A mixed-methods study of Head Start Family Service worker qualifications and Family Services utilization: Implications for policy and leadership

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Abstract

This mixed-methods research study utilized Shared Leadership and Community-Based Participatory Research (CBPR) design and looked at the relationship between qualities of Family Service Workers (FSWs) in Head Start and family outcomes. Head Start is a federally funded comprehensive early child development program serving families of low income children ages birth to five. Fifty Head Start FSW participants from a convenience sample in Virginia provided complete responses to a survey instrument distributed at the Virginia Head Start Association Health and Family Conference in November 2014. FSWs from Culpeper Head Start served as CBPR participants and contributed to the selection of variables, survey instrument design and discussion of the results, as well as triangulation and member checking. Multiple regression analyses were conducted to determine if education/degree, training hours, certificate/credentials, experience and Head Start parent status as a set were statistically significant of family service utilization and family service provision. It was determined that the only statistically significant predictor of family service utilization explaining 25% of the variance was Associates degree. It was also determined that the model that explained 30.1% of the variance of family service provision included Associates Degree, Bachelors Degree and no experience as a Head Start parent. Qualitative content analysis was conducted with the use of word clouds. This analysis provided depth of understanding to the types of degrees, credentials, training and experience of the FSWs and additional information to develop questions on future survey instruments. With Associates Degree being a significant predictor of positive family outcomes in both multiple regression analyses, it is possible this may be an important contribution to shape future policy decisions on required qualifications for FSWs. Further research with this population is necessary.
Chapter I: Introduction

This research study is designed to look at the relationship between the qualities of family service workers in Head Start to the outcomes in the families they serve. This chapter includes the background of the study of workers in Virginia, the purpose of the study, research questions and procedural overview, strengths and limitations. The background of the study provides context for the interest in this topic and a brief history and introduction to Head Start. The purpose of the study and an overview of its relevance to the field are discussed along with a summary of the procedures. The research questions are formulated and there is a synopsis of the strengths and limitations of the study.

Background of the Study

Head Start is a federally funded comprehensive early childhood development program serving low-income children from ages birth to five and their families and has been in existence in the United States since 1965. The program was part of Lyndon Johnson’s War on Poverty. It was designed be an innovative child development program that supported communities in meeting the needs of preschoolers from families with disadvantages. These disadvantages included poverty, disabilities, English language acquisition and other risk factors impacting a child’s educational progress (Administration for Children and Families, 2014).

Early Head Start was added in the 1994 to support families of expectant parents and those with children up to age three. This moved the nation toward a seamless early childhood program for families with economic and other challenges, families that would otherwise face educational disadvantages for their young children (Administration for
Children and Families, 2014). The expansion to include Early Head Start was partially based on brain development research at the time that highlighted the importance of supporting the brain development of infants through positive relationships with caregivers. These findings were supported by a 2002 research report on the effectiveness of Early Head Start (Love, Kisker, Ross, Schochet, Brooks-Gunn, Paulsell, Boller, Constantine, Vogel, Fuligni & Brady-Smith, 2002).

Head Start and Early Head Start (subsequently referenced throughout this paper as the single program Head Start) were designed to be comprehensive programs addressing the educational, emotional, social, health, mental health, oral health, nutritional and familial needs. The program has retained much of its original design and is currently focused on reducing inequalities and promoting school readiness (Administration for Children and Families, 2015). Head Start is one of the few remaining federal-to-local grants where the federal funds are granted directly to local community government, school divisions or nonprofit organizations. All grantees are required to follow a set of federal Performance Standards, and while meeting those minimum standards, are free to design programs that meet the specific and unique needs of their community. This allows for programs to maximize their expertise about their service area and best tailor their services to their own community (Administration for Children and Families, 2015).

My personal interest in Head Start began in my own community program. I started my interactions with Head Start as a community partner. I worked for a small nonprofit organization and would conduct an annual parent training on child abuse for the local Head Start program. Years later, I became a Head Start Director of a small
nonprofit program that served 181 children and their families across six rural counties in Virginia. I became an active member of the Virginia Head Start Association, participating in regional and state events as a committee member and conference presenter. After time as a director, I moved into the Head Start Training and Technical Assistance Network and provided consultant-model services to Head Start and Early Head Start programs in Region III – Virginia, West Virginia, Washington D.C., Maryland, Delaware and Pennsylvania. As I transitioned into the academic world of college teaching, I began consulting privately with Head Start programs in Virginia, including providing grant writing services and maintaining my relationship with the Virginia Head Start Association as a volunteer consultant.

I have had many roles within Head Start. I have said many times that there is no “middle-class” in Head Start. I am referring to expertise and tenure, rather than socio-economic status. People become involved in the program as staff, community partners or parents and either find quickly that it is not a fit for them, or become invested in the program for life. This sentiment was quoted in the 2011 Virginia Head Start Association Annual Report. I am very passionate about this program and have dedicated a significant portion of my career to championing its cause. I believe the comprehensive design of Head Start is uniquely successful and a true model for services to families with challenges.

Beyond my anecdotal experiences, Head Start works. This perception of effectiveness in Head Start is echoed in the personal success stories across the country and is grounded in research. There have been numerous studies including the Perry Preschool Project and the Carolina Abecedarian Project that document general gains for
children who participate in Head Start (Currie, 2001; Smolensky & Gootman, 2003).
There have also been well documented studies of specific cognitive benefits (Garces, Thomas & Currie, 2002) and some long term social benefits such as reduced teen pregnancy rates and improved college attendance (Currie, 2001). While there are some critics, they are generally quieted by the voluminous support for high quality early childhood programs.

In Head Start, there has been a movement to ensure that classroom teachers and teacher assistants have early childhood credentials and degrees to ensure quality. This was most recently enforced with the additions to the Head Start Act at its reauthorization by Congress in 2007, where preschool teachers are now required to have a minimum of either an Associates or Bachelors degree in Early Childhood Education or a Bachelors degree in a related field with coursework equivalent to a degree in Early Childhood Education. Teacher assistants are required to have a minimum of a Child Development Associate (CDA) credential or be enrolled in a CDA program to complete in 2 years or less. Early Head Start teachers are required to have a minimum of an Infant Toddler CDA. The rationale behind these policy changes and the shift toward professionalization of the teacher and teacher assistant roles are related to research that teachers with degrees result in better educational outcomes for children.

Head Start’s roots are in a commitment to family development. The Head Start Act and Head Start Performance Standards require the provision of family services and a management position for services provided to families. They also include vague family service worker requirements stated as “Family and community partnership services must be supported by staff or consultants with training and experience in field(s) related to
social, human, or family services” (Department of Health and Human Services, 1999). The examination of family service worker credentials rationally follows the discussion of teacher credentials. My study seeks to provide a more complete picture of family service worker qualities and may affect new recommendations for family service worker credentials. The results may have implications for program leadership or shape policy maker decisions for the upcoming Head Start Act reauthorization.

This research has the potential to be very influential in the Head Start community. It may shape future policy decisions regarding family service worker qualifications in the Head Start Act when it is considered for reauthorization in Congress. It may affect the design and implementation of training, education and/or credentialing of family service workers. It may affect local leadership in Head Start as leaders make decisions about resource allocation or human resources. It also may enlighten current and former Head Start family service workers as they consider their career ladder. This research also has the potential to contribute to the discussion about quantifying family progress and measuring family outcomes.

This research may provide evidence in support of established leadership theories. Knowing the strengths of family service workers and the relationship between their qualifications and family outcomes may influence a leaders behavior in moving followers toward a goal. This could affect training plans, resources and program decision making in Head Start and beyond. As Head Start moves into more extensive and comprehensive partnerships with child care, the potential implications of this research increase. Head Start and child care management and leadership will have to consider the research base and their resources when making difficult decisions on how to train and supervise staff.
The best practices could also shape policy decisions as the bar continues to rise for the quality of early childhood education (Zlotnick, Strand & Anderson, 2009).

Head Start has the opportunity to influence policy. While social and economic factors are the primary drivers in the development of solutions on the political level, there is also an important role for social science research. Specifically, social science research deductively hones in on the problem and contributes to more effective solution alternatives (Peters, 1980). This research gives additional support to the importance of Head Start research in the development of policy that supports services to families in an effective and efficient way.

There is also a substantial audience for the findings of this in nonprofit leadership. Nonprofit organizations have a history of utilizing their own processes with clients to develop a plan to transition from autocratic leadership to Shared Leadership within their organization (Henderson-Loney, 2014). Shared Leadership meshes easily with Community-Based Participatory Research (CBPR). The concepts of Shared Leadership and CBPR were incorporated into the design and implementation of my study at each stage. It was the intent of this study to be as collaborative with the participant population as possible, truly embracing the roots of Head Start, which are community-oriented and respectful. Specifically, CBPR participants had complete information on which to base decisions and had the ability to make decisions. Their diversity of opinion and experience was valued.

This collaborative teamwork is evidenced at all levels of Head Start from coworker relationships to empowerment approaches with families. The most recent
version of the Head Start Program Performance Standards mandate that “family and community partnership services must be supported by staff or consultants with training and experience in field(s) related to social, human, or family services” (HSPS, 1999, p.27). These standards demonstrate the codification of the foundational commitment to parent involvement and family services in Head Start.

**Purpose of This Study**

The Head Start community is moving toward measuring family progress, family outcomes and using data to make program decisions about serving families (National Center on Parent Family & Community Engagement, 2014). This movement identifies a critical gap in understanding. The primary provider of services to families is the family service worker (FSW). The FSWs have varying degrees of success in their abilities to partner with families to achieve their goals and demonstrate positive family outcomes. There is not an understanding of what factors may influence the ability of the FSW to be more or less successful in the provision of services which ultimately lead to family outcomes. As training and technical assistance resources are used for supporting family service workers in developing positive, goal-oriented relationships with families and other important training ventures, we are unable to assess whether skill-building for family service workers results in improved services. The mandatory qualifications for family service workers are not specific and not rooted in any evidence base. My study collected information about family service workers and aimed to determine if the qualities of these family service workers are related to the services received by families.

This research study took place in the Commonwealth of Virginia, which provides an excellent opportunity to survey family service workers from diverse programs and
service areas. Virginia has urban, suburban and rural programs in areas of very high and very low socioeconomic status. They have Head Start and Early Head Start programs of varying sizes in nonprofit, government, school division and faith-based entities (Administration for Children and Families, 2015). While it cannot be assumed that Virginia is a statistically representative sample of the nation, the diversity is such that it makes a good convenience sample for this initial study.

Research Questions and Procedural Overview

There is well developed literature on the relationship between teacher degrees and child outcomes. Kelley and Camilli (2007) with the National Institute for Early Education Research conducted a thorough meta-analysis and determined there was a small, but significant relationship between bachelor degreed teachers and child outcomes. Other studies have demonstrated that child development outcomes are higher when teachers have Bachelor degrees (Barnett, 2004). There have also been studies published that the cost of implementing Bachelor degree requirements is far too high to justify the potential benefits (Fuller, Livas, & Bridges, 2006). Bassok (2013) recently reported on continued mixed results in the research on Head Start teacher degrees, making it difficult to determine whether certain staff qualifications have a positive effect on child outcomes. Sun, Kwon, Jeon and Hong (2013) discovered a positive relationship between teacher training and specific social-emotional child outcomes. In addition, for many years in Head Start there has been discussion in the field about non-degree credentials and Head Start experience and the relevance to child outcomes.

This study aims to understand the relationship between qualities of FSWs and outcomes for families. The study will draw on a review of the literature on qualities of
workers in both Head Start and in allied professions. There is a limited amount of research specifically focused on Head Start FSWs, so the literature will draw on the study of the qualities of home visitors, child welfare workers, Early Head Start caregivers, mental health consultants and other human service professions similar to FSWs.

The review of the literature, my expertise and observations, and consultation with CBPR participants helped determine the FSW qualities to be focused on in my study. The Head Start Performance Standards (Department of Health and Human Services, 1999) require that when two applicants for a vacant position in Head Start are of equal qualifications, preference shall be given to Head Start parents for hiring. This demonstrates an inherent program preference for hiring staff with Head Start parent experience. The predictor variables for my study include degrees, credentials, training, experience and Head Start parent status. The outcome variables for my study include family service utilization and family service provision. These two outcome variable were developed in collaboration with the CBPR participants and this process will be detailed later in this chapter.

While the relationship between the FSW qualities and family outcomes may be interesting in isolation, in reality, many of these variables exist at the same time. For example, a family service worker may have a degree, 20 years of experience and be a former Head Start parent. For this reason, the quantitative, multivariate research question in my study is to examine the joint effects of family service worker education/degree, training hours, certificate/credentials, experience, and Head Start parent status upon family service utilization and family service provision. In order to gather this
information, a survey instrument was developed that utilized a combination of open-ended and closed-ended questions to gather information about FSWs.

This study utilizes a modified explanatory sequential mixed-methods research design (Creswell, 2014) grounded in pragmatic paradigm and Community-Based Participatory Research (CBPR) techniques. The design is diagrammed in Figure 1.1 below and more thoroughly explicated in Chapter three.

Figure 1.1 Procedural Overview

A survey instrument was developed in collaboration with the CBPR participants to collect qualitative and quantitative information about family service worker (FSW) qualities. In accordance with the mixed methods design, the qualitative and quantitative data was collected concurrently. The qualitative data gives perspective and additional depth to the quantitative data and provides more context for discussion and interpretation of the results. The qualitative research process is recursive and aims to provide
information supporting *what extent does the qualitative data give context to the quantitative results?* For example, when collecting data on family service worker education, the qualitative responses provided depth and context to the data as we looked at what types of degrees are often seen in family service workers. When collecting data on years of experience in Head Start, the qualitative data provided depth and background to what types of positions family service workers might hold throughout an organization prior to becoming family service workers.

The sample included FSW attendees to the Virginia Head Start Association Health and Family Institute in November 2014 in Charlottesville, VA. Participation was voluntary, included informed consent and was conducted in accordance with Institutional Review Board approval. Survey instruments were provided in paper copy to willing participants and collected in accordance with data management confidentiality. The researcher retained control of the survey instruments at all time. This sample was a convenience sample of family services staff currently employed and seeking professional development opportunities in Virginia. While it is not a perfect sample, its convenience facilitated obtaining fifty usable surveys in a period of one hour, which is consistent with a pragmatic approach to research.

When attempting to look at the relationship between these FSW qualities and family outcomes, there is a substantial gap in the understanding of family outcomes. This topic is discussed thoroughly in the review of the literature; however there is no agreed upon set of family outcomes or measures that can be compared across programs. This lack of standardized measures becomes problematic when designing a research study. Therefore, the outcome variables for my study were developed by utilizing the Program
Information Report (PIR) data on services provided to families. The PIR is an annual reporting requirement for all Head Start and Early Head Start grantees. There is a set of questions to collect data about the types of services provided, program enrollment, demographics and staff qualifications. This information is gathered each summer and compiled in September/October for a national report that is made available to the public and to Congress. Data is collected by programs about their own services, then reported in an electronic format for easy aggregation. The public is permitted to view the data and even customize reports according to region, state, grantee or service area. Anyone can run a report for the PIR information for any grantee in the nation.

My study utilized the program level data from the 2013 – 2014 PIR to develop outcome variables on family services. In collaboration with the CBPR participants, I put together two different indices that quantitatively represent family service utilization and family service provision. I then matched up the program level family services values with the individual FSW qualities from a survey instrument. I analyzed the relationship between the FSW qualities and these two outcome variables from the program where the FSW works. I also collected qualitative data on the types of FSW education/degrees, training, certificate/credential, experience and Head Start parent status. The data was qualitatively analyzed and is discussed concurrently with the quantitative results for comprehensive interpretation.

Community-Based Participatory Research (CBPR) was an important component of this study (Viswanathan, Ammerman, Eng, Garlehner, Lohr, Griffith, Rhodes, Samuel-Hodge, Maty, Lux, Webb, Sutton, Swinson, Jackman & Whitener, 2004)). This approach utilized members of the studied population, FSWs, in the development of each stage of
the study including selecting the variables, developing the survey instrument and interpreting the results. Utilizing CBPR methods and with the assistance of the family service workers from Culpeper Head Start in Culpeper, VA, the data from questions on the PIR were indexed into two outcome variables. These variables were named family service utilization and family service provision. The CBPR participants provided the real-world context both for indexing the outcome variables and in designing the survey instrument. They felt strongly that adding together the number of services provided and dividing it by the number of families served gave a strong index for family services utilization. They also felt strongly that dividing the number of families that had received at least one service by the number of families served was another important, and distinctly different outcome variable of family services provision. The CBPR participants and I had the opportunity to discuss collaborative approach, coworker exchange and coworker relations. They felt those concepts supported matching program data to FSW qualities. In completing the survey, study participants identified which Head Start program they came from in order to associate them with the correct program outcome variables.

The quantitative data analysis techniques included a series of two multiple regressions, each to address independently the relationship between the FSW qualities and the two outcome variables: family service provision and family service utilization. The qualitative data analysis techniques included content analysis and the use of word clouds to pictorially represent the qualitative responses and provide methods for discussing the results in an efficient manner with CBPR participants (Cisell, 2010; McNaught & Lam, 2010; Brantmeier & Bodle, 2015). In accordance with CBPR, the
results were discussed with the community-participants, who had opportunity to provide interpretation and recommendations for further study.

**Strengths and Limitations**

This study identifies and explains a gap in the understanding of the relationship between family service worker qualifications and program outcomes. The aim is to close that gap and provide important results for the field. It is anticipated these results may shape Head Start policy and leadership. This small study has a sample of sufficient size to conduct quantitative analysis with fidelity, though it could be expanded to a more national scope. However, the sample represents a diversity of subjects and is consistent with the Head Start family service worker staff in Virginia, as supported by the opinion of the CBPR participants. This study built upon strong collaborative partners in both Culpeper Head Start for the community-based participatory research and the Virginia Head Start Association for data collection. The utilization of mixed methods research techniques is a strength of the study, as the combination of qualitative and quantitative data analysis will present the most dynamic picture of family service worker qualifications and their relationship to family outcomes (Creswell, 2014). Research shows that CBPR practices are consistent with more effective and efficient studies (Viswanathan, 2004).

Some limitations include the possibility of sample error and selection bias. This is a convenience sample of voluntary participants in Virginia and it would be ideal, but not practical to have a random national sample. The outcome variables of family service utilization and family service provision are constructed from Program Information Report (PIR) data. PIR data regarding family services is the most complete source of data that exists on family outcomes, but is by no means a total picture. With no standard measure
of family outcomes, service provision or utilization, or instrument across programs, it is the best source of data available. It is an additional limitation that this study also requires that participants and programs self-report, which may be a source of error or bias. Another potential limitation may be the reliability and validity of the survey instrument. Attempts were made to establish reliability and validity of the quantitative assessment measures, but without other similar instruments, it was a challenge. Transferability and value of the qualitative measure and results were discussed. Research supports the use of focus groups to develop and test instruments to improve validity (Brantmeier & Bodle, 2015) as well as the importance of CBPR principles to research trustworthiness.

Ultimately, the results of this study may provide additional context to our understanding of the relationship between qualities of family services workers and the way families receive services. The results may influence new recommendations for family service worker credentials and have implications for Head Start program leadership. It also may inform shape maker decisions for the upcoming Head Start Act reauthorization.

**Definition of Terms**

A list of key terms, definitions and acronyms can be found in Appendix A.
Chapter II: Review of the Literature

This study aims to determine if there is a relationship between the qualities of family service workers (FSW) to family outcomes. The quantitative, multivariate research question in my study is to examine the joint effects of family service worker education/degree, training hours, certificate/credentials, experience, and Head Start parent status upon family service utilization and family service provision. The qualitative research approach is to what extent does the qualitative data confirm the quantitative data or give context to the results?

This chapter includes the review of the literature on four primary topics identified in this research study. The four topics offer support for this research study and I will provide a comprehensive discussion of each. The first topic is Head Start family services and Shared Leadership and will include an overview of the Head Start program. Head Start is grounded in Shared Leadership which provides a framework for services to families in the program. The second topic is the concepts of nonprofit, community and policy in Head Start. This section will provide an overview of potential areas of practical application for the research and integration of Shared Leadership. The third section discusses the qualities of Family Service Workers and allied professionals and the relationship of qualities to family outcomes. The final section is family outcomes and worker behavior, including the collaborative approach to family services. This section will highlight the gaps in understanding of the relationship between family service worker qualities and outcomes and the collaborative behaviors of family service workers. This review of the literature highlights theories that contributed to the selection of the variables of the study and lead to the methodology.
According to the Head Start Performance Standard 1301.2, *community* means a city, county, a multi-city or multi-county unit within a state, an Indian reservation, or any neighborhood or other geographic area (irrespective of boundaries or political subdivisions) which provides a suitable organizational base and possesses the commonality of interest needed to operate a Head Start program. For the purpose of this research study, the definition of community will also include a “community that occurs when people come together around common physical location, interests, cultures, and/or other identities.” (Fellin, 2001). This expanded interpretation of the concept of community is because Head Start defines itself as a community. While the services may be analogous to child care, family service, public health or other disciplines, the Head Start community is one of affiliation and considers itself unique.

**Head Start Family Services and Shared Leadership**

Head Start is the largest provider of Early Childhood services in the nation (Administration for Children and Families, 2014). This federally funded program is authorized by the Head Start for School Readiness Act of 2007. Throughout this literature review, the term Head Start will refer to the prenatal through age five services provided by the Head Start Act. The term Head Start includes the Head Start program for children ages three to five and the Early Head Start program for prenatal families to children age three.

Head Start was originally established as part of the Economic Opportunity Act of 1964 and was authorized by President Johnson to begin in the summer of 1965 as part of the War on Poverty. The purpose of this program was to give disadvantaged children a comprehensive program to meet their emotional, social, health, nutrition and
psychological needs. The development of the program was such that individual communities had flexibility in the design of their local programs, in order to be responsive to the unique needs of each community. Head Start saw expansions under Presidents Carter, Reagan, Clinton and George W. Bush and today serves approximately 1.2 million children annually in Head Start, Migrant Head Start, American Indian & Alaskan Native Head Start and Early Head Start (Administration for Children & Families, 2015).

Comprehensive services to families have always been the core of Head Start. One of the fundamental goals of Head Start is to empower parents and provide low-income families with resources that contribute to the entire family’s development (Zigler & Muenchow, 1992). Educating children, who represented the majority of people in poverty in the United States, was seen as a way to impact the cycle of poverty (Zigler, Gariac & Styfco, 2007). Head Start program design logically follows the research that lead to Head Start being part of the Economic Opportunity Act and War on Poverty, rather than a strictly educational initiative. Parent leadership in Head Start has always been paramount as parents are involved in making program decisions including design and personnel. “Families as partners” and Shared Leadership are two fundamental components of a successful early childhood intervention that supported stability for young children (Mangione & Speth, 1998).

My research study is reflective of and embodies the concept of Shared Leadership, defined as “the dynamic, interactive influence process among individuals in groups for which the objective is to lead one another to the achievement of group or organizational goals or both” (Pearce & Conger, 2003, p.1). The key difference between
Shared Leadership and other leadership theories is that “the influence process involves more than just downward influence on subordinates by an appointed or elected leader… leadership is broadly distributed among a set of individuals” (Pearce & Conger, 2003, p. 1). Shared Leadership is a multi-directional process which influences and is exemplified in the design of this research study. Shared Leadership is a model of leadership described as a relational process that is distributed among different levels and dependent on networks of influence and social interactions (Fletcher & Kaufer, as cited in Pearce & Conger, 2003). Shared Leadership is also a natural fit with Community-Based Participatory Research (CBPR) as both the community members and the researcher are leading each other toward a common goal of better understanding the research phenomena. CBPR is also utilized in this study and will be explicated in this review of the literature.

In the spirit of Shared Leadership, Head Start management teams are organized where a Director provides structure and direction, while the team executes service delivery in a coordinated way. This occurs through the collaborative provision of these services with partners within their communities. The Family Service Worker (FSW) is included in this team and can demonstrate leadership in the Head Start arena (Washington & Bailey, 1995). The importance of the FSW in this leadership role and teamwork model is a point of interest for this research study.

Teamwork in the workplace is dependent on trust between members (McAllister, 1995, Costa, 2003; Bligh, Pearce, & Kohles, 2006). In Head Start centers, this is especially so. A climate of trust is essential in order for staff to access and grow from professional development opportunities. Strong communication and relationship building
skills have been found to be related to the teacher’s willingness to learn. Teachers reported feeling validated as a member of the team when their feedback was sought and incorporated into decision making (Fitzgerald & Theilheimer, 2013).

Often in Head Start, teamwork and Shared Leadership can be seen in the process of planning program transitions. Transitions include the processes of children entering Head Start or Early Head Start or leaving Head Start, often to attend elementary School (Department of Health and Human Services, 1999). Mangione and Speth’s (1998) model for Shared Leadership training included eight training elements and has been piloted in Head Start programs. This model included Shared Leadership, families as partners and evaluation of partner success. Shared Leadership was found to be well received by staff, provided a common language for partners, and had a positive impact both on collaborations and on individual participants (Brown, Amwake, Speth & Scott-Little, 2002).

Since school readiness is one of the primary objectives of Head Start, these findings are consistent with other studies. In this context, Shared Leadership is again operationalized as the shared guided decision making among home, school and community partners (Mangione & Speth, 1998). This concept reflects the definition of families as partners, which describes parents as the primary decision makers for their child’s early education experience. Directors are exposed to training to empower them to embrace Shared Leadership principles and give them strategies to move beyond traditional management functions (Carter & Curtis, 2010). These strategies for professional development expand to elementary school leadership and include:
“Principal and teachers, as well as many parents and students, participate together as mutual learners and leaders in study groups, action research teams, vertical learning communities, and learning-focused staff meetings. Roles and actions reflect broad involvement, collaboration, and collective responsibility where participants engage in collaborative work across grade levels through reflection, dialogue, and inquiry.” (Lambert, 2005, p. 38)

Some Head Start program grantees are school divisions, which makes the elementary model for Shared Leadership in an educational institution more relevant. The majority of Head Start grantees are nonprofit organizations, which often have different structure than corporations or government entities. Shared Leadership between nonprofit organizations and government entities includes building trust, sharing ownership and being jointly accountable for community outcomes (Baker, 2011). This concept of Shared Leadership is evidenced often with the team format of Head Start organizations, nonprofit or otherwise.

**Nonprofit, Community and Policy in Head Start**

The outcome of this research has the potential to be very influential in the Head Start community. It may shape future policy decisions regarding family service worker qualifications in the Head Start Act when it is considered for reauthorization. It may influence the design and implementation of training, education and credentialing of family service workers. It may impact local leadership in Head Start as leaders make decisions about resource allocation or human resources. It also may enlighten current and former Head Start family service workers as they consider their career ladder. This research also has the potential to contribute to the discussion about quantifying family growth and measuring family outcomes.
Head Start organizations are community-based and take a number of different forms. Regardless of their grantee structure, some qualities remain constant including the commitment to quality, program evaluation and sustainability. Many Head Start grantees are nonprofit organizations and with the federal-to-local model, all programs are strongly rooted in their communities. According to the Head Start Performance Standards, programs are required to conduct a full community assessment every three years, and then update the assessment in each of the intervening years (HSPS, 1999). Community needs and resources are the backbone for Head Start program delivery and design.

This research is affected by and may provide evidence in support of established leadership theories. Knowing the strengths of family service workers and the relationship between their qualifications and family outcomes may influence the leaders’ behaviors in moving followers toward a goal. This could influence training plans, resources and program decision making in Head Start and beyond. As Head Start moves into more extensive and comprehensive partnerships with child care programs, the potential implications of this research increase. Head Start and child care management and leadership may have to consider the research base when making difficult decisions on how to train and supervise staff. The best practices should also shape policy decisions in the pursuit of improved quality of early childhood education (Zlotnick, Strand & Anderson, 2009).

At the time of the writing of this research study, Head Start programs are operating on the most recent version of legislation – the Head Start For School Readiness Act of 2007, which expired in 2012. The National Head Start Association called for 2014 to be a year of preparation and planning for the next reauthorization of Head Start
(NHSA, 2014). As of 2015, there continues to be inaction on this front, though there is the delightful work of expanding Early Head Start-Child Care (EHS-CC) partnerships around the nation with a federal increase of $435,000,000 (Administration for Children and Families, 2014). Head Start grantees continue to operate on the parameters set forth in the 2007 Act, since new performance standards have not been released for practical implementation. However, in the EHS-CC grant notice, applicants were required to limit the number of families served by a single FSW to 40 (Administration for Children and Families, 2014). This is just one example of changes in regulations affecting FSWs. It also gives evidence to support the attention to the importance of family services and opens the door for this study to shape future policy changes.

Head Start has the opportunity to influence policy. While social and economic factors are the primary drivers in the development of solutions on the political level, there is also an important role for social science research. Specifically, social science research deductively hones in on the problem and contributes to more effective solution alternatives (Peters, 1980). These findings may give additional support to the importance of Head Start research in the development of policy that supports FSWs and services to families in an effective and efficient way.

There is also substantial audience for the findings of this study beyond Head Start in nonprofit leadership. Nonprofit organizations have a history of utilizing their own processes with clients to develop a plan to transition from autocratic leadership to Shared Leadership within their organization (Henderson-Loney, 2014). This parallel process is seen all throughout Head Start and can be summed up in the following recommendations:
Be sure employees have complete information on which to base decisions.
- Use an understanding of personality differences to improve communication and enhance people’s self-confidence.
- Foster respect for diversity.
- Ask employees for input into any decision that will affect them.
- Use work teams to solve problems and make decisions.
- Reward staff for leadership, creativity, and team contributions.
- Harness all employees’ talents and creativity.
- Give staff both responsibility and authority to make decisions.
- Invest in education and training for employees. When they return from training, give them opportunities to use their new learning and share it with the rest of the organization.
- Give employees ongoing feedback about how they’re doing, and answer any questions they may have. (Henderson-Loney, 2014, p. 41)

These recommendations mesh easily with the principles of Community-Based Participatory Research (CBPR). Specifically, participants had complete information on which to base decisions, had the ability to make decisions, their diversity of opinion and experience was embraced and the process was ongoing with periodic updates. It was the intent of this study to be as collaborative with the participant population as possible; truly embracing the roots of Head Start, which are community-oriented and respectful. This approach, including CBPR, strengthened the study in that the CBPR participants provided for triangulation and validation of the qualitative and quantitative measures (McNaught & Lam, 2010, Creswell, 2014). They also provided additional context and depth to the analysis of results. Their perspective in detailing implications and recommendations only increased the fidelity of the study.

This collaborative teamwork is evidenced at all levels of Head Start and originates in part with Ecological Systems Theory of child development. This theory supports the positive impact of parent involvement on children’s educational outcomes (Bronfenbrenner, 1974). Parent involvement (Comer & Haynes, 1991) and parental decision making (Zigler, Styfco & Gilman, 1993) are hailed as successful methods for
making family-school partnerships happen. Building on these theories and best practices, we have a framework for parent involvement (Epstein, 1992) which supports the work that many Head Start programs have been doing in collaboration with parents over the previous decades based on their commitment to working with the whole family.

Many of the early researchers participated in the development of the Head Start program, and other successful models of comprehensive early childhood programming. Bronfenbrenner was part of the committee that originally developed Head Start in 1964 – 1965 (Fox, 2005). Comer is best known for establishing the School Development Program which began in 1968, and remains today to be an excellent example of successful school based interventions with marginalized groups, similar to Head Start (Comer School Development Program, 2015). Out of a desire to allow for local program decision making (Washington & Bailey, 1995), the Head Start Bureau did not issue specific program guidelines, except regarding parental participation and career expansion activities (Zigler, Styfco & Gilman, 1993). This flexibility allowed for much variation from program to program.

In 1975, the first Head Start Program Performance Standards were published with specific requirements for all Head Start grantees. These included as one of the goals:

“The child's entire family, as well as the community must be involved. The program should maximize the strengths and unique experiences of each child. The family, which is perceived as the principal influence on the child's development, must be a direct participant in the program.” (HSPS, 1975, p.58)

The most recent version of the Head Start Program Performance Standards mandate that “family and community partnership services must be supported by staff or consultants with training and experience in field(s) related to social, human, or family services”
These two historical documents demonstrate the codification of that foundational commitment to parent involvement and family services in Head Start.

In 2011, the Office of Head Start introduced the Parent, Family and Community Engagement (PFCE) Framework, seen in Figure 2.1, as a compliment to their Child Development Framework and Infant and Toddler Framework. (National Center for Parent, Family & Community Engagement, 2011). The PFCE framework highlights the critical role that families play in supporting young children and is hailed as the beginning of the next evolution of Head Start’s approach to engaging families in their children’s learning. It includes program foundations, impact areas, family outcomes and child outcomes. The framework exists to support Head Start programs in implementing more effective family engagement strategies.

The PFCE Framework is informed extensive research that supports the principle that strong family engagement is essential to children’s positive outcomes. Children with supportive home environments show improved literacy, stronger peer interactions, fewer behavior issues, and more motivation and persistence (Fantuzzo, McWayne & Perry, 2004). Longitudinal studies show that continued family engagement is associated with improved literacy skills for children growing up in low-income households and whose parents have limited formal education (Dearing, Kreider, Simpkins & Weiss, 2006).
Head Start’s approach to parents should be a team approach (Zigler & Muenchow, 1992; Washington & Bailey, 1995; Mangione & Speth, 1998; Brown, Amwake, Speth & Scott-Little, 2002; Pearce & Conger, 2003; and Fitzgerald & Theilheimer, 2013). This team approach embraces the concepts of Shared Leadership and includes management and supervisors, teaching staff, community partners, parents and family service workers members (McAllister, 1995, Costa, 2003; Bligh, Pearce, & Kohles, 2006). The role of the family service worker has received increased attention since its inception. Most recently, family service worker roles and a caseload limit of 40 families per worker were required as part of the funding application for the Early Head Start and Child Care Partnership grants in 2014 (Administration for Children and Families, 2014). As the attention on family engagement moves forward, the family
service worker will play an increasingly important role and they are the central element of this study.

**Family Service Worker and Allied Professional Qualities**

Family Service Workers (FSWs) are those staff that provide “in-home and other services including assessment, development of service plans, family advocacy and coordination of service delivery” (Head Start Act Section 648A(c), 2007). A FSW is defined as someone whose primary role is working with families and can be used interchangeably with role titles such as family advocate and family service provider (Daniel, 2002). Daniels’ research informed a 2001 Information Memorandum from the Office of Head Start which enumerated nine competency goals of FSWs including supporting families in reaching their goals and accessing resources. The FSW position is similar to many human service positions, but is clearly distinct based on these definitions and specific competencies.

There has been a small but significant amount of research in the areas of the impact of staff education and training on job performance in the human services industry. Specific to Head Start, there has been a great deal of research on the qualities and professional preparation of teachers. This literature overwhelmingly pointed to children having exposure to higher quality programs and improved outcomes when the classroom teacher has a degree (Burchinal et al., 2002, Clarke-Stewart et al., 2002, Howes et al., 1992, Kontos & Wilcox-Herzog, 2001, National Institute of Child Health and Human Development Early Child Care Research Network, 2000, 2002, Phillipsen et al., 1999, Scarr et al.,1994 as cited in Burchinal, Hyson & Zaslow, 2008).
This ultimately resulted in teacher degree requirements being included in the Improving Head Start for School Readiness Act of 2007. According to Act, as of October 1, 2011, Head Start teachers must have a degree (AA, BA, or MA) in early childhood education, an AA or BA in a related field with coursework equivalent to a major in early childhood or be in the Teach for America program. Early Head Start teachers must have a minimum of an Infant/Toddler Child Development Associate credential and training or coursework in early childhood education.

While there has been a substantial amount of research on qualities of teachers, specifically around degrees, there has not been a great deal of research about the qualifications of Head Start family service workers. To review the literature on this topic, I have taken a broad view looking at mental health, early childhood, home visitation and other comparable professions to see what research has been conducted on qualifications in these allied professions. While the work and role of the family service worker is unique, their qualities may or may not be unique. Examining research from allied professions will affect the variable selection and analysis techniques in pursuit of understanding family service worker qualities and their relationship with family outcomes. The results of this review of the literature are as follows.

The research on teacher qualifications which ultimately shaped the new teacher degree requirements in the Head Start Act included overwhelming support that children have improved educational outcomes when they are taught by a teacher with a degree (Barnett, 2004; Fuller, Livas & Bridges, 2006; Kelley & Camilli, 2007; Bassok, 2013; and Sun, Kwon, Jeon & Hong, 2013). As teachers in early childhood settings can be seen as analogous to family service providers in early childhood settings, it begs the question
as to whether it is important that a FSW has a degree. Some of the research on allied professions supports looking at provider degrees in early childhood settings. Educational degrees are shown to have a positive impact in the home visiting relationship and program outcomes (Harden, Denmark & Saul, 2010). Educational degrees also support perceptions of family child care providers engagement with children, knowledge and quality (Bordin, Machida & Varnell, 2000). In school-based settings, educational degrees are found to be positively related to opportunities, compensation and satisfaction for those implementing school-based prevention programs (Cross & Wyman, 2006).

Post-secondary education has been shown to have positive relationships with child outcomes, and that includes a variety of types of degrees. Systems Theory is a central tenet to Social Work degrees, as it was in the development of Project Head Start (Fox, 2005). Social work degrees may be the most supportive of the role of the FSW as they provide a holistic approach to broad services (Block & Block, 2002), are rooted in strengths-based practice in the child welfare field (Douglas, McCarthy & Serino, 2014), and include methods on relationship building with families (Block & Block, 2002). Those with degrees in human service related fields report they feel most prepared for work with families and those with Social Work degrees have the highest levels of preparedness beyond any other educational degrees or organizational settings (Cortis & Meagher, 2012).

While much of the data on post-secondary education is collected on participants with four-year degrees, it has been reported that the highest Early Head Start outcomes have been found when caregivers have an Associates Degree or credential, rather than a four-year degree, particularly when paired with a credential (Elicker, Wen, Kwon &
Sprague, 2013). The most frequently studied credential is the Family Development Credential (FDC). The FDC is a credential housed in the University of Connecticut’s Center for Culture, Health and Human Development. It requires that front-line workers take ninety hours of classes, complete a portfolio and pass a standardized exam (Forest, 2015). As workers are trained in empowerment approaches, their feelings of empowerment in their roles increase and they are more likely to include empowerment practices with families (Palmer-House, 2008). These findings indicate that the FDC can be thought of as more than a credential since it supports both worker improvements and family outcomes (Hewitt & Anderson, 2015).

A second credential that is commonly found in Head Start settings, though typically with classroom staff, is the Child Development Associate (CDA). The CDA is a credential housed within the Council for Professional Recognition. It requires that child care workers take one hundred twenty hours of professional education, combined with four hundred eighty hours of experience, complete a portfolio, pass an exam and have an approved observation of performance (Council for Professional Recognition, 2015). In Early Head Start, the best child outcomes are associated with a CDA, supportive environment and experience (Ellicker, Wen, Kwon & Sprague, 2013). The CDA and FDA can also be thought of as stepping-stones toward higher education and additional experience (Wolf, 2014).

While education and credentials vary across workers, all workers in Head Start are required to have training each year (HSPS, 1999). Training is an important component of preparing workers in multiple disciplines to work with children and families (Olsen & Holmes, 1982; Bordin, Machida & Varnell, 2000; Sloper, Greco,
Beecham & Webb, 2005; Gill, Greenberg, Moon & Margraf, 2007; Zlotnick, Strand & Anderson, 2009; Chopra, Banjeree, DiPalma, Merril & Ferguson, 2013 and Jung & Baird, 2003). Some of the findings related to training are wide-ranging in importance, such as attendance to training meetings or making sessions available to workers. These training strategies have a positive impact on services received (Bordin, Machida & Varnell, 2000; Cross & Wyman, 2006 and Jung & Baird, 2003). The frequency, duration and design of training, rather than training topics is important. Orienting Early Head Start workers to their positions with the opportunity to provide feedback supports job satisfaction (Gill, Greenberg, Moon & Margraf, 2007). Flexible training opportunities are more likely to be completed by workers (Walker, 2002) and those that receive more regular training spend more time developing relationships with families (Sloper, Greco, Beecham & Webb, 2005). Training specific to the social work “broker” role in a child welfare setting is essential in comprehensive service provision (Olsen & Holmes, 1982).

While many researchers agree that training is important for human service workers, there is also evidence that a lack of training negatively impacts recruitment, retention of workers and outcomes for children and families (Zlotnick, Strand & Anderson, 2009). Best practice recommendations for human service worker training includes evidence-based training with regular follow-up and continuing education (Chopra, Banjeree, DiPalma, Merril & Ferguson, 2013). When looking at worker qualities as they occur naturally in the presence of many qualities, best practices for training also include designing the training based on the years of experience in family services, suggesting a relationship between training and experience (Palmer-House, 2008).
Training and years of experience are often examined together. A workers’ years of experience in their position is related to positive outcomes for children with disabilities (Jung & Baird, 2003), strong Early Head Start program outcomes (Elicker, Wen, Kwon & Sprague, 2013), and provider engagement with children (Bordin, Machida & Varnell, 2000). Years of experience are also found to be related to positive relationships with staff and coworkers, even in supervisory roles (Allen & Green, 2012). As workers report more experience in their position, they also have higher multicultural sensitivity and empowerment skills, particularly when paired with experience enrolling their own child in Head Start (Franze, Foster, Abbott-Shim, McCarty & Lambert, 2002).

Head Start requires that when candidates for a position in Head Start have equal qualifications for a position, preference for hire must go to the Head Start parent. Research on connections between Head Start parents and family outcomes has particular relevance for policy decisions. The Head Start career ladder often begins with Head Start parents. Training indigenous community members for Head Start positions is considered a best practice and consistent with Shared Leadership (Chopra, Banjeree, DiPalma, Merrill & Ferguson, 2013).

This research is relevant in an age of accountability where special attention is being paid to how time and resources are being used in Head Start, among other federal grants. There is a modest research base of findings related to human service workers qualifications and effectiveness. There is a substantial research base related to teacher qualifications and child outcomes. This research shaped policy decisions leading to the current requirements for Head Start and Early Head Start teachers and assistant teachers.
There remains a gap in our understanding of family service worker qualifications and this research aims to close that gap.

**Family Outcomes and Worker Behavior**

Family Outcomes are the achievement of goals set by families where the whole family unit benefits from the attainment of the goal. This is in contrast to child outcomes where the child is the primary beneficiary of the achievement of the goal. The distinction between the two is somewhat fine, as often a child can benefit greatly from the achievement of a family goal. For example, a family that achieves affordable housing might bring great a sense of stability and security for a child. Conversely, the achievement of a child’s goal, such as improved self-regulation, may greatly benefit a family that struggles to use positive parenting skills when faced with behavioral challenges. The following text draws on the literature to put together an understanding of family outcomes for the purpose of this research study.

The Head Start National Center on Parent, Family and Community Engagement has put forth a definition of family originally proposed by United Advocates for Children of California in 2005. It states, “family is an enduring relationship, whether biological or non-biological, chosen or circumstantial, connecting a child/youth and parent/caregiver through culture, tradition, shared experiences, emotional commitment and mutual support.” (Administration for Children and Families, 2011, p. 7). The Program Planning Topics in Head Start document uses the following definition of outcome, “something that happened as a result of an activity or process; the actual results achieved each year. The term outcome is also used to refer to expected outcomes, that is, the results you expect to see because of an activity or process.” (Administration for Children and Families, 2015).
Taking these two definitions as a foundation, for the purpose of this research study, family outcomes are results of an activity or process that benefit the family, which includes the caregivers and the child.

There are no standard measures of family outcomes in Head Start (National Program Office of Free To Grow and Mailman School of Public Health, 1994) or in general family service literature. When searching the Mental Measures Yearbook with Tests in Print, there were 229 instruments determined to be related to the search phrase “family outcome.” There is also no standard curriculum in Head Start for working with families to move toward achievable goals. Whereas with child outcomes, Head Start programs are required to use a research-based and developmentally appropriate curriculum that address a number of different domains (HSPS, 1999), the requirements are not the same for working with families. There are some standard milestones and developmental goals for children of the same age, such a learning shapes, counting, colors and reading. Goals for families are far more diverse and therefore there is great variation in objectives and action steps. Assessing family outcomes, and not simply documenting efforts, is essential to evaluating Head Start programs (Bailey, 2001; Dempsey & Keen, 2008; Roberts, Innocenti, & Goetze, 1999 as cited in Raspa, et. al., 2010)

While there are clearly no standard measures of family outcomes in Head Start, there are multiple measures of family outcomes in an assortment of family service settings and with varying degrees of fidelity. In fact, much of the research in early childhood family outcomes comes from serving children with disabilities. Raspa et. al. (2010) documented the lack of consensus on family outcomes measures and provided
analysis of the Family Outcomes Survey developed by the Office of Special Education Programs in the US Department of Education in the 2000s. This survey was put together with great effort and identified five important family outcomes for families of children with disabilities. These outcomes were to understand their child's strengths, abilities, and special needs; know their rights and advocate effectively for their children; help their child develop and learn; have support systems; and access desired services, programs, and activities in their community (Raspa et. al., 2010, p. 497).

While there is agreement that there are no standard family outcomes measures, there is some interest in the Head Start community to have some type of measurement of family outcomes that can be compared across programs. The opposite is argued in much of the literature. In fact, standard outcomes are not recommended (Kisker, et. al., 2003 and Mannan, Summers, Turnbull & Poston, 2006). Best practices for measuring family outcomes includes selecting appropriate measures specific for the services provided (Mannan, Summers, Turnbull & Poston, 2006) and specifically designing outcomes measures for the uniqueness of the program (Kisker et. al., 2003). When tailoring outcomes measures to families and programs, families with high needs report fewer positive outcomes. When families are satisfied with program services, they are also more likely to report positive outcomes (Epley, Summers & Turnbull, 2011). Despite the numerous family outcomes tools available, none of these are endorsed by the Office of Head Start (Administration for Children and Families, 2014).

From this scan of the literature related to family outcomes measurement in early childhood settings, it can be determined that not only are there no standard measures, it is not advisable to have standard measures due to the variety of both families and programs.
This is consistent with the messages from the Head Start National Center on Parent, Family & Community Engagement, who designed their Research to Practice series to support programs in identifying research based strategies for supporting programs in attaining their own outcomes for families and children (Administration for Children & Families, 2015). This approach is also echoed in the Office of Head Start’s Measuring What Matters series that highlights the four data activities of prepare, collect, aggregate & analyze and use & share. These four data activities are to be specifically tailored for each program and the services and outcomes they are interested in (Administration for Children & Families, 2015).

The lack of access to Head Start families, lack of access to standard measures of family outcomes that could be compared across FSWs, lack of cultural sensitivity in many family outcomes tools and the research-based recommendations to look at family outcomes individually proved to be a challenge to identifying an outcome variable for this research study. Where standard family outcome variables were nonexistent, standard program variables were readily available in the Head Start Program Information Report (PIR). The PIR is a mandatory annual reporting requirement for all Head Start and Early Head Start grantees. There is a universal set of questions to collect data about the types of services provided, program enrollment, demographics and staff qualifications. The instrument is modified each winter, released to programs in spring, collected each summer and compiled in fall for a national report that is made available to the public and to Congress. Data is collected from programs about their own services, then reported in an electronic format for easy aggregation. The public is permitted to view the data and even run reports according to region, state, grantee or service area.
The choice to match program-level data to individual family service workers' qualities in this research study is influenced by a number of theories about the way coworkers behave in organizations. Through conversations with the CBPR participants, they often remarked that they worked as a team, thought the same, or acted as a beehive. These remarks led me to think about a collaborative approach to family service. In my own observation, I often saw the family service workers as a team or unit within an organization with very systematic and similar approaches to services. These observations and comments led to a pocket of literature, largely from the management sphere, on how coworkers tend to behave similarly in work settings. This concept will be fleshed out in the following paragraphs and its importance to this research study will be discussed.

Workers often report having a shared understanding with colleagues (Bittner & Leimeister, 2014). Shared understanding is described as integrated knowledge bases among coworkers in order to achieve complex tasks (Bittner & Leimeister, 2014, p.112). Shared understanding includes using the same labels for concepts, shared meaning, collaborative design and is obtainable by heterogeneous worker teams. Coworkers that exhibit shared understanding may utilize relationship maintenance strategies that have a positive effect on organizational outcomes (Madlock & Booth-Butterfield, 2012). This concept is rooted in the theory of interpersonal needs, which postulates that coworkers need to control and be controlled, include and be included and both give and receive affection in the workplace (Shutz, 1958 as cited in Madlock & Booth-Butterfield, 2012). This is consistent with Shared Leadership, which is enmeshed with Head Start and demonstrated in shared vision and empowering others to act. (Kouzes & Posner, 2007).
The popular leadership theory Leader-Member Exchange (LMX) and its more recent developments of Coworker Exchange (CWX) and Team-Member Exchange (TMX) provide additional framework for understanding the collaborative approach to family service. Previous research indicates that the higher the LMX between supervisor and employee, the greater the employee will perform (Gerstner & Day, 1997 as cited in Hu & Liden, 2013). Not only is there a relationship between relational LMX and job performance, but that relationship can be modified by positive relationships with coworkers. Therefore, positive relationships with team members can have a more important role in influencing a workers behavior than their relationship with the supervisor, within the context of the team (Hu & Liden, 2013). CWX describes the mutually respectful, trusting and loyal relationships among coworkers. As LMX increases, CWX increases, which means that as a supervisor develops a strong relationship with an employee, the employees develop strong relationships with each other. Hence, positive relationships with supervisors and/or coworkers are associated with a willingness to perform work duties beyond the required (Baker & Omilion-Hodges, 2013).

Personality and performance have a positive relationship. High quality social exchange relationships and TMX weaken the relationship between personality and performance. This means that the LMX and TMX quality is especially important for job performance, above and beyond that of individual personalities (Kamdar & Van Dyne, 2007). Higher quality TMX, in partnership with psychological collectivism, which is an additional descriptor of the quality of relationship among coworkers, is also associated
with the increased willingness of employees to volunteer to enact constructive change at work (Love & Dustin, 2014).

Coworkers with positive relationships among themselves behave similarly in the workforce and that is demonstrated by shared understanding, organizational commitment, positive influence on each other’s job performance, increased willingness to move beyond required duties, and willingness to take charge. These findings lend support to the decision to match up individual family service workers with program level outcome data. When reviewing this decision with the CBPR participants, it was determined that they felt a very high level of CWX with each other, saying that one could substitute for the other at any moment.

This chapter reviewed the literature on Head Start family services and shared leadership, nonprofit, community and policy in Head Start, the qualities of Family Service Workers and allied professionals, and family outcomes and worker behavior, including the collaborative approach to family services. This literature is essential to the design of this study and ultimately, the way the results may affect the field. The partnering of staff, families and communities to provide services and achieve positive outcomes for children are hallmarks of both this study and the Head Start model in both the nonprofit context and the policy arena. This review of the literature highlights the gaps in understanding of the relationship between family service worker qualities, services and outcomes for families. As will be discussed thoroughly in Chapter 3, this study exemplifies Shared Leadership and CBPR methods, which are not uncommon research methods in the nonprofit arena.
Chapter III: Methodology

The Methodology chapter provides a comprehensive overview of the methods used to conduct this research study. The purpose of the study is to look at Family Service Worker (FSW) qualities in Head Start from a sample of workers in Virginia and the relationships those qualities may have with family outcomes. The quantitative, multivariate research question in my study is to examine the joint effects of family service worker education/degree, training hours, certificate/credentials, experience, and Head Start parent status upon family service utilization and family service provision. The qualitative research approach is to what extent does the qualitative data confirm the quantitative data or give context to the results? The following elements are addressed: research approach and design, sample and instrumentation, procedures, and data analysis techniques to include both qualitative and quantitative methods.

Research Approach

This research study is based on a pragmatic paradigm. The pragmatic paradigm is consistent with many mixed-methods designs as is rooted in utilizing techniques that work in the context (Creswell, 2014). Pragmatic paradigm means that the research questions and collecting data to better understand the phenomena are central to the study. Pragmatic paradigm is concerned with the ‘what’ and ‘how’ of the research study. It attempts to ensure that the methods are those that best assess the phenomena, without allegiance to other paradigms or strict approaches to studying the areas in question. To contrast this paradigm with other popular paradigms, a strictly scientific approach does not lend itself to this social science study. Another paradigm, the constructionist approach, does not allow the researcher to rely on much of the excellent work that has
been rigorously done in establishing some of the constructs and phenomena under examination (Mackenzie & Knipe, 2006).

The pragmatic paradigm is best suited to this project because of the commitment to collaboration with community members. The researcher must be flexible and collaboratively design the project in the direction as influenced by community members and previous research. A pragmatic paradigm allows the researcher to keep the research questions central and retain the utmost respect for the community.

Mixed methods research is a process by which a researcher gathers qualitative and quantitative information, combines the data together, and then draws inferences about the research question(s) based on the strength of the integrated information (Creswell, 2014, p.2). The underlying assumption is that the research question cannot be fully approached using only quantitative or qualitative methods, but can be best understood by utilizing both methods for a more rich understanding of the data and phenomena. This study utilizes a modified explanatory sequential design, where qualitative and quantitative data are collected at the same time and then the qualitative methods help provide context to the quantitative analysis. There will be separate quantitative and qualitative analyses, and also the analysis of some integrated data. This allows for a more comprehensive view of the phenomena and may add strength to the developed survey instrument (Creswell, 2014).

This study also utilizes Community-Based Participatory Research (CBPR), which evolved out of the health disparities literature and is consistent with the pragmatic paradigm and practice-based evidence. CBPR is a collaborative research technique where members of the community being studied take an active role in the development,
implementation and analysis of the study (Viswanathan, M. et. al., 2004). CBPR is based on nine principles which include:

1. recognize the community as a unit of identity;
2. build on the strengths and resources within the community;
3. facilitate a collaborative, equitable partnership in all research phases through an empowering and power-sharing process that attends to social inequalities;
4. foster colearning and capacity building among all partners;
5. integrate and achieve a balance between data generation and intervention for the mutual benefit of all partners;
6. focus on the local relevance of public health problems and on ecological perspectives that attend to multiple determinants of health;
7. involve systems development in a cyclical and iterative process;
8. disseminate results to all partners and involve them in the wider dissemination of results; and
9. involve a long-term process and commitment to sustainability.

(Israel, Eng, Schulz & Parker, 2005)

This study employs CBPR in that the Head Start community is defined as a clear community of affiliation (see Appendix A) with great strengths. The process of conducting this research has been in close collaboration with members of the community. Head Start is a program focused on elimination of social disparities and is philosophically aligned with this research approach. This approach is also consistent with Shared Leadership. Both the researcher and the community participants are learners and leaders in this process, with a focus on the information which shapes practices to support Head Start. The intent is to present this information collaboratively at academic and non-academic conferences and to continue this partnership so long as it continues to benefit the participants.

CBPR is beneficial for researchers and participants and can result in more culturally relevant instruments and more effective studies. McAllister, Green, Terry, Herman and Mulvey (2003) applied CPBR in an Early Head Start setting. Their report focused not on the results of the study, but the practice of CBPR in Head Start. Their
findings were that the CBPR approach enhanced the design, conduct and conclusions of their study. Their aims for incorporating CPBR in Head Start settings are as follows:

1. “collaboration between researchers and program/community partners to develop the local research focus, questions, and design;
2. community-focused recruitment of study participants under the leadership of community-based program staff;
3. employment of community residents as research staff and use of a team approach in research decision making and practice;
4. joint program–research oversight of the research process; and
5. sharing preliminary findings with program/community partners, and engaging them in interpretation of findings and implications for program practice.”
   (McAllister, Green, Terry, Herman & Mulvey, 2003, p. 1673)

This research study closely followed and employed these five aims. The Family Service Workers (FSWs) of Culpeper Head Start, a small Head Start program in Central Virginia agreed to be part of the research study. This program is local to the researcher and there is a pre-existing positive professional relationship among the researcher and staff. These FSWs were particularly important to the development of the questions and design, research decision making, research oversight and discussion and interpretation of findings. Additionally, the Virginia Head Start Association and Executive Director agreed to be collaborative partners based on the existing positive relationship with the researcher for the purpose of recruiting study participants and serving as a peer reviewer.

The Culpeper FSWs lent their expertise in the Head Start field by developing the indexed variables, developing the instrument, and interpreting the analysis. The planning meetings were very open-ended, unstructured, and almost uncomfortable for the collaborative partners at the beginning. They expected to have more direction, whereas it was important to CBPR to allow the conversation to go in the direction that made the
most sense for the participants. This process utilized Shared Leadership, which is a foundational theory in this study.

Shared Leadership was also evidenced in the process of developing the outcome variables. I initially provided the idea of family outcomes as the sole outcome variable, based on the Program Information Report (PIR) data and review of the literature. After reviewing information about the process of creating an index variable and reviewing the state-wide aggregate PIR data, the community participants made recommendations for developing two independent outcome variables. From their experience, the process of ensuring each family served receives a service (family service provision) was significant and different from the process of ensuring that families received appropriate and comprehensive services (family service utilization). They valued both of these outcomes and felt strongly there could be an important relationship between family service worker qualities and each of those variables, thereby influencing the original research design. Throughout the process, the community partners clearly had an influence on the research project, but also demonstrated how Shared Leadership is a thread throughout the Head Start community, which is likely to come into play for research recommendations and implications.

Sample

The Virginia Head Start Association (VaHSA) allowed the distribution of the survey instrument for this study to participants at their conference, Health Institute Bridges to Healthy Families: A Comprehensive Approach November 11 – 13, 2014 in Charlottesville, VA. This conference was designed for Head Start Directors, Health Managers and Family Services Staff. This was the first year including family services
staff in the conference; it was previously a Health Institute. It was expected that there would be a substantial number of family services participants, but no history to predict attendance.

The group surveyed was a purposeful convenience sample of family service workers in Virginia. While a randomized sample from around the nation might have produced more robust quantitative data, that design was not practical for this study. Purposeful sampling is in line with qualitative research methods as it is important to have participants who are rich in the information related to the purpose of the study (Patton, 2002). In accordance with CBPR, the VaHSA served in a leadership role in connecting the researcher to participants. While this sample may limit the ability to generalize the results to a larger population, it provided for practical distribution of the survey instrument.

The VaHSA expected anywhere from 50 – 200 participants from the health and family services disciplines. Participants heard an oral presentation of the research design and completed the survey instrument on a voluntary basis, during the scheduled lunch hour on Thursday November 13, 2014. Participants included family service staff in attendance at the conference. No participant was required or pressured to participate and only those with informed consent were permitted to participate. This research project has received approval from the James Madison University Institutional Review Board to ensure the ethical treatment of research with human subjects.

**Instrumentation and Rigor**

After review of the literature, it was determined that there was no available established instrument to use with this population for these research questions. The
closest instrument is the Head Start Family And Child Experiences Survey (FACES), which is a longitudinal study that has been ongoing for several years. This data is analyzed by contract with the Administration for Children and Families each year and current data is not available to the public. Therefore, for this study the survey instrument needed to be developed. While this is not ideal with respect to establishing reliability and validity, the pragmatic paradigm keeps the research questions central, and in order to assess those questions, a new tool had to be developed.

In collaboration with the Community-Based Participatory Research (CBPR) participants from Culpeper Head Start, I developed a survey instrument for the purpose of data collection for this study. The survey instrument evolved through a collaborative process of review, discussion and revision with the community participants. The literature review affected some of the survey instrument questions assessing education level, experience, credential/certificate, training hours and Head Start parent status. The community participants provided the context for developing each of the questions and assisted with the wording of the questions to ensure fidelity with the field understanding of the concepts. The process of multiple analyst or multiple investigator triangulation was used with the CBPR participants to cross-check the wording of questions and concepts assessed (Patton, 2006; Merriam, 2009 and Creswell, 2012). This technique is incorporated into community-based participatory research methods (Merriam, 2009).

Combinations of qualitative and quantitative survey questions were developed to assess the participants’ experiences and qualifications. The quantitative questions were closed-ended and developed to measure concepts that had an existing scale, such as years of experience or level of education. The qualitative questions were open-ended and
developed to assess those values that do not have an established or predictable scale, such as non-degree credential, rewards of the position or popular training topics. The following paragraphs review the development of the questions of the survey instrument.

Questions one and two are about participants’ status as a parent. The CBPR participants felt that if we were to assess whether they were Head Start parents, it would be best to first determine whether they were parents or parenting grandparents, as that is an increasing trend in Head Start families. This provides a baseline for comparison between those that are Head Start parents and those that are not, by having the ability to exclude from that comparison those that are not parents at all.

Question three assessed their age and the CBPR participants felt strongly that we must divide the age up into categories. Normally, that would not be recommended as it is not statistically stronger to change a continuous variable of age into a discrete variable. However the CBPR participants felt that it would be far more likely that participants would answer the question if they did not have to fill in their actual age, but an age range. In the interest of collecting data rather than asking questions that won’t be answered, the age question was formatted into the categories of ages 18 – 29, 30 – 39, 40 – 49, 50 – 59 and 60+. This question provides some demographic and descriptive information about the sample.

Questions four, five and six assessed status as a Head Start parent, and whether they were a parent first or an employee first. The CBPR participants felt there might be a distinction there. People who first experience disadvantage and risk and then go on to careers in service may have different qualities than those first motivated into a career of
service. It is unclear whether there will be enough responses to this question to run any reliable statistical analysis.

Questions seven through eleven assess the participants current position, caseload, hours per week, whether they find the position rewarding and their career progression throughout Head Start. These questions provide some key demographics about the participants that may reveal unforeseen relationships. The question of caseload was specifically related to the Early Head Start-Child Care partnership grants that limited applicants to forty families per FSW. The CBPR participants also thought there could be a connection between hours per week, caseload and service provision and/or service utilization. These questions tell us whether the participants have always been in this position, or whether they were in other Head Start positions before this one. It is expected that the qualitative responses to whether the position is rewarding will provide some rich context for participant motivations in working with families.

Question twelve asks about the Head Start program where the participants currently work. This question is important as it allows the participants to be matched up with the outcome variables from their programs. As noted in the literature review, worker collectivism affects the choice to match individual worker qualifications with program level data. In order to do this with fidelity, the workers must be matched to their actual programs.

Questions thirteen through sixteen assess the participants for their years of experience both within and outside Head Start, and both within and outside of serving families. The CBPR participants felt that there might be a difference in experience in Head Start or not, and experience in family services or not. Questions seventeen and
eighteen ask about intent to pursue other career options, within or outside Head Start. This might provide some information about the participants intended longevity or motivations for leaving Head Start.

Questions nineteen through twenty-two assess participants training. While quantitative information about the number of training hours are gathered, qualitative information about the types of training topics and their importance to the work of serving families are also gathered. Question twenty-three is about non-degree credentials and CBPR participants expect to gather information here about Child Development Associates and Family Development Associates, among others. While it is anticipated there will not be enough responses in each of the different credentials to assess differences among them, it is anticipated that this item will be transformed into a categorical predictor variable of credential or not. It is expected the qualitative responses will provide some context to the types of credentials often sought or demonstrated by FSWs.

Questions twenty-four and twenty-five assess level of education and how recently that was achieved. CPBR helped to develop the levels of High School/GED, Associates, Bachelors, Masters and Doctoral degrees. Qualitative information will be sought about these as participants are asked to disclose the type of degree or major. Question twenty-six assesses whether participants are currently enrolled in an educational program and whether it conflicts with their Head Start activities. Again, this question is to give more context to the educational background and/or aspirations of the participants.

Question twenty-seven assesses whether participants have a second job and if it conflicts with their Head Start activities. Question twenty-eight assesses in what ways
educational programs or second jobs interfere with Head Start. These two questions serve as a bridge to asking about participants financial situation. The CPBR participants thought there might be some value to assessing whether a FSW had experienced some of the financial circumstances that Head Start families experience. Questions twenty-nine and thirty assess the participants economic status, currently and as a child. The CBPR participants felt that questions twenty-seven, twenty-nine and thirty were important because understanding the participants economic status might affect how they build relationships with families in Head Start and possibly impact how those families access services. The qualitative responses will provide some contextual history of the participants life experience and may provide additional understanding and depth to FSW qualities.

Vetting the tool was limited to CBPR participants. Participants collaboratively brainstormed about possible questions and ways to ask the questions with the researcher. Attention was paid to keeping questions simple, but also assuring that complex information could be gathered. The researcher took notes and put together a draft survey instrument, which was shared with the CBPR participants. CBPR participants provided feedback through the process of multiple investigator triangulation in accordance with community-based participatory research methods (Viswanathan et. al., 2004; Merriam, 2009) and suggested changes which were incorporated into the final draft. They then reviewed the draft and the instructions to ensure clarity. As the mixed-methods design includes quantitative and qualitative methods, descriptions of research rigor are included below.
Validity of an instrument means that the instrument measures what it says it measures, and not some other construct. There is no straightforward, mathematical test for establishing validity of an individual instrument (Kember & Leung, 2008). The instrument for this research study is not designed to measure a psychological phenomenon, rather to gather information about the participants. Having said this, it is important that there is construct validity in the sense that when the participants are asked about their education level for example, they understand that to be their formal education and not some other concept. The process of utilizing CBPR helps support the face validity of an instrument as the community being studied is an active member of the team developing the instrument. This is consistent with the argument of Messick (1996) that authenticity is an important construct to take into account when establishing validity.

Reliability of an instrument means that the instrument consistently measures what it intends to measure. The sample size of my study is too small to conduct a factor analysis, which is one method of establishing reliability. As a majority of the items on the survey instrument are not scale measurement, it is not possible to calculate Chronbach’s Alpha, which is a measure of internal consistency. The process of establishing reliability through participant/peer checks was incorporated through the development of the survey instrument using multiple investigator triangulation and CBPR principles. Due to the fact that it was very difficult to establish rigorous validity and reliability, the results of this research may not be generalizable to the population. For this reason, it is recommended this survey be conducted with additional samples.

Reliability and validity address items with quantitative responses. As many of the items in this survey require qualitative responses and therefore qualitative analysis, the
qualitative rigor is demonstrated using a variety of techniques including triangulation, peer review, member checking and an audit trail (Creswell, 2012). A modified audit trail (Lincoln & Guba, 1985) which includes description of how data is collected, how themes are identified and the process for making decisions in included in Table 3.1 below. The methods summarized in the modified audit trail are detailed throughout this chapter as the researcher develops the instrument in collaboration with the CBPR participants. In continues in the next chapter as decisions are made in the process of analyzing the qualitative information.

Table 3.1 Audit Trail

<table>
<thead>
<tr>
<th>Date</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>9/30/15</td>
<td>Dissertation Proposal Approved by Committee</td>
</tr>
<tr>
<td>10/23/14</td>
<td>Institutional Review Board confirmed that approval was not needed to contact CBPR participants as they were not being studied.</td>
</tr>
<tr>
<td>10/23/14</td>
<td>Contacted CBPR participants and set up first meeting.</td>
</tr>
<tr>
<td>10/28/14</td>
<td>First meeting with CBPR participants to explain study, discuss constructs and variables and use triangulation for development of survey instrument.</td>
</tr>
<tr>
<td>10/31/14</td>
<td>Drafted and shared first draft of instrument with CBPR participants</td>
</tr>
<tr>
<td>11/4/15</td>
<td>Received feedback from CBPR participants utilizing triangulation and finalized draft instrument.</td>
</tr>
<tr>
<td>11/7/15</td>
<td>Received Institutional Review Board approval</td>
</tr>
<tr>
<td>11/13/14</td>
<td>Distributed instrument; collected data</td>
</tr>
<tr>
<td>12/2/14</td>
<td>Met with VaHSA Director to discuss study and incorporate peer review.</td>
</tr>
<tr>
<td>12/4/14</td>
<td>Met with CBPR participants to discuss raw result, triangulation.</td>
</tr>
<tr>
<td>2/26/15</td>
<td>Met with CBPR to discuss analyzed results, triangulation.</td>
</tr>
<tr>
<td>3/26/15</td>
<td>Presented findings at Virginia Head Start Association, further discussed results with FSW attendees for member checking.</td>
</tr>
<tr>
<td>4/16/15</td>
<td>Review coded qualitative analysis with CBPR participants to ensure fidelity and triangulation.</td>
</tr>
</tbody>
</table>

Through the audit journal, evidence for transferability can be established. Transferability is the process by which the original researcher describes the research process in great detail so that future applications may be done with fidelity (Lincoln & Guba, 1985). This modified audit trail provides a record of the integrated systems of qualitative rigor. This includes the process of developing the qualitative questions,
processing their results, applying analysis techniques and interpreting the results in collaboration with the CBPR participants. It is documented in this chapter and the next to increase the likelihood of transferability of these results. Demographic and descriptive information is gathered and reported about participants that may not be used in analysis, but provides context and description of the sample to increase likelihood of transferability.

There were several points along the research study where triangulation was used as a method of establishing qualitative rigor. As noted in Table 3.1, indexing the outcomes variables, developing the survey instrument, processing the results and putting together interpretations and recommendations was all done as part of a collaborative process with the CBPR participants. These steps provided for triangulation of the qualitative methods, or the convergence of multiple researchers and perspectives in order to establish credibility (Creswell, 2012). It was particularly important and aligned with CBPR principles for this triangulation to take place with members of the researched group.

Not only were the perspectives of the CBPR participants valuable, I also incorporated a peer review process to increase the qualitative rigor. Following the collection of data, the procedures, survey instrument and preliminary results were shared with the VaHSA Executive Director for peer review. Peer review is the process of discussing the study with someone who is valued for their feedback and opinion (Creswell, 2012). As a former program director and currently in an advocate position as the leader of the VaHSA, the Executive Director reported she was most drawn to the potential policy implications for the results. She immediately connected with the parallel
process between teacher degrees and policy change for quality with FSW qualifications and future policy change.

The audit trail also includes the process of member checking. This opportunity emerged through my contact with the Virginia Head Start Association Executive Director. She was interested in my presenting my findings at their conference and encouraged me to use the opportunity to check the results with members and get additional feedback (Creswell, 2012), rather than see it as a firm deadline for sharing complete results. Twenty-five conference attendees attended my session. They reported finding the study interesting, seeing how it would be relevant to their work and liked the ease and accessibility of the word clouds. They did not find the results surprising and agreed further study was warranted.

Merriam (2009) provides a concise review of ethical strategies to promote reliability and validity in qualitative or mixed-methods studies. The audit trail and utilizing rich descriptions have been addressed. CBPR methods are very supportive of these strategies. Triangulation (using multiple investigators and methods) and member checks (taking data and interpretations back to those who are being studied) are two strategies that are directly incorporated into CBPR. Through the process of meeting with the CBPR participants to develop the survey instrument, review the survey instrument, develop the outcome variables and interpret the results, they had the opportunity to influence the study and support its validity. Researcher position, another method of increasing qualitative rigor, is incorporated into my study and discussed in both chapters one and five (Merriam, 2009). It is with great reflection and thoughtful critique that these research orientations and methods were chosen.
Procedures

Community-Based Participatory Research (CBPR) is a pivotal orientation for this research process. Three interested Family Service Workers (FSW) were identified as collaborative research partners. These partners are members of the Head Start community and also currently serving in family service roles, which provided an important perspective in the development of the study and increased qualitative rigor with triangulation and validity of the quantitative methods. It was determined early on that a data set with Head Start FSW qualities was not available and a survey instrument would need to be developed and distributed. The Virginia Head Start Association (VaHSA) was a willing collaborative partner and permitted the researcher to introduce and distribute the survey instrument during their conference lunch session, as well as serve as a peer reviewer. In accordance with CBPR principles, the research findings were processed with the CBPR participants and shared with the Head Start community at the VaHSA annual conference in March, 2015, as well as other opportunities within the Head Start community.

During the lunch session, the participants were introduced to the research project verbally by the researcher. It was explained that participation in the study was strictly voluntary and written consent letters were made available to all participants. Participants were then given a copy of the survey instrument to record responses. Blank paper was provided for those who wished to write more than the space on the survey instrument provided. When participants finished, they raised their hand and the researcher collected the completed survey and put it into a large envelope. All responses were placed into a locked case only available to the researcher to ensure data security. Table 3.2
summarizes the procedures for the mixed-methods design and includes the proposed analysis techniques.
### Table 3.2 Summary of Mixed-Methods Methodology

<table>
<thead>
<tr>
<th>Type of Data</th>
<th>Quantitative</th>
<th>Qualitative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participants</td>
<td>Culpeper Head Start Family Service Worker (CBPR participants) Purposive Convenience sample of attendees to Virginia Head Start Association Health Institute Bridges to Healthy Families: A Comprehensive Approach Conference November 11 – 13, 2014</td>
<td>The central phenomenon to be captured is the life and professional experience of the family service workers including type of education/degree, training, certificate/credential, experience and HS parent experience in the words of the participants to identify themes.</td>
</tr>
<tr>
<td>Site for Research</td>
<td>VaHSA Conference Charlottesville, VA November 13, 2014 – lunch session</td>
<td></td>
</tr>
<tr>
<td>Number of Participants</td>
<td>3 – 4 FSW staff 50 – 200 participants</td>
<td></td>
</tr>
<tr>
<td>Type of Information to be collected</td>
<td>Independent Variables: Family Service Workers’ (1) education/ degree broken into 3 levels, (2) training hours, (3) certificate/credential, (4) years HS experience, and (5) HS parent status. Dependent Variable: Indices titled “Family Service Utilization” and “Family Service Provision” will be calculated based on the information for each Head Start/Early Head Start’s Program Information Report (public data) Questions C35 (total # families served), C46 (number of families that received a service broken out into 15 options) and C47 (# of families that received at least one service listed above).</td>
<td></td>
</tr>
<tr>
<td>Types of Data</td>
<td>Questionnaire including closed-ended questions assessing the variables above. Questionnaire will be developed in consultation with the family service workers from Culpeper Head Start to ensure fidelity with the field.</td>
<td>Survey of open-ended questioning soliciting responses to the types and kinds of experiences related to the independent variables. Questionnaire will be developed in consultation with the family service workers from Culpeper Head Start to ensure fidelity with the field.</td>
</tr>
<tr>
<td>Procedures for organizing data</td>
<td>Enter into SPSS.</td>
<td>Manual entry of comments into word document and internet-based word cloud software.</td>
</tr>
<tr>
<td>Basic Data Analysis</td>
<td>Descriptive analysis will be conducted of the quantitative data.</td>
<td>Qualitative data will be organized in word clouds in order to be organized for interpretation.</td>
</tr>
<tr>
<td>More Advanced Data Analysis Procedures</td>
<td>Multiple regression will be utilized to examine the joint effects of family service worker education/ degree, training hours, certificate/ credential, HS experience, and HS parent status upon the family outcomes index.</td>
<td>Content analysis techniques using word cloud tools will be used to provide depth and explanation to the qualitative results.</td>
</tr>
<tr>
<td>Software</td>
<td>SPSS</td>
<td>Word Clouds</td>
</tr>
</tbody>
</table>
Data Analysis Techniques

Table 3.2 summarizes the convergent mixed-methods design of this research project, which includes qualitative and quantitative data collection and analysis. The Statistical Package for the Social Science (SPSS) version 22 is a commonly used statistical software package used to perform complex data manipulation and analysis. SPSS has multiple statistical and mathematical functions, scores statistical procedures, flexible data handling capability and data manipulation utilities. It can read data in almost any format (e.g., numeric, alphanumeric, binary, dollar, date, time formats) and proved to be a useful and available platform for quantitative data analysis in this research study.

Qualitative content analysis was conducted manually utilizing a number of techniques. Much of the process of categorizing the data was done in the process of developing the survey instrument. For example, information about whether participants find their position rewarding is found in the responses to that particular question. The same goes for most helpful training topics, socioeconomic status and so forth. Some qualitative responses were reviewed and integrated into SPSS as quantitative data. For one of the predictor variables, those responses that met the definition of a credential were entered in as “Yes” for credential, while no answer or answers that did not meet the definition of credential (See glossary of terms Appendix) were entered as “No” in SPSS for credential. This transformed the qualitative data into a quantitative, categorical variable for the purpose of analysis. However, the qualitative responses about types of credentials are relevant and available for qualitative analysis and give depth and understanding to the FSW experience around obtaining credentials.
Following the recommendations of Brantmeier and Bodle (2015), the ingredients for qualitative analysis include collection, reduction and display of data. An emerging twenty-first century tool for qualitative analysis and data visualization is known as a word cloud (Cidell, 2010; McNaught & Lam, 2010). A selection of text is entered into an internet-based free program that displays the most frequently used words in the text as larger and the less frequently used words as smaller. The user has the freedom to set limits to the number of words and impact the layout of the design (Kistler, Evergreen & Azzam, 2013). This new technique is an effective method of exploratory content analysis (Cidell, 2000) and is recommended as an analysis tool when the full text of the participants’ response is included (McNaught & Lam, 2010). This “state-of-the-art” mechanism is a “powerful tool for text analytics” when including further information (Heimerl, Lohmann, Lange & Ertl, 2014). While tools for qualitative analysis and visualization are not nearly as numerous as quantitative options, word clouds are user friendly and can be used without credit to the software, such as wordle (Kistler, Evergreen & Azzam, 2013). This tool for content analysis fits well with this mixed-methods design that includes other measures.

Content analysis using word clouds is also a strong fit with community-based participatory research as it is a simple method of understanding key concepts and is predicted to have greater impact in qualitative analysis and data visualization in the future (Edyburn, 2010). This tool provides access to organized data, supporting an equitable partnership and Shared Leadership between the researcher and the CBPR participants. It also involves the participants more strongly in the iterative process of research and the dissemination of the results and recommendations (Israel, Eng, Schulz & Parker, 2005).
This technique is very accessible, user-friendly, and provides for a modern approach to community-based participatory research.

Qualitative responses of particular interest to the research study were entered into word cloud software in their entirety. This process of content analysis served to reduce the data, if desired by selecting the number of most commonly used words to include in the word cloud. It also serves to display the data in a visually interesting way, which also may influence interpretation. This tool allowed for the identification of the most commonly shared responses and words displayed in a way that when shared with the CBPR participants, allowed them to connect with the data and easily draw inferences without a specific research background. An example of a word cloud from the credential data above can be seen in Figure 3.1

Figure 3.1 FSW Credentials Question 23

As you can see, the most commonly listed credentials were First Aid, CPR and CDA as those terms appear largest in the word cloud. The next most frequently included
responses were FDA, Child Abuse, Family, Child, Services and Certified. Some of the less common responses included EITC, MAT, Al’s Pals, Data Entry and Instructor. The type of layout, font and colors are chosen by the developer of the word cloud and in this study, only represent artistic interest. While a change in color indicates a change in number of times a particular response was recorded, the specific colors do not indicate anything in particular beyond visual interest.

The remainder of the qualitative responses word clouds were discussed with the CPBR participants and the content was analyzed to identify themes and draw inferences. In accordance with the recommendations of Guba and Lincoln (1981), theme were identified based on frequency of responses, importance to the participants, uniqueness and unexpectedness. Initial researcher interpretations of themes and context were shared with CBPR participants for additional analysis and triangulation of interpretation. The CBPR participants asked questions about the interpretation of themes, offered alternative interpretations or confirmed the initial analysis conducted by the researcher. Results are noted in chapter 4.

The analysis of qualitative data and quantitative data took place concurrently. While some of the qualitative responses were transformed into quantitative data, the quantitative analysis began with descriptive statistics. Some of the descriptive statistics were of particular relevance to the study, while others provided information about the diversity of the sample. These included age of participants, number of families on their caseload and parental status. From there, more complex multivariate analysis was conducted to determine if there were any relationships between the variables describing FSW qualities and the outcomes of family service provision and family service
utilization. These questions are multivariate in that each of the variables exists in the presence of the others and may interact.

Multiple regression analysis requires defining the predictor variables. Predictor variables for this study included education/degree, training hours, certificate/credential, experience and Head Start parent status. For education/degree, the variable LevelEd was recorded and those with a Doctoral degree were scored 5, those with a Masters degree scored 4, Bachelors degree scored 3, Associates Degree scored 2 and High School Diploma/GED scored 1. This variable was then dummy coded to create three sub-variables, edu1, edu2 and edu3. Dummy coding is detailed in Table 3.3. As a categorical variable with more than two categories, it is important to dummy code to appropriately determine the relationship between each of the degrees and the outcome variables. For example, when left without dummy coding, the analysis assumes that the difference between having an Associates Degree and having a Bachelors Degree is the same as the difference between having a Bachelors Degree and having a Masters Degree. That is not necessarily the case. Creating the three dummy coded variables allows High School Diploma/GED to be the baseline, which is consistent with Head Start expectations that all staff have a minimum of a high school education or equivalent. Then Edu1 measures the difference between an AA and HS/GED. Edu2 measures the difference between BA and HS/GED. Edu3 measures the difference between MA and HS/GED. This allows us to determine the actual effect of each degree, rather than an assumption of equivalence between each level of education.
Table 3.3 Dummy Coding of Education Variable

<table>
<thead>
<tr>
<th></th>
<th>Edu1</th>
<th>Edu2</th>
<th>Edu3</th>
</tr>
</thead>
<tbody>
<tr>
<td>High School/GED</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Associates Degree</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Bachelors Degree</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Masters Degree</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

For training hours, the variable TrainPY was recorded and included the number of hours per year participants reported receiving training. For certificate/credential, the variable Creden23 was recorded. The qualitative responses to question 23 were reviewed and those that reported a credential were scored 1 and those that did not were scored 0.

In collaboration with the CBPR participants, the decision was made to not include those with a Cardio-Pulmonary Resuscitation certification as that is required for all people who work with young children. Other child development and family services credentials, including the Child Development Associate (CDA) and Family Development Credential (FDC) were included. For the experience variable, the decision was made with CBPR participants to record YrsexpHS, which includes the number of years the participant reported being in Head Start, regardless of position. For Head Start parent status, the responses from participants that they were currently a Head Start parent or had ever been a Head Start parent were recorded as 0, and those that had not were recorded as 1 in the variable HSParent.

Outcome variables of family service utilization and family service provision were computed according to the designations from the CBPR participants. Family Service Utilization was computed for each Head Start program in Virginia by adding up the fifteen services identified in question C46 of the 2013 – 2014 Program Information Report (PIR). This number was then divided by the number of families served by that
program, question C35. Family Service Provision was computed for each Head Start program in Virginia by dividing the number of families that received at least one service, question C47, by the number of families served, question C35. See Table 3.4 for a complete list of the programs and indexed outcome variables.

<table>
<thead>
<tr>
<th>HS Program</th>
<th>Total Number Families C35</th>
<th>Family Services Provided C46</th>
<th>Family Service Utilization C46/C35</th>
<th>Families that received at least one service C47</th>
<th>Family Service Provision C47/C35</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>491</td>
<td>3061</td>
<td>6.23</td>
<td>491</td>
<td>1.00</td>
</tr>
<tr>
<td>2</td>
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<td>456</td>
<td>2.05</td>
<td>220</td>
<td>0.99</td>
</tr>
<tr>
<td>3</td>
<td>210</td>
<td>347</td>
<td>1.65</td>
<td>71</td>
<td>0.34</td>
</tr>
<tr>
<td>6</td>
<td>217</td>
<td>431</td>
<td>1.99</td>
<td>173</td>
<td>0.80</td>
</tr>
<tr>
<td>10</td>
<td>408</td>
<td>747</td>
<td>1.83</td>
<td>346</td>
<td>0.85</td>
</tr>
<tr>
<td>13</td>
<td>167</td>
<td>147</td>
<td>0.88</td>
<td>78</td>
<td>0.47</td>
</tr>
<tr>
<td>18</td>
<td>1225</td>
<td>1534</td>
<td>1.25</td>
<td>551</td>
<td>0.45</td>
</tr>
<tr>
<td>19</td>
<td>502</td>
<td>265</td>
<td>0.53</td>
<td>131</td>
<td>0.26</td>
</tr>
<tr>
<td>21</td>
<td>123</td>
<td>337</td>
<td>2.74</td>
<td>100</td>
<td>0.81</td>
</tr>
<tr>
<td>22</td>
<td>137</td>
<td>324</td>
<td>2.37</td>
<td>135</td>
<td>0.99</td>
</tr>
<tr>
<td>27</td>
<td>488</td>
<td>537</td>
<td>1.10</td>
<td>488</td>
<td>1.00</td>
</tr>
<tr>
<td>29</td>
<td>280</td>
<td>794</td>
<td>2.84</td>
<td>270</td>
<td>0.96</td>
</tr>
<tr>
<td>30</td>
<td>234</td>
<td>862</td>
<td>3.68</td>
<td>231</td>
<td>0.99</td>
</tr>
<tr>
<td>31</td>
<td>172</td>
<td>442</td>
<td>2.60</td>
<td>170</td>
<td>0.99</td>
</tr>
<tr>
<td>33</td>
<td>122</td>
<td>373</td>
<td>3.06</td>
<td>107</td>
<td>0.88</td>
</tr>
<tr>
<td>38</td>
<td>103</td>
<td>829</td>
<td>8.05</td>
<td>103</td>
<td>1.00</td>
</tr>
<tr>
<td>39</td>
<td>139</td>
<td>345</td>
<td>2.48</td>
<td>139</td>
<td>1.00</td>
</tr>
<tr>
<td>41</td>
<td>126</td>
<td>204</td>
<td>1.61</td>
<td>85</td>
<td>0.67</td>
</tr>
<tr>
<td>42</td>
<td>214</td>
<td>215</td>
<td>1.00</td>
<td>131</td>
<td>0.61</td>
</tr>
</tbody>
</table>

As mentioned above, for the quantitative analysis, descriptive analysis was conducted to provide information about the sample and examine assumptions for the multivariate analysis. The simple bivariate correlations of the predictor variables with each other and with the outcome variables were examined. Histograms of the continuous predictor variables were examined for normality of distribution. The two outcome variables are measured on a continuous scale. Family Service Utilization has a range of 0.53 to 8.05. Family Service Provision has a possible range of 0 to 1 with good
variability in results. There are seven predictor variables, when including the three variables developed from the level of education. Some of the variables are categorical and some are continuous informing multiple regression as the most appropriate quantitative analysis technique.

Two different primary multiple regression analyses were conducted to determine if there was a model of the independent variables that statistically significantly and sufficiently predicted family service utilization and family service provision. The analyses determined the unique contributions of each of the predictor variables to explaining variance in the two family outcomes variables. Multiple follow-up multivariate analyses were conducted to determine the most parsimonious models for predicting family service utilization and family service provision. The analysis also explored potential statistically significant interaction between predictor variables.

Figure 3.2 pictures the convergent mixed methods design including CBPR research methods. This diagram demonstrates that the survey instrument was developed in collaboration with CBPR participants and both the qualitative and quantitative data was collected at the same time. Quantitative and qualitative data analysis was conducted and the results were considered together for interpretation and discussion. The CBPR participants again participated in the interpretation of the results and the discussion of implications of the study.
Figure 3.2 A Convergent Mixed Methods Design of Community-based Participatory Research on Family Service Workers Qualities
Chapter IV: Results

The research data in this chapter provides information about the qualities of a sample of Head Start Family Service Workers (FSWs) in Virginia and the relationship of these qualities to family service utilization and family service provision. This chapter discusses the nature and significance of these relationships as evidenced by quantitative analysis. This chapter also discusses themes that emerged during the analysis of qualitative responses. The research questions guiding this study are to examine the joint effects of family service worker education/degree, training hours, certificate/credentials, experience, and Head Start parent status upon family service utilization and family service provision and to what extent does the qualitative data confirm the quantitative data or give context to the results. This section begins with the descriptive analysis, followed by the quantitative analysis, then followed by the qualitative content and integration of the qualitative and quantitative content. The implications and conclusions we can draw from these results are discussed in Chapter Five.

Sixty five surveys were turned in to the researcher, with 50 completed surveys from family services staff. The surveys that were not usable were either from Health Services staff or did not include the program the participant came from, making it impossible to pair the collected data with the family outcomes information. The quantitative data was entered into SPSS version 22 for analysis. The qualitative data was entered into a word document for analysis and then word cloud programs were used to visually represent the qualitative data for content analysis. Some of the qualitative data regarding credentials was transformed into quantitative data – Credential, Yes or No, for the purpose of further analysis.
The following descriptive information is of the sample of 50 family services providers in Head Start programs in Virginia. Of the 50 participants, 37 are Family Service Workers with caseloads, ten are Family Service Coordinators without caseloads and three are Family Service Coordinators with caseloads. All worked full-time at either 37.5 or 40 hours per week. Nine are currently enrolled in an educational program and seven have a second job. Table 4.1 below shows the demographics of the participants with respect to their parenting status. 80% of the participants reported being parents, with 35% of those, or 28% of the total sample reporting they were at some point a Head Start parent. Of these, 86% were first a Head Start parent before becoming a Head Start employee.

Table 4.1 Participant Parent Status

<table>
<thead>
<tr>
<th></th>
<th>Parent</th>
<th>Ever a HS Parent</th>
<th>Current HS Parent</th>
<th>HS Parent before Employee</th>
<th>Single Parent</th>
<th>Raising Grandchild</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raw number</td>
<td>40</td>
<td>14</td>
<td>3</td>
<td>12</td>
<td>15</td>
<td>2</td>
</tr>
<tr>
<td>Percent (of parents)</td>
<td>80% (40/50)</td>
<td>35% (14/40)</td>
<td>7.5% (3/40)</td>
<td>30% (12/40)</td>
<td>37.5% (15/40)</td>
<td>5% (2/40)</td>
</tr>
</tbody>
</table>

Table 4.2 includes demographics and descriptions of the participants with respect to the other four identified predictor variables, experience, training, education and credential. Seventeen participants had a non-degree credential. As mentioned previously, this was determined by using the qualitative responses where participants listed their credentials. Those credentials that did not include First Aid or Cardio-Pulmonary Resuscitation (CPR) were classified as Yes and those that listed no credential or just CPR/First Aid were classified No. One participant responded “too many to list” which was classified as No because it could not be determined which credential the participant had. 80% of participants reported they had a postsecondary degree. The
average number of training hours per year was 39 and number of years’ experience in Head Start ranged from half a year to 35 and a half years, with an average of ten years.

The average caseload was 53 families per worker, from a broad range of seventeen to 122.

Table 4.2 Participant Experience, Training, Education and Credential Status

<table>
<thead>
<tr>
<th></th>
<th>Age</th>
<th>Caseload</th>
<th>Years HS experience</th>
<th>Years FSW experience</th>
<th>Training hours per year</th>
<th>Education Level</th>
<th>Credential</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average (Mean)</td>
<td>39</td>
<td></td>
<td>10</td>
<td>8</td>
<td>39</td>
<td>3 years post-secondary</td>
<td>34%</td>
</tr>
<tr>
<td>Range</td>
<td>6</td>
<td>18–29</td>
<td>0.5 – 35.5</td>
<td>0 - 35</td>
<td>10 - 180</td>
<td>10 HS/GED</td>
<td>6 CDA</td>
</tr>
<tr>
<td></td>
<td>8</td>
<td>30–39</td>
<td>11 AA</td>
<td>10 HS/GED</td>
<td>2 FDA/C</td>
<td>2 FDA/C</td>
<td>2 FDA+</td>
</tr>
<tr>
<td></td>
<td>15</td>
<td>40–49</td>
<td>21 BA</td>
<td>2 FDA/C</td>
<td>CDA</td>
<td>CDA</td>
<td>CDA</td>
</tr>
<tr>
<td></td>
<td>14</td>
<td>50–59</td>
<td>8 MA</td>
<td>7 Other</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>60+</td>
<td>20 MA</td>
<td>7 Other</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Quantitative Analysis

Complete data were available for 50 participants. Basic descriptive statistics of the predictor and outcome variables are shown in Table 4.3. For the values HS parent status, those determined to be Yes were coded 0 and those that were determined to be No were coded 1. For the values for Credential, those that were determined to be Yes were coded 1 and those that answered No were coded 0. These classifications created a numerical representation of a categorical variable for statistical analysis. For education/degree, the variable LevelEd was recorded and then dummy coded to create three sub-variables, edu1, edu2 and edu3. Dummy coding is detailed in Table 3.3. Creating the three dummy coded variables allows High School Diploma/GED to be the baseline, which is consistent with Head Start expectations that all staff have a minimum of a high school education or equivalent. Then Edu1 measures the difference between an AA and HS/GED. Edu2 measures the difference between BA and HS/GED. Edu3
measures the difference between MA and HS/GED. This allows us to determine the actual effect of the degree, rather than an assumption of equivalence. The means and standard deviations reported in Table 4.3 are representative of the coded answers.

Table 4.3 Descriptive Statistics

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Years experience HS</td>
<td>50</td>
<td>0.5</td>
<td>36.0</td>
<td>10.110</td>
<td>9.0567</td>
</tr>
<tr>
<td>Training hours</td>
<td>44</td>
<td>10</td>
<td>180</td>
<td>39.48</td>
<td>33.531</td>
</tr>
<tr>
<td>Edu1 (HS to AA)</td>
<td>50</td>
<td>0</td>
<td>1</td>
<td>0.22</td>
<td>0.419</td>
</tr>
<tr>
<td>Edu2 (HS to BA)</td>
<td>50</td>
<td>0</td>
<td>1</td>
<td>0.42</td>
<td>0.499</td>
</tr>
<tr>
<td>Edu3 (HS to MA)</td>
<td>50</td>
<td>0</td>
<td>1</td>
<td>0.16</td>
<td>0.371</td>
</tr>
<tr>
<td>HS parent status</td>
<td>44</td>
<td>Yes/No</td>
<td>Yes/No</td>
<td>0.75</td>
<td>0.43802</td>
</tr>
<tr>
<td>Credential</td>
<td>50</td>
<td>Yes/No</td>
<td>Yes/No</td>
<td>0.34</td>
<td>0.479</td>
</tr>
<tr>
<td>Family Service Utilization</td>
<td>50</td>
<td>0.53</td>
<td>8.05</td>
<td>2.6056</td>
<td>1.6653</td>
</tr>
<tr>
<td>Family Service Provision</td>
<td>50</td>
<td>.26</td>
<td>1.00</td>
<td>0.8066</td>
<td>0.24845</td>
</tr>
</tbody>
</table>

In Table 4.4, the simple bivariate correlations matrix is included. This data represents the univariate relationships between each of the individual predictor and/or outcome variable with each other. These demonstrate that there are low correlations among each of the predictor variables. It is less parsimonious for predictor variables to be correlated when utilizing multiple regression analysis techniques. From Table 4.4, it is evident that all of the predictor variables have low correlation with each other and with the outcome variables, or \( r < 0.5 \). Many of the variables have little, if any correlations with \( r < 0.3 \). The predictors are generally uncorrelated with the Family Services Utilization, with the exception of Edu1, which is moderately correlated at \( r = 0.500, p = 0.000 \). There are three significant correlations with Family Services Provision, years experience, Head Start parent status and credential. From this correlational analysis, we can generally expect that there will be a relationship between the predictors and Family Service Provision, but not Family Service Utilization, when taken together as a set.
Family Service Provision and Family Service Utilization are moderately correlated
$r = .618, p = .000$, which tells us these outcome variables may partially be representing the same construct. This is not surprising as the same question response from the Program Information Report, number of families served, was used as the denominator when computing the index for each variable.

Table 4.4 Bivariate Correlation Matrix

<table>
<thead>
<tr>
<th>Variable</th>
<th>Statistic</th>
<th>Years exper. in HS</th>
<th>Training hours per year</th>
<th>HS parent status</th>
<th>Credential</th>
<th>Edu1</th>
<th>Edu2</th>
<th>Edu3</th>
<th>Family Service Util.</th>
<th>Family Service Prov.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Years exper. In HS</td>
<td>Pearson</td>
<td>.154</td>
<td>.319</td>
<td>-.248</td>
<td>-.231</td>
<td>-.373</td>
<td>-.231</td>
<td>-.373</td>
<td>-.231</td>
<td>-.231</td>
</tr>
<tr>
<td></td>
<td>Sig. N</td>
<td>.50</td>
<td>.44</td>
<td>.44</td>
<td>.50</td>
<td>.50</td>
<td>.50</td>
<td>.50</td>
<td>.50</td>
<td>.50</td>
</tr>
<tr>
<td>Training hours per year</td>
<td>Pearson</td>
<td>.105</td>
<td>.30</td>
<td>-348*</td>
<td>-348*</td>
<td>-348*</td>
<td>-348*</td>
<td>-348*</td>
<td>-348*</td>
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</tr>
<tr>
<td></td>
<td>Sig. N</td>
<td>.44</td>
<td>.39</td>
<td>.44</td>
<td>.44</td>
<td>.44</td>
<td>.44</td>
<td>.44</td>
<td>.44</td>
<td>.44</td>
</tr>
<tr>
<td>HS parent status</td>
<td>Pearson</td>
<td>-.169</td>
<td>.273</td>
<td>.030</td>
<td>-.133</td>
<td>-.133</td>
<td>-.133</td>
<td>-.133</td>
<td>-.133</td>
<td>-.133</td>
</tr>
<tr>
<td></td>
<td>Sig. N</td>
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<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Credential</td>
<td>Pearson</td>
<td>.209</td>
<td>.172</td>
<td>.273</td>
<td>.163</td>
<td>.096</td>
<td>.259</td>
<td>.259</td>
<td>.259</td>
<td>.259</td>
</tr>
<tr>
<td></td>
<td>Sig. N</td>
<td>.50</td>
<td>.44</td>
<td>.44</td>
<td>.50</td>
<td>.50</td>
<td>.50</td>
<td>.50</td>
<td>.50</td>
<td>.50</td>
</tr>
<tr>
<td>Edu1</td>
<td>Pearson</td>
<td>.009</td>
<td>.172</td>
<td>.273</td>
<td>.030</td>
<td>.055</td>
<td>.731</td>
<td>.731</td>
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<td>.452**</td>
</tr>
<tr>
<td></td>
<td>Sig. N</td>
<td>.50</td>
<td>.44</td>
<td>.44</td>
<td>.50</td>
<td>.50</td>
<td>.50</td>
<td>.50</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Edu2</td>
<td>Pearson</td>
<td>-.232</td>
<td>-.371**</td>
<td>1</td>
<td>-.232</td>
<td>-.232</td>
<td>-.232</td>
<td>-.232</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Sig. N</td>
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<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Edu3</td>
<td>Pearson</td>
<td>-.231</td>
<td>-.269</td>
<td>.373*</td>
<td>-.372**</td>
<td>.372**</td>
<td>.372**</td>
<td>.372**</td>
<td>-.231</td>
<td>-.231</td>
</tr>
<tr>
<td></td>
<td>Sig. N</td>
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<td>.50</td>
<td>.50</td>
<td>.50</td>
<td>.50</td>
<td>.50</td>
</tr>
<tr>
<td>Family Service Utilization</td>
<td>Pearson</td>
<td>.106</td>
<td>.178</td>
<td>.436</td>
<td>.416</td>
<td>.416</td>
<td>.416</td>
<td>.416</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>Sig. N</td>
<td>.50</td>
<td>.44</td>
<td>.44</td>
<td>.50</td>
<td>.50</td>
<td>.50</td>
<td>.50</td>
<td>.50</td>
<td>.50</td>
</tr>
<tr>
<td>Family Service Provision</td>
<td>Pearson</td>
<td>.008</td>
<td>.077</td>
<td>.013</td>
<td>.008</td>
<td>.008</td>
<td>.008</td>
<td>.008</td>
<td>.351</td>
<td>.351</td>
</tr>
<tr>
<td></td>
<td>Sig. N</td>
<td>.50</td>
<td>.44</td>
<td>.44</td>
<td>.50</td>
<td>.50</td>
<td>.50</td>
<td>.50</td>
<td>.618**</td>
<td>.618**</td>
</tr>
</tbody>
</table>

** Correlation is significant at the 0.01 level
* Correlation is significant at the 0.05 level

Each of the continuous predictor variables: years experience in Head Start, training hours per year and level of education were found to be roughly normally distributed. Multiple regression is robust to some deviations from normality, so it is
appropriate to proceed. The sample size is 50, which is large enough to conduct the
analysis, but with seven predictor variables, 250 participants would be ideal. This may
contribute to some weaknesses in the study when all of the variables are put into the
model together as a set. This smaller sample size provides even more support for
identifying the most parsimonious models of relationship between predictor variables and
outcome variables as the most parsimonious model will have the most statistical power.

**Family Service Utilization**

Family service utilization is the outcome variable representing a Head Start
programs ability to ensure that families received appropriate and comprehensive services.
Family Service Utilization was computed for each Head Start program in Virginia by
adding up the fifteen services identified in question C46 of the 2013 – 2014 Program
Information Report (PIR). This number was then divided by the number of families
served by that program, question C35, rendering an index outcome variable named family
service utilization.

The first of two multiple regression analyses were conducted to examine if level
of education broken out into Edu1, Edu2 and Edu3, training hours, certificate/credential,
experience in Head Start and Head Start parent status combined together as a set could
explain a significant amount variance in family service utilization. It was determined that
the model including these seven variables does not predict a statistically significant
portion of the variance in family service utilization $F(7,31) = 2.24, p = .057$. There were
several predictor variables in the model that were nowhere near significance and at least
one predictor variable that was approaching significance. In order to be sure that the poor
predictors were not obscuring the value of possible strong predictors, a follow-up
multiple regression analysis was conducted removing the worst of the seven predictors, Edu3 $b=-.036$, $t(31) = -.037$, $p=.971$, to analyze a six variable model.

The first follow-up multiple regression analysis was conducted to see if the six variable model including level of education broken out into Edu1 and Edu2, training hours, certificate/credential, experience in Head Start and Head Start parent status together as a set could explain a significant amount of variance in family service utilization. It was determined that the model including these six variables can statistically significantly explain 33.6% of the variance of family service utilization $F(6,32) = 2.703$, $p=.031$, $R^2 = .336$. When these six variables are included in the model, the only variable that is statistically significant on its own is Edu1. Edu1 uniquely explains 12.3% of the variance of family service utilization when the presence of the other variables $b=1.514$, $t(32) = 2.435$, $p=.021$, squared semi-partial $=.123$.

To continue the attempt at finding the most parsimonious model that explains a statistically and practically significant portion of the variance of family service utilization, a second follow-up multiple regression was run after removing the most insignificant variable from the six variable model, Edu2 which is the significance of having a Bachelors Degree $b=-.231$, $t(32) = -.413$, $p=.682$. Therefore, the second follow-up multiple regression analysis was conducted to see if the five variable model including Edu1, training hours, certificate/credential, experience in Head Start and Head Start parent status together as a set could explain a significant portion of the variance of family service utilization. It was determined that the model including these five variables can statistically significantly explain 33.3% of the variance of family service utilization $F(5,33) = 3.292$, $p=.016$, $R^2 = .333$. These results are also statistically and practically
significant and with a higher $F$ value than the six variable model, is indicative of a larger effect size in the model. When these five variables are included in the model, Edu1 $b=.1.656$, $t(33)=3.321$, $p=.003$, squared semi-partial = .210, remains the only statistically significant predictor.

In pursuit of the most parsimonious model that explains a statistically and practically significant portion of the variance of family service utilization, a third follow-up multiple regression was run after removing the most insignificant variable from the five variable model, Head Start parent status $b=-.241$, $t(33)=-.448$, $p=.657$. Therefore, the third follow-up multiple regression analysis was conducted to see if the four variable model including Edu1, training hours, certificate/credential and experience in Head Start together as a set could explain a significant portion of the variance of family service utilization. It was determined that the model including these four variables can statistically significantly explain 33.7% of the variance of family service utilization, $F(4,39)=4.949$, $p=.003$, $R^2 = .337$. Again, the variance explained is practically significant as well as statistically significant and the increased $F$ value demonstrates larger effect size. When these four variables are included in the model, again only Edu1 $b=1.668$, $t(39)=3.488$, $p=.001$, squared semi-partial = .207, remains a statistically significant predictor.

In order to continue the determine the most parsimonious model for predicting family service utilization from family service worker qualities, the worst predictor from the four predictor model, years experience in Head Start $b=-.014$, $t(39)=-.574$, $p=.569$ was removed. A fourth multiple regression analysis was conducted to determine if a three predictor model including Edu1, training hours and certificate/credential together as
a set could explain a statistically significant portion of the variance of family service utilization. It was determined that the three predictor model statistically significantly explains 33.1% of the variance of family service utilization, $F(3,40)=6.599, p=.001$, $R^2=.331$. Again, the model is significant and the only individually statistically significant predictor is Edu1 $b=1.711, t(40)=3.653, p=.001$.

In order to see if this in fact is a multivariate equation, and not entirely reliant on Edu1 as a predictor, the worst predictor from the three variable model was removed, training hours per year $b=-.008, t(40)=-1.292, p=.204$. A fifth multiple regression analysis was conducted to see if a two predictor model including Edu1 and certificate/credential together as a set could explain a statistically significant portion of the variance of family service utilization. It was determined that the two predictor model could explain 25.7% of the variance of family service utilization $F(2,47)=8.115, p=.000$, $R^2=.257$. In this model, Edu1 remains the only significant predictor variable $b=1.967, t(40)=3.919, p=.000$, squared semi partial =.243. From this analysis, we can determine that this is a univariate research question. Regardless of the presence of other variables, Edu1, or having an Associates Degree, explains 25% of the variance of Family Service Utilization. The details of this univariate analysis are found in Table 4.5.

<table>
<thead>
<tr>
<th>Table 4.5 Univariate Model</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Parsimonious Model Univariate</strong></td>
</tr>
<tr>
<td>Edu1 (AA Degree)</td>
</tr>
</tbody>
</table>

Outcome Variable: Family Service Utilization

Based on the fact that the CBPR participants were interested in the relationship between caseload and the outcome variables, a preliminary univariate regression analysis was conducted to determine if there was a relationship between caseload and family
service utilization. It was determined that there was not a significant relationship between the two variables $F(1, 48) = .500, R^2 = .01, p = .483$.

**Family Service Provision**

Family service provision is the outcome variable representing a Head Start programs ability to ensure that families receive at least one family service throughout their year in Head Start. Family Service Provision was computed for each Head Start program in Virginia from the information in the 2013 – 2014 Program Information Report (PIR) by dividing the number of families that received at least one service, question C47, by the number of families served, question C35, rendering an index outcome variable named family service provision on a scale of 0 to 1.

The second multiple regression analysis was conducted to determine if level of education broken out into Edu1, Edu2 and Edu3, training hours, certificate/credential, experience in Head Start and Head Start parent status combined together as a set could explain a significant amount of variance in family service provision. It was determined that the model including these seven variables can statistically significantly explain 41.7% of the variance in family service provision $F(7, 31) = 3.164, p = .012, R^2 = .417$. In the social science field, this is a substantial finding with practical significance. It means that by knowing the values for these FSW qualities variables, we can make some predictions about the family service provision experience of the families served. When all of these variables are included in the model, the only variable that is statistically significant on its own is Edu1, which is the significance of having an Associates degree. Edu1 uniquely explains 8.1 % of the variance of family service provision when in the
presence of the other variables, $b=.237$, $t(33) = 2.077$, $p=.046$, squared semi-partial = .081.

In order to find the most parsimonious model that explain a statistically and practically significant portion of the variance of family service provision, a follow-up multiple regression was run after removing the most insignificant variable from the model, training hours per year $b=.000$, $t(33) = -.232$, $p=.818$. Therefore, the first follow-up multiple regression analysis was conducted to see if the six variable model including level of education broken out into Edu1, Edu2 and Edu3, certificate/credential, experience in Head Start and Head Start parent status together as a set could explain a significant amount of variance in family service provision. It was determined that the model including these six variables can statistically significantly explain 36.8% of the variance of family service provision $F(6,34) = 3.587$, $p=.007$, $R^2 = .368$. These results are still practically significant and with a higher $F$ value, are indicative of greater statistical power to the study. When these six variables are included in the model, the only variable that is statistically significant on its own is Head Start parent status. Head Start parent status uniquely explains 7.1% of the variance of family service provision when in the presence of the other variables $b=.150$, $t(34) = 2.034$, $p=.049$, squared semi-partial = .071. In this six variable model, Edu1 approaches significance $p=.053$.

To continue the attempt at finding the most parsimonious model that explains a statistically and practically significant portion of the variance of family service provision, a second follow-up multiple regression was run after removing the most insignificant variable from the six variable model, Edu3 which is the significance of having a Masters Degree $b=.053$, $t(34) = .420$, $p=.677$. Therefore, the second follow-up multiple
regression analysis was conducted to see if the five variable model including level of education broken out into Edu1 and Edu2, certificate/credential, experience in Head Start and Head Start parent status together as a set could explain a significant portion of the variance of family service provision. It was determined that the model including these five variables can statistically significantly explain 36.5% of the variance of family service provision $F(5,38) = 4.363, p=.003, R^2 = .365$. These results are also statistically and practically significant and with a higher $F$ value than the six variable model, is indicative of a larger effect size in the model. When these five variables are included in the model, both Head Start parent status $b=.156, t(38)=2.179, p=.036$, squared semi-partial = .080 and Edu1 $b=.182, t(38)=2.219, p=.032$, squared semi-partial = .082, are statistically significant predictors.

In pursuit of the most parsimonious model that explains a statistically and practically significant portion of the variance of family service provision, a third follow-up multiple regression was run after removing the most insignificant variable from the five variable model, Credential $b=-.069, t(38)=-1.012, p=.318$. Therefore, the third follow-up multiple regression analysis was conducted to see if the four variable model including level of education broken out into Edu1 and Edu2, experience in Head Start and Head Start parent status together as a set could explain a significant portion of the variance of family service provision. It was determined that the model including these four variables can statistically significantly explain 34.8% of the variance of family service provision, $F(4,39)=5.194, p=.002, R^2 = .348$. Again, the variance explained is practically significant as well as statistically significant and the increased $F$ value demonstrates larger effect size. When these four variables are included in the model
Head Start parent status $b=.165$, $t(39)=2.315$, $p=.026$, squared semi-partial $= .089$ and Edu1 $b=.192$, $t(39)=2.350$, $p=.024$, squared semi-partial $= .092$, both statistically significantly and uniquely predict a portion of the variance of family service provision.

In attempt to find the most parsimonious model that explains a statistically and practically significant portion of the variance of family service provision, a fourth follow-up multiple regression was run after removing the most insignificant variable from the four variable model, years experience in Head Start $b=-.007$, $t(39)=-1.677$, $p=.102$. Therefore, the fourth follow-up multiple regression analysis was conducted to see if the three variable model including level of education broken out into Edu1 and Edu2 and Head Start parent status together as a set could explain a significant portion of the variance of family service utilization. It was determined that the model including these three variables can statistically significantly explain 30.1% of the variance of family service provision, $F(3,40)=5.729$, $p=.002$, $R^2=.301$. All three of the variables are statistically significant predictors and over thirty percent of the variance of family service utilization can be explained by this model.

The next step was to conduct a multiple regression analysis to determine whether the model that included years experience in Head Start predicted statistically significantly more variance in family service provision above and beyond the model with just Edu1, Edu2 and Head Start parent status. The purpose of this level of analysis is to determine which statistically significant model is stronger, regardless of whether the individual predictors were significant. It was anticipated that the four predictor model did not predict statistically significantly above and beyond the three predictor model because years experience was not a statistically significant predictor in the four variable model,
but I ran the analysis to be sure. It was determined that the four variable model did not predict statistically significantly more variance above and beyond the three predictor model as the F change from the three predictor to the four predictor was not significant, \( R^2_{\text{change}} = .047, F_{\text{change}}(1,39) = 2.811, p = .102 \). Therefore, the multivariate regression equation to predict Family Service Provision from AA Degree, BA Degree and Head Start Parent Status is: 
\[
\text{FSProv} = .549 + .195(\text{HSParent}) + .228(\text{Edu1}) + .163(\text{Edu2}).
\]

Please refer to Table 4.6 as the best model of these available variables for predicting family service provision from family service worker qualities. The individual contributions of each of the variables in the presence of the entire set of variables, along with their unique contributions to variance of family service provision explained, are detailed in Table 4.7.

Table 4.6 Multiple Regression Model

<table>
<thead>
<tr>
<th>Parsimonious Model</th>
<th>R</th>
<th>R square</th>
<th>F</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Head Start Parent Status, Edu1 (AA), Edu2 (BA)</td>
<td>.548</td>
<td>.301</td>
<td>5.729</td>
<td>.002</td>
</tr>
</tbody>
</table>

Outcome variable: Family Service Provision

Table 4.7 Individual Contributions of Variables in Multivariate Model

<table>
<thead>
<tr>
<th>Variable</th>
<th>Regression Coefficient b</th>
<th>Confidence Interval for b</th>
<th>t-test (40)</th>
<th>Significance</th>
<th>Squared semi-partial</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSParent</td>
<td>.195</td>
<td>.053 - .338</td>
<td>2.772</td>
<td>.008</td>
<td>.135</td>
</tr>
<tr>
<td>Edu1</td>
<td>.228</td>
<td>.066 - .391</td>
<td>2.844</td>
<td>.007</td>
<td>.141</td>
</tr>
<tr>
<td>Edu2</td>
<td>.163</td>
<td>.020 - .306</td>
<td>2.309</td>
<td>.026</td>
<td>.093</td>
</tr>
</tbody>
</table>

Outcome variable: Family Service Provision

Once the most parsimonious model was determined and I could examine the main effects of AA degree, BA degree and Head Start parent status, an additional level of analysis was conducted to determine if there were any interaction effects among these variables. Interaction effects are when the variance explained by one variable is modified or depends on another variable. Two new variables were computed to determine if family service provision could be statistically significantly predicted by the effect of
Head Start parent status and AA degree, and Head Start parent status and BA degree. Neither of the models that included the interaction predicted a statistically significant portion of the variance of family service provision above and beyond the three variable model.

Based on the fact that the CBPR participants were interested in the relationship between caseload and the outcome variables, a preliminary univariate regression analysis was conducted to determine if there was a relationship between caseload and family service provision. It was determined that there was not a significant relationship between the two variables $F(1,48)=3.207, R^2=.063, p=.008$. This relationship approaches significance and warrants enough attention to recommend the continued inclusion of this question in the survey instrument for future research.

**Qualitative Analysis**

Complete qualitative data from the fifty complete surveys were entered into a word document for organization and further analysis. Some of the data was reviewed and entered into SPSS in order to process Credential as a quantitative variable. The remaining data was analyzed to identify frequent themes, themes important to the CBPR participants, uniqueness and unexpectedness (Guba & Lincoln, 1981). In accordance with Brantmeier and Bodle (2015), the qualitative responses were first entered into a word cloud program to assess frequency themes. The word clouds also served as a conversation starter about qualitative analysis with the Community-Based Participatory Research participants. This technique is an emerging tool for content analysis (Cidell, 2010, McNaught & Lam, 2010) and allows the CBPR participants to connect with the visualized data (Kistler, Evergreen & Azzam, 2013). Results are shown below.
The first word cloud is of the responses to question ten which reads: Do you find your position rewarding? How so or why not? This question was important to the CBPR participants to be included because they thought finding a position rewarding or not might contribute to the ways families receive services. Interestingly, 100% of the participants responded in the affirmative, that they found their position rewarding. These responses identified a theme unique to Head Start and possibly unique to FSWs. Some of the most frequently appearing words are families/family, help/helping, children, working, parent, enjoy, goals, relationships, lives and love. While these responses don’t necessarily contribute to the research question about FSW qualities, they are interesting and may influence future research. Figure 4.1 is the word cloud representation of the responses.

Figure 4.1 Word Cloud of Do you find your position rewarding?
The responses to question eleven which reads: What has your career progress within Head Start been? are included in the world cloud in Figure 4.2 The CBPR participants thought that having positions throughout Head Start also might affect the ways in which FSWs provide services to families. Twenty-eight respondents identified a clear career ladder where they started in a less or equally professional position within the organization and then moved up or over to their current position in family services. The positions included volunteer, parent, substitute, bus driver, teacher, teacher assistant and others. Five participants started out as a Teacher Assistant, nine started out as a volunteer or intern, fifteen began as a FSW, three started out as administrative assistant/secretary and two began as family educators/home visitors. There was great diversity in the responses to this question.

Figure 4.2 World Cloud of What has your career progress within Head Start been?

Question seventeen asks participants if they have considered pursuing other career options within Head Start. Question eighteen asks the same question, but outside of Head
start. For participants that answer yes to either of these questions, they are asked to qualitatively indicate what options they are considering. Twenty-five participants indicated that they are not considering career changes, either within Head Start or outside of Head Start. Of the remaining twenty-five participants, many are considering management positions within Head Start, while others are considering positions with Social Services, Military Family Services, Public School and in Counseling. The word clouds for career options within Head Start are reflected in Figure 4.3 and the responses for career options outside of Head Start are included in Figure 4.4.

Figure 4.3 Word Cloud of Career options within Head Start
When these data are grouped and coded to include the topics Head Start management, education, counseling, government, training and unsure, the most frequently reported career path is in Head Start management. These codes were reviewed with the CBPR participants to ensure appropriate triangulation and analysis of the information, with which they are in agreement.

Questions twenty, twenty-one and twenty-two are all related to training. They ask participants about the best topics they have been trained on, where they get their training and how it benefits their work. Many participants identified popular training topics, which are represented in the word cloud in Figure 4.5. When coded and reviewed with the CBPR participants, the most common themes of training were Family services (19), Behaviors (8), Poverty/Abuse (7), Administrative (6), Health/Mental Health (6), Child Development/Education (5) and Fathers (3). Participants frequently mentioned the Virginia Head Start Association or Conferences as places where they get their training.
Interestingly, participants seemed to make a distinction between training and education as college courses were not ever mentioned as a source of training. Several participants mentioned virtual learning in the form of online courses, general websites and Early Childhood Learning and Knowledge Center (ECLKC) the Head Start website. Many benefits to training were noted, with an emergent theme of increasing knowledge to provide better services to families. Word clouds for each of these questions are included in Figures 4.5, 4.6, and 4.7.

Figure 4.5 Word Cloud of Best Training Topics
In questions twenty-four, participants were asked to check which level of education they received – from High School/ GED, Associates, Bachelors, Masters and
Doctoral degrees. They were then asked to list the type of degree, major and/or minor.

Ten participants have a High School Diploma or GED. Eleven participants reported having a credential. Of those, nine had a credential of either Child Development Associate (CDA) or Family Development Credential (FDC). Eleven participants had an Associates Degree in the areas of in Human Services, Early Childhood Education, Education, Business Administration and Natural Resources. Twenty-one participants had a Bachelors degree in the areas of in Social Work (6), Psychology, Business Administration, Liberal Studies, Business Management, Human Services Counseling, Spanish, American Studies and, Criminal Justice. Eight participants reported Masters degrees in the areas of Human Services, Social Work, Business Administration, Public Administration, Community Counseling, Applied Linguistics and Education. The responses to the qualitative portion are included below in Figure 4.8.

Figure 4.8 Word Cloud of Types of degrees
Qualitative data was collected on participants pursuing degrees and their motivations for doing so. There were ten participants engaged in educational pursuits, only eight of which detailed their motivations for doing so. Therefore, due to the limited number of response and interest in focusing on qualitative data more closely related to the research question, the responses to these questions were not analyzed. It is noted, though that the lack of advanced educational pursuits was an unexpected theme of the qualitative responses.

Questions twenty-nine and thirty ask participants to identify their socioeconomic status growing up and their current socioeconomic status. In the development of the instrument, CBPR participants felt this information might be very useful as there might be a relationship between people who have experienced poverty or economic challenge and the way they approach serving families. Of the fifty participants, six left their socioeconomic status growing up blank and seven left their current socioeconomic status blank. Of the complete responses, fourteen participants reported no change from their status growing up and their current status. Twenty noted an improvement of their socioeconomic status from growing up to current and five reported a decline in their status from growing up to current. Of the forty-three participants, eight identified currently as poor, poverty or lower class while zero identified as upper class. The responses to these questions are represented below in figures 4.9 and 4.10.
Figure 4.9 Word Cloud of Socioeconomic Status Growing Up

Figure 4.10 Word Cloud of Current Socioeconomic Status
Summary

Sixty five surveys were completed and fifty were usable sources of data on FSWs that provided the identifying information about the program they work for so that predictor data could be matched to program outcome data. Thirty-seven respondents are Family Service Workers with caseloads, ten are Family Service Coordinators without caseloads and three are Family Service Coordinators with caseloads. All participants work full-time and 80% report being parents with 28% of the total sample reporting Head Start parent status.

Multiple regression analyses were conducted to determine if a set of predictor variables could predict statistically significant portion of the variance of family service utilization and family service provision. It was determined that having an Associates Degree was the only statistically significant predictor of family service utilization $F(1,48)=16.022, p=.000, R^2=.25$. Having an Associates Degree can exclusively explain 25% of the variance of family service utilization, even in the presence of the other variables. Through these analyses it was also determined that the model including having an Associates Degree or Bachelors Degree and not being a Head Start parent can statistically significantly explain 30.1% of the variance of family service provision, $F(3,40)=5.729, p=.002, R^2=.301$. All three of the variables are statistically significant predictors and over thirty percent of the variance of family service utilization can be explained by this model.

A series of word clouds were used as a tool for content analysis of the qualitative data (Cidell, 2010; McNaught & Lam, 2010; Edyburn, 2010; Kistler, Evergreen &
Azzam, 2013; Brantmeier & Bodle, 2015). It was discovered that 100% of the participants reported that their job was rewarding and gave a variety of reasons why that is so. Fifty-six percent of participants had moved to their current family services position from a less professional or equally professional position within Head Start. Fifty percent of participants are considering career changes either within or outside of Head Start and fifty percent are not. A variety of degree specializations and credentials were identified as possessed by the participants, as well as a number of training topics and benefits to receiving that training. Finally, the current socioeconomic status and socioeconomic status growing up were identified and available for comparison. Of the forth-three participants, eight identified as currently poor, poverty or lower class while zero identified as upper class.

These findings present a picture of family service workers employed in Virginia Head Start programs. Through the Community-Based Participatory Research (CBPR) process, these findings were reviewed, analyzed and discussed. The interpretations of the findings, relevance to leadership and policy, and recommendations are shared in Chapter five.
Chapter V: Discussion

Head Start is a federally funded comprehensive early childhood development program serving low-income children from birth to age five and their families. It has been in existence in the United States since 1965. The term “Head Start” includes services to families of children age three to five and Early Head Start services to families with children prenatal to age three. Head Start provides comprehensive services that include educational, health, nutrition and family services (Administration for Children and Families, 2014). There has been a great deal of research conducted recently on child outcomes and their relationship to teacher qualifications (Barnett, 2004; Fuller, Livas & Bridges, 2006; Kelley & Camilli, 2007; Bassok, 2013; and Sun, Kwon, Jeon & Hong, 2013). These collections of research led to a change in the Improving Head Start for School Readiness Act of 2007 to include early childhood education degree requirements for Head Start Teachers (Administration for Children and Families, 2007). Social science research, particularly within the Head Start community can and should influence policy changes to improve programs on the national level (Peters, 1980; and Zlotnick, Strand & Anderson, 2009).

Family Service Workers (FSWs) are the staff that provide “in-home and other services including assessment, development of service plans, family advocacy and coordination of service delivery” (Head Start Act Section 648A(c), 2007). Requirements for FSW education and experience vary by program and are decided at the local program level. There are general recommendations that staff that provide services to families have education and experience in family services or related field (HSPS, 1999), but there are no specific requirements about education, credential, degree or experience. There are
also provisions in the Head Start Performance Standards that when two candidates are equally qualified for a position, preference shall go to the Head Start parent (HSPS, 1999). Some research that supports this policy is that training indigenous community members for Head Start positions is considered a best practice and consistent with Shared Leadership (Chopra, Banjeree, DiPalma, Merrill & Ferguson, 2013).

The research and discussion of child outcomes and degrees for teachers naturally leads to a discussion of outcomes for Head Start families and potential qualifications for FSWs. The focus of this research study is to explore the qualifications of a sample of FSWs in Virginia and determine the joint effects of family service worker education/degree, training hours, certificate/credentials, experience, and Head Start parent status upon family service utilization and family service provision. This study collected information about family FSWs to determine if the qualities of these FSWs were related to the services received by families. In order to gather this information, a survey instrument was developed and utilized a combination of open-ended and closed-ended questions to gather information about FSWs. The data was entered into the SPSS program and word clouds for analysis. SPSS is a commonly used statistical analysis software and readily available in academic settings. Word clouds are a twenty-first century approach to organizing qualitative data for content analysis and visual representation (Cidell, 2010; McNaught & Lam, 2010).

This study is rooted in a pragmatic paradigm and utilized a modified explanatory sequential mixed-methods design, where qualitative and quantitative data were collected at the same time and then the qualitative methods helped provide context to the quantitative analysis (Creswell, 2014). This process is detailed in Figure 3.1. Separate
multivariate quantitative and qualitative analyses were conducted as well as the analysis of the integrated data. This allowed for a more comprehensive view of the data and added strength to the developed survey instrument (Creswell, 2014). This study utilized Community-Based Participatory Research (CBPR) methods, which are consistent with the pragmatic paradigm and practice-based evidence. CBPR is a collaborative research technique where members of the community being studied take an active role in the development, implementation and analysis of the study (Viswanathan, M. et. al., 2004).

CBPR is based on nine principles which include:

1. recognize the community as a unit of identity;
2. build on the strengths and resources within the community;
3. facilitate a collaborative, equitable partnership in all research phases through an empowering and power-sharing process that attends to social inequalities;
4. foster colearning and capacity building among all partners;
5. integrate and achieve a balance between data generation and intervention for the mutual benefit of all partners;
6. focus on the local relevance of public health problems and on ecological perspectives that attend to multiple determinants of health;
7. involve systems development in a cyclical and iterative process;
8. disseminate results to all partners and involve them in the wider dissemination of results; and
9. involve a long-term process and commitment to sustainability.

(CBPR, as implemented in this research study, supports the validity of the survey instrument and provides for triangulation and member checking (Creswell, 2014) of the data analysis, results and interpretations. Word cloud visualization techniques were an important component of CBPR as participants who were community members without a research background commented on the ease of connecting to complex data. This study employed CBPR in the sense that the Head Start community is defined as a clear community of affiliation (see Appendix A) with great strengths. The research study was conducted in close collaboration with members of the community. Head Start is a
program focused on the elimination of social disparities and is philosophically aligned with this research approach. This approach is also implemented in accordance with Shared Leadership. Both the researcher and the community participants are learners and leaders in this process with a focus on the information which shapes Head Start practices.

The Virginia Head Start Association (VaHSA) allowed the distribution of the survey instrument for this study to participants in their annual conference, Health Institute Bridges to Healthy Families: A Comprehensive Approach November 11 – 13, 2014 in Charlottesville, VA. The group surveyed was a purposeful convenience sample of family service workers (FSWs) in Virginia. Purposeful sampling is in line with mixed methods in that it is important to have participants who are rich in the information related to the purpose of the study (Patton, 2002). In accordance with CBPR, the VaHSA served in a leadership role in connecting the researcher to participants, and provided the opportunity for triangulation and member checking. While this sample may limit the ability to generalize the results to a larger population, it provided for practical distribution of the survey instrument. Only participants with informed consent were permitted to participate. This research project has received approval from the James Madison University Institutional Review Board to ensure the ethical treatment of research with human subjects.

Including the VaHSA was another way of demonstrating Shared Leadership woven throughout the research study. Shared Leadership is an essential component of Head Start programs and is defined as “the dynamic, interactive influence process among individuals in groups for which the objective is to lead one another to the achievement of group or organizational goals or both” (Pearce & Conger, 2003, p.1). Shared Leadership
is exemplified in the trust between FSWs and families (Washington & Bailey, 1995) and the relationships among coworkers and a teamwork approach to management (McAllister, 1995, Costa, 2003; Bligh, Pearce, & Kohles, 2006). Shared Leadership is evidenced by shared decision making (Fitzgerald & Theilheimer, 2013) and is shown to benefit individuals and collaborative partnerships (Brown, Amwake, Speth & Scott-Little, 2002).

Despite their critical role in service delivery and teamwork, there is very little research explicitly about FSWs in Head Start. Much of the research that contributed to the design of this study, including the selection of variables, was drawn from research in allied professions such as child care, home visiting programs, mental health and community based work. These roles and professions also work directly with families, particularly those with young children or families with high needs. Some of the research on allied professions supports looking at postsecondary degrees in early childhood settings. Educational degrees are shown to have a positive impact on home visiting relationships (Harden, Denmark & Saul, 2010), family child care engagement (Bordin, Machida & Varnell, 2000), and job satisfaction (Cross & Wyman, 2006). Social work degrees specifically are related to improved provider preparedness (Cortis & Meagher, 2012), improved relationship building with families (Block & Block, 2002), and strengths-based practice (Douglas, McCarthy & Serino, 2014). From Early Head Start, research supports the best outcomes related to workers with an Associates Degree (Elicker, Wen, Kwon & Sprague, 2013).

Another form of postsecondary education includes non-degree credentials. Commonly found in Head Start are the Child Development Associate (CDA) and Family
Development Credential (FDC). Both credentials require a combination of education, experience, development of a portfolio and passing an exam (Council for Professional Recognition, 2015; and Forest, 2015). These credentials are found to support empowerment practices with families (Palmer-House, 2008), family outcomes (Hewitt & Anderson, 2015), child outcomes (Elicker, Wen, Kwon & Sprague, 2013), and have been shown to be a stepping stone to further postsecondary education (Wolf, 2014).

Training is a requirement for all staff in Head Start programs (HSPS, 1999). Training has an assortment of benefits for staff from a positive impact on services (Bordin, Machida & Varnell, 2000; Cross & Wyman, 2006 and Jung & Baird, 2003) to supporting employee job satisfaction through appropriate orientation (Gill, Greenberg, Moon & Margraf, 2007). Flexible training opportunities are more likely to be completed by workers (Walker, 2002) and those that receive more regular training spend more time developing relationships with families (Sloper, Greco, Beecham & Webb, 2005).

Training is sometimes studied in combination with years of experience (Palmer-House, 2008). Experience in their position is related to positive outcomes for children with disabilities (Jung & Baird, 2003), strong Early Head Start program outcomes (Elicker, Wen, Kwon & Sprague, 2013), and provider engagement with children (Bordin, Machida & Varnell, 2000).

There are no standard measures of family outcomes in Head Start (National Program Office of Free To Grow and Mailman School of Public Health, 1994) or in general family service literature. Goals for families are far more diverse and therefore the goals they set and objectives to meet them vary. Assessing family outcomes, and not simply documenting efforts or family outputs, is essential to evaluating Head Start
programs (Bailey, 2001; Dempsey & Keen, 2008; Roberts, Innocenti, & Goetze, 1999 as cited in Raspa, et. al., 2010). While there is agreement that there are no standard family outcomes measures, it is also true that standard outcomes are not recommended (Kisker, et. al, 2003 and Mannan, Summers, Turnbull & Poston, 2006). Best practices for measuring family outcomes includes selecting appropriate measures specific for the services provided (Mannan, Summers, Turnbull & Poston, 2006) and specifically designing outcomes measures for the uniqueness of the program (Kisker et. al., 2003).

For this study, where standard family outcome variables were nonexistent, standard program variables were readily available in the Head Start Program Information Report (PIR). The PIR is a mandatory annual reporting requirement for all Head Start and Early Head Start grantees. There is a universal set of questions to collect data about the types of services provided, program enrollment, demographics and staff qualifications, among many other topics. Data is collected from programs about their own services, then reported in an electronic format for aggregation across all the grantees in the nation. I initially provided an idea of family outcomes as the sole outcome variable, based on the Program Information Report (PIR) data and review of the literature. After reviewing information about the process of creating an index variable and reviewing the state-wide aggregate PIR data, the community participants made recommendations for developing two independent outcome variables, family service provision and family service utilization. They valued both of these outcomes and felt strongly there could be an important relationship between family service worker qualities and each of those variables, thereby influencing the original research design.
Throughout the process, the community partners clearly had an influence on the research project, but also demonstrated how Shared Leadership is a thread throughout the Head Start community, which is likely to come into play for research recommendations and implications. The choice to match program-level data to individual family service workers qualities in this research study is influenced by a number of theories about the way coworkers behave in organizations. Through conversations with the CBPR participants, they often remarked that they worked as a team, thought the same, or acted as a beehive. Workers in organizations often have a shared understanding (Bittner & Leimeister, 2014), give and receive support in the workplace (Shutz, 1958 as cited in Madlock & Booth-Butterfield, 2012), and find improved performance based on positive relationships with coworkers (Hu & Liden, 2013).

In order to completely look at the relationship between FSW qualities and family outcomes within their program, a combination of qualitative and quantitative survey questions were developed to assess the participants experiences and qualifications. The quantitative questions were developed for concepts that had an existing scale, such as years of experience or level of education. The qualitative questions were developed to assess those values that do not have an established or predictable scale, such as non-degree credential, rewards of the position or popular training topics. CBPR principles supported the validity of the survey and provided for triangulation of the concepts. The qualitative responses provided some contextual history of the participants life experience, were integrated for quantitative analysis and represented in word clouds for data visualization (Cidell, 2010; McNaught & Lam, 2010).
From the review of the literature and collaborative research design with the CBPR participants, the information collected from the FSWs provided both quantitative and qualitative results that are related to family service provision and family service utilization. Quantitative analysis was conducted through descriptive statistics and a series of multiple regression analyses. Qualitative analyses utilized content analysis techniques and data visualization through word clouds (Cidell, 2010; McNaught & Lam, 2010). The results were shared in Chapter 4 and will be explained in the following sections. I will begin with the quantitative results, then share the qualitative results and any opportunities where the integration of the qualitative and quantitative results provide more depth and context to understanding the relationship between FSW qualities and family outcomes. All results and interpretations were discussion with the CBPR participants for triangulation and member-checking. Implications for further research are discussed.

Findings and Interpretations

This section will provide discussion and analysis of the quantitative and qualitative results of the study. Input from the CBPR participants and member checking with FSWs at the Virginia Head Start Association conference were essential elements of this section. Their impressions and thoughts on implications and future research are woven throughout this section to provide depth and context.

Quantitative

Sixty five surveys were turned in to the researcher, with 50 completed surveys from family services staff. The quantitative data was entered into SPSS version 22 for analysis. The qualitative data was entered into a word document and then a word cloud program for analysis. Some of the qualitative data around credentials was transformed
into quantitative data – Credential, Yes or No, for the purpose of further analysis. In addition, the education variable was broken out into three levels – AA, BA and MA degrees. The Program Information Report data was gathered and indexed in collaboration with the CBPR participants to develop the outcome variables.

Table 3.4 describes the values for family service provision and family service utilization for each of the Head Start programs that had a FSW complete the survey. These programs are in random order and are not identified. The range of values for family service utilization, or the number of services received per family, is from 0.53 to 8.05 services per family. The range of values for family service provision, or the number of families that received at least one service, is from 34% to 100%. When these results were discussed with the CBPR participants, they were surprised by the outliers. They reported feeling the middle range was most likely true, while those with 100% of families receiving services or less than one service per family may have had errors in tracking or reporting their family outcomes.

The first of two multiple regression analyses were conducted to examine if level of education broken out into Edu1 (Associates degree), Edu2 (Bachelors degree) and Edu3 (Masters degree), training hours, certificate/credential, experience in Head Start and Head Start parent status combined together as a set could explain a significant amount variance in family service utilization. After removing each the least significant variable each time, the final multiple regression was conducted and determined that the two predictor model including Associates Degree and Credential could explain 25.7% of the variance of family service utilization $F(2,47)=8.115, p=.000, R^2=.257$. In this model, Associates Degree remained the only significant predictor variable $b=1.967, t(40)=3.919,$
\( p = .000 \), squared semi partial = .243. From this analysis, we can determine that this is a univariate research question. Regardless of the presence of other variables, having an Associates Degree explains 25% of the variance of Family Service Utilization.

These results are thought-provoking because in the presence of various education levels, years of experience, training hours, credentials and involvement as a Head Start parent, the only variable that was statistically significantly related to family service utilization was FSWs having an Associates degree. This is not to say that Bachelors degrees or Masters degrees had an adverse effect on family service utilization, but having those degrees did not explain more of the variance in family service utilization above and beyond Associates degree. The CBPR participants found this interesting because they felt like experience and ongoing training were very important in their personal professional development and affected their work with families.

These results are consistent with the research of Elicker, Wen, Kwon and Sprague (2013) who also found the best outcomes were related to Early Head Start workers with Associates degrees. In this sample there were six participants who had a Social Work degree, too few a number to determine with statistical methods whether that particular degree had any individual influence on family service utilization. However, as a Social Worker myself and as a Social Work educator, I have personal interest in this matter. Several studies reviewed for this research project examine social work degrees and found a relationship with provider preparedness (Cortis & Meagher, 2012), strengths-based practice (Douglas, McCarthy & Serino, 2014) and positive relationship building with families (Block & Block, 2002). Further study is warranted on the relationship between social work degrees and family outcomes in Head Start.
While this study is small and only in Virginia, with repeated studies these results could have substantial implications for the future of Head Start. If it is generalizable to the population that an Associates degree is practically significant in its relationship to family outcomes, this result may follow a similar path to that of the classroom teachers. Only in the past decade have the requirements for Head Start teachers to have degrees been mandated and implemented in Head Start programs (Improving Head Start for School Readiness Act, 2007). With this information, we may be able to improve family access to services by simply introducing an Associates degree requirement for FSWs nationwide.

The second multiple regression analysis was conducted to determine if level of education broken out into Edu1 (Associates degree), Edu2 (Bachelors degree) and Edu3 (Masters degree), training hours, certificate/credential, experience in Head Start and Head Start parent status combined together as a set could explain a significant amount of variance in family service provision. Again, after removing the least significant variable each time, the three variable model including level of education broken out into Edu1 and Edu2 and Head Start parent status together as a set statistically significantly explained 30.1% of the variance of family service provision, $F(3,40)=5.729, p=.002, R^2=.301$. All three of the variables are statistically significant predictors and over thirty percent of the variance of family service utilization can be explained by this model. Therefore, the multivariate regression equation to predict Family Service Provision from Associates Degree, Bachelors Degree and Head Start Parent Status is:

$$FSProv = .549 + .195(\text{HSParent}) + .228(\text{Edu1}) + .163(\text{Edu2}).$$
These results are interesting because it includes both educational attainment and *not* having a history of being a Head Start parent. The Head Start parent variable is categorical and was coded with “yes” as 0 and “no” as 1. Therefore, in the presence of an Associates or Bachelors degree, as a FSW is more likely to *not* be a Head Start parent, family service provision is higher. Thus the recipe for hiring a FSW who is most likely to provide more family services to the families in the program has either an Associates degree, Bachelors degree or both and has no history as a Head Start parent. These results were surprising for the CBPR participants as experience in Head Start has always been considered an advantage and is legislated and valued in the hiring process (HSPS, 1999). While the literature supports the importance of Associates and Bachelors degrees, this finding was particularly unexpected. While the ability for a worker to share with those they serve that they have experienced similar hardship may have some value, perhaps there is a certain amount of judgment or unwillingness to help those who did not make the choices one made oneself to pull oneself out of challenging circumstances. Further research is needed in the importance of a history of being a Head Start parent both with FSWs and potentially in other careers in Head Start.

**Qualitative**

The qualitative survey questions were developed in collaboration with the CBPR participants to provide triangulation of the concepts (Creswell, 2014). Many of the questions were influenced by the review of the literature, particularly Head Start parent status, type of degree, type of credential and questions around training received. Other questions were developed out of the experiences of the CBPR participants including questions about participants perception of the rewards of their work, their career ladder
and their socioeconomic status. The purpose of collecting this qualitative information was to provide context for some of the quantitative responses, to give depth and richness to the results and also to inform future research and study of the qualities of FSWs in relationship to family outcomes.

Participants were asked if they found their position as a FSW to be rewarding, and if so, why? All fifty participants, 100% reported that they find their position rewarding. Some of the reasons they gave include “Yes I can make an impact in the lives of others.” And “always had a passion for working with women and children and Head Start allows me to work with the entire family.” The word cloud detailing the results of this question is pictured in Figure 4.1. Word clouds take a selection of text and represent it as a collage of words where the largest words are those that appear most frequently in the text. The smaller words appear less frequently and those that only appear one or two times in the text are not included in the collage. Following the word Yes, other most frequently seen words include families, children, helping, working, enjoy, love, passion and opportunity. Word clouds provide for a visualization of qualitative data and allowed the CBPR participants to be more strongly involved in the research process (Israel, Eng, Schulz & Parker, 2005).

The CBPR participants were not surprised by these results, sharing that you cannot teach people to care and FSWs either care about their jobs and those they serve, or they move on to something else. In discussion, I pointed out that regardless of their caring or not, there was still great variation in the way families utilized and were provided services so there must be something more to it than agreement the job is rewarding. These results are particularly interesting to the researcher, as it is unusual for
all the participants to respond in the affirmative for any question. This was the only question with this overwhelmingly positive response in total agreement with each other. The motivations for starting with Head Start, staying with Head Start or serving families were not assessed in this study. Based on the richness of these responses, this may be an important area for future research.

Figure 4.2 is a word cloud depicting participants career progress within Head Start. Many participants reported being in other positions from teacher, teacher assistant, bus driver and volunteer prior to their experience as a FSW. As experience was not a significant predictor of either family service provision or family service utilization, there is not much relevance as far as statistically significant relationships. However, the CBPR participants still felt like the context was worth discussion. Figures 4.3 and 4.4 describe participants’ intended career paths both within Head Start (Figure 4.3) and outside of Head Start (Figure 4.4). Many participants considered career advancement. Within Head Start, they were largely focused on ascending to management or coordinator level positions within family services, or into management and leadership positions as the director or other executive. Participants also considered positions outside of Head Start, entirely in the allied professions of health, human services, disabilities and counseling. It was interesting to note than none of the participants reported considering career development were considering options outside of the human services and allied professional fields – for example electrician or hair dresser.

These questions about career ladder were asked to give context and perspective on understanding the experience FSWs bring to Head Start and also where they might be motivated to take that experience. The CBPR participants felt they had improved in their
service delivery as they continued in their positions. They cited more confidence, better knowledge of resources and the ability to cope with challenging families all as skills they honed with experience. This was consistent with the findings in the literature that experience in a position is related to positive child outcomes (Jung & Baird, 2003) and engagement between providers and families (Bordin, Machida & Varnell, 2000). The CBPR participants said they valued their on the job experience and felt it affected their work with families. Based on their testimony, the elements of experience might be an area for deeper research in attempt to determine which parts of experience might be more relevant or related to family outcomes.

Years of experience and strong training have been found to support family outcomes (Palmer-House, 2008). Also, training is a requirement for all Head Start staff (HSPS, 1999). It has been found that the more training a worker receives, the more time they spend developing relationships with families (Sloper, Greco, Beehcam & Webb, 2005) and that they have higher job satisfaction (Gill, Greenberg, Moon & Margraf, 2007). The word clouds depicted in Figures 4.5, 4.6 and 4.7 are related to best training topics, source of training and benefits of training as reported by the FSWs. As training was also not a significant predictor of family service utilization or family service provision, these findings provide context, but do not contribute to understanding the relationship with family outcomes. One interesting point was that most participants receive their training through Head Start Association conferences at the state or national level. As this data was collected at a state Head Start conference, the data was not surprising, but it certainly does point to the importance of associations in supporting FSW professional development. As we understand the importance of training in relation to
family outcomes through further research, it may be useful to look in particular at the role of the associations. When processing these results with the CBPR participants, they were initially surprised that there were more obvious themes emerging about training topics or benefits. Upon further discussion, they added that perhaps there need to be more specific questions about how FSWs use training when they receive it, how they integrate it into practice or which topics have translated to practice change. The qualitative results may influence future question phrasing and grouping of questions on training.

Figure 4.8 is a word cloud representing the type of degree participants reported. There was a fairly even distribution of eleven Associates degrees, twenty one Bachelors degrees and eight Masters degrees. Ten participants reported a High School Diploma or GED, which served as the baseline for comparison. There were themes of education, human services and social work as choices of major, though there were some less-related degrees such as business and criminal justice. Unfortunately, there were not enough participants with specific degrees to study the quantitative results with fidelity, but the word cloud is informative. The CBPR participants were surprised at the breadth and variety of degree choices. While there were no specific inferences drawn, they posed the question that it would be interesting to know if FSWs made their degree choice prior to becoming a FSW or since becoming a FSW. They thought perhaps there might be a difference in those who pursue a degree in their field to support their work, versus those who chose a degree path prior to an interest in working in services to families.

The Associates degree was the only statistically significant predictor of family service utilization and one of three significant predictors of family service provision. For this reason, it would deepen the survey substantially to expand the sample to enough
participants to gather information on their specific Associates degrees. These implications, based on their quantitative significance, may pose the most fruitful follow up research with the opportunity to influence the field. In that the Associates degree has proven to be so important in relationship to child outcomes, it was not surprising to the CBPR participants that it may be so for family outcomes as well.

The two final word clouds are depicted in Figures 4.9 and 4.10. They are representations of participants socioeconomic status growing up and current socioeconomic status, respectively. Initially, the research did not include these questions as the focus was on qualities of FSWs, not their history or life circumstances. However upon discussion with the CBPR participants, they felt that the question around whether a FSW had ever been a Head Start parent was very important because it assessed whether they had experience in common with the families they serve. The CBPR participants felt like another way to potentially capture that information about FSWs was to determine their current and former socioeconomic status. Many FSW reported they had grown up “middle class” or were currently “middle class” while there were also many that reported “low/lower class”, “working class” and “poor/poverty.” A few reported “upper class”. Again, this may be another opportunity to ask more specific questions of a larger sample to assess whether life experience with financial challenges may influence the way FSWs provide services to families or the family outcomes. It could be a way to add more depth and understanding to the phenomena we captured in this study as only Head Start parent status.

This research design allowed for rich discussion to take place between the principle researcher and the CBPR participants. This provided for a more rigorous study
design and opportunities for triangulation, member checking and peer review (Creswell, 2014). The process of discussing the results was reported to be very confirming by the CBPR participants, though they were sometimes perplexed by the results or could offer no additional concrete explanation. They overwhelmingly supported additional research on FSW qualities and offered to serve as a CBPR participant in future research studies. The Virginia Head Start Association also offered continued support and opportunities for presentation and publication.

Conclusions and Recommendations

This mixed-methods study explored qualities of Family Service Workers (FSWs) in Head Start and the relationship of these qualities to two types of program level family outcomes, family service provision and family service utilization. From this research study, we know that among this sample, there was a statistically significant positive relationship between FSWs with an Associates degree and family service utilization. We also know there was a multivariate statistically significant relationship between Associates degree, Bachelors degree and not being a Head Start parent, as a set, with family service provision. Also among this sample, 100% of the participants found their job rewarding, and a great variety of degrees, credentials, training and experience were reported. This sample was local to Virginia and too small to generalize the results to the greater population, however the results were practically significant and vital to shaping future research.

The recommendations are to expand and redesign the quantitative survey to incorporate more of the dynamics that emerged from the qualitative results. This would be particularly relevant in the areas of type of degree, type of experience and relevance
and application of training and credentials. It would be very desirable to expand the sample to outside Virginia to increase the diversity and size of the sample. More participants would make it possible to conduct further quantitative analysis on some of the themes and context that emerged in the qualitative results and increase the power of the significant results.

It is also recommended that further study proceed in accordance with Shared Leadership principles and CBPR. The CBPR participants were crucial to providing context and relevance for the practical implications of this research and for helping the researcher connect the survey responses to application in the field. They asked good questions and prompted the researcher to keep the FSW central to the study. They provided dynamic responses to results and influenced recommendations for future research that would continue to be rooted in Shared Leadership.

As further data is collected, it is anticipated the results may provide additional support for the importance of Associates degrees. If this is the case, it is recommended that the research shape future reauthorization of the Improving Head Start for School Readiness Act. This Act is on a continuing resolution and at some point in the future will be revised, based on new information, to improve quality and accountability. As programs and state Head Start Associations consider these results, it may influence future partners with the community college systems for the development of Associates degrees even more relevant and accessible for FSWs. It is the hope that this, and future research, will shape policy recommendations to include appropriate qualification for FSWs to improve the quality of family outcomes.
**Researcher Reflections**

This study was conducted by a researcher with a history of experience in policy practice, family services and Head Start. The researcher is currently involved with social work higher education and has clear biases in support of post-secondary education and family services. The researcher brings assumptions about the importance of family services in the Head Start program and the importance of the relationship between FSWs and families in pursuing family outcomes. The researcher has a practical paradigm, has seen the benefits of Head Start to families firsthand, and would like to be involved in sustaining and improving Head Start. While the researcher attempted to shed previous conceptions and biases in support of Head Start, this was not entirely possible. The use of CBPR was critical in bringing multiple perspectives to the study in attempt to make it balanced and keep it rooted in the practical field. This researcher is in pursuit of a Doctorate of Philosophy in Strategic Leadership Studies with a concentration in Nonprofit and Community Leadership. This educational pursuit greatly influenced the theoretical framework and design of the study as Shared Leadership was an essential component. These biases also had the potential to shape future policy and community decisions.
Appendix A

Glossary of Terms and Abbreviations

**CBPR** – Community-Based Participatory Research

**CDA** – Child Development Associate

**Certificate/Credentials** – post-secondary coursework that supports ones professional development and skills in the workplace, but does not lead to a degree. Is recognized at the state or national level as a certification or credential.

**Community** - A city, county, a multi-city or multi-county unit within a state, an Indian reservation, or any neighborhood or other geographic area (irrespective of boundaries or political subdivisions) which provides a suitable organizational base and possesses the commonality of interest needed to operate a Head Start program. Community occurs when people come together around common physical location, interests, cultures, and/or other identities.

**CWX** – Coworker Exchange

**ECLKC** – Early Childhood Learning and Knowledge Center

**Education/Degree** – post-secondary coursework that resulted in an Associates, Bachelors, Masters or Doctoral level degree award.

**EHC-CC** – Early Head Start Child Care

**Experience** – volunteer or paid hours working with families, within or outside of Head Start, as specified.

**Family Outcomes** - results of an activity or process that benefits the family, which includes the caregivers and the child.
**Family Service Provision** – the number of families that received at least one service, as reported on the Program Information Report, divided by the total number of families served.

**Family Service Utilization** – the number of services received by each family, as reported on the Program Information Report, divided by the total number of families served.

**Family Service Worker (FSW)** - Those staff that provide in-home and other services including assessment, development of service plans, family advocacy and coordination of service delivery. A family worker is someone whose primary role is working with families and can be used interchangeably with role titles such as family advocate and family service provider.

**FDC** – Family Development Credential

**Head Start Parent Status** – this designation is given to any person who served as a parent or guardian to a child enrolled in Head Start or Early Head Start at any time, for any period of time.

**IRB** – Institutional Review Board

**LMX** – Leader Member Exchange

**PFCE** – Parent, Family & Community Engagement

**PIR** – Program Information Report

**TMX** – Team Member Exchange

**Training** – professional development opportunities offered in conjunction with the workplace, or sought outside the workplace, specific to supporting duties associated with the FSW position. Training may lead to a certificate or contribute to continuing education hours, but is not a state or nationally recognized credential.
VaHSA – Virginia Head Start Association
Appendix B

Instrument

Please answer the following questions about your personal, educational and professional background completely. Please feel free to circle or check the answer that best fits, or to write out your answers below the question or on the line provided. There is additional paper provided if you’d like to add comments.

1. Are you a parent?  
   YES  NO

1a. How many children do you have in each of these age ranges?
   _____ Zero – Age 2
   _____ Age 3 – 5
   _____ Age 6 – 12
   _____ Age 13 – 17
   _____ Age 18 and above

1b. Were you, at any point, a single parent?  
   YES  NO

2. Are you currently raising a grandchild/grandchildren?  
   YES  NO

3. What is your age range?
   _____ 18 – 29
   _____ 30 – 39
   _____ 40 – 49
   _____ 50 – 59
   _____ 60+

4. Are you currently a Head Start/EHS parent?  
   YES  NO
5. If not currently, were you ever a Head Start/EHS parent
   YES  NO

5a. If yes, how long ago?
   _____ years

6. If yes, which of the following came first?
   HS/EHS PARENT    HS/EHS EMPLOYEE

7. What is your current position in Head Start/EHS?

8. What is your current caseload?
   _____ families

9. How many hours per week are you paid to work?
   _____ hours

10. Do you find your position rewarding? How so or why not?

11. What has your career progress within Head Start been?
   An example is: Volunteer – Teacher Assistant - Teacher

12. What Virginia Head Start/EHS program do you work for?

13. How many years of experience do you have in Head Start?
    _____ years

14. How many years of experience in Head Start family services?
    _____ years

15. How many years of experience in HS, but not family services?
    _____ years

16. How many years of experience in family services, but not HS?
    _____ years

17. Do you see yourself pursuing other career options within Head Start?
   YES  NO

17a. If yes, such as what?

18. Do you see yourself pursuing other career options outside Head Start?
   YES  NO

18a. If yes, such as what?

19. How many training hours do you receive per year average?
    _____ hours
20. What are the best topics you have been trained on?

21. Where do you get your training?

22. How has training benefited your family service work experience/duties?

23. What non-degree certifications/credentials do you have?

24. What is your highest level of education? (please fill in degree/major/minor)
   ____High School/GED
   ____Associates: ________________________________________________
   ____Bachelors: _______________________________________________
   ____Masters: _________________________________________________
   ____Doctoral: ________________________________________________

25. How long ago did you get your highest degree? ____ years

26. Are you currently enrolled in an education program or taking classes?
   YES      NO

26a. If yes, what type?

26b. If yes, why are you enrolled in classes or an education program?

26c. If yes, does it limit your participation in Head Start activities? YES       NO

27. Do you have a second job? YES       NO

27a. If yes, does it limit your participation in Head Start activities? YES       NO

28. If yes to 26c or 27a, in what ways are you limited in participation in Head Start activities?

29. What was your economic status during your childhood upbringing?

30. What is your current economic status?

Thank you very much for your contributions to this study.
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