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The Impact of the Family Development Credentialing Program on School Readiness: Outcomes in Family Support

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THE IMPACT OF THE FAMILY DEVELOPMENT CREDENTIALING PROGRAM ON SCHOOL READINESS: OUTCOMES IN FAMILY SUPPORT

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Empowerment initiatives like the Family Development Credential (FDC) and Family Support (FS) program demonstrate how strengths-based practice can be used to help family workers become successful in partnering with families to help them reach their goals. As these two initiatives converged in Allegheny County Pennsylvania in 2005, families, workers, advocates and policy-makers in FS aimed to improve the skills of workers and improve School Readiness outcomes for children by increasing parent involvement and the regular assessment of child developmental milestones.

The theoretical basis for this study can be found in tenets of the Ecology of Human Development which posits that the interactions of human are connected to the family and social systems of their environment (Bronfenbrenner, 1979; Bronfenbrenner, Moen and Garbarino, 1984; Bronfenbrenner and Evans, 2000; Forest, 2006). Using a quasi-experimental pre/post test comparison group design this study investigated whether the FDC program impacted the Family Support goal of School Readiness and related child outcomes. It compares the results of micro level interactions on parent involvement and child delay for children with family workers trained in FDC to those who were not.

Findings from this study revealed that parent involvement scores varied depending on the status of the FDC worker (trained or untrained) and the race of the child. Prior to implementation of the FDC program (FDC1), parent involvement scores for Black children were lower than

those of White children. Once FDC was implemented, for children with FDC trained workers (FDC2), parent involvement scores for Black children increased and no statistically significant difference was found between the races. After the implementation of FDC, for children who had workers without FDC training (FDC3), a statistically significant difference was found in the parent involvement scores; scores for White children were lower than those for Blacks and Black children's' parent involvement scores which had increased with FDC workers, stayed at the same level.

Although the study did not find that FDC had an impact on child developmental delays, it did find that girls were less likely to be delayed than boys and older children were more likely to be delayed then younger children.

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CHAPTER ONE

INTRODUCTION

Statement of the Problem

In the early 1920's, empowerment models were used by family workers in the Settlement House movement in the U.S. to help families identify and find solutions to their social, economic and familial problems (Trattner,1999). As the country faced the onset of industrialization and society became more complex, American families found their problems also became more difficult to manage on their own. The birth of helping traditions caused the field of social work to fight to become a recognized profession. Traditional case work models that developed in response to families' growing needs and changes in the social structure were being designed to help treat peoples' problems. Schools of social work nationwide trained caseworkers in this 'medical model' which embraced a problem-focused, 'fix-people' paradigm. This paradigm essentially blamed the families for their situations and reinforced their negative self-worth (Popple and Leighninger, 2002). As a consequence, these deficit-oriented models disempowered families making them less likely to trust the systems and the workers that were created to help them reach their goals.

In the last thirty years a significant shift in the approach to working with families has been on the rise. Programs like the Family Development Credential (FDC) were designed to support families and promote goal attainment by helping them identify their strengths, as opposed to their challenges (Crane, 2000). These programs purport to have better results than those using a deficit orientation; therefore this study examines how one such strengths-based model, the FDC, impacts another family-serving intervention known as Family Support (FS). FS

is a network of programs comprised of families, workers, agencies and policy-makers that provide a helping system of support for families enrolled.

Both the Family Development Credential (FDC) and the Family Support (FS) initiatives use empowerment principles to help families achieve and sustain goals. FDC is a vehicle that uses training on strengths-based principles and empowerment processes to teach human service workers better ways to engage families. As these two models converge locally in Allegheny County Pennsylvania, this study investigates whether the FDC helps workers in FS facilitate positive outcomes for before school-aged children zero to five years old enrolled in the FS centers.

Purpose of the Study

According to research on the Family Development Credential (FDC), FDC trained family workers who adopt principles of empowerment have been successful in partnering with families to identify, plan, and reach goals (Crane, 2000; Palmer-House, 2006). These findings serve as the fundamental rationale for this dissertation research. To that end, the impact of the FDC program (through the training of family workers) was measured on one very specific family goal, School Readiness (SR). School Readiness in the family centers is determined by the level of parental involvement and child developmental appropriateness as indicated by evidence of a 25% delay in one or more developmental areas.

Given the findings in FDC literature which assert that FDC trained family workers help families reach their goals, this study asks: What is the impact of FDC trained workers who partner with families in Family Support (FS) on two child outcomes? Has there been any change since the implementation of FDC on parental involvement throughout the FS network and has there been any change in the children's levels of developmental appropriateness? Quantitative

methodology was used to investigate the answer to those questions and to measure the impact of Family Development on outcomes in Family Support.

Research Questions and Hypotheses

For the last twenty years Family Support Centers (FS) in Allegheny County have helped families prepare their children for kindergarten. This goal of School Readiness is achieved through a home visitation model that includes parenting skills development, social support, self-sufficiency services, referrals for adults, and child development activities for the children. By teaching and modeling healthy parent-child interaction and conducting child development screening and assessments on children from birth through five years of age, family center workers partner with families to achieve positive outcomes aimed at children becoming "school ready".

Tenets of human and child development theory (Bronfenbrenner, Moen and Garbarino, 1984) are implicit in the activities that FDS workers conduct with families in the applied context of Family Support (FS). This study explored how the Family Development Credential (FDC), a skills-based training program intervened in FS, a local human service initiative and whether that intervention facilitated improved interactions between parents and children in the form of parental involvement and child developmental appropriateness. The importance of the interactions and relationships between worker and parent has been studied in the literature on FDC and School Readiness and cannot be ignored (Smith and Bone, 2003; Watson-Smith, 2004) and (McWayne et al., 2004).

Throughout this FDC/FS outcomes study the following hypotheses and research questions are investigated.

Hypothesis 1:

Parents with FDC trained workers will demonstrate higher levels of parent involvement with their children compared to those whose workers do not have the credential.

Research Question 1:

Is there any difference between levels of parent involvement in FS, before and after the family workers earned Family Development Credentials?

Hypothesis 2:

Children in FS with FDC trained workers will demonstrate higher levels of child developmental appropriateness compared to those whose workers do not have the credential.

Research Question 2:

Is there any difference between level of child developmental appropriateness, (children with identified delays in FS), before and after the family workers earned Family Development Credentials?

Limitations

This study was conducted in an effort to increase the knowledge base about the Family Development Credentialing program and its impact on families' ability to reach their goals. The study sample was limited to parents and children enrolled in the Allegheny County Family Support (FS) program during a 10-year period. While selection of this sample was intentional, it extremely limits the ability to generalize the results beyond the programs under study. Further, only family workers who were employed at a family center between 1999 and 2010 were included in the study.

Finally, because a secondary dataset was used and data were extracted from the Allegheny County FS database, I was limited to the use of data collection instruments designed by the Family Support network. Often, questions on those instruments that were relevant to my

variables of interests were not mandatory fields and not all parents responded to them. Since I was restricted to conducting the analyses on the data that were available, the number of missing values between Pre and Post test observation periods varied. Ultimately, these limitations were taken into consideration and adjusted for statistically.

Despite its limitations, this study has merit in that there is always a need to investigate whether social service programs are working and whether they are having an impact on the people they serve. The results of this study can be used to inform administrators of both the Family Development Credentialing (FDC) and Family Support programs about the effectiveness of FDC with families and their children in Allegheny County.

CHAPTER TWO

A REVIEW OF THE LITERATURE

Theoretical Framework

Before examining the impact of the Family Development Credential (FDC) program on School Readiness outcomes in Family Support (FS), it was essential to first identify the relevant theories that underlie the programs under study. At the center of both the FDC and FS initiatives is the fundamental belief that no individual, child, or family can be successful without the support of significant others in their lives and the systems in which they find themselves. Key features at the core of human relationships between workers and parents, and parents and children can be found in theories of human development, child development and School Readiness in human services delivery systems. In this dissertation research, I examined the theoretical connections between the FDC, an empowerment training program for human services workers and FS, a strengths-based family and child serving human services system dedicated to achieving positive parent and child outcomes.

Human Development and FDC

The most important theoretical aspect of the FDC program relevant for parent and child outcome studies can be found in the Ecology of Human Development theory of Urie Bronfenbrenner (Bronfenbrenner, 1979; Bronfenbrenner, Moen and Garbarino, 1984; Bronfenbrenner and Evans, 2000; Forest, 2006). Bronfenbrenner's psychological and ecological theory of human development purports that as humans develop, every individual responds to and is stimulated by their immediate environment and the many systems within that environment (Jalongo & Isenberg, 2004). This ecological systems theory explains how people interact within

and between various elements of the social structure at four distinct levels. The four levels are: 1) the microsystem, where the individual connects to self and immediate others like family and friends; 2) the mesosystem, where the individual interacts with neighbors and less significant others; 3) the exosystem, where individuals (and families) interact with institutions and organizations; and 4) finally, the macrosystem, which encompasses all of the culture, values and beliefs of the larger society that influence individual human development. (Bronfenbrenner, 1979)

Like Bronfenbrenner, another social theorist, C. Wright Mills agreed that individuals interact with their environment but Mills limited his explanation of the social structure to just three levels (micro, meso and macro). Mills however, added a second dimension to his systems theory when he examined the direction of influence between individuals and the various levels of the system. He concluded that the direction of influence was two-way, not merely unidirectional. For instance, he posits that people can influence and change social systems as much as those systems can affect and change the individual (Aulette, 2007).

Some twenty years after his initial work on human development, Bronfenbrenner and Evans (2000), also expanded ecological systems theory to include the two-way interactional effects of human development. They explained this phenomenon using a term called *proximal process* and defined it this way:

> "…proximal process involves a transfer of energy between the developing human being and the person, objects, and symbols in the immediate environment. The transfer may be in either direction or both: from the developing person to features of the environment, from features of the environment to the developing person, or in both directions, separately or simultaneously" (p. 118).

The existence of proximal process can be seen in the interrelationships between FDC trained workers and parents and parents and children in Family Support (FS). When family workers partner with parents to enhance or improve the parent's levels of self-sufficiency and involvement with their children, the workers have the ability to influence parents and vice versa. Simultaneously, as parents grow and develop they share the skills they have learned with their children, they have the ability to influence their child's growth and development and vice versa. Ultimately, all of the participants in FS have the ability to affect the outcomes of the children, making them better prepared for kindergarten or school ready. When children are more ready for school the systems must be ready to serve them as well (McAllister, Wilson, Green and Baldwin, (2005).

Both the Family Development Credential (FDC) program and the Family Support (FS) centers promote principles and values that focus on the quality of relationships and the level of support that individuals receive. Family workers know that these relationships are critical to the healthy development and autonomy of the child and healthy interdependence and self-reliance of the adults. Unlike traditional deficit models that cause system dependency when families seek help (Popple & Leighninger, 2002), these two empowerment approaches share intrinsic values and principles that encourage healthy *interdependence* for families within and across their social systems (Cochran, 1982; Forest, 2006).

This theory of human ecology resonates with some of the early ideas of structural functionalists who explained the interconnectivity between social systems (Powers, 2004). Functionalists believed that social institutions are *interdependent* within the social structure, (macro level). Likewise, families and individuals are *interdependent* with the organizations and

systems in their environment (meso level). Finally, the FS workers are interdependent and work closely with families to facilitate positive outcomes for children (micro level).

The Family Development Credential (FDC) program in Allegheny County was provided as a training vehicle for workers within Family Support (FS). The ultimate goal of all of the entities in the FS network is to influence the parent and the child's life in a positive direction. By studying these outcomes, this research aimed to establish a link between the ecological theory of human development and the family practice strategies of FDC and FS. Since the strengths-based paradigm of these two programs is so different from the "medical models" of social work practiced in other areas of human services, this FDC research study contributed to the research on the field of human services by examining the effects of worker-parent and parent-child interactions on School Readiness outcomes in FS.

Today, family workers in Family Support (FS) are participating in a paradigm shift in their daily practice with families. Based on the assumptions embodied in ecological theory of human development (Bronfenbrenner, 1979), it is evident that family workers in FS strive to create a system of support for families that nurtures children so they can thrive and grow. Workers use dynamic, empowering, strengths-based strategies to effectively support families, understand their problems, and meet them at their point of need so that they can achieve their goals. At the core of this helping system, FS centers assist families with parent involvement and child development activities to prepare their children for school. The School Readiness of the children in the FS network becomes the first priority in the goal planning process.

Child Development in Family Support

Family Support (FS) has many similarities to Head Start, a federally funded initiative, co-founded by Bronfenbrenner that has garnered documented success and produced positive

outcomes for families and their children as they prepare for school. Inherent in both of these models is the belief that a child's development progresses in direct response to the adults with whom he interacts and the environment in which he grows (Jalongo & Isenberg, 2004).

In early work at Cornell, Bronfenbrenner along with Cochran (1982) studied the effects of parents on their children's success in a six-year project known as "Family Matters". They focused on these processes by observing parents' interactions with their children in a home visitation model similar to the Allegheny County Family Support program. Bronfenbrenner and Cochran found parents' interactions with their children were integral in the child's development. They explain, "Our assumption is that how positively parents view their children effects what they do with their children; the activities they do together, the disciplinary approaches they use" (Cochran, 1982, p.4). The findings from this project reinforces the need for quality support for children from parents and other positive adults, relatives, neighbors, home visitors, child development programs and specialists, and good home-school relationships.

Family Support centers, like the Family Matters program were designed to improve parent involvement, child development and School Readiness outcomes for families. Child development theory is at the center of the literature on School Readiness. While human ecology theory is only one approach to child development, it is relevant to both the Family Development and the Family Support (FS) initiatives and its tenets provide the fundamental framework for this study. This theory establishes a link between the practice strategies of FS and the theoretical assumptions that lie within the work itself. As family workers engage parents, parents engage their children and the children respond to the adults - these are the processes and the empowering environment that prepare the children for school.

Many other child development theories have been explored by researchers to determine what exactly prepares a child for kindergarten (Diamond, Reagan and Bandyk., 2000; May and Kundert, 1997). According to Diamond et al, (2000), definitions of School Readiness vary and depend on the discipline of the researcher conducting the study. For instance, some researchers take a developmental approach and assume that all children are ready to learn as they move through a series of stages (Piaget, 1952). Others take an environmental approach, asserting that children follow the example of the adults in their environment (Vygotsky, 1978). Other theorists believe in a psycho-sociological approach based on the child's fundamental needs being met first, as in Abraham Maslow's theory of self-actualization in which case, children will be best prepared if they have what they need physically, socially and emotionally before they enter school (Jalongo & Isenberg, 2004).

Parents in Family Support, like child development researchers, have many varying conceptions about what kindergarten readiness means to them. These conceptions raise several questions about how effective empowerment initiatives are and what influence they have on children. Some of those questions relevant to this study are:

A. Can workers in social intervention programs like Family Development (FDC) and Family Support (FS) integrate theory into daily practice and help parents and children achieve their goals?
B. Can staff communicate principles of empowerment to families and demonstrate those principles in their work?
C. Once parents understand the principles of FDC/FS and the goal of School Readiness, do workers sufficiently partner with them to improve child development outcomes for the County's children?

To answer these questions, workers in Family Support (FS) help parents develop their own conceptions about School Readiness. The strategy used by FS involves family workers modeling healthy parent-child interactions, sharing information on child development and performing assessments on the children as they learn and grow. For family workers to facilitate positive parent and child outcomes in FS, they must be able to translate theory into practice. By doing this, the program can ensure the successful implementation of the empowerment model (FDC) and the subsequent fidelity to its principles (Baerveldt, Horjus & DeWinter, 2008).

CHAPTER THREE

THE HISTORY OF FAMILY DEVELOPMENT

The Intervention: Family Development Credential

In the early 1990's, a diplomat in New York state government, Evelyn Harris, faced a social dilemma. As an administrator and dispenser of Community Service Block Grant funding, she recognized that current family practice models being implemented throughout the state reflected deficit-oriented principles and practices. These interventions were entrenched in a traditional case work paradigm that she believed reinforced families' weaknesses and disempowered them, hindering their ability to reach their goals.

Ms. Harris eventually approached researchers at Cornell University's School of Human Ecology about the problem. Seminal research was underway at the University, led by human ecology theorist Urie Bronfenbrenner along with Moncrieff Cochran, and others. These researchers had been collaborating for many years, from the late 1970's through the mid-1980's, on a cross-cultural study called "Family Matters" which was designed to measure the impact of parental empowerment and parental engagement on outcomes for children. This early work examined how children developed in response to the myriad of people and settings to which they were exposed (Cochran, 1982; Forest 2006; 2008).Their research helped to strengthen Bronfenbrenner's theory on the "ecology of human development", which essentially posits that individuals interact with systems at various levels of society and grow in response to those interactions. Researchers at the Family Matters project applied the principles of Bronfenbrenner's theory of human development in their research and explain it this way:

> …the growing person acquires a more extended, differentiated, and valid conception of the ecological environment, and becomes motivated and able to engage in activities that

> reveal the properties of, sustain, or restructure that environment at levels of similar or greater complexity in form and content. (Cochran and Henderson, 1985, p.13) citing (Bronfenbrenner, 1979).

The work being done at Cornell exemplified the theory, understanding and application of empowerment in human service work that Ms. Harris was seeking. Since she was primarily interested in improving the way human service workers interacted with families, she met with researchers at the University and explained her desire for large-scale change for family workers in New York State. She discovered that work had already begun on a training curriculum on the Family Development Credential (FDC) called the "Empowerment Skills for Family Workers" (Forest, 2003). The FDC which was wrought with tenets of Bronfenbrenner's theory was designed to promote empowerment and teach family workers to embrace principles that would change the way they worked with families. Eventually workgroups were formed that integrated theory, practice and policy into the development and implementation of the FDC program in New York state (Crane, 2000).

The creation of this initiative allowed workers state-wide to abandon the usual tenets of deficit-oriented social work in favor of more strengths-based practice. With funding from the state, foundations and the research community at Cornell, practitioners launched the Family Development Credential Curriculum and Training program (Forest, 2006). Since then, FDC has been implemented in at least 18 other states nationally. Over 5,000 FDC workers in New York State and approximately 10,000 nationwide have been trained and credentialed in empowerment principles and strengths-based family practice (FDNYS Conference, 2005) using the manual, "Empowerment Skills for Family Workers" (Forest, 2003).

According to Crane (2000) the goals of the FDC program provide a basis for determining the efficiency of the curriculum and its implementation across states, organizations and multiple venues. She identifies the three primary goals of the FDC program as:

- Families will develop their own capacity to solve problems and achieve long-lasting self-reliance and interdependence with their communities.
- Frontline workers will develop skills and competencies needed to work effectively with families.
- Agencies and communities will transform the way they work with families, focusing on strengths, families setting their own goals, and fostering collaboration (p.88)

The goals of the FDC program are clearly aligned with Bronfenbrenner's ecological systems theory. The interrelationships between a) the family and the family worker, b) the families, workers and service agencies and c) those entities and the community clearly demonstrate the systemic nature of complex interactions that occur within the Family Development and Family Support initiatives.

Relevant Research

In general, the Family Development Credential (FDC) literature reveals that the FDC has the potential to yield positive outcomes first for family workers and second for the families with whom they partner (Crane, 1999; Palmer-House, 2006; Hewitt, Mooney and Crane, 2010). Ultimately these partnerships have the potential to change organizations and communities where family service programs are located (Day Rolinson and Watrous, 2003). In several studies in Pennsylvania, California, New York, and Missouri, researchers reported workers experienced: a) a paradigm shift from negative to positive attitudes about families and an increased knowledge of resources (Watson-Smith, 2003), b) an increased application of strengths-based practice and

networking with other agencies (Bell and Hollingsworth, 2006), c) improved professional and personal development (Crane, 1999), d) an increase in global self-esteem and mastery (Smith and Bone 2004; Palmer-House, 2006), and e) an increased attainment of career goals and improved positive relationships (Svihula and Austin, 2004). Overall, the majority of the studies found that the FDC helped workers to develop skills to form mutually respectful relationship with families.

Researchers have also found that the Family Development Credential (FDC) has had an impact beyond the individual level of workers and families. One example of how the program works at the meso and macro level is demonstrated by the collaboration of the program with community colleges, universities and community-based organizations. According to Smith and Bone (2004) the FDC program in Missouri strengthened agencies and communities and increased interagency communication. Support was provided to individuals and their families from the workers, social service program, and community organizations.

Similarly, in San Mateo County, California, the sponsoring agency implemented the FDC program by creating a nurturing and supportive environment for workers. By promoting a culture of support for workers and families, the County's FDC program included incentives for participation and collaborative networks made up of professionals, workers, facilitators and family members. This California community embraced the FDC, built mutually respectful relationships and strengthened the chances of ensuring the program's growth. In the first sixteen weeks, 50 workers were trained and the agency made a commitment that once 500 workers obtained the credential, the FDC would become a course offered by the local community college (Svihula &Austin, 2004). In the four years since its inception locally in Allegheny County, a

similar collaboration of human service agencies has managed to train over two hundred graduates and more are enrolling every year.

Despite many family worker and community outcomes of the FDC program, this program also has its challenges. Researchers at the University of Pittsburgh found that in some instances workers in the FDC program indicated that it was sometimes difficult to implement the skills and competencies they learned on their jobs. They found that when the entire system did not make the shift to strengths based practice, things like assessments, regulations, policies and other workers and administrator attitudes adversely affected their work. Getting entire deficit-oriented systems to readily embrace or financially support the program was harder than expected (Bell & Hollingsworth, 2006). Without organizational and administrative support, workers found they were hard-pressed to carry out this model and its empowering principles in a disempowering environment.

Another study in Connecticut conducted on family workers in the Child Protective Services system, (Alpert and Britner, 2005) found no significant difference between the family focused attitudes of workers trained in the Family Development Credential and those that were not. This study also found that the Child Welfare system and its regulatory nature make some tenets of FDC difficult if not impossible to implement. One drawback in the study was that there were some limitations in the way it coded survey responses. Additionally, because CPS workers are trained in a variety of similar concepts as a matter of course for their jobs, it is possible that this created an interaction effect making it impossible to detect any difference between the two types of training programs. The possibility of an interaction was not addressed in the study.

Another study in Missouri used a treatment and comparison group and pre and post test design to look at test scores of workers on job related criteria (Smith and Bone, 2004). They

found no significant differences between the control and treatment groups on two specific study variables, job satisfaction and turnover rates. The researchers did however find evidence that supports increased levels of self-esteem and global mastery of workers, after attending the FDC training.

All of these studies are relevant and provide a background of essential information and a fundamental rationale for this project. Generally, the Family Development Credential program helps family workers improve their own skills and engage families as a result. Given what has been researched in the FDC literature, a gap still exists. In all of the studies whether they used qualitative or quantitative research methodology, none specifically investigated the family and child outcomes of workers trained in FDC. To that end, this study examines whether the FDC workers had an impact on the children of families enrolled in the Family Support (FS) network in Allegheny County, specifically investigating whether there was any evidence of a significant relationship between the FDC and School Readiness outcomes for children in FS.

CHAPTER FOUR

RESEARCH SETTING

Allegheny County Family Support

The Family Support (FS) network in Allegheny County (AC) is a configuration of nonprofit organizations that use social support and empowerment to achieve positive outcomes for families and children. According to Rappaport, Swift and Hess (1984) empowerment of families and professionals can only happen when true collaboration occurs between them. Although similar interventions are being implemented in communities across the U.S., the large Family Support (FS) presence in AC has consistently been a collaboration of several entities, advocates and families. Funded by one public and one private source for many years, the 31 Family Support center organizations have one common purpose, to strengthen families and promote School Readiness for their children.

To fully understand how the Family Support model works locally, it is important to grasp the culture of practice present throughout the network. Essentially, the values and principles being practiced with families, sponsoring organizations and managers, reflect those espoused by other family support organizations nationwide. The core principles under which family support organizations operate are *strengths based*. The fundamental premise that all people have strengths is carried out when family workers use those principles to help families identify their strengths and reach their goals.

The methods used in the family support movement are reminiscent of the principles first described by Moncrieff Cochran (1982) in the Family Matters Project in Ithaca, New York in the late 1970s and early 1980s. In Allegheny County, the family support centers use similar home visitation strategies to help families identify goals and promote child wellbeing and child development. While the paradigm shift of the empowerment movement was underway in New

York State, it was beginning to take shape in Allegheny County Pennsylvania at the same time, and continues today. According to Family Support America (2005), family support centers use effective approaches with families because they:

1) are based on strengthening and empowerment principles,

2) are grassroots and community based,

3) represent a shift in human services delivery and

4) represent a movement for social change.

These are the same key elements that create a structure of social support and empowerment for families and workers locally.

Many researchers of family interventions contend that for families to be successful at reaching their goals, they must be empowered to believe they possess the ability to attain those goals and not blamed for the situations in which they find themselves (Brown Rosier and Corsaro, 1993; Crane, 1999; Dunst and Dempsey, 2007; Keen, 2007). The concept of families reaching goals covers a broad spectrum of life experiences and is applicable to all families. Whether families access support through human service programs or not, *family support* in some context, through family, friends, community, faith, private organizations or the government, is necessary for healthy human development.

In Family Support (FS), families and children are exposed to many levels of interactions designed to stimulate positive growth and development. Much like the various systems (micro, meso, macro) described by Bronfenbrenner (1979), the FS network in Allegheny County is a complex structure of systems designed to meet the family at their point of need and empower them to reach their goals. In late fall of 2004, the FDC program was introduced to policy makers and human service collaborators in Allegheny County, Pennsylvania as an alternative to

established training program already in place. The collaborators viewed the FDC training as an asset to strengthen worker competencies and to help meet the needs of families throughout the county.

Although the Family Development Credential (FDC) program is relatively new in Pennsylvania (six years), Family Support (FS) is rooted in the community and has been operating locally for nearly 20 years. There are currently 31 Family Support centers offering services to families in Allegheny County. In the last several years, these centers have offered strengths-based activities in families' homes and at the centers to nearly 8,000 adults and children annually (Dick, 2007). There are two levels of services available to families. Families in FS can voluntarily opt for two types of services, *intensive* (home visiting, goal planning, self-sufficiency and child development) or *general* (group activities primarily held at the FS center). Only the *intensive* families and their workers were eligible to be research subjects in this study.

Family support organizations receive technical assistance and support from the Office of Child Development (OCD) at the University of Pittsburgh. Part of that assistance involves providing data and feedback to the Family Centers on the populations they serve and the activities they conduct each year. These data help to profile families by the catchment areas where services are offered so that the FS centers can better tailor services to meet the needs of those families. In the (Dick, 2007) unpublished report that summarized parent survey responses, researchers at the University of Pittsburgh found that 55% of all families receiving *intensive* services were run by a single, primarily female, head of household. When examining race, the study found that African Americans in FS are disproportionately represented much like in other empowerment programs (Head Start and Early Head Start) that serve families and young children (Brooks-Gunn and Markham, 2005; Jarrett, 1998; Jung and Stone, 2008; and

McAllister, 2005). In the year prior to the issuance of the report, 62% of the total population of FS was African American. (Dick, 2007)

Family workers in Family Support, whether Family Development Credential trained or untrained, face many problems related to the socio-demographics of the populations they serve. Socioeconomic limitations related to poverty, education and income are known to affect the extent and manner to which parents get involved with their children (Almgren, Yamashiro and Ferguson, 2002; Jarrett, 1998). Of all 981 adults who responded to the Dick survey in 2006, which included families receiving both intensive and general services, 63% were employed full time and 32% indicated they had part-time jobs. Of the families receiving only *intensive* services, more than half of the primary parents were unemployed (56%), unmarried females whose average age ranged between 21 and 30 years old. Many of these single moms had low educational attainment with only 38% having a high school education and 21% having less than a high school diploma (Dick, 2007).

Given these demographics and the presenting needs of the families in the community, it is easy to understand why empowerment approaches make sense for this service population. Regardless of family demographics, most of the services sought by families in Family Support in Allegheny County in 2006 were related to micro level concerns like the child's School Readiness and family self-sufficiency. Secondary concerns for the families were related to health and nutrition, and employment and housing. Since demographics have been known to affect child outcomes, factors like child and parent race, parent age, income and education level were explored in this study.

Despite the type of issues, needs and concerns facing families in FS, the primary goal of Family Support in Allegheny County has long since been established as School Readiness.

Administrators, parents, family workers, policy makers and funders determined that the foremost purpose for the work done in FS is focused on preparing the children developmentally for school from the time they are born. Program managers and parents alike believe that parents must learn the necessary skills to prepare children for school. The influence of Bronfenbrenner's early work with families at Cornell is evident in the programmatic structure of FS. The effect of interrelationships between workers and parents and parents and children can be seen at the lowest (micro) level of interactions. Empowerment processes occur when workers model and influence the parents' level of involvement with their children, and also when parents model appropriate child development activities for their children as well.

In 2006, parents in Family Support participated in several service strategies related to School Readiness. Home visitors modeled child development activities for parents, provided child developmental screenings and conducted group learning opportunities at the center. Parents practiced the necessary skills and developmentally appropriate parent/child interactions to help their children thrive and grow. By the end of fiscal year 2006, 80% of the children in intensive services had received at least one child developmental assessment (Dick, 2007).

The Convergence of the Family Development Credential and Family Support

For many years the Allegheny County Family Support network has provided workers intensive training that included information on family systems, adult and child development and principles of empowerment. Once the Family Development Credential (FDC) program was implemented in the county however, the existing pre-service training program for family workers was strengthened by the use of the FDC curriculum. Family workers already familiar with strengths-based approaches were now using enhanced parent engagement strategies to help families with children 0-5 years old prepare for kindergarten. By participating in the FDC

program, research suggests that worker-parent partnerships can be strengthened. Hence, improved partnerships could focus more closely on the goal of School Readiness. If this were to occur, it could improve the level of parent involvement throughout the network and increase the parents understanding of what constitutes child developmental appropriateness and delays.

By providing comprehensive training in Family Support on basic human and child development, administrators aim to increase family workers understanding of the theory that drives their work with families. If workers understand those assumptions, they can partner with parents and use best practice strategies to help families set and reach goals. In Allegheny County Family Support, workers learn about human and child development theories and assumptions during the initial 40-hour pre-service training provided to them when they are first hired. To strengthen the workers skill base, administrators and policymakers in Allegheny County believed that the FDC training would complement the existing training, enhancing workers professional development. They understood that the convergence of these two empowerment models (FDC and FS) had the potential to affect family and child outcomes in a positive direction.

So, how does the Family Development Credential program help? The FDC curriculum teaches workers that by using empowerment principles, families can become more self-reliant (Forest, 2003). Family workers trained in FDC help parents shift from system dependence to self-sufficiency (Bell and Hollingsworth, 2006) and gain better skills (Crane, 2000 and Palmer-House, 2006). Since a major focus for FS is School Readiness, this study examined whether increasing the skills of workers through FDC helps parents become more involved with their children and those children to be developmentally appropriate and ready to compete when they enter kindergarten.

Creating a Conceptual Framework

The primary purpose of this study is to determine whether the intervention, the Family Development Credential program (the independent variable), has made an impact on the outcome, School Readiness (the dependent variable) in the form of positive parent involvement and child developmental appropriateness in Allegheny County Family Support (FS). While the FDC has been linked to positive *worker* outcomes in most of the FDC literature, families have attested that workers who earned the FDC helped them reach their goals and improve the quality of their lives. To date however, no known study has established a link between the FDC and family and child outcomes, using quantitative research methods.

Several key assumptions derived from the literature help to establish the conceptual framework for this research. These assumptions listed in Table 1 provide the fundamental premise on which this study is founded.

Table 1
Key Assumptions

1. Family serving interventions show positive results for parents and children when they link theory to practice.
2. When strengths-based empowerment approaches are employed in family service programs, they yield more success for families than those using deficit-oriented models.
3. The FDC program increases family workers' family engagement, empowerment and goal setting skills, helping families set and reach their goals
4. The primary goal for A.C. Family Support is School Readiness for children 0-5 years old
5. Ecological systems theory explains how a child's life is affected by supportive adults – parents and family workers in family service programs like FS.
6. Family Support uses the parent's involvement in the child's life to facilitate School Readiness (SR) outcomes
7. FS and FDC have a common language and similar principles of empowerment and support that both workers and parents understand.
8. Family workers and parents in FS have a universal understanding of School Readiness, which includes two key elements, *parental involvement* and *child developmental appropriateness (delay).*
9. Parents who are actively involved in their children's lives have children who are more apt to be prepared for school.

Ecological theory of human development (Bronfenbrenner, 1979), suggests that humans are shaped and supported by the other people, interactions and events that occur in the environment. If we apply this theory to Family Support (FS), we can easily see how the program was designed to work for its children using these principles. When children have supportive adults in their lives, starting with their parents, relatives, teachers and family development workers in FS they are more apt to develop appropriately in an environment that caters to their needs.

Parents in Allegheny County Family Support (FS) are encouraged by workers to nurture the child and to help them develop to their fullest potential. This study investigates whether the attainment of the Family Development Credential (FDC) changes the degree to which parent become involved with their children and or the number of children who are identified as developmentally delayed. Figure 1 depicts a Conceptual Framework of the FDC program, how it impacts FS and how those processes occur. This framework was derived from the original program logic model (Appendix B) of the FDC created by Crane, (2000) and the logic model I created for this study (Appendix C).

According to the Kellogg Foundation (2004) a logic model is "a picture of how your organization does its work – the theory and assumptions underlying the program links outcomes with program activities…" (p. IIII). The first logic model demonstrates the original intent and purposes of the FDC program (Crane, 2000) and the one created for this study depicts how the two initiatives converge and serve families within the Family Support system in Allegheny County along with the complexities of that system. This logic model shows the inputs, activities, outputs and the expected outcomes that FDC workers and FS parents and children can hope to achieve.

The joint FDC/FS logic model also depicts the short-term and intermediate outcomes that are expected as a result of the activities between workers and parents (parent involvement) and parents and children (child development). Once the family workers (FDS) are trained in the FDC approach, it is expected that they gained a heightened sense of awareness and understanding of FDC principles and FS activities. Those activities conducted with parents are intended to help parents become more involved with their children's development. As parents become more involved with the children, it is expected that the children's response can be measured by the developmental appropriateness (delays or no delays) for school. To fully understand the terms used throughout this study, a glossary of those terms was also created (Appendix A).

In the section following the conceptual framework, a discussion of the outcome of School Readiness is included, followed by the rationale for research in this study. These sections explain why School Readiness is so important to Family Support and how family-serving interventions similar to the Family Development Credential and Family Support initiatives have been found to positively impact child outcomes.

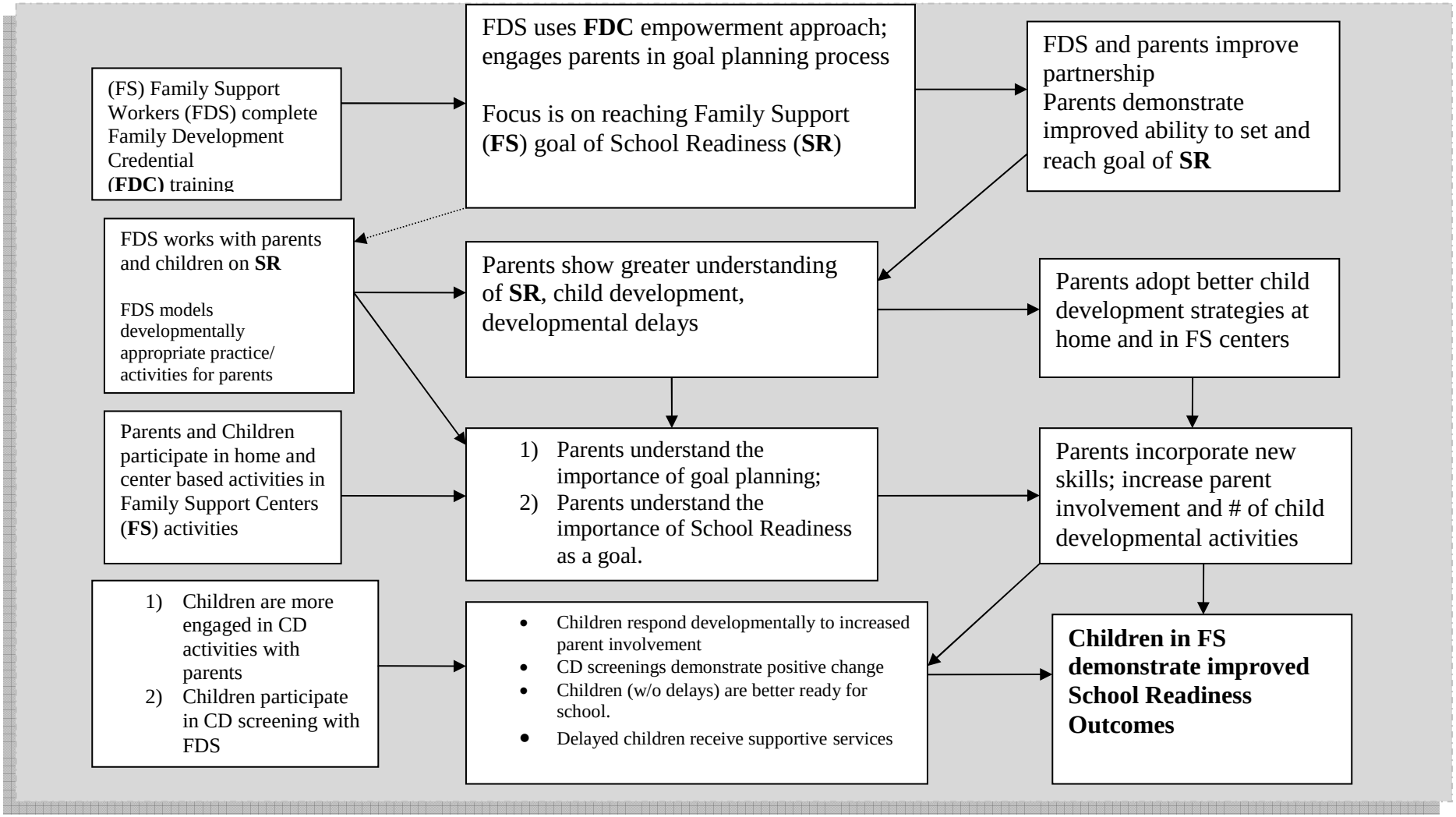


*Figure 1***:** Conceptual Framework: Impact of FDC on FS School Readiness.

The Outcome- School Readiness in Family Support

Since many definitions of School Readiness (SR) exist in the literature and in multiple applied settings, it is important to juxtapose the local definition of School Readiness with some of those definitions. To help families in Family Support (FS) achieve this goal, Family Development Credentialed family workers must be able to conceptualize the definition in order to operationalize it. The concept of SR was revisited in Allegheny County (AC) several years ago and redefined for the FS network.

In 2004, the AC Family Support Policy Board formed a School Readiness Committee made up of lead agency representatives, Site Directors, policy makers, parents and family workers. The goal of that committee was to develop a consensus about what School Readiness meant to all persons involved in the network. Out of those meetings the group developed a working definition of SR at that time. For FS centers, School Readiness was defined as: *documented evidence that the family has prepared the child for school based on the child's developmental appropriateness and that he/she has not exhibited significant delays (as evidenced by child development assessments conducted by FS or Head Start). Also, that an adequate level of parent involvement, (as indicated by home-based child development activities conducted with the child) is present* (Family Support, 2004). A review of the literature on the concept of School Readiness helps elucidate how the FS network may have arrived at this definition.

In the U.S., School Readiness has been at the center of policy discussions by task forces, commissions and education forums for decades. School Readiness was established as a priority in the form of a national goal for educators in 1995 at the National Education Goals Panel (Love et al., 2005). According to Diamond, Reagan, & Bandyk (2000) "Those efforts are exemplified

in the first of the national educational goals which stresses the importance of children being ready to learn when they enter school" (p.93). Although policymakers agree that School Readiness is a priority, researchers differ about what this concept actually means.

While early theorists disagree about what constitutes a child being ready for school (Diamond, Reagan, & Bandyk, 2000; Kim & Murdock, 2005), some key constructs from the literature seem to resonate in the definition used in Family Support (FS). For example, Erik Erikson suggests that what is most important for a child's development is rooted in the way they interact socially, grow emotionally and adapt to their surroundings (Morrison, 1995). Bronfenbrenner (1979), also addresses the manner in which children interact with significant others like parents, family workers, relatives, teachers, friends and others within their social environments, community and society at large (Jalongo & Isenberg, 2004). The influence of the parents on the child's development constitutes what the FS network calls *parent involvement*.

Other researchers distinguish between the child's readiness to learn and the child's readiness for school, (Diamond et al., 2000, McAllister, Wilson, Green & Baldwin, 2005). Readiness to learn means the child has an inner ability to comprehend knowledge. Readiness for school means there is an element of social and psychological development required to attend school itself. This concept, readiness for school is at the center the Family Support (FS) practice in Allegheny County and is the second element in the FS definition of SR, *child developmental appropriateness*. Theoretically and practically, the FS network successfully integrates the complex perspectives in the child development literature into this family intervention. They have operationally defined School Readiness (SR) and based that definition on the program's philosophy of support and the types of services it provides. Hence, the definition of SR clearly

has a fundamental base in relevant child development theory and applicability in this research study.

Many parents in Family Support come to the centers to learn more about child development and to secure better skills for maintaining a certain quality of life for their families. This is not unlike parents in many of the studies on child development. In one study by Diamond et al, (2000) researchers found that most parents believe that *a variety of skills* are important for children to enter kindergarten. They concluded that cognitive and social skills taught by parents to their children through home-based learning activities like reading, learning the alphabet and watching educational television were important. In this study, I examined whether parent's involvement changed after the Family Development Credential program was in place. Measures of School Readiness were derived from frequencies of participation in homework, watching educational television, and playing with and reading to the child.

The Family Support (FS) network uses multiple strategies to prepare children for school. However based on the definition FS created in 2004, the principles embodied in FS are built on the School Readiness theory that focuses on parent involvement and parent-child interactions. A large body of literature exists that asserts that healthy parent-child interactions strengthen the child's preparation for kindergarten (Cochran and Henderson, 1985, Dunst and Dempsey, 2007; Jarrett, 1998; McAllister et al., 2005; Reynolds, Temple, and Ou, 2003). Many family/school involvement programs nationwide are built on these same assumptions (Westmoreland et al., 2009).

Locally, family center staff use home visitation to model appropriate interactions, and perform child development assessments. These assessments measure the child's health, social, cognitive, language, gross and fine motor and behavioral milestones. During this dissertation

research, the results of the assessment that indicate whether or not a child was delayed were examined before and after the implementation of the FDC program to see if any relevant changes occurred in child delay between the two time periods.

The entirety of what determine a child's School Readiness is not solely based on parent involvement or the developmental appropriateness of the child but on many other aspects associated with the child's environment. In sum, to promote School Readiness and model parent/child activities with parents, family workers must consider the complex nature of School Readiness and what that concept means. Some of those other factors include:

1) level of parent involvement (McWayne et al., 2004),
2) parental beliefs, values and personal transitions (McAllister, Wilson, Green & Baldwin, 2005),
3) parents value of education (Brown Rosier and Corsaro, 1993; Jarrett, R. 1997)
4) teacher expectations and performance of the child, (Diamond, Reagan & Bandyk, 2000),
5) level of development across domains such as cognitive, social and emotional development (Jalongo and Isenberg, 2004)
6) parents views on child health (Abbott-Shim and Lambert, 2003), and
7) the schools' readiness to receive the children and the health of the community environment where the child lives (McAllister et al., 2005; McWayne et al., 2004; May and Kundert, 1997 just to name a few.

Ultimately, researchers, policy makers, staff and parents need to be keenly aware that there can be many predictors of School Readiness outcomes. While distinct academic disciplines (psychology, education, social work) approach the topic of SR from different theoretical and contextual frameworks, all of them agree that parental influence and child developmental

appropriateness are strong predictors of SR. Although these other factors can have an effect, this study focused on two factors of parent involvement and child developmental appropriateness only and controlled for demographic influences.

Both the Family Development Credential (FDC) and the Family Support (FS) programs value the critical nature of the worker/parent and parent/child relationship. The relationship between family workers and parents and parents and children, are the catalyst for promoting change in families' lives in FS. If FDC workers aid parents in setting and reaching the goal of School Readiness, then parents' should experience improvement in their ability to prepare their children for school and children should respond accordingly. The impact of these interventions on these core interactions were examined in this research. The question raised in the research presented here is both the degree to which this effect is evident and, secondly, the extent to which that evidence can be measured using the methodology incorporated in this study.

Rationale for Research: Family Serving Interventions That Work

One continuous theme revealed in the literature on Family Development (FDC), Family Support (FS) and School Readiness (SR) programs was that family serving interventions that employ family-focused strategies and principles of empowerment, often yield positive outcomes for parents and children. An investigation into how other researchers of family interventions linked theory to practice in parent and child outcome studies helped to strengthen the rationale for this dissertation research. In several different studies, researchers identified a variety of strategies similar to those used in FDC and FS as effective. When organizations establish a goal to effect positive change in families with children, those interventions are usually well-grounded in the fundamental tenets of social, psychological or educational theories of human and child development.

Research of other family-serving programs has been found to yield positive results. Researchers found that worker- parent partnerships, home visitation models, family support approaches, Head Start and Early Head Start and even progressive child welfare options have been successful in producing positive family and child outcomes (Crampton, 2006; Gfellner, McLaren and Metcalfe, 2008; Jung & Stone, 2008; Morrow & Malin, 2004). Studies like these and others, support the rationale for an exploratory investigation of the Family Development Credential program and its effect on School Readiness outcomes in Family Support

Worker/Parent Partnership

The core construct of the Family Development Credential / Family Support model is the worker-parent partnership. When parents partner with professionals to achieve their goals, the children benefit as a result. Bronfenbrenner (1979) placed critical emphasis on the role of the interaction between significant adults in the life of the child and the importance of a nurturing environment. Family workers and parents facilitate an environment that allows the child to thrive and grow. The Family Worker – parent partnership in FS succeeds and is effective when true collaboration is present (Morrow & Malin, 2004). In programs like FS, parents and workers alike agree that the key principles of the FDC program, mutual respect, trust and honesty are three of the most important features of professional/parent relationship (Dunst et al., 1994; Forest, 2003).

In one study of parents with children with developmental disabilities, parenting competence, confidence and enjoyment were associated with the quality of the parent/professional partnership and their sense of empowerment (Dunst and Dempsey, 2007). In FS, the success of the worker /parent relationship and attainment of mutually agreed-upon goals, are the primary elements of the intervention. Parents in Family Support are accustomed to family workers partnering with them to reach their goals. Hence, this study on the Family Development

Credential investigates whether increased worker competencies related to parent engagement, has an effect on parents' involvement levels and children's School Readiness.

Measuring the effect on outcomes via worker/parent partnership in another study, researchers found that using only one measure to assess service quality and partnership alone is not sufficient for determining the complexity of parent -- professional partnerships. They believe that additional measures are needed to identify the extent of influence that the parent professional partnership has on family and child outcomes (Keen, 2007). In this study, I examined several indicators of the outcomes of the worker-parent partnership. Measures in my study looked at parent involvement on four levels: how often a parent read to a child, played with a child, did homework and watched educational TV to determine patterns of parenting practice. Child development appropriateness and developmental delays were also measured to determine if the worker parent relationship had influence on that as well.

Home visitation models

The Family Development Credential and Family Support (FS) programs use home visitors to partner with families and work with parents and children at the FS center. The literature is rich with studies on home visitation models and parent and child outcomes (Crane, 1999; Cochran, 1982; Palmer-House, 2006; Watson-Smith, 2005). Several studies found positive outcome for families as a result of the interaction between the home visitor and the parent. In the UK where home visitors were trained in the Family Partnership Model which uses very similar strategies to FS, workers visited children every week from six to 12 months postnatal. During this multicenter randomized controlled trial and economic evaluation, researchers found improved parenting and health outcomes for families at risk for abuse and neglect (Reading, 2007).

Similarly in a 20-year evaluation of the Parent Child Home Program (PCHP) in West Manitoba Canada, Gfellner, McLaren and Metcalfe, (2008) used a model that closely resembles Family Support (FS). Home visitors modeled parent-child interactions to stimulate cognitive development in children. Based in social cognitive theories of learning, this study also used multiple instruments to measure parent-child bonding and interaction, styles of play, reading, verbalization and awareness of the environment. Like FS Allegheny County, families in this Canadian study were both ethnically and socioeconomically diverse. Study participants were Caucasian, Asian, and primarily Aborigine and were classified into three categories; at risk, interested and concerned parents. Researchers found that PCHP demonstrated positive benefits for parents within all three classifications on two indicators (parenting behaviors and cognitive competence of the children). In this Family Development Credential outcomes study, both parenting practice (level of parent involvement with the child's developmental progress) and the child's developmental appropriateness (evidence of a pre-existing 25% delay in areas such as cognition, socio-emotional, fine and gross motor development) were examined.

Family Support Models

Other studies have examined the concept of *family support* and its relationship to family and child outcomes, but this concept is not as widely researched as some others. In one program in New South Wales, Australia users of family support services and nonusers of services were given pre-and post test measures of child well-being and family functioning. Families in the experimental group showed improvement over the course of the intervention "closing the gap" with non-service users (Sanders and Roach, 2007). Findings also showed that when parents are involved in data collection in FS that they preferred to participate in processes when the performance measures used would help to inform child and family welfare practice (Cortis, 2007).

This study is relevant to my research because in Allegheny County, families are constantly inundated with requests for information. Family workers collect data at the time of enrollment and at every home visit with families. Subsequent home visits entail collection on parenting measures, Parents as Teachers (PAT) questionnaires and on child development assessments like the Denver II screening or the Ages and Stages Questionnaire (ASQ). The decision to utilize only secondary data was made to reduce the burden of data collection on the family. No new information was collected from parents during the course of this research and the responses they provided to the worker on parent involvement and child development were already available in the FS database. Like the Cortis (2007) study, this research project will not only inform child welfare practice but contribute to the literature in both the fields of Family Development and Family Support.

Two other home visitation models that resemble Family Support are Head Start (HS) and Early Head Start (EHS). Theoretically, the strategies employed in these programs are based in the interactions between parents and their children and outcomes are focused on the child's developmental progress and parental involvement. HS and EHS were designed to enhance the developmental competencies of at- risk and low- income children under five (Jung and Stone, 2008). These researchers assert that "key proximal outcome domains include motivation, cognitive competencies and skills, social adjustment, and family support (that is, parenting skills, parent-child relationships)" (p.149).

In the Jung and Stone (2008) study, researchers investigated socio-demographic and programmatic moderators of Early Head Start and uncovered significant race and program type interactions. They found that African American and Hispanic families that participated in both center and home-based programming demonstrated positive child cognitive and parenting

outcomes. Additionally mothers who had not completed high school also were found to do well in this type of program. This study has relevance for my research on two levels. First, it is very likely that some FS parents also participate in either EHS or HS because some of the child development assessments are done by EHS workers and not Family Support (FS) workers and sent to FS. Second, consideration of race and other demographics were given in this study since many of these characteristics have been found to indicate different effects in similar studies and populations (Jarrett, 1997).

The Sure Start Local Programme in the United Kingdom also showed similar promise. It was established to improve the child well-being of children zero to three years old for families in disadvantaged communities (Melhuish, Belsky, Annin, Ball, Barnes, and Barnes, 2007). In large initiatives like FS, FDC, HS and EHS, operators of these programs must ensure fidelity of implementation if they intend to compare results across sites. The Sure Start Programme conducted a national evaluation to determine if variation in program and/or implementation reduced the program's effectiveness.

As in the EHS study, researchers measured the impact of child and parenting outcomes and controlled for family demographics. They found a modest linkage between program implementation (the complexities between parents and staff) and its effectiveness on child and parenting outcomes. This study’s findings like many others, held relevance for my study since variations like the difference between workers trained in FDC and those not trained in FDC will be controlled for statistically.

Child Welfare Models

Most of the programs that are focused on child and family development use some tenets of empowerment to engage families and achieve outcomes. Empowerment approaches like the Family Development Credential, require workers to adopt a paradigm shift (Forest, 2006) in their thinking to successfully engage families. The benefit to these types of models has not gone unnoticed by the child welfare systems. Locally in Allegheny County, policymakers advocate for more progressive, diversionary child welfare practice to reduce the number of children in care. Nationally, Child Protective Services (CPS) is charged with the primary responsibility of protecting children from abuse and neglect. In many ways CPS entities are learning that empowerment practice including strengths-based principles, improved methods of communicating with families, working together in multiagency teams, and utilizing early intervention techniques that involve the family in decision-making and goal setting, are just a few of the ways to achieve best practices and yield greater results with families.

This shift toward better practice is evidenced by the diversity of models that child welfare uses to achieve family and child outcomes. Whether it is an Early Intervention program in the UK that helps prevents children at risk for abuse and neglect from entering care and improves parenting skills (Moran et al., 2007); the Family Group Decision Making model used globally and locally in Allegheny County to include parents in the planning and decision making processes and stabilize the family (Crampton, 2006); the Single Point of Engagement program in California that involves parents and community partners in reducing children's time in care by nearly 50% (Marts, Lee, McRoy & McCroskey, 2008) or the shift toward the development of "participatory practice" with families to improve their outcomes (D'Cruz and Stagnitti, 2008), one thing is clear, these child welfare programs like FDC and FS are participating in the change

from the traditional deficit –oriented case work model to the strengths-based approach on the rise.

There is one commonality in all of these studies of diverse family serving program models; researchers documented the impact of family practices in human services and the positive effect on parent and child outcomes. Regardless of the research methodology used, quantitative, qualitative, mixed or program evaluation, or the diversity in the findings, the literature on family serving interventions substantiates the rationale for my dissertation and provides a strong foundation for an outcomes study on Family Development and Family Support.

CHAPTER FIVE

METHODS

The purpose of this research was to examine the impact of the Family Development Credential and Training program (FDC) on School Readiness (SR) outcomes of children in Family Support (FS). For the last twenty years Family Support (FS) in Allegheny County helped families prepare their children for kindergarten. This goal of School Readiness is achieved through home visitations that include parenting skills development, social support, self-sufficiency services, referrals for adults, and child development activities for the children. By teaching and modeling healthy parent-child interaction and conducting child development screening and assessments on children from birth through five years of age, family center workers (FDS) partner with families to achieve positive outcomes aimed at children becoming school ready. The study investigates two research questions in an effort to discover if the FDC had any effect.

Research Questions and Hypotheses

This study examined the impact of the FDC (the independent variable) on School Readiness (the dependent variable) outcomes in Allegheny County Family Support. The study sought to measure the extent to which levels of parent involvement and child developmental appropriateness (delays) changed between two intervals. Those two intervals were defined in two five-year periods: Before FDC implementation -1999 to 2004 and After FDC implementation - 2005 to 2010. This investigation explored two hypotheses and research questions as the groundwork for this FDC/FS outcomes study.

Hypothesis 1:

Parents with FDC trained workers will demonstrate higher levels of parent involvement with their children compared to those whose workers do not have the credential.

Research Question 1:

Is there any difference between levels of parent involvement in FS, before and after the family workers earned Family Development Credentials?

Hypothesis 2:

Children in FS with FDC trained workers will demonstrate higher levels of child developmental appropriateness compared to those whose workers do not have the e credential.

Research Question 2:

Is there any difference between level of child developmental appropriateness, (number of children with identified delays in FS, before and after the family workers earned Family Development Credentials?

Researcher Position

Existing Family Development Credential (FDC) literature asserts that the FDC is an effective model because both staff and families attest to its power to change their lives. This model contains an inherent value of self-empowerment that gives all people the ability to change and recognize that change within themselves. Most of the current studies on the FDC program have been conducted by persons who had extensive familiarity with the topic. They disclosed the nature of any association with the program and declared a researcher position as a matter of ethical appropriateness. As in all research, the potential for bias exists, but steps can be taken to minimize its effects. In this dissertation research, I believe it is necessary for me to declare my position and disclose my extensive familiarity with both the FDC model and the Family Support program operations in Allegheny County as well.

In 2004 when the Family Development Credential (FDC) program was first introduced in Allegheny County, I was employed as the Director of Training at the University of Pittsburgh's

Office of Child Development (OCD). OCD provides intermediary technical support services to the 31 Family Support centers throughout the County. As training director, my responsibilities included designing, developing, identifying and improving pre-service and ongoing training opportunities for staff at the FSCs. Within my purview, I made training choices that could affect the skill level and competency of many family workers in FS. When the FDC training program was introduced as an option for family workers, I reviewed the literature and the curriculum, met with administrators, funders, policy-makers, family members, staff, site directors, co-workers and local universities to promote and assist in its implementation.

At that time, I had been employed for over thirty years as a professional in social work and family and child prevention services. My experience with nonprofit programs and initiatives gave me the opportunity to have researched and practiced many family intervention programs. Through much of my own training and experience, I knew that strengths-based models have the highest potential for yielding positive results and lasting effects on families and children.

During my tenure at the University of Pittsburgh and the first year of Family Development Credential (FDC) implementation, I also became certified as an FDC Instructor and Portfolio Advisor and taught FDC classes to community workers and to students at the University of Pittsburgh, School of Education. By year two and three of its implementation, I was only providing Portfolio Advisement to four family workers. Since that time, I have had no active involvement with the FDC or Family Support (FS) initiatives. Despite my physical absence from the programs, I still strongly believe in the theoretical and practical application of the principles of FS and FDC. Those beliefs drove my desire to conduct this research on the convergence of the two programs and to substantiate the many claims that empowerment models have the potential to improve families' lives.

In cases where the researcher is very familiar with the project or organizations under study, it is important to minimize biases wherever possible to maintain objectivity. To help me remain open, my dissertation committee includes objective advisors who are experts in the study topic (the Family Development Credential), social theory and quantitative research methodology. These advisors were specifically chosen to help provide me with checks and balances and neutralize my biases throughout the dissertation process. They were integral in helping me to maintain transparency and conduct the appropriate procedures in this study particularly during the interpretation of the findings. Ultimately, I do not believe my familiarity with FDC and FS challenged my objectivity but enhanced my ability to further the research agenda for the FDC program. This research adds a unique contribution on two initiatives using empowerment models in family practice, particularly since it is the first of its kind to link the FDC training program to specific parent/child outcomes.

Research Design

Research from a positivist perspective can be considered an endeavor of scientific search and discovery for absolute truth. Since I was already very familiar with the Family Support (FS) and Family Development Credential (FDC) initiatives, this study was approached from a pragmatic paradigm and an exploration into what impact the FDC initiative had on the families in FS. Mertens (2004) defines pragmatism as an approach to research where the researcher is not a "distanced observer"…but is someone more apt to be the one who is, "free to study what interests you and is of value to you" and to " study it in the different ways that you deem appropriate"…because… "effectiveness is the criteria for judging the value of the research as opposed to the nature of what is scientific truth" (p.27). My intimate knowledge of the FDC program allowed me to investigate the program from my perspective. The research design,

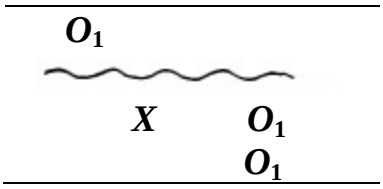
theoretical framework, sampling procedures, operational definitions, hypotheses and research questions were very intentional. The primary goal of this study was to specifically determine the impact of the FDC program on child outcomes in Family Support. Therefore, a quasi-experimental, cross-sectional, pre-post test design with a nonequivalent control group was used.

It is often difficult to conduct true experiments in human service programs because of the need to ensure human subjects protection. Quasi-experimental design is the most viable option for a study on family workers and their families in Family Support. Quasi-experimental designs also make sense when it is difficult to identify an equivalent comparison group. When no equivalent comparison group is available, the experimental group can serve as its own control group by observing that group and measuring the effects of an intervention on them before and after their exposure to a specific intervention (Rossi, Lipsey & Freeman, 2004). In this study, data were collected on families before and after the Family Development Credentialing (FDC) program came to Allegheny County in 2005, creating a nonequivalent control group prior to FDC and a comparison group within itself after its implementation. Outcome data were collected on the three different groups.

This study design involved making Pre test and Post test observations of child outcomes of families in the Allegheny County Family Support system. Those three groups consisted of families whose workers were not trained in the Family Development Credential (Non-FDC) and those families with workers trained in FDC and workers after FDC implementation not trained in FDC. The first group and the second two groups were separated by time intervals respectively: a) 1999 to 2004 and b) 2005 to 2010. Random assignment was not possible for this study since families are assigned to the family worker at the time of enrollment in FS. Consequently, in this

Pretest, post test, control group design, statistical controls of appropriate variables were employed to minimize certain threats to validity.

The pre test post test, non-equivalent control group design can be charted this way,



The line between the observations of the control group and the treatment group represents the nonequivalence of the first two groups and the separation by time periods (Cook and Campbell, 1979). Using this design, it was possible to compare the coefficients of all three groups even though children in those groups had workers with different levels of FDC training.

Demographic Considerations

In the literature on School Readiness researchers often found it necessary to control for socio-demographic influences on program outcomes (Jarrett, 1997; 1998; Brooks-Gunn and Markman, 2005 and Jung and Stone, 2008). Therefore, it was determined that some of the variables that could influence outcomes on School Readiness are those related to socio-demographics (e.g., parent/child race, gender, age and parent's education and income levels) and exposure to other training, like Parents as Teachers (PAT). Demographic data were collected from families at the time of their enrollment in Family Support (FS). Data on the PAT training, while invaluable, was not available from the County at the time of this study, nor was it documented in the central FS database from which the data were extracted.

Using quasi-experimental comparison group designs is not new in the Family Development Credential (FDC) literature and there are only a limited number of FDC studies using quantitative research methods. Two earlier studies that used similar research designs also investigated the effectiveness of human service workers who were trained in FDC and those who

were not. The focus of the research in those studies was on outcomes of family workers themselves, not families (Mosley and Smith, 2004; Alpert and Britner, 2005 and Hewitt, Crane and Mooney, 2010). In these two studies, researchers found no significant differences between the groups on family-focused attitudes (Alpert and Britner, 2005) and job satisfaction and turnover rates (Mosley and Smith, 2004) but in many of the qualitative studies researchers found that FDC workers help families achieve their goals (Crane, 1999, Forest, 2006 and Palmer-House, 2006). Because of those findings, I chose to conduct this study on parent and child outcomes in FS, keeping the focus on how the FDC program affects child and not worker outcomes.

Many researchers determined that a parent's involvement with their child is an important predictor of School Readiness and that children are prepared for kindergarten within the context of family systems (Jarret, 1997; Diamond et al, 2000 and Jung and Stone, 2008). To date, no Family Development Credential (FDC) study has explored whether there is any correlation between the interventions of FDC trained workers and School Readiness outcomes using quantitative research methods. After identifying the treatment and comparison groups by FDC status, it was then necessary to statistically control for socio-demographic characteristics such as the race and age of the child and the parent's age, education and income level, to rule out any spurious effect those variables could have on the outcomes. In the next section a more in-depth discussion of the study sample, description of the study variables, the instruments used to measure those variables and the data collection process ensues.

Sampling Procedure

In developing the study design, how selection would affect the study results had to be considered. Since I was using secondary data, consideration was given to the systematic process

already in place at Pitt and the way families were assigned to family workers in the Family Support program. At the time of enrollment families are assigned to a worker and placed in one of two categories. The first category (General) is for families not interested in receiving child developmental and other activities in the home. The second category (Intensive) consists of families agreeing to participate in targeted services such as home visitation, child development, self-sufficiency, parent involvement, and health and nutrition for parents and primarily pre-kindergarten children. Therefore, a purposive sample (Monette, Sullivan & DeJong, 2005) of parents and their children receiving Intensive services in Allegheny County Family Support, between the years 1999 and 2010 were selected for participation in this study. This purposive sample allowed the research to be focused on an extremely targeted population.

This type of selection clearly represents a threat to external validity, because the sampling frame is limited to parents and children enrolled in the Allegheny County Family Support network between 1999 and 2010, Although this population is very limited, the primary intent of this research is not to generalize the results to any other type of human service program (Monette, Sullivan & DeJong, 2005; Rossi, Lipsey & Freeman, 2004).

The Family Development Credential (FDC) program was implemented in the human services arena in Allegheny County in 2005. The decision to choose families enrolled between 1999 and 2010 was made to ensure a large enough sample at the Pre and Post test observation periods. Since this study examines the impact of FDC trained and non-FDC trained workers on School Readiness outcomes (parent involvement and child developmental appropriateness/delay), it was important to identify families who had not been exposed to FDC for Pretest observation and those who had been exposed to FDC for Post test observations.

Selection Process

Once the two samples had been identified as Pre and Post FDC, it was still necessary to cluster the sample data even further. All data collected on the families was extracted from the Allegheny County Family Support (FS) database housed at the University of Pittsburgh. It was comprised of demographic data of parents and children and outcome data for the children only. The children in FS represent the unit of analysis in this study however it is very important to understand that the family worker does not work with the child directly so a more detailed description of the selection process is warranted.

First, all workers employed in the Family Support (FS) network at Pre and Post test intervals needed to be identified. Lists from the Allegheny County Department of Human Services (ACDHS) and the Office of Child Development at the University of Pittsburgh (OCD) were garnered and used to identify workers with Family Development Credential training. Family workers were then clustered into three groups: FDC1- *Non -FDC* trained *before* implementation (1999 to 2004), FDC2- *FDC* trained *after* implementation (2005 to 2010) and FDC3- *Non-FDC* trained *after* implementation (2005 to 2010).

Once the Family Support network had begun implementation of the program in 2005, workers could voluntarily participate in the program. By the end of the second year of implementation about half of all workers had been credentialed. An inquiry was made to the Department of Human Services Coordinating office for the Family Development Credential (FDC) in March 2010; it revealed that more than 80 family workers had been trained in FDC and many of the supervisors were being trained as well.

After clustering the workers by training status, FDC1, FDC2, and FDC3, families assigned to the individual groups of workers were identified and linked by the unique ID code of the primary caregiver. Children in those families were linked by their relationship to the

caregiver in the dataset. At the time of Pre test observation there were approximately 2400 children who were receiving intensive services in the dataset.

At the time of the Internal Review Board submission, I believed that it would be important to cluster families even further, identifying those who had family workers also trained in the parenting curriculum known as Parents As Teachers (PAT). After reviewing the data made available to me, the PAT training of workers was not documented in the database. Any effects related to exposure to PAT training on the outcomes of the children in this study could not be controlled, therefore spuriousness of those effects cannot be ruled out.

The biggest threat to validity in a study with this type of selection process is *history.* Any number of influences in the FS environment can have possibly affected the parent's level of involvement and the children's growth and developmental progress. Statistically controlling other variables such as socio-demographics like race, gender, income and education can reduce some of those threats. *Attrition* which is often a factor in most human service programs due to drop off in attendance between Pre and Post test is not an issue here because the two groups in the study are independent samples, not the same sample compared at two different intervals.

Study Variables

This study departs from the trend in the Family Development Credential research of examining worker outcomes and takes the research one step further by using quantitative research methods to measure the impact of the FDC program on very specific child outcomes in Family Support. The independent variable in the study is the FDC program and the dependent variable is School Readiness as evidenced by the level of parent involvement and child developmental delays.

School Readiness researchers have long associated parent involvement with child developmental progress and positive School Readiness outcomes in children (Jarrett, R. 1997; May and Kundert, 1997; McWayne et al., 2004). By creating a system of practice that closely aligns School Readiness research findings, founders of the Family Support (FS) system promote strong partnerships between family workers (FDC trained and non-trained) and parents as the vehicle that facilitates successful child outcomes. As a consequence, in 2004 FS policymakers operationalized the two key indicators of School Readiness as *parent involvement* and *child developmental appropriateness (delay/no delay).*

Since there is evidence in the Family Development Credential (FDC) literature that FDC trained workers improve their ability to engage families and help them reach their goals, this study is an investigation into whether by participating in the FDC training, family workers in Family Support actually help families attain the goal of School Readiness specifically. Additionally, determining if socio-demographics (race, gender, age, income or education) influence those outcomes in any way is necessary since prior studies document that these factors can affect child outcomes. The next section includes a description of all the study variables and the data collection instruments used to measure them.

Measuring School Readiness

Parent Involvement and Child Developmental Appropriateness (Delay or No Delay)

The operational definition of School Readiness used in Family Support identified two variables, parent involvement and child developmental appropriateness as predictors of School Readiness. Child developmental appropriateness is measured through screenings done by family workers of the children in the home. Those screenings indicate whether a child is delayed or not. For those children in the database who had received developmental assessments, parent

involvement scores were calculated using the Total Involvement Score index. This index was used to calculate parent involvement scores for children zero to five years of age receiving intensive services. Workers partnered with families to teach parent involvement and developmentally appropriate activities during home visits and conducted child developmental assessments using reliable instruments like the Denver II (the most common Pre test instrument) or the Ages and Stages Questionnaire, the mandated instrument being used now in Family Support. (See Appendices E and F for copies of both instruments). The family worker conducts the assessments at various milestones of the child's development and records whether the child shows any evidence of a developmental delay, documenting that in the child's record. Since the literature on School Readiness suggests that it is such an abstract concept and subject to the interpretation of the researcher (Abbott-Shim and Lambert, 2003), I adopted the two indicators of *parent involvement* and *child developmental appropriateness as evidenced by delay or no delay*, as the outcome variables for this study.

Independent Variable: FDC Program

The independent variable in this study is the Family Development Credential (FDC) program. It was expected that the FDC workers would have a higher impact on School Readiness outcomes than on untrained workers, so it was first necessary to identify the workers with FDC training. As of March 2010, there were 68 Family Development Specialists (family worker) positions funded. Approximately 50% of all workers in the Post test period had received the credential. Evidence of workers credentialing was obtained from the Allegheny County Department of Human Services database of FDC trained participants. This list identified all family workers in the County who had earned the Family Development Credential by March 2010 (N = 93). These workers had completed 80 hours of training, 10 hours of Portfolio Advisement and passed the final exam, earning the credential. The list of trained FDC workers

was sent to the Information Systems Coordinator at the Office of Child Development. He subsequently cross-referenced the names on that list with the employees list in Family Support and determined who had worked during the Pre and Post test observation periods and grouped them into the three categories FDC1, FDC2 and FDC3. The linking of the two lists was the first step in identifying all family workers by FDC status - the total number of FDC trained workers in the Post test period was 56.

Dependent Variable: Parent Involvement

Parent Involvement in Family Support was measured by parent self-report responses recorded on the MIS form, Child/Youth Member Profile (See Appendix D). When parents enroll children in Family Support they are asked to respond to several questions about their parental involvement with their children. The Child/Youth Member Profile which contains critical information for this study is updated by the worker when parents indicate to the worker that changes have occurred. The Childmember.profile form identifies the staff, the parent and child with unique identifiers. These unique ID #'s were used throughout the data collection process in lieu of names to respect families' confidentiality and to ensure human subjects protection.

Four questions on the Child Member Profile address what Family Support considers parent involvement with children. Between the pretest (1999-2004) and posttest period (2005-2010) the formatting for the instrument changed periodically but the parent involvement questions remained similar. At the time of enrollment the parents are asked if they have engaged in a variety of parent involvement activities. On the most recent Child Member Profile form the parent involvement questions are 20a, 20b, 21, 22a, 22b and 22c.(See Appendix D).

Question 20a) asks, "How many parent-teacher conferences have you attended for this child". Response options to this question range from 1 to 5 (Coded 1= 1, 2=2, 3=3, 4=4 or more or 5 = None). Question 20b lists a variety of other activities that asks parents to record how often

they participated in a list of activities such as school or day care events, school meetings, and community activities etc. Responses to this question identify parent involvement outside of the home along with the frequency of those activities.

The response options for questions 20b are rated on a scale of 1 to 7, coded from 1=everyday, 2= A few times a week, 3=Once per week, 4=2-3 times a week, 5=One time per month, 6=Less than one time per month and 7=never). Questions 21 and 22 are essential in this study for identifying other parent involvement characteristics of School Readiness. Question 21 reads "How often did the primary caregiver play with or engage in activities with their child at the current time?" Response options for this question are: 1= Everyday, 2= Once per week, 3= A few times per week, 4= Less than 1 time per month, 5= 2-3 times a month, 6=One time per month, and 7= Does not engage in any of these activities with the child.

Question 22 asks about parent engagement in three specific activities: a) Reading to the child, (b) Working on homework with the child and (c) Watching educational programs on TV. The scale choices for these three activities range from 1 to 7, coded as follows: 1=Everyday, 2= A few times per week, 3= Once per week, 4=2-3 times a month, 5= 1 time per month and 7=Does not read, work on homework or watch educational TV with participant respectively. Frequencies were run on all Parent Involvement data for children at pre and post test intervals and between FDC trained and non-FDC trained at post test. Mean comparisons were conducted between the three groups.

Total Involvement Scores

At first, all of the questions related to parent involvement were used to create an index for the computing of the Total Involvement Score" for each child until it was discovered that the questions 20a and 20b had not been asked during the Pretest period. Ultimately, the variable Total Involvement Scores was created using an index with a maximum of 12 points scored from

four of the questions on this form. The total scores for each of the four questions were re-categorized to create a "total involvement score" with a minimum score of 0 and a maximum score of 12. The range of scores was divided into four levels coded from 0 to 3 respectively for Parent Involvement: Not involved for a score of 0 (coded 0), Less Involved for a score between 1 and 4 (coded 1), Adequately Involved for a score between 5 and 8 (coded 2) and Very Involved for a score between 9 and 12 (coded 3). Table 2 shows the index and reflects the coding for children whose parents responded to the four questions.

Table 2
Total Involvement Scores Index

Level of involvement	Level of involvement value	Total Score
Very involved	3	8-12
Adequately involved	2	5-8
Less involved	1	1 – 4
Not involved	0	0

Table 3 shows how the coding for this question was created for questions 20b through 22c listing the seven response options. The questions address frequency of activities related to parent involvement on four specific categories - Playing with the child, doing Homework with the child, Reading to the child and Watching educational television with the child. The scores from these four variables were combined to create the Total Involvement Score for each child.

Table 3
Total Point Scoring Frequencies

Possible Options	Points
1 = Every day	3
2 = A few time per week	3
3 = Once per week	2
4 = 2-3 times per month	2
5 = One time per month	1
6 = Less than one time per month	1
7 = Never	0
Expected maximum points	3

Dependent Variable: Child Developmental Appropriateness

During the last 10 years, Family Support center staff used a variety of instruments to assess the developmental levels of children enrolled in the program. The Denver II was the most common screening instrument used by centers during the Pre test observation period, but it was not exclusively used. By 2010 Family Support policymakers had decided to bring uniformity to practice by training and implementing the use of a child developmental assessment instrument known as Ages and Stages. Regardless of the instrument used for assessments, the worker records the evidence or lack of evidence of developmental delay in the child's record.

Once the family worker completes the assessment the worker completes the identifying information for themselves, the primary caregiver and child on the Developmental Assessment/Screening Record (DEVASSMT.FRM), (See Appendix G). Information on Developmental Delays is entered on question 6, by indicating Yes/ No responses coded 0 for Yes and 1 for No on nine domains Cognitive=1 to Other =9. Question 7 records the total score from the CDA and question 8 is the most important question for documenting SR outcomes in FS, it reads *"Does the child show a 25% developmental delay in one or more of the above areas (options 1=Yes, 2 = No).*Once the child is identified as delayed or not delayed in any one area, that code is entered into the child's record. Therefore, the second predictor of SR, child developmental appropriateness was measured by the evidence of delay or no delay on the child's developmental screening tool and recorded on the Developmental Assessment Record.

Control Variable: Demographics

Families in Family Support are similar to the general population in the Allegheny County communities surrounding the centers but the service population is more diverse. There are higher representations of single moms with low incomes and low educations and more African Americans in the centers than in surrounding communities (Bangs et al., 2004; Dick, 2007).

Many studies have documented the influence of socio-demographic factors on a child's development (Diamond et al, 2000; Dunst and Dempsey, 2008; McAllister et al., 2005), so it was important to consider any effects these variables may have on School Readiness outcomes during this research. Parents' age, race, education and income level and the child's race have been known to influence parents conceptions' of and children's preparedness for kindergarten in Head Start and Early Head Start programs ((Brooks-Gunn and Markman, 2005; Jung and Stone, 2008; Kim and Murdock, 2005).

Family center staff collect socio-demographic data at the time of enrollment on the Family Support Center Enrollment Form (ENROLL33), (See Appendix H).The staff utilize this instrument to record Staff ID#, Family ID#, and Child ID#. Question # 2 on the form, identifies which families received which type of services, General is coded 1 and Intensive is coded 2. Question # 5 is the primary source for the Parents Date of Birth, since actual dates of birth were given and not the age of the parent, the DOB had to be recoded. The numeric representation calculated into years was later classified into age groups for parents, (ParentAgeGroup) for use in more detailed analyses. ParentAgeGroup was coded in the following categories: 18 and under =1, 18-25 =2, 26-35= 3, 36-45=4 and 46 and older = 5.The child's date of birth is also recorded using actual dates and has been recalculated to represent the exact age of the child at time of enrollment. The ChildAgeGroup variable was then created to classify the children in three distinct categories: Less than 2 years old=1, 2 to 3 years old = 2, and 4-5 years old =3.

Other variables collected on the Primary Caregiver and the child are gender, coded 1 for male and 2 for female. The codes for Race/Ethnicity ranged from 1 through 7 as follows: 1=Non-Hispanic/White, 2=Non-Hispanic/African American, 3=American Indian/Alaskan Native, 4=Asian/Pacific Islander, 5=Hispanic, 6= Other. Ultimately, because missing values were

included in the Other category and the frequency of children who were not Black or White was so small, two categories of Child_Race were created and coded 1 for White and 2 for Black.

Education levels were also collected on the enrollment form and entered into the database. The variable Highest Grade represents several pre-coded categories for education which ranged from 1-20. They were coded accordingly: for grades 1-12, enter grade number, 13=GED, 14=Associates Degree, 15= Some College, 16 = Bachelors Degree, 17 = Vocational, 18 = CBSA- child below school age, 19 = Other specify and 20 = Graduate or Professional Degree.

Parental income and education levels have been found to influence the School Readiness outcomes in children (Kim and Murdock, 2005) and Family Support collects that information on adults enrolled in this program. On Question 16 adults are asked "What was the approximate total gross (before taxes) income for the most recent year for this participant?" Sixteen options are given on an interval scale beginning with "Less than $5,000" to be coded 1, through "Over $75,000" to be coded 16. Each interval represents a $5000 increment. Since income is not a mandatory requirement for enrollment in Family Support and the parent refused to answer, missing values in this field were left blank.

Data Collection

Standard research procedures were undertaken as outlined by the Institutional Review Board for Indiana University to ensure the protection of the subjects in this study. Data were collected on the family workers, families and children whose data were housed in the Allegheny County Department of Human Services database located at the Office of Child Development, University of Pittsburgh (OCD). All data collection procedures, the subsequent data analyses and the presentation of the results align with Human Subjects Protections inherent in empirical

research. Primarily quantitative research methods were used in the study. The study database contains proper coding mechanisms to protect family workers and family's names and other private information through the use of unique identifiers for staff, parents and the children themselves.

Data were collected at three levels: on the staff, the parent and the child. Two datasets with accompanying data dictionaries were sent to me from the Information Systems Coordinator at the University of Pittsburgh in August of 2010. The first two data tables contained demographic data on the children and their parents. These tables included the following variables for the Pre and Post test observation period (Before and After FDC): Siteid (Family Center); Familyid, Memberid (for the child); Relationship (child's relationship to the Primary Caregiver); Birthdate (parent and child); Age (parent and child), Enrolledate (child); Sex (Male, Female-parent and child); Raceid (Ethnicity-parent and child); Racespecify (if Hispanic-parent and child); Hispanic (parent and child); Highestgrade completed (parent and child); Staffid (FDS); Completedtype (general or intensive); Staff-FDC (FDC status, trained on non-trained) and Income by month, annual and then grouped by class in $5000 increments (parents).

A second data table was sent to me that included child outcome data for the Pre and Post test observation periods. These tables included the same demographic variables and child outcome variables for Before and After the FDC program implementation periods. The data dictionary accompanying the tables labeled variables as: TeachActivityEngaged (level of involvement points for attending teacher conferences in Question 20A; OtherActivityEngaged (level of involvement points for participating in other listed activities in Question 20b); PlayWithFreq (level of involvement points for Question 21 frequency of play with the child); ReadFreq, HomeworkFreq and EduTVFreq (Level of involvement points for Question 22a

through c respectively for frequency of Reading, Doing homework and Watching educational television with a child). Two other variables related to outcomes are included: Total_InvolScores (this represents the total scores calculated from the level of parent involvement points from the prior questions) and CDS_Delay which represents whether each child is labeled Delayed (coded 1) or No Delay (coded 2) or if no data were collected on the child the field is left blank. Ultimately, all of the data tables were combined into one final dataset and transferred from the original excel format into the STATA IIC statistics software for data analysis.

In addition to the demographic data and the child outcome data, supplemental information on the staff's Family Development Credential training and Family Support organization were retrieved from the Allegheny County Department of Human Services (DHS), Office of Community Services. This information described the funding level of the family centers, the number of staff positions at each location, and whether the centers were located in urban or suburban communities. All of this supplemental information was primarily reviewed to understand the complex structure of the family support organization in Allegheny County.

Evaluability Assessment

In my original submission of the proposal to the Internal Review Board for this study, I proposed that a document analysis be conducted on approximately 10 family files at the Pre and Post test observation periods. In order to obtain the files, a request was sent from the Office of Child Development Training Department to each of the Family Support Centers on two occasions. Only one Site Director responded to the request and informed me in writing that they had archived old files (prior to 2004) and that she would attempt to get back to me on the later ones. After several communications, no files were ever received from any of the centers.

Since the purpose of the Evaluability Assessment was to document what data were actually available in the database and the files were never made available to me to conduct the document analysis, this step was not performed. By the time the data were extracted from the Family Support database, it was evident that all of the variables of interest for this study were included in the database at some level of frequency except for one, the documentation of Parents As Teacher (PAT) training for the worker. Consequently, analysis of the effect of PAT training on outcomes in this study could not be achieved.

CHAPTER SIX FINDINGS

Purpose of the Research

For human service programs like Family Support (FS) the role of the family worker is a key factor in the family's ability to achieve positive outcomes. In Family Support centers in Allegheny County Pennsylvania, family workers partner with families to attain the primary goal of School Readiness for children. The purpose of this quasi-experimental pre/post test study with a control group was to explore the impact of the Family Development Credential program on child outcomes of School Readiness in Family Support.

Chapter Six includes a summary of the findings of the analyses on demographic characteristics of the study sample in Part I, tests conducted on the first dependent variable, Total Involvement Scores in Part II, and tests conducted on the second dependent variable, Child Delay, in Part III. The structure for this chapter presents the findings in response to the hypotheses for this study that suggest child outcomes of School Readiness will be improved when families in Family Support have a family worker trained in FDC.

Data collected from the Family Support (FS) database were used to conduct analyses on two outcome variables, parent involvement and child developmental appropriateness (delay). The Total Involvement Scores of parents and the Child Delays of children were compared between three different groups of family workers. The first group (FDC1) represents workers in FS before the implementation of the FDC program. The second and third groups (FDC 2 and FDC 3) represent workers in FS after the implementation of the FDC program, those trained in FDC and those who were not trained in FDC respectively. The data from the three groups were analyzed using a series of regression techniques and other tests to determine if the child outcomes of family workers trained in FDC were better than those who were not.

Summary of the Findings

In an unpublished report conducted at the University of Pittsburgh, Dick (2007) profiles the characteristics of families in the 31 Family Support (FS) centers at that time. The study found that most of the families enrolled were low-income, single parent, African American women with high school educations. Data analyses from this study which spanned a ten-year period from 1999 to 2010 showed that the demographics of the study sample were consistent with that report.

For children whose race was indicated, more children were Black (74%) than White (26%) with a mean age of 1.91 years. Children in the sample were almost evenly divided by gender 48% male and 52% female. Most of the primary caregivers were female (97%), had a high school education or less (66%) and the mean age of the parents was 28 years. Incomes of the primary caregivers ranged from less than $5000 per year to $72000 with a mean income of $11,000 annually and the higher wage earners in the sample were White. Demograpnic characteristics were included in the tests of the dependent variables to control for any differences and rule out any spurious effects that could have been caused by them.

The first hypothesis suggests that parent involvement levels should improve when families have an FDC trained worker. After identifying the demographics of the sample to be included in the analyses, regression techniques were conducted on the outcome variable, Total Involvement Scores. This score represented parent's responses on frequency of participation in parent involvement activities with the child specifically, how often they played with, read to, did homework with and watched educational television with the child. Most of the parents in the sample (63%), scored in the Very Involved range for parent involvement.

In a study on child outcomes in the Early Head Start program, Jung and Stone (2008) found race and certain programmatic interactions. Likewise in this study, including race as a

predictor of child outcomes was important. When different combinations of the Child Race and FDC status were included in the regressions, the significance values of other variables changed. An interaction was occurring between the period of FDC and race of the child. When tested by itself, the tests of the main effect of the FDC period or the race of the child on Total Involvement Scores was not significant; neither FDC nor race alone had an effect. Realizing this was contradictory to the literature, more tests were conducted.

Tests were run to measure the simple main effects of the FDC periods and race. Throughout the study confidence levels were set at 90% so as not to underestimate the effects of the intervention on the dependent variable of parent involvement. Findings showed that Total Involvement Scores varied by period and by the race of the child.

Mean Total Involvement Scores differed between the FDC periods for children of both races and were statistically significant (See Table 20). Significant differences were found by period for White children at the $p < .05$ level and for Black children at the $p < .10$ level. Further investigation into differences by race revealed that for the first period (FDC1), the difference in parent involvement scores was statistically significant at the $p < .05$ level. The mean parent involvement score for White children was 9.357 and for Black children the mean score was 8.508. For the FDC3 period, parent involvement scores were also different but at the $p < .10$ level. For White children the mean parent involvement score was 8.420 and for Black children the mean score was 9.011. In terms of effect by FDC workers, for children with workers trained in FDC, (FDC2), there was no statistically significant difference found between the mean parent involvement scores of White ($M = 9.021$) and Black ($M = 8.979$) children. These finding show that mean score differences were found between children by race with untrained workers before FDC and after FDC implementation, but not for the workers with FDC training.

Other tests were run to examine the simple main effects by race for White and Black children separately. Findings showed that there was a statistically significant difference between the Total Involvement Scores of White children between periods. Prior to implementation of the program, FDC1 mean scores were at the highest level (M = 9.357). After implementation for children with trained workers (FDC2), scores were lower (M = 8.979) and the difference from the prior period was significant at the $p<.01$ level. The difference in scores for children with untrained family workers was also significant at the $p<.10$ level and dropped to a mean score of 8.420 respectively.

For Black children between FDC1 (M = 8.508) and FDC2 (M = 9.021), the difference in parent involvement scores was statistically significant at the $p<.05$ level improving the parent involvement scores for Black children in a positive direction. The difference in scores between FDC1 (M =8.508) and FDC3 (M = 9.011) was also significant at the $p<.10$ level. Once parent involvement scores improved for Black children, they remained consistently higher than before FDC implementation, even for workers without FDC training. Two demographic characteristics, Child Age and Parent Income were also significant predictors of parent involvement at the $p<.001$ and $p<.01$ levels respectively.

The second hypothesis suggests that some change would occur in child developmental appropriateness (Child Delay) in Family Support once the Family Development Credential was implemented. Child Delays were determined by assessments performed by the family workers on the child in the home and recorded in the child's record. Only 10% of the children in the sample who had assessments were identified as delayed. Analyses were conducted on the variable Child Delay using the same set of independent variables for FDC status and demographic characteristics. Findings from the tests for Child Delay showed that no statistically significant

difference was found based on children with workers trained in FDC (FDC2). The odds of children being delayed with workers not trained in FDC, after implementation (FDC3), were 206 times more likely than FDC2 and 79 more times likely than FDC1. This suggests a difference within the untrained workers and interpretation and possible explanations for this finding are explored further in the discussion in Chapter Seven.

Two of the demographic characteristics were consistently found to have an effect on Child Delay, Child Gender and Child Age. The odds of girls being delayed were 59% less likely than boys ($p<.01$) and the odds of older children were 91% more likely to be delayed ($p<.001$) than younger children. Both of these findings are consistent with the literature on School Readiness.

In the next three parts of this chapter detailed descriptions of the processes used to conduct the analyses and the results of those analyses are presented. Findings are highlighted in tables and graphs with explanations that further elucidate the complexity of the study and the steps taken to investigate the impact of the Family Development Credential on School Readiness outcomes in Family Support.

Part I: Demographic Characteristics of the sample

Exploratory Analyses of Demographics

To begin the research, basic exploratory analyses were conducted on the characteristics of the families in the study sample. Since the literature on School Readiness suggests that certain demographic characteristics such as child race and parental age, education and income can have an effect on School Readiness outcomes for children (Diamond, Reagan & Bandyk, 2000; Jung & Stone, 2000), it made sense to closely examine those variables in this study. Ultimately, six characteristics, child gender, child age and child race, parent age, parent income and parent

education were chosen as control variables in this research. In Tables 4 through 7, data representing those demographic characteristics of the children and their parents are presented.

Table 4
Children and Parents by Gender

Characteristic	Children (n = 2365)	Parents (n=2224)
Male	1140 (48)	72 (3)
Female	1225 (52)	2152 (97)

Table 4 shows the frequency and percentage of children and parents in the sample by gender. Parents in the samples were primarily female (97%) and the participation of children in Family Support is almost equally distributed with males (48%) and females (52%), respectively.

Child Age

All of the children in the sample were before school age (under 5.99 years old). They were later grouped into three age categories for the purpose of analysis. The majority of the children in the sample (58%) were in the youngest age category, less than 2 years old. Children in the second youngest category, two to three year-olds, made up 26% of the sample and four to five year-olds made up the remaining 16% respectively.

Children and Parents Race

At the time of enrollment in Family Support (FS), parents are asked to identify their race and the race of their children. However, when completing enrollment forms, parents know that many of the fields on the data collection forms are not considered mandatory. Consequently, some parents reported their race and that of their child and some did not. See Table 5 for a description of parents who reported race.

Table 5
Children and Parents by Race

Characteristic	Children (n = 2360)	Parents (n=2222)
White	485 (21))	646 (29)
Black	1393 (59)	1335 (60)
Other	482 (20)	241 (11)

Note. The Other category includes races other than White or Black and Missing Values coded "Not volunteered by the recipient".

The majority of the children (59%) and the parents (60%) in the sample were identified as Black. White parents made up almost one third of the adult population (29%) while less than a quarter of the children were identified as White (21%). The third category "Other" represents races such as Hispanic, Native American, Asian and Hawaiian Pacific Islander, all of which totaled only 1% of the entire study sample. Unfortunately, when the data were collected and coded by FS, the 'Other' category also included those who did not specify race at the time of intake. Nearly 20% of the children and 10% of the parents' races were not identified, which renders the "Other" category contaminated and effectively reduces the sample. While this is a limitation, the study sample remains sufficient in size and viable for its intended purpose. Once those without race and the 1% of other races was removed, the study sample (N =1878) still included 485 White children and 1393 Black children. Due to the small number of "Other" race children, a decision was made to focus the multivariate analyses on the impact of the Family Development Credential on School Readiness outcomes for White and Black children only.

In this study, the impact of the FDC program was measured on child outcomes and the child is the unit of analysis. When more advanced analyses were conducted, child race was included as one possible predictor of School Readiness. In certain School Readiness literature the

effect of interventions like Head Start or Early Head Start were reported in terms of child outcomes based on race or age. In this study, the race of the parent was left alone because the child is the primary focus. Although the possibility exists that some of the children in the sample are of mixed race, (there are small differences between the number of children and parents who are identified as White, Black or Other) the focus of this study is to measure the impact of the FDC as an intervention on child, not parent outcomes. Any further investigation into the differences in racial characteristics between this small group of parents and children could be investigated in a later study.

Parent Age and Education

In the Allegheny County database each child is identified as having only one primary caregiver (PC). Throughout this study the child's parent and the PC are one and the same and relationship of the child to the PC has already been established (See Child.member profile form in Appendix D). Some PCs are grandparents, aunts, uncles or older siblings. Demographic information on the parent (PC) is collected by the family worker at intake and is recorded on the intake forms. Since parental age and education are very important control variables in studies on child outcomes, the proportions of parents by age and level of education are shown in Table 6. The annual income reported in Table 4 reflects that of the primary caregiver only, not the family or any other members of the household.

Table 6
Parent's Age and Education

Parent's Age (n = 2212)	16-17	18-25	26-35	36-45	46-55	56>
	45 (2)	921(42)	945(43)	222(10)	49(2)	30(1)
Parent's Education (n =2222)	**< HS**	**HS / GED**	**Some College**	**Vocational**	**Bachelor's**	**Graduate/ Other**
	60(3)	1400(63)	493(2)	74(3)	120(5)	72(4)

Many of the parents in the sample indicated they had at least a HS diploma or equivalent (63%), or an Associate's Degree or some college (22%) respectively. In Table 7 descriptive statistics for four possible predictors of School Readiness are shown, including the mean, standard deviation and range for child and parental age, parent's level of education and parent's annual income.

Table 7
Descriptive Statistics of Predictors of Parent Involvement

				Range	
	N	*M*	*SD*	*Min*	*Max*
Children's Age	2366	1.91	1.75	0	5.99
Parent's Age	2212	28.13	7.86	16	76
Parent's Education Level	2222	12.832	2.44	1	20
Parent's Annual Income	1346	11,149	9860.64	0	72,000

Note: Parent education was grouped into categories from 1 to 20 with 12 being the equivalent to a HS diploma. Parent's income was grouped into 16 categories of $5000 increments.

Analyses of the Independent and Dependent Variables

Independent Variable: FDC Program

The Independent Variable in this study is the FDC program which was measured by the evidence of the earned Family Development Credential of family workers. Before separating the children in the sample by Black and White only, they were clustered into three groups according to the FDC status of their family worker. Prior to the 2005 implementation of the FDC program in Allegheny County, *no* children had a worker with an earned FDC. In the study sample, there were 447 children (19%) in this category before 2005, without a FDC trained worker (FDC1). Of the 1919 children in the sample between 2005 and 2010 after FDC implementation, there were 976 children (41%) with a worker with an earned FDC credential (FDC2) and 943 children (40%) without one (FDC3).

Dependent Variable: School Readiness

The dependent variable in this study, School Readiness (SR), is an abstract concept with multiple aspects. Only two specific aspects of SR were identified and measured empirically in this research. First, the level of parental involvement with the child based on parents' Total Involvement Scores was measured. Second, the impact of the FDC on Child Developmental Delay was examined. The following section describes how the Total Involvement Scores index was created, the proportion of parents identified by their level of parent involvement and the proportion of children in the sample who were identified as at least 25% developmentally delayed in one or more area.

Parent Involvement

To measure Parent Involvement, Total Involvement Scores were calculated using parents' responses on four questions (Q21 to 22C) on the Child Member Profile form (See

Appendix D).The maximum number of points any parent could score for Total Involvement was 12 by earning three points for each of the four activity areas – Play with, Read to, do Homework with and Watch Educational TV.

Table 8 shows the index of the expected Total (Parent) Involvement Scores based on the four levels of parent involvement. Each category (Not Involved to Less Involved, to Adequately Involved and Very Involved) consists of a four-point range except for the first category where a score of zero is attributed to parents who indicated they were not involved in any of the developmental activities with their child. The final row shows the proportion of parents in the sample that scored at each of the four parent involvement levels. In all, more parents scored in the Very Involved range (63%) than any other level.

Table 8
Total Involvement Score Index by Category

	Very Involved	Adequately Involved	Less Involved	Not Involved	Maximum Score
Points Per Question	3	2	1	0	3
Range	9-12	5-8	1-4	0	12
Frequency of Parent's Scores	1497 (63)	560 (24)	171 (7)	138 (6)	

Note: N = 2366

Child Developmental Appropriateness

To measure Child Developmental Appropriateness, scores from child developmental assessments were calculated and entered in the Family Support database prior to data extraction for this study. If a child's score indicated a 25% delay in one or more developmental area, it was indicated in the record by the family worker. Of the total children in the sample (N=2366), 1665 children (70%) were screen or assessed for delays. These numbers differ from the total number

of children in Table 4 because not all children who had Total Involvement Scores also had child developmental screenings.

Of the 1665 children who had received a developmental assessment only 148 (8.89%) showed significant delay in one or more developmental area. When looking at the children who had been identified as Black or White only, that number is even smaller (N=1,195) however the proportion of those children who were delayed increases slightly to 9.87% (118). When examining the 118 by race, the study found a higher proportion of White children, 37 out of 300 (12.33%) were delayed then Black children, 81 out of 895 (9.05%) respectively.

Part II: Regression Techniques for Parent Involvement

Various regression methods were used to examine the effect of predictor variables on the first of the two indicators of School Readiness, the dependent variables Parent Involvement. Ordinary Least Squares regression and Regression with Robust Standard Errors were used to test the impact of the FDC on parent involvement. In Table 9 a list and description of all the original and dummy variables is provided. These variables were used throughout the study in multivariate analyses and to empirically measure the impact of the FDC on SR outcomes in Family Support.

Table 9
Variable List and Descriptions

Variable	Description
Total_InvolScores	Total points scored on index from parent's responses on four parent involvement questions
Total_Scores_2pt5	Total_InvolScores raised to the power of 2.5
Period_FDC1	Pre FDC Program implementation – 1999-2004 – no FDC training
Period_FDC2	Workers status after FDC Program implementation 2006-2010 – received FDC training
Period_FDC3	Workers status after FDC Program implementation 2006 – 2010 – FDC training not received
Child Gender	Gender of the child
Child Age Group	Child ages grouped in 3 categories 1=less than 2 years old; 2=2-3 years old and 3= 4-5 years old.
Parent Age Group	Parent's age grouped in categories
Parent Education	9 levels of parent education from Less than HS through Graduate School and other
Parent Income	Parent's annual income grouped in 16 levels from less than $5000 through over $75,000.
Child Race	Child's race; 1=White; 2= Black

Analyses of Total Involvement Scores

In the first regression model, I used Ordinary Least Squares regression and regressed Total Involvement Scores on the independent variables FDC2, FDC3 and control variables for child race, child gender and child age along with parent age, income and education to see if any of these variables were significant predictors for parent involvement. The independent variable period FDC was dummy-coded for FDC1, FDC2 and FDC3 to delineate between pre and post observation groups in the model. After running the regression used regression criticism techniques to determine adherence to model assumptions.

According to Judd and Kenny (1981) when investigating social interventions, it is important to not overestimate or underestimate the treatment effects that programs like the

Family Development Credential have on outcomes. Judd and Kenny suggest that social research has been diligent about training researchers to prevent Type I errors, not overestimating the effects of social programs. However they posit that it is just as important for social researchers to not underestimate a treatment effect and commit a Type II error by neglecting a potential effect that a social intervention is having. Judd and Kenny assert that it is good to be careful about estimation because social welfare programs invest a great deal of financial and human resources into serving families.

This is true for Family Development Credential and Family Support programs as well. Therefore to avoid a Type II error and in keeping with Judd and Kenny's analysis, I have chosen to set the alpha level at the $\alpha = .10$ level. Lowering the confidence level in the regression models makes sense for this dissertation study because the findings could be meaningful for Family Development Credential and Family Support programs and the interpretation of the results is important. Lowering the confidence level to 90% captures those variables that are significant at $p<.10$ as well as those with higher significance levels. None the less, all p values are reported at their respective alpha levels.

A series of four regression analyses were conducted to determine the model of best fit for the data. In Table 10 (Model 1), Total Involvement Scores is regressed on a series of independent variables using Ordinary Least Squares regression.

Table 10
OLS Regression Total Involvement Scores

	Total Involvement Scores		
	B	*SB*	90% CI
Variable			
Constant	6.21***	.62	[5.18, 7.24]
FDC 2	.47†	.24	[.07, .87]
FDC 3	.27	.25	[-.14, .69]
Child_Race	.44†	.22	[-.80, .06]
Child Gender	.11	.19	[-.19, .42]
Child Age Group	1.06***	.13	[.85, 1.27]
Parent Age Group	.17	.11	[-.00, .36]
Parent Income	.15*	.05	[.06, .24]
Parent Education	.11†	.06	[-.20, .02]
R^2	.09		
Adjusted R^2	.09		
F	12.96***		

N = 1025 CI = Confidence Interval *p<.05 ***p<.001 †p<.10

The combination of exogenous variables in the first regression for Total Involvement Scores, account for only about 9% of the variability given the adjusted R^2 = .09. With the confidence level set at 90%, there are five significant independent variables in this model. There is a positive significant relationship between FDC2 trained workers, Child Race and a negative significant relationship between Parent Education and Parent's Total Involvement score at the p< .10 level. There is also a positive significant relationship between Child Age and Parent Income and parent's Total Involvement scores at the p<.001 and p<.05 level respectively.

After this first regression, a Variance Inflation Factor (VIF) test for multicollinearity was performed which accounts the proportion of variance in each variable that is independent of all the other X variables. In the VIF test in Table 11, there was no evidence of multicollinearity as the mean VIF is not much larger than 1 (Chatterjee, Hadi & Price, 2000) and the 1-R^2 or

tolerance ranged from .77 (FDC period_1) to .99 (Child gender); where FDC period_1 is a dummy variable representing the FDC period when it is not FDC period 2 or 3.

Table 11
Variance Inflation Factor of Independent Variables (Model 1)

Variable	VIF	1/VIF
Period_FDC1	1.29	.77
Parent Inc3	1.25	.80
Period_FDC3	1.22	.81
Parent Age Group	1.12	.89
Parent Education	1.10	.90
Child_race	1.09	.92
Child Age Group	1.06	.94
Child Gender	1.01	.99
Mean VIF	1.14	

I then tested for heteroskedasticity by comparing the residuals with the fitted values. The Breusch-Pagan/ Cook-Weisberg hettest for constant variance was statistically significant at χ^2 (1, N = 1025) = 5.87, p = .02, thereby rejecting the null hypothesis of constant variance and assuming heteroskedasticity in the data.

Charts graphically depicting model output better inform decisions made with regard to next steps in data analysis. In Figure 2 the residual versus fitted values (RVF) plot demonstrates graphically the evidence of heteroskedasticity found in the hettest. This means that errors in the data are not normal independent identically distributed. The leverage versus residual squared (LVR2) plot displays residuals to determine if there were any outliers exerting extreme influence or leverage on the model as a whole.

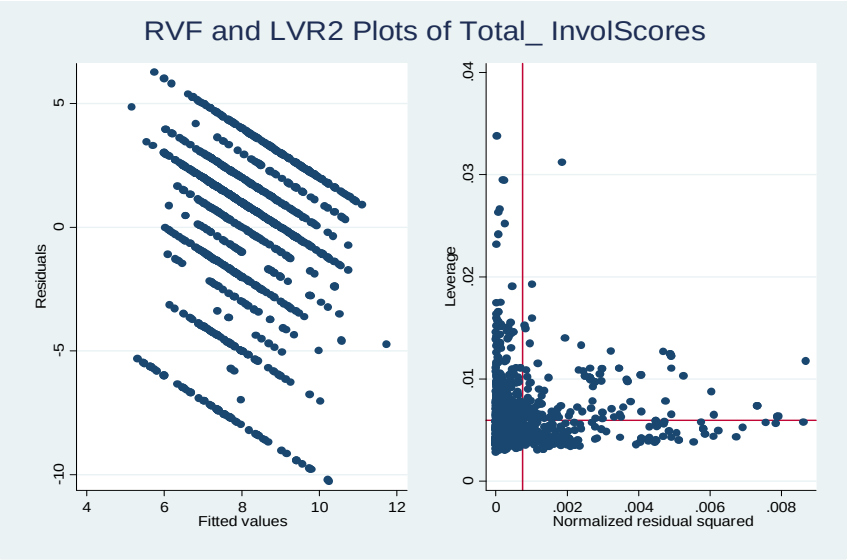


Figure 2: RVF and LVR2 plot of total involvement scores.

Next, I conducted additional univariate analyses on the dependent variable, Total Involvement Scores to verify the shape of the distribution and determine corrections to the model. The univariate analysis revealed a mean Total Involvement Score of 8.12, a median of 9, a standard deviation of 3.13 meaning the distribution was negatively skewed (-1.052) for the dependent variable. Based on the skewness, the mean - median comparison and the graphs in Figure 3, we can see that the distribution of the dependent variable, Total Involvement Scores could benefit from transformation.

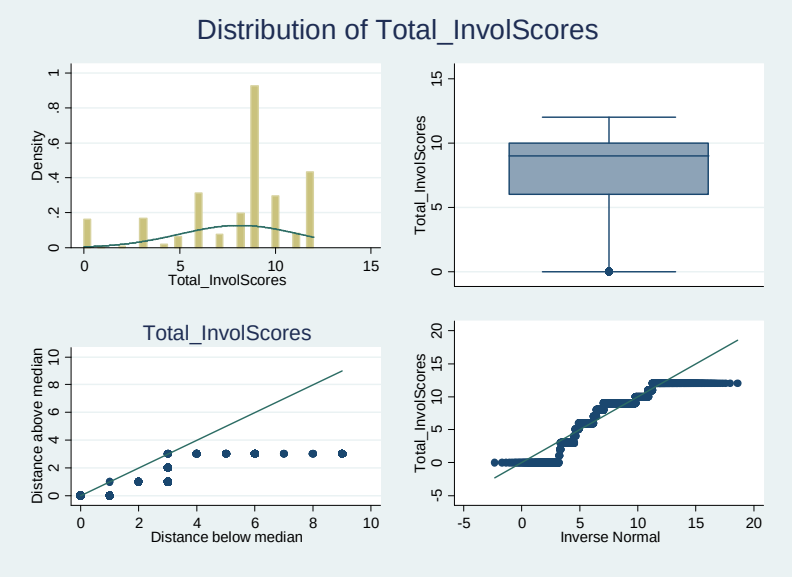


Figure 3: Distribution of Total Involvement Scores.

To improve on the distribution, a new dependent variable *Total_scores_2pt5*, (Total_Involscores transformed to the 2.5 power) was generated as shown in Figure 3. I then ran the OLS regression for the newly transformed variable and predicted the residuals.

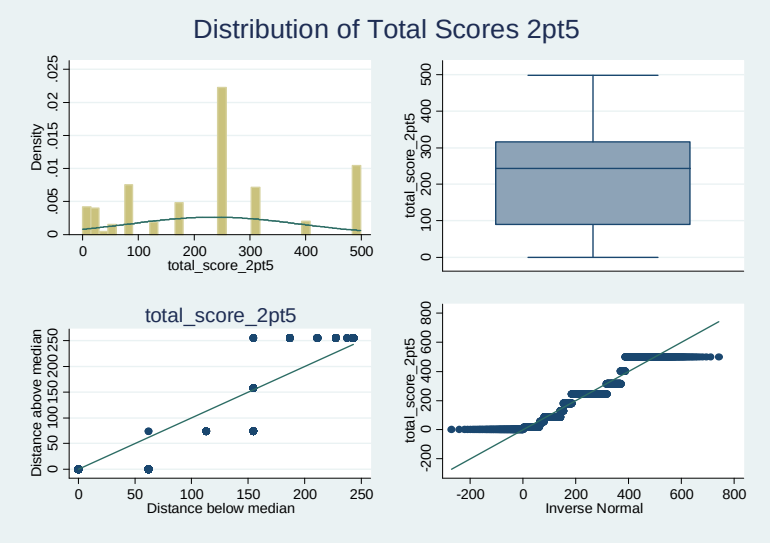


Figure 4: Distribution of Transformed DV Total Scores2pt5.

The distribution of the transformed variable Total Scores2pt5 in Figure 4 and the residuals in Figure 5 are now more symmetrical, better approximating a normal shaped distribution.

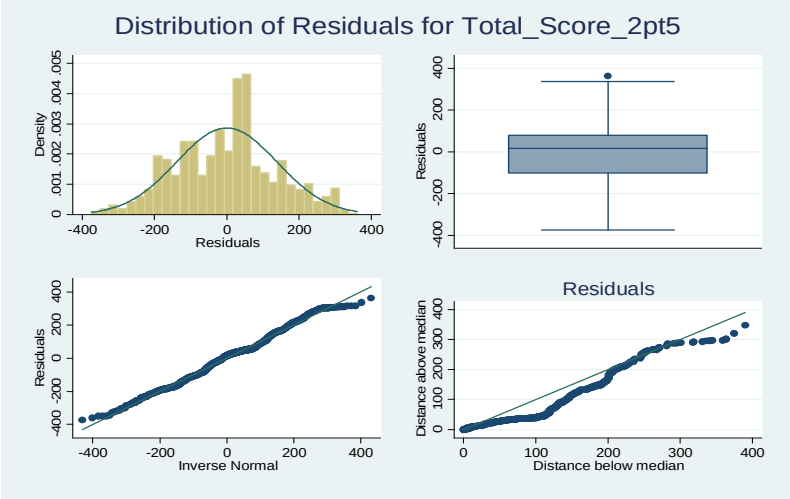


Figure 5: Distribution of Residuals after regression of Total Scores2pt5.

The next step was to run the regression using the newly transformed variable. The results of that regression did improve (see Model 2) with an adjusted R^2 = .13, meaning a little over 14% of the variation in this model can be attributed to the combination of independent variables.

Table 12

Model 2 - OLS Regression Total Involvement Scores 2pt5

	Total Involvement Scores 2pt5		
	B	*SB*	90% CI
Variable			
Constant	96.92***	29.42	[48.48, 145.36]
FDC 2	.14.17	11.44	[.4.66, 26.82]
FDC 3	7.25	11.89	[-12.33, 26.82]
Child race	-5.69	10.47	[-22.93, 11.56]
Child Gender	5.24	8.83	[-9.30, 19.78]
Child Age Group	70.39***	5.99	[60.53, 80.25]
Parent Age Group	6.50	5.24	[-2.13, 15.13]
Parent Income	7.93**	2.51	[3.80, 12.06]
Parent Education	-5.02†	2.64	[-9.38, .67]
R^2	.14		
Adjusted R^2	.13		
F	21.37***		

Note: N = 1025 CI = Confidence Interval *p<.05 **p<.01 ***p<.001 †p<.10

In this second OLS regression model in Table 12 there are still two statistically significant variables Child Age (p<.001) and Parent Income (p<.01). As in the first model as Child Age and Parent Income increase, Total Involvement scores also increase. Parent Education

is significant at the p< .10 confidence level but for every one unit increase in Parent Education, Total involvement scores go down (.52). This contradicts the literature; parent involvement should improve for parents with higher educations. Child Race which was significant in the earlier model is now not significant which also contradicts the literature. Again, regression criticism techniques were used. By running another test for heteroskedasticity, results of the Breusch-Pagan/ Cook-Weisberg hettest for constant variance of the fitted values of the transformed dependent variable, total scores 2pt5 was still found to be statistically significant at $\chi^2(1, N = 1025) = 11.53, p = .00$. There is now a more symmetrical distribution of errors as seen in Figure 5, although severe heteroskedasticity is still present.

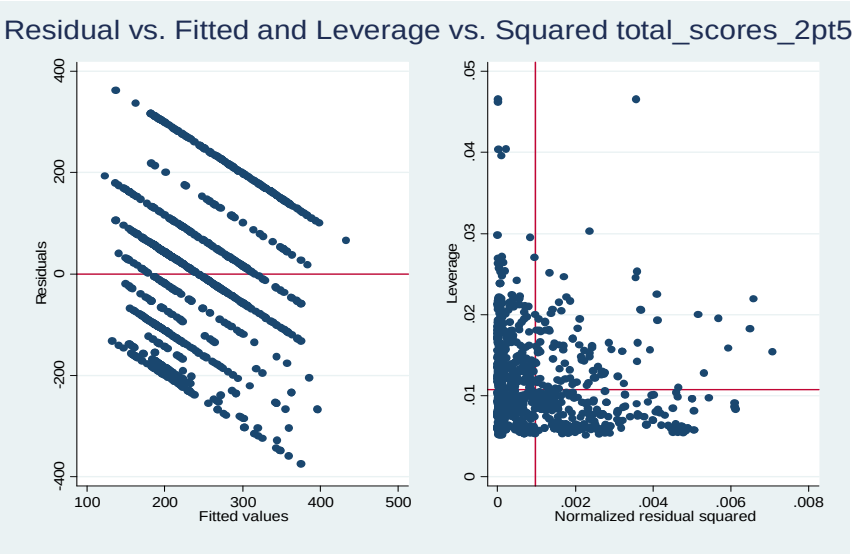


Figure 6: RVF and LVR2 plots for transformed variable.

Although there are not significant outliers exerting influence on the model present in the LVR2 plot in Figure 6, after examining the case data more closely, one case (403) was found that appeared unusual. To investigate it further, the regression was run again dropping Case 403; it was found to have no effect. Since the hettest did show heteroskedasticity, other attempts to potentially remedy the homoskedastic pattern in the errors and obtain a more

symmetrical distribution were made. Regression with robust standard errors was used in the subsequent models.

Robust Standard Errors, Clustering and Race as a predictor

To address the issue of heteroskedasticity and thereby obtain a "more credible estimate of standard errors and confidence intervals" (Hamilton, 2006, p.258), the Huber and White, sandwich estimator of variance was used in the next several regression models. Regression with robust standard errors is a less conservative method of estimating sample to sample variation. By using this method we cannot assume that the estimates reflect the true parameters of the population. Using this approach assumes that if the data collection were repeated on other children sampled the same way as in the original sample and the model was refitted, 90% of the time, we would expect the estimated coefficient of Total Involvement Scores to be in same the range. Robust standard errors do not require normal i.i.d. errors and are appropriate when conducting a regression in the presence of heteroskedastic errors (Stata Manual: [U] 20.16, p.301).

The third model in the series in Table 13 represents regression using robust standard errors of the transformed variable Total Involvement Scores raised to the 2.5 power. In this model, families were clustered by the family ID code assigned to them in the original dataset. This method of clustering was selected because there is only one primary caregiver per family and some families have more than one child. This study was designed to measure the impact of the Family Development Credential program on the level of parent involvement so the use of clustering is a viable technique used in regression modeling to control for the possibility of intercorrelation Sribney, 2009) between children and families.

In the regression in Table 13 with families clustered by family ID code, there are now only two significant variables. Child Age is still significant at the p<.001 confidence level and Parent Income improves and is now significant at the p< .01 confidence level. As Child Age and Parent Income increase, Total Involvement scores increase also.

Table 13
Model 3 - Regression with Robust Standard Errors Total Involvement Scores 2pt5 (clustered)

	Total Involvement Scores 2pt5 Robust Standard Errors		
Variable	*B*	*SB*	90% CI
Constant	96.92	30.58	[46.46, 147.29]
FDC 2	14.17	12.84	[-6.99, 35.33]
FDC 3	7.24	14.13	[-16.03, 30.52]
Child race	-5.68	10.88	[-23.60, 12.24]
Gender	5.24	9.42	[-10.29, 20.78]
Child Age Group	70.39***	6.61	[59.51,81.27]
Parent Age Group	6.50	5.93	[-3.28, 16.27]
Parent Income	7.93**	2.96	[3.06, 12.81]
Parent Education	-5.02	3.64	[-11.02, .97]
R^2	14		
F	18.14		

Note: N = 1025 CI = Confidence Interval **p<.01 ***p<.001

In the literature on School Readiness and other family serving interventions, the role of race in child outcomes is well documented. In this model race is still not significant, requiring more in depth analyses to investigate the possibility that something else was occurring. Investigating whether an interaction was present between FDC status and race became an integral part of this study. This possibility was explored in the next set of analytical techniques to determine the model of best fit.

Model of best fit

The fourth and final regression (Model 4) is the model of best fit with an $R^2 = 15.50$. The combination of independent variables explains a little over 15% of the variation in the model. The interaction between FDC periods and child race are also accounted for in this model. In

Table 14 we can see that there are three statistically significant predictors of Parent Involvement, Child Race and Parent Income at the p<.05 level and Child Age and FDC3 at the p<.01 level. . The interaction between period and race is also significant for FDC 2 and FDC3 respectively, however this needs further explanation.

Table 14
Regression with Robust Standard Errors Total Involvement Scores 2pt5 (interactions)

Total Involvement Scores 2pt5 with Period/Race Interaction			
Variable	*B*	*SB*	90% CI
Constant	124.47**	26.87	[80.21, 168.72]
FDC 2	-26.24	17.16	[-54.50, 2.02]
FDC 3	-62.19***	20.66	[-96.22, 28.16]
Child race	-56.72**	18.64	[-87.42, 26.02]
Child Gender	5.98	9.39	[-9.49, 21.44]
Child Age Group	71.31***	6.58	[60.49, 82.15]
Parent Age Group	4.55	5.97	[-5.28, 14.39]
Parent Income	8.51**	2.92	[3.69, 23.32]
Parent Education	-4.37	3.67	[-10.42, 1.68]
FDC 2/Child Race2	59.55**	24.25	[19.57, 99.47]
FDC 3/Child Race2	94.81***	27.16	[50.07, 139.54]
R^2	.15		
F	15.85		

Note: N = 1025 CI = Confidence Interval *p<.05 **p<.01 ***p<.001

Understanding the interactions in Model 4 in Table 14 is a bit more complicated because this model includes a transformed dependent variable total_score2pt5, with dummy-coded independent variables for FDC period and race, therefore straightforward conclusions about the coefficients or p values for these variables requires further investigation.

For example in Table 14, period_FDC3 has a negative coefficient with p=.003; this means that FDC period3 differs from FDC period1 but *only in relation to the interaction effect* and in this case when children's race is white. It does not mean that a difference exists irrespective of race and the other variables; actually in this model Black offsets White, such that

no difference exists if you “averaged” race. To understand more about the interaction between FDC periods and race for White and Black children only, this model was used to test these more specific statistical relationships. Statistical calculations from the regression and the test command in Stata Corp. II were used to compare the means and measure the effects of FDC period and race on parent involvement.

After running several regressions with different combinations of independent variables, period (FDC status) and race (White and Black), I found that differing effects occurred depending on the changes in those X variable combinations. This led to an investigation of the main effects and simple main effects of period and race.

Main Effects, Interactions and Simple Main Effects

According to an article on main effects (Main Effects, n.d.) interactions are present when “the effect of one independent variable on the dependent variable changes depending on the level of another independent variable.” The process for testing for main effects, interactions and simple main effects involved three steps. First, I examined the adjusted means of the transformed variable Total Involvement Scores 2pt5; next using chi square tests of FDC and controlling for all other variables I investigated whether the main effects for FDC status (period_FDC) and Child Race were significant. Last I tested for simple main effects, by period at all levels of race and then by race for White and Black children at all levels of FDC period.

Main Effects for Mean Parent Involvement Scores

The chi square results of the tests for main effects for FDC period and Child Race are presented in Table 15. According to the test for main effects presented in Table 15, neither FDC periods nor Child Race have an effect on Parent Involvement when controlling for all the other

variables. Therefore, I continued the investigation by examining the simple main effects within the interaction term.

Table 15
Main Effect of FDC Period and Child Race on Total Involvement Scores

Variable	X^2	Df	p
FDC Period	2.24[a]	2	.33
Child Race	.23	1	.63

N = 1025; [a] *F* = 1.12

Simple Main Effects of Period by Race

I first predicted margins for the adjusted means and tested for the simple main effects by period at all levels of race. Two tests were conducted that compared the mean Parent Involvement scores of FDC1, to mean parent involvement scores at period FDC2 and period FDC3 for White then Black children respectively. Tests reveal that FDC periods vary significantly but differently for each level of race.

Table 16
Simple Main Effects of FDC Period at Race

Variable	X^2	df	P
White Children	9.08[a]	2	.01
Black Children	4.69[b]	2	.10

Note: The actually p =.0958, cannot reject the null at p<.05 but can reject it at the p< .10 level.
N = 1025; [a]*F* = 4.54; [b]*F* = 2.35

The simple main effects for FDC period in Table 16 show that FDC period varies and is statistically significant for White children at the p≤.05 and for Black children at the p≤.10 level. Levels of FDC period vary at the levels of race controlling for all other X variables

Simple Main Effects of Race by Period

The next set of tests examined the simple main effects of race at the different FDC periods to see if White and Black are significantly different. The results of those tests are presented in Table 17.

Table 17
Simple main effects for Race by Period

Period	X^2	df	P
FDC 1	9.26	1	.00
FDC 2	.03	1	.86
FDC 3	3.45	1	.06

N = 1025

The simple main effect for race at FDC1 and FDC3 are statistically significant at the p.≤ .05 and the p≤ .10 level respectively. This means that there is a statistically significant difference between the mean Parent Involvement Scores of White Children and Black Children at FDC1 (before FDC implementation) and FDC3 (after FDC implementation for workers without FDC training). *There is no statistically significant difference between the mean Parent Involvement scores of White and Black children at FDC2 (with FDC trained workers, p =.86).*

In Table 18, tests for simple main effects by period for White children only are examined to see if mean Parent Involvement scores vary for White children when comparing one FDC period to another. .

Table 18
Simple Main Effects by Period for White Only

Period	X^2	df	P
FDC 1 -2	2.34	1	.13
FDC 1-3	9.06	1	.00
FDC 2-3	3.30	1	.07

N = 1025

For White children, there is a statistically significant difference at the p≤ .05 level between Parent Involvement scores when comparing FDC1 and FDC3 and at the p ≤.10 level when comparing FDC2 and FDC3.

In Table 19, tests for simple main effects by period for Black children only are examined to see if mean Parent Involvement scores vary for Black children when comparing one FDC period to another.

Table 19
Simple Main Effects by Period for Black Only

Period	X^2	df	P
FDC 1-2	3.98	1	.05
FDC 1-3	3.50	1	.06
FDC 2-3	.00	1	.97

N = 1025

For Black children, there is a statistically significant difference between Parent Involvement scores between FDC1 and FDC2 at p≤.05 and FDC1 and FDC3 at p≤.10 This provides statistical evidence that parent involvement scores were different between periods 1 and 2 and 1 and 3 for Black children.

After running the tests for simple main effects, I calculated the inverse transformations for the Total Involvement Score 2pt5; this returned the results to the original units of the Independent Variable, Total Involvement Score. The interactions between FDC periods and child race were then graphed as seen in Figure 7 and Table 20.

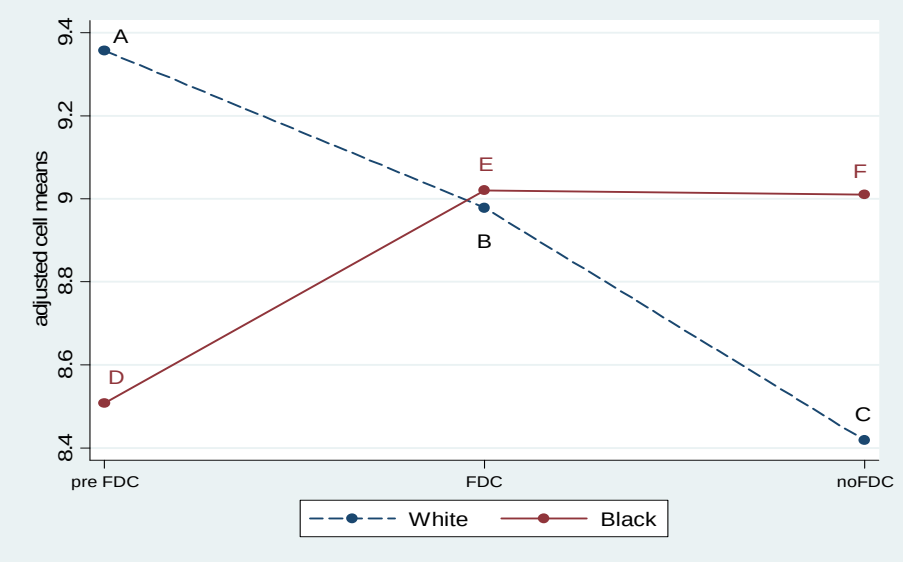


Figure 7: Simple Main Effects of Race and FDC Period.

Table 20
Mean Parent Involvement Scores by Period and Race with Significance Values

Mean Parent Involvement Scores					
A	B	C	D	E	F
9.36	8.98	8.42	8.51	9.02	9.01

Period by White Only	Period by Black Only	Race by Period
A-B=0 no diff	D-E≠0 at α=.05	A-D≠0 at α=.01
A-C≠0 at α=.01	D-F≠0 at α=.10	E-B=0 no diff
B-C≠0 at α=.10	E-F=0 no diff	F-C≠0 at α=.10

Interpretation for Simple Main Effects

White Children

For White children, mean Parent Involvement (PI) scores before the implementation of FDC1 (*M* = 9.357) are not significantly different then at FDC2 (*M* = 8.979). However, PI scores for White children are significantly higher before implementation than at FDC3 workers with no FDC training, (*M* = 8420) and the PI scores of White children are also higher for FDC trained workers then non-trained workers during the same time period.

Black Children

For Black children, PI scores before implementation of FDC were significantly lower (*M* = 8.508) then after FDC at Period 2 (*M* = 9.021) and Period 3 (*M*= 9.011). However, there is no significant difference between PI scores for Black children after the implementation between FDC2 and FDC3.

Comparing Races by FDC Period

Before the implementation of FDC (FDC1), PI scores for White children were significantly higher (*M* = 9.357) than for Black children (*M*= 8.508). After implementation for FDC workers (FDC2) there is no significant difference between the PI scores of White and Black children. After implementation however, the PI scores for Black children with workers with no FDC training (*M* = 9.011), are significantly higher than for White children (*M* = 8.420).

Conditional Effects

In the regression (Model 4) of best fit in Table 14, two predictors of parent involvement were found to be statistically significant, Child Age and Parent Income at the $p<.001$ and $p<.01$ respectively. Since it has been determined that simple main effects by race were statistically significant, I compared the conditional effects of these two variables by race also. The conditional effects plots graph the predicted residuals of the dependent variable against independent variables. In this case the graphs in Figure 8 and Figure 9 depict the conditional effects of parent involvement for child age and parent income by race.

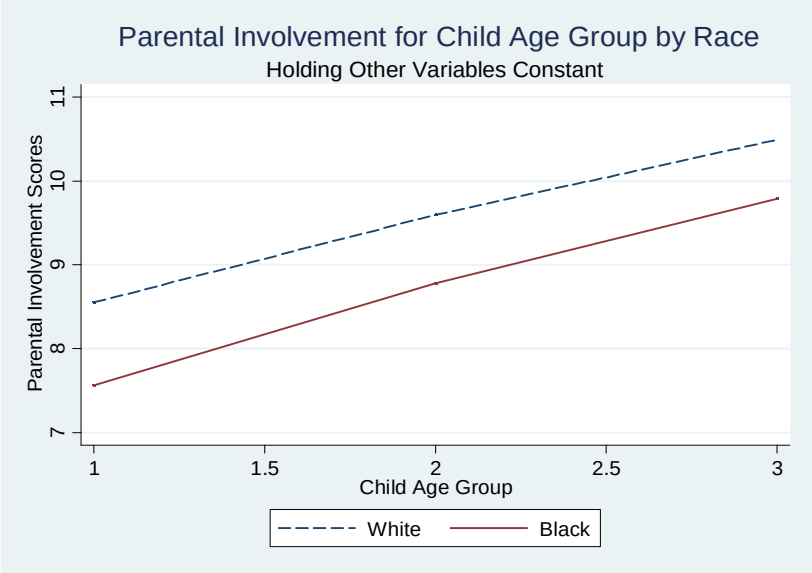


Figure 8: Conditional Effects Plot for Child Age by Race.

In Figure 8, holding all variables constant, Child Age has a similar effect on parent involvement scores for White children and for Black children, however mean scores for White children are higher and remain that way as the children in the sample grow older.

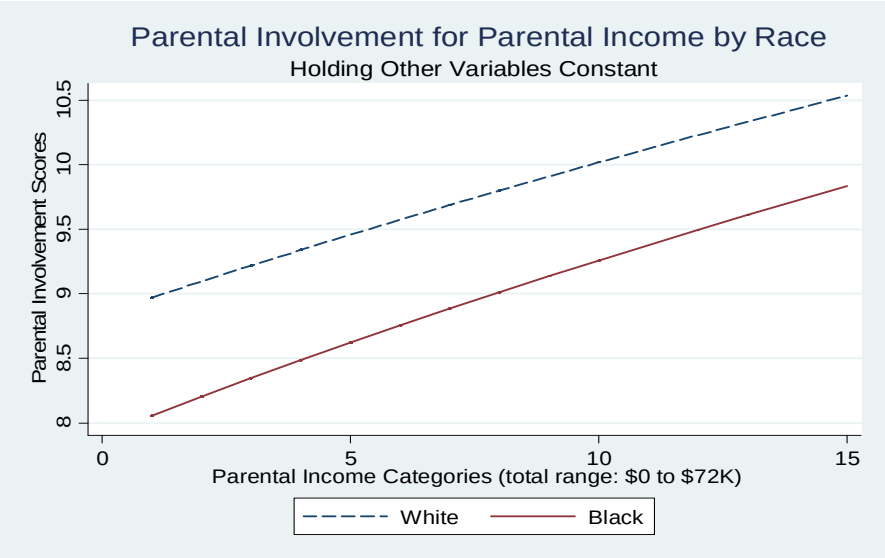


Figure 9: Conditional Effects Plot of Parent Income by Race.

In Figure 9, holding all other variables constant, Parent Income has a similar effect on parent involvement scores for White and Black children, however as parent income increases, parent involvement scores for White children start at a slightly higher margin but remain consistently

higher than for Black children in the sample overall. This suggests that income is a significant predictor of parent involvement, irrespective of the race/period interaction found in the regression models.

Summary of Findings for Parent Involvement

The findings from the regressions and tests for main effects and simple main effects, and conditional effects present evidence of an impact of the Family Development Credential on child outcomes, particularly with regard to Parent Involvement. The effect varies at different levels at times by the FDC period and at times depending on the race of the child. Two significant predictors of parent involvement were consistently found throughout the analyses, child age and parental income.

After exploration into the impact of the FDC program on Child Developmental Appropriateness in Part III, below, a full discussion of the interpretation of these findings is presented in Chapter Seven. The findings are integrated with the theories of human ecology and School Readiness and are presented with relevance to the Family Development and Family Support programs.

Part III –Logistic Regression for Child Developmental Appropriateness

Analysis of Child Delay

In Part III the second of two dependent variables, Child Developmental Appropriateness is examined using logistic regression based on evidence provided by family workers. After children underwent developmental screenings by family workers, the children in the sample were identified if they exhibited a 25% delay in one or more developmental area. The results of those screenings were entered into the database before the study sample was extracted. Since this is a binary variable, Logistic regression was used on the dependent variable, Child Delay. The first of

two models included period/race interaction established in the previous section on parent involvement. The model was again clustered by family ID.

Less than 10% of the children in the study sample were identified as developmentally delayed resulting in a dependent variable, CD Delay that was skewed. Given the skew, caution must be taken when making the interpretations. As a result, the regression analyses yielded only a few significant independent variables and a low pseudo R^2 .06. (See the pseudo R^2 in Table 20 and the ROC curve in Figure 10).

After running the first logistic regression with the interaction, the interaction was not significant and therefore dropped for purposes of parsimony as there was no need to continue an investigation into a complex interaction variable that was not found to be significant.

The final model included the FDC periods, 1, 2, and 3 as dummy variables. Three regressions were run to test the difference between the dummies for FDC periods. The second hypothesis in this study states that a change in Child Delay is expected after the implementation of FDC when compared to before the implementation of FDC. The most prudent process in the regression technique was to compare the two post FDC periods to the pre FDC period in the first model. This model is presented in Table 21 (R^2 = .062).

In the logistic model shown, children after implementation with workers without training (FDC3) were 206 times more likely to be delayed than at FDC1. When compared to FDC2, the odds of children being delayed in FDC3 were 79 times more likely. The odds of children being delayed with workers not trained in FDC after implementation were more likely than at any other time period.

According to the regression in Table 21, only two other independent variables were statistically significant. Child Gender, at the $p < .01$ level and Child Age at the $p < .001$ level are

both significant predictors of Child Delay. They were consistently significant irrespective of any other combination of X variables. For Child Age, the odds of having a delay are 91 % more likely for older children than for younger children. When comparing genders the odds of females having a delay is 59% less likely than for males.

The LROC graph in Figure 10 shows the (radio operator characteristic) estimates under the curve and is presented to depict the predictive power or strength of the logistic model in Table 21. This graphic representation of the model supports the finding that exposure to FDC training is not a strong predictor of Child Delay.

Table 21
Logistic Regression of Child Delay with Robust Standard Errors (clustered)

		Logistic Regression of Child Delay	
Variables	*OR*	*SB*	90% CI
FDC 2	1.71	.80	[.78, 3.69]
FDC 3	3.06**	1.40	[1.44, 6.49]
Child race	.81	.27	[.46, 1.39]
Gender	.59**	.15	[.39, .91]
Child Age Group	1.91***	.31	[1.47, 2.50]
Parent Age Group	.85	.14	[.64, 1.11]
Parent Income	.96	.08	[.83, 1.06]
Parent Education	.90	.08	[.77, 1.05]
$\times^2$	26.49		
Pseudo R^2	.06		

Note: N= 695 CI= Confidence Interval **p<.01 ***p<.001

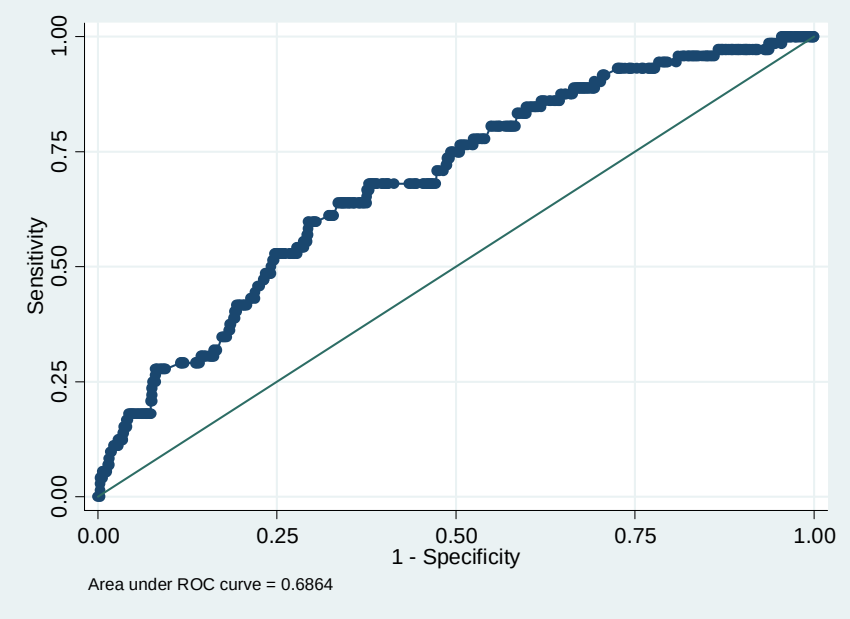


Figure 10 : LROC of Logistic Regression of Child Delay.

According to Figure 10, there is only about 68% under the curve, since the line is at 50% which is equivalent to zero predictive power. This model only has about 18% predictive power. It is not a good model for predicting child developmental delays in Family Support. The strength of the relationship is weak (6%) and there is very little predictive power in the variables in this model. Since the study hypothesized that FDC would impact Child Delay and the model itself is weak, the LROC graph is included as a demonstration of the lack of strength of the model as a whole.

Summary of Results for Child Developmental Appropriateness

In summary, the impact of the FDC program on Child Developmental Appropriateness (Delay) was examined using logistic regression. After testing the impact of the various periods in the regression and testing for them separately, only one significant difference was found. For children with workers in FDC3 (workers without training), differences were found from the other two periods, controlling for all other exogenous variables. With such a weak model and so little variation attributed to it, results must be interpreted with extreme caution.

A later study with a more detailed dataset of child development indicators (like actual scores from the assessments), would possibly produce more valid results about the differences between children with delays and those without. Results, since they showed minimal effects, suggest that potentially a better measure for Child Delay could be developed. Child Gender and Child Age were significant predictors, with girls being less likely than boys, and older children being more likely than the younger ones to be identified as delayed, regardless of FDC period. The children with FDC trained workers were not significantly different from the other two groups but FDC3 group was more likely to be delayed. This is the group without any additional training.

CHAPTER SEVEN DISCUSSION

Purpose of the Research

The purpose of this research was to measure the impact of the Family Development Credential (FDC) program on School Readiness (SR) outcomes. Children in Family Support (FS) centers in Allegheny County Pennsylvania served as the sample population. The independent variable was established as the FDC program and the dependent variables were defined as parent involvement (measured by Total Involvement Scores) and child developmental appropriateness (measured by Child Delay). A series of analytical techniques were employed that empirically measured the impact of the FDC program on these two SR outcomes. This quasi-experimental pre/post test design provided the structure for the comparison of the SR outcomes of children with family workers trained in FDC and those who were not. Throughout the analyses, the demographic characteristics of child race, age and gender and parent age, income and education were controlled to rule out the effects any one of these variables may have caused.

This chapter presents a review of the findings and implications of the study in relation to both theory and practice. How the FDC program interacted with the demographic characteristics of the sample and how that interaction impacted the outcome of parent involvement is explained along with reasons for the lack of impact on child developmental delay. The chapter culminates with a discussion of the implications for the Family Development Credential program, limitations of the study, and recommendations for future research based on the study's findings.

Characteristics of the Sample

The relevance of socio-demographic characteristics in studies of social welfare programs has long been established. When conducting studies on the effects of interventions on child outcomes, characteristics related to age, gender, race, income and education are often taken into

consideration. In this study on the impact of the Family Development Credential (FDC) program on outcomes in Family Support, the demographic characteristics of the children and parents in the sample were accounted for in the regression models. The results of those analyses showed variation in the levels of parent involvement based on the race of the child when family workers were trained in FDC and when they were not.

The large body of literature on the impact of socio-demographics on child outcomes presented in Chapter Two provided the rationale in this study for inclusion of child and parent characteristics as control variables. Six demographic characteristics were retained throughout the regression modeling and were tested as predictors of Total Involvement Scores and Child Developmental Delay. Those were a) child race, b) child gender, c) child age, d) parent age, e) parent income and f) parent education. During the regression modeling, certain demographic variables were found to be significant. In the model of best fit for parent involvement (Table 14), holding all other variables constant, three variables were found to be significant predictors of parent involvement, child race, child age and parent income. In the logistic model used to test child developmental appropriateness using Child Delay as the measure in Table 21 (holding all other variables constant), only two demographic variables, child gender and child age were found as highly significant predictors of child developmental appropriateness although the model for testing Child Delay was too weak to affirm these findings.

To understand the results of the demographic analyses, it is important to view them in the context of the Family Support (FS) program under study. One of the aims of the Family Support programs in Allegheny County is to provide services to diverse families from communities in need. The centers and family workers partner with families regardless of socioeconomic background. Although there are distinctive differences in the children enrolled in FS, varying by

age, more children under two years old and gender (48% male and 52 % female) and race, more predominately Black (59%) than White (21%), all of families in Family Support are eligible to receive the same services regardless of such differences. Since several of the variables were found to be statistically significant, it was equally as critical to examine those differences from an ecological perspective.

When families enroll children in Family Support (FS), parents expect to receive the same types of services regardless of income, education, age or race. Based on the findings in this study, the interaction of child race with the different groups of FDC workers was found to be significant. The goal of the FS network is to achieve School Readiness in all of the communities where family centers are located irrespective of socio-demographics. To fully comprehend how child race and FDC status affected parent involvement, a detailed explanation is presented below within the theoretical framework for this study.

Effects of FDC on Parent Involvement

Nearly thirty years ago, researchers at Cornell University implemented a project with families and young children known as "Family Matters" (Forest, 2006). This early work established some of the core principles and values that are still relevant to the work done with parents and children in the Allegheny County Family Support program today. Those principles which promote the appropriate development of children and its relationship to the support and interactions of influential adults, is the fundamental premise of the Family Support (FS) model. Using this premise, this study examined whether the relationship between family workers and parents had any effect on the parents level of involvement in the child's development, adequately preparing them for school.

Advocates and policy-makers in Allegheny County believe that a child's parent has the ability to influence the child in a positive manner. To support that belief, strategies for parent involvement are integrated into the pre-service training curriculum in Family Support (FS) and workers are strongly encouraged to increase his/her competencies and relationship-building skills with families by earning a Family Development Credential (FDC). About half the workers in this sample employed in FS between 2005 and 2010, (after the implementation of FDC), were FDC trained and half were not. No family in FS before 2005 had an FDC worker. Because of the different training levels of workers, FDC status was included in the regression modeling process along with demographic characteristics to test its effect on parent involvement.

The methodology used in this study, departs from previous studies on FDC. Unlike other studies, this study used a parent involvement measure (Total Involvement Scores) of parents' self- report responses on child development activities and quantified the results of those responses. Three prior FDC studies used quantitative methodology with treatment and comparison groups of workers, but those studies focused on the outcomes of workers and not families (Alpert and Britner, 2005; Smith et al, 2007 and Watson-Smith, 2003). This study fills a gap in the literature on FDC since the main goal of this research was to differentiate between the child outcomes not worker outcomes in Family Support and compare the results. This study is important because it investigated the effects of the FDC on the child and evaluates the outcomes of the end user and assumes that the FDC worker will engage the parent to facilitate positive outcomes for the child.

In this study, two aspects of School Readiness (SR) were measured, parent involvement (Total Involvement Scores) and child developmental appropriateness (Child Delay). According to May and Kundert (1997), the concept of School Readiness (SR) has many facets used by

researchers to measure a child's preparation for kindergarten. It is up to the researcher to determine which of those facets are relevant to their study. The first of two research questions in this study asks: Is there any difference between levels of parent involvement in Family Support, before and after the family workers earned Family Development Credentials? This study investigated whether parent involvement outcomes improved after the implementation of the FDC program.

The process of testing this hypothesis involved the use of regression with robust standard errors of the dummy variable Total Involvement Scores transformed to the 2.5 power clustered by family ID code. After conducting various regression techniques, regression criticism revealed that child age and parent income were significant predictors of parent involvement. Findings also revealed that the status of the FDC worker had varying effects on children and that the child's race also produced varying effects within the FDC periods.

It is important to interpret the findings of this study within the ecological context of the Family Support (FS) program and the communities where FS centers are located. The relevance of income as a predictor for parent involvement in FS was not a surprise since FS is designed to serve low income, primarily single moms in mostly Black neighborhoods. The finding that more Black than White families were served during the study period is consistent with the demographics of families served in Family Support over the years (Dick, 2007). Consequently, the study found that the Family Development Credential (FDC) program seemed initially to have a greater effect on Black families relevant to parent involvement. These findings make sense since the FS program was created to reduce the disparities between communities and prepare all children for kindergarten regardless of race, parent education or parent income. Conditional effects were also present with parent income and child age by race. When comparing the mean

parent involvement (PI) scores, White children's mean PI scores were higher when examining he conditional effects of child age and parent income. This is not surprising since more White parents in the network fell into the higher income brackets. The finding that mean scores are higher overall for White children (see Figures 8 and 9), is consistent with the literature on School Readiness.

Similar to the findings in this study, the disparities between School Readiness (SR) outcomes of White children with parents with higher incomes and education and Black and Hispanic children with parents with low-income and education exist in the literature. The differences by race are sometimes attributed to some deficiency in the parent or the child (Jarrett, 1997 see also May and Kundert, 1997). Despite the differences found by race, Jarret found that Black parents were resourceful in finding and using good child developmental programs and stayed involved in the growth and development of the child. The findings in this research on Family Support show that once the FDC program was implemented, the parent involvement scores of Black children in Family Support increased. Like in the Jarrett study, Black parents accessed established child development programs to improve the level of involvement with their children.

Along with parent income and child race, the age of the child was also found to be a significant predictor of parent involvement in this study. Parents were more apt to be involved in child development activities with older children than parents with younger children. Anecdotally, I have served as an administrator in several programs serving before school age and school age children. After observing parents and staff in my role of administrator, I found that both groups were more comfortable interacting and engaging older children than younger children in child developmental activities. One explanation for this could be that understanding the developmental

processes and age-appropriate activities for infants and toddlers is more difficult than working with pre-school and school-age children.

Two factors need to be considered relevant to child age in this sample. First, more children were under two years of age than any other category (58%). Second, four questions comprised the Total Involvement Score index. Those questions asked how often the parent played with, read to, watched educational TV with, and did homework with the child. The first two questions (play with and read to) can apply to children of any age group. The last two questions (watch educational TV and do homework with) are seemingly geared toward older children. This may suggest that when parents rated the level of involvement on the two questions related to TV and homework, ratings were lower for children under two years old. It may also suggest that as the child grows within the Family Support program and the longer the family stays enrolled then the awareness of what constitutes good child developmental activities increases. The effects on children for Total Involvement Scores were measured using the composite score, not by the individual questions that composed that score.

Interactions by Period and Race

After running a series of regressions a significant interaction was found in the model between the race of the child and the FDC period for parent involvement. Ultimately, the study found that neither the main effects of child race nor FDC period were statistically significant when tested separately. This finding contradicted the literature on the effects of race in School Readiness and the effects of the FDC program on family outcomes. More statistical tests were conducted to investigate what was occurring between these two independent variables, so the simple main effects associated with the race period interaction were examined.

The findings of the test for simple main effects by period tell an interesting story (see Figure 7 and Table 20). There was no statistically significant difference found between the scores for parent involvement (PI) for White children before implementation (FDC1) and after implementation for children with and FDC trained worker (FDC2). The PI scores of White children with trained workers (FDC2) were different than those with untrained workers (FDC3) and were statistically significant. When comparing the PI scores for White children at FDC1 to the White children at FDC3, mean PI scores were lower than the FDC1 group and the difference was also statistically significant.

These findings tell us that Parent Involvement scores for White children with untrained workers after implementation (FDC3) were different than at any other time period. One possible explanation for this could be that untrained workers were less skilled at working with White families at that time period. The cause of this is not known. Whether other extraneous factors contributed to this finding would need to be explored in a later study. Since the socio-demographic characteristics of the workers was not known for any of the periods, if the effect was caused by cultural differences between workers and families during FDC3 this could not be explored or substantiated. The focus of this study was to primarily measure the impact of trained workers on child outcomes, any effects found by untrained FDC workers with regard to race can be examined with additional research.

The findings for tests of the simple main effects for parent involvement scores by period for Black children also show variation by FDC period. The difference between the PI scores of Black children before the implementation of the program (FDC1) are lower than at either of the other two periods and are statistically significant for both periods (FDC2 and FDC3) respectively. A probable explanation of this is that Family Support is designed to help children

prepare for school, as a result, PI scores for Black children *improved* once the FDC program was implemented.

When comparing the PI scores of Black children after FDC between trained and untrained workers (FDC2 and FDC3), no significant difference was found. One possible explanation for this lack of a distinction could have been caused by the threats to validity like history. The thrust in Family Support was to improve School Readiness outcomes for all children; at the same time, the FS network was abuzz about the principles of Family Development and focused on engaging families better. Because Black children's parent involvement scores increased after FDC implementation, it is possible that Black parents focused on maintaining their levels of involvement, once they acquired improved skills. Why this effect did not occur with White children's parent involvement scores during that period is not fully known. The policy and principles of Family Support is to train workers to treat families equally. The principles of Family Development include a strong focus on cultural diversity which supports the finding that for trained workers, no distinctions were found in parent involvement scores by race.

The findings from the tests of simple main effects for differences between White and Black children's parent involvement scores were statistically significant for children before implementation (FDC1) and after implementation without training (FDC3). This change suggests that several things could have happened.

Family Support (FS) centers share the goal to help all children get ready for school irrespective of race. In keeping with that goal, parent involvement (PI) scores of Black children improved. Once PI scores increased, upon the implementation of the FDC program, the PI scores of Black children stayed at the improved level. A more important question is: Why did the PI

scores of White children go down below the scores of Black children with untrained workers after implementation? It is possible that once the Family Development Credential (FDC) program was implemented, a more realistic account of what was actually occurring with families was exposed by the improved interactions between workers and parents during the FDC program.

In the McAllister et al, (2005) study in which a similar home visitation model was used, findings indicate that good relationships between workers and parents allowed parents to express ideas about child development and parent involvement more freely. Parents could clearly explain the types of developmental activities done with the children without inhibition. It was the relationship between the family worker and the parent that facilitated good communication and realistic expectations about the child's development. This would support why the PI scores of all families in this study were at the same level for FDC trained workers. The differences between scores were found by race with untrained workers.

In three other studies, parents developed a trust with the worker that allowed for better articulation of the types and nature of the activities conducted with children (Brown-Rosier and Corsaro, 1993; Diamond, et al, 2000; Jarrett, 1997). In this study, it is possible that the mean parent involvement scores of White children could have been overstated and mean parent involvement scores of Black children could have been understated before FDC implementation. Once the FDC workers better engaged parents, the actual levels of parent involvement (PI) may have become more accurately represented. The fact that White children with FDC3 workers have lower scores, if caused by some interaction between untrained workers and their families, while a possibility, cannot be substantiated. At a later time, a study that includes qualitative inquiry and interviews or surveys of Family Support program administrators, workers and parents may

provide further explanations about these differences between children with untrained workers after FDC. The focus of this study however was to examine the effect, if any of the FDC trained workers on child outcomes in Family Support.

To that end, the most important finding from the tests on simple main effects was that no statistically significant difference between the PI scores of White and Black children with Family Development Credentialed workers (FDC2) was found. This result supports the fundamental premise of the FDC that asserts when workers and families partner together and form mutually respectful relationships, families' goals are achieved (Crane, 2000; Forest, 2003). This finding also may suggest that once the parents in Family Support had established good relationships and understanding irrespective of race, the practice of incorporating that understanding with culturally diverse populations was in effect. Although it was hypothesized that the parent involvement scores for children with FDC trained workers would be higher than those without the training at any other time period, this is an unexpected yet welcome and positive finding. Conducting a later study on parent involvement outcomes and examining the effects of FDC and the level of exposure (length of time FDC worker has been trained), could provide additional information about the interactions between workers and parents and possibly yield stronger results.

In summary, the first research question in this study hypothesized that there would be greater differences between the levels of parent involvement before and after family workers earned a credential. Though parent involvement was not higher for children with Family Development Credentialed workers, what was found was even more complex. The findings by race and period were unexpected and broadened my thinking about how to measure program impact using outcome variables and how to interpret the results. The fact that a race/period

interaction was discovered caused a deeper investigation into the impact of FDC on subsets of the population sample in ways that had not been considered when this study was initially proposed. The fact that parent involvement scores for children with FDC workers were found to be at the same level for both White and Black children at one FDC level and not at another was an unintended consequence that attests to the complexity of measuring program outcomes in social programs. Making statements about the interpretations of the results must be done with care and in the context of the program under study.

Effects of FDC on Child Developmental Appropriateness (Delay)

The second of the two research question asks: Is there any difference between levels of child developmental appropriateness, (measured by the number of children with Child Delay) in Family Support, before and after the family workers earned Family Development Credentials? It was hypothesized that children in Family Support with Family Development Credential (FDC) trained workers would demonstrate higher levels of child developmental appropriateness compared to those whose workers did not have the credential.

This hypothesis guided an exploration into the differences in Child Delay between children with FDC trained and untrained workers. What was not known when the study was proposed was that nearly one third of the children (30%) had not received an assessment by the worker and of those who had, only 118 children, (less than 10%) exhibited more than a 25% delay in any one developmental area. This meant the data were extremely skewed and would probably yield minimal results given the model and data limitations.

Logistic regression was conducted controlling for the same independent variables used in the analyses for Total Involvement Scores, FDC periods and demographic characteristics. The

findings from the logistic regression models revealed that regardless of X variable combinations, only 6% of the variation was accounted for by the independent variables in the model.

The results of the analyses (Table 21) show that most of the variables in the model were not significant except for FDC3, Child Gender and Child Age. For children enrolled in Family Support before the implementation of the FDC program (FDC1) and those enrolled after implementation that had FDC trained family workers (FDC2), there was no statistically significant difference in the odds of those children having a developmental delay. Whatever environmental, social, individual or familial characteristics that contributed to a child being developmentally delayed in the early years 1999 to 2004 (FDC1) did not change when children had an FDC worker in the later time period, 2005 to 2010 (FDC2).

For children with workers during FDC3, statistical significance was found when compared to the other two periods. The odds of a child being delayed were 206 times higher in FDC3 when compared to FDC1 and 79 times higher in FDC3 when compared to FDC2. This finding suggests that untrained workers, after FDC was implemented were more apt to identify a child as delayed. One possible explanation for this might be that non-FDC trained workers (FDC3) identified more children as delayed because they were in need of additional training like the FDC program, training on the administration of assessments and recognizing the signs of delays in young children.

Worker problems with the type and issuance of developmental screening instruments is well documented in the School Readiness literature. May et al, 1997 describe three major problems with the developmental screening of young children as “inappropriate uses of the screening test results, psychometric problems with the screening tests and inaccurate identification of children at-risk” (p.75). A study by Janson and Squires (2004) found that

environmental factors, lack of cultural adaptation and the way the parent structures child development activities in the home can affect the outcome of in-home developmental assessments, particularly for children at-risk. Family workers in Family Support do the assessments in the home. Workers with less training could have possibly faced issues with the administration of the instrument itself or adapting it to the child activities in the home environments of different families.

Janson and Squires (2004) suggest that scholars take careful consideration when interpreting study findings relative to child developmental delay. In keeping with human ecology theory, the children in Family Support (FS) who are being screened for delays are at the center of the many systems and the parents and workers who influence them. Family workers and parents in FS can partner together to ensure the results of assessments are interpreted correctly and when children are delayed, referred to professionals trained in Early Intervention.

The finding that children with untrained workers after FDC implementation are more likely to be identified as delayed must be considered in the context of the Family Support environment at the time. As Training Director for Allegheny County Family Support between 2004 and 2006, I observed a strategic focus placed by administrators on assessing child developmental appropriateness (Child Delay). Prior to 2005, the frequency and attention by workers on conducting child developmental assessments was sporadic at best. More than one instrument was used to make the assessments and depended on the philosophy of the lead agency. Strategies to ensure consistency of implementation by workers and improve on the quality of assessment had begun by 2006. This occurred during the same time period that the Family Development Credentialing program was being implemented. Efforts to retrain workers was ongoing. At the time this research was conducted, I was told by the new Training Director,

Sharon Harper in a phone conversation that the network did not agree on one uniform assessment (Ages and Stages) until early in 2010 (Personal communication, May 26, 2010).

The issue of measuring developmental delay is complex. Additionally, what constitutes a child's readiness for school can be facilitated or hampered by the use of screening instruments. This may have contributed to the difference between children with untrained workers (FDC3) and those with FDC trained workers (FDC2). Interventions used with young children by family workers are dependent upon the theoretical perspective of the interventionist. Some programs use a nativist, environmental, maturationalist, developmental, or ecological approach (Diamond et al, 1997; May et al, 1997) as described in Chapter Two. In Allegheny County Family Support advocates use a blended approach that supports the use of screening the child by developmental milestones combined with the ecological approach that accounts for external influences in the environment. Trained FDC workers may have been more likely to consider all the factors that influence the child's development and not so quick to identify the child as delayed.

The FS network is improving the approach to assessment by using the Ages and Stages questionnaire (ASQ) to identify delays in children. Unlike prior instruments that require the workers to record observations of the child in the home, this assessment is based on parent's acknowledgement about what the child can do developmentally (Janson and Squires, 2004). By quickly objectifying parent concerns about how their child performs, the use of the ASQ could possibly reduce or eliminate the differences found between workers without FDC training and those credentialed in Family Development.

The complexity of the debate over the use and interpretation of screening instruments compounds the discussion on what to do with children who are delayed in preparing them for kindergarten. Since this study found no impact on children with a FDC worker on Child Delay,

questions about the effects of different types of screening instruments and the use of those instruments by workers lie outside of the scope of this study. The binary nature of the data (delay versus no delay) further limited the types of statistical tests that could be conducted to investigate the effects of FDC. A future study that includes more details about the developmental domains of a child, would enhance the literature on the impact of the FDC program on child outcomes in Family Support.

Two demographic characteristics however, were found to be statistically significant predictors of Child Delay: child age and child gender. According to the results of the logistic regression (Table 21) the odds of children being delayed as they get older is 91 % higher than for younger children for each subsequent age group. One possible explanation is that workers and parents are more able to recognize and codify the delays in older children. They may be more willing to actually accept that the child needs to be referred to Early Intervention services. In the Janson and Squires (2004) study, less variability was found on children under three years old.

Along with the age of the child, this research found the gender of the child to be a significant predictor of Child Delay. Girls were 59% less likely than boys to be identified as developmentally delayed. In the May et al, (1997) study, gender differences were also statistically significant predictors of child developmental outcomes. Children in lower economic strata showed characteristics that delayed entry to kindergarten. The May study found that more boys were delayed than girls for school entry based on developmental characteristics. The range in one of those studies indicated that 70% of boys compared to 30% of girls were delayed (May & Kundert, 1995).

In summary, the answer to the research question, “Is there any difference between child developmental appropriateness before and after workers earned the Family Development

Credential", is that it is inconclusive given the weakness of the model and the findings in the post FDC group with no training. There is no difference between the child developmental appropriateness outcomes for children with untrained workers before (FDC1) and trained workers after implementation of the program (FDC2). A difference after implementation was found to exist, but this occurred for workers who had no training (FDC3) which makes this investigation and its results more complex. The two predictors of delay which were found to be significant, child age and child gender are in concert with the literature but unrelated to any effect of the FDC program. Given the limitations of the sample size and the lack of detail provided from the child developmental assessments, no thorough comparisons could be made and no statistically significant evidence was found to link the FDC program to Child Delay. If other research were conducted on this topic, the use of a more detailed dependent variable is highly recommended.

Implications for Family Development

There is evidence in the Family Development Credential (FDC) and School Readiness literature that positive interactions in relationships between workers and parents provide a meaningful, central mechanism for affecting change in family serving programs (Smith and Bone, 2003; Watson-Smith, 2004). While this study did not uncover evidence that the second dependent variable, child developmental delay was influenced by the presence of an FDC trained worker; statistically significant evidence was found that the FDC program impacted parent involvement. Significant differences were found in children's parent involvement scores by race and FDC status.

Principles of the Family Development Credential program (FDC) promote empowerment and strengths-based approaches with families. FDC teaches the importance of developing healthy

relationships with families and understanding cultural diversity (Forest, 2003). Of the three groups of children in the sample, those with FDC trained workers (FDC2) showed the best results. Irrespective of race, when children had a FDC trained worker, equal outcomes for parent involvement (PI) were found. Advocates for the FDC program and the Family Support network, can use this finding as evidence that when the FDC approach is implemented with families, workers and parents develop trusting relationships and parent involvement outcomes for children are positively affected. Supporters of FDC can also use this finding to demonstrate that the use of the FDC program for training workers in interventions like Family Support enhances the workers ability to help families reach their goals.

The Seven Steps of Family Development promote values such as family worker partnership, assessment of family needs, family-driven goal setting, creating a plan to reach goals, learning and practicing self-reliance and increased family responsibility through the family development process. The findings in this study relative to parent involvement show that at least three of these Seven Steps were incorporated in the work done in Family Support (FS) in Allegheny County Pennsylvania. Those three steps are identified by the FDC curriculum as: "1) The family develops a partnership with a family... 3) The family sets its own major goal… and 6) The family uses services as stepping stones to reach their goals, …" (Hewitt, Crane and Mooney, 2010).

For parent involvement scores to be impacted by FDC, a partnership had to be developed first. The family had to have participated in the goal setting process, identified School Readiness (SR) as a major goal and accessed supportive services by enrolling in FS. The findings in this study may encourage more family-serving programs to adopt the FDC model, incorporate its principles and replicate its best practice strategies into their program design.

Much of the typical casework practice in human service programs today is still operating under the deficit-oriented model (Popple and Leighninger, 2002). The Family Development Credential (FDC) program can help shift this traditional practice to a strengths-based practice in the field of human services. If program developers, planners and policy-makers are convinced that improving the skill levels of workers through FDC training mediates child and family success in the form of measurable outcomes like parent involvement, then the FDC program will be instrumental in improving the lives of families and building the capacity of the communities in which they live.

The findings in this study reinforce the need for policies that promotes the Family Development Credential (FDC) program as a viable alternative for achieving positive family outcomes in human service programs. As more workers in Family Support (FS) earn the FDC, the impact on children and families in the FS network should also increase. It is the relationships between the FDC workers and families that create a viable mechanism for helping families achieve their goals (Crane, 2000). As other studies continue to investigate School Readiness outcomes with FDC trained workers in FS and evidence is found that demonstrates a positive effect, then FDC can help children become ready for kindergarten, one child at a time.

Limitations of this Research

This study merely scratched the surface in its exploration of the impact of one family serving initiative (FDC) on a very specific outcome, School Readiness (SR) in Family Support (FS) Allegheny County. Because this study focused on a specific sample of families in a particular region (Allegheny County), generalizability is limited to that population and statements cannot be made beyond the programs and the sampling frame under study. This purposive sample included children and parents who had been enrolled in FS between 1999 and

2010. The participants in FS live in and around the City of Pittsburgh and surrounding communities where the 31 FS centers are located. Most of the centers are in urban areas but a few are situated in the suburbs. The demographic characteristics of the study sample could be different from other parts of the state or even nationally. Generalizing the results to other communities or family support programs can only serve the purpose of fueling additional research questions.

Selection for this study was also limited by the nature in which children and families come to the program. Family Support (FS) is a voluntary program which is one of the main reasons families are attracted to it. Parents participate at their own rate and decide at what level of participation they will enroll (General or Intensive). Only Intensive families were chosen for selection in this study because those families participated in parent involvement and child developmental activities. Parents who voluntarily participate in programs may have underlying characteristics related to motivation that are different than parents who do not volunteer. This motivation suggests that a higher level of interest is present in these parents desire to see their child succeed. The selection of Intensive families clustered the sample even further, making the population even more unique and limiting the results to those families.

Another limitation comes as part of the study design, one treatment, one nonequivalent and one equivalent comparison group. The first group (FDC1) consisted of those children in the sample prior to 2005. None of those children had a FDC trained worker because the program had not been implemented. The treatment group (FDC2) was comprised of those children who had a worker trained in the credential after 2005. Possible problems with the validity threat of history with the third group, family workers not trained in FDC after 2005 (FDC3) must be acknowledged.

History occurs when study participants are exposed to similar occurrences during the same period of time as the treatment group. The two groups of children in FDC2 and FDC3 were essentially in Family Support during the same five-year period (2005 to 2010). All workers employed by the Family Support at that time were exposed to the FDC program. All staff did not volunteer to be trained in FDC, in fact nearly half were trained in FDC and half were not. During those years, family and child advocates and policy-makers placed a large emphasis on the implementation of Family Development Credential. It was marketed to all workers and recruitment was widespread. Not only were workers in Family Support being trained but workers in Allegheny County in other human service agencies and the county's child welfare agency were invited to enroll in the program also. It is possible that exposure to the principles of FDC and applied practice of those principles had an effect on the FDC3 group even though they did not actually attend the training.

Maturation of the study participants must also be taken into consideration. Since the parents in the study are participating in a child development program, it is customary for them to participate in all kinds of parent involvement and child developmental activities to prepare the child for kindergarten which may increase their abilities regarding parent involvement and child developmentally appropriate practice. One effect found on Total Involvement Scores was caused by the age of the child, as the child aged the Total Involvement Scores increased. It is possible that parents could have matured and naturally become more involved with the children as the child aged, or they could have matured as a result of being involved in Family Support program alone.

One other limitation in this study was presented by lack of information on family workers trained in the Parents as Teachers curriculum (PAT). PAT is used throughout Family Support to

teach parents specific child development information and activities. It basically operates under the premise that the parent is the child's first teacher. Without identifying which of the family workers were trained in PAT, any spurious effects caused by the knowledge or skills parents gained from working with staff trained in PAT, not FDC or both, could not be ruled out. This information would certainly be very helpful in any future study of Family Support participants.

Finally, the second of two dependent variables, Child Delay, was based on the family workers indication of developmental appropriateness garnered from the results of developmental screenings. The binary nature of the variable (Delay/No Delay) presented limitations on the type and scope of the analyses that could be conducted. If the actual scores from the assessments from each of the developmental domains had been available, the differences across domains could have been tested and may have portrayed more in depth results.

In summary, the limitations in this study need to be carefully considered. To generalize from this unique population to other populations the selection for the study cannot be so limited. The closer a study approximates an experimental design, the more likely the results can be generalized beyond the study sample. How researchers can reduce or eliminate the limitations and improve on this study's design is presented as recommendations for future research.

Recommendations for Future Research

This study was an investigation into the impact of the Family Development Credential on School Readiness (SR) outcomes in Family Support (FS). Differences were explored based on the status of the family worker (those trained in FDC compared to those who were not). Earlier studies on the FDC program suggest that the relationships with a FDC trained worker helps families reach their goals.

In Family Support (FS) the primary goal for all families is to achieve School Readiness for children zero to five years of age. Policy-makers and funders in Allegheny County have invested substantial resources in the Family Development Credential (FDC) program. The results of this study have significant implications for practice in both Allegheny County Family Support and the FDC program as a whole. In the current political and economic climate, support for these types of programs is diminishing. Advocates of family and child-serving programs constantly seek evidence of the program's viability. Research that supports the theoretical frameworks on which they are founded could make the difference in the ability of these programs to be sustained over time.

Unlike highly funded and long established programs for young children like Head Start, no national funding has been allocated for the Family Development Credential or the Family Support model used in Pennsylvania. While the state of Pennsylvania does financially support Family Support centers, that funding is constantly dependent upon the policy changes that occur with changes in government leadership. Unified national and statewide advocacy for FDC is limited. While several studies from FDC support positive outcomes for workers more studies are needed that substantiate the impact of FDC on family and child outcomes. If studies find positive (or beneficial) outcomes, policy-makers could increase political and financial support for the FDC program.

This study found evidence that parent involvement for children without Family Development Credentialed workers had statistically significant score differences based on the child's race. In the early years when workers were not trained in FDC, White children's parent involvement scores were higher. In later years, with workers not trained in FDC, Black children's scores were higher. When the Family Support worker was FDC credentialed, the

scores of children in both races were the same. Other studies are needed that further investigate distinctive characteristics of children and family demographics in programs with FDC trained workers. A deeper investigation into child outcomes by race could certainly be beneficial to the FDC program. Since this study found that children with FDC workers had similar outcomes for parent involvement, it would be valuable if future studies investigate the implementation of the FDC approach across diverse populations with different cultural characteristics and on other child and family outcomes.

In this study, the child developmental appropriateness measure (Child Delay), did not yield significant information to actually test the developmental appropriateness of the children across domains. The Family Development Credential (FDC) program was not found to be a predictor of Child Delay. A future study that uses actual assessment scores to measure the parent-child interactions would be valuable. This would allow the researcher to explore more in depth distinctions between the developmental milestones of children in different groups of FDC trained and untrained workers. By improving on the construct of the dependent variable (Child Delay), findings from such a study could provide evidence on how the FDC program impacted child developmental appropriateness across developmental domains.

If family workers in family serving programs are trained in child development curricula and other types of training programs, the differences between those programs need to be controlled. In this study, data were not available that identified the family workers who were trained in the Parents As Teacher (PAT) curriculum. Any interaction between the FDC and PAT training curricula could not be measured. A study that rules out spurious effects of PAT or any other training would be invaluable to FDC. Future studies of FDC trained workers who are

exposed to other trainings should control for effects of those trainings if the research intends to assess the impact of the FDC program on worker or family outcomes.

One final recommendation is to improve the quality of the study design. This quasi-experimental pre/post test nonequivalent comparison group design served its purpose in this dissertation research. Future studies however, should look to improve upon and attempt to approximate a stronger experimental design. Such a study could be used to enrich the body of literature on empowerment initiatives and identify best practice strategies for family workers in the field of Family Development. A more sophisticated study could include elements such as a) exposure (length of time the family worked with an FDC trained worker), b) cultural considerations (including demographic characteristics of the family and the worker), c) randomization (randomly selecting families or children in the sample) and d) coverage (broadening the scope of the study sample to include different types of communities). A study of this magnitude would help determine if there is any difference in the outcomes of families irrespective of family, worker, cultural or community characteristics and would be helpful to the FDC community, the fidelity of the FDC program and its implementation as a whole.

In summary, this study answered a few questions about the Family Development Credential (FDC) program in the context of Family Support (FS). It also uncovered some unexpected consequences related to the race of the child and the different statuses of FDC workers, before and after implementation of the FDC program. The study further raised questions that can provide direction for future research. More studies that focus on the extent to which FDC actually impacts families, in ways that can be measured using quantitative methodology would elucidate the strength of the FDC programs and substantiate its applicability for impacting family and child outcomes. While research using quantitative methodology on

FDC is limited, studies using qualitative methodology exist and support the program's value. New studies will complement the body of work already written on positive worker outcomes. Studies that combine quantitative and qualitative methodologies could include reflections from families, workers and advocates of the FDC program that support its value in the field of human services. This kind of research would continue the dialogue on the potential effects of the FDC program and can be used to garner resources for the implementation of the Family Development Credential program in other communities nationwide.

REFERENCES

Abbott-Shim, M. and Lambert, R. (2003). A comparison of school readiness outcomes for children randomly assigned to a Head Start program and the programs wait list. *Journal Of Education For Students Placed At Risk, 8* (2), 91–214.

Almgren, G., Yamashiro, G. & Ferguson, M. (2002). Beyond welfare or work: Teen mothers household subsistence strategies and child development outcomes. *Journal of Sociology and Social Welfare, XXIX* (3), 125-149.

Alpert, L. and Britner, P. (2005). Social workers' attitudes toward parents of children in child protective services: Evaluation of a family-focused casework training program. *Journal of Family Social Work, 9* (1), 33-64.

Aulette, J. (2007). *Changing American families.* Boston, MA: Pearson Education.

Baerveldt, C., Horjus, B. & DeWinter, M. (2008). From evaluation to interpretation: Assessing theoretical elements in residential programs. *Evaluation. 14* (3), 345-362.

Bangs, R., Anthou, C., Hughes, H. & Shorter, C. (2004). *Black white benchmarks for Allegheny County.* Retrieved on November 4, 2007 from http://www.ucsur.pitt.edu/benchmarks/2004% 20Benchmarks/BW%20Benchmarks—Allegheny%20County.pdf

Bell, S. and Hollingsworth, E. (2006). *Family development credential focus groups report.* Unpublished report. University of Pittsburgh Office of Child Development Division of Planning and Evaluation.

Bronfenbrenner, U. (1979). *The ecology of human development: Experiements by nature and design.* Cambridge, MA: Harvard University Press

Bronfenbrenner, U. and Evans, G.(2000). Developmental science in the 21st century: Emerging questions, theoretical models, research designs and empirical findings. *Social Development 9* (1), 2000.

Bronfenbrenner, U., Moen, P. & Garbarino, J. (1984). Child family and community. In R. Parke. *Review of child development: The family* (pp. 283-328). Chicago: Chicago University Press.

Brooks-Gunn, J. and Markman, L. (2005). The contribution of parenting to ethnic and racial gaps in school readiness. *The Future of Children, 15 (1),* 139-168.

Brown Rosier, K. and Corsaro, W. (1993). Competent parents, complex lives: managing parenthood in poverty. *Journal of Contemporary Ethnography*, pp. 171-204.

Chatterjee, Hadi and Price, 2000. In Hamilton, (2006). *Statistics with Stata* (pp. 211-212). Belmont, CA: Thomson

Cochran, M. (1982). *Family matters update: Design, baseline findings, policy implications and program developments from a family support study*. Cornell University. Ithaca, NY. A paper presented to the Syracus Community. Retrieved on October 1, 2009 from http://www.eric.ed.gov/ERICDocs/data/ericdocs2sql/content_storage_01/0000019b/80/2d/eb/ee.pdf.

Cochran, M. and Henderson, C. (1985). *Family matters: Evaluation of the parental empowerment program.* Final report to the National Institute of Education. Cornell University. Ithaca, NY

Cook, T.D., &Campbell, D.T. (1979). *Quasi-esperimentation: Design and analysis issues for field settings.* Boston, MA: houghton Mifflin Company

Cortis, N. (2007). What do service users think of evaluation? Evidence from family support. *Child and Family Social Work, 12*, 399-408.

Crampton, D. (2007). Research review: Family group decision-making: a promising practice in need of more programme theory and research. *Child and Family Social Work, 12*, 202-209.

Crane, B. (1999). *Families setting and reaching their own goals: Outcomes of NYS Family Development Training and Credentialing Program (FDC) reported by families, frontline workers, trainers, supervisors and community leaders*. Ithaca, NY: Cornell Empowering Families Project.

Crane, B. (2000). *Building a theory of change and a logic model for empowerment-oriented family support training and credentialing program.* (Doctoral dissertation. Cornell University, 2000).

Day Rolinson, M. & Watrous, S. (2003). *Family Development Credentialing Project Impact Study*. Unpublished report to the Community College Foundation of California

D'Cruz, H. and Stagnitti, K. (2008). Reconstructing child welfare through participatory and child-centred professional practice: a conceptual approach. *Child and Family Social Work, 13*, 156-165.

Diamond, K. E., Reagan, A. J., & Bandyk, J.E. (2000). Parents' conceptions of kindergarten readiness: relationships with race, ethnicity, and development. *The Journal of Education Research*, *94* (2), 93-100.

Dick, D. (2007). Q*uality assurance annual report*. Pittsburgh, PA. Office Child Development, University of Pittsburgh Unpublished Report.

Dunst, C. and Dempsey, I. (2007). Family-professional partnerships and parenting competence, confidence and enjoyment. *International Journal of Disability, Development and Education, 54 (3),* 305-318.

Dunst, C., Trivette, C., Davis, M., & Cornwell, J. (1994). Characteristics of effective help giving practices. In C. J. Dunst, C.M. Trivette, & A. G. Deal (Eds.) *Supporting and strengthening families:Methods, strategies and practices.* vol 1, pp. 197-211. Cambridge, MA: Brookline Books.

Family Development Association of New York State. (2004). *Conference proceedings.*

Family Support Allegheny County. (2004). School Readiness Committee.

Family Support America. (2005). How effective is family support? Retrieved December 13, 2005 from http://www.familysupportamerica.org/content/learning_dir/about FS.htm. In Palmer-House, K. (2006). *The perceived impact of strengths-based family worker training: Worker's learning that helped empower families*. (Doctoral dissertation. Teacher's College Columbia University, 2006).

Forest, C. (2003). *Empowerment skills for family workers.* Ithaca, NY: Family Development Press.

Forest, C. (2006). *Preliminary research findings on "How do families coached by FDC workers set and reach goals?"*. Unpublished report. Cornell Empowering Families Project. Cornell University.

Forest, C. (2008). *Family Development Credential: Foundational Research*, Retrieved October 9, 2009 from http://www.human.cornell.edu/che/HD/FDC/research/Foundational Research.cfm.

Gfellner, B., McLaren, L. & Metcalfe, A. (2008). The parent-child home program in Western Manitoba: A 20-yr evaluation. *Child Welfare League of America, 87 (5),* 49-67.

Hamilton, L. (1992). *Regression with graphics: A second course in applied statistics.* Pacific Grove, CA: Thomson

Hamilton, L. (2006). *Statistics with Stata.* Belmont, CA: Thomson

Hewitt, N., Crane, B. & Mooney, B. (2010). The family development credential program: A synthesis of outcome research on an empowerment-based human service training program. *Families in Society: The Journal of Contemporary Social Services, 91*(1), 1-9

Jalongo, M. and Isenberg, J. (2004). *Exploring your role: A practitioner's introduction to early childhood education.* Upper Saddle River, NJ: Prentice Hall.

Janson, H. and Squires, J. (2004). Parent-completed developmental screening in a Norwegian population sample: a comparion with US normative data. *Acta Paediatr, (93).*(1525-1529)

Jarrett, R. (1997). African American family and parenting strategies in impoverished neighborhoods. *Qualitative Sociology, 20 (2),* 275-288.

Jarrett, R. (1998). African American children, families, and neighborhoods: Qualitative contributions to understanding developmental pathways. *Applied Developmental Science, 2 (1),* 2-16.

Judd, C. and Kenny, D. (1981).*Estimating the effects of social interventions.*Cambridge University Press.

Jung, S. and Stone, S. (2008). Sociodemographic and programmatic moderators of Early Head Start: Evidence from the national Early Head Start research and evaluation project. *Children and Schools, 30* (30), 149-157.

Keen, D. (2007, September). Parents, familes, and partnerships: Issues and considerations. *International Journal of Disability,Development and Education, 54 (3),* 339-349.

Kim, J., and Murdock, T. (2005). Investigation of parents' beliefs about readiness for kindergarten: An examination of National Household Education Survey. *Education Research Quarterly, 29*(2), 3-17.

Love, J. K., Kisker, E., Ross, C., Constantine, J., Boller, K., Chazan-Cohen, R. et al. (2005). the effectiveness of Early Head Start for 3 year-old children and their parents: Lessons for policy and programs. *Developmental Psychology, 41 (6),* 885-901.

Main Effects.(n.d.). Retrieved March 11, 2011 from http://psych.hanover.edu/classes/ResearchMethods/Readings/Main_effects_and_interactions.pdf

Marts, E., Lee, E., McRoy, R. & McCroskey, J. (2008). Point of engagement: Reducing disproportionality and improving child and family outcomes. *Child Welfare League of America, 87 (2),* 335-358.

May, D. and Kundert, D. (1995). Does delayed schoool entry reduce later grade retentions and use of special education services? *Remedial Education, 16*, 288-294

May, D., Kundert, D., Nikoloff, O., Welch, e., Garrett, M. & Brent, D.& Brent, D. (1997). school readiness practices and children at-risk; examining the issues. *Psychology In The Schools, 34(2),* 73-84.

McAllister, C. Wilson, P., Green, B. & Baldwin, L. (2005). Come and take a walk: Listening to early head start parents on school readiness as a matter of child, family and community health. *American Journal of Public Health, 95* (4), 617-623.

McWayne, C., Hampton, V., Fantuzzo, J., Cohen, H. & Sekino, Y. (2004). A multivariate examination of parent involvement and the social and academic competencies of urban kindergarten children. *Pyschology In The Schools, 4 (3),* 363-377.

Melhuish, E., Belsky, J., Annin, A., Ball, M., Barnes, J., Barnes, J. et al. (2007). Variation in community intervention programmes and consequences for children and families: The example of Sure Start Local Programmes. *Journal of Child Psychology and Psychiatry, 48,(6),* 543-551.

Mertens, D. (2004). An introduction to research. In D. Mertens, *Research and evaluation in education and psychology: Integrating diversity with quantiativ, qualitative, mixed methods* (pp. 1-42). Sage.

Monette, D., Sullivan, T. & DeJong, C. (2005). *Applied social research.* Belmont, CA: Thomson Wadsworth.

Moran, P., Jacobs, C., Bunn, A. & Bifulco, A. (2007). Multi-agency working: implications for an early-intervention social work team. *Child and Family Social Work,* 143-151.

Morrison, G. (1995). *Early childhood education today.* Englewood Cliffs, NJ: Prentice Hall

Morrow, G. and Malin, N. (2004). Parents and professionals working together: Tuning the rhetoric into reality. *Early Years: An International Journal of Research and Development, 24,* 163-177.

Mosley, J. and Smith, D. (2004). *A preliminary evaluation of the Missouri Family Development Training and Credentialing Program*. Institute of Public Policy. University of Missouri Columbia. Report 3 – 204.

Northouse, P. (2007). *Leadership: Theory and practice.* Thousand Oaks, CA: Sage

Palmer-House, K. (2006). *The perceived impact of strengths-based family worker training: Worker's learning that helped empower families*. (Doctoral dissertation. Teacher's College Columbia University, 2006).

Piaget, J. (1952). *The origins of intelligence in children.* New York: International Universities Press.

Popple, P. and Leighninger, L. (2002). *The policy-based profession:An introduction to social welfare analysis for social work.* Boston, MA: Pearson Education.

Powers, C. (2004). *Making sense of social theory: A practical introduction.* Lanham, MD: Rowman & Littlefield.

Rappaport, J., Swift, C. & Hess, R. (1984). *Studies in empowerment: Steps toward understanding and action.* Binghamton, NY: Haworth Press.

Reading, R. (2007). Lancet child development series. *Current Literature* , 502-507.

Reynolds, A., Temple, J. and Ou, S. (2003). School-based early intervention and child well-being in the Chicago longitudinal study. *Child Welfare League of America, LXXXII (5),* 633-655.

Rossi, P., Lipsey, M & Freeman, H. (2004). *Evaluation: A systematic approach.*Thousand Oaks, California: Sage Publications. Saddle River, NJ: Prentice Hall.

Sanders, R. and Roach, G. (2007). Closing the gap? the effectiveness of referred access family support services. *Child and Family Social Work, 12*, 161-171.

. Sribney, W. (2009). *Comparison of standard errors for robust, cluster and standard estimators*. Retrieved April 15, 2011 from http://www.stata.com/support/faqs/stat/cluster.html

Smith, D. and Bone, B. (2004). *Midsouth Regional Family Development Program evaluation.* Retrieved January 11, 2007 from http://cas.umkc.edu/fdc/

Stata Manual (Version 11) [Computer Software]. [U]20.16, p.301

Svihula, J. and Austin, M. (2004). Preparing human service workers to implement welfare reform: Establishing the Family Development Credential in human services agencies. In Michael Austin, (Ed.), *Changing Welfare Services*, (chapter 20).

Trattner, W. (1999). *From poor law to welfare state: A history of social welfare in America (6th ed.).* New York: Free Press.

Urie Bronfenbrenner. Ecological systems theory of human development. (1974). Retrieved June 1, 2007 from www.education.umd.edu/Depts/Depts/EDHD/geron/lifespan/6.html. No author or publication date noted.

Vygotsky, L. (1978). *Mind in society. The development of higher psychological processes.* Cambridge, MA: Harvard University Press.

W. K. Kellogg Foundation. (2004). *Using logic models to bring together planning, evaluation and action: logic model development guide.* Battle Creek, MI: W. K. Kellogg Foundation

Watson-Smith, T. (2003). *The impact of a training intervention among social service workers in select Head Start programs in New York City: Implications for staff development and program practice*. (Doctoral dissertation. Teachers College Columbia University, 2003).

Weiss, C. H. (1998). *Evaluation:Methods for studying programs and polices (2nd ed.).* Upper

Westmoreland, H., Bouffard, S., O'Caroll, K. & Rosenberg, H. (2009). *Data collection instruments for evaluation family involvement.* Harvard Research Project. Cambridge, MA: Harvard Graduate School of Education. Retrieved July 1, 2009 from http://www.hfrp.org/hfrp-news/news-announcements/data-collection-instruments-for-evaluating-family-involvement.

APPENDICES

APPENDIX A: Glossary of Terms

Glossary of Terms

Table 1: Glossary of Terms

Child Developmental Appropriateness – The proximity to normal development across domains of each child in FS, that is, once assessed and based on scores on assessments that screen for developmental delays or no delays. Family Support – A network of agencies and community –based organizations designed to provide families- parents and their children with School Readiness and family self-sufficiency services Family Development Credentialing Program- a family serving initiative designed to increase the competencies of family workers using a strengths-based empowerment model and goal planning as a mechanism to help families and individuals reach their goals Parent Involvement – The level of interaction provided to the child by the parent relative to the child's personal growth and development across domains (e.g. cognitive, gross and fine motor etc.) School Readiness – An outcome by which the combined effect of parent involvement in child developmental activities and the screening and assessment of those activities after the child has participated in them with the parent results in the child being prepared for kindergarten

APPENDIX B: FDC Training Program: Logic Model (Crane, 2000)

Inputs/Resources **(If these resources are applied)**	**Activities** **(And if these activities are completed)**	**Initial outcomes (Then...)**	**Intermediate Outcomes (And then...)**	**Long-term Impact/ Vision (And finally...)**
1. Agencies, coalitions and Advisory Councils that market FDC training locally. 2. Funding available for workers to pay for training & credentialing 3. Cornell curriculum, training, technical assistance, credential. 4. State agency support & funds for training at local level, for example: - State agencies' Interagency Workgroup on Family Development -NYS Department of State staff support and funding -NYS Council on Children & Families advocacy for FDC program -Other state agency funds, e.g. grants from Family Resource Centers and Even Start 5. Family Development Association of NYS (FDANYS) 6. Workers who enroll and	1. Representatives of agencies/coalitions and colleges apply to & participate in Cornell Institute and become Trainers. 2. Cornell provides training and technical assistance for the trainers and field advisors, and the credentialing process. 3. Trainers choose & orient Field Advisors. 4. Interagency FDC training classes and field advisement are offered. 5. Supervisors support workers to enroll in training and use new skills. 6. Frontline workers register, pay fees, participate, and do portfolio work/ earn FDC credential. 7. Trainers and trainees/workers create a class environment that encourages personal reflection and sharing.	*Trainers* Trainers use skills they learn in FDC in their personal and professional lives. *Workers/trainees* 1. Workers/trainees develop personally. 2. Workers/trainees increase their knowledge about and skills in family development practice. 3. Workers/trainees use skills they learn in FDC in their personal and professional lives. *Families/help-seekers* Family members/help-seekers experience the "seven steps of family development:" a. Develop a partnership with the worker, a mutually respectful relationship. b. Assess needs and strengths. c. Set own goals and ideas for reaching them. d. Make a written plan. e. Learn and practice skills. f. Use services as stepping-stones to goals. g. Sense of responsible self-	*Workers/trainees* 1. Workers/trainees network with and make referrals to each other. 2. Workers/trainees progress in their educational goals & careers. 3. Workers/trainees provide leadership. *Families/help-seekers* 1. Families demonstrate ability to set and reach their own goals. 2. Family members/help-seekers are less dependent & more involved in community. *Agency/Community* 1. Service providers adapt policies, procedures & forms to support family development. 2. Agencies see more efficiency & fewer crises. 3. Higher staff morale & lower turnover. 4. Agencies reward credential in hiring and promotions.	1. Family development principles & practices are applied in all helping services. 2. Family development is taught in preservice education. 3. Families have adequate, sustainable income. 4. Youth are engaged in their family, school, and community. 5. Children and youth are safe in their homes and communities. 6. Democratization – family members & workers realize their power; use their voice for change. 7. Individuals and families have healthy self-reliance and interdependence. 8. Communities, states, nations create conditions through which families can reach their goals. 9. Diversity (race, ethnicity, gender, class, family form, religion, physical & mental ability, age, sexual orientation) is recognized as an important reality.

learn. 7. Families who engage in the process & are advocates for family development. 8. College credit for FDC training through PONSI, Empire State and local colleges.	8. Local programs hold celebrations for those who earn credential. 9. State and local agencies, Cornell, FDC trainers and trainees, and the FDANYS carry out awareness-building activities.	control is restored.	5. Support for family empowerment increases among service providers and officials.	10. Hope

APPENDIX C: FDC/FS Program Logic Model

Inputs	**Activities**	**Outputs**	**Short Term Outcomes**	**Intermediate outcomes**	**Long-Term Outcomes**
Organizations implementing FDC in Allegheny County (AC) o Community Action Association of PA (CAAP) o Office of Child Development (OCD) o Indiana University of Pennsylvania (IUP) o A.C. Dept. of Human Services (DHS) o Family Support Centers (FSC) Funding -To pay for operations, worker credentialing FDC Program o FDC Curricula o Trainers o Portfolio Advisors o Family Development Specialists (FDS) Families o Parents o Children (0-5)	Organizations collaborate, plan, schedule, monitor, fund and implement FDC in Family Support Network and form a local Advisory Council Sites support FDS to obtain certification CAAP trains the trainers and Portfolio Advisors/ purchases curricula FDS enroll in 80 hours of instruction and 10 hours of portfolio advisement FDS works with parents and children on goal of School Readiness; models appropriate child development activities Parents and children participate in center and home-based	# of entities implementing FDC # Advisory Council members # Family Centers supporting FDS POS (perceived organizational support) # of trainers and portfolio advisors # FDS that complete program # FDS assigned to offer Family Support services to families # Parents and children receiving intensive services e.g., goal planning, parent/child interaction activities and groups etc. # of parents	Oversight organizations and Advisory Council members gain an understanding of FDC approach. Implementation is guided by the principles as measured by fidelity to those principles in all FDC classes. FSCs embrace FDC model in program operations and supervisors support FDS during training as indicated by time off to attend classes and complete portfolio. Trainers/portfolio advisors transfer learning of skills to FDS who become certified, gain new knowledge and skills as measured by the number of FDS' graduates. FDS begin using empowerment approach and language in parent interactions as measured by the number of goal plans and home visits that reflect parent involvement and parent/child interaction activities. FDS show greater understanding of School Readiness, child development and developmental delays as measured by notations in	Collaborating entities adopt Family Development as a county-wide strategy for family workers as measured by funding level and number of non- FSC workers who graduate. FSC network adopts FDC approach throughout network and demonstrates greater empowerment of workers as measured by POS questionnaire FDC becomes preferred training for staff at all levels as measured by number of non-front line workers trained FDS incorporates FD approach into all Family Support services as indicated on goal/family service plans. FDS and parents improve collaboration on developing better child development and School Readiness strategies at home and in the center. Parents demonstrate improved ability to set and reach their own goals.	DHS and FS implement policy changes for the county and establish FDC as a statewide initiative as measured by state funding and AC DHS policies. FSCs experience higher FDS morale, lower turnover amongst staff as measured by worker satisfaction and promotions. Communities contiguous to FSC areas experience less crises as measured by staff /family/ community cooperation. Intensive and non-intensive families demonstrate higher self-reliance and determination as measured by lower FDS/FSC dependence. FDS/Parent partnership culminates in parent leadership as indicated by parent advocacy for uniform kindergarten readiness standards. Parents address other personal goals to create conditions for healthy parenting and family life as indicated on goal plans and family records.

Parent/Child and Child Development Instruments/measures	interventions- parent/child interaction, child development activities Parents As Teachers (PAT) curriculum incorporated into home visitation FDS screens children for age appropriate development and delays Ages and Stages Questionnaire (ASQ) used in home visits to assess developmental	completing PAT home visits # children screened for developmental delays using ASQs or other Child Development Assessments milestones and delays	child/member profile or progress notes? Parents understand the importance of goal planning for themselves and their child's preparation for school as measured by biannual completion of goal plans. Parents increase the amount and type of School Readiness activities they conduct with their children as measured by the Idaho Survey of Family Practice and/or self-report on child/member profile. Children participate in regular child development assessments as measured by number of children identified with delays.	Parents incorporate new skills and conduct new parent/child activities covering all domains as indicated in progress notes. Children respond developmentally to increased parental involvement and child developmental activities as measured by scores on ASQ.	Parents maintain stimulating home environments as indicated by developmentally appropriate materials and activities Children in AC FS demonstrate higher levels of School Readiness by age 5 and children identified with delays receive Early Intervention Services as measured by EI referrals for developmentally delayed children.

APPENDIX D: Child/Youth Family Member Profile

This form is used to collect information about individual program participants who are ***ages 17 or younger and enrolling with a primary care giver AND who are not parents or not currently pregnant.*** *One form should be filled out for each child in a family. This form should be completed within two weeks of being enrolled in the Center, and should be updated* ***at any time when there is a change in any of the information collected on this form or every six months.***

(Note to Data Entry Staff: ***If the box for Update with Change, or Update with No Change, is checked below, you MUST archive this form NOW before proceeding).***

Is this form being completed as a:
□ **New Enrollment** □ **An Update with Change** □ **Update with No Change? (Check only one)**

Please Print

Date Form Completed: ____/____/____
mo day yr

Staff Person's Name: **_____** ***ID#:*****_____**

1. **Child/Youth Member ID#: _____ Family Enrolled as** □ **General or** □ **Intensive (*Check one only)***
2. **Child/Youth's First Name: _____ Last Name: _____**
3. **Child's E- Mail address**: **_____.**
4. **Name of Child/Youth's Primary Caregiver: _____**
5. **Member ID# for Primary Caregiver: _____**
6. **What is the relationship of this child/youth to his/her primary caregiver (check one)?**

□ 1=Son
□ 2=Daughter
□ 3=Stepchild
□ 4=Foster Child
□ 5=Brother
□ 6=Sister
□ 7=Niece
□ 8=Nephew
□ 9=Granddaughter
□ 10=Grandson
□ 11=Other (Specify): _____
□ 12=N/A Participant is enrolled as a single person family
□ 13=Court Appointed Ward

7. **What is/will be the participant's primary language (check one):**

□1=English □2=Spanish □3=Other (please specify)

8. **In which of the following activities are you most interested in having your child/youth participate or have your child/youth participated at the Family Support Center, (in addition to the Intensive/General Services)? Check all that apply.**

□ 1=Recreational/Social Activities
□ 2=Boy Scouts/Girl Scouts
□ 3=Referral for Child Care
□ 13=Nutritional Services (Non-emergency)
□ 14=Community Involvement/Activities
Specify:

_____

☐ 4=Play groups

☐ 5=Educational Vocational info/assistance

_____

☐ 6=Summer Camp

☐ 7=Boys and Girls Club

☐ 8=Literacy Programs

☐ 9=Computer Classes

_____

☐ 10=After School Programs

_____

☐ 11=Tutoring for children

☐ 12=Specific course/Center activity Offered (Specify):

_____

☐ 15=Support Groups: (What Kind)

☐ 16=Male Mentoring Group

☐ 17=Female Mentoring Group

☐ 18=Family Retreat Center

☐ 19=Other (Specify):

Who is the participant′s primary health care provider? (check one):

☐ 1=Emergency Room
2=Health Clinic
3=Private pediatrician
4=Family physician
5=None
6=Other (Specify):
_____
9=Refuse/Don′t know

If seen regularly by a health clinic, private pediatrician, or family physician, please provide the following information:

Physician/Clinic Name _____
Address _____
Phone: _____Fax:_____

Has the participant received health services from sources other than the one listed in #9 above within the past 6 months?

☐ 1=Yes --- Go To #10a
2=No --- Go To #11
9=Refuse/Don′t Know --- Go To #11

10a. IF YES: Please indicate who delivered those services (check all that apply):

☐ 1=Emergency Room
2=Health Clinic
3=Private pediatrician
4=Family physician
5=None
6=Other (Specify): _____

Does the participant have a birth defect, learning disability, or other physical or emotional problem?

□ 1=Yes *(Complete 11A and 11B)*
2=No *(Go to Question 12)*
3=Not Sure *(Go to Question 12)*
11a. IF YES, please describe the birth defect, learning disability, or other physical or emotional problem:
_____
_____

11b. Has the participant been referred for special services?
1=Yes (Specify where referred): _____
2=No
3=Not sure
Are the participant′ s immunizations up to date? (A Child Immunization Record must be completed on EVERY CHILD between the ages of 0 - 12.)
□ 1=Yes
2=No
3=Not Sure
Has this participant had a lead screening?
□ 1=Yes (Don't forget to complete Immunization and Lead Screening
2=No form)
3=Not Sure
Has this child received any screenings for hearing, vision, or speech?
1=Yes → Skip to 14a
2=No → Skip to 15
14a. Did this child receive any services related to the developmental screening, reported in 14, above?
□ 1=Yes, services recommended and received □ 2=No, but services recommended and NOT received
3=No, services not recommended
Does this participant receive routine medical check-ups OR follow the schedule of well-child care used by the Early Periodic Screening, Diagnosis & Treatment (EPSDT)?

□ 1 = Yes
□ 2 = No
□ 3 = Not Sure
Was this child's birth weight under 6 pounds?
1= Yes 2= No
Does this participant see a dentist or dental hygienist according to the schedule recommended by the American Dental Association (regular dental visits beginning after the first birthday)?
□ 1 = Yes
□ 2 = No
□ 3 = Not Sure
□ 4 = N/A, child less than three years of age

Is the participant currently receiving any other services from other programs or agencies?
□ 1=Yes (Go to 18a)
□ 2=No (Go to 19)
□ 9=Refuse to answer (Go to 19)
18a. If yes, which of the following services is this participant currently receiving? (Check ALL that apply):
□ 1=Women, Children & Infants (WIC) □ 6=Children, Youth and Families (CYF)
□ 2=Consumer Counseling Services □ 7= Early Intervention Services
□ 3=Mental Health Counseling/Services □ 8=Other (Specify): _____
□ 4=Mental Retardation Services □ 9=Other (Specify): _____

□ 5=Drug and Alcohol Counseling/Services □ 10=Other (Specify): _____

Is the child currently receiving any early childhood education services?
1=Yes -->*Check below which of the following early childhood education services your child is receiving. (Check all that apply).*

□ 1=Head Start/EHS □ 6=Day Care
□ 2=Alliance for Infants □ 7=Even Start/Family Literacy
□ 3=K4 □ 8= Early Intervention Services
□ 4=Pre-kindergarten Program □ 9=Other: (Specify): _____
□ 5=Private Pre-School Education Program
2=No, Child is appropriate age but is not attending day care or preschool
3=N/A (Child is above preschool or day care age)
4=N/A (Child is Kindergarten eligible)
19a. Was the Child enrolled in Kindergarten on time, if the Child is Kindergarten eligible?
□Yes □ No □NA □Refused to answer
The following is a list of activities that parents might engage in at their children′s schools (either day care, preschool, elementary or secondary). What activities, if any, has this child′s primary caregiver participated in during the previous school year? (Check all that apply).

□1=Attend a parent-teacher conference →

20 a. Check how many parent-teacher conferences you have attended for this child

□ 1=1 □ 2=2 □ 3=3 □ 4=4 or more □ 5=None
□ 2=Attend a school/day care or class event
□ 3=Attend a general school/day care meeting
□ 4=Act as a volunteer at the school/day care
□5=Serve on a school/day care committee
□6=Community-oriented activities
□ 7= Youth Advisory Committees
□8=Other (Specify): _____
□ 9=Did not participate in any activities
□ 10=N/A Child was not in school/day care during previous school year

20b. Please check how often you have joined in the activities you checked for 2 – 8 above.

□ 1=Every day □ 2=A few times per week □ 3= Once per week □ 4=2-3 times per month
□ 5=One time per month □ 6=Less than One time per month □ 7=Never

How often did the primary caregiver play with or engage in activities with their child at the current time?

□ 1 = Everyday □ 5 = 2-3 times a month
□ 2 = Once per week □ 6 = One time per month
□ 3 = A few times per week □ 7 = Does not engage in any of these
□ 4 = Less than 1 time per month activities with child

How often does the primary caregiver do the following activities with this child at the current time? (Read to child, work on homework, watch educational programs on T.V.)

Read to participant:	Work on homework with participant:	Watch educational programs on TV:
□ 1 = Everyday □ 2 = A few times per week □ 3 = Once per week □ 4 = 2-3 times a month □ 5 = 1 time per month □ 6 = Less than 1 time per month □ 5= Does not read to participant	□ 1 = Everyday □ 2 = A few times per week □ 3 = Once per week □ 4 = 2-3 times a month □ 5 = 1 time per month □ 6 = Less than 1 time per month □ 5= N/A Does not work on homework with participant	□ 1 = Everyday □ 2 = A few times per week □ 3 = Once per week □ 4 = 2-3 times a month □ 5 = 1 time per month □ 6 = Less than 1 time per month □ 5= Does not watch educational TV with participant

STOP HERE, if child is not in school and less than six years old.

FOR CHILDREN IN SCHOOL or SIX YEARS OF AGE AND OLDER *(If child is NOT in school and not six or older, STOP HERE)*

9. Is the participant currently in school?

□ 1=Yes --- **IF YES:**

a. In what school is this participant currently enrolled?

Name of School: _____

Address: _____

_____

Phone: _____ FAX: _____

b. In what grade is s/he currently enrolled? _____

c. Check appropriate box if participant is enrolled in any of the following school-based vocational training programs?

□ 1=Work Coop Program □ 2=Child Care □ 3=Cosmetology
□ 4=Food Services □ 5=ROTC □ 6=Other (Specify): _____
□ 7= Not applicable _____

(GO TO QUESTION 25)

□ 2=No --- **IF NO:** What was the highest grade level that s/he completed? ____ ***(Go to Question 24A)***

□ 9=Refuse/Don't know ***(Go to Question 24A)***

24A. IF NO, did this participant drop out of school during this school year?

□ 1=Yes ***(Go to Question 24C)***

□ 2=No ***(Go to Question 24B)***

24B. IF NO, did this participant graduate from high school?

- 1=Yes ***(Go to Question 25)***
- 2=No **(*Go to Question 24C*)**

24C. IF NO, did this participant complete a GED?

- 1=Yes
- 2=No

25. Please indicate number of days this participant has been absent <u>during the past school year</u> and whether the absences were excused or unexcused.

- 1= 0-5 days absent
- 2= 6-10 days absent
- 3= 11-15 days absent
- 4=16 or more days
- 5=NA1-not enrolled in school past yr.
- 6=NA2-home schooling

26. Was this participant promoted to the next grade level when he/she completed his/her most recent full year of school?

- 1=Yes
- 2=No
- 3=N/A (Child in first year of school)

Did this participant drop out of school during the previous year?

- 1=Yes

If yes, what was the reason why this participant dropped out of school?

- 1 = Academic problems
- 2 = Behavioral problems

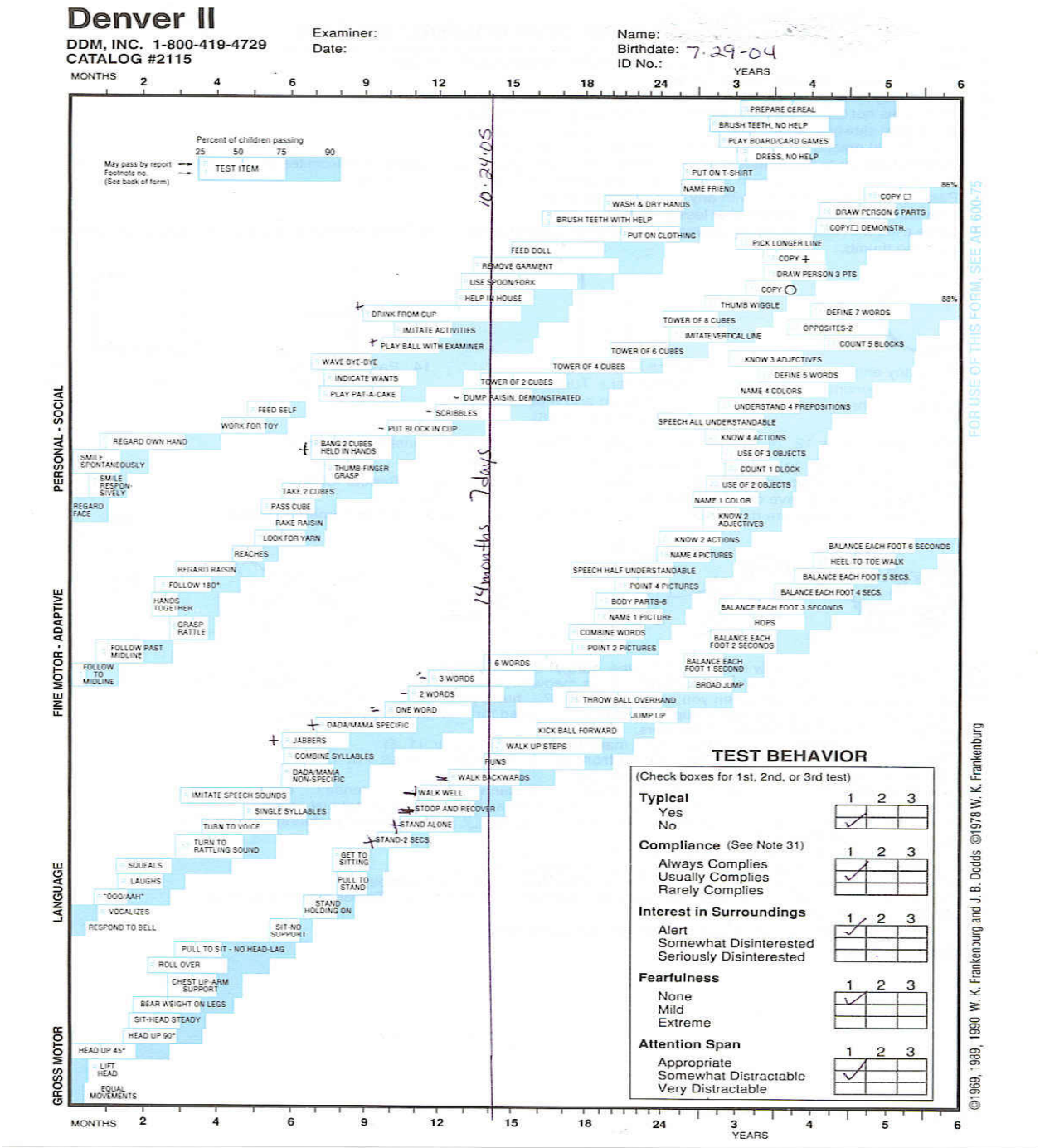
3 = Dislikes school
4 = Child care/Marriage/Pregnancy
5 = Wanted to work
6 = Runaway or expelled
7 = Other (Specify): _____
8 = N/A (not of school age)
9 = Still in school

Has this participant been involved in any delinquent acts (e.g., graffiti, breaking curfew, truancy) during the previous school year?

Yes No N/A Child not of school age Refuse to answer Don't Know

Comments: _____
_____
_____

This form will be updated six months from now on / / or when any change occurs in the.
Mo Day Yr information on this form.


Denver II
DDM, INC. 1-800-419-4729
CATALOG #2115
Examiner:
Date:
Name:
Birthdate: 7-29-04
ID No.:
MONTHS
YEARS
Percent of children passing
25 50 75 90
May pass by report
Footnote no.
(See back of form)
TEST ITEM
10-24-05
14months 7days
PERSONAL - SOCIAL
FINE MOTOR - ADAPTIVE
LANGUAGE
GROSS MOTOR
REGARD OWN HAND
SMILE SPONTANEOUSLY
SMILE RESPONSIVELY
REGARD FACE
FEED SELF
WORK FOR TOY
BANG 2 CUBES HELD IN HANDS
THUMB-FINGER GRASP
TAKE 2 CUBES
PASS CUBE
RAKE RAISIN
LOOK FOR YARN
REACHES
REGARD RAISIN
FOLLOW 180°
HANDS TOGETHER
GRASP RATTLE
FOLLOW PAST MIDLINE
FOLLOW TO MIDLINE
DRINK FROM CUP
IMITATE ACTIVITIES
PLAY BALL WITH EXAMINER
WAVE BYE-BYE
INDICATE WANTS
PLAY PAT-A-CAKE
PUT BLOCK IN CUP
FEED DOLL
REMOVE GARMENT
USE SPOON/FORK
HELP IN HOUSE
TOWER OF 2 CUBES
DUMP RAISIN, DEMONSTRATED
SCRIBBLES
TOWER OF 4 CUBES
TOWER OF 6 CUBES
TOWER OF 8 CUBES
THUMB WIGGLE
IMITATE VERTICAL LINE
WASH & DRY HANDS
BRUSH TEETH WITH HELP
PUT ON CLOTHING
NAME FRIEND
PUT ON T-SHIRT
DRESS, NO HELP
PLAY BOARD/CARD GAMES
BRUSH TEETH, NO HELP
PREPARE CEREAL
86%
COPY □
DRAW PERSON 6 PARTS
COPY□ DEMONSTR.
PICK LONGER LINE
COPY +
DRAW PERSON 3 PTS
COPY ○
88%
DEFINE 7 WORDS
OPPOSITES-2
COUNT 5 BLOCKS
KNOW 3 ADJECTIVES
DEFINE 5 WORDS
NAME 4 COLORS
UNDERSTAND 4 PREPOSITIONS
SPEECH ALL UNDERSTANDABLE
KNOW 4 ACTIONS
USE OF 3 OBJECTS
COUNT 1 BLOCK
USE OF 2 OBJECTS
NAME 1 COLOR
KNOW 2 ADJECTIVES
KNOW 2 ACTIONS
NAME 4 PICTURES
SPEECH HALF UNDERSTANDABLE
POINT 4 PICTURES
BODY PARTS-6
NAME 1 PICTURE
COMBINE WORDS
POINT 2 PICTURES
6 WORDS
3 WORDS
2 WORDS
ONE WORD
DADA/MAMA SPECIFIC
JABBERS
COMBINE SYLLABLES
DADA/MAMA NON-SPECIFIC
IMITATE SPEECH SOUNDS
SINGLE SYLLABLES
TURN TO VOICE
TURN TO RATTLING SOUND
SQUEALS
LAUGHS
"OOO/AAH"
VOCALIZES
RESPOND TO BELL
HEAD UP 45°
LIFT HEAD
EQUAL MOVEMENTS
ROLL OVER
CHEST UP: ARM SUPPORT
BEAR WEIGHT ON LEGS
SIT-HEAD STEADY
HEAD UP 90°
PULL TO SIT - NO HEAD-LAG
SIT-NO SUPPORT
STAND HOLDING ON
GET TO SITTING
PULL TO STAND
WALK WELL
STOOP AND RECOVER
STAND ALONE
STAND-2 SECS
WALK BACKWARDS
RUNS
WALK UP STEPS
KICK BALL FORWARD
JUMP UP
THROW BALL OVERHAND
BROAD JUMP
BALANCE EACH FOOT 1 SECOND
BALANCE EACH FOOT 2 SECONDS
HOPS
BALANCE EACH FOOT 3 SECONDS
BALANCE EACH FOOT 4 SECS.
BALANCE EACH FOOT 5 SECS.
HEEL-TO-TOE WALK
BALANCE EACH FOOT 6 SECONDS
TEST BEHAVIOR
(Check boxes for 1st, 2nd, or 3rd test)
Typical
Yes
No
Compliance (See Note 31)
Always Complies
Usually Complies
Rarely Complies
Interest in Surroundings
Alert
Somewhat Disinterested
Seriously Disinterested
Fearfulness
None
Mild
Extreme
Attention Span
Appropriate
Somewhat Distractable
Very Distractable
1 2 3
FOR USE OF THIS FORM, SEE AR 600-75
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Ages & Stages Questionnaires®: A Parent-Completed, Child-Monitoring System
Second Edition

By Diane Bricker and Jane Squires
With assistance from Linda Mounts, LaWanda Potter, Robert Nickel, Elizabeth Twombly, and Jane Farrell

10 Month Questionnaire

On the following pages are questions about activities children do. Your child may have already done some of the activities described here, and there may be some your child has not begun doing yet. For each item, please check the box that tells whether your child is doing the activity regularly, sometimes, or not yet.

Important Points to Remember:

- ☑ Be sure to try each activity with your child before checking a box.
- ☑ Try to make completing this questionnaire a game that is fun for you and your child.
- ☑ Make sure your child is rested, fed, and ready to play.
- ☑ Please return this questionnaire by _____
- ☑ If you have any questions or concerns about your child or about this questionnaire, please call: _____
- ☑ Look forward to filling out another questionnaire in _____ months.

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By Diane Bricker and Jane Squires
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10 Month Questionnaire

Please provide the following information.

Child's name: _____

Child's date of birth: _____

Child's corrected date of birth (if child is premature, add weeks of prematurity to child's date of birth):

_____

Today's date: _____

Person filling out this questionnaire: _____

What is your relationship to the child? _____

Your telephone: _____

Your mailing address: _____

_____

City: _____

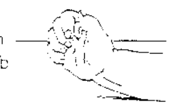
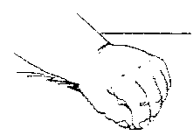
State: _____ ZIP code: _____

List people assisting in questionnaire completion: _____

_____

Administering program or provider: _____

	YES	SOMETIMES	NOT YET	
COMMUNICATION *Be sure to try each activity with your child.*				
1. Does your baby make sounds like "da," "ga," "ka," and "ba"?	❑	❑	❑	___
2. If you copy the sounds your baby makes, does your baby repeat the same sounds back to you?	❑	❑	❑	___
3. Does your baby make two similar sounds like "ba-ba," "da-da," or "ga-ga"? (He may say these sounds without referring to any particular object or person.)	❑	❑	❑	___
4. If you ask her to, does your baby play at least one nursery game even if you don't show her the activity yourself (e.g., "bye-bye," "Peekaboo," "clap your hands," "So Big")?	❑	❑	❑	___
5. Does your baby follow one simple command, such as "Come here," "Give it to me," or "Put it back," *without* your using gestures?	❑	❑	❑	___
6. Does your baby say one word in addition to "Mama" and "Dada"? (A "word" is a sound or sounds the baby says consistently to mean someone or something, such as "baba" for bottle.)	❑	❑	❑	___
		COMMUNICATION TOTAL		___
GROSS MOTOR *Be sure to try each activity with your child.*				
1. If you hold both hands just to balance her, does your baby support her own weight while standing? 	❑	❑	❑	___
2. When sitting on the floor, does your baby sit up straight for several minutes *without* using his hands for support? 	❑	❑	❑	___
3. When you stand her next to furniture or the crib rail, does your baby hold on without leaning her chest against the furniture for support? 	❑	❑	❑	___
4. While holding onto furniture, does your baby bend down and pick up a toy from the floor and then return to a standing position? 	❑	❑	❑	___
5. While holding onto furniture, does your baby lower himself with control (without falling or flopping down)?	❑	❑	❑	___
6. Does your baby walk along furniture while holding on with only one hand?	❑	❑	❑	___
		GROSS MOTOR TOTAL		___

	YES	SOMETIMES	NOT YET	
FINE MOTOR *Be sure to try each activity with your child.*				
1. Does your baby pick up small toys with only one hand? 	❑	❑	❑	___
2. Does your baby *successfully* pick up a crumb or Cheerio by using her thumb and all her fingers in a raking motion? (If she already picks up a crumb or Cheerio, check "yes" for this item.) 	❑	❑	❑	___
3. Does your baby pick up a small toy with the *tips* of his thumb and fingers? (You should see a space between the toy and his palm.) 	❑	❑	❑	___
4. After one or two tries, does your baby pick up a piece of string with her first finger and thumb? (The string may be attached to a toy.) 	❑	❑	❑	___
5. Does your baby pick up a crumb or Cheerio with the tips of his thumb and a finger? He may rest his arm or hand on the table while doing it. 	❑	❑	❑	___*
6. Does your baby set a small toy down, without dropping it, and then take her hand off the toy?	❑	❑	❑	___
		FINE MOTOR TOTAL		___

**If fine motor item 5 is marked "yes" or "sometimes," mark fine motor item 2 as "yes."*

	YES	SOMETIMES	NOT YET	
PROBLEM SOLVING *Be sure to try each activity with your child.*				
1. Does your baby pass a toy back and forth from one hand to the other? 	❑	❑	❑	___
2. Does your baby pick up two small toys, one in each hand, and hold onto them for about 1 minute? 	❑	❑	❑	___
3. When holding a toy in his hand, does your baby bang it against another toy on the table? 	❑	❑	❑	___
4. While holding a small toy in each hand, does your baby clap the toys together (like "Pat-a-cake")?	❑	❑	❑	___

	YES	SOMETIMES	NOT YET	
PROBLEM SOLVING *(continued)*				
5. Does your baby poke at or try to get a crumb or Cheerio that is inside a clear bottle (such as a plastic soda-pop bottle or baby bottle)?	❑	❑	❑	___
6. After he watches you hide a small toy under a piece of paper or cloth, does your baby find it? (Be sure the toy is completely hidden.)	❑	❑	❑	___
PROBLEM SOLVING TOTAL				___

PERSONAL-SOCIAL *Be sure to try each activity with your child.*

1. While on her back, does your baby put her foot in her mouth? 	❑	❑	❑	___
2. Does your baby drink water, juice, or formula from a cup while you hold it?	❑	❑	❑	___
3. Does your baby feed himself a cracker or a cookie?	❑	❑	❑	___
4. When you hold out your hand and ask for her toy, does your baby offer it to you even if she doesn't let go of it? (If she already lets go of the toy into your hand, check "yes" for this item.)	❑	❑	❑	___
5. When you dress him, does your baby push his arm through a sleeve once his arm is started in the hole of the sleeve?	❑	❑	❑	___
6. When you hold out your hand and ask for her toy, does your baby let go of it into your hand?	❑	❑	❑	___
PERSONAL-SOCIAL TOTAL				___

OVERALL *Parents and providers may use the bottom of the next sheet for additional comments.*

1. Do you think your child hears well? YES ❑ NO ❑
   If no, explain: _____
2. Does your baby use both hands equally well? YES ❑ NO ❑
   If no, explain: _____
3. When you help your baby stand, are his feet flat on the surface most of the time? YES ❑ NO ❑
   If no, explain: _____
4. Does either parent have a family history of childhood deafness or hearing impairment? YES ❑ NO ❑
   If yes, explain: _____

OVERALL *(continued)*

5. Do you have any concerns about your child's vision? YES ☐ NO ☐

   If yes, explain: _____

6. Has your child had any medical problems in the last several months? YES ☐ NO ☐

   If yes, explain: _____

7. Does anything about your child worry you? YES ☐ NO ☐

   If yes, explain: _____

10 Month ASQ Information Summary

Child's name: _____ Date of birth: _____

Person filling out the ASQ: _____ Corrected date of birth: _____

Mailing address: _____ Relationship to child: _____

Telephone: _____ City: _____ State: _____ ZIP: _____

Today's date: _____ Assisting in ASQ completion: _____

OVERALL: Please transfer the answers in the Overall section of the questionnaire by circling "yes" or "no" and reporting any comments.

1. Hears well? YES NO
   Comments:
2. Uses both hands equally well? YES NO
   Comments:
3. Baby's feet flat on the surface? YES NO
   Comments:
4. Family history of hearing impairment? YES NO
   Comments:
5. Vision concerns? YES NO
   Comments:
6. Recent medical problems? YES NO
   Comments:
7. Other concerns? YES NO
   Comments:

SCORING THE QUESTIONNAIRE

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

Total	0	5	10	15	20	25	30	35	40	45	50	55	60
Communication	○	○	○	○	○	○	○	○	○	○	○	○	○
Gross motor	○	○	○	○	○	○	○	○	○	○	○	○	○
Fine motor	○	○	○	○	○	○	○	○	○	○	○	○	○
Problem solving	○	○	○	○	○	○	○	○	○	○	○	○	○
Personal-social	○	○	○	○	○	○	○	○	○	○	○	○	○
Total	0	5	10	15	20	25	30	35	40	45	50	55	60

Examine the blackened circles for each area in the chart above.

5. If the child's total score falls within the ▭ area, the child appears to be doing well in this area at this time.
6. If the child's total score falls within the ▭ area, talk with a professional. The child may need further evaluation.

OPTIONAL: The specific answers to each item on the questionnaire can be recorded below on the summary chart.

10 months

	Score	Cutoff
Communication		25.0
Gross motor		17.5
Fine motor		39.0
Problem solving		30.5
Personal-social		30.0

	Communication	Gross motor	Fine motor	Problem solving	Personal-social
1	○ ○ ○	○ ○ ○	○ ○ ○	○ ○ ○	○ ○ ○
2	○ ○ ○	○ ○ ○	○ ○ ○	○ ○ ○	○ ○ ○
3	○ ○ ○	○ ○ ○	○ ○ ○	○ ○ ○	○ ○ ○
4	○ ○ ○	○ ○ ○	○ ○ ○	○ ○ ○	○ ○ ○
5	○ ○ ○	○ ○ ○	○ ○ ○	○ ○ ○	○ ○ ○
6	○ ○ ○	○ ○ ○	○ ○ ○	○ ○ ○	○ ○ ○
	Y S N	Y S N	Y S N	Y S N	Y S N

Administering program or provider: _____

APPENDIX G: Developmental Assessment Record

This form is used to collect information on the Developmental Assessments completed for any participating child. It should be completed whenever a Developmental Assessment is conducted. The next time an assessment should be completed on this child is _____/_____.
Month Year

Please Print
Date Form Completed: ___/___/___
mo day yr
Staff Person's Name: _____ ID#: _____
Child Member ID#: _____ Family ID#: _____
Child First Name: _____ L-Name: _____
3. Date of Assessment: ___/___/___ 4. Child's Date of Birth: ___/___/___
mo day yr mo day yr
5. Assessment/Screening Instrument (check one):
1=REEL
2=ELAP
3=LAP-D
4=Other (please specify): _____
5=DENVER
6 = DOCs
6. Test Scores (please enter NA if the subtest was not conducted):
DELAY?

Score in Number of Months:		Yes	No
1. Cognitive/Learning (LAP/ELAP)	□ NA	□	□
2. Language /Communication (Denver/LAP/ELAP)	□ NA	□	□
3. Fine Motor (Denver/LAP/ELAP)	□ NA	□	□
4. Gross Motor (Denver/LAP/ELAP)	□ NA	□	□
5. Social/Emotional (LAP/ELAP)	□ NA	□	□
6. Personal/Social (Denver)	□ NA	□	□
7. Self-Help (LAP/ELAP)	□ NA	□	□
8. Pre-writing (LAP)	□ NA	□	□
9. Other (specify): _____	□ NA	□	□
7. Total/Overall Score: _____		□ NA	□ □

8. Does this child show a 25% developmental delay in one or more of the above areas?
□ 1=Yes □ 2=No
Was the recommendation made to the primary care giver that a referral be made for special services?
□ 1=Yes *If yes, provide date recommended* ___/____/____ □ 2=No, not indicated mo day yr
Was/Will this child be referred for special services?
□ 1=Yes □ 2=No, not indicated
□ 3=Primary Caregiver Refused ____/_____/_____ (Date) □ 4=NA, Child already receiving Early
mo day yr Intervention Services
If YES, where was/will child/family (be) referred to: _____ Alliance for Infants _____ ARC_____
DART _____ Early Learning Institute _____ PPS-EI _____ Other (Specify) _____
Date of Referral to Early Intervention: _____/_____/____ mo day yr
Part II of this form should be completed by _____/____/_____ (Date)

Part II of the Developmental Assessment/Screening Record should be completed only if a child has been referred to Early Intervention based on the results of the developmental assessment/screening. *This form should be completed within two months after the child has been referred to Early Intervention.*

DEVELOPMENTAL ASSESSMENT/SCREENING RECORD - PART II

Date Part II completed: ___/____/_____ Mo Day Yr

11. Was this child *assessed* by an Early Intervention Service Provider?
□ Yes (Continue and then go to question 11) □ No (Go to 10a.)
If yes, what was the date of the Early Intervention Assessment? _____/____/Mo Day Yr

Which of the following Early Intervention Service Providers conducted this assessment?

_____ Alliance for Infants _____ ARC _____ DART
_____ Early Learning Institute _____ PPS EI services _____ Other (Specify)

11a. If this child has not yet been assessed by an Early Intervention Service Provider, please indicate the reasons why not by checking the appropriate box(es):

□ 1 = Appointment scheduled for ___/____/_____
□ 2 = Parents missed appointment
□ 3 = EI Provider has not yet Scheduled child for assessment
□ 4 = Parent(s) have decided against assessment at this time
□ 5 = Parent(s) facing barriers to keeping scheduled appointment (lack of transportation, child care, conflict with work schedule, etc.)
□ 6 = Other (Specify):_____

If child <u>has not been assessed</u>, STOP HERE. You will be asked to update this form in one month.

12. Was this child *accepted* for Early Intervention services?
□ Yes (Continue and then go to Question 12)
If yes, what was the date the child was accepted for Early Intervention services? _____/_____/
Mo Day Yr
If yes, has a copy of the child's IFSP been obtained? _____ Yes _____ No
(If NO, please ask the child's parent/guardian for their written consent to obtain the IFSP for the purpose of coordination of services)
□ No (Go to 11a.)

12a. If child has not been accepted for Early Intervention Services, please indicate the reasons by checking the appropriate boxes below:

□ 1 = Early Intervention Assessment indicated no need for EI services
□ 2 = Child is too close to the cut off age for program's age guidelines
□ 3 = Child accepted but parent decided not to accept services
□ 4 = Child's needs were beyond the scope of the service provider and child was referred elsewhere (Specify):_____
□ 5 = Other (specify):

If child has not been accepted for Early Intervention Services, STOP HERE.

13. Was this child *admitted* to Early Intervention services?

□ Yes Indicate date of admission: _____/_____/_____ (Go to Question 13)
Mo Day Yr

□ No Indicate the reason(s) child not admitted to Early Intervention Services by checking the appropriate box(es):

□ 1 = Waiting list to get into program
□ 2 = Child accepted but paperwork has been misplaced
□ 3 = Child accepted but parent refused admission
□ 4 =Other (Specify): _____

If child <u>has not been admitted</u> to Early Intervention Services, STOP HERE. You will be asked to update this form in one month.

14. From which of the following Early Intervention Service providers is this child receiving EI services?

_____ Alliance for Infants _____ ARC _____ DART
_____ Early Learning Institute _____ PPS EI services _____ Other (Specify) _____

If child is now enrolled and receiving Early Intervention Services, please make a change to the Developmental Assessment Record Part I Question 10 indicating that child is now enrolled in EI services.

This form is to be completed to enroll a family or family member in either the General or the Intensive Services Program of the Family Support Center. The primary caretaker or head of household should be asked to provide this information for the entire family. **This form should be updated at any time when there is a change in any of the information collected on this form or every six months**.

Walk in Date**: ___/___/___* ***Date Form Completed: ___/___/___
mo day yr ***mo day yr***

Is this form being completed as a: □ New Enrollment □ An Update with Change □ Update with No Change? (Check one)

Staff Person's Name: _____Staff ID#: _____

1. Has this family ever been enrolled in the Family Center before?

□ 1 = Yes □ 2 = No

2. Is this family enrolling in the □ General or the □ Intensive Service Program (Check only one)

3 Is this family ***currently*** enrolled in any other family center? □ Yes □ No □ Unknown
If yes, in which family center is the family enrolled? _____
What was the approximate month and year of enrollment at the other family centers?
Family Center #1 ___/____ Family Center #2 ___/____ Family Center #3 ___/____
Mo Yr Mo Yr Mo Yr
What is this family's other family center(s) ID# (If known)? _____ □ Not known

4.

(To be completed by Data Entry Staff)
Assigned family ID#:_____ Family is enrolling as _____ (G or I) State ID# _____

5. Family's Street Address: _____
City: _____State: _____ Zip: _____-_____
Phone Number ( ) _____-_____ (Home) Cell phone: ( ) _____-_____
Phone Number ( ) _____-_____ (Work) E-Mail address:_____
6. Emergency Contact Names:
Name: _____ Phone: ( ) ____-_____
Name: _____ Phone: ( ) ____-_____

7. What type of housing does the family have?
1=Home Owner (house, town home, trailer, etc.)
2=Rent a house/town home/trailer/apartment (unsubsidized)
3=Subsidized housing
4=Public housing/housing project
5=Reside with relative or friend

6=Shelter or Crisis/Transitional Living
7=Homeless
8=Other (Specify): _____
9=Refuse/Don't know

8. Was the family referred to the Family Support Center (<u>not</u> including self-referral)?
□ **1=Yes** □ **2=No**

9. How was the participant made aware of or referred to the Family Support Center? (Check all that apply).

□ 1=Self
□ 2=Teacher
□ 3=School Administrator
□ 4=Parent
□ 5=Friend/neighbor
□ 6=Media Sources (Television, Radio, Newspaper, etc.)
□ 7=Other Advertising
□ 8=Other Family Center
□ 9=Employment services
□ 10=Religious institution
□ 11=Children, Youth and Families (CYF)
□ 12=Social Service Agency(specify): _____
_____
□ 13=Physician/health care provider (specify): _____
□ 14 = Other (specify): _____
_____
15=Recruited by Family Support Center

10a. What is the primary language spoken in the home (check one):

1=English □2=Spanish □3=Other (please specify) _____

10b. Outside the home, how often is a language OTHER than English spoken by this participant?
□ 1=Always □2=Frequently □ 3=Sometimes □4=Never

11. Are any of the children in this family currently in an out-of-home placement (e.g., foster care)?□
1=Yes **IF YES, please fill out an Out of Home Placement form for each child who is placed out-of-home.**

2=No 9=Refuse/Don 't know

(To be read by staff to family member enrolling:)
From time to time, our family center receives funds for special programming that our families can participate in. However, in order to know whether you and your family are eligible for these programs, we have to ask you some information about your monthly income. You do not have to provide us with this information if you do not wish to do so.

16. What is the approximate *<u>monthly</u>* income for your household? _____ □ Refuse/Don't Know (Go to Question 19)
If this is an update, what type of change has occurred in household income over the past year? **□ Increase □ Decrease □ No change**

12A. Is this amount □ your gross income (income <u>before</u> taxes are withheld) OR
□ your net income (income <u>after</u> taxes, etc. have been withheld)?
13B. How many family members are dependent on this income?

Please list below the other members of this family that are enrolling in the Family Support Program at this time and provide the requested information for each family member. If child/children in this family are in Out-of-Home Placement *AND* are going to be enrolled in the Family Center, please be sure to list them below and write Y on the line for Out of Home.

First Name	**Last Name**	**Social Security Number**	*Relation-ship to **PC**	**A/T/TP Child**	**DOB**	**Sex M/F**	**Hispanic Y/N**	***Race/ Ethnicity**	****Child Born a**	*****Highest Grade Completed**	**Out of Home (Y/N)**	**Preg. (Y/N)**	**Date Enrolled**	**Member ID# (Office assigns)**
_____	_____	_____	_____	_____	__/__/__									
__/__/__	-01													
_____	_____	_____	_____	_____	__/__/__									
__/__/__	-02													
_____	_____	_____	_____	_____	__/__/__									
__/__/__	-03													
_____	_____	_____	_____	_____	__/__/__									
__/__/__	-04													
_____	_____	_____	_____	_____	__/__/__									
__/__/__	-05													
_____	_____	_____	_____	_____	__/__/__									
__/__/__	-06													
_____	_____	_____	_____	_____	__/__/__									
__/__/__	-07													
_____	_____	_____	_____	_____	__/__/__									
__/__/__	-08													
_____	_____	_____	_____	_____	__/__/__									
__/__/__	-09													
_____	_____	_____	_____	_____	__/__/__									
__/__/__	-10													
_____	_____	_____	_____	_____	__/__/__									
__/__/__	-11													
_____	_____	_____	_____	_____	__/__/__									
__/__/__	-12													
_____	_____	_____	_____	_____	__/__/__									
__/__/__	-13													

_____ _____ _____ _____ _____ __/__/__/__/__ _____-

***Relationship to PC:** 1=Primary Caregiver, 2=Mother, 3=Father, 4=Aunt, 5=Uncle, 6=Sister, 7=Brother, 8=Grandmother, 9=Grandfather, 10=Daughter, 11=Son, 12=Spouse, 13=Partner, 14=Stepchild, 15=Foster Child, 16=Niece, 17=Nephew, 18=Granddaughter, 19=Grandson, 20=Teen enrolling without parent, 21=Child enrolling without parent, 22=Other (Specify)

**** Indicate whether an Adult (A), Teen (T), Teen Parent (TP), or Child (C), and if enrolling in Intensive Program, remember to complete a Family Member Profile for each family member listed.**

*****Race/Ethnicity Coding**:

1=White

2=African American

3=American Indian/Alaskan Native

4=Asian/Pacific Islander

5=Hispanic

6=Bi-Racial

7=Other (Specify): _____

*******Highest Grade Completed Coding:**

For grades 1-12 enter actual grade number

13=GED, 14=Associate's Degree, 15=Some college, 16=Bachelor's Degree,

17=Vocational Training Certificate, 18= for children below school age (CBSA), 19 = Other (Specify):

20=Graduate or Professional Degree ****Child Born a: 1= Singletary, 2=Twin, 3= Triplet, 4= More Than 3

15. What type of health insurance does the participant have? (Please enter type of health insurance for each member listed above on Q14):

First Name	Last Name	*Type of Health Insurance (Use the insurance coding provided below)	Insurer (If you selected "5=Other Health Insurance" then specify)	Insurer ID	Member ID# (Office assigns)
					-01
					-02
					-03
					-04
					-05
					-06
					-07

-08

-09

-10

-11

-12

-13

-14

-15

***Type of health insurance code:** **1**=Private/Commercial/HMO (**non**-Medicaid); **2**=Medical Assistance (Includes MA HMOs like Gateway, Best Health, etc.); **3**=Medicare or CHIPS program if CHILD; **4**=None; **5**=Other Health Insurance (Specify); **9**=Refuse/Don't know

16. Please list below other persons in the Household who are NOT enrolling in the Family Support Center at this time:

First Name	Last Name	Relationship to PC	*A/T/TP Child	D.O.B.
				/ /
				/ /
				/ /

Family Support Team

Staff Name: _____ Title: _____ Staff ID#: _____
Staff Name: _____ Title: _____ Staff ID#: _____
Staff Name: _____ Title: _____ Staff ID#: _____
Staff Name: _____ Title: _____ Staff ID#: _____
Staff Name: _____ Title: _____ Staff ID#: _____
Staff Name: _____ Title: _____ Staff ID#: _____

This form should be updated: ___/___/___ *(Six months from the date of enrollment)* ***or when any change occurs in the information on this form****.*
mo day yr

Information for the Office of Children, Youth and Families for Non-Placed Children Receiving **TANF Services**

Is this family receiving : (Check all that apply)

- TANF (receiving cash)
- SSI
- Food Stamps
- Medicaid
- Child/Family receive none of the above

APPENDIX I: Adult Family Member Profile

*This form is used to collect information about individual program participants who are **ages 18 or older**. One form should be filled out for each adult in a family. This form should be completed within two weeks of enrollment, and should be updated at any time when there is a change in any of the information collected on this form or **every 6 months**.*

(Note to Data Entry Staff: *If the box for □Update with Change□ or □Update with No Change□ is checked below, you MUST archive this form NOW before proceeding).*

*(Please Print***)**

Is this form being completed as a:

□ **New Enrollment** □ **An Update with Change** □ **Update with No Change? (Check only one)**

Date Form Completed: ___/___/___
mo day yr
Staff Person's Name: _____ ID#: _____

Member ID#: _____ Family Enrolled as □ General or □ Intensive (Check one only)
First Name: _____ Last Name: _____
(Only write in the address below if DIFFERENT from the information on the enrollment form)
Address:_____
City, State, Zip: _____
E-Mail Address: _____

Phone number where this adult can be reached (daytime): ( ) _____-_____
(evening): ( ) _____-_____
Cell phone ( ) _____-_____

What is the primary language spoken by the participant?
□ 1=English □ 2=Spanish
□ 3=Other (please specify):_____

4b. Outside the home, how often is a language OTHER than English spoken by this participant?
□ 1=Always □ 2=Frequently □ 3=Sometimes
4=Never

5a. What is this participant's relationship to the child(ren) in this family (check one):
□ 1=Mother □ 5=Aunt □ 9=Other relative (Specify)
□ 2=Father □ 6=Uncle □ 10=Foster Parent
□ 3=Grandmother □ 7=Sister □ 11=Other (specify)□ 4= Grandfather
□ 8=Brother _____
12=N/A (Individual is enrolling as a single person family) No Children
13=Step Parent

5b. Is this individual a court-appointed guardian of the child(ren)? Yes ____ No ____

5c. How many children does this participant have? (Include natural born, adopted, and step children. Do not include foster children).____

What are the three (3) main services that the participant is most interested in receiving while at the Family Center?
Note: Please check three (3). If "Emergency Assistance" is selected as one (1) of the three (3) main services, please check all "Emergency Assistance" subcategories that apply.

□ 1=Recreational/Social Activities □ 15=School Involvement Activities
□ 2=Home management/life skills training Specify: _____
□ 3=Referral for Child Care □ 16=Pregnancy Support Services
4=Parenting Training/Learn About Child □ 17=Support Groups (Specify what kind):
Development_____
□ 5=Educational Vocational info/assistance
□ 6=Health Care information/assistance_____
□ 7=Economic information/assistance □ 18=Male Mentoring Group
8=Employment training/assistance □ 19= Female Mentoring Group
□ 9=Computer Classes □ 20=Family Retreat Center
10=Adult Education Classes □ 21=Emergency Assistance: (Check all that apply)
11=Drop In Center □ Food □ Housing□ Utilities
12=Other Special course/Center activity □ Clothing □ Transport.
□ Employment Offered (Specify): _____ □ Mental Health□ D & A
_____ □ Other (Specify):_____
□ 13=Nutritional Services (Non-emergency) □ 22=Child Programs/Services
□ 14=Community Involvement/Activities □ 23=After School Programs
Specify □ 24=Summer Camps
□ 25=Family Literacy/Even Start
□ 26=Other (please specify):_____ 27=Supervised Visitation

7. Is the participant currently a foster parent?1=Yes□ 2=No
What is the participant′s marital status? (check one):
1=Married
2=Single, never married, not living w/partner
3=Separated not living w/partner
4=Living with partner, unmarried
5=Remarried, no children or children from one spouse only
6=Remarried, with step-family (blended family)
7=Other (specify) _____
8=Divorced
9=Widowed
9. Is the participant currently pregnant?
□ 1=Yes --- If Yes, you MUST complete PART I of the Pregnancy Record Form
□a. In which trimester of pregnancy is the participant at the time of completion or update of this form?
□1=First trimester □2=Second trimester □3=Third trimester
2=No
3=NA (Male participant) □ 9=Refuse/Don′t know
Who is the participant′s primary health care provider? (check one):
1=Emergency Room
2=Health Clinic
3=Private pediatrician
4=Family physician

5=None
6=Other (specify): _____
9=Refuse/Don′t know
If seen regularly by a health clinic or family physician, please provide the following information:
Physician/Clinic Name _____
Address _____
_____
Phone: _____ FAX: _____

EDUCATION AND EMPLOYMENT INFORMATION
11. What is the highest level of education that s/he completed? (Check one only):
1=Less than high school
2=High school diploma
3=GED
4=Associate's Degree
5=Some college
6=Bachelor's Degree (B.A./B.S.)
7=Other (specify): _____
8=Vocational training certificate □ 9=Graduate or Professional Degree
12. Has the participant completed any educational/employment training programs (e.g. certificates, diplomas)?
1=Yes --- IF YES: How many has s/he completed? _____
For the most recent training completed, date completed: ____/____/___ Mo Day Yr
List type(s) of certificates completed: _____
_____ 2=No _____ 9=Refuse/Don′t know
13. Is the participant currently enrolled in any educational and/or employment training programs?
1=Yes Date Enrolled: ___/___/_____ (Go to #14a)
2=No
9=Refuse/Don't know
13a. If yes: What type of educational/employment training are you currently enrolled in?
□ 1=High school □ 8=Family Literacy Program
□ 2=GED □ 9=Job-related training
□ 3=Vocational Training □ 10=Pre-employment skills training
□ 4=Associate's Degree □ 11=Driver's Education
□ 5=Bachelor's Degree □ 12=Community Service
□ 6=ABE or ESL □ 13=Other (specify): _____
□ 7=Other education programs □ 14=Not currently involved in any program
(Specify): _____
□ 15=Graduate or Professional Degree
13b. Is this person a full-time student? Yes ____ No ____
14. Is the participant currently employed? □ Yes , Employment began on ___/____/_____
Zip Code of Place of Employment _____

ALSO SELECT ONE OF THE FOLLOWING to describe type of employment: (Check all that apply)
1=Full Time Paying Job (35+ hours/week)
2=Part Time or seasonal paying job (Less than 35 hours/week)
3=Job Training Program
4=Employed and going to School
5=TANF Employee Training Program (at least 20 hours per week)

6=TANF Community Service Program (at least 20 hours per week)
7 =Other (Specify): _____
8=Refuse

How many hours does this participant work each week?
0-10 hours
11-20 hours
21-35 hours
36-50 hours
51+ hours
No. If the participant is unemployed:
Is the participant laid-off or on leave? Date employment ended ___/____/___
□Yes □No
Is the participant currently seeking employment?
□Yes □No
If not currently seeking employment, select the following reasons:
□ 1=Enrolled in school/Training or educational program, unable to work
□ 2=Retired
□ 3=Chooses to stay home to care for child(ren)
□ 4=Would like to work but have no child care available
□ 5=Disabled
□ 6=Other (Specify): _____

15. Mark the category(ies) below for all sources of income for this participant:
□ 1=Employment □ 7=Disability/Supplemental Security Income
□ 2=Alimony/Child support □ 8=Private aid (Scholarships, training stipends)
□ 3=Public assistance (TANF) □ 9=Support by relatives and friends
□ 4=Retirement/Pension/Social Security □ 10=Refuse/Don't know/Cannot determine
□ 5=Unemployment Compensation □ 11=Other (Specify): _____
□ 6=Workman′s Compensation

What was the approximate <u>total</u> gross (before taxes) income for the most recent year for this participant? Note: Include ALL income checked in 15 above.

□ Less than $5,000 □ $45,000 to $49,999
□ $5,000 to $9,999 □ $50,000 to $54,999
□ $10,000 to $14,999 □ $55,000 to $59,999
□ $15,000 to $19,999 □ $60,000 to $64,999
□ $20,000 to $24,999 □ $65,000 to $69,999
□ $25,000 to $29,999 □ $70,000 to $74,999
□ $30,000 to $34,999 □ Over $75,000
□ $35,000 to $39,999 □ No information
□ $40,000 to $44,999 □ Refused to answer

17. Does the participant receive any of the following types of assistance AT THIS TIME?
(Please check ″yes″ or ″no″ or ″NA″ for each source listed.)

YES	NO	N/A	
□	□	□	Transportation subsidies
□	□	□	Women, Infants and Children (WIC)

□ □ □ Food Stamps
□ □ □ Food Bank Assistance
□ □ □ Other Nutritional subsidies (Specify) _____
□ □ □ TANF (cash)
□ □ □ Medical Assistance
□ □ □ Supplementary Security Income (SSI)
□ □ □ Housing assistance (e.g., rent or utility subsidies)
□ □ □ Non TANF Child care subsidies
□ □ □ TANF Child Care subsidies
□ □ □ Education Assistance (e.g., student financial aid)
□ □ □ Child Support
□ □ □ Other (Specify): _____

18. Is the participant involved in or do they volunteer for any community organizations? (Please check all that apply)

□ 1=Fire Department □ 6=Head Start/Preschool
□ 2=Neighborhood Watch □ 7=Senior or Recreational Center
□ 3=Library □ 8=Church or religious organization
□ 4=Family Center □ 9=Other (Specify): _____
□ 5=School □ 10=Not involved in any community Organizations

18b. During the past 12 months and prior to enrollment, indicate the participant's level of involvement in the community organizations checked above in question 18.

1=4+ times per month
2=2-3 times per month
3=1 time per month
4=Less than 1 time per month
5=Never

During the previous year, indicate how often the participant engaged in any of the following activities: (Check only one response for each activity listed).

	None	1-5 times	6-10 times	11+ times
A parenting class	□	□	□	□
A support group to help with parenting	□	□	□	□
A class that provides information on child development	□	□	□	□
A class that provides info about emergency first aid for children	□	□	□	□
Home visits from someone trained to talk about children′s development	□	□	□	□
Life skills classes (i.e., budgeting)	□	□	□	□
Health-related classes (i.e., prenatal, Nutrition, etc.)	□	□	□	□
Mental Health Support Services (i.e. Counseling, drug and alcohol, etc.)	□	□	□	□
Recreational Classes	□	□	□	□
Other (Specify): _____	□	□	□	□
Not involved in any activities	□			

18. Is the participant currently receiving any other services from other programs or agencies?

□ 1=Yes (Go to 18a)
□ 2=No (Go to 19)
□ 9=Refuse to answer (Go to 19)

18a. If yes, which of the following services are you currently receiving? (Check ALL that apply):

□ 1=Women, Children & Infants (WIC) □ 6=Children, Youth and Families (CYF)
□ 2=Consumer Counseling Services □ 7= Aging Services
□ 3=Mental Health Counseling/Services □ 8=Other (Specify): _____
□ 4=Mental Retardation Services □ 9=Other (Specify): _____
□ 5=Drug and Alcohol Counseling/Services □ 10=Other (Specify): _____

19. Will or is the participant enrolled in the Parents as Teachers (PAT) program

1=Yes □ 2=No

If family member receives CYF services, please enter

1. His/her CYF Case No. _____
2. His/her CYF Caseworker's Name:
3. Regional Office for CYF Services:

Is the Family's Case _____ Court Active or _____ Not Court Active (Check only one)

Comments: _____
_____
_____
_____
_____

This form will be updated six months from now on ___/___/___ or when any change occurs in mo day yr the information on this form.

APPENDIX J: Parent's income grouped

Table 9: Parents Income Level Grouped

Level	Annual Income Groups	Frequency	Percent	Cum. Percent
1	Less than $5,000	418	31.05	31.05
2	$5,000 to $9,999	327	24.29	55.35
3	$10,000 to $14,999	273	20.28	75.63
4	$15,000 to $19,999	141	10.48	86.11
5	$20,000 to $24,999	90	6.69	92.79
6	$25,000 to $29,999	19	1.41	94.21
7	$30,000 to $34,999	26	1.93	96.14
8	$35,000 to $39,999	22	1.63	97.77
9	$40,000 to $44,999	13	.97	98.75
10	$45,000 to $49,999	10	.74	99.48
11	$50,000 to $54,999			
12	$55,000 to $59,999	2	.15	99.63
13	$60,000 to $64,999	4	.30	99.93
14	$65,000 to $69,999			
15	$70,000 to $74,999	1	.07	100
16	Over $75,000			
Total		1346	100	