide an impetus for positive literacy development.

Keywords: *early childhood intervention, poverty, preschool, literacy*

Introduction

Early childhood educational intervention can be an effective means of helping young children succeed, not only in school, but in life.

To investigate the enduring impact of preschool experiences in Amarillo, Texas, researchers (i.e., the authors of this paper) collaborated with the current executive director of the Opportunity School. Together, they designed a study to

discover how preschool experiences influenced the lives of former students who were now adults. Kirp (2009) asserted that “a superb preschool experience can make a lifelong difference” (p. 53), while Schweinhart and Weikart (1997) contended that knowledge and dispositions developed in preschool can help individuals avoid future delinquency and that the preschool experience is linked to later success in life. This study sought to discover if these claims held true in Amarillo, Texas.

Preschool experiences provide students with structured educational experiences that can influence their future educational attainment and enhance emergent literacy development. High-quality preschool curricula should include beginning reading, writing, listening, and speaking activities, which all serve as the basis for literacy development. Lonigan, Schatschneider, and Westberg (2008) found that young students’ early literacy experiences set the stage for later reading achievement. Students who attend preschools using high-quality curricula typically develop foundational literacy skills that can enhance school readiness (Lasser & Fite, 2011).

Foundational skills, such as oral language and listening comprehension skills are critical for later literacy achievement (Lonigan et al., 2008). However, researchers have found that children raised in poverty have fewer opportunities to develop these essential oral language skills and may lack important pre-literacy skills at the beginning of kindergarten (Snow, Burns, & Griffin, 1998; Wells, 1986). Research studies have also reported that early educational intervention can be helpful in overcoming some of the disadvantages of poverty (Campbell et al., 2012; Campbell, Ramey, Pungello, Sparling, & Miller-Johnson, 2002). Typical preschool activities, such as Show and Tell, circle time, and learning centers, provide rich language experiences that are beneficial to all young students, but are especially critical for students who may be in danger of achieving academic success (Snow et al., 1998).

Two well-documented early childhood interventions were conducted in the 1960s and 1970s. The High/Scope Perry Preschool Study, beginning in 1961, investigated the impact of preschool intervention among students from poverty in Ypsilanti, Michigan (Kirp, 2009). The Abecedarian Project, which started in 1972, provided child care and preschool experiences to children from disadvantaged backgrounds in Chapel Hill, North Carolina (The Carolina Abecedarian Project, n.d.).

The High/Scope Perry Preschool Study examined the impact of preschool intervention on the lives of 123 African American children living in poverty (Schweinhart, 2000). The children were randomly assigned to either a treatment group that received a high-quality preschool program or a control group that did not attend a preschool program. Data were collected on the two groups annually from ages 3-11, and subsequently at ages 14, 15, 19, 27, 39, and 41. Results from this evidence-based study revealed that high-quality preschool programs improved children’s intellectual performance (Schweinhart & Weikart, 1980) and reduced the need for special education services (Barnett, 1995). Kirp (2009) reported similar positive outcomes and found that children who were a part of the High/Scope Perry Preschool Study scored higher on literacy tests even at age 27.

The Abecedarian Project provided a more intense early childhood intervention program. The children were randomly selected to be a part of the experimental group that received full-time, high-quality educational intervention in a childcare setting from infancy through age five (The Carolina Abecedarian Project, n.d.). Campbell et al. (2002) studied the long-term impact of the Abecedarian Project and reported that out of the 104 participants in the follow-up study, of which 98% were African American, individuals who were part of the preschool treatment group exhibited higher scores on measures of reading and math skills in elementary school and that the positive outcomes persisted into adulthood. These findings have suggested that “high-quality

educational child care can make a dramatic difference in the lives of young African American adults reared in poverty” (p. 52).

Multiple research studies have investigated the influences of preschool intervention programs (e.g., Campbell et al., 2002; Kirp, 2009; Schweinhart, 2000; Schweinhart & Weikart, 1980; The Carolina Abecedarian Project, n.d.). Findings from these national studies are well documented, but no known investigations have been conducted regarding the long-term impact of early childhood educational interventions in the Amarillo, Texas area. This study sought to address this gap and investigate the impact of participation in an early childhood educational intervention offered through a preschool located in Amarillo, Texas among low-income children and their families.

Review of Literature

Helping at-risk preschool students from low socioeconomic households be more successful in school and in life is a weighty endeavor that deserves thoughtful investigation. The American Psychological Association (2018) reported that lower socioeconomic status can negatively influence the lives of young children due to an increase in emotional and behavioral difficulties, decreased educational success, and diminished family stability. A review of literature on this topic revealed several variables to take into consideration. For example, Lee (2014) found that the timing of exposure to poverty could be an indicator of possible educational problems, regardless of race. Researchers have also concurred that the negative impact of exposure to poverty can be extremely detrimental to young children due to their burgeoning cognitive, linguistic, social, and emotional development (Lee, 2014; Magnuson, 2013). Lamy’s (2013) research also found that “preschool can provide the developmentally stimulating experiences that many children growing up in poverty lack” (p. 33).

Preschool attendance has clear benefits for students from all socioeconomic levels,

especially students from low-income households. Mashburn (2008) reported that high-quality early education positively affects students’ academic, language, and literacy skill development. According to Polat and Yavuz (2016), “Preschool education can offer benefits for children, particularly those who do not have advantages at home, including benefits related to academic skills, social-emotional development, and communication” (p. 396). Findings from their study of 308 children revealed that when the duration of preschool education increases, young students experience great benefits across many different domains of learning.

A key factor affecting outcomes of early childhood interventions is the quality of the program. According to the National Association for the Education of Young Children (NAEYC), a direct correlation exists between the quality of the early childhood program and the long-term benefits associated with attendance which include “increased educational attainment, healthier lifestyles, and more successful careers” (NAEYC, 2018, para.1). Currie (2001) reviewed early childhood programs, such as Head Start, and found that high-quality programs provide significant long-term benefits for children and that these effects have a greater influence among children who are considered at-risk students. Currie utilized different scales to evaluate the quality of early childhood programs, which typically assessed classroom processes and structure. Classroom process referred to the qualitative qualities of the program, such as teacher/child interactions, use of developmentally appropriate practices and activities, or the arrangement of classroom materials, while classroom structure referred to the measurable qualities of the program.

While several national research studies have been conducted to examine the influences of quality early childhood interventions, no formal studies were available that examined early childhood interventions in Amarillo, Texas at the time of this study. Therefore, we sought to address this gap and investigate the lasting effects of preschool attendance among former Opportunity School students. The goal of this

study was to add to the literature concerning long-term outcomes of preschool attendance, including its impact on literacy development.

Methodology

Context

Opportunity School was started in February of 1969 by members of a Sunday school class held at First Presbyterian Church in Amarillo, Texas. The Opportunity School began with 15 students, a teacher, and an assistant teacher and has served approximately 4,000 students and their families over the past 50 years (Opportunity School, 2018). Opportunity School serves mostly low-income children, ages six weeks to five years old, and their families residing in Amarillo, Texas.

Sample

The purposeful sample for this investigation was chosen from a database of approximately 2,500 former Opportunity School. The parameters for inclusion in the sample were set at students who attended Opportunity School during the years of 1969 and 2000. This sample was targeted in this manner to ensure that participants included in the study were at least 18 years of age or older.

Data Collection and Analysis

We began designing this research project by looking at the methodology for the High/Scope Perry Preschool Study and the Abecedarian Project longitudinal studies. We noted that these studies tracked former preschool students and reported data concerning educational attainment, employment status, delinquency and crime rates, economic conditions, family formation, and social relations. Therefore, we designed our survey to gather similar demographic data for former Opportunity School students. We also added open-ended items so participants could describe salient memories and perceived long-term benefits of attending Opportunity School. The Opportunity School database contained contact information for parents, rather than the students.

Thus, we had to contact parents in order to obtain current contact information for former Opportunity School students. With this in mind, we decided to also use the survey to collect data from parents of former students.

The researchers contacted former Opportunity School students and their parents and invited to participate in this study. We used undergraduate and graduate research assistants to assist with this aspect of data collection. Contact information provided in the Opportunity School database was up to 48 years old, so most of the phone numbers and addresses were incorrect or no longer in service. Therefore, the researchers and their research assistants had to be very creative in locating potential participants. After a first attempt of utilizing available contact information, we used alternative methods to locate former students and their parents. Alternative methods included word of mouth, email blasts, Facebook messenger, Opportunity School newsletters, websites, Facebook pages, and paid People Search websites.

When a former student or parent was located, they were invited to participate. If they agreed, participants were asked if their responses could be recorded to aid with accurate transcriptions. Survey questions were posed to participants over the phone, and data were entered into the Qualtrics Research Suite. During each phone interview, we documented ideas, questions, and reflective thoughts in the form of field notes.

Data collection took over a year to complete and yielded 98 completed surveys. Of these, 68 surveys were from former Opportunity School students and 30 surveys were from the parents of former Opportunity School students. We used basic statistical analyses to examine quantitative data we collected, which consisted of demographic information. We used open and axial coding techniques to analyze qualitative data we collected and unearth overarching themes (Corbin & Strauss, 2007; Merriam, 2009).

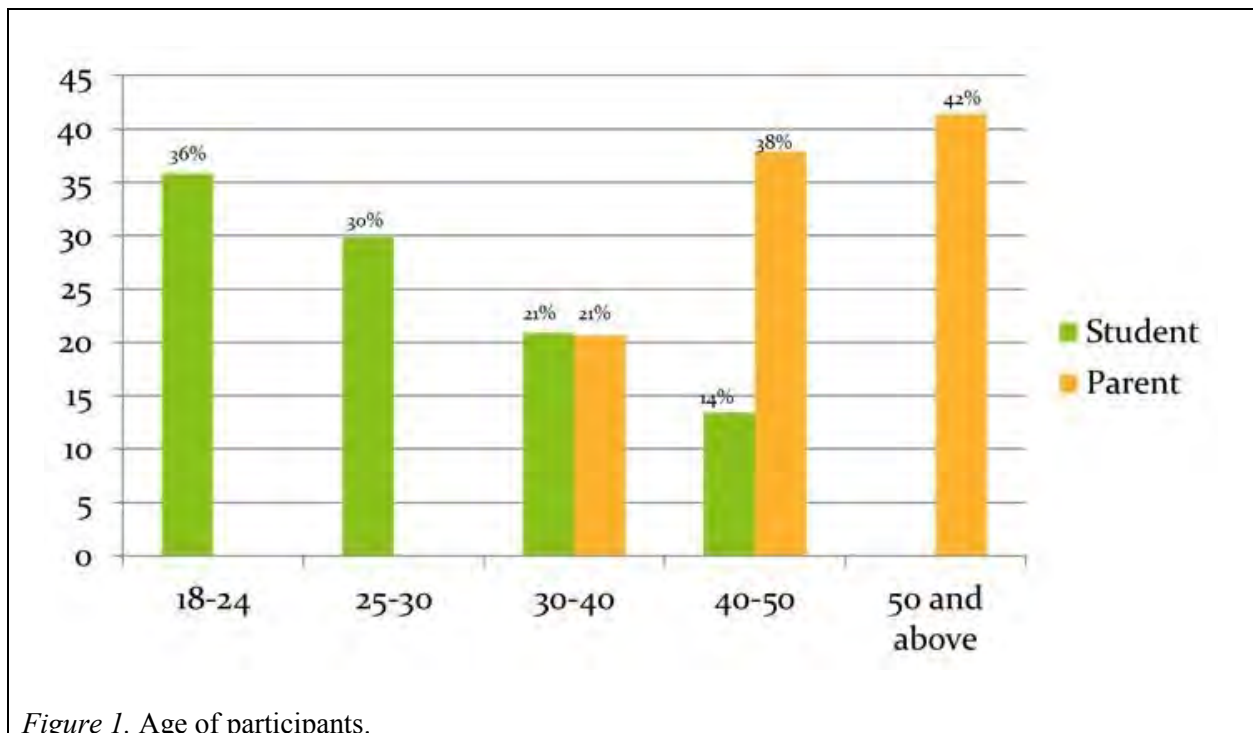
Findings

Quantitative Data

Quantitative data provided information about the participants' age, race, employment, educational attainment, and criminal history (see Figures 1-6). Among the participants, 80% of parents were ages 40 and above, and 59% were African-American. On the other hand, 87% of former students were ages 40 and younger, and 55% were African-American. Findings also revealed that 64% of parents and 61% of former students were first-generation postsecondary students, and 72% of parents and 89% of former students had attained some type of post-high

school education. Interestingly, 16% of former students had received one or more master's or doctorate degrees. In addition, 67% of parents and 88% of former students were employed in either full- or part-time jobs. Moreover, 95% of former students reported that they had not ever committed a felony, and 92% indicated that had never been convicted of a crime.

Participants were also asked to rate how influential the Opportunity School was in their lives. 72% of parents and 65% of former students indicated that Opportunity School was Very Influential, while 24% of parents and 22% of former students indicated that it was Somewhat Influential (see Figure 7).



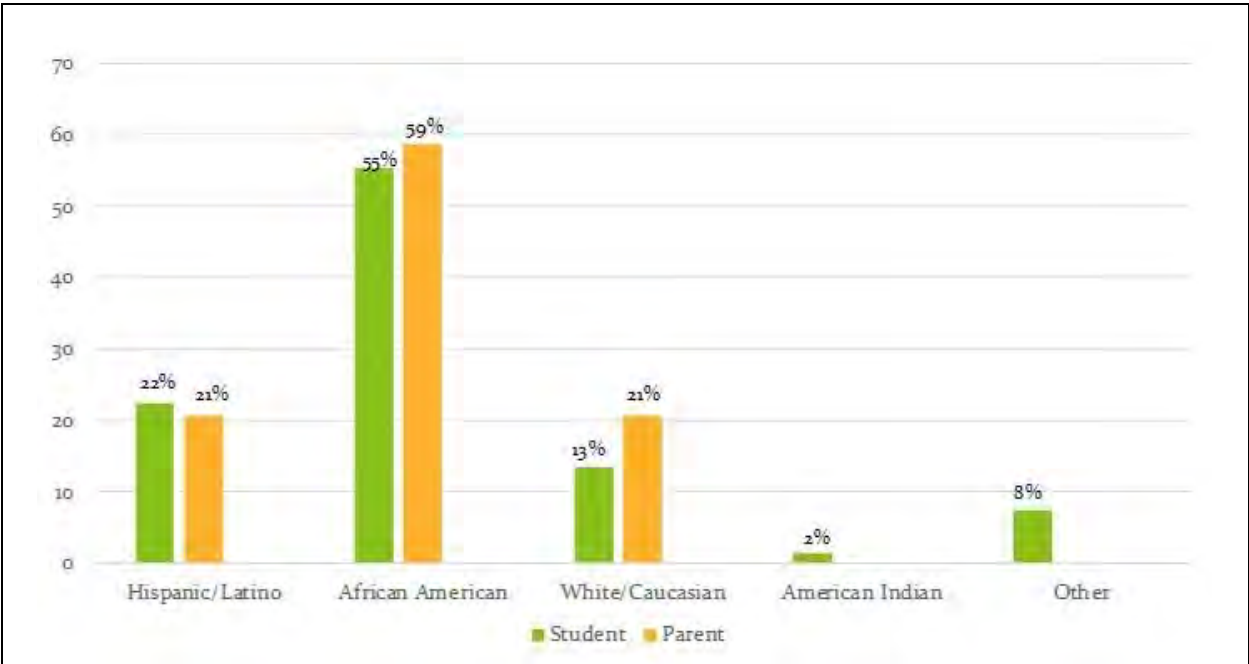


Figure 2. Race of participants.

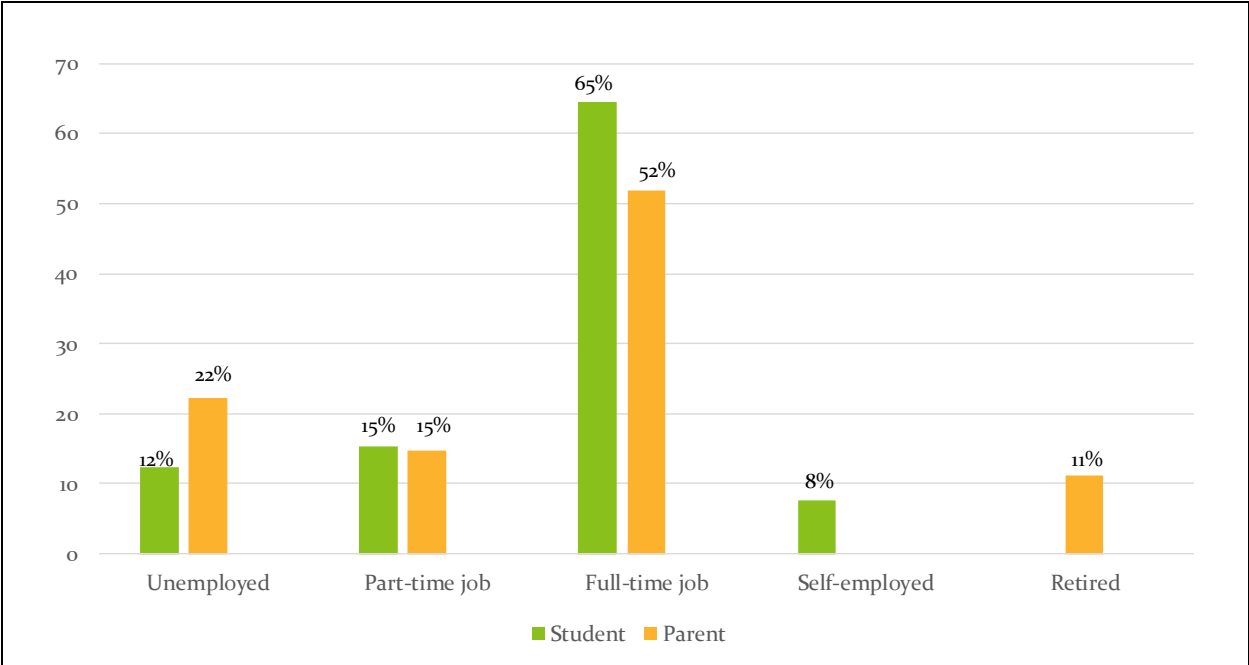


Figure 3. Employment status of participants.

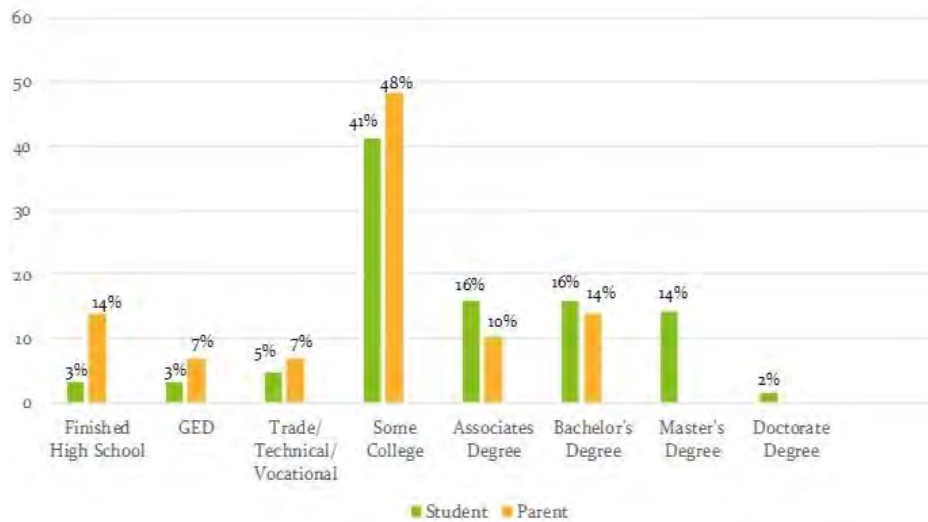


Figure 4. Educational attainment of participants.

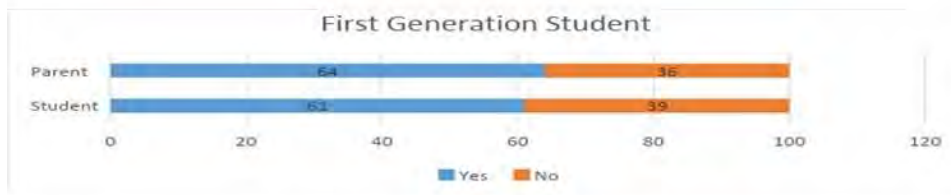


Figure 5. First generation postsecondary student status of participants.

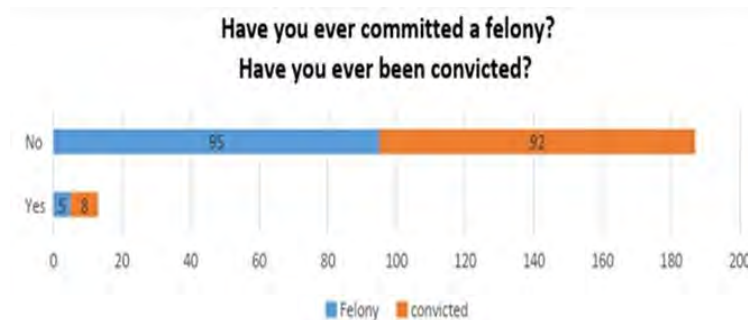


Figure 6. Criminal history of participants.

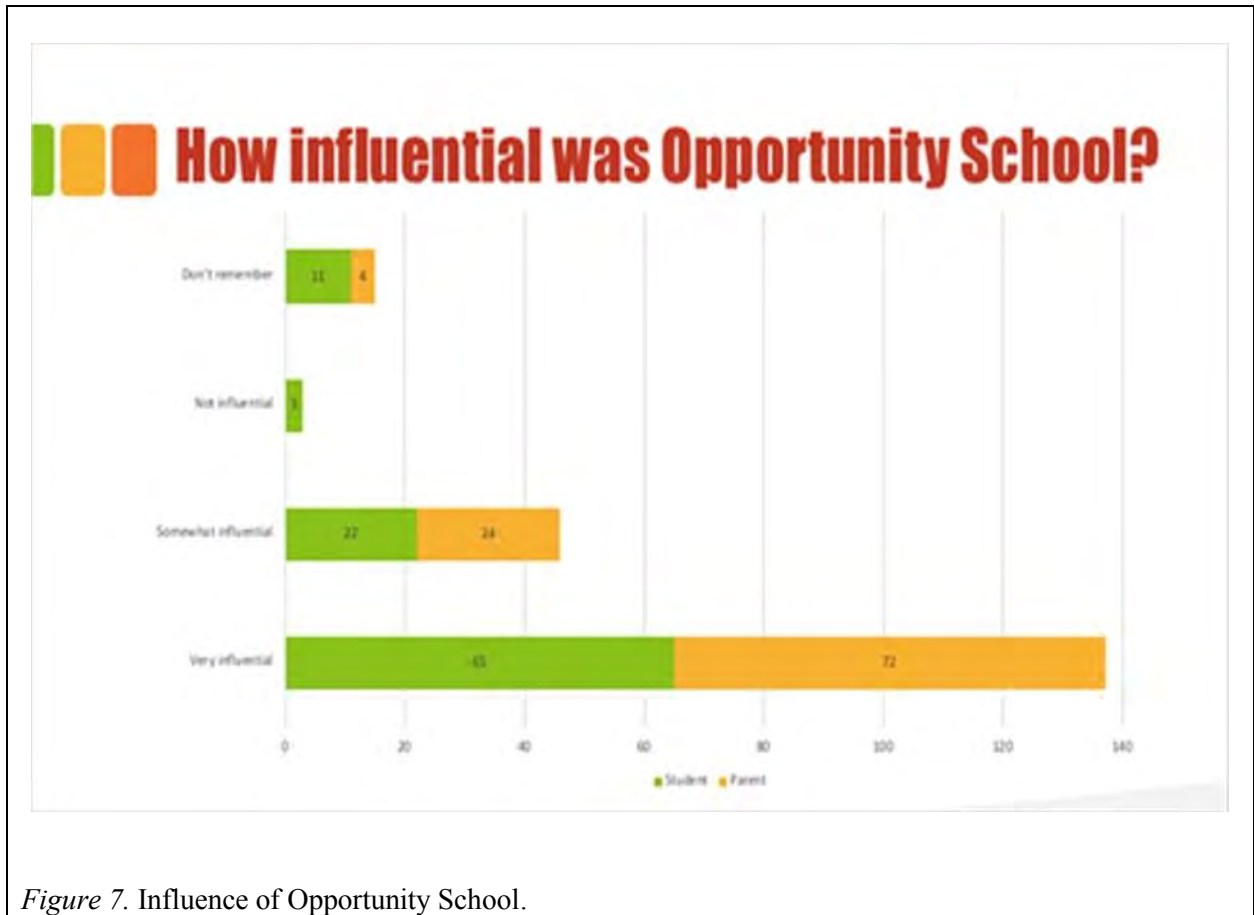


Figure 7. Influence of Opportunity School.

Qualitative Data

Survey respondents frequently cited ways that Opportunity School supported their family (see Figure 8). For instance, 61% of former students said that the preschool provided a safe learning environment and offered childcare services and meals that greatly helped the family. Several parent participants pointed out that Opportunity School teachers were “kind” and “thoughtful,” and some of their most treasured memories were the long-standing relationships with school staff members. Data revealed that some former Opportunity School teachers were still in contact with their former students and families, even after 40 years.

We reviewed the qualitative data a second time to look for preschool experiences that may have influenced the school readiness or emerging literacy development among former students. Several themes emerged after revisiting the qualitative information through a different lens. Identified themes included caring teachers, home visits, family connections and support, effective learning environments, engaging school activities, and early literacy experiences. An overview of each theme is explored below.

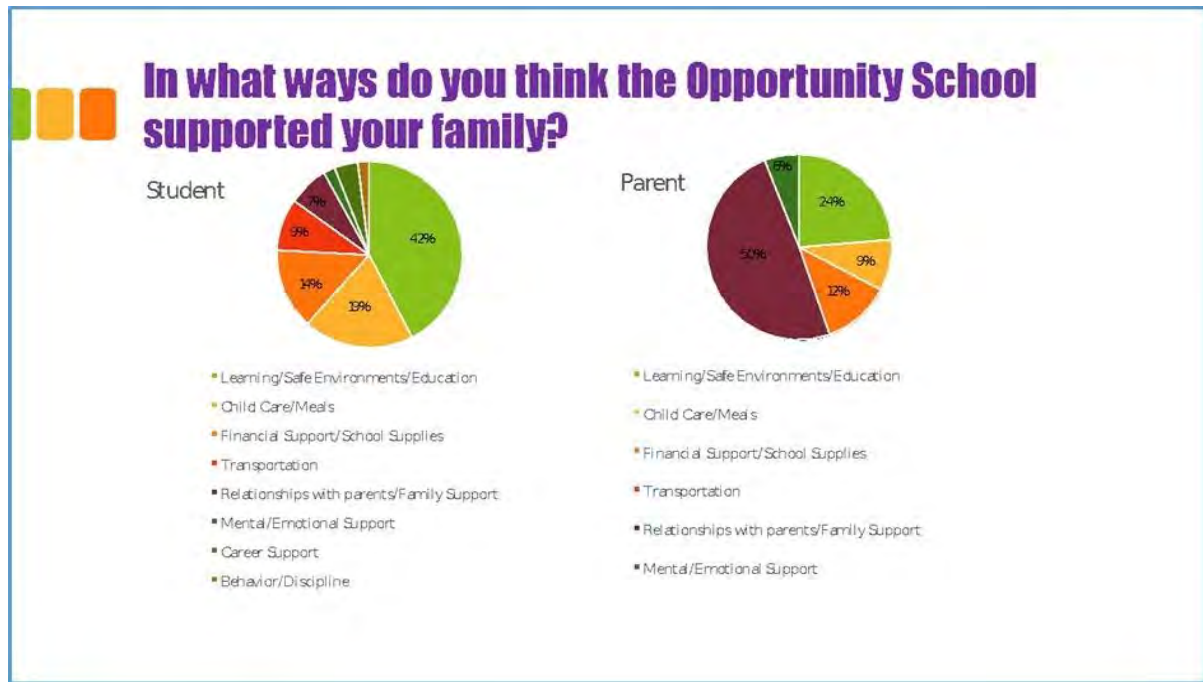


Figure 8. Themes for ways in which attending Opportunity School supported families.

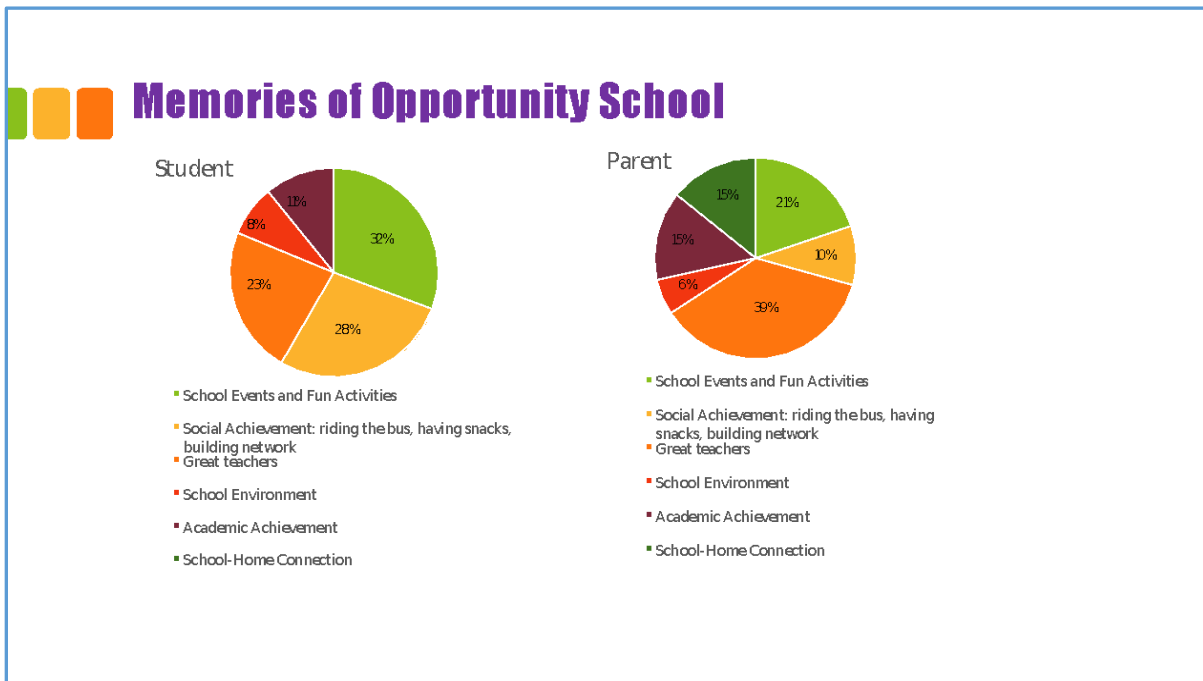


Figure 9. Themes for Memories of Attending Opportunity School.

Caring teachers. Teachers at Opportunity School played a major role in influencing the perceptions of parents towards their children's school attendance, academic preparedness in kindergarten-12th grade, and continued "positive feelings" towards school. When describing their memories of the Opportunity School, Participant 28 stated, "The teacher had the biggest influence. The teachers really stood out to us." Other parent participants used adjectives, such as "awesome," "great," and "excellent" to describe teachers at Opportunity School (Participants 2, 10, and 15). Four parent participants further described how much their children "loved their teacher" (Participants 3 and 6), "thought the teachers were amazing" (Participant 12), and "enjoyed the interaction with the teacher" (Participant 15). Participant 6 suggested that the love of the teacher motivated their child to go to school by explaining that their child "loved to go and see his teacher." Feelings of care and admiration for Opportunity School teacher were also exemplified when Participant 22 stated that her son "loved his teacher and to this day talks about her," and Participant 24 shared, "we still keep in contact with [Opportunity School teachers]." Participant 10 further expressed the lifelong impact that the teachers had on students when they stated, "The teacher was great and helped the students build confidence and excel and get a head start in [my daughter's] learning and the things she needed to do in school."

Home visits. One unique aspect of Opportunity School for both former students and parents were the frequent home visits conducted by the teachers. The home visits not only provided the teachers a chance to reinforce learning experiences among students, but they also honored the culture of the families by learning more about them on a personal level. The home visits eased anxiety and equipped parents with valuable educational information. Participant 28 explained, "It was such a wonderful experience for us, and we were not going to be worried about going to school . . . The teacher was coming to our home and explaining and making suggestions." Similarly, Participant 11 stated, "[Opportunity School

teachers] would come to our house and actually be there to visit with us, and I liked that because you could tell that it was important to them and not judgmental." This parent participant also went on to say:

Community wide, it takes a village to raise a family. I liked that everyone interacted and the teachers could see the food that [mom] prepared for her child and her ethnicity and saw her in her own home. I think it is very important about the home visiting part, and it is very important for us to all get to know each other and relate to one another as people, not teachers and parents, so that everyone can get to know each other and have understanding and not be so judgmental.

Relationships built during these home visits developed trust in the teachers, and this helped the parents be more involved in their child's education. According to Participant 12, the teachers and staff came "to the home once a week and went over how they were doing in school, and [asked] if we thought they needed anything extra."

Family connections and support. Data emphasized the critical role that family connections and school support systems played in the education of former Opportunity School students. One former student clearly stated, "Parent involvement is important (Participant 7). Participant 21 explained how the Opportunity School staff provided meaningful encouragement by stating, "Opportunity School [teachers] supported us very well for educational purposes. They helped us, and whenever I got in trouble, they came to my house and talked to my mom. They included the parents and were very helpful."

Transportation was another way in which former students felt supported at Opportunity School. Participants 2 and 8 fondly remembered riding the "bumpy blue and brown bus" to school. Participant 9 explained, "By providing transportation, my mom talked to them a lot with the teachers coming by the house." Participant 38 stated, "I remember the

bus and [bus driver] picking us up from our house, and she always made it fun.”

Participant 37 explained the significance of Opportunity School’s mission to serve minority, low-income, immigrant, or refugee populations by saying, “It helped in terms of providing a place for me to be when my parents were both working. It was the beginning of my integration to people that lived here—we were immigrants.” Another former student reported, “We were refugees and had problems financially at that time. Opportunity School gave us an opportunity to be exposed to education.” Participant 17 was a former student whose daughter was currently attending Opportunity School. She shared, “Now that my daughter attends there, they help with food, clothing, and transportation.”

Effective learning environment. A friendly, optimistic, and well-organized learning environment provides students with the structure necessary for them to learn. One parent participant recounted their memories of the positive school culture by recalling, “The students were able to learn in a positive environment, a welcoming environment” (Participant 5). Another parent participant shared, “It is important to be in a learning environment as early as possible, to get that structure” (Participant 43). Parent participants also made several comments regarding the small class sizes. Participant 18 shared, “I think it helps them [students] get an edge by learning the basics with a smaller class and more individualized [instruction].” Participant 36 added, “The teacher-student ratio is really good. One-on-one or some sort of small group [instruction].” Participant 57 further indicated the importance of an effective learning environment for young learners by stating, “I think that this is an awesome set up and environment because your children build positive relationships at an early age.”

Engaging school activities. One of the cornerstone principles of Opportunity School’s educational philosophy is to provide experiences that foster “children’s curiosity, love of learning,

and responsibility” (Opportunity School, 2018, bullet 8). Former student participants exemplified this principle in a variety of ways. A favorite activity that was mentioned frequently involved kitchen activities, such as the beloved “gingerbread man project” (Participant 11). Participant 9 recalled this activity by explaining, “The gingerbread man that they used to bake while we were outside playing... and then we would have to go back inside and find it.” Former students recounted many other kitchen activities, such as “snacks” (Participant 13), “soup” (Participant 4), “birthday cupcakes” (Participant 62), and a “tea party” (Participant 26).

Field trips also exemplified Opportunity School’s educational philosophy. One former student recalled, “I also remember all of our field trips. We had cool experiences including the Amarillo symphony. They took us on a lot of field trips.” Another favorite field trip was the public library. Participant 55 said, “I remember going to the library when I was in Opportunity School. Early access to people who encouraged me to read and learn made all the difference to me. It set me on a strong path.”

Early literacy experiences. Opportunity School teachers provided many engaging early literacy experiences for former students, which set them up for positive literacy development. Participant 55, who shared that she was now a secondary school teacher, explained, “I think that Opportunity School is probably the biggest impact on that part of my life. I was an early reader and having regular access to books was a big thing for me.” Participant 54 remembered, “I had one-on-one reading sessions with my teacher.” Additionally, Participant 60 reminisced:
[Opportunity School] was kind of a blessing to my family . . . and was definitely helpful for me and my brother to prepare for kindergarten and first grade. My brother actually wanted to read books, and they brought us 200 books. It was a great experience for us!

Discussion

This study examined the lasting influences of early childhood intervention among a group of former Opportunity School students and their parents. Our findings were similar to those reported in the Abecedarian Project and High/Scope Perry Preschool studies and have demonstrated positive outcomes associated with Opportunity School attendance among former students and their parents. Additionally, Murdock, Cline, Zey, Jeanty, and Perez (2014) reported, “Expanding preschool programs to focus on four-year-olds from poor families have a high potential for increasing school readiness” (p. 9). Since Opportunity School serves mostly low-income children and their families, our findings have suggested a need for providing quality early childhood educational interventions for children and families who live in poverty. Recently, lawmakers in Texas passed legislation that aimed to increase access to prekindergarten programs for young children from low-income families, limited-English-speaking households, foster care, and military families (Svitek, 2015). These programs have the capacity to improve school readiness and provide a strong and healthy start for young children and their families (Texas Early Learning Summit, 2018).

It is widely understood that the teacher sets the tone of the classroom. Teachers who genuinely value and cherish their students can develop positive and trusting cultures of learning in their classrooms (Kerman, Kimball, & Martin, 1980; Zehm & Kottler, 1993). Our findings reinforced this understanding. Participants frequently mentioned ways in which Opportunity School teachers were caring individuals who made students and parents feel welcome at the school. Participants also asserted that the kindness and warmth from Opportunity School teachers extended the doors of the school and followed students to their homes, which permeated the entire community. This kind of caring school community is important for all students; however, Battistich, Solomon, Watson and Schaps (1997) maintained

that a caring school community benefits at-risk populations of students the most.

The influence of caring teachers who conducted frequent home visits was a major theme that emerged from our analyses of data. These positive school-home connections evoked pleasant memories from both former students and their parents. Yaafouri-Kreuzer (2017) described how conducting home visits transformed her interactions with 3rd grade students whose families were new to the United States. She discovered what the Opportunity School teachers knew over 40 years ago—visiting students’ homes creates a positive and meaningful classroom culture. Yaafouri-Kreuzer concluded, “Particularly with immigrant and refugee students, visiting families’ homes connects teachers to students’ histories, needs, and strengths” (p. 21).

Along with home visits, participants cited other ways in which Opportunity School connected their families to the school and addressed their needs. For example, participants specifically indicated the importance of school transportation, childcare, and meals at Opportunity School. According to Maslow’s hierarchy of needs theory, the basic needs of students and their families must be met before significant learning can occur (McLeod, 2017). Consequently, schools must first address the physical, safety, and psychological needs of students. Moreover, researchers have contended that ongoing efforts to involve the entire family in the early education of their children will reap greater benefits (Joo, 2010; Park, 2008; Slaby, Loucks, & Stelwagon, 2005).

Engaging preschool activities, such as cooking in the classroom and taking field trips, enhance the quality of early childhood educational interventions. These types of developmentally appropriate practices are not only memorable, as suggested by participants in this study, but are also vital to young students’ continual growth and learning (Kostelnik, Soderman, Whiren, & Rupiper, 2015). Implementing engaging preschool activities provide fertile ground for the growth and

development of young students and set the stage for continued educational progress (The University of Texas System & Texas Education Agency, 2015).

Early childhood educational interventions can help young children overcome some of the disadvantages of poverty by supporting developing literacy skills (Genishi, 2018; National Institute for Literacy, 2002; Shanahan & Lonigan, 2017). According to Baxter (2014), oral language development is important to emergent literacy skills, as well as social development. Preschool environments and activities can provide multiple and meaningful exposures to language in diverse contexts that influence the development of language skills and later literacy achievement (National Institute for Literacy, 2002). This study documented several approaches that Opportunity School teachers have used to promote literacy development, including enhancing vocabulary development through authentic and meaningful activities, bringing books to students, and modeling good read aloud strategies for parents.

Limitations and Suggestions for Future Research

We experienced great challenges with locating former Opportunity School students and

their parents. Contact information was outdated, so our sample included only former students and parents that we could locate. Another limiting factor was participants in this study self-reported data from their past memories. Since their recollections were far in the past, parents may not have had clear memories of events that occurred long ago, and former students may not have accurate remembrances from early ages. Future research endeavors should include ways to include a control and treatment group to explore additional influences of early childhood educational interventions.

Conclusions

Findings from this study have clearly demonstrated that early childhood educational interventions can provide positive outcomes for students and their parents. Early childhood teachers and leaders can use this research-based information to design meaningful activities and enact transformational practices to support at-risk students and their families. Educator preparation programs can use this knowledge to help their preservice teachers develop the knowledge and skills to be effective early childhood educators. We assert that it takes all stakeholders working together to transform the learning outcomes for our youngest students.

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