Evaluation of a Home Visiting Program Aimed at Facilitating Refugee and Immigrant Children's Acclimation and Development

Laurie Lynn Grad

Minnesota State University - Mankato

Follow this and additional works at: https://cornerstone.lib.mnsu.edu/etds

Part of the Educational Methods Commons, Family, Life Course, and Society Commons, and the Race and Ethnicity Commons

Recommended Citation


This Thesis is brought to you for free and open access by the Graduate Theses, Dissertations, and Other Capstone Projects at Cornerstone: A Collection of Scholarly and Creative Works for Minnesota State University, Mankato. It has been accepted for inclusion in All Graduate Theses, Dissertations, and Other Capstone Projects by an authorized administrator of Cornerstone: A Collection of Scholarly and Creative Works for Minnesota State University, Mankato.
Evaluation of a Home Visiting Program Aimed at Facilitating Refugee and Immigrant Children’s Acclimation and Development

By

Laurie Grad, B.S.

This Thesis Submitted in Partial Fulfillment of the Requirements for the Clinical Psychology Masters Degree

Minnesota State University, Mankato

Mankato, Minnesota

May 2015
This thesis has been examined and approved.

Examing Committee:

________________________________________________________________________

Dr. Sarah Sifers, PhD, LP/Advisor

________________________________________________________________________

Dr. Daniel Houlihan, PhD/Professor

________________________________________________________________________

Dr. Lindstrom Bremer, PhD/Graduate Assistantship Supervisor
Abstract

Ready To Learn is a home visiting program that uses the Growing Great Kids curriculum to improve child development and parent education of immigrant and refugee families. This study completed a program evaluation to determine the effectiveness of Ready To Learn using the Ages and Stages Questionnaire (ASQ). Five areas of development were assessed using this evaluation: communication, gross motor, fine motor, problem solving and personal/social.

Results found that 36% of children improved from their first ASQ to their most recent ASQ. All together, 78% of children were ready for kindergarten after graduating from the program, which decreases their chance of falling behind their peers. To determine if the difference between the first average ASQ score was significantly different than the most recent average ASQ score, a repeated measures t-test was utilized. The results showed a significant difference, with the most recent ASQ score being significantly higher than the first ASQ score. These findings are similar to previous literature, which found that early intervention programs are effective for low-income, immigrant and refugee families. Thus, other early intervention, home visiting programs should be implemented for immigrant and refugee families to promote learning at a young age and improve chances of academic success later in life.

*Keywords*: home visiting programs, school readiness, early childhood development, immigrants, refugees
Acknowledgements

I would like to thank the YWCA in Mankato, MN for giving me the opportunity to work with them as a volunteer and data analyst. Their easygoing, openhearted attitude made this two-year collaboration enjoyable. I gained more knowledge and insight from this corporation than I could ever explain. I learned about different cultures, effective developmental skill building activities, and most importantly, I learned my passion for multicultural psychology.

In addition, I would like to thank my advisor, Dr. Sifers, as she assisted me in every step of completing this study. Through her motivating speeches and invaluable knowledge, I was able to glean all the necessary skills and knowledge to complete this thesis and stay positive throughout the process.

Lastly, I need to thank my friends, family, and Patrick Kincade for supporting me through this process. I am so blessed to have the supportive network I do, and I do not think I could have completed this degree or thesis without you.
# HOME VISITING PROGRAM FOR REFUGEE/IMMIGRANT CHILDREN

## TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>CHAPTER</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Introduction</td>
<td>7</td>
</tr>
<tr>
<td>Hardships Immigrants and Refugees Face During Acclimation</td>
<td>7</td>
</tr>
<tr>
<td>School Readiness</td>
<td>10</td>
</tr>
<tr>
<td>Effectiveness of Home Visiting Programs for Child Development</td>
<td>11</td>
</tr>
<tr>
<td>Advantages of Home Visiting Programs</td>
<td>12</td>
</tr>
<tr>
<td>Early Head Start</td>
<td>13</td>
</tr>
<tr>
<td>Nurse Family Partnership</td>
<td>14</td>
</tr>
<tr>
<td>Parent Education Programs</td>
<td>14</td>
</tr>
<tr>
<td>Inconsistent Findings</td>
<td>15</td>
</tr>
<tr>
<td>Ready To Learn</td>
<td>15</td>
</tr>
<tr>
<td>Hypotheses</td>
<td>16</td>
</tr>
<tr>
<td>II. Method</td>
<td>17</td>
</tr>
<tr>
<td>Participants</td>
<td>17</td>
</tr>
<tr>
<td>Measures</td>
<td>21</td>
</tr>
<tr>
<td>Procedure</td>
<td>22</td>
</tr>
<tr>
<td>III. Results</td>
<td>23</td>
</tr>
<tr>
<td>IV. Discussion</td>
<td>29</td>
</tr>
<tr>
<td>Limitations</td>
<td>30</td>
</tr>
<tr>
<td>Future Research</td>
<td>31</td>
</tr>
<tr>
<td>Conclusion</td>
<td>31</td>
</tr>
<tr>
<td>References</td>
<td>33</td>
</tr>
</tbody>
</table>
List of Figures

1. Ready To Learn enrollment per child since the program began...............................18
2. Country of origin of the families enrolled in Ready To Learn since the program began........19
3. Annual household income of families enrolled in Ready To Learn.............................20
4. Comparison of developmental screeners........................................................................25
CHAPTER I

Introduction

Schools in the United States are becoming increasingly more diverse in regards to race, ethnicity, language, national origin, and a multitude of other factors (Jacob, Decker & Hartshorne, 2011). According to the DHS Office of Immigration Statistics (2014), a total of 779,929 individuals were naturalized in 2013; this is an increase from 2010 (710,000), 1990 (500,000) and 1980 (210,000; U.S. Naturalizations Annual Flow Report, 2014). The last report placed Minnesota 17th among the states for number of immigrant residents. Regardless of one’s beliefs of the advantages or disadvantages of this increase in immigrant and refugee families in the United States, it is this diverse generation that will be leading the United States in many years to come. Thus, it is pertinent to explore the challenges these individuals face when arriving in the United States to promote success and happiness.

There are numerous reasons for immigrants or refugees to decide to uproot their previous home and move to the United States. Their motives typically depend on which culture they are coming from, their experiences, and future opportunities in the United States. These factors depict the complexity of immigration and, more specifically, how each immigrant or refugee is unique. Even though each individual is different on multiple levels, it is also important not to neglect shared experiences of immigrant and refugee families (Hernandez, Denton, & Macartney, 2008).

Hardships Immigrants and Refugees Face During Acclimation

Most immigrants experience a learning curve after arriving in the United States. They need to learn the language, culture, education system, and typical developmental milestones for
their children. Typically, immigrant and refugee families experience a substantial amount of obstacles after arriving to the United States, including a lack of resources, proficient English skills, and overall knowledge of where to go to receive aid (Karoly & Gonzalez, 2011). Lack of resources and knowledge leave immigrant families wondering how to advance their children’s development. Unfortunately, a large number of immigrant and refugee families have difficulty affording early childhood education (Hernandez et al., 2008). These financial restraints are often experienced by immigrant and refugee families and are associated with a breadth of other issues so the impact of poverty for these families will now be addressed.

**Poverty**

Understanding how poverty influences these children’s development and academic achievement first starts with understanding poverty and the misconceptions that come with it. Studies have shown that the majority of parents within these immigrant and refugee families (95%) have at least one parent working (Camarota, 2011). Unfortunately, their lower education achievements influence their career outcomes, which negatively impact their income (Cameron & Heckman, 1991). Even though these families are working part-time or full-time jobs, they typically need to utilize government services to support their families. This researcher believes these families are handed a lifetime of obstacles and hardships, which makes the “American dream” a lot harder to accomplish; however, these impediments do not make their dreams impossible to achieve. Rather, providing these individuals with exceptional resources, relationships, and an education will open a successful pathway and potentially help to achieve their aspirations.

A study done by Hernandez et al. (2008) depicted the vast difference in poverty between immigrant and U.S. born families. They found that 21% of children born to immigrant families
lived in poverty, compared to 14% of U.S. born families. What is more concerning is that poverty often means lack of education resources, which indicates a future of academic hardship for these children (Brooks-Gunn & Duncan, 1997; Duncan, Brooks-Gunn, & Aber, 1997; Simpson, Colpe, & Greenspan, 2003). With this lack of resources at home, these families have been unable to fund their schools or give their children the necessary means at home to be academically successful. In a study of children’s use of time in educational spaces, survey data were used to show that wealthy children spent significantly more hours in educational places other than their homes, day care centers, or schools (e.g., museums, parks; Tavernise, 2012). In another study, the number of hours children spent in literacy activities were compared across different families. They found that children in high-income families spent 400 more hours than poor children in literacy activities by the time they began school. Other researchers have found similar results. Children in professional families hear significantly more words per hour when compared to working class families and families on welfare. In fact, by the time these children turn three years old, children from wealthier (i.e., professional) families have shown to hear approximately 30 million more words than children from poor families (“Choose Your Parents Wisely,” 2014). Unfortunately, this has given children from high-income families a head start before even starting school. This achievement gap has shown to continue into adolescence and adulthood. Hernandez (2008) found that immigrant adolescents are less likely to graduate high school and more likely to fall behind in the classroom.

With their lack of resources, one would assume immigrant and refugee families would attempt to alleviate their impediments by using public programs and government services; however, immigrant and refugee families encounter a variety obstacles when using these services. First, immigrant and refugee families have restrictions they encounter with federal benefits. For
example, adults are generally barred during their first five years as qualified immigrants from food stamps. Lawful permanent residents, or immigrants who have the authority to live and work in the United States permanently, are barred from public health insurance and cash assistance for the first 5 years and social security for their entire duration of stay (Dinan, 2005). Second, they lack knowledge of the available aid. There are exceptions to these general rules; however, this is another obstacle immigrant families need to overcome after arriving in the United States.

Immigrant and refugee families’ increased probability to experience poverty is due to a variety of factors. One reason immigrant and refugee families experience poverty is because parents in these families lack advanced education after arriving to the United States. A majority of immigrant and refugee families have been found to not possess a college degree, with some not graduating high school (Matthews & Ewn, 2006). This lack of education can engender other issues, including lack of access to jobs and single parent household incomes (Cameron & Heckman, 1991). In addition, lack of education has made it hard for these parents to advocate for their children’s pre-school training and other academic opportunities (Isik-Ercan, 2012).

Early intervention programs can be used as a preventive measure to give immigrant and refugee children a better chance at success. Moreover, intervention from birth to 5 years of age can help assure that children will be ready for school. Through early education, enrolled children would be introduced to the English language and become acclimated to the United State’s education system, which increases their probability of being ready for kindergarten.

School Readiness

As Westheimer (1997) stated,

Getting children ready for schools when schools are not ready to welcome an
educationally, economically, socially and ethnically diverse group of students will not make a difference. Similarly, having children enter the best and most developmentally appropriate kindergarten classrooms when they have not had the opportunity to develop the necessary social, emotional, physical and cognitive skills to engage in the classroom activities will also not make a difference (p. 245).

Children go through a vital transition period when entering school and they need to be prepared in all aspects of development: cognitive, social, and emotional. It is important for all children to be exposed to educational resources at an early age to promote learning and build the necessary skills to become academically successful (Thompson, 2001). Despite the risk factors immigrant and refugee families experience, previous research has found that children of these families have been less likely to attend preschool or other forms of formal schooling before elementary school (Magnuson, Lahaie & Waldfogel, 2006). In addition, they have been found to be more likely to lack English proficiency and the resources necessary to be ready for kindergarten (Magnuson et al., 2006). This can create an education gap between U.S. born children and immigrant and refugee children when entering kindergarten. Unfortunately, as stated earlier, this gap has shown to continue through later education (Hernandez et al., 2008; Takanishi, 2004).

**Effectiveness of Home Visiting Programs for Child Development**

Fortunately, early intervention programs have shown to be extremely effective with immigrant and refugee families (Magnuson et al., 2006; Matthews & Ewen, 2006). In fact, implementing these programs has shown to be more effective for children of parents who do not speak English at home when compared to families who speak English at home (Magnuson et al., 2006; Middlemiss & McGuigan, 2005; Trawick-Smith, 2010; Wagner & Clayton, 1999).
Previous researchers have stated that this discrepancy in effectiveness is because immigrant and refugee children have a lot more to gain when exposed to English at home (Magnuson et al., 2006).

Numerous home visiting programs have been implemented to promote learning and resiliency in children of immigrant and refugee families during early childhood. In my experience, trained professionals who implement home-based early interventions typically have two objectives: to support parents and ensure children are meeting their developmental milestones. Trained professionals educate parents about typical child development and teach them appropriate parenting skills. They do this through a standardized teaching curriculum that is directed by trained staff. The trained individuals are aware of the deficits of each child and complete tasks with the family to progress their learning. Concurrently, the parents are learning these strategies so they can continue to use them after the program finishes. Nearly all home visiting programs also provide parents with the necessary resources to accomplish their goals, such as reading materials, parental counseling, food assistance, clothing assistance, healthcare referrals, school and housing information, and other basic needs (Sweet & Appelbaum, 2004).

**Advantages of Home Visiting Programs**

The advantages of home visiting programs have been researched extensively. Home visiting programs help parents miss fewer appointments because the interventions are at their home in a comfortable environment (Brooks-Gunn, Berlin, & Fuligni, 2000; Gomby, Larson, Lewit, & Behrman, 1993; Johnson, 2009). It spares the family the extra stress of commuting to receive the intervention. In addition, it allows the researchers to obtain real life data of the families in their home environment. Lastly, research has shown that much of children’s development occurs during the prenatal period through the first couple years of life (Thompson,
HOME VISITING PROGRAM FOR REFUGEE/IMMIGRANT CHILDREN

Home visiting programs allow educated, trained individuals to work with children during these vital years to encourage school readiness, healthy parenting, and appropriate social and emotional development.

**Early Head Start**

For example, the Department of Health and Human Services developed an Early Head Start program for children birth to three years old to improve family functioning and school readiness (U.S. Department of Health and Human Services, 2006). This home visiting program had significant impacts on the children who partook. Children in the Early Head Start Program had fewer behavioral problems and better approaches to learning. In addition, they had more supportive environments at home, received more support for learning from their parents, and had mothers with better mental health. Looking at the results more closely, they found that there were significant impacts on vocabulary for Spanish-speaking children, but not for English-speaking children. There was sustained impact for families who were more “at risk.” At risk demographic factors could include families who were characterized by low socioeconomic statuses, have members of the family who are disabled, or are living in a single parent home. The Early Head Start study is important to analyze because it also depicted that families who benefitted the most out of these programs were low income, non-English speaking families.

Unfortunately, despite these results, findings showed that immigrant and refugee families were less likely to utilize preschool or early intervention programs when compared to U.S. born citizens (Matthews & Ewn, 2006). Multiple factors including demographic factors, language, culture, and immigration status dictated whether immigrant and refugee families utilized these services. Children with low income families, or families with lower education are less likely to have their children participate in preschool.
Nurse Family Partnership

A similar finding was discovered by Olds et al. (2013). Their study involved low-income mothers with their first-born child. The researchers were interested in analyzing whether a home-visiting program using nurses and paraprofessionals could sustain long-term effects on children birth to two years old. Children visited by these nurses and paraprofessionals displayed an improvement in visual attention, behavioral functioning, and language. However, they did not show a large improvement for intellectual functioning and academic achievement. Also, this program substantially helped mothers of these children. Home-visited mothers were found to have delayed and reduced subsequent pregnancies, decreased welfare dependence, and increased participation in the workplace (Olds et al., 2013).

Parent Education Programs

These programs do more than direct intervention with children. In fact, the researchers of a majority of programs were most interested in parent-focused, home-based early intervention programs (Westheimer, 1997). These programs supported and instructed parents about their child’s development and gave them ways to be involved in their early education.

MOM program. The MOM program was implemented to promote competence among mothers living in urban poverty. The authors’ hope was to educate mothers about various resources to increase the mothers’ participation in early intervention programs for their children. Children whose mothers received the intervention were referred to and received early interventions significantly more often than those in the control group (Schwarz et al., 2012).

Home instruction for parents of preschool youngsters program (HIPPY). The authors of the HIPPY program were interested in the parent being the child’s first and primary teacher. Parents in this program learned skill-building activities to engage with their children.
The curriculum encompassed language building, problem solving techniques, and discrimination skills (Westheimer, 1997). Studies found that children who participated in HIPPY were rated by their teachers as more adapted to the classroom (Baker & Piotrkowski, 1993). In addition, intervention used within this HIPPY program has shown to boost reading scores significantly (“Choose your parents wisely,” 2014).

**Inconsistent Findings**

Even though research shows these early intervention programs can be successful, other researchers have found that some home visiting programs only produced small differences between intervention and control groups. In fact, some studies did not produce any important positive impacts on participating families compared to control families (St.Pierre, Layzer, Goodson, & Bernstein, 1997). Generally speaking, effects varied with multiple factors including family SES, risk factors, and language proficiency. As stated earlier, low-income families typically have benefitted from these interventions significantly more than moderate- or high-income families. Thus, it is important to continue to evaluate these programs to determine what types of programs should be utilized and implemented.

**Ready To Learn**

Due to previous research that has addressed the obstacles immigrant and refugee families have experienced, a multitude of programs have been implemented to promote success for these individuals. The leaders of YWCA also understood this need and developed a program to address it. The Ready to Learn Program started as a pilot version in the fall of 2011. Ready To Learn is a home visiting-program directed by YWCA staff that services immigrant and refugee families in the greater Mankato, MN area. Children between birth and five-years old are enrolled in the Growing Great Kids curriculum (GGK), which is a variety of developmental skill
building activities to prepare them for kindergarten. This curriculum has had six rigorous evaluations and has been found to improve child development and parent education (Growing Great Kids, Inc., 2010). With these evaluations, the researchers illustrated that the GGK curriculum could improve parent stress, attitude, and overall well-being. In addition, participation in the GGK curriculum has moved children from the “at risk” category to the developmentally typical category. The program is based on research that suggests children in higher risk families (e.g., low SES, low English speaking, or one income) would have a greater chance at being ready for school if they practiced necessary skills during the vital pre-K years.

The curriculum consists of weekly home visits by volunteers that last for approximately an hour. During these visits, the volunteers, children, and parents take part in a variety of activities (See Appendix A for example). It is a standardized curriculum that has each same-age child experiencing the same activities. Every six months a supervisor, using the Ages and Stages Questionnaire (ASQ), evaluates the children’s progress. After the child turns five years old, he or she graduates from the program and is expected to be ready for kindergarten.

**Hypotheses**

It is hypothesized that Ready To Learn will be an effective program in improving developmental skills and preparing children for kindergarten. With this hypothesis, I believe many of the children entering Ready To Learn will fall below the cut off on the ASQ. After going through the Growing Great Kids curriculum, most children will be ready for kindergarten, evident by an increased score on the ASQ, with their score no longer being below the cut off. Lastly, the researcher will be observing the Ready To Learn sessions to ensure fidelity and standardization of the program.
CHAPTER II

Method

Participants

The participants of this study included immigrant and refugee families from the greater Mankato, MN area. This study included 89 children that enrolled in the Ready To Learn since the program began and have been assessed using the ASQ. The first family enrolled in July 2011 and the program is still expanding to other families in Mankato, Minnesota. For an overview of enrollment over time, see Figure 1. Of the 89 children that have been enrolled in Ready To Learn, 45% were girls and 55% were boys. The children were birth to five when they were receiving the Ready To Learn services. In addition, 36.8% of the children enrolled in Ready To Learn were also enrolled in other educational activities including preschool and daycare centers. The majority of families that have been enrolled in Ready to Learn were from Somalia, with others from Sudan, Cambodia, and Guatemala. The specific percentages of the country of origin for these families can be found in Figure 2. Nearly 50% of the families had an annual household income equal to or less than $10,000 at the time of enrollment. A description of the annual household income of families can be found in Figure 3.
Figure 1. Ready To Learn enrollment per child since the program began.

*Note: 7 out of the 89 children that have been enrolled in this program were missing their enrollment time information
Figure 2. Country of origin of the families enrolled in Ready To Learn since the program began.
Figure 3. Annual household income of families enrolled in Ready To Learn.
Measures

The Ages and Stages Questionnaire. The ASQ is a monitoring tool used for children birth to 6 years that assesses social, emotional, and cognitive development. More specifically, it assesses five areas of development: Communication, gross motor, fine motor, problem solving and personal and social skills. The parent and home visitor fill out the form together every 6 months to assess progress. The parent answers questions about his or her child’s development by answering yes, sometimes, or not yet. The home visitor scores each answer with a response of yes equivalent to 10 points, an answer of sometimes equivalent to 5 points and an answer of not yet equivalent to 0 points. All of the points are added up and compared across a range, 0-60 points (See Appendix B). The number the child receives either falls within the developmentally typical range, in the “at risk” range, or below typical development.

The psychometric properties of the ASQ have been tested extensively and the ASQ has shown to have high validity and reliability in multiple research studies (Design Options for Home Visiting Evaluation: Measurement Tool Brief, 2012). First, the test-retest reliability of the ASQ was measured by comparing the results of parents who completed two questionnaires about their child within a two-week interval. Results depicted high reliability with 92% agreement. Inter-rater reliability was measured by comparing the results of parents with those of a trained examiner. Inter-rater reliability was also high, with 93% agreement. Internal consistency, how much questions asking about the same construct coincide, was moderate to high (coefficients ranged from .51 to .87). In addition, the validity of the ASQ when compared to other standardized tools (Battelle Developmental Inventory (BDI)) demonstrated 82.6% – 88.9% agreement.
It is also important to note that the ASQ is normed by age. Thus, this instrument controls for maturation because it takes into consideration the normal progression of development as a child ages.

**Progress note.** The Ready To Learn volunteers fill out a progress note for each child during every session. This progress note articulates what was done during that session. More specifically, it indicates which of the five areas were worked on, what lessons were completed, and what activities were completed, with a space to write a detailed description of the session (see Appendix C).

**Procedure**

IRB approval was obtained before any research was conducted. All of the participants within this study were already enrolled in Ready To Learn. They were approached by a staff member and asked to consent for the progress of their children to be monitored and analyzed when they entered the program. The researcher also observed individual Ready To Learn sessions from parents who consented to this additional procedure. The researcher sat in on sessions to observe how well each volunteer was following the standardized curriculum. The fidelity of this intervention was analyzed using an observation log sheet (See Appendix D).

The rest of the information was received via archival data, including parent demographic information documents, progress notes and the ASQ. The parent demographic information documents were received at the beginning of their participation in the Ready To Learn program. The volunteers collected the progress notes (see Appendix C) during every weekly session and the outreach workers administered the ASQs every 6 months during the families’ participation in the Ready To Learn program.
CHAPTER III

Results

The researcher hypothesized that the Ready To Learn program would be effective in preparing children for kindergarten. The specific analyses that were addressed to determine the effectiveness of the program are described below.

**Research question 1:** After going through the Growing Great Kids curriculum, most children will be ready for kindergarten, evident by an increased score on the ASQ, with their score no longer being below the cut off.

The researcher used descriptive statistics and a repeated measures t-test to analyze this research question. The ASQs were examined to determine the number of children who were in the developmentally typical range after graduating from the program. Of the children who graduated from the program, 78% had all their scores on their most recent ASQ above the cutoff, or in the developmentally typical range. More specifically, since the program began, 14 children have graduated from the program. Eleven out of the 14 children had all of their scores on the ASQ above the cut off, whereas three of the children who had graduated from the program had some of the areas below the developmentally typical range on the ASQ. Unfortunately, a large percentage of the families left the program due to moving or other obligations, which hindered the chances of their children graduating from Ready To Learn.

In addition, the ASQ archival data allowed the researcher to compare the children’s first ASQ score to the most recent score to determine if their scores improved. To do this, the researcher averaged all of the subtest scores for each ASQ and computed an overall ASQ score for each separate date it was administered. The researcher found that 36% of the children
improved from their first average ASQ score to their most recent average ASQ score. However, a large percentage of the children (38.2%) had not yet completed two developmental screens to compare. This is in part because some of the children were not in the program long enough to complete two developmental screeners, or they left the program before they were able to complete two developmental screeners. In addition, approximately 16.9% of the children had the same average score from the first developmental screener to the most recent developmental screener, suggesting that they did not have developmental problems and continued to develop appropriately. Lastly, 9% of the children decreased from their first developmental screener to their most recent developmental screener. Please see Figure 4 to compare these results.
Figure 4. Comparison of the first average ASQ score to the most recent average ASQ score.
To determine whether the difference between the first ASQ and most recent was significant, the researcher utilized a repeated measures t-test to compare the first average ASQ score to the most recent average ASQ score. The repeated measures t-test determined that there was a significant difference between the first average ASQ score ($M = 52.36$) and the most recent average ASQ score ($M = 56.47$), with the first score being significantly lower than the most recent score, $t(54) = -4.12, p < .001$. Please note that the degrees of freedom are 54, which denotes that there were only 55 comparisons. Out of the 89 participants, only 55 (~62%) had completed two developmental screeners. A listwise function was utilized to omit the participants who only had one developmental screener.

**Research question 2:** The researcher will be observing the Ready To Learn sessions to ensure fidelity and standardization of the program.

The observation log sheet allowed the researcher to count the number of volunteers who included all the parts of the activity, followed the exact wording of the activity, and used the recommended supplies for the activity. The researcher found that the Ready To Learn curriculum, overall, was not being followed.

In the first observation (2/17/15, 1:00pm), there were three children and two volunteers. The children were five years old, 3 years old, and 8 months old. The children had significant difficulty with the English language; thus, the volunteers determined the GGK curriculum was too advanced for them. The volunteers utilized Pinterest and other online sources to find letter and number activities to do with the children. During this session, the volunteers did not complete any GGK activities and did not use any GGK items (e.g., toys, books). They read a book about different names of children in different countries. They followed that with another activity that involved the children pointing to different numbers and letters. They utilized cut out
shapes to match different shapes and colors. Lastly, the volunteers and children played Simon Says and made shapes with Playdoh. The volunteers mentioned this was their second visit with the family.

The second observation (2/27/15, 10:00 am) consisted of a family with 3 children and two volunteers (different volunteers from the previous session). The ages of the children are as follows: 3 years old, 2 years old and 11 months old. All three of the children were male. Only the eldest child could understand English, and even he had difficulty communicating with the volunteers. During this session, the volunteers did not complete any GGK activities; however, they did utilize some of the toys and items from the center. They practiced gross motor skills by throwing a ball back and forth. They practiced numbers and letters while utilizing the letter chart from the center. In addition, they completed puzzles, colored, and sang the Itsy Bitsy Spider song. Overall, there were not any planned activities and the volunteers seemed to introduce toy after toy until the children engaged with them. After speaking with the volunteers after the session, they said it was their second time with the family and they had difficulty utilizing the GGK curriculum because the children did not understand the lessons in English. They found it more helpful to practice more fundamental English skills (e.g., practicing letters, numbers, and colors).

The researcher had two other observations planned (3/5/15 and 3/6/15), but both of these volunteers cancelled the sessions. The following week was also cancelled due to spring break. As the data suggest, volunteers, in general, had difficulty utilizing the GGK curriculum due to the children lacking fundamental English skills. Without these skills, the lessons were not understood and nothing was gleaned from the meeting. In addition to this, it seems as though volunteers often canceled their home visits. If children were missing their weekly sessions often,
it is difficult to attribute the gains or failures to the GGK curriculum. This limitation will be addressed further in the discussion session.
CHAPTER IV

Discussion

The purpose of this study was to evaluate the effectiveness of a home-based early intervention program for immigrant and refugee families: Ready To Learn. The researcher found that this program might have been effective for preparing immigrant and refugee children for kindergarten because a large percentage of the children who graduated from the program evidenced a developmentally typical score on the ASQ. In addition, there was a significant difference between the children’s first ASQ score compared to their most recent ASQ score, suggesting an improvement in developmental skills. However, because the curriculum was not implemented with fidelity based on observations and observation attempts, limiting the ability to attribute the improvements to the curriculum.

The findings from this study correspond with previous research that suggests early intervention programs are effective, especially with immigrant and refugee families (Magnuson et al., 2006; Matthews & Ewen, 2006). This is most likely due to immigrant and refugee families lacking the skills that are needed for the United States education system. With these early intervention programs, these children are obtaining access to the English language and are building all areas of development (communication, fine motor, gross motor, personal/social, and safety). Entering the United States education system with knowledge about English and other developmental skills, this program could help lesson the achievement gap currently seen in schools, and addressing this issue early on will hopefully alleviate the issues these children face later in life.
Limitations

The limitations of this study need to be considered along with the significant results. First off, there was not an adequate control group to compare the Ready To Learn participants to. There are a couple of reasons for this: First off, the YWCA in Mankato was not interested in putting these families on any type of wait list, which is understandable with their clients’ high need of services. In addition, most of the individuals who could be used for a control group were already in the program, or were not interested in being part of this type of research and/or program. It is difficult to say whether these children would show this same increase in developmental skills without Ready To Learn. Even though having a control group would be beneficial for this study, the progress-monitoring tool we used, the ASQ, is normed by age, which controls for natural maturation by age.

The second limitation of this study was the organization of the archival data. All of the archival data were paper copies from the past three years. Unfortunately, some of the information about families was lost over the past three years. With additional information, more specific analyses could have been performed.

The third limitation that needs to be considered with this study is the number of observations that were done to determine the fidelity of the program. The researcher had the outreach workers at the YWCA inform the families about the observation process: how a researcher will come to the sessions and observe the volunteer work with their family. However, it was difficult to obtain consent from these families for numerous reasons. First off, the families resided in small apartments, with large families, so more people in their homes was overwhelming. Secondly, the reason the researcher was going to observe the sessions might have been lost in translation, which in turn affected the consent rate. Thirdly, mothers might not
have felt comfortable having a stranger in their home watching them and their children. Overall, four families consented for me to observe the session in their home. However, due to volunteers cancelling their session, only two out of these four observations were completed, which might not represent all the families and volunteers within the program.

Although the original goal of this study was to collect quantitative data on the percentage of volunteers who were following the curriculum, due to a low consent rate from families and low session completion rate of volunteers, there were only two observation sessions, so analyses were better done qualitatively. The volunteers found most of their activities on Pinterest or other online sources, not following any of the pre-determined curriculums that were intended to be evaluated in this study. This is another limitation of this study. However, it suggests that the GGK curriculum might need to be altered slightly for individualized services. For example, if the GGK curriculum is too advanced linguistically for a particular client, the volunteer could start with lower age level activities and follow the curriculum accordingly.

**Future Research**

Future research should address these same questions with more controlled, randomized studies. The use of a control group will allow future researchers to compare the children in the Ready To Learn programs to same age peers. This will further evaluate the effectiveness of the program. In addition, expanding the research to other programs, ethnicities, and races is necessary to generalize these findings because the majority of individuals within this study were from Eastern Africa. It would be interesting to see if these programs are effective for other immigrant and refugee families and if the language barrier can be successfully addressed.

**Conclusion**

Education is the equalizing power of the United States of America. An educated and
healthy public allows people to flourish with their own passions and life goals. These goals can be obstructed with a low quality education and lack of educational resources. A large percentage of immigrant and refugee students are entering school drastically behind their peers, which, as the research suggests, sends them into an educational downhill spiral. Early intervention programs give these children a chance at success. By implementing these types of programs, immigrant and refugee children will be more likely to enter school prepared and ready to learn. However, research on such programs is still limited and hampered by lack of resources within programs, language barriers, and questions about whether programs developed for mainstream families will work with immigrant and refugee families. The results of this study represent merely pilot data, but suggest that such programs have potential to be beneficial and should continue to be developed and evaluated.
References


Appendix A

ABOUT ME AND MY BODY

WHY DO THIS ACTIVITY

- To increase understanding of self-image and personal boundaries
- To enhance self-identity
- To teach the names of body parts
- To encourage children to accept individual differences

HOW TO DO THIS ACTIVITY

1. During CIRCLE TIME, tell children that this week they will be learning about their bodies. Create a discussion aimed at helping children to understand what their body is and learning the names of body parts, by saying things such as:
   - This is my BODY.
   - Here are my HEAD, my ARMS, my TUMMY, my LEGS and my FEET.
   - Where is your BODY? Let's name the PARTS of your BODY.
   - Where are your EYES? Can you point to your NECK?

2. During your discussion, help children identify the following body parts:
   - Eyes...Ears...Nose...Mouth...Hair...
   - Head...Tummy...Hands...Feet...Arms...
   - Legs...Fingers...Toes...Neck...Knees...
   - Shoulders...Back...Butt...Elbows...
   - Cheeks...Tongue...Teeth...Wrist...Waist...
   - Skin...Fingernails...Toenails...Forehead

Supplies
Newspapers or Large Pieces of Paper (1 for each child), Markers, Crayons or Chalk, Tape
Appendix B

Ages and Stages Questionnaire Scoring Distribution

1. Be sure each item has been answered. If an item cannot be answered, refer to the ratio scoring procedure in The ASQ User's Guide.
2. Score each item on the questionnaire by writing the appropriate number on the line by each item answer.
   YES = 10    SOMETIMES = 5    NOT YET = 0
3. Add up the item scores for each area, and record these totals in the space provided for area totals.
4. Indicate the child’s total score for each area by filling in the appropriate circle on the chart below. For example, if the total score for the Communication area was 50, fill in the circle below 50 in the first row.

<table>
<thead>
<tr>
<th>Area</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication</td>
<td>0 5 10 15 20 25 30 35 40 45 50 55 60</td>
</tr>
<tr>
<td>Gross motor</td>
<td>0 5 10 15 20 25 30 35 40 45 50 55 60</td>
</tr>
<tr>
<td>Fine motor</td>
<td>0 5 10 15 20 25 30 35 40 45 50 55 60</td>
</tr>
<tr>
<td>Problem solving</td>
<td>0 5 10 15 20 25 30 35 40 45 50 55 60</td>
</tr>
<tr>
<td>Personal-social</td>
<td>0 5 10 15 20 25 30 35 40 45 50 55 60</td>
</tr>
</tbody>
</table>
### Appendix C

#### Ready to Learn Progress Notes

<table>
<thead>
<tr>
<th>Date:</th>
<th>Start Time:</th>
<th>Age:</th>
<th>Gender: Male / Female</th>
<th>Case Number:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Child Name:**

**Family Goals:**

**Progress Notes:**

**Home Visitor Comments / Notes:**

**COMPLETED HOME VISIT ACTIVITIES:** (Provide a brief description of what occurred)

<table>
<thead>
<tr>
<th>PLANNED ACTIVITIES</th>
<th>AREAS OF FOCUS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ASQ-3 / ASQ-8E</td>
</tr>
<tr>
<td></td>
<td>Fine Motor Skills</td>
</tr>
<tr>
<td></td>
<td>Gross Motor Skills</td>
</tr>
<tr>
<td></td>
<td>Communication</td>
</tr>
<tr>
<td></td>
<td>Problem Solving</td>
</tr>
<tr>
<td></td>
<td>Personal / Social</td>
</tr>
<tr>
<td></td>
<td>Safe Environment</td>
</tr>
</tbody>
</table>

**Referrals Needed / Follow-up:**

- (Please notify YWCA if referral is needed)

<table>
<thead>
<tr>
<th>GGF Module:</th>
<th>Pg:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>GSK Module:</th>
<th>Months:</th>
<th>Pg:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Parent Response to Child’s Core / Behavior**

**Child Goals**

**Date / Time of Next Visit:**

**Home Visitor Signature:**
Appendix D

Date ________________________________

Case number ______________________

1. Included all parts of activity? □ Yes □ No
   Explain:

2. Followed wording of activity? □ Yes □ No
   Explain:

3. Had and used the “needed items” for activity? □ Yes □ No
   If no, why?
   Explain:

4. Skipped an entire activity? □ Yes □ No
   Explain:

Any other observations noted during this session?