DISSERTATION

ATTAINMENT OF PARENTING GOALS IN AN EARLY HEAD START PROGRAM

Submitted by

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WE HEREBY RECOMMEND THAT THE DISSERTATION PREPARED UNDER OUR SUPERVISION BY JULIE S. JAMESON ENTITLED "THE ATTAINMENT OF PARENTING GOALS IN AN EARLY HEAD START PROGRAM" BE ACCEPTED AS FULFILLING IN PART REQUIREMENTS FOR THE DEGREE OF DOCTOR OF PHILOSOPHY.

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ABSTRACT OF DISSERTATION

ATTAINMENT OF PARENTING GOALS IN AN

EARLY HEAD START PROGRAM

Early childhood programs providing parenting education and support seek to enhance home environments through comprehensive services aimed at developing nurturing relationships between parents and children. The majority of programs aimed at improving child and parent outcomes utilize the home visit as the primary means of service delivery. Home visit practitioners plan activities implemented in the family home designed to enhance child development while at the same time modeling and coaching the parent in their interactions with the child. The process of impacting child and family outcomes begins with the transfer of skills from home visitor to parent who in turn utilizes the skills to improve interactions and outcomes for the child.

Early Head Start (EHS) is one of the five largest programs serving young children in the United States that utilizes the home visit approach in the delivery of services to pregnant women, infants, toddlers, and their families. In the city and surrounding communities of Fort Collins, Colorado, the Poudre School District (PSD) serves as the grantee agency for the delivery of EHS services. PSDEHS programs utilize family mentors to conduct the home visit and parent education portion of the program. Family mentors are responsible for the planning, implementing, and assessing of all home visit activities. This study documented parental progress toward goals identified by the parent and PSDEHS family mentor during participation in the home visiting program to assess factors that may contribute to success in goal attainment.

Fifty-three families participated in the study over 12 weeks. Family mentors utilized the method of Goal Attainment Scaling (GAS) at each home visit to measure parental progress on jointly identified goals. GAS scores range from a score of -2 (much less than expected outcome) to +2 (much more than expected outcome). Identified goals fell into one of six general categories: family, financial, parenting, education/job, health/wellness, and other. Participants most often set family related and parenting related goals indicating those areas as needing improvement. GAS results indicated that while the majority of families scored below the expected outcome, all families scored within the range of -1 (somewhat less than expected outcome) and +1 (somewhat more than expected outcome). GAS scores tended to increase toward the positive range with an increase in the number of home visits received. Analysis of GAS scores among the various demographic groups present in PSDEHS revealed that home-based families had slightly higher mean GAS scores (m=-.36) than center-based families (m=-.40). Spanish speaking families had higher mean GAS scores (m=.07) than English speaking families (m=-.49). Teen parented families has slightly higher mean GAS scores (-.26) than adult parented families (m=-.36). As expected, dual parent families had higher mean GAS scores (m=-.26) than single parent families (-.52). Mean GAS scores also improved as the educational levels of mother's and father's increased.

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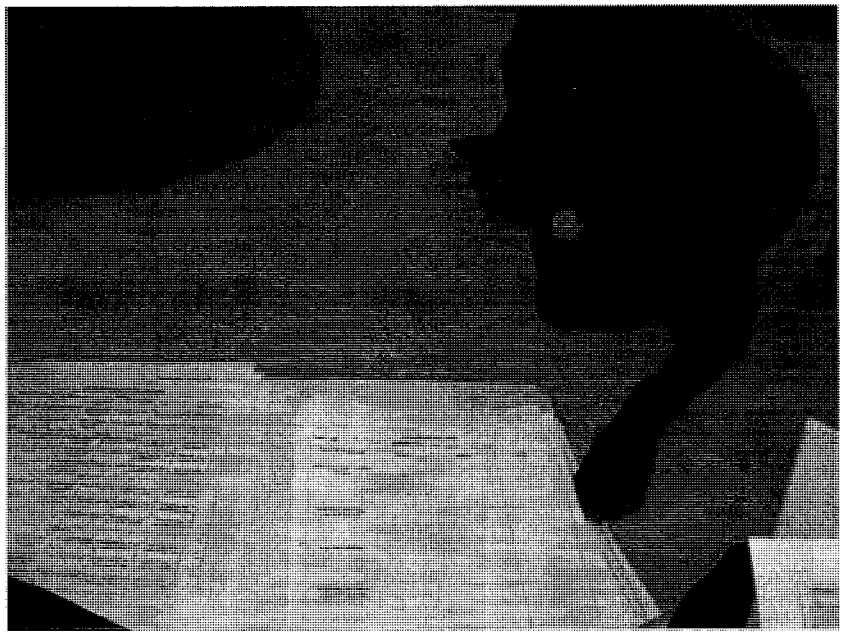
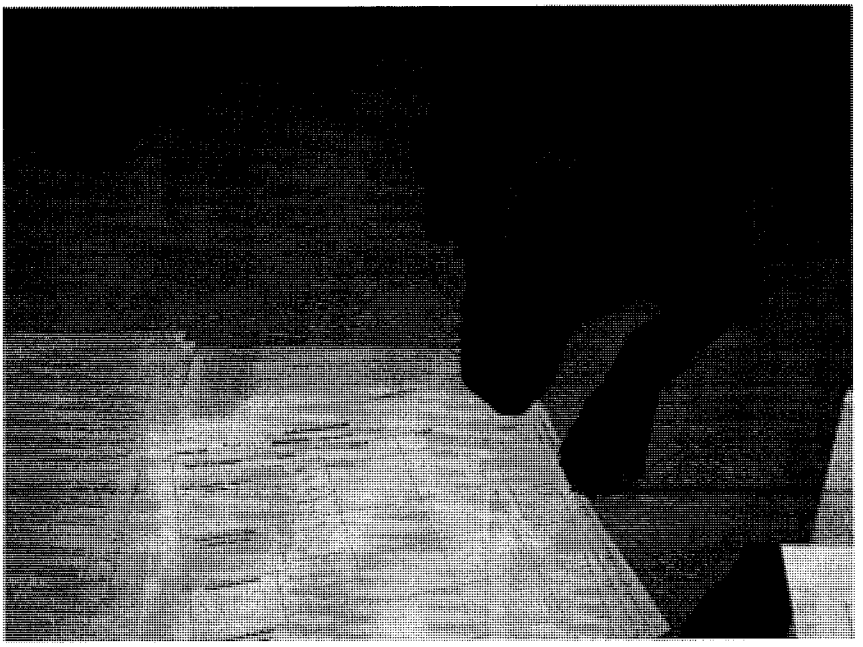


My Research Assistant, Hagan, "coding" the data.



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CHAPTER 1: INTRODUCTION

The years from birth to age three are marked by periods of enormous physical, cognitive, linguistic, social, and emotional growth. In the first years of life the primary caregivers, most often the parents, become the child's first teacher. Good parenting skills can make the difference between a poor and exceptional start in life (Brooks, 1991). Child development research points to the primary years as pivotal in the development of healthy, happy children who are eager to learn. This perspective is supported by the Committee on Early Childhood Pedagogy,

> Right from birth a healthy child is an active participant in that growth, exploring the environment, learning to communicate and, in relatively short order, beginning to construct ideas and theories about how things work in the surrounding world. The pace of learning, however, will depend on whether and to what extent the child's inclinations to learn encounter and engage supporting environments. There can be no question that the environment in which a child grows up has a powerful impact on how the child develops and what the child learns (National Research Council, 2000, p2).

Early childhood programs providing parenting education and support seek to enhance those environments by providing comprehensive services aimed at developing nurturing relationships between parents and children.

The process of equipping parents with the skills necessary to enhance their child's development is often arrived at via an indirect route. The majority of programs aimed at improving child and parent outcomes utilize the home visit as the primary means of service delivery. Brookes, Summers, Thornburg, Ispa, and Lane (2006) define a home

visit as when "a trained professional or paraprofessional comes to the home at agreed-upon intervals to offer materials, modeling, and suggestions for enhancing the social, emotional, and cognitive, and physical development of the children in the family" (p25). Home visit practitioners plan activities implemented in the family home designed to enhance child development while at the same time modeling and coaching the parent in their interactions with the child. The process of impacting child and family outcomes begins with the transfer of skills from home visitor to parent who in turn utilizes the skills to improve interactions and outcomes for the child. The underlying belief behind this practice is that child welfare is dependent upon parent and family welfare (Brookes, 2006). This delivery method allows for unique opportunities to empower the parent to be an active participant in the growth and development of their child while also focusing attention on the acquisition of important child development milestones.

Home visitation as a means for service delivery has its roots in the profession of social work. As early as the beginning of the twentieth century, professionals visited poor families in their homes with the intention of improving family outcomes and to connect families with resources available in their community (Rector, 2002). This practice has grown and evolved over time into the modern adaptation in practice today. Early Head Start (EHS) is one of the five largest programs serving young children in the United States that utilizes the home visit approach in the delivery of services to pregnant women, infants, toddlers, and their families (Raikes, 2006). The basic objectives of child and parental development activities are only part of the complex puzzle that is the EHS mission.

Overview of the Issue

The 1994 Head Start reauthorization included funding to begin a new program aimed at providing services to pregnant women and low-income families with infants and toddlers. The program, titled Early Head Start (EHS), capitalized on the recent trends in child development and early childhood education research to address the critical issues facing communities, families, and the youngest children. Governed by the Administration for Children and Families (ACF), a division of the U.S. Department of Health and Human Services, Early Head Start created an extension to the existing Head Start programs which were providing comprehensive early childhood education, child development, and related health and wellness services to prekindergarten aged children and their families (Administration for Children and Families, 2006). EHS programs were designed in response to an increased awareness of the quiet crisis facing families of infants and toddlers in the United States and growing community needs for services to benefit these families. Several major factors are cited as contributing to the crisis, including lack of adequate prenatal care, parental isolation, substandard child care, poverty, and inadequate health care (Paulsell, 2002). To address these factors, EHS programs have a triple mission that includes promoting healthy prenatal outcomes, enhancing development of infants and toddlers, and promoting healthy family functioning. While the majority of education related intervention services are targeted at preschool aged children, EHS programs are unique in that they serve the very youngest children and their families prior to entry into more formal school settings. Three purposes for implementing a program aimed specifically at this population were identified:

1) To enhance children's physical, social, emotional, and cognitive development,

2) To enable parents to be better caregivers of and teachers to their children, and
3) To help parents meet their own goals, including that of economic independence (Kamerman, 2004, p415).

In recognition of the results of early childhood brain research that have increased awareness about the importance of development in the early years, these EHS programs were created with a two-dimensioned approach; to promote healthy growth and development among children and to educate families about the importance of quality interactions that will promote development in the earliest years (Administration for Children and Families, 2003). EHS programs strive to address these issues through a comprehensive delivery method of services aimed at both children and parents.

Charged with designing EHS, experts in the field of early childhood education identified four areas of intended outcomes that serve the mission identified by the Administration for Children and Families: Child Development, Family Development, Community Building, and Staff Development. These four areas are seen, by those in early care and education, as the cornerstones essential to quality programs for young children. They would lay the foundation for the delivery of services and outline the areas of program accountability for all EHS grantee agencies. The EHS mission is accomplished through the delivery of services which include early education; home visits; parent education, including parent-child activities; comprehensive health services, including services to women before, during, and after pregnancy; nutrition; and case management and peer support groups for parents (Kamerman, 2004).

The areas of child development and family development serve as the foundational premises for the conceptual models used in EHS programs. EHS is unique among

programs for young children because of the strategy of aiming services at both the child and the family. This two generation approach allows programs to influence child development both directly and indirectly through early childhood and parent education. The parent education component of EHS services begins prior to birth with the teaching of parenting skills. After birth, the comprehensive services expand to include a variety of service models aimed at providing early childhood education in addition to parenting skills to equip parents to be the primary educator of their developing infant or toddler (C. Van Dyke, personal communication, April 19, 2007).

EHS began primarily as a home-based program with center-based services provided as a supplement or at a later time, after parents gained employment skills (Rector, 2002). This early model, as in Figure 1, is prevalent in EHS today. Programs designated to provide EHS services commonly follow one of three designs: home-based, center-based, or a combination of the two.

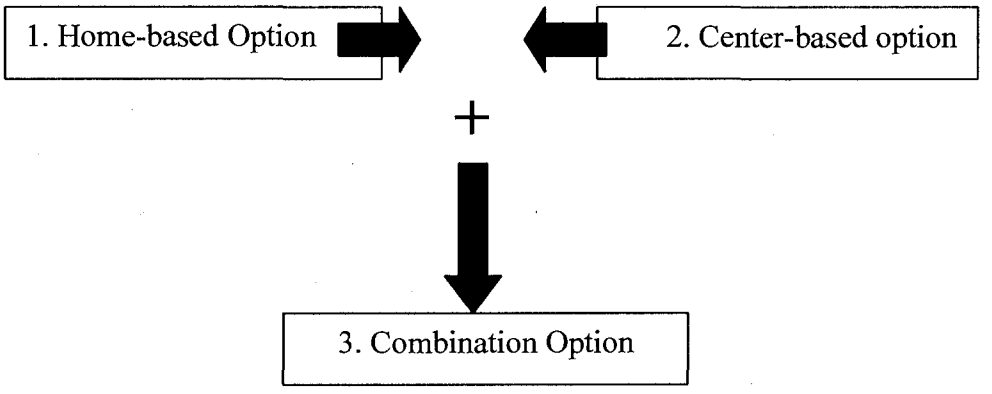


Figure 1. EHS program delivery models.

The home-based option provides services to children and their families through regular home visits and group socializations such as play groups and parent events. The center-based option provides services to children in a child care center-based program. Participants in this option receive parenting education and family support through less frequent home visits. The third option is a combination where services are provided to children through a prescribed combination of home-based and center-based services. (Administration for Children and Families, 2005).

Programs acting as grantee agencies can be public or private organizations that receive funds from the Administration for Children and Families through the department designated to run the programs: The Head Start Bureau. As of February 2007, there were over 650 community-based EHS programs serving 62,000 children in all 50 states, the District of Columbia, and Puerto Rico (Administration for Children and Families, 2007).

Accountability in Early Childhood Education

Educational policy drives decision making and practice at all levels of educational systems. Head Start and Early Head Start programs are no exception. The announcement of President Bush's initiative, "Good Start, Grow Smart", in January, 2002, marked the beginning of an increased interest in accountability for federal programs serving the youngest children and their families (Office of The White House, 2002). The desire to bring accountability standards to Head Start and Early Head Start programs has stemmed from two main causes; the increase in research highlighting the critical importance of the earliest years in child development and demands for return on investment for federal monies allocated to educational programs.

The Good Start, Grow Smart Initiative

The direct relationship of Early Head Start to the federal government and its funding creates accountability to that source to meet its established goals. The Good Start, Grow Smart initiative was created with the goal of "(preparing) children to read and succeed in school with improved Head Start and early childhood development programs". The initiative addresses three major areas:

1) Strengthening Head Start,
2) Partnering with states to Improve Early Childhood Education, and
3) Providing information to Teachers, Caregivers, and Parents (Office of The White House, 2002, p1).

The first component, strengthening Head Start, includes the establishment of program performance standards and a system for assessing the achievement of the standards called the National Reporting System (Office of the White House, 2002). This initiative directly impacts EHS programs by establishing and monitoring progress toward the program performance standards. EHS programs are periodically reviewed by the Administration for Children and Families to ensure compliance with federal standards and accountability measures such as the Head Start Performance Standards.

Research and program accountability have been a part of the EHS model from the start. Continuous program improvement was identified as an area of importance in the initial program conceptual framework. The Secretary's Advisory Committee on Services for Families with Infants and Toddlers also defined the role of research, charging that

research be used as a means to continuous program improvement at both the national and local level. According to the report issued by the committee

> Evaluation of Early Head Start is essential for determining the effectiveness of the initiative and for advancing our understanding about which services work best for different types of families under different circumstances... The Advisory Committee believes that the Secretary must approach evaluation not just as a mechanism for producing summary statistics and reports about the changes in child and family development as a result of these new efforts, but as a tool for individual programs so that they can continuously refine their practices based on feedback from their own program evaluation . . .In keeping with the Head Start national laboratory role, we encourage research that examines variations in Early Head Start experiences on child development to learn more about the effectiveness of different interventions for very young children and their families. (Administration for Children and Families, 2006, p1)

As the stakes in public education continue to rise and funding sources become increasingly strained, accountability for program performance emerges as a necessity for continuous program improvement and sustainability. Education and human service related programs are being called upon to demonstrate the efficacy of their programs in meaningful terms. As research in child development and parenting grows to include increasing knowledge about development in the early years, EHS programs have been asked to assess the portion of the program that most directly impacts the families they serve: the home visit. EHS must also work to collect data as to the impact of its programs to meet accountability requirements during its federal reviews by the U.S. Department of Health and Human Services (Administration for Children and Families, 2006).

The Head Start Performance Standards

The Head Start Act, passed by Congress and signed into law by the President, establishes program standards and other regulations that govern the program making

them directly accountable for adhering to federally mandated standards and accountability measures (U.S. Department of Health and Human Services, 2000).The Head Start Performance Standards are the "mandatory regulations that grantees and delegate agencies must implement in order to operate a Head Start and/or Early Head Start program" (Administration for Children and Families, 2007, p1). These standards provide direction for grantee agencies by outlining the objectives and mandatory features of a quality EHS program. Part 1304 of the Head Start Performance Standards outlines minimum requirements and curricular standards in the areas of health, education, parent involvement, nutrition, social, transition services, and administration of financial and facilities related aspects of the programs (Administration for Children and Families, 2007).

Part 1304.40 of the Head Start Performance Standards stipulates the requirements for EHS programs in the area of family partnerships and states:

> (a) (1) Family Partnerships. Grantee and delegate agencies must engage in a process of collaborative partnership-building with parents to establish mutual trust and to identify family goals, strengths and necessary services and other supports. (2) As part of this ongoing partnership, grantee and delegate agencies must offer parents opportunities to develop and implement individualized family partnership agreements that describe family goals, responsibilities, timetables and strategies for achieving these goals as well as progress in achieving them. (e) Parent involvement in child development and education. (2) Grantees and delegate agencies operating home-based program options must build upon the principles of adult learning to assist, encourage, and support parents as they foster the growth and development of their children. (3) Grantee and delegate agencies must provide opportunities for parent to enhance their parenting skills, knowledge, and understanding of the educational and developmental needs and activities of their children and to share concerns about their children with program staff.

In addition, Sections 1306.33 and 1306.34 outlines the requirements for the frequency and duration of home visits along with the purpose.

Section 1306.33: Home-based Program Option

(a) Grantees implementing a home-based program option must: (1) provide one home visit per week per family (a minimum of 32 home visits per year) lasting for a minimum of one and a half hours each… (5) Maintain an average caseload of ten to 12 families for any individual home visitor.
(b) Home visits must be conducted by trained home visitors with the content of the visit jointly planned by the home visitor and the parents. Home visitors must conduct the home visit with the participation of parents. Home visits may not be conducted by the home visitor with only babysitters or other temporary caregivers in attendance. (1) The purpose of the home visit is to help parents improve their parenting skills and to assist them in the use of the home as the child's primary learning environment. The home visitor must work with parents to help them provide learning opportunities that enhance their child's growth and development. (2) Home visits must, over the course of a month, contain elements of all Head Start program components. The home visitor is the person responsible for introducing, arranging and /or providing Head Start services.

The above mentioned requirements are to be met during all EHS home visits by including at each visit activities designed to address the areas of child development, family partnerships, health, safety, mental wellness, dental, nutrition and diet.

Head Start lists among its core values "respect the importance of all aspects of an individual's development, including social, emotional, cognitive, and physical growth" (U.S. Department of Health and Human Services, 2002, p 4). In addition to their mission to educate the whole child, the current operating system for Head Start and Early Head Start programs include a large family component as well as health and wellness related aspects. The decision to keep jurisdiction for these programs in the U.S. Department of Health and Human Services, as opposed to moving them to the U.S. Department of Education, lies in the commitment to educating and caring for children and families in all areas of development and health. EHS has a history of valuing the process or journey to

learning as much as the products that are a result of that learning. Programs looking to assess any part of their program must keep in mind that evaluation must chronicle the process of acquiring knowledge as much as the end results of that acquisition.

Poudre School District Early Head Start

In the city and surrounding communities of Fort Collins, Colorado, the Poudre School District (PSD) serves as the grantee agency for the delivery of EHS services. Poudre School District Early Head Start (PSDEHS) programs utilize both home-based and center-based delivery models. Families participating in the home-based option typically receive two to four home visits per month as the primary delivery method for curriculum related to child and parental development. In contrast, families participating in the center-based option receive child development services through a child care center partnered with PSDEHS and receive one to two home visits per month focusing on the parental development component.

PSDEHS programs utilize family mentors to conduct the home visit and parent education portion of the program. Family mentors are responsible for the planning, implementing, and assessing of all home visit activities. Like many programs serving young children, PSDEHS programs experience frequent staff turnover. In addition, many of the family mentors have not participated in formal training or coursework in early childhood education or related fields. In light of these factors, staff training and evaluation become an important part of educating and retaining high-quality family mentors in order to maintain continuity of care and to serve their intended mission of

improving outcomes for children and families (C. Van Dyke, personal communication, April 11, 2007).

Statement of the Problem / Purpose of the Study

Evaluation plays a critical role in determining the efficacy of any intervention. Like other EHS programs, the PSDEHS programs participate in the goal setting process with each family upon entrance into the program. Goal setting is first introduced at the program's inquiry visit, typically the first visit from PSDEHS personnel. The purpose of this visit is to introduce the home visitation process and the EHS program as well as an explanation of ongoing partnerships and goals. Family mentors spend time establishing the family partnership and connection prior to establishing goals to allow for the free exchange of information about the child and family (D. Helgoth, personal communication, December 7, 2007). This process of collaborative goal setting gives family mentors direction for future delivery of services and provides families with an objective to work toward.

Family partnerships consist of a series of three steps that the family and family mentor complete together which will help them to identify goals that they can strive toward. Phase one requires the family mentor to present a Community Resources List which identifies all of the human service agencies in operation in the county. Families are asked to identify each agency that they are currently working with, have used in the past, or would like more information from. This provides information to the family mentor for use in future planning and social service referrals. Phase two utilizes the Family Interview Summary. This is a report filled out by the family and mentor once rapport is

established between the two parties. The form asks guiding questions designed to get the family thinking about successes, challenges, potential areas of change, and elements that they would like to maintain as they are. The form and its questions are used to open dialog between the family and family mentor to openly discuss issues of interest or concern to them. The Family Interview Summary lays the foundation for the third phase, family goals. This final phase brings together all of the previously gathered information to assist the family to identify goals that they can work toward to improve their current situation. The role of family mentor in this stage of the process is to assist the family in creating specific, measurable, attainable, realistic, and timely goals. The objective of this goal setting process is not to highlight deficits in current practice, but to move the family forward with the creation of focused objectives that they can work toward (D. Helgoth, personal communication, December 7, 2007). The individualization of this process allows for family mentors to honor what each family brings to the process of parent education and to define success or progress toward the identified goals as opposed to conceptualization of what it means to be a successful parent.

Beyond the establishment of family goals, measures are not currently in place to formally revisit the goals. Without a system to periodically document progress toward or attainment of family goals, the original objectives for the family can be easily forgotten. The outcomes of parenting education are often broad. Goal setting and achievement of those goals are one way to examine the efficacy of practices in parenting education. The mission of EHS programs addresses the need for parents to master skills that will empower them to be active facilitators in their children's healthy growth and development (Administration for Children and Families, 2003). EHS programs must

engage in continuous program improvement efforts as mandated by the Administration for Children and Families (2003). A systematic review of the goal attainment process will assist family mentors in continually setting, examining, and revising the focus of their parenting education interventions.

What is lacking from PSDEHS documentation is not only the ability to record progress toward established goals as a result of participation in the home visitation process over a period of time, but an analysis of the efficacy of the delivery method for those services. Providing a way for EHS administrators to examine the impact of program design and delivery on parental success or challenge will offer information for future program models. Therefore, the purpose of this study is to examine parental progress toward their identified goals while engaging in the EHS home visitation process.

This research will add to the field of study by introducing a process for measuring the attainment of identified parental goals. Parent education is often defined in terms of child developmental milestones. Achievements of parenting education programs are often measured in terms of how well a child is reaching identified developmental milestones and not in measuring the progress of a parent in utilizing the lessons on a regular basis and in naturally occurring situations. The current literature in the field supports the need for further development of curricula as well as measurable goals and objectives for parent education. Upon conducting a literature search for parent education assessment tools, few resources were identified that did not rely solely on parental self-report. The use of measurement tools that combine parent self-report with evaluation from a secondary source, family mentor, appears to be an area lacking current research and development.

It is beyond the scope of this study, to introduce assessment instruments that will measure gains in each of the mandated EHS areas of child development, family partnerships, health, safety, mental wellness, dental, nutrition and diet. However, the introduction of a method to measure the goals established by parents and family mentors may well address topics in any one of those eight areas. Currently, no formal measures are in place to assess gains made in the area of family partnerships which includes the development of parenting related skills.

Current societal attitudes toward the family unit drive policy and resources allocated to parenting education. Concerns over values and individual rights often cloud the need for quality preventive programs. Many parent education programs utilize the home visit model. The majority of empirical research focuses on measuring the ultimate gains for the child. Outcomes are typically measured in terms of the child's successes in school or their ability to relate to others in social situations. The school achievement data presents perhaps the most compelling argument for investing in parents. Home visiting and parent education are a common component of early childhood education, but seem to wane in frequency as children enter formal schooling environments in the K-12 arena.

Research Questions

The purpose of this study was to observe parental progress toward goals identified in collaboration by the parent and EHS family mentor during participation in the EHS home visiting program. The specific research questions are:

Question #1:

What types of goals do participants report?

Question #2:

What are the outcomes observed while participating in PSDEHS home visitation programs?

Question #3:

What is the relationship between the PSDEHS service delivery model (home-based vs. center-based) and the attainment of parental development related goals?

Question #4:

What patterns and relationships emerge from the collected data as predictors for goal attainment based on demographic data?

Definition of Terms

Center-based service delivery option- EHS services are delivered through contact with the child care center where their child is enrolled and fewer home visits.

Family Mentor - the EHS staff member assigned to work with parents to provide comprehensive services to children and their families through home visits and group socialization activities.

Goal Attainment Scaling (GAS)- a methodology for measuring the achievement of any type of established goals.

Goals- outcomes related to parenting skills established by Early Head Start and participating parents of infants and toddlers who receive home visitation.

Home-based service delivery option- EHS services are delivered through regular home visits and group socializations such as play groups and parent events.

Parents- those who have made a long term commitment to a child to assume responsibility for that child's well being and development. This responsibility includes providing for the child's physiological and emotional needs, forming a loving emotional relationship, guiding the child's understanding of the world and culture, and designing an appropriate environment.

Parenting Education- a process that involves the expansion of insights, understanding and attitudes and the acquisition of knowledge and skills about the development of both parents and of their children and the relationship between them.

Assumptions and Potential Limitations

Conducting a study of one specific program or population presents some unique challenges. The generalizability of this project is limited to EHS programs that utilize the same delivery methods, models, and curriculum as the PSDEHS programs. Therefore, it may be applicable to the program for which it was originally designed and implemented. EHS programs generally serve similar populations, but unique characteristics of the PSDEHS participants may limit the generalizability of these findings.

Diffusion of treatment suggests that the successful collection of data is dependent upon the adequate training of the family mentors and identical implementation of the GAS procedures. There are several potential limitations to the use of PSDEHS family mentors as data collectors. First, the goal setting process is complex. EHS family mentors are currently required, as part of the program, to set goals with each family as they enter

the program. The fact that they are participating in the goal setting process is not, however, an indication of how they engage in the goal setting process or what types of goals are set. Family mentors who have little experience or training in assisting families through this process may have difficulty in helping them to set realistic and attainable goals. In addition, improper and inconsistent data collection will impact the outcomes of the study. Family mentors are less likely to participate in regular and accurate data collection if it is seen as difficult, time consuming, or otherwise inconvenient. Thirdly, family mentors may also have anxiety about how the data will be used and who will have access to it creating social desirability bias. The accuracy of the data collected may reflect the anxiety on the part of the family mentor to demonstrate improvement as a result of their involvement in the delivery of services to the family.

Recruitment of participants is crucial to the success of any study. Participation in this study was voluntary. This may present limitations as families who choose to participate may represent those that are already high functioning families or those who feel that they can adequately meet their stated goals. Families may choose not to participate for a variety of reasons. Some families expressed concern over documentation of their activities due to an ethical and legal mandate that any concerns be reported to the appropriate agencies.

Goal setting is a difficult process. The accuracy of collected data is dependent upon the family mentors assisting the families with the selection and scaling of appropriate goals. Families who choose goals that are too easily attained may skew the data toward more positive outcomes as families that choose difficult goals may impact the data toward a more negative result.

It is not possible to control for all outside influences that may impact parenting ability. One cannot ethically or practically keep families from engaging in activities that may enhance their parenting skills outside of participation in the EHS home visits. The rationale for center-based families receiving fewer monthly home visits is due to the contact that they have with the child care center staff that care for their child on a regular basis. It is assumed that parents will be interacting with these child care providers who model developmentally appropriate child care practices enhancing their parenting skills as a result.

Varying length of exposure to the intervention may also limit the findings of the study. Families participating in this study will be at varying points in their relationship with PSDEHS or other EHS programs. It is likely that the sample contained families who are new to the program at the beginning of data collection and families who have an established relationship with the program and who have participated in parenting education activities over varying lengths of time. The GAS procedures of individualized goal setting control for this statistically, but not practically. Family mentors assisted families to create goals that are realistic and attainable goals and also reflect their current level of functioning.

Delimitations

It is beyond the scope of this study to make comparisons between EHS programs; therefore, this study will be limited to families participating in the PSDEHS program. Specifically, this study will compare two groups within the PSDEHS programs; home-based and center-based families. To assess the efficacy of EHS home visitation models in

general, a control group of families not participating in EHS home visits would be necessary for comparison. Instead, this study aims to examine differences found between families participating in differing options of the same program.

Time is also a delimitation imposed upon this study. For practical purposes, data collection over a long period of time is not feasible. The window of time to demonstrate change over time will be limited and could potentially impact the outcome of the study.

Researcher's Perspective

Several years ago, I began working with PSDEHS on a project to examine their chosen home visiting curricula. The program administrators and staff impressed me with their willingness for self reflection and program examination. During our initial meetings, they were continually expressing a desire to tackle larger and deeper issues that addressed their own perceived weaknesses. In addition to being ready for their federal review, they expressed a desire to continuously improve the delivery of the services provided to enhance the outcomes for families and children. As I watched them work tirelessly at this task, my own thoughts began to formulate as to how I could contribute to the process of renewal and discovery that they so eagerly embraced. It is in that spirit that this study was born. Without the enthusiastic participation of the administrators, family mentors, and families of PSDEHS, this study would not have come to completion. I know with certainty that the evolutionary process of improvement is just beginning for this program and I look forward to being a part of the team.

My initial interest in this project stems from my years in the field of early childhood education. The critical importance of the early years in a child's development

and later success in academics and in life are reflected in the efforts of programs like EHS. These programs are working toward creating nurturing home environments that will provide a solid foundation for important early learning experiences. My philosophy of education is one of inclusivity where all aspects of a child's environment contribute to development, but I firmly believe that the home environment is the most critical factor in shaping a child's developmental trajectory.

EHS programs strive to serve the most challenged of families to make a positive impact upon the experiences for all involved. Parents are empowered to become positive, active participants in their child's development and learning in addition to receiving support to further their own educational or life goals. This influence directly impacts the likelihood that the family will become stable and loving, well equipped to nurture all members in their own development.

Impacting child development and learning at this fundamental level is at the heart of the passion that I feel for making the most of the important early childhood years. It is my hope that the contributions that this study will make to the PSDEHS programs will be shared with other EHS programs who seek to engage in continuous reflection and program improvement. In addition to the impact that this study will have upon the program and its participants, contributing to a program as well known and respected as EHS will allow me to grow professionally as I expand my professional experience into the arena of research.

CHAPTER TWO: REVIEW OF LITERATURE

Child development researchers and educators have long advocated for the intersection of early education and the delivery of family services. Bronfenbrenner's ecological model defines the ecology of human development as involving the scientific study of the interrelationship between an active, growing human being and the settings or contexts in which the developing person exists. In addition, his theory asserts that development is also influenced by the relations among these settings and the larger cultural and community contexts in which the settings are embedded (Schiamberg, 1988). From this perspective of development, programs providing comprehensive child and parent education will serve to bridge the gap between home and learning environments.

In today's society, parenting education takes on many forms. The traditional model evokes images of a voluntary, group setting where parents came together to learn the basics of raising children. Often, these courses were offered as new parents prepared for the birth of their child. Traditional programs were conducted outside of the home and were typically facilitated by a nurse or teacher. Parenting education has evolved with the body of knowledge that has emerged from brain research and developmental psychology indicating the benefits of stimulating and appropriate home environments for young children.

Parenting skills reflect the changing societal attitudes toward children and families. Today's techniques of guiding and encouraging the mastery of developmental milestones are in sharp contrast to the parenting expectations of a few decades ago. Brooks (1991) defines parenting as "a process of interaction between parent and child. As the parent nourishes, supports, guides the child to maturity, both parent and child are changed, and that change in turn transforms the interaction between the two" (p23). Parenting education strives to inform the process of guiding a child so that the parent enters into the relationship more confident in their abilities to provide nurturing environments critical to the optimal development of the young child.

History of Parenting Education

Early childhood education has a history of being the by-product of social projects aimed at strengthening the family and community. The first child care programs were in response to the increase of women entering the work force. In the United States during World War II, it became socially acceptable for women to enter the workforce and a corresponding increase in out of home child care and preschool programs was observed. Traditionally, women were seen as capable mothers due to a perceived biological predisposition to motherhood. It was thought that parenting classes were not needed because mothers would instinctively know how to raise children. Today's parenting education programs acknowledge that even the most capable, balanced, loving parents benefit from guidance in the art of raising children (Powell, 1989).

A traditional core American value has always been that the responsibility for determining the child's best interest lies first and foremost with the parents. It is this

value that guides the relationship between parents and early childhood education programs even today.

> Recognition of the family as the child's primary socialization agent has been accompanied by periodic calls for monitoring parental performance and by recommendations for providing parents with childrearing information and guidance. It has been argued, for instance, that every child deserves a trained parent (Powell, 1989, p5).

Current literature on the increased focus on parenting and parent education cites two primary reasons for the attention. Most often mentioned is the increase in the number of working single and dual parent families. The rise in numbers of women in the workforce, whether of necessity or choice, has led to a larger availability of child care and preschool options as well as growing concerns over the quality found in the child care arrangements. The second reason highlights growing concern about the ability of families to provide optimal childrearing environments in the context of widespread changes in the social connectedness of families, neighborhoods, and communities (Powell, 1989, p1). As technology, business, and industry allows extended families to live farther from one another, parents often look to neighbors and friends for assistance in meeting the demands of parenthood. This fact removes the new parent from the resources that their parents and relatives can provide such as the modeling of appropriate discipline techniques or decision making in the best interest of child and family provided that these were worthy models of parenting technique.

The Role of Schools

Schools are increasingly called upon to partner with families to ensure that children are supported in all areas of their lives. Goal number eight of the Goals 2000: Educate America Act of 1994 challenged educators to create "school partnerships that will increase parent involvement and participation in promoting the social, emotional, and academic growth of children" (Crosser, 2005, p142). Since 1998, Head Start programs have mandated parent participation in the classroom in addition to providing parent education through regularly scheduled home visits and parent events (Administration for Children and Families, 2003).

Research evidence suggests that children perform better in school when parents are involved regardless of age, socio-economic status, or gender. Several studies have correlated parent involvement with higher achievement, improved attitudes, increased school attendance, fewer discipline problems, higher aspirations, and decreased dropout rates. In addition, studies have found a relationship between parent involvement and reading achievement, lower numbers of grade retention, and fewer referrals for special education services (Crosser, 2005). While educators have long recognized the importance of families in the care and education of the child, studies have fueled this belief by concluding that family variables were more powerful than school variables in predicting academic performance (Powell, 1989).

Parenting Theory

Any quality parenting program must have a firm grounding and foundation in the most recent empirically proven theory. Theories about parenting provide parents and parenting educators a basis for defining the role of the parent, determining best practices in parenting, and providing a means for appropriate decision making and action within the family dynamic. Family systems theory examines the interconnectedness of the family unit. Children, while individuals in their own right, act upon and are influenced by the family unit that surrounds them. Parenting theory seeks to provide a model through which we can begin to foster discussion regarding the inner workings of families and how parents can work to create and facilitate positive connections among family members.

Marienau and Seagal (2006) acknowledge that "for most people, regardless of personal qualities, life circumstances, and overall preparedness, being a parent can be among the most challenging tasks of adulthood (p768). Parenting is often described as a journey or a trajectory filled with celebrations and crises. Education aims to fortify parents with skills to make the most of every celebration and to learn from the crises. Parenting education provides and models several aspects of parenting from fostering language development to appropriate discipline to seizing on the natural opportunities for learning that occur in everyday life. The majority of parenting programs are aimed at parents of young children, between the ages of zero to five. Parenting education acknowledges that the parent's job is not finished at the conclusion of the child's fifth year of life, and programs are in existence that address parenting across the lifespan.

Brooks (1991) has identified eight building blocks of parenting: (1) modeling, (2) trust, (3) respect, (4) love and discipline, (5) communication, (6) honesty, (7) positive

statements, (8) time, attention, and concern. The first building block, modeling supports the idea that parents are in a unique position to model strategies for coping with every day stressors and situations that will help children develop into independent and responsible adults. Children are continually taking cues from parents such as to how to react in specific circumstances, learning appropriate social behavior, and learning how to manage the stresses inherent in life. "Parents who express warmth, happiness, consideration, and respect in their daily handling of the child, who are gentle and respond to children's needs with smiles and humor, help their children to develop a positive approach to life" (Brooks, 1991, p 40). Parenting often requires self reflection of one's own behavior and the ability to know whether or not that behavior is sending a positive message to the child.

Trust, the second building block, emphasizes the confidence that effective parents have that they have instilled children with the tools to navigate the social world of family, friends, school, and society. Trust allows the parent to intervene when necessary to change behavior so that the child eventually learns to meet problems head on with solutions of their own creation. Trust allows parents to set appropriate limits, shape behavior, and engage in mutual problem-solving discussions with the child (Brooks, 1991). A trusting relationship sets the stage for all other interactions between the parent and child.

Respect allows for the parent to view the child as a separate and valued individual. Children are not objects to be manipulated, but rather thinking and feeling human beings ready to explore, learn, and conquer their environments. Brooks (1991) states, "Children need to be interacted with and talked to with as much courtesy and

consideration as you would expect for yourself" (p40). Appreciating the uniqueness of childhood is an important task of parenting. Child development research has shown that toddlers are not going to think and act in the same mature ways that an adult would. Parents with an understanding and appreciation for the uniqueness of toddlerhood are much more likely to embrace the successes and challenges encountered during this time of exploration and growth.

Love and discipline are integral to the parent-child relationship. Loving in and of itself does not make an effective parent. Parents who use appropriate strategies to discipline their child demonstrate the love and caring that exists between parent and child. Discipline is a necessary part of parenting. Setting and reinforcing limits communicates to children that parents are dependable and trustworthy.

Communication, honesty, and positive statements complement each other in the building blocks to parenting. Open and honest communication teaches children that parents value their opinions and builds trust between parent and child. Brooks (1991) emphasizes the importance of sending accurate messages to children. "When parents do not match their behaviors with their words as they go about setting limits, children get mixed messages. When children get too many mixed messages, they begin to distrust what parents tell them, or they begin to distrust their own perceptions. Either result presents problems" (p41). Time, attention, and concern give parents the opportunity to become involved with their child in addition to the demands of parenting. Showing interest in the child, as stated in the research on the effects of parent involvement in schools, ensures a greater return on the investment.

A Framework for Parenting Education

The vision of the National Parenting Education Network (NPEN) is that "all parents/families will have the information, resources, and support needed to provide a nurturing relationship and an optimal environment that will encourage their children's healthy growth and development" (McDermott, 2006, p742). The mission of the organization is to advance the field of parenting education. NPEN defines parenting education as "a process that involves the expansion of insights, understanding, and attitudes, and the acquisition of knowledge and skills about the development of both parents and of their children and the relationship between them" (McDermott, 2006, p742).

Advocates for parenting education often cite outcomes as the argument for supporting these programs. Two outcome areas commonly mentioned are child competence and parental self-development. Parenting educators must be knowledgeable in areas of child development, parental concerns and development, and adult learning. NPEN has identified four core principles that guide and define the profession of parenting education.

NPEN Core Principles and Beliefs

Parents can meet the needs of their children most effectively in the context of a respectful, responsive, and supportive relationship. NPEN also believes that parents bring strengths to their role as well as unique histories, goals, values, and beliefs that need to be understood.

Parenting is a lifelong dynamic process where adults can learn and develop along with their children. NPEN believes that parenting is influenced by the social, economic, and psychological context of families, communities, and cultures. Parenting education can be an effective resource for a strength-based approach to serving families.

Parenting educators:

- Are individuals whose background include preparation in the following areas: child development, adult development and learning, family relationships, parenting education, and interpersonal group facilitation;
- Continually expand their knowledge base of issues and topics relevant to children and families;
- Work toward developing multiple perspectives to address the diversity of families, build networks, share resources and advocate to effect change on behalf of the families they serve (McDermott, 2006, p748-749).

By outlining a core set of guiding principles, NPEN has defined the practice of what it means to be a parent educator, and has identified areas of focus for those interested in furthering the scope and reach of the field.

Parenting Education as Prevention

Parenting education theory extols the virtues of educating all parents regardless of education level, socio-economic status, or race. However, research on parenting education indicates that it is most urgently needed for parents and children deemed "at-risk". Nicholson, Brenner, and Fox (1999) found that the youngest children remain the highest group at-risk for instances of child abuse with 78% of child abuse related

fatalities occurring among children under the age of five years old (p247). One goal of parenting education is to reduce these statistics by teaching parents skills needed to better manage children's challenging behaviors.

While incidents of child abuse span socio-economic and cultural lines, certain parental characteristics have been correlated to both harsh discipline practices and increases in problem behaviors in young children. Several studies have identified young, single, less-educated lower-income mothers as more likely to use higher levels of verbal and physical punishment, to practice less-positive nurturing behaviors, and experience higher levels of children's behavior problems than older, married, more-educated middle-income mothers (Nicholson, 1999, p247). In addition, low-income mothers were more likely to spank their children more often and to be less responsive to the needs of their children. Numerous studies have demonstrated a link between low socio-economic status, a high degree of harsh discipline, and a lessened display of maternal warmth (Nicholson, 1999, p 247; 2002, p362). One explanation for these findings is the inherent nature of living in poverty with its high stress environment where lack of income is a large source of that stress. Parenting education seeks to break the cycle of negative parent-child interactions by teaching parents alternatives to harsh disciplinary actions. In addition, parenting education seeks to further the skill base of parents to assist them in providing nurturing environments for their children.

Best Practices in Parenting Education

Parenting education aims to focus on areas of growth and potential for the parent and child. Often in interactions with parents, communication from teachers and

caregivers centers on problems and deficits. Parenting education aims to create environments where the educator is seen as a family friend and mentor as well as a knowledgeable professional. Three major ideological premises to effective parent education programs identified in the literature are programs: (1) work to match the program delivery with parent populations, (2) work toward a realignment of relations between program staff and participants, and (3) pay increasing attention to the social context of parent functioning (Powell, 1989, p 90). These three components reflect a shift in focus by meeting the needs of the clients, in this case the parents. Parents deemed at-risk are no longer left to seek parenting programs on their own; access is frequently paired with public child care and preschool programs as well as with other social service agencies.

In creating working mentor-parent relationships, Marieneau and Segal (2006) suggest being mindful of two questions:

1) What opportunities for learning do these challenges present?
2) How can the parent be supported further in developing her or his skills and habits for continual learning and growth (p768)?

These questions place learning at the heart of the experience for the parent. The authors advocate utilizing what we know about adult learners to structure a parenting education program. They believe that any parent may find success in learning from their own experiences and growing in their skills and abilities provided that the parent is motivated to change and is in a supportive environment that encourages their learning and development.

Marieneau and Segal (2006) also point out the importance of the parenting education facilitator. "Another key part of the equation is the presence of professionals equipped to help individuals mine lessons from their parenting experiences; face the risks of changing their values, attitudes or behaviors; and build a stronger foundation of knowledge and skills relevant to parenting" (p769). Experiential learning and reflection lie at the center of best practices in parenting education. Facilitators must be equipped to guide parents on a journey that utilizes both their experiences as capable parents and their ability to reflect upon their parenting skills and style to work toward positive changes in behavior (National Parenting Education Network, 2007).

Home visiting is one approach to the delivery of parenting education programs. Home visits are unique in that clients, in this case the parents, are able to develop skills in the environment where they will perform them in an effort to maximize independence and mastery. Sweet and Appelbaum (2004) describe the practice of home visiting as,

> Based on the belief that parents mediate changes in the behavior and abilities of their children. Typically, home visitors work to promote parents' skills and interactions with their children rather than working with children directly. By providing services in the home, many of the barriers to program participation may be reduced. Most home visiting programs are preventive in their intent and frequently target families whose children are at risk for less than optimal development (p1436).

The delivery of parenting education activities in a home setting puts the home visitor in the unique position as a guest in the client's home. While this may increase the likelihood of authentic learning experiences for the parent, it may potentially compromise the effectiveness of the home visitor and the activities attempted during the visit.

Parenting Education Curricula

PSDEHS utilizes established curricula to lend support to the home visitation process. These curricula draw upon research in parenting, parenting education, and child development to provide structure and rationale for the activities implemented during the visit. PSDEHS programs have chosen home visit curricula that address program goals for parental development. Two primary curricula are used in the planning of home visits: Partners in Parenting Education (PIPE) and Partners for a Healthy Baby.

Both curricula utilize supervised parent-child activities to focus the parent on the child's needs and emotional communications (Perkins, 2002). This supports the fundamental mission and goals of EHS programs to strengthen parent/child relationships (C. Van Dyke, personal communication, April 11, 2007). In addition, several additional curricula are used as reference materials in the home visit planning process: Creative Resources, Simple Steps, Baby and Toddler Play, Active Learning 123's, Touch Points, and CARES (D. Helgoth, personal communication, December 7, 2007). Common themes that emerge from the chosen curricula can be used to assist in the development of appropriate goals for families.

Developmental checklists, such as the Ages and Stages Questionnaire, allow PSDEHS family mentors to record child growth and development at specific points in time or to screen for atypical developmental patterns. In addition, family mentors have access to curricula to use as resources when designing parental development activities for their home visit plan. Partners in Parenting Education (PIPE) and Partners for a Healthy Baby, a curriculum developed at Florida State University, are the primary models in use

to develop activities to address the parental development component of the home visit. (C. Van Dyke, personal communication, November, 10, 2007).

Partners In Parenting Education

PIPE was developed by the organization How to Read Your Baby, a non-profit established in 1982 in Denver, Colorado. The mission of How to Read Your Baby is to "promote healthy family relationships by strengthening the attachment between the primary caregiver and the child, thus improving the confidence and resiliency of the child" (How to Read Your Baby, 2007). Originally developed as a curriculum for teen parents, the PIPE curriculum is the result of a collaborative process between researchers at the University of Colorado Health Sciences Center and parenting educators who work with high-risk parents in a variety of early intervention programs. It has since been adopted by programs with diverse models and clients to impart the goals of parenting education in a variety of settings. The philosophy statement from How to Read Your Baby (2002) states,

> The PIPE model and curriculum are designed to draw on the strengths of each parent to help the parent become more emotionally available. Our belief is that the skills of emotional availability can be learned and will become internalized if parents have the right information and have the opportunity to practice with the support of a knowledgeable and caring educator or home visitor. This sharing and caring can lead to a new and enduring internalized model of behavior (p2).

The PIPE model utilizes supervised parent-child activities to focus the parent on the child's needs and emotional communications (Perkins, 2002). When used in a home visit setting, the PIPE curriculum advocates for a partnership instructional model where the home visit practitioner works together with the parent to:

1. Educate and empower the parent to be the most consistent and pervasive force shaping the life of the child.
2. Instruct the parent to allow the baby to become the teacher.
3. Facilitate and coach the parenting process.

The goal is to familiarize the parent with the cues presented by their child to make the job of parenting easier. Interactive activities are included to enhance the communication and bond between parent and child. The PIPE curriculum is divided into three units: Listen, Listen, Listen, Love Is Layers of Sharing, and Playing Is Learning (How to Read Your Baby, 2007).

Throughout each of the three units of the PIPE curriculum, there are eight emotional development concepts identified by How to Read Your Baby as critical to effective parenting. The principles of each core concept are woven throughout the 28 lessons of the curriculum. The concepts build upon one another and are repeated so as to facilitate mastery through the repetition of content. The eight core concepts are:

1. Shared Positive Emotions: Building an emotional connectedness by sharing positive emotions.
2. Regulation: Behavior management through anticipatory response and quiet discipline.
3. Temperament: Individual differences and individualized parenting.
4. Autonomy: Respecting the child's view, developing mastery skills, and using scaffolding techniques.
5. Communication Skills: Listening, relationship building, language, and problem solving.

6. Emotional Refueling: Time when parents can refresh and renew.
7. Trust: Being constant, reliable, and supportive; feeling safe.
8. Interdependence: Sharing commitment to another; feeling a unique connection or sense of belonging; attachment (How to Read Your Baby, 2007).

The Listen, Listen, Listen unit consists of activities that focus on emotional communication, regulation skills, and respecting the child as an individual. Eight topic areas comprise the Listen, Listen, Listen unit: Cribside Communication, Patterns and Expectations, Baby Cues, Tune In Tune Out, Floor Time, Learning Language, Music and rhythm, and Reading to Baby. These areas address key aspects of development and the parents' role in facilitating the attainment of developmental milestones. Cribside Communication, Patterns and Expectations, Baby Cues and Tune In Tune Out teach parents to focus in on the messages that babies and toddlers send about how they are feeling at any given time based upon their observable state of awareness. In addition, the lessons address the importance of reading cues and responding to them appropriately. Lessons range from teaching the importance of consistent and appropriate responses from the parent to provide a stable pattern to the child's natural routines to facilitating communication between parent and child based upon responsiveness to non-verbal behavioral cues presented by the child (How to Read Your Baby, 2007).

All four of the remaining areas address building aspects of the parent- child relationship that lay the foundation for healthy development. Floor Time, Learning Language, Music and Rhythm, and Reading to Baby teach parents skills that will enhance

exploration, communication, and independence. Floor time is a widely practiced technique for facilitating play with an infant or toddler. In this section, family mentors address the importance of providing safe and stimulating environments for the child to explore and learn. In addition they teach parents to scaffold experiences for children so that they may build confidence and autonomy. Learning Language, Music and Rhythm, and Reading to Baby model skills for use during the infant/toddler years, a critical period of early language development. The last three sections of the Listen, Listen, Listen section aim to teach parents about the importance of developing receptive and expressive language abilities as well as introduce the ritual of reading with your child. The theme of communication is woven throughout all three units of the PIPE curriculum (How to Read Your Baby, 2007).

The Love Is Layers of Sharing unit focuses on building stable, loving relationships. Ten topic areas comprise the Love Is Layers of Sharing unit: Love is in the Palm of Your Hand, Each Child is Different, Love Needs a Safe Base, Joy and Laughter, Touch Tones, Attachment, Love Is Letting Go, Love and Limits, Love is Sometimes a Rocky Road, and Emotional Refueling. These lessons aim to teach parents how to nurture positive emotional bonds with their child. Family mentors use this section of the curriculum to educate parents about setting and maintaining appropriate behavioral limits, the importance of attachment to development and learning, and to remind parents that taking care of themselves and their own needs is a critical part of being an effective parent. Creating and maintaining positive relationships between parent and child are critical to the basic well being of both parties. The theme of communication is evident throughout the lessons in this unit. The final unit will build upon the components of

communication and relationships established in the prior units and introduces the importance of play (How to Read Your Baby, 2007).

The final unit, Playing is Learning, focuses on the power of play to promote learning. The ten topics in this unit are designed to facilitate the parent's role in nurturing play and exploration with their child. The unit is designed to help parents understand how play is related to learning so that they may take a more interested role in developing and implementing activities designed to engage their child in play. The ten lessons that comprise the Playing is Learning unit are: Playing Is Learning, Playing Is Learning About Differences, Baby's First Teacher, What Are Children Really Learning?, Learning the "Do's", Roadblocks to Learning, Playing Stimulates the Senses, Playing Is Imitation and Turn Taking, Playing Is Communication, and Playing Is Problem Solving. The activities of this unit assist parents to identify appropriate opportunities for play, to understand that play is a valuable means of learning for infants and toddlers, and to empower parents to see their role as a facilitator of learning and play (How to Read Your Baby, 2007).

Partners for a Healthy Baby Home Visiting Curriculum

The Partners for a Healthy Baby Home Visiting Curriculum brings together knowledge from the areas of neurodevelopment research, infant mental health, and evidence-based best practices. The primary goal of the curriculum is for families to participate in activities designed to promote warm, nurturing relationships, healthier lifestyles, the recognition of early health and developmental problems, as well as ways to support and enhance their child's development (Florida State University Center for

Prevention and Early Intervention Policy, 2007). The curriculum was developed in 1998 at the Partners for a Healthy Baby Institute which is part of the Center for Prevention and Early Intervention Policy at Florida State University.

The Partners for a Healthy Baby Institute was created in response to the lack of training opportunities and educational resources materials available for home visiting professionals. Research was conducted through the Institute to establish the effectiveness of the practice of home visiting. That research revealed that the content addressed during home visits directly correlated with program outcomes. The curriculum is designed to provide a planned sequence of topics deemed critical to creating a family centered intervention approach. Handouts utilized as part of the curriculum concentrate on such topics as including and supporting early language and literacy development, providing environments that support independent movement, choosing quality child care, providing appropriate guidance for young children, and the importance of routines for young children. The Center for Prevention and Early Intervention Policy states the mission of the curriculum as (2007) "our hope is that these curricular resources will help home visitors effectively communicate these critical topics with families, and that families will provide the social emotional, intellectual, and physical support young children need to thrive" (p2).

Examining Poverty

The theory of change underlying early childhood programs like EHS is that targeting the parents will have positive impacts upon the experience for the family in the areas of family functioning, parental health and wellbeing, child health and safety, and child development. By creating a more positive environment at home, these programs

hope to impact future educational and work related outcomes for the child. Researchers who study poverty and its effects on children and families argue that in order for these intervention strategies to be successful, interventionists must understand the culture of poverty and work to overcome divides that may exist between the norms of one social class and another (Cohen, 1995).

The cycle of poverty has lasting effects which impact current and future generations of a family.

> Poverty affects the physical and mental well-being of children and families in a number of ways. Being poor can lead to inadequate nutrition, affecting the health of adults and children and the birth weight and viability of newborns. Substandard housing conditions increase lead-poisoning (through the ingestion of paint or the use of old lead plumbing), rat bites, and disease generally. The psychological stress of living at a subsistence level can lead to depression and increase violent responses to frustration- including child abuse, spouse abuse, murder, and suicide. Poor families tend to live in poor neighborhoods, which compounds their problems. Poor neighborhoods may have less access to health services because of lack of transportation, and poorer quality health care, public services, and schools. Poorer education and social isolation, in turn, can affect employability and access to jobs that would raise a family out of poverty. Finally, growing up in a poor family in a poor neighborhood increases the likelihood that one will be poor as an adult and, therefore, raise another generation in poverty (Fisher, 1995).

Given the factors that contribute to keeping families in poverty, multi-generational programs like EHS are critical for assisting families to locate resources and support systems to better mitigate the lasting effects of living in poverty. Payne (2005) states that there are two factors that help individuals move out of poverty; education and relationships (p8). Early Head Start programs combine the approach of fostering supportive and nurturing relationships with families to educate the parent and child.

It is tempting to think of poverty as a social condition that impacts only the lazy or unmotivated individual. Recent statistics prove otherwise. According to the most

recent census conducted in 2003, the poverty rate in the U.S. for all individuals was 12.5%. For children under the age of six, the ages served by Head Start and EHS, the rate was 20.3%. The number of young children in poverty is growing, up from 18% in 2001. Immigrant children are twice as likely as native-born children to be poor. Regardless of race or ethnicity, poor children are much more likely than non-poor children to suffer developmental delay and damage, to drop out of high school, and to become teen parents. Children five and younger remain particularly vulnerable to poverty. In 2003, the rate of poverty for children under the age of six with a female head of household, meaning no father present, experienced a poverty rate of 53.7% as compared to 9.7% for children of the same age in married couple families (Payne, 2005).

Payne (2005) identifies the definition of poverty as, "the extent to which an individual does without resources" (p7). She states that the ability to get out of poverty is dependent upon resources other than financial. Families living in poverty often lack the social support systems necessary to educate them about the ways to navigate and thrive in a society based upon middle class norms. For example, the client base of EHS programs may not have access to prenatal medical care or even have knowledge of the importance of being examined by a physician early and often during pregnancy due to lack of experience, lack of medical insurance, or lack of access to health care. It becomes part of the mission of these programs to educate parents about being good parents, but often family mentors play the role of advisor and counselor encouraging families to seek resources for the betterment of the family. Just as with the basic needs of food, water, and shelter, real parenting education cannot begin until the primary needs of the family are satisfied.

CHAPTER THREE: RESEARCH METHODOLOGY

Research Approach and Rationale

The method of inquiry for this study is quantitative. The premise for undertaking a study of any program is that a theory exists which supports the belief that the program is making an impact. Scale development and analysis asserts that there are characteristics of a program which are measurable and that those characteristics will indicate an acceptance or rejection of the theories. Data collection assists program administrators and providers to make informed decisions as to refinements for the future. As stated by Creswell (2003, p10), "data, evidence, and rational considerations shape knowledge." It is the practice of collecting information through instruments based upon measures identified by the program that provides evidence which leads to change.

This study utilized the PSDEHS program as it operated to examine aspects of the treatment as opposed to introducing a new approach to service delivery. Studying the existing practices allowed for the researcher and ultimately PSDEHS programs to collect data on a continuing, long-term basis as to the status of the participants in its program. Data assists EHS in making informed generalizations to all participants in their programs. Early Head Start operates not only on the local level in communities, but also at the administrative and policy level on a national stage. A well planned and implemented study can be used among several EHS programs to provide data on a larger scale, which

has the potential to impact all EHS program providers. In the life of a school based program, timely collecting data and reporting results are of the essence. Educational decisions are often made before sufficient time has passed in the implementation stage to make an accurate determination as to the efficacy of a program.

This study collected data as to the demonstrated proficiency of each parent as they worked toward the planned goals and objectives for each home visit from their assigned family mentor. PSDEHS family mentors utilized the Goal Attainment Scaling (GAS) instrument at the first home visit to establish the goals unique to each family and then revisited the instrument at each subsequent home visit, thus collecting data over time as to the parents' progress on the goals developed from identified PSDEHS constructs.

To address the above mentioned aspects of the study, the research questions are--

Question #1: What types of goals do participants report?

Question #2: What are the outcomes observed while participating in PSDEHS home visitation programs?

Question #3: What is the relationship between the PSDEHS service delivery model (home-based vs. center-based) and the attainment of parental development related goals?

Question #4: What patterns and relationships emerge from the collected data as predictors for goal attainment based on demographic data?

Program evaluation can be defined as "the systematic collection of information about the activities, characteristics, and outcomes of programs to make judgments about programs, improve the program effectiveness, and/or inform decisions about future programming" (National Parenting Education Network, 2007, p1). The American Evaluation Association has developed a set of guiding principles that provide guidance for evaluators. To supplement their efforts, NPEN has created their own set of guiding principles aimed directly at parenting education programs. The eight principles developed by NPEN are:

1) Evaluation is a tool to strengthen programs.
2) Evaluation should be flexible.
3) Multiple methods should be used to gather information.
4) Evaluation should be focused on needs and use.
5) Evaluation is a participatory process.
6) Evaluation is sensitive to staff and participants and supports diversity.
7) Evaluation is an ongoing process.
8) Evaluation can be used to prove and improve (National Parenting Education Network, 2007, p1)

Program evaluation is a complex task. There are many ways to measure the effectiveness of programs like EHS who define success according to a broad range of possible outcomes. GAS is an approach to client assessment that can be utilized to reflect the impact of a particular intervention. While mindful of the eight guiding evaluation principles established by NPEN, this study utilized GAS to create individualized

assessments for parents participating in the PSDEHS programs to measure their progress toward goals reflective of the parenting education themes present in EHS home visit intervention approaches. This flexible method of examining progress while participating in the program, allowed for the uniqueness found within the families served by the PSDEHS programs.

Site

Poudre School District (PSD) serves families living in the city and surrounding areas of Fort Collins, CO. PSD covers 1,856 square miles in northern Colorado, including the towns of Fort Collins, Laporte, Timnath, Wellington, Red Feather, Livermore, Stove Prairie, and parts of Windsor. The approximate student enrollment in this district includes 24,737 students in kindergarten through 12th grade and 788 preschool students (http://www.psdschools.org/documentlibrary/downloads/Communications/Pride_and_Profile.pdf accessed August 26, 2008).

PSD serves as the agency authorized in Fort Collins to operate Head Start and Early Head Start programs and services. PSDEHS enrollment statistics from July-December 2007 reflect that the program served 124 participating families with a total of 139 participating children. Seventy-five children were from home-based families. The remaining 69 children were enrolled at one of three child care centers partnered with PSDEHS: Kids Harbor: 29 children enrolled, Little Acorns: 22 children enrolled, and United Daycare: 18 children enrolled (D. Helgoth, personal communication, December 7, 2007).

The population served by PSDEHS included families who are income eligible based upon the federal poverty guidelines and families with identified high risk factors. High risk factors may include the following: an inadequate or unhealthy living situation, concerns regarding family safety, poor health of the parent, teen parents, unstable family status, unstable parent employment, mental health concerns, child safety, child health and disabilities.

Table 1. PSDEHS Demographic Information	
Ethnicity	Number of families
American Indian	4
Asian Pacific Islander	1
Black (not Hispanic)	3
Hispanic	71
White	42
Undeclared	3
Financial Status	
On Public Assistance	25
Below the poverty line	103
Above the poverty line	21
Primary Language Spoken in the Home	
English	99
Spanish	25
Highest Level of Education Completed	Number of Parents
< High School Grad./GED	73
High School Grad./GED	85
Some college	66
College degree	20
Family Status (Primary caregiver is…)	Number of families
Grandparent	4
Single Parent	47
Two Parent	73

(D. Helgoth, personal communication, December 7, 2007)

PSDEHS home visiting programs are facilitated by family mentors trained in child development. Educational and professional backgrounds of the mentors vary with

all having at least a minimum of child development workshop training to assist in implementing the goals of EHS. Length of employment varies among the mentors. Turnover can be high in EHS programs due to several factors including low wages, high stress levels, and demanding workloads. A critical factor to the success of home visiting programs like EHS is low staff turnover. Relationship building with the families served is essential to meeting their needs and assisting them with parenting, job, or health and wellness related issues. Trust is a huge part of a successful family- family mentor relationship.

Each family mentor was randomly assigned ten to fifteen families depending upon the perceived amount of support needed by the family. A balance between families needing little support and those needing significant support was sought. Family mentors were encouraged to modify the visit structure and schedule to meet the needs of individual families. Visits were conducted in the family home unless the living situation or family and child safety prevented it. Families were assigned to one family mentor who educated and counseled the parent(s) in addition to working with any additional social service agencies on behalf of the family.

Participants

A convenience sample of parents enrolled in the PSDEHS program was utilized for this study. Within the program structure, families were grouped according to service delivery structure: home-based and center-based families. Home-based families were those with at least one stay-at-home parent who is responsible for the daily care of the children. These families did not participate in any child care arrangement affiliated with

EHS. Due to the isolating nature and increased demands of stay-at-home parenting, these families received more frequent EHS home visits than center-based families. In contrast, center-based families sent their children to child care centers that were partnered with PSDEHS for daily care and participated in fewer home visits per month.

Families recruited for this study represented a sample of both the home-based and center-based families. Families entered the program voluntarily and are often referred by other social service agencies that work with the family. A total of 53 PSDEHS families chose to participate in the study. Once enrolled in one of the options, families had been randomly assigned to one of the ten PSDEHS family mentors. Family mentors serviced a mixture of both home-based and center-based families. Participants represented a cross section of the PSDEHS population. In addition to assignment to either the home-based or center-based program models, Spanish and English speaking families were represented as well as working and unemployed parents, and families with a variety of living situations, parental educational levels, and states of health and physical wellness.

Family status

Family status identifies who is primarily responsible for the well-being of the child. One of five conditions was possible for this study: Single Parent with Partner, Single Parent Family, Two Parent Family, Grandparents, or Foster Home. Thirty-one of the 53 participating families were parented by a two parent family. Nineteen were headed by a single parent. One family consisted of a single parent with a live-in partner, another family was headed by the child's grandparents, and one child was living in a foster home.

Table 2. Participant Family Status		
	Number of Families (n=53)	Percent
Single parent with partner	1	1.9
Single parent family	19	35.8
Two parent family	31	58.5
Grandparents	1	1.9
Foster home	1	1.9

Teen parents

Teen parents often have unique needs and living situations. This statistic identifies how many families have at least one teen parent. Forty-one of the participating families had both parents over the age of 20. Eleven of the families had one teen parent and one family was headed by two teen parents.

Table 3. Number of Teen Parent Participants		
	Number of Families (n=53)	Percent
Both parents over age 20	41	77.4
One parent under age 20	11	20.8
Both parents under age 20	1	1.9

Educational levels of the mother and father

Twenty-three of the mothers had not finished high school/had not earned a high school diploma or the equivalency. Eleven of the mothers had earned a high school diploma or the equivalent (GED). Thirteen of participating mothers had some post-high school education and six of the mothers had gone on to higher education and achieved a bachelor's degree or higher.

Table 4. Mothers Educational Level		
	Number of Mothers (n=53)	Percent
No diploma	23	43.4
GED/HS diploma	11	20.8
Post high school	13	24.5
Bachelor's or above	6	11.3

Twenty of the fathers had not finished high school/had not earned a high school diploma or the equivalency. Thirteen of the fathers had earned a high school diploma or the equivalent (GED). Eight of participating fathers had some post-high school education. No fathers had gone on to higher education or achieved a bachelor's degree or higher. Twelve of the families did not have a father present.

Table 5. Father's Educational Level		
	Number of Fathers (n=53)	Percent
No diploma	20	37.7
GED/HS diploma	13	24.5
Post high school	8	15.1
Bachelor's or above	0	0
Unknown	12	22.6

Mother's employment status

Sixteen of the participating mothers chose to be unemployed to stay home with their child. Nine were recently unemployed or laid off from work. Twenty were steadily employed. One mother was working while attending school and three were attending school full-time. Two mothers were in a job training program. Two mothers were not

present; the child is either living in foster care or with grandparents and therefore maternal employment information was not available.

Table 6. Mother's Employment Status		
	Number of Mothers (n=53)	Percent
Stay at home	16	30.2
Unemployed/Laid off	9	17
Employed	20	37.7
Employed and educational program	1	1.9
Educational program	3	5.7
Job training	2	3.8
Unknown (child in foster care or with grandparent)	2	3.8

Father's employment status

Thirty-one fathers were steadily employed. Two were unemployed and one was attending school full-time. Nineteen fathers were not present making "father's employment status" not applicable.

Table 7. Father's Employment Status		
	Number of Fathers (n=53)	Percent
Unemployed	2	3.8
Educational program	1	1.9
Stable employment	31	58.5
Father not present	19	35.8

Family mental health

Family mental health was one factor to be considered when evaluating a parent's ability to adequately care for their child. Forty-two of the participating families were

considered by PSDEHS to be in stable mental health. Nine had been classified by PSDEHS as having mental health issues and two had confirmed psychiatric diagnoses.

Table 8. Family Mental Health		
	Number of Families(n=53)	Percent
Stable	42	79.2
Mental health issues	9	17.0
Psychiatric diagnosis	2	3.8

Child mental health

Child mental health can be an indicator of the impact of a living situation on the child. Of participating families, 48 had children classified by PSDEHS as having good social/emotional health. Five families had expressed concern to PSDEHS regarding their child's mental health.

Table 9. Child Mental Health		
	Number of Children(n=53)	Percent
Good social/emotional	48	90.6
Parental concern only	5	9.4

Parental health

Thirty-eight parents were classified by PSDEHS as healthy. Ten parents were identified by PSDEHS as having a history of health issues. Two were identified by PSDEHS as having periodic health issues and three were classified as having significant health issues.

Table 10. Parental Health		
	Number of Families (n=53)	Percent
Healthy Parent	38	71.7
History of Issues	10	18.9
Periodic Health Issues	2	3.8
Significant Health Issues	3	5.7

Child health

Forty-two children were identified by PSDEHS as healthy. Seven were classified by PSDEHS as having a history of health issues. One was labeled by PSDEHS as having periodic health issues and three were identified as having significant health problems.

Table 11. Child Health		
	Number of Children (n=53)	Percent
Healthy Child	42	79.2
History of Health Issues	7	13.2
Periodic Health Issues	1	1.9
Significant Health Problems	3	5.7

Family safety

Forty-four of the participating families were labeled by PSDEHS as having no safety concerns. Three families were identified by PSDEHS as having relationship difficulties, three were identified by PSDEHS as having a history of violence, and three families were living in neighborhoods where there was some concern expressed by PSDEHS for child and family safety.

Table 12. Family Safety		
	Number of Families(n=53)	Percent
No concerns	44	83.0
Relationship difficulties	3	5.7
History of violence	3	5.7
Neighborhood concerns	3	5.7

Child safety

Forty-four children were identified by PSDEHS as living in safe and supportive home environments. Five families had requested parenting help from PSDEHS. Two families were identified as being involved with Child Protective Services and two additional families were identified as having a history of abuse.

Table 13. Child Safety		
	Number of Children(n=53)	Percent
Safe supportive home	44	83.0
Parenting help requested	5	9.4
Child Protection involved	2	3.8
History of abuse	2	3.8

Measures

Goal Attainment Scaling

The GAS procedures were first utilized in the 1960s in the field of mental health. Therapists were seeking a method to measure change resulting from mental health treatment and community intervention programs. With funding from the National Institute of Mental Health, Thomas Kiresuk and Robert Sherman developed GAS in 1968

at the Hennepin County Mental Health Center in Minneapolis, Minnesota, as a general method to document outcomes and as an alternative to existing standardized measures. Since that time, the fields that employ the technique of GAS have grown to include education, rehabilitation, nursing, and social work (Smith, 1994).

The process of GAS involves the setting of goals, which may in itself have a positive effect on the outcomes of parenting education. Parents who feel alienated by a third party evaluation technique may embrace the opportunity to become an active contributor in establishing the benchmarks that will be used to evaluate how much progress they have made while participating in the home visits. Smith (1994) echoes this hypothesis by stating, "It seems to enhance the feeling of active participation and provides some feeling of control over one's own life" (p1). In addition, users of GAS have reported that while "the approach required effort, the quality of the services was enhanced" by the process of narrowing the focus of evaluation to areas of specific interest to the client (Smith, 1994, p1).

GAS requires the development of outcome scales that are unique and tailored to the specific individual to be evaluated. The individualized nature of GAS is attractive to human service related fields that often look to measure change resulting from intervention as opposed to a "one size fits all" approach of measurement on a standardized scale. Rather than rating all parents on a scale developed to measure parenting goals in general, GAS advocates the setting of individualized goals for each client, in this case the parent. This approach values the developmental foundation of learning to parent as well as the unique challenges or characteristics of the parent (Smith, 1994).

One of the primary challenges to evaluating the complex process of home visiting is the disparity among the many objectives of the home visit. Evaluative scales could be created for child development, parental development, nutrition, wellness, and others. Given the diversity of parent and family situations, it is possible that clients will be at varying beginning points in their knowledge and skills on any of the given topics. GAS shifts the focus of evaluation from moving all families to the same ending point to establishing a beginning point during intervention and then establishing realistic, attainable goals given all of the factors that may affect their ability to attain those goals. For example, families that are struggling to put food on the table may not be as accomplished at nurturing child development milestones as families in more stable resource situations. GAS recognizes these unique circumstances and allows for variance in the setting of goals and evaluation of each client (Smith, 1994).

Within GAS, goals can be parent devised, family mentor devised, or mutually agreed upon. Goals that are parent devised would be established solely by the parent and reflective of their own personal goals. Family mentor devised goals would be goals that are set by the family mentor without the input and participation of the parent and reflective of the EHS program goals for the parent. Mutually agreed goals reflect the intersection of both interests. In this case, parents and family mentors worked together to establish goals that are reflective of both EHS program goals and personalized parent goals. The later approach is perhaps the most beneficial for this particular program and in keeping with the EHS philosophy of making parents active participants in the program (Hurn, 2006).

Goal Attainment Follow-Up Guides are used to evaluate intervention induced change that has occurred in a client. They document the established goals and outline the levels of attainment for each goal. Goal Attainment Follow-Up Guides may be utilized over one or several intervention intervals to record client growth or change. Scores are recorded at each established interval and recorded for comparison over time (Smith, 1994). Each scale measures the goals set with the expected outcome serving as the benchmark. Indicators of each level of attainment are entered into the boxes so that the observed outcome can be translated into a Goal Attainment Score (a score ranging from +2 to -2) which can be utilized to establish a numerical indicator of progress toward the goal.

LEVEL OF ATTAINMENT	Goal 1:	Goal 2:	Goal 3:
Much more than expected outcome (+2)			
Somewhat more than expected outcome (+1)			
Expected outcome (0)			
Somewhat less than expected outcome (-1)			
Much less than expected outcome (-2)			

Figure 2. Blank Goal Attainment Scale.

There are eight steps used in the GAS process to construct the Goal Attainment Follow-Up Guide (Smith, 1994). Step 1: identify the issues that will be the focus of treatment. It is likely that parents may have several issues that they are working on at any one time. EHS may have parenting goals for the family that is struggling to keep food in the home that go above and beyond their current level of functioning. GAS seeks to identify only the problems or issues that treatment is expected to change during the projected treatment period. Rather than setting the goal of reading twice a week to your child this families goal may become taking inventory of needed food and making use of available resources to procure that food.

Step 2: Translate the selected problems into at least three goals. After assessing the issues relevant to a particular family, three goals will be identified by the family mentors in partnership with the parents. GAS focuses on the positive aspects of goal attainment and not on the deficiencies or shortcomings of the client. Setting goals at the end of an initial visit allows the family mentor to establish a positive working relationship that is critical to effective home visiting practice. The only restrictions on the types of goals that can be set would be established by EHS and not by the framework of GAS. The philosophical constructs supporting the practice of home visiting in EHS would guide the establishment of goals, but the GAS technique itself does not require that goals of any one specific type be set.

Step 3: Select a label for each goal. A brief title should be identified for each goal. The goal setter, in this case the family mentor, would choose a briefly worded label that

conveys the intent of the goal; for example, bedtime routines, weekly shopping, or floor time.

Step 4: Specify the expected level of outcome for the goal. Using the goal as a guide, the goal setter specifies and writes in the nature and parameters of the expected outcome. Specification can be done in terms of frequency, percentage, or intensity of occurrence of the behavior. The expected level of outcome should be indicative of what the family mentor believes the parent will most likely achieve at the time of evaluation. Simply stated, the expected level of outcome is the level of proficiency that is expected to satisfy the goal. Parenting education related examples may include, "engaged child in bedtime routine of brushing teeth and reading a story twice this week".

Step 5: Review the expected level of outcome. Goal setters must ensure that the expected level of outcome is aligned with the original goal and consistent with the expectations for programmatic outcomes. In addition, goal setters must be attentive to whether or not the expected level of outcome reflects what is considered proficiency for the established goal.

Step 6: Specify the somewhat more and somewhat less than expected levels of outcome for the goal. Once the level of expected outcome is set, it becomes possible to then envision what a better than expected or less than expected outcome might be. Like the expected level, the somewhat more and less favorable outcomes must be realistic and attainable outcomes.

Step 7: Specify the much more and much less than expected levels of outcome for the goal. These parameters envision the achievable limits of the indicated goal for this client. Each extreme level of outcome should represent that which might be expected to

occur in five-ten percent of clients. Again, the much more and much less than expected outcomes must be realistically envisioned for this client.

Step 8: Repeat these scaling steps for each of the three or more goals. Each of the goals must have five levels of outcome identified. Levels may not be left blank or too vague so as not to be an effective measure of progress.

Once goals are established, Goal Attainment Follow-Up Guides created, and the home visits under way, family mentors used the guides to evaluate the progress of parents at regular intervals by tracking the scores attained at the intervals. Scores were used to represent the impact of the home visiting process over time and to aid in the planning of future intervention strategies for the family (Smith, 1994).

Reliability and Validity

Reliability

Reliability is fundamental to the success of a study. Reliability "refers to consistency throughout a series of measurements" (Gliner & Morgan, 2000, p310). If an instrument lacks reliability, the results obtained from multiple uses of the instrument will vary thus providing inaccurate reflections of the measure. Reliability ensures that the instrument is universal.

The GAS approach to measurement allows for multiple ratings to be recorded over time that are combined in an overall score. Several empirical studies have been conducted to determine the reliability of GAS. GAS was designed to measure change in individuals. Variation from one measurement occasion to another is expected as a result

of change toward the goal and not necessarily due to error within the methodology (Cardillo & Smith, 1994). Cardillo and Smith (1994) state,

> Lower reliability estimates have been reported when scores were obtained on two or more occasions, a finding consistent with our view of the GAS score as a measure of change.... Not only are scores obtained on two or more occasions likely to vary, but also scores obtained on occasions different from that specified during follow-up guide construction can be more difficult to interpret (p240).

Reliability issues may also become evident given that the goal setter has a vested interest in the outcome of the intervention. Adequate training and implementation of GAS methodology will help to control for this issue.

Validity

Validity refers to the generalizability of the identified constructs. Validity is concerned with establishing the evidence for use of a particular instrument in a particular setting (Gliner & Morgan, 2000, p 319). Though an instrument may be proven reliable, it is important to distinguish that that this does not indicate that the instrument is valid. Validity ensures that the instrument is accurately measuring what you have set out to assess.

Face validity is perhaps the easiest type of validity to ensure. Face validity determines that the instrument measures what it appears to measure. This does not guarantee content validity. Content validity "refers to the actual content of the instrument. Specifically, one asks if the content that comprises the instrument is representative of the concept that one is attempting to measure" (Gliner & Morgan, 2000, p 320). In the case of GAS, content validity is assumed given that the goal setter is a professional in the field

of child development and parenting education (Cardillo & Smith, 1994). PSDEHS administrators strive to make family mentors experts in those fields by providing extensive training in addition to seeking experience and education as criteria for employment. During the training phase of the study, each family mentor participated in the process of defining the constructs and concepts that the instrument seeks to measure through a review of the constructs inherent to PSDEHS philosophies and the chosen home visiting curricula.

Procedure

A four hour training session was conducted with PSDEHS family mentors to orient them to the goals of the study and explain the procedures of GAS. Aspects of the study including: an overview of the study, procedures for structuring the goals, and specific instructions for completing the follow-up guides and submitting the results were discussed in the training. Family mentors had an opportunity to practice scaling a goal, ask pertinent questions, and seek clarification on the procedures. During the training session, Family Mentors posed questions to the PSDEHS administrator present as to how this would impact the amount of paperwork each mentor is required to fill out and submit following each visit. It was decided that the GAS Follow-up Guide would take the place of the regular forms used to document family progress after each visit.

After implementing the training session, PSDEHS family mentors were asked to first introduce the PSDEHS families to the idea of formally documenting and measuring the goal setting and attainment process. Upon obtaining the family's permission to participate in the study, family mentors introduced the GAS instrument and assisted the

families in the scaling of each identified goal. Mentors were instructed to allow no more than three goals per family and to assist the families in setting goals that were realistic, but not easily attained in a minimal amount of time. Once the goals were established, mentors assisted the families to identify what the expected outcome would be if they made good progress. After establishing the benchmark, mentors then facilitated the creation of the conditions to be met for the ratings of somewhat more than expected, much more than expected, somewhat less than expected, and much less than expected. At each subsequent home visit over a 12 week period, family mentors used the GAS instrument to document progress toward achievement of the identified goals by choosing the point on the scale the best reflects the family's current status. A 12 week time period was designated as an appropriate amount of time to allow for families to see some progress. In addition, this amount of time would ensure that each family mentor could visit each family a minimum of two times. GAS follow-up guides allowed for the collection of results at multiple intervals to be recorded for a family on the same scale assisting with data collection efforts by eliminating the need for additional scales at each visit. During the 12 weeks, family mentors implemented activities designed to enhance achievement of the set parental development goals. During this time period, home-based option family mentors conducted a minimum of four home visits and center-based option family mentors conducted a minimum of two home visits. To ensure some accuracy of the data, a minimum of two home visits is needed to see progress from participation in home visiting activities. Additionally, no family received more than 12 visits in 12 weeks. During the data collection phase, the results of the initial goal setting done at the first inquiry meeting were reviewed.

Descriptive data in the form of demographic information were collected and kept by the PSDEHS administrators for the participating families on site at their main offices. PSDEHS family mentors provided minimal identifying information, a student identification number, on the GAS Follow-up Guide so that the collected data could be matched with the records kept by PSDEHS administrators. No additional identifying information was obtained or recorded by the family mentors which limited potential risk to participating families. At the conclusion of the data collection period, participating families were encouraged to review their progress and to continue working toward the attainment of identified goals. PSDEHS family mentors submitted the GAS follow-up guides to the PSDEHS Education Coordinator.

Data Analysis

Analysis of the data required the use of descriptive statistics. Descriptive statistics offer a detailed look at who participated in these programs; describing what a "typical" PSDEHS family looks like and what their experiences are while participating in the program and the study. For this study, descriptive statistics included the overall sample size, numbers of participating home-based and center-based families, numbers of participating families headed by one parent or two parents, language preferences, family living situation, parental health, child health, goal attainment scores for those groups, reported both as an average score and as a distinct score by goal per visit, measures of central tendency, and measures of variation.

CHAPTER FOUR: RESULTS

The purpose of this study was to observe parental progress toward goals identified by the parent and EHS family mentor during participation in the EHS home visiting program. The specific research questions are:

Question #1:

What types of goals do participants report?

Question #2:

What are the outcomes observed while participating in PSDEHS home visitation programs?

Question #3:

What is the relationship between the PSDEHS service delivery model (home-based vs. center-based) and the attainment of parental development related goals?

Question #4:

What patterns and relationships emerge from the collected data as predictors for goal attainment based on demographic data?

Analysis

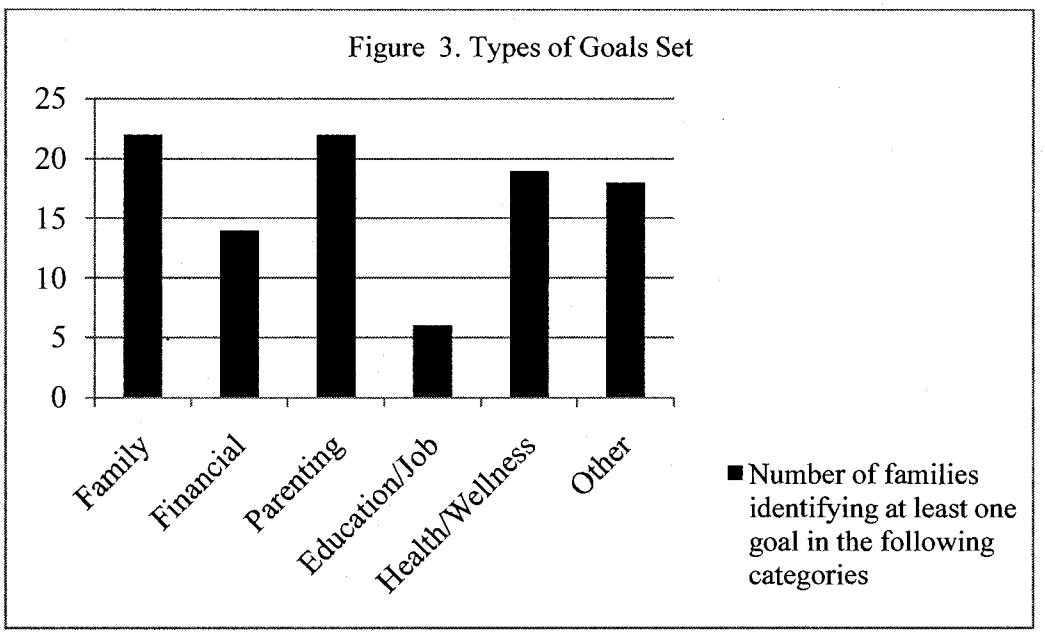
Question #1: What types of goals do participants report?

To illustrate the complexities of the measurement process, data were gathered to identify the types of goals set by the families. The families were asked to identify at least one, but no more than three goals. All of the families (n=53) identified one goal, 46 identified two goals, and 27 set three goals. The goals were to be measurable, realistic, and somewhat challenging—meaning that it would take some time and effort to see progress. Family mentors assisted in this process ensuring that all goals met the above mentioned criteria.

Qualitative examination of the goals identified that they can be generally placed into one of six categories. The goals can be categorized as: "family related", "financial", "parenting related", "education/job related", "health and wellness related", and "other". Goals in the category of 'family related' included, "spending more time together as a family", "meeting a new step-daughter", and "playing games together as a family". Financial goals included items such as, "saving more money" and "paying bills". The goals categorized as 'parenting' addressed primarily parenting skills. Examples from the parenting category included, "anger management" and "appropriate response to a child", "establishing toilet training or feeding routines", and "reading with their child". 'Education and/or job related' goals included, "learning more English" or "getting a stable job". The 'health and wellness' category represented goals that ranged from personal health, such as "losing weight" or "exercise more", to hygiene goals like "cleaning the house regularly". The category of 'other' was created to represent the goals

that fell outside of one of the previously identified categories. Placing these goals into an existing category would have been difficult. In addition, the goals were varied enough that placing them into one specific category was impossible. Goals in the 'other' category included, "cleaning out the household items and selling unwanted items", "scheduling religious ceremonies like weddings and baptisms", and "obtaining a driver's license". A complete listing of goals by category is found in Appendix A.

Figure 3. Types of Goals Set

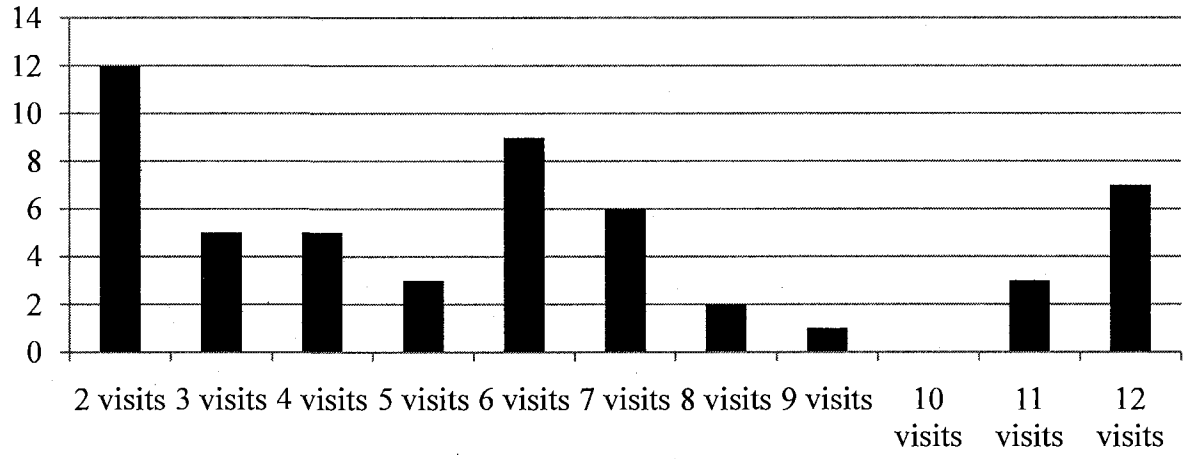


Family related and parenting goals were most commonly identified by the families. This finding is in direct support of the EHS program goals of encouraging positive parent/child interaction and educating parents as to how they can best support their child's development. Goals in the additional categories help to illustrate the nature of the challenges facing the PSDEHS families. In all of the categories with the exception of education/job related goals, data showed that families were selecting more than one

goal in the remaining categories. For example, several families set more than one family related goal.

During the data collection period, families received two to 12 home visits. Differences in number of visits were generally due to assignment to one of the two program options: home-based or center-based. Home-based families typically received more home visits due to the isolation and demands of stay at home parenting. Of the 53 families, 12 families received two visits during the 12 week period, the minimum necessary to complete the GAS instrument and provided one additional data collection point, while seven families received the maximum of 12 visits; one per week.

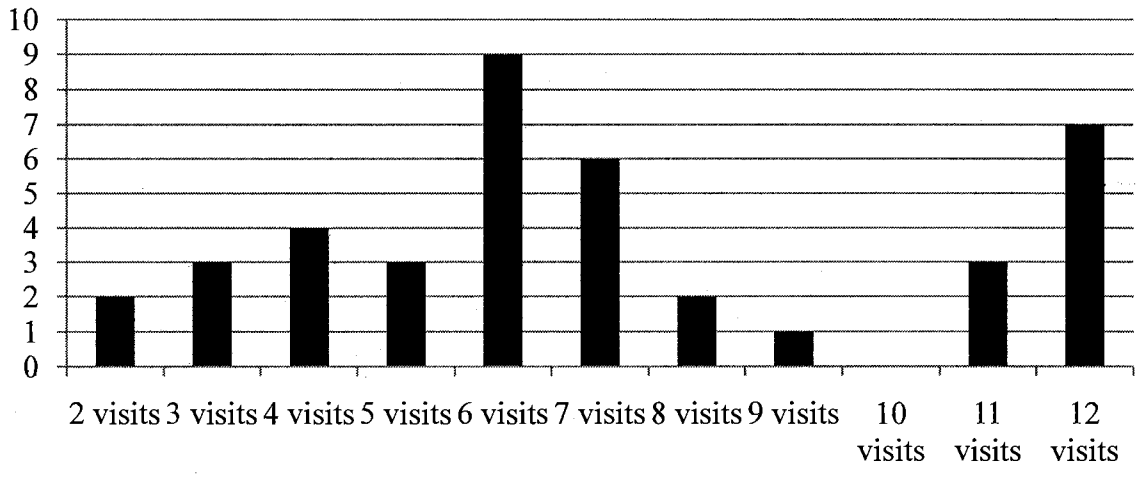
Figure 4. Number of visits received by all families during the data collection period (n=53)



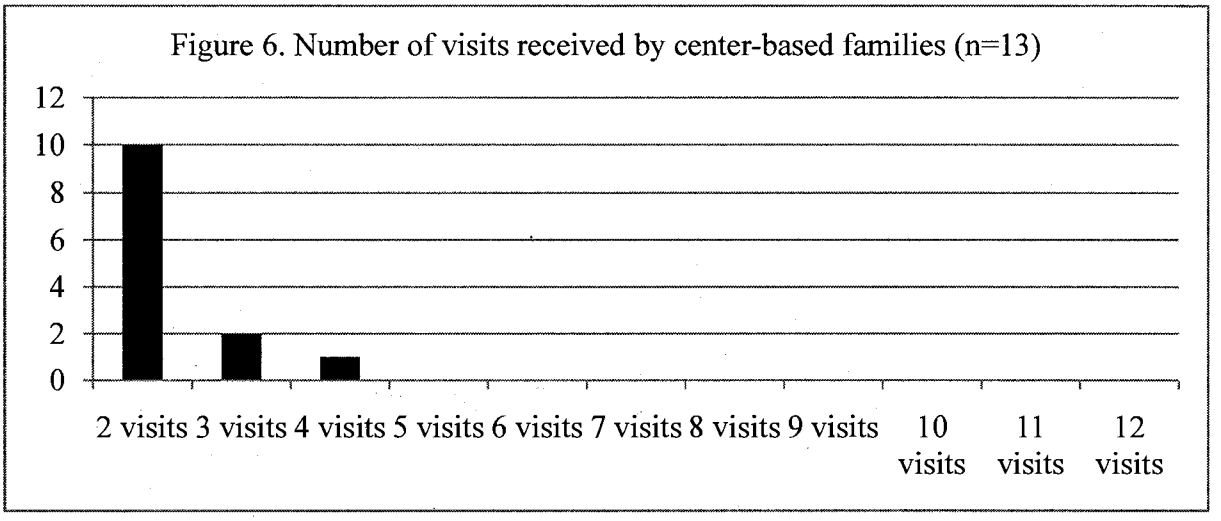
Home-based families were represented at nearly all numbers of visits with the majority of families receiving six visits; one every other week. Family mentors were given flexibility to modify the number of visits granted to each family based upon

perceived need and mentor availability. This accounts for differences seen across all home-based families.

Figure 5. Number of visits received by home-based families (n= 40)



Center-based families typically received fewer home visits due to increased support from child care providers and less available time to meet with EHS family mentors. As with home-based families, mentors were encouraged to modify the number of visits granted to support the families as needed. The majority of center-based families, ten, received two visits in a 12 week period. Of the remaining three center-based families, two received three visits and one family participated in four visits.



These data are useful to determine not only frequency of visitation, but to examine any differences that may occur between the groups that may be attributable to the number of visits experienced.

Question #2: What are the outcomes observed while participating in PSDEHS home visitation programs?

Calculation of GAS scores.

To arrive at a method for comparison across the participants, a summary GAS score was calculated. GAS follow-up guides created by the Family Mentors did not include numerical ratings attached to the levels of outcome. For purposes of data analysis, numerical ratings were assigned to each of the five possible outcome levels. A

rating of "much less than expected" equated to a numerical rating of -2, "somewhat less than expected outcome" equaled -1, an "expected outcome" equaled a rating of 0, "somewhat more than expected outcome" equaled a rating of +1, and "much more than expected outcome" equated a rating of +2.

In line with GAS methodology, a summary score was generated for each visit that represented a combination of the scores on all goals. GAS scores were then recorded for each data collection point. One of the purposes for designing the study to take place over a 12 week period was to allow for data collection at as many as 12 points. The goal of multiple data collection points was to examine progress for the participants as they took part in the program and not to examine results at minimal intervals such as pre- and post-test.

A final GAS score was calculated for each family by adding the rating scores for all goals visit by visit and then dividing by the number of visits. To allow for variation in the number of goals created by each family, this score was then divided by the number of goals set. Step one required summing of the scores visit by visit. For example, Table 14 shows scores for family #47984. They had a rating of -2 for goal one on visit one, a rating of -1 for goal two on visit one and a rating of -2 for goal three on visit one. Those scores were then summed to provide a score of -5 for visit one.

Table 14. GAS score: Step one

EHS ID#47984	Goal 1	Goal 2	Goal 3	Sum Score per Visit
Visit 1	-2	-1	-2	-5

To arrive at one GAS score for each family, this process is then repeated to obtain a score for each visit. Once a score is calculated for all visits, the sum GAS score is divided by the number of visits received to arrive at a sum GAS score regardless of number of goals for each family. Due to the fact that families differed in the number of goals set, the sum GAS score regardless of number of goals was then divided by the number of goals set. This score was then used as a comparison to examine differences in outcomes potentially due to such factors as number of visits, program designation, and primary language spoken.

Table 15. GAS score: Step two and three

EHS ID#47984	Goal 1	Goal 2	Goal 3	Sum Score
Visit 1	-2	-1	-2	-5
Visit 2	-2	-1	-2	-5
Visit 3	-2	-1	-2	-5
Visit 4	-1	-1	-2	-4
Visit 5	-1	-1	-2	-4
Visit 6	-1	-1	-2	-4
Visit 7	-1	-1	-1	-3
Visit 8	-1	-1	-1	-3
Visit 9	-1	-1	-1	-3
Visit 10	-1	-1	-1	-3
Visit 11	-1	-1	-1	-3
Visit 12	-1	-1	-1	-3
Sum GAS Score 1				-45
Sum GAS Score 2				-45/12 visits= -3.75
				-3.75/3 goals set= -1.25
GAS Score				-1.25

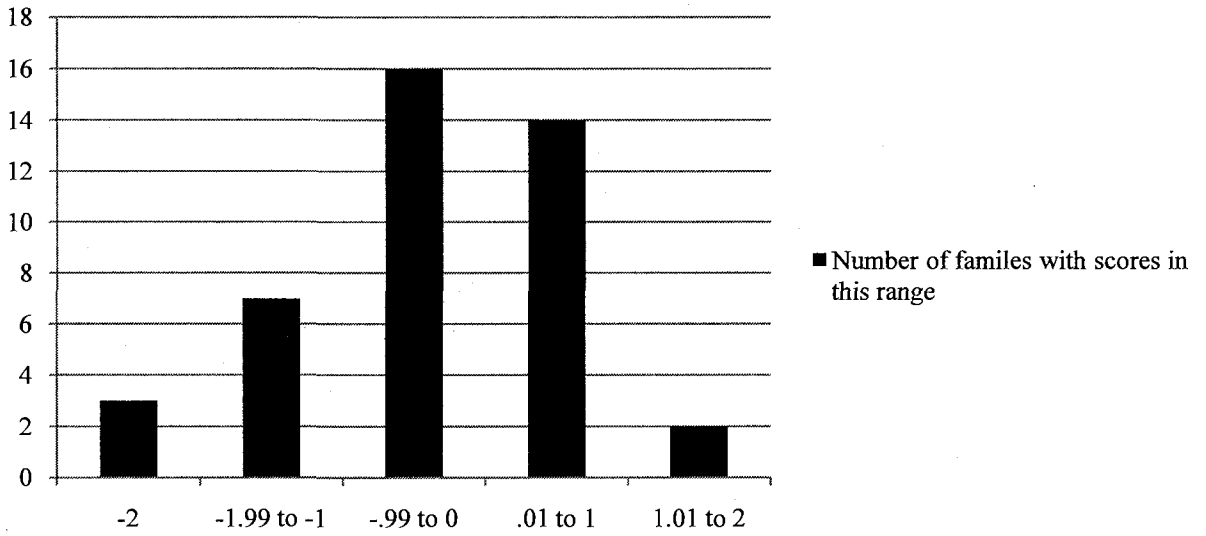
Summary GAS score results

Final GAS scores for all participating families ranged from - 2.00 to 2.00. The mean score reported for all families was -.37.

Table 16. Descriptives GAS score					
Descriptive Statistics					
	N	Minimum	Maximum	Mean	SD
GAS score	53	-2.00	2.00	-.37	.88144

Thirty-four families had scores in the negative range (less than expected outcomes) while the remaining 19 families had scores in the positive range (more than expected outcome). No families had a GAS score of zero (expected outcome). While the mean GAS score showed that families scored below the expected outcome score of 0, the majority of families scores fell within the range of -1 to +1 indicating that the GAS scores of few families fell at the extremes of -2 or +2. A more complete description of the distribution of scores reveals that three families had a score of -2, the lowest possible score, equivalent to a much less than expected outcome. Seven families had scores between -1 and -1.99, a score ranging in equivalence from a somewhat less than expected outcome to a much less than expected outcome. Sixteen families' scores were in the range of -.99 to 0, indicating a range from the expected outcome to a somewhat less than expected outcome. Fourteen families' scores were in the range of .01 to 1, equivalent to a range of expected outcome to somewhat more than expected outcome. Two families had a score between 1.01 and 2, the highest range possible, equivalent to a rating of somewhat more than expected outcome to a much more than expected outcome. A complete Frequency Distribution of all GAS Scores is found in Appendix B.

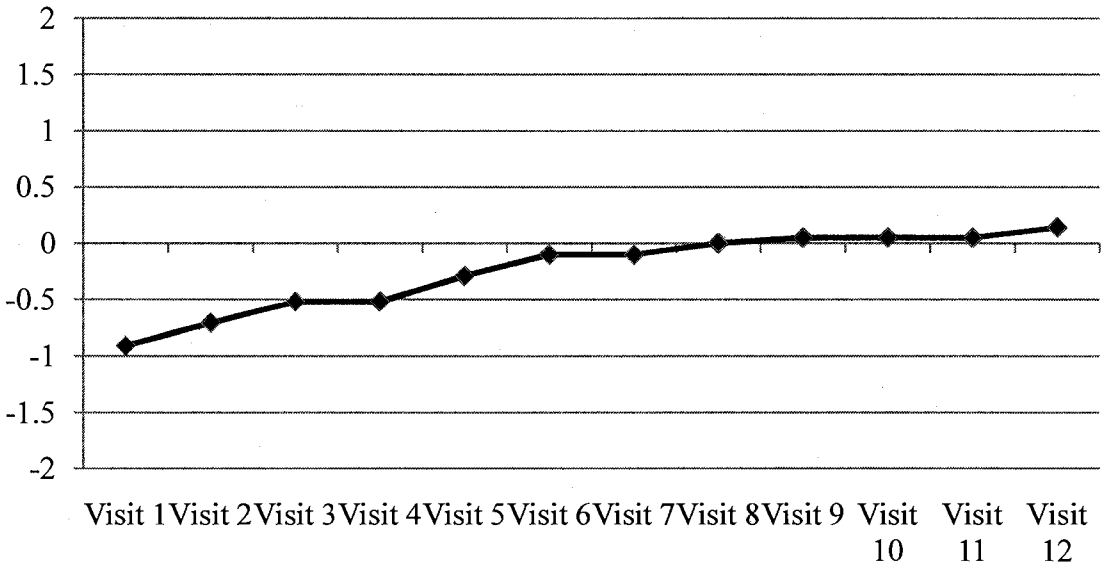
Figure 7. Distribution of GAS Scores



Results analyzed by goal per visit.

Summary GAS scores gave us a basis for comparing groups. In order to report parental progress on the specific goals set, it was necessary to look at the progress reported at each visit. The minimum value possible was -2 which designated a much less than expected outcome. The maximum value possible was 2 which equated to a rating of a much more than expected outcome. Ratings in between the minimum and maximum values represented: -1= less than expected outcome, 0= expected outcome and 1= more than expected outcome. To account for errors in calculating change over time, only GAS scores for families receiving 12 visits over the 12 week data collection period were used to calculate visit by visit progress. Figure 8 depicts the trend in mean GAS scores experienced by families receiving a visit each week during the 12 week data collection period.

Figure 8. Mean GAS Score by Visit



Mean GAS score for visit one was -.91. Data collected from all families at visit one indicated the expected result of a "less than expected outcome". This result is expected because of the nature of the goals setting process. If families were to score highly in the first visit the goals would be deemed too easily attainable and not appropriate as a longer term EHS objective or for the purposes of this study.

At the second and third visits, the data revealed shifts in the scores reported across participating families. Families were already beginning to make positive progress toward the attainment of the goals at this point in data collection. The mean GAS score for visit two was -.71. While remaining in the "less than expected" range, an improvement over scores reported at visit one. Visits three and four yielded a consistent mean score of -.52. Again, a positive trend and improvement over previously reported scores. Mean score for

visit five returned to a positive trend with a mean score of -.29. Mean GAS scores continue on an upward trend for visits six and seven, with a mean score -.1, nearing the score for an expected outcome, but still slightly in the less than expected outcome range. Mean score levels off at visits eight through 11with a mean of .05, the first scores reported above the minimum level for an expected outcome. The mean score continues to rise for visit 12 ending at .14, a score equivalent to the expected outcome. While it is difficult to draw definitive conclusions from this limited data, these results may indicate a timeline for observing changes in behavior patterns. Families receiving 12 visits were in the minority with the next largest group of families receiving only six visits. An analysis of mean scores may reveal that six weeks is not long enough a time period to see marked change in score and resulting behavior. However, mean scores did tend to steadily improve with an increase in the number of visits and then level off around visit eight and remain constant through visit 12.

Question #3: What is the relationship between the PSDEHS service delivery model (home-based vs. center-based) and the attainment of parental development related goals?

Within the PSDEHS program, families are designated as either home-based (n=40) or center-based (n=13). Home-based families received more frequent home visits to offset the isolation and demands of stay at home parenting. The differences in means demonstrated that home-based families scored higher (m= -.36) than center-based families (m= -.40) on GAS score. While both groups scores translated to below

"expected outcome" (score of zero), the mean for the home-based families was slightly higher and between the scores of "somewhat less than expected" and "expected outcome".

Table 17. Comparison of Mean GAS scores by program option

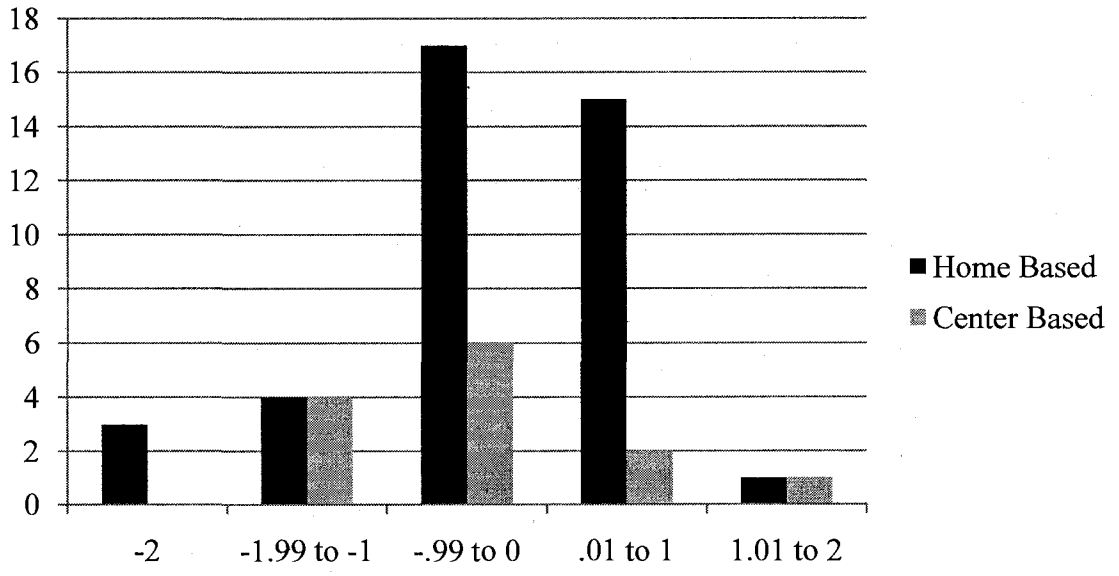
	Program Option	N	Mean GAS Score	SD
	Home- based	40	-.3598	.8615
	Center-based	13	-.4038	.9760

The distribution of scores analyzed by program option indicated that the majority of families for both the center-based and home-based options had GAS scores in the somewhat less than expected to expected outcome range. Of home-based families, 24 families had scores in the negative range (somewhat less to much less than expected outcomes) while the remaining 16 families had scores in the positive range (expected outcome to a more than expected outcome). No families had a GAS score of zero (expected outcome). A more complete description of the distribution of scores reveals that three families had a score of -2, the lowest possible score, equivalent to a much less than expected outcome. Four families had scores between -1 and -1.99, a score ranging in equivalence from a somewhat less than expected outcome to a much less than expected outcome. Seventeen families' scores were in the range of -.99 to 0, indicating a range from the expected outcome to a somewhat less than expected outcome. Fifteen families' scores were in the range of .01 to 1, equivalent to a range of expected outcome to somewhat more than expected outcome. One family had a score between 1.01 and 2, the

highest range possible, equivalent to a rating of somewhat more than expected outcome to a much more than expected outcome.

Of center-based families, ten families had scores in the negative range (less than expected outcomes) while the remaining three families had scores in the positive range (more than expected outcome). No families had a GAS score of zero (expected outcome) and no families had a GAS score of -2, the lowest possible score, equivalent to a much less than expected outcome. Four families had scores between -1 and -1.99, a score ranging in equivalence from a somewhat less than expected outcome to a much less than expected outcome. Six families' scores were in the range of -.99 to 0, indicating a range from the expected outcome to a somewhat less than expected outcome. Two families' scores were in the range of .01 to 1, equivalent to a range of expected outcome to somewhat more than expected outcome. One family had a score between 1.01 and 2, the highest range possible, equivalent to a rating of somewhat more than expected outcome to a much more than expected outcome. A complete Frequency Distribution of GAS Scores for both home-based and center-based families is found in Appendix C.

Figure 9. Distribution of GAS Score by Program Option



Another way to analyze the differences between the two groups was to look at the mean scores for home-based families versus center-based families for each goal at each visit. Due to PSDEHS program structure which dictates that home-based families receive more frequent home visits than center-based families, data were only collected for the majority of center-based families through the third visit. A decision was made to refrain from analyzing the data collected from the first three visits as a goal by goal comparison between the groups to avoid making incorrect assumptions that can be drawn from limited data.

Question #4: What patterns and relationships emerge from the collected data as predictors for goal attainment based on demographic data?

PSDEHS programs collected detailed demographic data for each of their families in an effort to best serve the individual needs of each family. This demographic data provided a rich opportunity to examine the patterns of relationships that may exist as predictors for success in goal attainment. For example, were Spanish speaking families experiencing more success than English speaking families? GAS scores were used to examine differences between English and Spanish speaking families, families with teen (aged 19 and under) parents and families with adult (aged 20 and older) parents, single parent families and dual parent families, highest level of education attained by the mother and the father.

English and Spanish speaking families

Of the 53 participating families, 42 were identified as speaking English as the primary language in the home. Eleven families were identified as speaking Spanish as the primary language in the home. Spanish speaking families scored higher (m= .07) than English speaking families (m= -.49) on GAS score. While mean score for the Spanish speaking families translated to an encouraging "expected outcome", the mean score for English speaking families was "somewhat less than expected".

Table 18. Comparison of GAS scores for English speaking versus Spanish speaking families

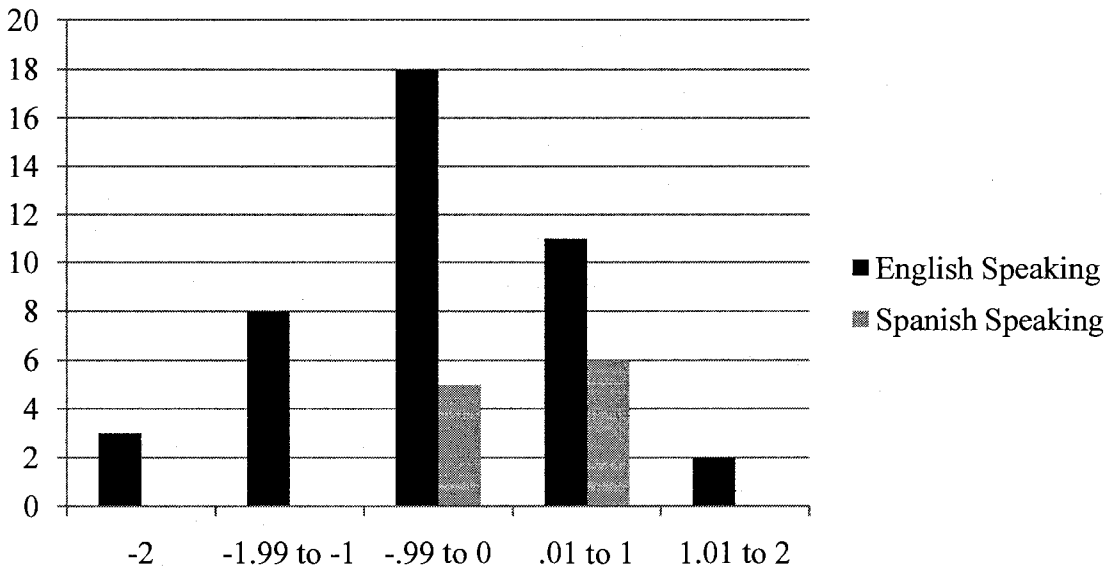
	Language	N	Mean GAS Score	SD
	English	42	-.4855	.8960
	Spanish	11	.0682	.6933

An analysis of the distribution of GAS scores reveals that of English speaking families, 29 families had scores in the negative range (less than expected outcomes) while the remaining 13 families had scores in the positive range (more than expected outcome). No families had a GAS score of zero (expected outcome). Three families had a GAS score of -2, the lowest possible score equivalent to a much less than expected outcome. Eight families had scores between -1 and -1.99, a score ranging in equivalence from a somewhat less than expected outcome to a much less than expected outcome. Eighteen families' scores were in the range of -.99 to 0, indicating a range from the expected outcome to a somewhat less than expected outcome. Eleven families' scores were in the range of .01 to 1, equivalent to a range of expected outcome to somewhat more than expected outcome. Two families had a score between 1.01 and 2, the highest range possible, equivalent to a rating of somewhat more than expected outcome to a much more than expected outcome.

Of Spanish speaking families, five families had scores in the negative range (less than expected outcomes) while the remaining six families had scores in the positive range (more than expected outcome). No families had a GAS score of -2, the lowest possible score equivalent to a much less than expected outcome. No families had scores between -1 and -1.99, a score ranging in equivalence from a somewhat less than expected outcome to a much less than expected outcome and no families had a GAS score of 0. Five families' scores were in the range of -.99 to 0, indicating a range from the expected outcome to a somewhat less than expected outcome. Six families' scores were in the range of .01 to 1, equivalent to a range of expected outcome to somewhat more than expected outcome. None of the families had a score between 1.01 and 2, the highest

range possible, equivalent to a rating of somewhat more than expected outcome to a much more than expected outcome. A complete Frequency Distribution of GAS Scores for both English and Spanish speaking families is found in Appendix D.

Figure 10. Distribution of GAS Score by Primary Language



Families with teen (aged 19 and under) parents and families with adult (aged 20 and older) parents

Of the 53 participating families, 41 were identified as having parents aged 20years or older (adult parent group). Eleven families were identified as having at least one parent 19 years of age or younger (teen parent group). One family was headed by grandparents and thus excluded from these analyses. The teen parent group (m= -.26) scored higher (m= -.36) than the adult parent group on GAS score. Although mean scores for both groups translated to a "somewhat less than expected outcome", the

resulting differences in means reflected an unexpected outcome with teen parents scoring slightly higher on GAS score.

Table 19. Comparison of GAS scores for teen and adult parented families

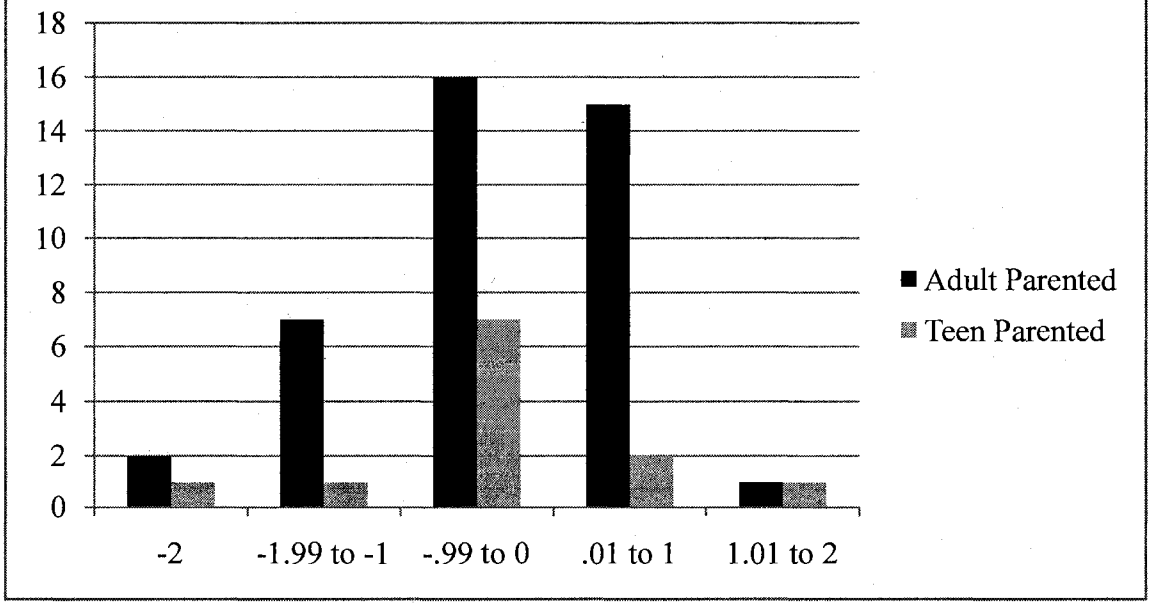
	Age of Parents	N	Mean GAS Score	SD
	Teen Parent	11	-.2582	.8880
	Adult Parent	41	-.3610	.7782

An analysis of the distribution of GAS scores reveals that of adult parented families, 25 families had scores in the negative range (less than expected outcomes) while the remaining 16 families had scores in the positive range (more than expected outcome). No families had a GAS score of zero (expected outcome). Two families had a GAS score of -2, the lowest possible score equivalent to a much less than expected outcome. Seven families had scores between -1 and -1.99, a score ranging in equivalence from a somewhat less than expected outcome to a much less than expected outcome. Sixteen families' scores were in the range of -.99 to 0, indicating a range from the expected outcome to a somewhat less than expected outcome. Fifteen families' scores were in the range of .01 to 1, equivalent to a range of expected outcome to somewhat more than expected outcome. One family had a score between 1.01 and 2, the highest range possible, equivalent to a rating of somewhat more than expected outcome to a much more than expected outcome.

An analysis of the distribution of GAS scores reveals that of teen parented families, nine families had scores in the negative range (less than expected outcomes) while the remaining three families had scores in the positive range (more than expected

outcome). No families had a GAS score of zero (expected outcome). One family had a GAS score of -2, the lowest possible score equivalent to a much less than expected outcome. One family had scores between -1 and -1.99, a score ranging in equivalence from a somewhat less than expected outcome to a much less than expected outcome. Seven families' scores were in the range of -.99 to 0, indicating a range from the expected outcome to a somewhat less than expected outcome. Two families' scores were in the range of .01 to 1, equivalent to a range of expected outcome to somewhat more than expected outcome. One family had a score between 1.01 and 2, the highest range possible, equivalent to a rating of somewhat more than expected outcome to a much more than expected outcome. A complete Frequency Distribution of GAS Scores for both home-based and center-based families is found in Appendix E.

Figure 11. Distribution of GAS Scores by Age of Parent



Single parent families and dual parent families

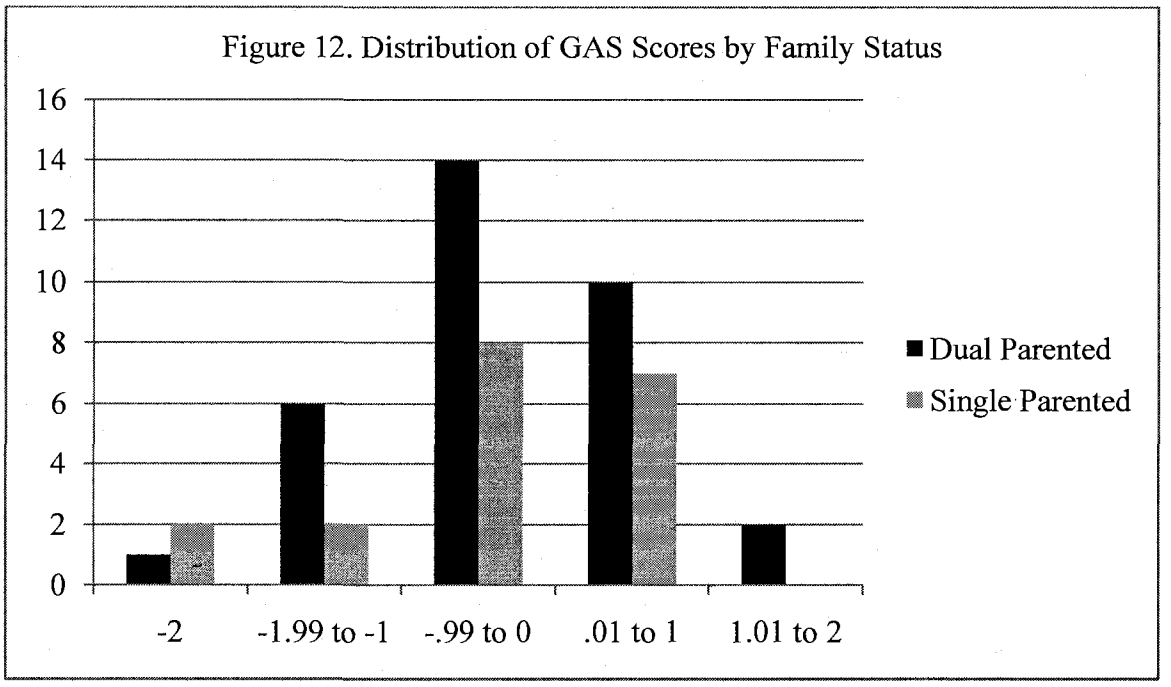
Of the 53 participating families, 20 were identified as single parent families and 31 families were identified as having two parents. One family was headed by grandparents and another was a foster home and thus excluded from these analyses. The two parent group scored higher (m=-.26) than the single parent group (m= -.52) on GAS score. Mean scores for both groups translated to a "somewhat less than expected outcome", but reflected the expected result.

Table 20. Comparison of GAS scores for single parent and dual parented families				
	Family Status	N	Mean GAS Score	SD
	Single Parent Family	20	-.5230	.9151
	Two Parent Family	31	-.2584	.8856

An analysis of the distribution of GAS scores reveals that of dual parent families, 21 families had scores in the negative range (less than expected outcomes) while the remaining 12 families had scores in the positive range (more than expected outcome). No families had a GAS score of zero (expected outcome). One family had a GAS score of -2, the lowest possible score equivalent to a much less than expected outcome. Six families had scores between -1 and -1.99, a score ranging in equivalence from a somewhat less than expected outcome to a much less than expected outcome. Fourteen families' scores were in the range of -.99 to 0, indicating a range from the expected outcome to a somewhat less than expected outcome. Ten families' scores were in the range of .01 to 1, equivalent to a range of expected outcome to somewhat more than expected outcome.

Two families had a score between 1.01 and 2, the highest range possible, equivalent to a rating of somewhat more than expected outcome to a much more than expected outcome.

Of single parent families, 12 families had scores in the negative range (less than expected outcomes) while the remaining seven families had scores in the positive range (more than expected outcome). Two families had a GAS score of -2, the lowest possible score equivalent to a much less than expected outcome. Two families had scores between -1 and -1.99, a score ranging in equivalence from a somewhat less than expected outcome to a much less than expected outcome and no families had a GAS score of 0. Eight families' scores were in the range of -.99 to 0, indicating a range from the expected outcome to a somewhat less than expected outcome. Seven families' scores were in the range of .01 to 1, equivalent to a range of expected outcome to somewhat more than expected outcome. None of the families had a score between 1.01 and 2, the highest range possible, equivalent to a rating of somewhat more than expected outcome to a much more than expected outcome. A complete Frequency Distribution of GAS Scores for both English and Spanish speaking families is found in Appendix F.



Highest level of education attained by the mother

A comparison of means was conducted to examine mean GAS scores according to the highest reported level of education attained by the mothers. Mean scores ranged from -1.10 to .01. Differences in the mean scores demonstrated higher GAS scores for mothers with more education.

Table 21. Comparison of means among highest level of education achieved by mothers			
	Mean	N	SD
No Diploma	-.4496	23	1.0187
GED/High school diploma	-.3655	11	.5435
Post high school	-.2738	13	.8859
Bachelor's or above	-.2867	6	.9887

Of families with mothers without a diploma, 17 families had scores in the negative range (less than expected outcomes) while the remaining six families had scores in the positive range (more than expected outcome). One family had a GAS score of -2,

the lowest possible score equivalent to a much less than expected outcome. Six families had scores between -1 and -1.99, a score ranging in equivalence from a somewhat less than expected outcome to a much less than expected outcome and no families had a GAS score of 0. Ten families' scores were in the range of -.99 to 0, indicating a range from the expected outcome to a somewhat less than expected outcome. Four families' scores were in the range of .01 to 1, equivalent to a range of expected outcome to somewhat more than expected outcome. Two families had a score between 1.01 and 2, the highest range possible, equivalent to a rating of somewhat more than expected outcome to a much more than expected outcome.

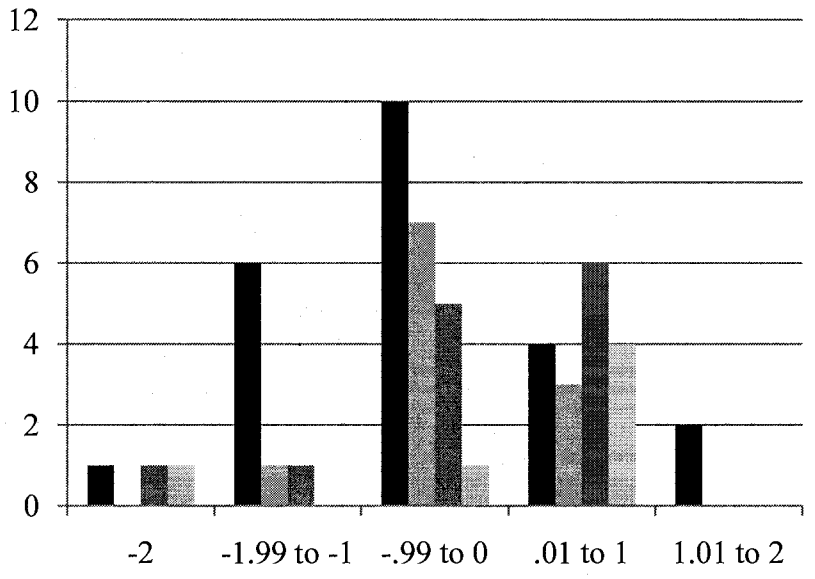
Of families with mothers with a high school diploma or Graduate Equivalency Degree (GED), eight families had scores in the negative range (less than expected outcomes) while the remaining three families had scores in the positive range (more than expected outcome). No families had a GAS score of -2, the lowest possible score equivalent to a much less than expected outcome. One family had a score between -1 and -1.99, a score ranging in equivalence from a somewhat less than expected outcome to a much less than expected outcome and no families had a GAS score of 0. Seven families' scores were in the range of -.99 to 0, indicating a range from the expected outcome to a somewhat less than expected outcome. Three families' scores were in the range of .01 to 1, equivalent to a range of expected outcome to somewhat more than expected outcome. None of the families had a score between 1.01 and 2, the highest range possible, equivalent to a rating of somewhat more than expected outcome to a much more than expected outcome.

Of families with mothers with post high school education, seven families had scores in the negative range (less than expected outcomes) while the remaining six families had scores in the positive range (more than expected outcome). One family had a GAS score of -2, the lowest possible score equivalent to a much less than expected outcome. One family had a score between -1 and -1.99, a score ranging in equivalence from a somewhat less than expected outcome to a much less than expected outcome and no families had a GAS score of 0. Five families' scores were in the range of -.99 to 0, indicating a range from the expected outcome to a somewhat less than expected outcome. Six families' scores were in the range of .01 to 1, equivalent to a range of expected outcome to somewhat more than expected outcome. None of the families had a score between 1.01 and 2, the highest range possible, equivalent to a rating of somewhat more than expected outcome to a much more than expected outcome.

Of families with mothers with a bachelor's degree or higher, two families had scores in the negative range (less than expected outcomes) while the remaining four families had scores in the positive range (more than expected outcome). One family had a GAS score of -2, the lowest possible score equivalent to a much less than expected outcome. No families had scores between -1 and -1.99, a score ranging in equivalence from a somewhat less than expected outcome to a much less than expected outcome and no families had a GAS score of 0. One family's scores were in the range of -.99 to 0, indicating a range from the expected outcome to a somewhat less than expected outcome. Four families' scores were in the range of .01 to 1, equivalent to a range of expected outcome to somewhat more than expected outcome. None of the families had a score between 1.01 and 2, the highest range possible, equivalent to a rating of somewhat more

than expected outcome to a much more than expected outcome. A complete Frequency Distribution of GAS Scores by highest education level attained by the mother is found in Appendix G.

Figure 13. Distribution of GAS Scores by Mother's Educational Level



Highest level of education attained by the father

A comparison of means was conducted to examine mean GAS scores according to the highest reported level of education attained by the father. Mean scores ranged from -.82 to -.11. Like educational level of the mother, differences were observed in mean score when the father's educational level increased.

Table 22. Comparison of means among highest level of education achieved by fathers			
	Mean	N	SD
No Diploma	-.2920	20	1.0294
GED/High school diploma	-.4469	13	.7476
Post high school	-.0612	8	.4574

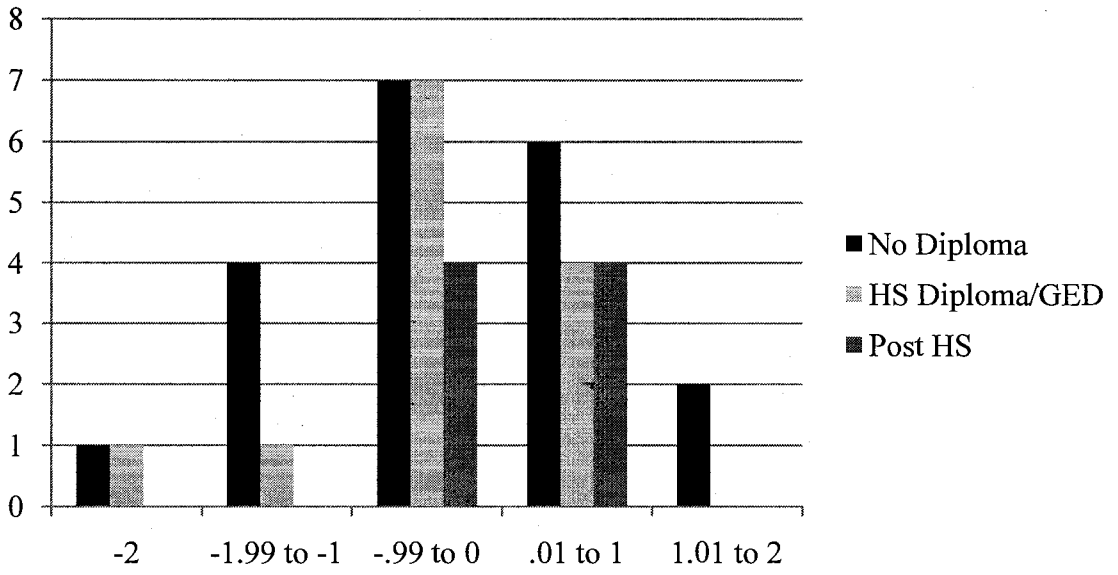
Of families with fathers without a diploma, 12 families had scores in the negative range (less than expected outcomes) while the remaining eight families had scores in the positive range (more than expected outcome). One family had a GAS score of -2, the lowest possible score equivalent to a much less than expected outcome. Four families had scores between -1 and -1.99, a score ranging in equivalence from a somewhat less than expected outcome to a much less than expected outcome and no families had a GAS score of 0. Seven families' scores were in the range of -.99 to 0, indicating a range from the expected outcome to a somewhat less than expected outcome. Six families' scores were in the range of .01 to 1, equivalent to a range of expected outcome to somewhat more than expected outcome. Two families had a score between 1.01 and 2, the highest range possible, equivalent to a rating of somewhat more than expected outcome to a much more than expected outcome.

Of families with fathers with a high school diploma or Graduate Equivalency Degree (GED), nine families had scores in the negative range (less than expected outcomes) while the remaining four families had scores in the positive range (more than expected outcome). One family had a GAS score of -2, the lowest possible score equivalent to a much less than expected outcome. One family had a score between -1 and -1.99, a score ranging in equivalence from a somewhat less than expected outcome to a much less than expected outcome and no families had a GAS score of 0. Seven families' scores were in the range of -.99 to 0, indicating a range from the expected outcome to a somewhat less than expected outcome. Four families' scores were in the range of .01 to 1, equivalent to a range of expected outcome to somewhat more than expected outcome. None of the families had a score between 1.01 and 2, the highest

range possible, equivalent to a rating of somewhat more than expected outcome to a much more than expected outcome.

Of families with fathers with post high school education, four families had scores in the negative range (less than expected outcomes) while the remaining four families had scores in the positive range (more than expected outcome). No families had a GAS score of -2, the lowest possible score equivalent to a much less than expected outcome, or -1 and -1.99, a score ranging in equivalence from a somewhat less than expected outcome to a much less than expected outcome. No families had a GAS score of 0. Four families' scores were in the range of -.99 to 0, indicating a range from the expected outcome to a somewhat less than expected outcome. Four families' scores were in the range of .01 to 1, equivalent to a range of expected outcome to somewhat more than expected outcome. None of the families had a score between 1.01 and 2, the highest range possible, equivalent to a rating of somewhat more than expected outcome to a much more than expected outcome. A complete Frequency Distribution of GAS Scores by highest education level attained by the father is found in Appendix H.

Figure 14. Distribution of GAS Scores by Father's Educational Level



CHAPTER FIVE: DISCUSSION

The theory of change for EHS programs is to improve outcomes for disadvantaged children by targeting intervention at the parent. PSDEHS and other EHS programs have at their disposal a myriad of instruments designed to assess milestones achieved in child development. Longitudinal studies have followed EHS children through P-12 and beyond to measure the impact of early intervention programs. Studies examining the first point of target, the change that takes place in the parent, are limited. Where studies do exist, they generally measure parenting along dichotomous variables rather than approaching it as a multi-dimensioned construct (Raikes, Green, Atwater, Kisker, Constantine, and Chazan-Cohen, 2006). The purpose of this study was to observe parental progress toward goals identified by the parent and EHS family mentor during participation in the EHS home visiting program.

Challenges to measuring qualitative change in a population as diverse as EHS were overcome by utilizing the Goal Attainment Scaling methodology. This approach allowed for the disparity of each parent's level of functioning to be expressed. Rather than measuring change on indicators identified by an outside entity, GAS allows parents and their mentors to identify what the relevant issues and the related goals are for them specifically and how they will measure progress. The quantitative coding of GAS data took place after the completion of the data collection to minimize any feelings of judgment that may be felt on the part of the parent being assessed. Literature on early intervention services stresses the importance of establishing and maintaining an alliance with families when delivering any type of intervention. Korfmacher, Green, Spelman,

and Thornburg (2007) state, "...strong alliances with families (most typically the parent or primary caregiver) are mechanisms for change, whether through challenging past negative models of interpersonal relationships, or (more simply) by increasing the families' comfort and trust in the information or services provided" (p461).

Explanation of Results and Findings

Qualitative analysis of the types of goals identified by the families revealed that family related and parenting goals were most commonly identified by the families as areas needing improvement. Home visiting is a unique approach in the field of early intervention in that the theory of change supports the idea that parents are voluntarily seeking assistance to prevent negative outcomes for their child as opposed to seeking change for themselves directly (Korfmacher, et al., 2007, p461). These findings are in line with the mission of EHS programs and support the need for continued mentoring of the parent as well as early intervention strategies aimed at the child.

Analysis of the number of visits received also confirmed the structure set in place by PSDEHS administrators to provide more frequent home visitation to families not connected with a child care center affiliated with the program. Among home-based families, the majority of families were visited every other week with the next largest group visited every week. This level of personalized attention and service delivery can weigh on the resources of an EHS program. With more families enrolling and opting for the home-based option, PSDEHS administrators may find that they are in need of more family mentors to provide the comprehensive and frequent services that these families need. Data also demonstrated a leveling off of mean GAS score at visit eight through visit

12. Further study is needed to determine if this trend was due to chance. Past studies examining the home visiting process have had similar results. "Families who reported higher scores (on the Strengths-Based Practices Inventory) received more home visits and scored higher on measures of parent empowerment, parent competency, and home environment quality" (Kormacher, et al., 2007, p464). Further study would benefit PSDEHS program administrators in making decisions as to recommended number of visits and allocation of resources over time.

Results of GAS indicated that the mean score for all families participating fell between the markers of somewhat less than expected and the expected outcome. Of all participating families, regardless of program designation, more family's mean scores fell below the "expected outcome" than above. The means for both home-based and center-based groups are below the "expected outcome" but above a "somewhat less than expected" outcome. Home-based families had a slightly higher mean GAS score (m=-36) than center-based families (m=-.40). The difference in mean scores may be attributable to the frequency of the visitations provided to home-based families and the subsequent level of support given to these families.

Spanish speaking families had higher mean GAS scores than English speaking families. It is beyond the scope of this study to assert why this result may have occurred. However, PSDEHS program administrators may be interested in further examination of possible explanations. One such explanation may be attributable to the family mentor. Not all PSDEHS family mentors are bilingual. Spanish speaking families are automatically assigned to one of the bilingual family mentors. Further study may reveal what differences exist in home visit delivery or family mentor performance that can be

correlated with these results. Upon examination of the specific goals set by Spanish speaking families, it becomes apparent that Spanish speaking families identified more goals that were language dependent than English speaking families. Having a bilingual Family Mentor is an advantage to successful completion of a goal that may otherwise be unobtainable due to a language barrier.

Adult aged parents had lower mean GAS scores than those families parented by at least one teen parent. It is beyond the scope of this study to determine what factors contributed to these findings. A study conducted by Johnson, Harrison, Burnett, and Emerson (2003) seeking to identify deterrents to parental participation in parenting education programs found "no significant correlations…when the variable age of respondent was correlated with the five factors (lack of confidence, lack of course relevance, personal problems, situational barriers, and time) identified as deterring participation in parenting education programs" (p418). These findings support the assertion that age of parent may have less to do with the outcomes of parenting education than other situational or demographic factors.

Results comparing other demographic information yielded expected results. Two parent families had higher mean GAS scores than single parent families. It is to be expected that dual parent families have more available resources to provide nurturing environments for themselves and their children while single parent families are often held to the same expectations with fewer available resources.

Families with more highly educated mothers and fathers had higher mean GAS scores than those with less education. One part of the EHS mission is to improve outcomes for the family including job and education related goals. Participation in EHS

programs may provide the stability and support that participants need to further their education. This data reflects the importance of collaboration with social service agencies and programs. Families who are expected to shoulder the responsibility for their families in addition to seeking educational or work related opportunities without support are set up to fail. These results reflected the efforts of this program to improve child outcomes despite the inherent factors that may put children at risk for less than optimal developmental outcomes.

Discussion

The culture of poverty

A common factor among all participating families, poverty, is a decisive factor in determining outcomes for children and families. Regardless of which of the demographic categories families fit into, the largest aspects impacting their success or failure are those intrinsic to living in poverty. In support of this assertion, Payne (2005) states, "the ability to leave poverty is more dependent upon other resources than it is upon financial resources" (p8). Families must learn to cultivate emotional resources, mental resources, spiritual resources, physical resources, support systems, and relationships/role models. Emotional resources provide individuals with the resilience to withstand challenging and uncomfortable feelings and situations. Emotional resources are critical for allowing families to break old habits and to move into new ways of being. Mental resources allow families to be more self-sufficient when seeking out and utilizing new information. Spiritual resources support a healthy self concept and view of the world. With abundant spiritual resources, parents see themselves as capable of making an impact in the world.

Physical resources include the ability to be mobile and healthy. Healthy parents are better equipped to provide for their families. Support systems are important resources for families living in poverty. Are there reliable and trusted individuals whom the family can call upon when a child is sick? Is there someone to assist the parent in navigating the admissions process to further their education? These are all support systems that provide security and assistance to the family. Finally, relationships and role models are important resources for families. Does the family have nurturing and appropriate role models to assist with parenting skills or job skills? Role models provide an emotional example to parents (Payne, 2005). Without access to these resources, the challenges of daily life increase. PSDEHS families may have initially set goals that became secondary to more important tasks such as finding work or feeding their family.

Limitations of the findings

A criticism of the GAS methodology has been the clients, in this case the parents, involvement in the rating process. Concerns are often raised about accuracy of measurement when a self-imposed rating is given. This was controlled for in this study by asking PSDEHS family mentors to engage the parent in a discussion about their progress prior to making a rating. Consensus was to be sought between parent and family mentor with the mentor acting as balance for an accurate rating. This is, of course, describes the ideal. The possibility exists when individuals have a vested interest in the outcome of the exercise that results will be skewed to reflect the desired outcome of the participant or evaluator. The possibility does exist that parent rating may not accurately

reflect their current progress or that family mentor ratings would not be in agreement if measured separately.

Another factor that was not included in data collection for this study is time in the PSDEHS program. Families come and go from the program as they move geographically, as their children age, or as they are no longer eligible for services. Some families may be newer to the program structure, concept, and philosophy than others who have had multiple children of varying ages participate over a span of several years. This study treated data from all of the families as equal due to unknown length of time participating in the program. In addition, data on the length of each visit was not documented.

PSDEHS administrators have found it challenging to ensure consistency among all home visits. Program philosophy and mission dictates that there be some flexibility to allow the family mentors to design activities to address the unique needs of each family. Program administrators seek to find a balance between that flexibility and ensuring that home visit content remains somewhat consistent. Two primary parenting education curricula are used, Partners in Parenting Education (PIPE) and Partners for a Healthy Baby. These curricula provide family mentors with resources when planning activities for each home visit. PSDEHS conducts in-house training and provides opportunities for family mentors to attend external training sessions on how to implement the curricula during home visitation. This study focused solely on the goals set by the parents while participating in the home visitation process. No measures were used to track qualitative data as to the content of each home visit. A possible direction for future research would be to assign family mentors to one of three curriculum conditions: PIPE, Partner for a Healthy Baby, or a more flexible combination of the two (i.e., as the curriculum is

currently utilized) to see if one model is superior to the others in the delivery of parenting education related services.

Implications for PSDEHS

PSDEHS administrators are constantly involved in the process of program review and analysis. While several of the findings in this study serve to support the existing mission and structure of the program, some raise questions about the efficacy of current practices. The results indicating that home-based families had higher mean GAS scores than center-based families may lead program administrators to request for more funding to hire more family mentors in order to conduct more home visits regardless of program designation. While PSDEHS has no control over a family's chosen employment situation and program option choice, they are in a position to advocate for the ability to provide more frequent home visits to center-based families. The current program model would not support an increase in the number of visits expected of each family mentor. Heavy workloads are cited as one cause of frequent PSDEHS family mentor turnover (D. Helgoth, personal communication, April 11, 2007). Conducting more home visits will require more family mentors to balance the workload and stress.

In addition to potentially hiring more family mentors, PSDEHS administrators may want to examine the practices of the family mentors who serve the Spanish speaking families. Spanish speaking families reported higher mean GAS scores than English speaking families. As previously stated, Spanish speaking families are assigned to bilingual family mentors. At the time of this study, two of the PSDEHS family mentors were bilingual and serving Spanish speaking families. Length of visit, frequency of

visitation, and program curricula are all standardized across PSDEHS family mentors. How those components are delivered may provide a window into the increase in mean GAS scores over English speaking families. Program administrators may wish to gather qualitative data as to the content and methods used by the bilingual family mentors in the home visitation process in order to make program wide improvements in service delivery.

Future directions for research

This study examined outcomes for parents in one EHS program. Generalizations to other EHS programs around the country are not advised and would be considered tentative at best. While this study provides insight into the practices of one particular program which may be used for program improvement, further studies are needed to gather data that would be applicable to all EHS programs. Future research studies may choose to examine several programs at varying locations across a state or the country. Examination of multiple programs in differing settings would allow for comparisons to be made and recommendations for EHS-wide programmatic improvement.

Additionally, there are no comparisons made to families who are not choosing to participate in EHS services. Replicating this study with a control group of families with similar demographic characteristics who do not participate in EHS services would provide an opportunity to see if outcomes are attributable to the services delivered through EHS and not due to chance or other factors.

PSDEHS administrators have expressed a desire to create a curriculum framework that would simplify the home visit planning process for family mentors. This proposed framework would cross reference home visit content with activities found in the PIPE

and Partners for a Healthy Baby Curricula. In addition to creating this framework as a planning reference for new family mentors, a study that examines the practices of veteran family mentors would provide valuable qualitative data as to the successful implementation and execution of home visits. Standardizing the content and execution of the visits is the first step to ensuring the consistency among experiences that PSDEHS administrators are seeking.

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APPENDIX

Appendix A. List of Goals Set by Category

Family Goals:
"Get married by year end"
"Go out to the park to play"
"Eat dinner together as a family"
"Take family fishing"
"Reduced aggression between siblings in the car"
"Family to go camping together"
"Take child to pool once a week"
"Get family situated in new home"
"Spend time together as a family doing fun activities outside"
"To spend two hours every other weekend doing something active together"
"Go out more often to the park or have fun"
"Have family hour (reading, board games) before bedtime"
"Two to three hours of one-on-one time for (child) with dad and/or mom each Saturday"
"Sunday afternoon family outing"
"Watch less TV"
"To reduce the time spent on TV/video games"
"Improve family relationship. Not fight or cause problems"
"Spend more quality time together"
"For (father) to spend some time away doing something he enjoys one weekend each month"
"Meet future stepdaughter and make a good impression"
"One on one time with each child"
"Parent quality time"
"Play in backyard three times a week"

Financial Goals:
"Set a budget"
"Save money"
'To save money for a baby carrier for the back of the bike"
"Save money to finish the house in Guatemala"
"Pay off debt"
"Pay bills that are behind"
"Stick to budget/Don't overspend"
"Save money for a car"
"Save money for new house"

Parenting Goals:
"Have children do school work during the summer"
"Encourage child to be more independent of parents"

"Potty training"
"To teach (child) new words"
"To encourage (child) to pedal consistently on the tricycle"
"To prepare four complete meals during the week"
"Have both children not using a bottle"
"Help daughter to understand healthy eating choices and exercise to lose weight"
"(Child) will sleep through the night in her own bed"
"Work on getting (child) to stop pulling her sister's hair and biting her"
"To make it routine for the children to clean up toys after playtime"
"Get closer to (child). Say something nice three times a day"
"Stop using the bottle as a comfort object"
"Practice (child) sitting up every day"
"Getting the boys to do chores"
"Make sure baby book is up to date"
"Walk (child) home from child care three times per week"
"Read to child"
"(Child) reaches for an object even if she just reaches and touches it"
"Encourage child to stop throwing food or fork when eating"
"Play with one toy for ten minutes each day"
"Don't yell, keep myself calm, don't get mad"
"(Father) keeps up to date to make (child) do better. Focus on him. Make sure (child) is wearing his hearing aid and practice walking"
"Play on the floor with child"

Education/Job Goals:
"Start own business"
"Find a stable job"
"3.5 GPA in college"
"For mom to get a new job with better pay"
"Study more English"

Health/Wellness Goals:
"Go to AlAnon meetings"
"Dad exercise daily"
"Mom to ride bike"
"Resolve sleep problems/Go to a doctor for sleep problems"
"To vacuum and mop once each week"
"Exercise in the afternoon/lose 10 pounds"
"Find someone to help with house cleaning every other week"
"To walk to the park with the children once in the next two months"
"Laundry done"
"Exercise three-four times a week"
"Eat fresh veggies/salad"

"To make homemade and nutritious meals regularly on weekdays"
"To take (child) on walks Mondays and Wednesdays"
"Wash hands more often"
"Have (child) circumcised"
"Decrease amount of cigarettes smoked in a day/Quit smoking"
"Keep house clean"

Other:
"Learn how to write better"
"Get drivers license"
"Go to policy council meetings"
"Organize the girl's bedroom"
"Organize son's bedroom"
"Learn how to drive"
"Have floor in family room installed"
"Have everything prepared before our trip"
"Have car up and running"
"Have a garage sale at Mom's house"
"Spring clean the whole house"
"Clean out/organize the garage"
"Organize the basement"
"Get the girls baptized"
"Restack (child's) clothes"
"Put everything in the correct room"
"Backyard clean/Gardening"
"Change (child's) legal name"
"To finish unpacking boxes at the new apartment"
"Get a bike trailer"

Appendix B. Frequency Distribution of GAS Scores

GAS Score	Frequency	Percent
-2	3	5.7
-1.91	1	1.9
-1.88	1	1.9
-1.5	1	1.9
-1.33	1	1.9
-1.25	2	3.8
-1.22	1	1.9
-1.16	1	1.9
-0.92	1	1.9
-0.91	1	1.9
-0.87	1	1.9
-0.86	1	1.9
-0.75	2	3.8
-0.67	1	1.9
-0.66	3	5.7
-0.64	1	1.9
-0.55	1	1.9
-0.5	4	7.5
-0.47	1	1.9
-0.34	1	1.9
-0.33	1	1.9
-0.28	1	1.9
-0.16	2	3.8
-0.06	1	1.9

GAS Score	Frequency	Percent
0.06	1	1.9
0.08	1	1.9
0.16	2	3.8
0.19	1	1.9
0.2	1	1.9
0.22	1	1.9
0.33	1	1.9
0.41	1	1.9
0.5	1	1.9
0.52	1	1.9
0.62	2	3.8
0.66	2	3.8
0.77	1	1.9
1	1	1.9
1.4	1	1.9
2	1	1.9

Appendix C. Distribution of GAS Score by Program Option

Frequency Distribution for Home-based Families:

GAS Score	Frequency
-2	3
-1.91	1
-1.88	1
-1.22	1
-1.16	1
-0.92	1
-0.91	1
-0.87	1
-0.86	1
-0.75	1
-0.67	1
-0.66	2
-0.64	1
-0.55	1
-0.50	2
-0.47	1
-0.28	1
-0.16	2
-0.06	2
0.08	1
0.16	2
0.19	1
0.20	1
0.22	1
0.33	1
0.41	1
0.52	1
0.62	2
0.66	1
0.77	1
1.00	1
1.40	1

Frequency Distribution for Center-based Families:

GAS Score	Frequency
-1.50	1
-1.33	1
-1.25	2
-0.75	1
-0.66	1
-0.50	2
-0.34	1
-0.33	1
0.50	1
0.66	1
2.00	1

Appendix D. Distribution of GAS Score by Primary Language

Frequency Distribution for English Speaking Families

GAS Score	Frequency
-2.00	3
-1.91	1
-1.88	1
-1.50	1
-1.33	1
-1.25	2
-1.22	1
-1.16	1
-0.91	1
-0.87	1
-0.75	2
-0.67	1
-0.66	2
-0.64	1
-0.55	1
-0.50	3
-0.47	1
-0.34	1
-0.33	1
-0.28	1
-0.16	2
0.06	1
0.08	1
0.16	2
0.19	1
0.20	1
0.22	1
0.41	1
0.50	1
0.66	1
0.77	1
1.40	1
2.00	1

Frequency Distribution for Spanish Speaking Families

GAS Score	Frequency
-0.92	1
-0.86	1
-0.66	1
-0.50	1
-0.06	1
0.33	1
0.52	1
0.62	2
0.66	1
1.00	1

Appendix E. Distribution of GAS Scores by Age of Parent

Frequency Distribution for Adult Parented Families

GAS Score	Frequency
-2.00	2
-1.91	1
-1.50	1
-1.33	1
-1.25	2
-1.22	1
-1.16	1
-0.92	1
-0.91	1
-0.87	1
-0.86	1
-0.75	2
-0.66	3
-0.64	1
-0.50	3
-0.47	1
-0.28	1
-0.16	1
0.08	1
0.16	2
0.20	1
0.22	1
0.33	1
0.41	1
0.50	1
0.52	1
0.62	2
0.66	2
0.77	1
1.00	1
2.00	1

Frequency Distribution for Teen Parented Families

GAS Score	Frequency
-2.00	1
-1.88	1
-0.67	1
-0.55	1
-0.50	1
-0.34	1
-0.33	1
-0.16	1
-0.06	1
0.06	1
0.19	1
1.40	1

Appendix F. Distribution of GAS Scores by Family Status

Frequency Distribution for Dual Parented Families

GAS Score	Frequency
-2.00	1
-1.91	1
-1.50	1
-1.33	1
-1.25	1
-1.22	1
-1.16	1
-0.87	1
-0.75	2
-0.66	1
-0.64	1
-0.55	1
-0.50	2
-0.47	1
-0.33	1
-0.28	1
-0.16	2
-0.06	1
0.08	1
0.16	2
0.19	1
0.22	1
0.33	1
0.41	1
0.50	1
0.62	1
1.00	1
1.40	1
2.00	1

Frequency Distribution for Single Parented Families

GAS Score	Frequency
-2.00	2
-1.88	1
-1.25	1
-0.92	1
-0.91	1
-0.86	1
-0.66	2
-0.50	2
-0.34	1
0.06	1
0.20	1
0.52	1
0.62	1
0.66	2
0.77	1

Appendix G. Distribution of GAS Scores by Educational Level of the Mother

Frequency Distribution for Mothers with Post High School:

GAS Score	Frequency
-2.00	1
-1.88	1
-0.75	2
-0.34	1
-0.28	1
-0.16	1
0.06	1
0.20	1
0.33	1
0.62	2
0.77	1

Frequency Distribution for Mothers with a Bachelor's or Above:

GAS Score	Frequency
-2.00	1
-0.92	1
0.16	2
0.22	1
0.66	1

Frequency Distribution for Mothers with a High School diploma/GED:

GAS Score	Frequency
-1.22	1
-0.66	3
-0.64	1
-0.50	2
-0.33	1
0.08	1
0.41	1
0.66	1

Frequency Distribution for Mothers without a Diploma:

GAS Score	Frequency
-2.00	1
-1.91	1
-1.50	1
-1.33	1
-1.25	2
-1.16	1
-0.91	1
-0.87	1
-0.86	1
-0.67	1
-0.55	1
-0.50	2
-0.47	1
-0.16	1
-0.06	1
0.19	1
0.50	1
0.52	1
1.00	1
1.40	1
2.00	1

Appendix H. Distribution of GAS Scores by Educational Level of the Father

Frequency Distribution for Fathers with Post High School:

GAS Score	Frequency
-0.75	1
-0.50	1
-0.33	1
-0.16	1
0.08	1
0.22	1
0.33	1
0.62	1

Frequency Distribution for Fathers with a High School diploma/GED:

GAS Score	Frequency
-2.00	1
-1.22	1
-0.92	1
-0.75	1
-0.66	2
-0.50	1
-0.34	1
-0.28	1
0.16	2
0.20	1
1.00	1

Frequency Distribution for Fathers without a Diploma:

GAS Score	Frequency
-2.00	1
-1.91	1
-1.33	1
-1.25	1
-1.16	1
-0.87	1
-0.67	1
-0.64	1
-0.55	1
-0.50	2
-0.16	1
0.06	1
0.19	1
0.41	1
0.50	1
0.52	1
0.62	1
1.40	1
2.00	1

Appendix I: Blank Goal Attainment Scale

Goal Attainment Scale

Student ID# _____ Date created:_____

Level Of Attainment	Goal 1:	Goal 2:	Goal 3:
Much more than expected outcome			
Somewhat more than expected outcome			
Expected outcome			
Somewhat less than expected outcome			
Much less than expected outcome			

Goal Attainment Follow-Up Guide

At every home visit, please circle the level of family progress for each goal.

Visit 1-

Goal 1	Much more than expected outcome	Somewhat more than expected outcome	Expected outcome	Somewhat less than expected outcome	Much less than expected outcome
Goal 2	Much more than expected outcome	Somewhat more than expected outcome	Expected outcome	Somewhat less than expected outcome	Much less than expected outcome
Goal 3	Much more than expected outcome	Somewhat more than expected outcome	Expected outcome	Somewhat less than expected outcome	Much less than expected outcome

Visit 2-

Goal 1	Much more than expected outcome	Somewhat more than expected outcome	Expected outcome	Somewhat less than expected outcome	Much less than expected outcome
Goal 2	Much more than expected outcome	Somewhat more than expected outcome	Expected outcome	Somewhat less than expected outcome	Much less than expected outcome
Goal 3	Much more than expected outcome	Somewhat more than expected outcome	Expected outcome	Somewhat less than expected outcome	Much less than expected outcome

Visit 3-

Goal 1	Much more than expected outcome	Somewhat more than expected outcome	Expected outcome	Somewhat less than expected outcome	Much less than expected outcome
Goal 2	Much more than expected outcome	Somewhat more than expected outcome	Expected outcome	Somewhat less than expected outcome	Much less than expected outcome
Goal 3	Much more than expected outcome	Somewhat more than expected outcome	Expected outcome	Somewhat less than expected outcome	Much less than expected outcome

Visit 4-

Goal 1	Much more than expected outcome	Somewhat more than expected outcome	Expected outcome	Somewhat less than expected outcome	Much less than expected outcome
Goal 2	Much more than expected outcome	Somewhat more than expected outcome	Expected outcome	Somewhat less than expected outcome	Much less than expected outcome
Goal 3	Much more than expected outcome	Somewhat more than expected outcome	Expected outcome	Somewhat less than expected outcome	Much less than expected outcome

Visit 5-

Goal 1	Much more than expected outcome	Somewhat more than expected outcome	Expected outcome	Somewhat less than expected outcome	Much less than expected outcome
Goal 2	Much more than expected outcome	Somewhat more than expected outcome	Expected outcome	Somewhat less than expected outcome	Much less than expected outcome
Goal 3	Much more than expected outcome	Somewhat more than expected outcome	Expected outcome	Somewhat less than expected outcome	Much less than expected outcome

Visit 6-

Goal 1	Much more than expected outcome	Somewhat more than expected outcome	Expected outcome	Somewhat less than expected outcome	Much less than expected outcome
Goal 2	Much more than expected outcome	Somewhat more than expected outcome	Expected outcome	Somewhat less than expected outcome	Much less than expected outcome
Goal 3	Much more than expected outcome	Somewhat more than expected outcome	Expected outcome	Somewhat less than expected outcome	Much less than expected outcome

Visit 7-

Goal 1	Much more than expected outcome	Somewhat more than expected outcome	Expected outcome	Somewhat less than expected outcome	Much less than expected outcome
Goal 2	Much more than expected outcome	Somewhat more than expected outcome	Expected outcome	Somewhat less than expected outcome	Much less than expected outcome
Goal 3	Much more than expected outcome	Somewhat more than expected outcome	Expected outcome	Somewhat less than expected outcome	Much less than expected outcome

Visit 8-

Goal 1	Much more than expected outcome	Somewhat more than expected outcome	Expected outcome	Somewhat less than expected outcome	Much less than expected outcome
Goal 2	Much more than expected outcome	Somewhat more than expected outcome	Expected outcome	Somewhat less than expected outcome	Much less than expected outcome
Goal 3	Much more than expected outcome	Somewhat more than expected outcome	Expected outcome	Somewhat less than expected outcome	Much less than expected outcome

Visit 9-

Goal 1	Much more than expected outcome	Somewhat more than expected outcome	Expected outcome	Somewhat less than expected outcome	Much less than expected outcome
Goal 2	Much more than expected outcome	Somewhat more than expected outcome	Expected outcome	Somewhat less than expected outcome	Much less than expected outcome
Goal 3	Much more than expected outcome	Somewhat more than expected outcome	Expected outcome	Somewhat less than expected outcome	Much less than expected outcome

Visit 10-

Goal 1	Much more than expected outcome	Somewhat more than expected outcome	Expected outcome	Somewhat less than expected outcome	Much less than expected outcome
Goal 2	Much more than expected outcome	Somewhat more than expected outcome	Expected outcome	Somewhat less than expected outcome	Much less than expected outcome
Goal 3	Much more than expected outcome	Somewhat more than expected outcome	Expected outcome	Somewhat less than expected outcome	Much less than expected outcome

Visit 11-

Goal 1	Much more than expected outcome	Somewhat more than expected outcome	Expected outcome	Somewhat less than expected outcome	Much less than expected outcome
Goal 2	Much more than expected outcome	Somewhat more than expected outcome	Expected outcome	Somewhat less than expected outcome	Much less than expected outcome
Goal 3	Much more than expected outcome	Somewhat more than expected outcome	Expected outcome	Somewhat less than expected outcome	Much less than expected outcome

Visit 12-

Goal 1	Much more than expected outcome	Somewhat more than expected outcome	Expected outcome	Somewhat less than expected outcome	Much less than expected outcome
Goal 2	Much more than expected outcome	Somewhat more than expected outcome	Expected outcome	Somewhat less than expected outcome	Much less than expected outcome
Goal 3	Much more than expected outcome	Somewhat more than expected outcome	Expected outcome	Somewhat less than expected outcome	Much less than expected outcome

Appendix J: Blank Goal Attainment Scale- Spanish

Escala de logro de metas

ID del estudiante # _____ Fecha en la que fue creado:_____

Nivel de logro	Meta 1:	Meta 2:	Meta 3:
Mucho más que el resultado anticipado			
Algo más que el resultado anticipado			
Resultado anticipado			
Algo menos que el resultado anticipado			
Mucho menos que el resultado anticipado			

Guía para el seguimiento de logro de metas

En cada visita al hogar, por favor circunde el nivel de progreso de la familia para cada meta.

1era visita-

Meta 1	Mucho más que el resultado anticipado	Algo más que el resultado anticipado	Resultado anticipado	Algo menos que el resultado anticipado	Mucho menos que el resultado anticipado
Meta 2	Mucho más que el resultado anticipado	Algo más que el resultado anticipado	Resultado anticipado	Algo menos que el resultado anticipado	Mucho menos que el resultado anticipado
Meta 3	Mucho más que el resultado anticipado	Algo más que el resultado anticipado	Resultado anticipado	Algo menos que el resultado anticipado	Mucho menos que el resultado anticipado

2da visita-

Meta 1	Mucho más que el resultado anticipado	Algo más que el resultado anticipado	Resultado anticipado	Algo menos que el resultado anticipado	Mucho menos que el resultado anticipado
Meta 2	Mucho más que el resultado anticipado	Algo más que el resultado anticipado	Resultado anticipado	Algo menos que el resultado anticipado	Mucho menos que el resultado anticipado
Meta 3	Mucho más que el resultado anticipado	Algo más que el resultado anticipado	Resultado anticipado	Algo menos que el resultado anticipado	Mucho menos que el resultado anticipado

3ra visita-

Meta 1	Mucho más que el resultado anticipado	Algo más que el resultado anticipado	Resultado anticipado	Algo menos que el resultado anticipado	Mucho menos que el resultado anticipado
Meta 2	Mucho más que el resultado anticipado	Algo más que el resultado anticipado	Resultado anticipado	Algo menos que el resultado anticipado	Mucho menos que el resultado anticipado
Meta 3	Mucho más que el resultado anticipado	Algo más que el resultado anticipado	Resultado anticipado	Algo menos que el resultado anticipado	Mucho menos que el resultado anticipado

4ta visita-

Meta 1	Mucho más que el resultado anticipado	Algo más que el resultado anticipado	Resultado anticipado	Algo menos que el resultado anticipado	Mucho menos que el resultado anticipado
Meta 2	Mucho más que el resultado anticipado	Algo más que el resultado anticipado	Resultado anticipado	Algo menos que el resultado anticipado	Mucho menos que el resultado anticipado
Meta 3	Mucho más que el resultado anticipado	Algo más que el resultado anticipado	Resultado anticipado	Algo menos que el resultado anticipado	Mucho menos que el resultado anticipado

5ta visita-

Meta 1	Mucho más que el resultado anticipado	Algo más que el resultado anticipado	Resultado anticipado	Algo menos que el resultado anticipado	Mucho menos que el resultado anticipado
Meta 2	Mucho más que el resultado anticipado	Algo más que el resultado anticipado	Resultado anticipado	Algo menos que el resultado anticipado	Mucho menos que el resultado anticipado
Meta 3	Mucho más que el resultado anticipado	Algo más que el resultado anticipado	Resultado anticipado	Algo menos que el resultado anticipado	Mucho menos que el resultado anticipado

6ta visita-

Meta 1	Mucho más que el resultado anticipado	Algo más que el resultado anticipado	Resultado anticipado	Algo menos que el resultado anticipado	Mucho menos que el resultado anticipado
Meta 2	Mucho más que el resultado anticipado	Algo más que el resultado anticipado	Resultado anticipado	Algo menos que el resultado anticipado	Mucho menos que el resultado anticipado
Meta 3	Mucho más que el resultado anticipado	Algo más que el resultado anticipado	Resultado anticipado	Algo menos que el resultado anticipado	Mucho menos que el resultado anticipado

7ma visita-

Meta 1	Mucho más que el resultado anticipado	Algo más que el resultado anticipado	Resultado anticipado	Algo menos que el resultado anticipado	Mucho menos que el resultado anticipado
Meta 2	Mucho más que el resultado anticipado	Algo más que el resultado anticipado	Resultado anticipado	Algo menos que el resultado anticipado	Mucho menos que el resultado anticipado
Meta 3	Mucho más que el resultado anticipado	Algo más que el resultado anticipado	Resultado anticipado	Algo menos que el resultado anticipado	Mucho menos que el resultado anticipado

8va visita-

Meta 1	Mucho más que el resultado anticipado	Algo más que el resultado anticipado	Resultado anticipado	Algo menos que el resultado anticipado	Mucho menos que el resultado anticipado
Meta 2	Mucho más que el resultado anticipado	Algo más que el resultado anticipado	Resultado anticipado	Algo menos que el resultado anticipado	Mucho menos que el resultado anticipado
Meta 3	Mucho más que el resultado anticipado	Algo más que el resultado anticipado	Resultado anticipado	Algo menos que el resultado anticipado	Mucho menos que el resultado anticipado

9na visita-

Meta 1	Mucho más que el resultado anticipado	Algo más que el resultado anticipado	Resultado anticipado	Algo menos que el resultado anticipado	Mucho menos que el resultado anticipado
Meta 2	Mucho más que el resultado anticipado	Algo más que el resultado anticipado	Resultado anticipado	Algo menos que el resultado anticipado	Mucho menos que el resultado anticipado
Meta 3	Mucho más que el resultado anticipado	Algo más que el resultado anticipado	Resultado anticipado	Algo menos que el resultado anticipado	Mucho menos que el resultado anticipado

10ma visita-

Meta 1	Mucho más que el resultado anticipado	Algo más que el resultado anticipado	Resultado anticipado	Algo menos que el resultado anticipado	Mucho menos que el resultado anticipado
Meta 2	Mucho más que el resultado anticipado	Algo más que el resultado anticipado	Resultado anticipado	Algo menos que el resultado anticipado	Mucho menos que el resultado anticipado
Meta 3	Mucho más que el resultado anticipado	Algo más que el resultado anticipado	Resultado anticipado	Algo menos que el resultado anticipado	Mucho menos que el resultado anticipado

11ma visita-

Meta 1	Mucho más que el resultado anticipado	Algo más que el resultado anticipado	Resultado anticipado	Algo menos que el resultado anticipado	Mucho menos que el resultado anticipado
Meta 2	Mucho más que el resultado anticipado	Algo más que el resultado anticipado	Resultado anticipado	Algo menos que el resultado anticipado	Mucho menos que el resultado anticipado
Meta 3	Mucho más que el resultado anticipado	Algo más que el resultado anticipado	Resultado anticipado	Algo menos que el resultado anticipado	Mucho menos que el resultado anticipado

12ma visita-

Meta 1	Mucho más que el resultado anticipado	Algo más que el resultado anticipado	Resultado anticipado	Algo menos que el resultado anticipado	Mucho menos que el resultado anticipado
Meta 2	Mucho más que el resultado anticipado	Algo más que el resultado anticipado	Resultado anticipado	Algo menos que el resultado anticipado	Mucho menos que el resultado anticipado
Meta 3	Mucho más que el resultado anticipado	Algo más que el resultado anticipado	Resultado anticipado	Algo menos que el resultado anticipado	Mucho menos que el resultado anticipado