EXPLORING PREDICTORS OF PARENT INVOLVEMENT FOR RURAL HEAD START CHILDREN

by

Benjamin E. Wynn

A thesis submitted in partial fulfillment of the requirements for the degree of

MASTER OF SCIENCE

in

Family, Consumer, and Human Development
ABSTRACT

Exploring Predictors of Parent Involvement for Rural Head Start Children

by

Benjamin E. Wynn, Master of Science Utah State University, 2007

Major Professor: Dr. Ann M. Berghout Austin Department: Family, Consumer, and Human Development

In the present study we examined parent participation in an extrafamilial context (Head Start) and the family and child development conditions that predicted such participation.

Participants included 3-, 4-, and 5-year-olds and their parents in the Northern Utah and Southeastern Idaho areas. The families were grouped according to the child’s previous Head Start experience: those who had received home-based services in year one followed by center-based services in the second year (HB to CB); those who had received no services in year one and home-based services in year two (HB only); and those families who had received no services in year one and center-based services in year two (CB only).

Parent involvement was measured using the Family Involvement Questionnaire (FIQ) which measured parent involvement according to three
factors: home-based involvement (HBI), school-based involvement (SBI), and home-school conferencing (HSC).

The children’s development assessments included the Ages and Stages Questionnaire: Social-Emotional Scale (ASQ:SE) and the Developmental Indicators for the Assessment of Learning-Third Edition (DIAL 3).

Through using the FIQ, this study investigated the predictors of the type and quantity of parental involvement using class grouping (HB to CB, HB only, & CB only), family demographics, and children’s ASQ:SE, and DIAL 3 scores as independent variables.

Our study revealed that even though the class grouping had no significant relation to parent involvement, there were a few independent variables that were beneficial in predicting parents’ involvement. The most significant finding was that the child’s ASQ:SE score could be used to help predict the variance in both home-based involvement and school-based involvement activities. This study found that the higher the number of the ASQ:SE score, the parents were less likely to participate in home-based and school-based activities.

Other interesting findings included that as the number of children increased, the amount of home-based parent involvement decreased. In addition to this, we found that if the parents were European-American and married, they were more likely to report being involved in home-school conferencing activities.

(74 pages)
ACKNOWLEDGMENTS

I would like to thank the local Bear River Head Start program for letting me involve the families in this research. Even more so, I would like to acknowledge my major professor, Ann Austin, for meeting with me and giving me much beneficial guidance and encouragement during the entire process of doing this research. As well, I would like to thank the members of my committee – Lori Roggman and Ray Reutzel – for giving me very useful feedback so as to make this a more meaningful and purposeful investigation.

I would also like to thank Roxanne Pfister for helping me with the statistical analysis. In addition, I express my appreciation to John Fantuzzo for giving me permission to use his instrument in my study. Lastly, I would especially like to give appreciation to my wife for the persistent persuasion for me to accomplish this thesis. She has demonstrated much confidence in me as well as patience during the process of completing this task.

Benjamin Wynn
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CHAPTER 1
INTRODUCTION

We used the developmental-ecological framework as the basis for this research. Bronfenbrenner’s developmental-ecological theory posits that children’s development is not only affected by what occurs in his or her microsystem, but also by his or her mesosystem – or the environment beyond the nuclear family (Bronfenbrenner, 1986).

The current study examined the factors that correlated with or could be used to predict the type and quantity of parent involvement in Head Start, an important part of the child’s microsystem.

Many previous investigations have examined the associations between parent involvement and children’s academic outcomes. The majority of these studies have looked at the effects of parent involvement on children’s achievement. Even though many studies have looked at parent involvement using similar frameworks, very few have examined specific areas of parent involvement as offered by the Family Involvement Questionnaire (FIQ; Fantuzzo, Tighe, & Childs, 2000) in conjunction with the specific experiences with Head Start. The specific experiences that this study examined were the child’s previous classroom experience and also the type of classroom he or she was in, whether it was a home-based classroom or center-based classroom. In home-based classrooms, the teachers have weekly visits to the home and works with the parents to present lessons to the Head Start child. In center-based classes, the children receive instruction in an actual classroom setting.
To our knowledge, thus far, only a few studies have specifically used the FIQ tool to investigate the relation between parental involvement and child development (Fantuzzo, McWayne, Perry, & Childs, 2004; Fantuzzo, Tighe, & Perry, 1999). The generalizability of past studies that have used the FIQ have been limited by the homogeneity of their participants and their urban settings. The vast majority of parent involvement investigations have looked at how parent involvement affects child outcomes and especially academic outcomes, but the current study differed however, in that it focused more on the predictors of parent involvement including the child's social, emotional, and academic assessments, the family's experience with Head Start across the one year prior to this study, and the family's experience with either the center-based or home-based services or both.

Past studies that have investigated predictors of parent involvement have used different tools to measure parent involvement (Baker & Roth, 1997; Parker, Piotrkowski, Kessler-Sklar, & Baker, 1996; Ritblatt, Beatty, Cronan, & Ochoa, 2002; Sheldon, 2002). In this study we chose to use the Family Involvement Questionnaire (FIQ) to measure parent involvement because it appeared to be a more encompassing measure of parent involvement as it allows the researcher to measure parent involvement in the following three areas: Home-School Conferencing, Home-based Involvement and School-based involvement (FIQ: Fantuzzo et al., 2000).

Fantuzzo et al. (2004) found that home-based activities showed the strongest correlation with how well the child performed. However, their study differs from the current study in that it took place in an urban setting where 96% of their participants were African American. Their study also differs in that they used the parent's involvement as
the predicting variable for the child's learning competencies. It was the reverse in the current study because we investigated the child's learning competencies as a possible predictor of parent involvement.

Purpose of the Study

The purpose of this study was to add to the literature by using the FIQ in a mostly rural population with a different ethnic make-up to examine the predictors of the type and quantity of parent involvement. Close to what was expected, we found that the participants' ethnicity was 75% European-American, while 23% said they were Latino/Hispanic. While not completely heterogeneous, this study included a somewhat different makeup of the ethnicity of participants than other studies that have also used the FIQ. Also, whereas past research has dealt with mostly urban settings, this investigation took place in a mostly rural population.

The developmental-ecological theory states that there is a bidirectional effect between parent interactions and how their child develops. Most studies have used child development as the dependent measure when examining the relation between parent involvement and child development scores. This study, however, used the quantity and type of parent involvement as the dependent measure and child development scores as one possible predictor of parent participation in Head Start activities. Thus, our independent variables were the children's scores on their ASQ:SE and DIAL 3 assessments, as well as nine demographic variables which included: the child's gender, the respondent's gender, marital status, number of children they have, education level, yearly income level, ethnicity, religion, how many consecutive years they have the target
child in Head Start, and lastly how many years altogether they had been in an early intervention program.

Research Questions

With all of the opportunities for participation in the Head Start program, why do some parents remain uninvolved? Head Start offers a wide range of activities and means for parent involvement and, at the same time, they have very mixed results as to the type and quantity of parent involvement. This study was designed in part, to help answer the above mentioned question. There were six specific research questions that were addressed in this current investigation. They were as follows:

Question One: Are there statistically significant correlations between the demographic variables, sample groups (home-based to center-based, home-based only, and center-based only), and the type of the parents' involvement in Head Start?

Question Two: Are there statistically significant correlations between demographic variables, the sample groups, and the quantity of the parents' involvement in Head Start?

Question Three: Are there statistically significant differences in the type of parent involvement activities by the three sample groups (HB to CB, HB only, and CB only), using the child's gender, age and prior years of family involvement as covariables?

Question Four: Are there statistically significant differences in the quantity of parent involvement by the sample groups, using the child's gender, age and prior years of family involvement as covariables?
Question Five: Does the type and quantity of parent involvement activities correlate with the child’s scores on developmental assessment scores at the beginning of the school year?

Question Six: Can the quantity of parent involvement activities be predicted by their child’s scores on developmental assessment scores at the beginning of the school year or by any of the other independent measures?

By investigating the six research questions above, this study hoped to contribute to the extant literature by showing which variables could help predict parental involvement in Head Start in a mostly rural population under three conditions of participation in Head Start: (HB to CB, HB only, and CB only).
CHAPTER II

REVIEW OF LITERATURE

Theoretical Framework

The current study is based upon Bronfenbrenner’s (1986) developmental-ecological perspective. This framework focuses on the family’s interaction with one another and their interactions with their environments, which especially influences the development of their young children in the family. This framework states that settings where children sometimes do not participate in – such as their parents’ social networks and circle of friends, are affected by and affect the children’s development.

This is the best theoretical framework to use for this study for two reasons. One is that Head Start focuses not just on the child but the entire family unit. The second main reason is that Head Start encourages families to become involved in all aspects of their child’s preschool program, which in many cases does not directly involve their children. Thus, because Bronfenbrenner specifies that effects are bidirectional, the types and quantity of the parents’ involvement in Head Start feasibly might be predicted by child development or other family variables.

Using this perspective, the Family Involvement Questionnaire (Fantuzzo et al., 2000) was used to measure the quantity and type of parental involvement and its associated predictors. Since it may be argued that the better-educated parents will become more involved in the Head Start Program, parent education was controlled for.
Parent Involvement

Past research in the field of parent involvement consists of a broad range of studies that have looked at many different variables associated with parent involvement. The primary focus of many of these studies was how parent involvement was associated with children’s academic performance (Flouri & Buchanan, 2004; Hill, 2001; Mattingly, Prislin, McKenzie, Rodriguez, & Kayzar, 2002; Maughan, Collishaw, & Pickles, 1998; Miedel & Reynolds, 1999; Reynolds, 1994; Stevenson & Baker, 1987; White, Taylor, & Moss, 1992).

Many of these studies on parent involvement have examined the effectiveness of parent involvement on child development throughout the different age groups. Some studies have also looked at the effect of parent involvement over long periods of time. For example, one investigation looked at the fathers’ involvement with their seven-year-old child and found that it helped predict educational outcomes when the individuals were 20 years old (Flouri & Buchanan, 2004). The vast majority of parent involvement research has been unidirectional in that it has examined the effects that parent involvement has on one area – the child’s educational success.

However, within the last fifteen years or so, there have been studies that have looked at parent involvement as a bidirectional process – investigating not only the affects of parent involvement but also what effects parents’ involvement. Along with this idea, studies have suggested numerous factors that influence parents’ participation in their child’s education (Parker et al., 1996). Specifically some of these factors include the parents’ gender (Deslandes & Cloutier, 2000), the parent’s educational background
(Dauber & Epstein, 1989), the parent’s marital status (Grolnick, Benjet, Kurowski, & Apostoleris, 1997), the parent’s attributions (Georgiou, 1999), the parent’s social networks (Sheldon, 2002), the parents’ ethnicity (Catsambis & Garland, 1997), income levels (Ames, DeStefano, Watkins, & Sheldon, 1995; Hill, 2001), whether or not the parent works outside the home (Eccles & Harold, 1996), the family’s characteristics (Deslandes, Potvin, & Leclerc, 1999), the child’s grade level (Epstein, 2001), the parent’s perception of the school/teachers (Ritblatt et al., 2002), and the teacher’s practices (Epstein & Dauber, 1991; Huffman & Speer, 2000) to name a few.

Similar to this study, one study found that fathers are more likely to be interested in their children’s education when they were 11 years old, if the child did well in math when he or she was 7 years old (Flouri & Buchanan, 2003). This same study also showed that mothers’ involvement level was a powerful predictor of the fathers’ involvement.

Through their extensive research on parent involvement predictors, Hoover-Dempsey and Sandler (1997) have created three constructs for understanding why parents become involved in their children’s education. According to these authors, the three main reasons are due to:

(a) the parent’s construction of his or her role in the child’s life, (b) the parent’s sense of efficacy for helping her or his child succeed in school, and (c) the general invitations, demands, and opportunities for parental involvement presented by both the child and the child’s school. (p. 8)

Furthermore, recent studies have concluded that parent’s involvement in their child’s homework is influenced by whether parents believe that their involvement will have a positive effect on their child, if they believe that they should be involved, and also
if they perceive that their child or their child’s teachers want and expect the parent’s participation (Hoover-Dempsey et al., 2001).

Most of these studies have focused on parent involvement predictors with their children in the elementary or secondary educational level (Deslandes & Bertrand, 2005; Deslandes & Cloutier, 2000; Georgiou, 1999; Hoover-Dempsey et al., 2001; Hoover-Dempsey & Sandler, 1995, 1997; Sheldon, 2002).

Fewer studies have specifically looked at predictors of parent involvement within a preschool setting and, specifically, in a rural area as this study proposed to do (Baker & Roth, 1997). A study by Baker and Roth did investigate predictors of parent involvement in their child’s preschool in both rural and urban settings, but their study involved only looking at the HIPPY program which is a two-year home-based program similar to Head Start. To our knowledge, no studies have grouped parents by prior and present participation in home-based and center-based programs as a framework for examining predictors of parent involvement.

In addition to this, many studies of parent involvement have used instruments that have included one or only a few aspects of parental involvement (Baker & Roth, 1997; Flouri & Buchanan, 2003; Hoover-Dempsey et al., 2001) instead of looking at a wide range of types of parental involvement and how those activities were associated with the preschoolers’ academic achievement (Fantuzzo et al., 2004).

One of the leading programs that has focused on getting parents involved in the education of their preschoolers is the nationwide Head Start Program. Head Start has focused on having parents involved in every aspect of their preschooler’s educational experience, from helping the teachers develop their classroom curriculum to parents
involved in the hiring process of the school personnel (U.S. Department of Health and Human Services, 1998).

This study added to the parental involvement literature by investigating how components of the children’s social, emotional, and academic development help predict how involved their parents become. Also, some scholars have recommended further investigations in this area that involve ethnically and culturally diverse populations as well as rural populations (Fantuzzo et al., 2004; Hill, 2001; McWayne, Hampton, Fantuzzo, Cohen, & Sekino, 2004). This study also added to the extant literature by specifically investigating the factors that predicted parents’ involvement in Head Start activities in a mainly rural population.

An interesting study revealed that as demands for family self-sufficiency increase, the amount of parental involvement activities decrease (Parker et al., 1997). With the Head Start population used in this study, demands for self-sufficiency may have played a role in how involved parents became, thus it was important to investigate whether certain self-sufficiency demands (income level and parents’ education level) could be used to help predict parent involvement activities in this setting.

Definitions of parent involvement vary, but one commonly used framework created by Epstein (1996) outlines six components of parent involvement. Her framework has since been used in numerous studies that have looked at different types of involvement. She divided the different ways that schools can involve parents, into the following six categories: parenting, communicating, volunteering, learning at home, decision-making, and collaborating with community.
Working with the Epstein’s framework, Fantuzzo and his colleagues (2000) developed a multidimensional scale for looking at family involvement. Their scale conceptualized Epstein’s six categories into three specific dimensions, which are home-based involvement, school-based involvement, and home-school conferencing. Each one of these types of involvement includes many activities and may be associated differently with the children’s academic skills and their social and emotional assets; therefore, literature in each area will be discussed.

*Home-based Involvement (HIBI)*

As defined by Fantuzzo and colleagues (2000), this dimension of parent involvement consists of items that foster learning in the home environment, such as creating space for learning activities at home, and providing learning opportunities for the child in the community.

Other scholars that have looked at predictors of parent involvement have referred to home-based activities as items such as: reviewing the child’s work and progress, discussing school events with the child, helping the child with their homework, providing activities in the home that relate to the child’s school success, and phone calls with teachers (Hoover-Dempsey & Sandler, 1997).

Sheldon (2002) referred to home involvement on a broader scale as he described parent involvement at home as “parent-child interactions on school-related or other learning activities, and represents the direct investment of a parent’s resources in her or his child’s education” (p. 302). In his research, Sheldon measured parent involvement at home using a 10-item scale. Examples of some of the questions that he used are: How
often do you... “read with your child,” “talk with your child about what he or she is learning in school,” “do homework with your child,” and “help your child with math.” In his study he found that the parents who had more social networks also had higher levels of involvement at home.

Reynolds (1992) also examined the relation between home-based involvement and child outcomes. Although his investigation focused on the effects of parent involvement, he does bring out a strong point that his study didn’t find any statistically significant relation between the home-based activities and children’s educational outcomes, in part, because his measures of home-based involvement needed to cover a larger range of activities. This did not appear to be a concern for the current investigation because the FIQ measurement, which has acceptable reliability and validity, covers a wide variety of activities.

Along this same topic, another study investigated preschool children in four groups that differed according to their ethnicity and urban/rural setting. These authors found that all four groups significantly said they participated in the in-home activities more than the out-of home activities (Baker & Roth, 1997).

School-based Involvement (SBI)

School-based involvement has been distinguished as activities that parents participate in at school to benefit their children such as volunteering in the classroom, going on field trips, and having planning meetings with other parents (Fantuzzo et al., 2000). In this area of involvement, Reynolds (1992) reports that it was school involvement that was the most highly related to the children’s academic performance,
compared with the at-home types of involvement. Similarly, when compared with more passive participation such as parent-teacher conferences and home visits, Marcon (1999) found that active participation such as volunteering in the school, class visits, and other activities were also more highly associated with children’s ability to master skills in many different subject areas. Similarly, another study reported that the number of workshops parents attended and the number of volunteer hours they gave was significantly associated with how parents and teachers rated children’s academic motivation, social competence, and school readiness (Parker et. al., 1997).

As far as studying predictors of school-based involvement, Sheldon (2002) referred to school-based involvement as parents interacting with teachers and other personnel. His study included Likert-type questions such as: “How often do you... ‘visit your child’s school,’ ‘attend events that are going on at school,’ and ‘volunteer in the classroom’” (p. 306). His study found a positive correlation between these involvement activities and parents’ social networks. He described parents’ social networks as parents communicating with the parents of their child’s classmates about school items. His study revealed that as parent’s social networks increased so did their involvement in their child’s school.

*Home-School Conferencing (HSC)*

Home school conferencing has been defined to mean the communication between the school and the home about the progress of the child, and ways to foster learning at home. These same researchers who defined home-school conferencing also found that with higher levels of parental education, there are also higher levels of home-school
conferencing (Fantuzzo et al., 2000). These same authors reported that in their investigation, the home-school dimension exhibited a weak relation with children’s behavior and learning competencies, when compared with other dimensions of parental involvement.

*Family Involvement Questionnaire (FIQ)*

The FIQ is a recently created and investigated measurement designed specifically for the younger-aged children. This instrument has only been used in a few studies dealing with preschool-aged children and their parent’s involvement (Fantuzzo et al., 2004). This instrument was chosen because it is thorough in measuring multiple areas of parental involvement. Also, this questionnaire is easily administered with 42 Likert-type questions that can be broken up into three specific factors of parental involvement – home-based involvement, school-based involvement, and home-school conferencing (Fantuzzo et al., 2000).

Some examples of the questions are: How frequently do you.... take your child to the public library? talk with your child’s teacher about classroom rules? or participate in planning school trips for your child?

Many past studies have used questionnaires filled out by either parents or educators in determining the level of parent involvement (Marcon, 1999). While all of the different means of gaining parental involvement information can be useful for research studies, Marcon reported that teacher’s ratings produce valid data when doing research on parental involvement. On the other hand, Rimm-Kaufman and Pianta (1999) brought up the point that by using a questionnaire or survey, the results will differ depending upon
who completes the questionnaire – parents or teachers. These authors also said that questionnaires may be biased by the teacher’s memory and focus. The third argument these researchers posed was that it is hard to quantify the amount of parent involvement on a questionnaire. The authors were aware of these arguments and decided to use parent reports to measure parent involvement mainly because the FIQ takes into account many activities on which the teachers would not be able to measure the parents. Furthermore, the FIQ has questions that ask about the quantity of the types of activities they have participated in so as to obtain the most reliable reports possible. Again, using Bronfenbrenner’s framework, it is believed that the parents’ report of their involvement will be influenced by their children’s developmental assets.

One such study that did investigate the predictability of parent involvement by children’s assets as a dependent variable was a study by Baker and Roth (1997). These scholars used the Cooperative Preschool Inventory (CPI) to gather data on the children’s cognitive achievement, as well as a parental depression measure as possible predictors. These scholars also looked at other family demographics in relationship to parent involvement. Their analysis revealed that the child’s cognitive development was positively correlated with in-home involvement in a mostly urban setting. On the other hand, their research showed no significant correlation between the parent depression measure and parent involvement.

*Child Development Assessments*

There are numerous research studies that have used various types of measurements of children’s development. For the purpose of this paper, two often
separate areas of development were investigated. When studying preschoolers’ school success, it is important to look at the different skills that a child needs in order to succeed and be ready for kindergarten. Thus, for this research, we focused not only on the academic assessments of the child, but also on the social and emotional scores of the children. The DIAL 3 (Mardell-Czudnowski & Goldenberg, 1998) instrument was mainly used to measure the children’s language, concept, and motor achievement and the ASQ:SE (Squires, Bricker, & Twombly, 2002) instrument was used to look at the social and emotional scores of the preschoolers. Just focusing on the academic assets of the children would have left out the important components of social and emotional development, which are also vital to children having success in school.

In summary, we felt that we would be able to add to the extant literature by showing which variables (e.g., the children’s DIAL 3, ASQ:SE scores in addition to demographic variables including the grouping variable) could be used to help predict parental involvement in Head Start in a mostly rural population.

*Developmental Indicators for the Assessment of Learning • Third Edition*

The DIAL 3 instrument is used to assess children in five areas -- physical, cognitive, communication, social or emotional, and their ability to adapt. In this investigation we analyzed data from all of the five areas of development, but mainly focused on the three areas of (physical) motor, concepts, and language. The physical part of this assessment deals with the child’s gross and fine motor skills. The concepts area reports the child’s basic knowledge such as counting and colors. The language part reports the child’s use of receptive and expressive language.
Ages and Stages Questionnaire: 
Social and Emotional Assessment

The ASQ:SE assessment is a parent report questionnaire that measures the frequency of the child’s social and emotional behaviors. This questionnaire asks questions about positive and negative behaviors. The response columns are as follows: most of the time, sometimes, and rarely or never. Each answer is awarded a point total. Questions that ask about a child’s positive behavior are awarded points as follows: 0 points for “most of the time,” 5 points for “sometimes,” and 10 points for “rarely or never.” The inverse is what is used for questions about negative behavior. For example, if a parent reported that his or her child damages things on purpose “most of the time,” then that child would receive 10 points for that particular item. Thus, the higher the child’s score the more behavior problems the child is reported to have.

Some examples of the positive questions include: Can your child name a friend? When upset, can your child calm down within 15 minutes? Does your child like to play with other children? Does your child use words to tell you what he wants? Examples of some questions about the child’s negative behavior include: Does your child destroy or damage things on purpose? Does your child hurt himself on purpose? Does your child have eating problems, such as stuffing foods, vomiting, eating nonfood items?
CHAPTER III

METHODS

Sample

The sample in this research included 3-, 4-, and 5-year-olds in the Bear River Head Start Program and their parents. This particular program serves children and families throughout counties in Northern Utah and Southeastern Idaho. Using classroom lists, there were a total of 171 families selected to participate in this study. The families were from one of three sampling groups relative to the type of classroom their child was in: those that were in the preschool home-based class last year and were now in a center-based class (HB to CB), children who were in a home-based classroom for their only experience in the program (HB only), and children who were in a center-based class for their first year in the Head Start program (CB only).

Using the class lists provided by Head Start, there were a total of 44 children identified in the first group (HB to CB). These 44 children were selected solely on the condition that they started the preschool program as three-year-olds in the home-based classroom and were turning five years old at the time of the data collection.

The next sample group (HB only) consisted of children that were 3-, 4-, or 5-year-olds and had only experienced home-based preschool services. This group was selected using classroom lists the same way the HB to CB group was identified. There were a total of 67 children identified that met this criterion.
The last potential sample group consisted of about 240 children that were experiencing a center-based classroom for the first experience with Head Start (identified as CB only). Since this group was so large, we used stratified random sampling techniques to ensure that this group was similar in demographic measures as the other two groups with respect to marital status and ethnicity (see Table 1). The stratified technique consisted of drawing a number out of a container that corresponded to a classroom list and a particular child in that classroom list. Names were drawn and included for this sample group as long as they matched the overall percentage breakdown of the participants in the other two classroom types. It was assumed that the other demographic variables, such as gender, would be similar without using the stratified techniques and the results confirmed that. There were a total of 60 families identified using this method.

Therefore, from the three classroom experiences there was a total sampling group of 171 families which included HB-CB \( (n = 44) \), HB only \( (n = 67) \), and CB only \( (n = 60) \). The three groups were fairly similar with regard to the number of boys and girls, and their parent’s marital status, and their ethnicity.

Table 1 shows the breakdown of the selected sample that includes the child’s gender, their parent’s marital status, and the ethnicity of the families according to the child’s classroom experience.

The distribution of the variables in the selected sample is very similar to the actual breakdown of the entire Head Start population for the particular area that the study takes place in (see Table 2).
Table 1

Demographics of Sample According to Classroom Type

<table>
<thead>
<tr>
<th>Variable</th>
<th>HB-CB (%)</th>
<th>HB only (%)</th>
<th>CB only (%)</th>
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</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Boy</td>
<td>27 (61)</td>
<td>32 (48)</td>
<td>31 (52)</td>
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<tr>
<td>Girl</td>
<td>27 (39)</td>
<td>35 (52)</td>
<td>29 (48)</td>
</tr>
<tr>
<td>Total</td>
<td>44</td>
<td>67</td>
<td>60</td>
</tr>
<tr>
<td>Ethnicity</td>
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<tr>
<td>Latino/Hispanic</td>
<td>10 (23)</td>
<td>15 (22)</td>
<td>17 (28)</td>
</tr>
<tr>
<td>Caucasian</td>
<td>34 (77)</td>
<td>52 (78)</td>
<td>43 (72)</td>
</tr>
<tr>
<td>Other</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>44</td>
<td>67</td>
<td>60</td>
</tr>
<tr>
<td>Marital status of parents/guardians</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not currently married</td>
<td>10 (23)</td>
<td>18 (27)</td>
<td>20 (33)</td>
</tr>
<tr>
<td>Currently married</td>
<td>32 (73)</td>
<td>47 (70)</td>
<td>20 (65)</td>
</tr>
<tr>
<td>Missing</td>
<td>2 (4)</td>
<td>2 (3)</td>
<td>1 (2)</td>
</tr>
<tr>
<td>Total</td>
<td>35</td>
<td>67</td>
<td>60</td>
</tr>
</tbody>
</table>

*a Spanish was listed as the primary language in all respondent’s homes.

Table 2

Overall Demographics for the Local Head Start Program

<table>
<thead>
<tr>
<th>Variable</th>
<th>(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
</tr>
<tr>
<td>Boy</td>
<td>54 %</td>
</tr>
<tr>
<td>Girl</td>
<td>46 %</td>
</tr>
<tr>
<td>Ethnicity*a</td>
<td></td>
</tr>
<tr>
<td>Latino/Hispanic</td>
<td>24 %</td>
</tr>
<tr>
<td>Caucasian</td>
<td>75 %</td>
</tr>
<tr>
<td>Other</td>
<td>1 %</td>
</tr>
<tr>
<td>Marital status of parents/guardians</td>
<td></td>
</tr>
<tr>
<td>Not currently married</td>
<td>29 %</td>
</tr>
<tr>
<td>Currently married</td>
<td>66 %</td>
</tr>
<tr>
<td>Other</td>
<td>5 %</td>
</tr>
</tbody>
</table>

*aPercentages signify the family’s primary language spoken in the home.
There were two separate waves of letters sent to the sample participants. After a few weeks, a second wave was mailed to those that did not respond to the first mailing. After the first mailing, 75 (45% response rate) responses were received. Then after the second mailing an additional 29 responses were received, bringing the total number of responses to 104 (62% response rate). This response rate for a mail questionnaire is typical of what occurs in social science research. Erwin and Wheelright’s (2002) investigation found that when monetary incentives were used to gather responses to mail questionnaires, the average response rate for research published in the *Journal of Counseling and Development* was at 51%.

The response rate for each classroom type varied with the HB-CB classroom type having the highest response percentage. Of the total number of participants selected to participate in the study, 73% (32 out of 44) in the HB-CB classroom responded to the questionnaires, whereas, only 55% (37 out of 67) responded from the HB only classroom, and only 58% (35 out of 60) responded from the CB only classroom.

The vast majority (90%) of the questionnaires and consent forms were filled out by the Head Start child’s mother, with father’s responses making up 5% of the sample and guardians/other making up the remaining 3% (see Table 3).

Participants were mainly from two ethnic backgrounds: European-American (75%) and Latino/Hispanic (23%). The remaining 2% were Asian or Pacific Islander. Marital status was collapsed into two classifications, currently married 80%, and not currently married, 20%. Currently married signified those who responded being married or remarried, while not currently married, referred to those who were divorced, separated, widowed, or never married.
Table 3

Questionnaire Respondents

<table>
<thead>
<tr>
<th>Variable</th>
<th>n</th>
<th>Percent</th>
<th>Valid Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Guardian</td>
<td>3</td>
<td>2.9</td>
<td>2.9</td>
</tr>
<tr>
<td>Father</td>
<td>5</td>
<td>4.8</td>
<td>4.9</td>
</tr>
<tr>
<td>Mother</td>
<td>94</td>
<td>90.4</td>
<td>92.2</td>
</tr>
<tr>
<td>Total</td>
<td>102</td>
<td>98.1</td>
<td>100</td>
</tr>
<tr>
<td>Missing</td>
<td>2</td>
<td>1.9</td>
<td></td>
</tr>
</tbody>
</table>

Table 4 includes the participant’s ethnic background and marital status by the three classroom types as well as all of the other demographic variables used in this study. It is important to note the demographic variables of the respondents also closely reflect the overall percentage breakdown of the local Head Start population (see Tables 2 & 4).

Other demographic variables included the child gender, father educational level, mother educational level, family income, number of children in the family, number of consecutive years the family has had their child in Head Start, number of years altogether that the family has had a child in an early intervention program, and as well as participants’ religion.

Originally, the educational levels were measured according to six categories, but were collapsed into four categories as follows: less than high school diploma including those with a 1-8 grade education, as well as those with a 9-11 grade education; high school/GED referring to those that completed high school or the equivalent thereof; vocational/some college referring to those that went to vocational school or a year or two of college, and college/university graduate and above including respondents who completed college and also those who reported completing graduate studies or other
professional schooling. The religion variable was also collapsed into three categories—Latter-day Saints, Catholic, and all others.

The majority of the participants came from low income families, as Head Start mainly enrolls only those from a low-income background. For the purpose of this study children from over-income families were largely excluded; however some over-income families were included in the study because families only had to verify their income level once at the very beginning of their Head Start experience. It is very likely that some families may very well have received other employment opportunities which would have made them over the income verifications had they had to re-qualify during the school year or even the following school year for roll-over families.

Unlike other studies that have used the Family Involvement Questionnaire (FIQ) with mostly African American backgrounds, this particular population was mostly Anglo American (76%) with a moderate minority of Latin Americans (23%), as well as a few others from other ethnic backgrounds.

The FIQ is also an effective tool to use, in part, because it covers such a wide range of parent involvement activities that can be classified into 3 overall factors: home-based involvement, school-based involvement, and home-school conferencing. In addition, by using the FIQ in this particular setting, it would be able to further validate the claims for this measurement to generalize to other ethnic populations besides just the African American backgrounds that it has been mainly used with.

Also, the FIQ tool has been used mainly in urban areas, whereas this study involved a population that lives in a mostly rural area in Southeastern Idaho and Northern Utah, therefore providing further information about the generalizability of this tool.
Table 4

Frequencies of Demographic Variables with Classroom Type

<table>
<thead>
<tr>
<th>Variable</th>
<th>HB-CB (%)</th>
<th>HB only (%)</th>
<th>CB only (%)</th>
<th>Total # (Cumulative %)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Boy</td>
<td>18 (56)</td>
<td>18 (49)</td>
<td>21 (60)</td>
<td>57 (55)</td>
</tr>
<tr>
<td>Girl</td>
<td>14 (44)</td>
<td>19 (51)</td>
<td>14 (40)</td>
<td>47 (45)</td>
</tr>
<tr>
<td>Total</td>
<td>32</td>
<td>37</td>
<td>35</td>
<td>104</td>
</tr>
<tr>
<td>Ethnicity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Latino/Hispanic</td>
<td>7 (23)</td>
<td>8 (23)</td>
<td>8 (23)</td>
<td>23 (23)</td>
</tr>
<tr>
<td>Caucasian</td>
<td>23 (77)</td>
<td>27 (77)</td>
<td>27 (77)</td>
<td>77 (77)</td>
</tr>
<tr>
<td>Total</td>
<td>30</td>
<td>35</td>
<td>35</td>
<td>100</td>
</tr>
<tr>
<td>Marital status</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not currently married</td>
<td>7 (22)</td>
<td>2 (6)</td>
<td>11 (31)</td>
<td>20 (20)</td>
</tr>
<tr>
<td>Currently married</td>
<td>25 (78)</td>
<td>33 (94)</td>
<td>24 (69)</td>
<td>82 (80)</td>
</tr>
<tr>
<td>Total</td>
<td>32</td>
<td>35</td>
<td>35</td>
<td>102</td>
</tr>
<tr>
<td>Father’s education level</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt; High school diploma</td>
<td>5 (17)</td>
<td>5 (15)</td>
<td>6 (18)</td>
<td>16 (16)</td>
</tr>
<tr>
<td>High School or GED</td>
<td>11 (37)</td>
<td>10 (29)</td>
<td>13 (38)</td>
<td>34 (35)</td>
</tr>
<tr>
<td>Some post H.S.</td>
<td>10 (33)</td>
<td>10 (29)</td>
<td>7 (21)</td>
<td>27 (28)</td>
</tr>
<tr>
<td>≥ College degree</td>
<td>4 (13)</td>
<td>9 (26)</td>
<td>8 (24)</td>
<td>21 (21)</td>
</tr>
<tr>
<td>Total</td>
<td>30</td>
<td>34</td>
<td>34</td>
<td>98</td>
</tr>
<tr>
<td>Mother’s educational level</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt; High school diploma</td>
<td>2 (6)</td>
<td>6 (18)</td>
<td>4 (11)</td>
<td>12 (12)</td>
</tr>
<tr>
<td>High School or GED</td>
<td>13 (41)</td>
<td>8 (24)</td>
<td>12 (34)</td>
<td>33 (33)</td>
</tr>
<tr>
<td>Some post H.S.</td>
<td>13 (41)</td>
<td>11 (33)</td>
<td>13 (37)</td>
<td>37 (37)</td>
</tr>
<tr>
<td>≥ College degree</td>
<td>4 (13)</td>
<td>8 (24)</td>
<td>6 (17)</td>
<td>18 (18)</td>
</tr>
<tr>
<td>Total</td>
<td>32</td>
<td>33</td>
<td>35</td>
<td>100</td>
</tr>
<tr>
<td>Family income</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>≤ $7,499</td>
<td>3 (10)</td>
<td>4 (13)</td>
<td>4 (11)</td>
<td>11 (12)</td>
</tr>
<tr>
<td>$7,500 - $14,999</td>
<td>5 (17)</td>
<td>6 (20)</td>
<td>7 (20)</td>
<td>18 (19)</td>
</tr>
<tr>
<td>$15,000 - $22,499</td>
<td>5 (17)</td>
<td>7 (23)</td>
<td>7 (20)</td>
<td>19 (20)</td>
</tr>
<tr>
<td>$22,500 - $29,999</td>
<td>5 (17)</td>
<td>5 (17)</td>
<td>4 (11)</td>
<td>14 (15)</td>
</tr>
<tr>
<td>$30,000 - $37,499</td>
<td>9 (30)</td>
<td>4 (13)</td>
<td>7 (20)</td>
<td>20 (21)</td>
</tr>
<tr>
<td>≥ $37,500</td>
<td>3 (10)</td>
<td>4 (13)</td>
<td>6 (17)</td>
<td>13 (14)</td>
</tr>
<tr>
<td>Total</td>
<td>30</td>
<td>30</td>
<td>35</td>
<td>95</td>
</tr>
<tr>
<td># of Children in family</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1-2 children</td>
<td>9 (28)</td>
<td>12 (36)</td>
<td>12 (34)</td>
<td>33 (33)</td>
</tr>
<tr>
<td>3 children</td>
<td>6 (19)</td>
<td>8 (24)</td>
<td>8 (23)</td>
<td>21 (21)</td>
</tr>
<tr>
<td>4 children</td>
<td>9 (28)</td>
<td>8 (24)</td>
<td>10 (29)</td>
<td>27 (27)</td>
</tr>
<tr>
<td>5 or more children</td>
<td>8 (25)</td>
<td>6 (18)</td>
<td>5 (14)</td>
<td>19 (19)</td>
</tr>
<tr>
<td>Total</td>
<td>32</td>
<td>33</td>
<td>35</td>
<td>100</td>
</tr>
</tbody>
</table>

(table continues)
Information gathered from those that did not initially participate in the study was very small but nonetheless also revealed similar demographics to those that did participate in the study (see Table 5). For the purpose of this study, just three demographic variables were looked at to compare with the initial respondents.

Table 5

Demographics of Initial Nonrespondents

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Boy</td>
<td>3</td>
<td>43</td>
</tr>
<tr>
<td>Girl</td>
<td>4</td>
<td>57</td>
</tr>
<tr>
<td>Ethnicity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Latino/Hispanic</td>
<td>1</td>
<td>14</td>
</tr>
<tr>
<td>Caucasian/White</td>
<td>6</td>
<td>86</td>
</tr>
<tr>
<td>Martial Status</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not currently married</td>
<td>1</td>
<td>14</td>
</tr>
<tr>
<td>Currently married</td>
<td>6</td>
<td>86</td>
</tr>
</tbody>
</table>
Procedures

Because this study involved human subjects, the procedures were reviewed and approved by the Utah State University’s Institutional Review Board (see Appendices A & B). As well, the procedures for this study were presented and approved by the governing body of Head Start known as the Policy Council which consists of current Head Start parents and community volunteers (see Appendix E).

Once all three sampling groups were identified, each potential participant was mailed a letter containing the parent consent form, the Family Involvement Questionnaire (FIQ), and the Parent Demographic Questionnaire (see Appendices C & D) along with a stamped, self-addressed envelope to return the items. In addition to these items, we also included 5 ice cream vouchers for an incentive, beforehand, for them to complete the questionnaires. Only a tracking number was in place of the family’s name to ensure confidentiality with the demographic questionnaire and the Family Involvement Questionnaire. By gathering the data this way, we hoped to increase the reliability of the responses because the parents would be able to fill out the questionnaire in the comfort of their own home and at their convenience.

All of the child assessment data were completed earlier at the beginning of the school year, but demographic information and responses on the FIQ were collected concurrent with the study. Data were stored and coded without the names attached. The data were also reported in aggregate fashion only so the individual families were not singled out or identified. To ensure confidentiality, all the data gathered were stored in a locked cabinet in a secure place. To further ensure confidentiality only the principle
researcher handled and inputted the data. To make sure that the data was inputted correctly, the principle investigator also performed random checks and found no errors in coding the responses.

Measures

*Developmental Indicators for the Assessment of Learning • Third Edition*

The DIAL 3 consisting of Motor, Concepts, & Language areas, was chosen for two main reasons. The first reason is that it has been used for many years as an assessment tool at the sample Head Start location and already available for use.

The second reason was because this assessment also shows moderate to high validity and reliability. Internal consistency for motor has received an overall alpha of .66, concepts has received an alpha of .84, and language an alpha of .77, with a total internal consistency of .87 (Mardell-Czudnowski & Goldenberg, 1998). Test-retest reliability was .69 for the motor area while it was .85 for both concepts and language as well as .88 for the overall DIAL 3 assessment (Mardell-Czudnowski & Goldenberg).

Regarding validity, the DIAL 3 assessment has been shown to correlate significantly with many other well-established instruments including the Early Screening Profiles (ESP), Battelle Developmental Inventory Screening Test (BDIST), the Bracken Basic Concept Scale, the Brigance Preschool Screen, the Differential Ability Scales (DAS), the Peabody Picture Vocabulary Test, Third Edition (PPVT-III), and the Social Skills Rating System (Mardell-Czudnowski & Goldenberg, 1998).
The DIAL 3 assessment takes about 20-30 minutes to administer and has eight to ten tasks to complete in each area. Examples of some of the tasks include: differentiating opposite figures such as which one is cold versus hot, or which one is the smaller versus the larger one. Other questions deal with the child being able to correctly respond to situations like: what would you do if you wanted to go outside and it was raining? Or, what would you do if you went into your room and it was dark inside? We analyzed the child’s overall standardized score as well as the standardized score for each of the three areas that the assessment focused on.

Ages and Stages Questionnaire: Social and Emotional (ASQ:SE)

This instrument has been used in conjunction with the Child Behavior Checklist (CBCL) and the Vineland Social-Emotional Early Childhood Scale (SEEC). It has also been shown to have concurrent validity with both the CBCL and the SEEC. Test-retests of the ASQ:SE administered over a few week period revealed a 94% agreement between being able to classify the children as being in the “at-risk” category (Squires, Bricker, & Twombly, 2002).

The ASQ:SE assessment was chosen for a few reasons. One reason is because this measurement has adequate validity and reliability. Another reason why this instrument was chosen is because the local Head Start program has been using this assessment in conjunction with the Bear River Mental Health Agency for a number of years and Head Start already had the data collected for each child. Thus by using this tool, it did not create nor require more work on the part of the parents or the teachers to generate data.
Family Involvement Questionnaire (FIQ)

The FIQ investigates a wide range of ways parents are involved in their preschoolers’ education. Ranging from home-based and school-based activities to home-school conferencing activities. Also, investigation revealed internal consistency with Cronbach alphas of .85, .85, and .81 for home-based involvement, school-based involvement, and home-school conferencing respectively (Fantuzzo et al., 2000).

Data Analysis

The independent variables of this study were the child’s current classroom experience (e.g., HB-CB, HB only, or CB only), the child’s DIAL 3, and ASQ:SE scores, along with the demographic variables from the demographic questionnaire including the child’s gender, the gender of the parent filling out the forms, marital status, number of children in the family, education level, yearly income level, ethnicity, religion, how many consecutive years they had had the target child in Head Start, and lastly how many total years they had been involved in an early intervention program. The dependent variable was the FIQ as completed by the parents.

The purpose of doing this research was to be able to answer the following six questions:

Question One: Are there statistically significant correlations between the demographic variables, sample groups (home-based to center-based, home-based only, and center-based only), and the type of the parents’ involvement in Head Start?
Question Two: Are there statistically significant correlations between demographic variables, the sample groups, and the quantity of the parents’ involvement in Head Start?

Question Three: Are there statistically significant differences in the type of parent involvement activities by the three sample groups (HB to CB, HB only, and CB only), using the child’s gender, age, and prior years of family involvement as covariates?

Question Four: Are there statistically significant differences in the quantity of parent involvement by the sample groups, using the child’s gender, age, and prior years of family involvement as covariates?

Question Five: Does the type and quantity of parent involvement activities correlate with the child’s scores on developmental assessment scores at the beginning of the school year?

Question Six: Can the quantity of parent involvement activities be predicted by their child’s scores on developmental assessment scores at the beginning of the school year or by any of the other independent measures?

By investigating the six research questions above, we felt that we would be able to contribute to the extant literature by showing which variables (e.g., the children’s DIAL 3, ASQ:SE scores, in addition to demographic variables) could be used to predict parental involvement in Head Start in a mostly rural population.
CHAPTER IV
RESULTS

To examine predictors of parent involvement in a rural setting, data were collected from 104 participants who returned the signed consent form along with the Parent Demographic Questionnaire and the Family Involvement Questionnaire. For statistical analysis we used three procedures. First, we calculated descriptive statistics, then we calculated correlations between the dependent variables and independent variables. As part of the correlation analysis we also checked for multicollinearity among the variables (see Appendix F). For the last analyses (Tables 8, 9, and 10) we used regression analysis to find the best predictors of the Family Involvement Questionnaire subscale scores (the type of parent involvement activities) and total scores (the quantity of parent involvement).

As shown in Table 6, for the first statistical analysis we found the mean, range, and standard deviation for the variables that could be analyzed in this manner which included the children's age, their ASQ:SE score, and their multiple scores on the DIAL 3 assessment.

Reliability tests were also computed to compare the results of this investigation with reported internal consistency coefficients of the Family Involvement Questionnaire (FIQ). For the three parent involvement factors, school-based involvement (SBI), home-based involvement (HBI), and home-school conferencing (HSC), previous work found Cronbach's alphas of .85, .85, and .81 respectively (Fantuzzo et al., 1999). In the current study the Cronbach's alphas were .80, .84, and .87, respectively.
Table 6

**Mean, Range, and SD for ASQ:SE, DIAL 3 Scores, and the Child’s Age in Months**

<table>
<thead>
<tr>
<th>Variable</th>
<th>$N$</th>
<th>Minimum</th>
<th>Maximum</th>
<th>$M$</th>
<th>$SD$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Child’s age in months</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Home-based to center-based (HB-CB)</td>
<td>32</td>
<td>49</td>
<td>63</td>
<td>55.38</td>
<td>3.99</td>
</tr>
<tr>
<td>Home-based only (HB only)</td>
<td>37</td>
<td>37</td>
<td>62</td>
<td>46.54</td>
<td>6.63</td>
</tr>
<tr>
<td>Center-based only (CB only)</td>
<td>35</td>
<td>41</td>
<td>60</td>
<td>54.60</td>
<td>4.15</td>
</tr>
<tr>
<td>Total overall</td>
<td>10</td>
<td>37</td>
<td>63</td>
<td>51.97</td>
<td>6.51</td>
</tr>
<tr>
<td>Child’s ASQ score</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Home-based to center-based (HB-CB)</td>
<td>32</td>
<td>0</td>
<td>120</td>
<td>35.31</td>
<td>28.74</td>
</tr>
<tr>
<td>Home-based only (HB only)</td>
<td>37</td>
<td>5</td>
<td>100</td>
<td>45.35</td>
<td>26.16</td>
</tr>
<tr>
<td>Center-based only (CB only)</td>
<td>35</td>
<td>0</td>
<td>105</td>
<td>37.89</td>
<td>25.63</td>
</tr>
<tr>
<td>Total overall</td>
<td>10</td>
<td>0</td>
<td>120</td>
<td>39.75</td>
<td>26.89</td>
</tr>
<tr>
<td>Child’s DIAL 3 motor percentile score</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Home-based to center-based (HB-CB)</td>
<td>32</td>
<td>6</td>
<td>99</td>
<td>62.88</td>
<td>33.89</td>
</tr>
<tr>
<td>Home-based only (HB only)</td>
<td>32</td>
<td>3</td>
<td>99</td>
<td>63.25</td>
<td>29.72</td>
</tr>
<tr>
<td>Center-based only (CB only)</td>
<td>33</td>
<td>7</td>
<td>99</td>
<td>66.00</td>
<td>29.81</td>
</tr>
<tr>
<td>Total overall</td>
<td>97</td>
<td>3</td>
<td>99</td>
<td>64.06</td>
<td>30.89</td>
</tr>
<tr>
<td>Child’s DIAL 3 concepts percentile score</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Home-based to center-based (HB-CB)</td>
<td>32</td>
<td>1</td>
<td>98</td>
<td>51.38</td>
<td>29.13</td>
</tr>
<tr>
<td>Home-based only (HB only)</td>
<td>32</td>
<td>3</td>
<td>95</td>
<td>47.00</td>
<td>28.96</td>
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<tr>
<td>Center-based only (CB only)</td>
<td>33</td>
<td>2</td>
<td>98</td>
<td>48.85</td>
<td>31.62</td>
</tr>
<tr>
<td>Total overall</td>
<td>97</td>
<td>1</td>
<td>98</td>
<td>49.77</td>
<td>31.60</td>
</tr>
<tr>
<td>Child’s DIAL 3 language percentile score</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Home-based to center-based (HB-CB)</td>
<td>32</td>
<td>1</td>
<td>99</td>
<td>43.19</td>
<td>35.90</td>
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<td>Home-based only (HB only)</td>
<td>32</td>
<td>1</td>
<td>98</td>
<td>45.69</td>
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<td>27.65</td>
</tr>
<tr>
<td>Total overall</td>
<td>97</td>
<td>1</td>
<td>99</td>
<td>46.77</td>
<td>31.60</td>
</tr>
<tr>
<td>Child’s DIAL 3 overall percentile score</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Home-based to center-based (HB-CB)</td>
<td>32</td>
<td>1</td>
<td>98</td>
<td>52.25</td>
<td>31.19</td>
</tr>
<tr>
<td>Home-based only (HB only)</td>
<td>32</td>
<td>2</td>
<td>99</td>
<td>53.53</td>
<td>30.97</td>
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<tr>
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<td>33</td>
<td>3</td>
<td>99</td>
<td>55.94</td>
<td>31.35</td>
</tr>
<tr>
<td>Total overall</td>
<td>97</td>
<td>1</td>
<td>99</td>
<td>53.93</td>
<td>30.89</td>
</tr>
</tbody>
</table>

Reliability tests were also computed to compare the results of this investigation with reported internal consistency coefficients of the Family Involvement Questionnaire (FIQ). For the three parent involvement factors, school-based involvement (SBI), home-
based involvement (HBI), and home-school conferencing (HSC), previous work found Cronbach’s alphas of .85, .85, and .81, respectively (Fantuzzo et al., 1999). In the current study the Cronbach’s alphas were .80, .84, and .87, respectively.

The next set of analyses performed was to answer the six questions on which this study was focused. For questions 1 through 5 we computed correlations between the independent and dependent variables (see Table 7). Then to help investigate question 6 we used regression analysis.

Questions One and Two

Are there any statistically significant correlations between the demographic variables, sample groups, and the type and quantity of the parents’ involvement? Our analysis found no statistically significant relations within the three sample groups and the type and the quantity of parents’ involvement. However, with the demographic variables there was one correlation between the parents’ ethnicity and home-based involvement activities. Analysis indicated that parents in the “HB only” and the “HB to CB” classroom types were more likely to report participation in home-based activities with their child if they were from an Anglo American ethnicity.

Question Three

Are there statistically significant differences in parent involvement activities by groups (HB to CB, HB only, and CB only), using the child’s gender, age and the parent’s education level as co-variables? Despite what the principle researcher was expecting to find, this study revealed no significant difference in the type of parent involvement
activities according to the child’s classroom type, even after controlling for the child’s age, and their parents’ education level.

Question Four

Are there statistically significant differences in the quantity of parent involvement by groups (HB to CB, HB only, and CB only), using the child’s gender, age, and prior years of family involvement as co-variables? Our analysis showed that there was no statistically significant difference in the amount of parent involvement according to the classroom type.

Question Five

Will the type and quantity of parent involvement activities correlate with the child’s scores on developmental assessment scores at the beginning of the school year? With this question, we found a few interesting findings. First was that the child’s overall DIAL 3 percentile rank correlated with home-based involvement activities. Also, the child’s ASQ:SE score correlated significantly in two of the three parent involvement factors – school-based and home-based activities.

Because the different components of the DIAL 3 did correlate with the child’s overall DIAL 3 percentile score, the components were used separately from the overall score. This was done to ensure that multicolinearity did not exist.

In addition to these findings, there were numerous other statistically significant correlations that we weren’t focusing on for this study, which weren’t surprising phenomena. A few examples of these correlations are the fathers’ and mothers’ education
levels correlating, as well as the number of consecutive years the target child had been in Head Start with the total number of years that the family was involved in an early intervention program. Other findings included a relation between both the fathers' and the mothers' education levels with the child's overall DIAL 3 percentile rank, as well as a correlation between the parent's marital status and the family income level.

Table 7

*Correlations Among Independent Variables and Parent Involvement Factors*

<table>
<thead>
<tr>
<th>Variable</th>
<th>School-based involvement</th>
<th>Home-based involvement</th>
<th>Home-school conferencing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HB to CB</td>
<td>.358**</td>
<td>.060</td>
<td>.009</td>
</tr>
<tr>
<td>HB only</td>
<td>.022</td>
<td>-.029</td>
<td>.151</td>
</tr>
<tr>
<td>CB only</td>
<td>.142</td>
<td>-.100</td>
<td>.023</td>
</tr>
<tr>
<td>Child’s age</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HB to CB</td>
<td>-.074</td>
<td>-.050</td>
<td>.099</td>
</tr>
<tr>
<td>HB only</td>
<td>.015</td>
<td>.051</td>
<td>-.078</td>
</tr>
<tr>
<td>CB only</td>
<td>-.069</td>
<td>-.013</td>
<td>-.145</td>
</tr>
<tr>
<td>Child’s ASQ score</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HB to CB</td>
<td>-.457***</td>
<td>-.427**</td>
<td>-.190</td>
</tr>
<tr>
<td>HB only</td>
<td>-.026</td>
<td>-.392**</td>
<td>.001</td>
</tr>
<tr>
<td>CB only</td>
<td>-.281</td>
<td>-.221</td>
<td>-.175</td>
</tr>
<tr>
<td>Parents marital status</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HB to CB</td>
<td>.055</td>
<td>.061</td>
<td>-.017</td>
</tr>
<tr>
<td>HB only</td>
<td>-.196</td>
<td>-.158</td>
<td>-.272</td>
</tr>
<tr>
<td>CB only</td>
<td>-.218</td>
<td>-.225</td>
<td>-.202</td>
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<tr>
<td>Ethnicity</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>HB to CB</td>
<td>.159</td>
<td>.425**</td>
<td>-.056</td>
</tr>
<tr>
<td>HB only</td>
<td>.114</td>
<td>.353**</td>
<td>-.117</td>
</tr>
<tr>
<td>CB only</td>
<td>-.064</td>
<td>-.094</td>
<td>-.221</td>
</tr>
<tr>
<td># of children in family</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HB to CB</td>
<td>.230</td>
<td>-.266</td>
<td>-.332*</td>
</tr>
<tr>
<td>HB only</td>
<td>-.036</td>
<td>-.010</td>
<td>.090</td>
</tr>
<tr>
<td>CB only</td>
<td>-.083</td>
<td>-.322*</td>
<td>-.211</td>
</tr>
</tbody>
</table>
Can the quantity of parent involvement activities be predicted by their child’s scores on their developmental assessment scores at the beginning of the school year or any other independent variables? For this question, regression analysis was performed to determine the best predictors for each of the three parent involvement factors.

Independent variables were selected for the regression if they correlated significantly with the dependent variables, but did not correlate beyond .60 with each other (see Tables 8, 9, and 10).

In the home-based factor (HBI), the child’s ASQ:SE score and the number of children in the family were the included variables that were found to help explain some
of the parents’ participation levels in this factor (see Table 8). These two variables together were found to explain 12% of the variance in parent’s involvement in this factor. The negative score with these two variables signified that as the child’s ASQ:SE score and the number of children in the family went up, the amount of the parents’ involvement in home-based activities went down.

With the school-based involvement (SBI), the child’s ASQ:SE score was again included, but this time as the only variable that could be used to help explain the parent’s participation in this factor (see Table 9). Analysis revealed that the child’s ASQ:SE wasn’t as strong as in the HBI factor but could still explain about 5% of the parent’s involvement in this area. The negative score with the ASQ:SE again signified that as the child’s ASQ:SE score increased the parents’ involvement in school-based activities decreased. This means that as parents report their children as having more behavior issues the less likely they will report participating in school-based activities.

The last analysis investigated the variables that could be used to help explain the parent’s participation in the home-school conferencing (HSC) factor. This study revealed that the parents’ marital status along with their ethnicity could be used to explain 9% of the parents’ participation in HSC activities (see Table 10).

Marital status had a negative sign which meant that parents who reported being single, never married, divorced, or widowed were less likely to participate in home-school conferencing activities. Along these same lines, parents who reported being Latino/Hispanic were also less likely to be involved in home-school conferencing activities.

In summary, regression analysis revealed that the child’s ASQ:SE score was the
most effective variable used in explaining the different types of parent involvement activities. Other variables that were somewhat useful for different parent involvement factors included: the number of children in the family, the parent’s ethnicity, and the parent’s marital status (see Table 11).
Lastly a nonresponse bias estimate was performed to investigate the possible bias effect of the responders versus the non-responders. After the data collection process was completed and analyzed, additional letters were sent out to those that chose not to participate in the original study. The letters included the FIQ along with the consent form and the Parent Demographic Questionnaire. The incentive for them to participate was raised to $10.00. All of the non responders that were part of the original sample size were included in a pool and we randomly selected 20 families to send out the letters to. Of the 20 letters we received 7 back and also four “return to senders” because the families had moved. This is important to consider that the initial response rate may have very well been effected by a large number of families that have moved as is a common occurrence for Head Start families.

The main purpose for doing this was to show whether those individuals that originally didn’t participate reported more or less involvement with their Head Start child. Our analysis showed that there weren’t significant differences in the responses from the initial responders and these responders. This adds strength to the actual results of this study in that they are less likely to be biased.
Questions one and two asked if there would be statistically significant correlations between the demographic variables including the classroom grouping and the type and quantity of parent’s involvement. This study showed no significant correlations with the type of classroom and the type of parent involvement activities, but did show one significant correlation between all of the demographic variables and the three types of parent involvement factors. Family ethnicity was the only variable that was shown to correlate with home-based involvement activities.

Ethnicity correlated positively with home-based involvement activities. Anglo Americans were coded as 2 while Latinos/Hispanics were coded as a 1. Therefore, this means that Anglo Americans were statistically more likely to participate in home-based activities than were the Latinos/Hispanics. The researcher believes this is true due to a difference in culture. In the Anglo American culture, it has been stressed for many years the importance of parents helping their children at home with their school work. Studies on the same subject have found mixed results. Ritblatt et al., (2002) reported that ethnicities do have an influence in how parents perceive their child’s education. For example, they reported that Caucasian parents are more familiar with the practice of volunteering, and, therefore, feel more empowered to take part in the schools’ activities than members of the other ethnic groups. But on the other hand, in a study of a preschool intervention program, Baker and Roth (1997) concluded that ethnicity was not associated with either out-of-home or in-home parent involvement activities.
Claude Goldenberg has conducted and written many research articles investigating how children’s race is associated with their school experience. In one of her rebuttal articles she stated that it was a false belief when people thought that low-income Hispanic parents do not think that getting involved in their child’s school is important (Goldenberg, 1988). She also claims that if low-income Hispanic parents don’t become involved in their children’s school it is because the school missed the opportunity to have them get involved, not because of any lack of willingness on the part of the parents.

As part of questions two and three we wondered whether there would be any correlation among the type of classroom grouping with the type and quantity of parent involvement. Our study showed no significant relation among the group type and the three types of parent involvement. This may have been because of the small sample size, or it also may have occurred because Head Start has used the same guidelines with involving parents no matter what type of classroom setting the child is in.

Questions three and four asked if there would be statistically significant differences in the quantity and type of parent involvement activities by groups (HB to CB, HB only, and CB only), using the child’s gender, age, and the parent’s education level as covariables. Surprising to this researcher, analyses revealed no statistically significant relationships for this investigation in these areas either. There may be various reasons that could help explain why this occurred. Again, one may be that the staff at Head Start did a good job of stressing the importance of parental involvement – no matter the classroom type.

Question five was if the children’s developmental assessment scores taken at the beginning of the school year would show any relation with parent involvement activities.
Our study showed that both the child’s ASQ:SE and the child’s overall DIAL 3 percentile score did correlate with the home-based involvement and school-based involvement activities.

The Ages and Stages Questionnaire: Social and Emotional (ASQ:SE) is a parent questionnaire that asks about the child’s behavior. This questionnaire is always filled out a few months before or within the month that their child enters the preschool program. The ASQ:SE correlated negatively which means that the higher the behavior problems those parents perceive their children as having at the beginning of the school year, the more likely they were to report less participation in the school-based and home-based involvement activities. This may be partly due to the idea that parents are less likely to become involved as they view their child’s behavior as a measurement of their own efficacy. This phenomenon is supported by previous research that indicates fathers are more likely to become interested in their child’s education when he or she is 7 years old or older or if the child has fewer emotional and behavioral problems (Flouri & Buchanan, 2003). Or this phenomenon could be just that it might be harder for parents to become involved as they are trying to deal with their child’s behavior.

Some of the implications for educators may be the need to specifically reach out more with an emphasis in helping parents get involved, if their child has received high ASQ:SE score or any negative score on a behavioral assessment for that matter. Another implication could be for educators to try and break down the barriers that parents may have when they report their child as having behavioral problems.

The sixth and last question of this study was if parent involvement activities can be predicted by their child’s scores on their developmental assessment at the beginning of
the school year and other independent variables. This study found this to be true. Using regression analysis and excluding all other statistically nonsignificant variables, the child’s ASQ:SE with the number of children in the family could explain about 12% of the parents’ home-based involvement activities. Also these same two variables could be used to explain about 5% of the parents’ school-based activities. As the child’s ASQ:SE score and the number of children in the family increased, 5-12% of the decrease in parent involvement activities could be explained. Also, the parents’ marital status and ethnicity was shown to be able to explain about 9% in the home-schooling factor. If parents were from Latino or Hispanic backgrounds and reportedly not currently married then they were more likely to report less involvement with home-school conferencing activities.

Although this study did show an effect, it should be noted that the amount of variability explained by the children’s ASQ:SE and other variables, is small but nonetheless important (12%). It is an important finding in that it helps us know which variables have a relation to how parents become involved in their child’s preschool education.

Past research has shown the ability of a child’s education performance to predict parents’ involvement. One such study investigated how children performed when they were seven years old (Flouri & Buchanan, 2003). These researchers found that a child’s math attainment at age 7 could be used to help predict whether their father would be more interested in their child’s education at age 7 and age 11.

Although the quantity and type of parent involvement did not differ according to the classroom types, there was a difference in the actual responses to the questionnaires. It would also be interesting to do further analysis to investigate why the response rate
varied so much depending upon the classroom type. It is quite possible that those parents in the HB-CB classroom had positive experiences with Head Start due to the fact that they were receiving their second year of services in Head Start. Therefore, it may be possible that their positive attitude towards Head Start led them to want to participate more in the study than the other parents in the other two classroom types. Nonetheless, this study failed to show a significant difference in parent involvement activities based on the classroom type.

One limitation to this study, is that in measuring parent involvement only the parent’s perception of how involved they are, was used. We used a parent questionnaire to report their own involvement due to the fact that we wanted to look at involvement activities that only the parents would know whether they participate in such as home-based activities. Additional studies could include the FIQ with an involvement questionnaire reported from the teachers and then compare and contrast the two. Although this particular Head Start program does track the overall hours of parent involvement, it would be very difficult, if not unattainable, to try and define the specific type and the quantity of a parent’s participation in the program throughout the school year. It is also important to note that this study included a relatively small sample size. Additional studies should be conducted that include a much larger sample size.

Also, the ASQ:SE was a report taken from the parents on how they viewed their child’s behavior. It would be interesting to note similarities or differences that might exist if we had included a teacher’s assessment on the child’s behavior. The DIAL 3 did contain a report on the child's behavior that was taken by teachers during the assessment. This particular area of the DIAL 3 did significantly correlate with the child’s ASQ:SE
score, however the rest of the DIAL 3 did not correlate significantly with the other dependent variables. Also, it is important to note that the child behavior assessment in the DIAL 3 just focused on negative behaviors exhibited in the testing atmosphere. And for many of the children it was the first time the child has been in a school setting.

The tool that was used to measure parent involvement was an effective and useful tool, but the results can also be somewhat biased based upon the responses to their questionnaires. There was a 62% response rate which signifies that there were 38% of the selected samples that chose not to participate in the study. The type and quantity of their involvement that wasn’t reported by the non-participants could alter the finding. A non-response bias estimate that was performed weakened the plausibility of this claim though. In spite of the results from the non-response bias estimate, it may still be possible that those who didn’t participate are those individuals that are less involved to begin with.

This study was conducted in a mostly rural population whereas the FIQ has typically been used in urban settings, therefore, more studies with the FIQ should be performed in rural settings to further validate the findings of the current study.

This study dealt with preschool-aged children and their families, therefore, the results shouldn’t be generalized to older school-aged children, because there are many other dynamics taking place at the different age intervals and different school settings.

The DIAL 3 was used mainly due to the request of the Head Start staff, who wanted to use existing data so as not to require more work and stress on the part of the Head Start teachers, even when an incentive for the teachers was offered. Instruments that are more structurally sound could be used in future studies.

Even with these limitations, this study proved to expand on the extant literature in
a few ways. The most significant finding is that the parent’s perception of their child’s behavior problems (ASQ:SE) can be used to help explain how involved they become in a rural Head Start area. Another finding was that the parents’ ethnicity and marital status can also be used to help explain the types of parent involvement factors that parents participate in.

The implications from this study are that those parents who report their child as having problem behaviors (ASQ:SE) are less likely to get involved. Therefore, more effort needs to come from educators to ensure that parents in these circumstances can feel comfortable in getting involved and receive the extra help with their children so they can become more involved. This study also suggests that greater effort is needed on the part of educators to reach out and help parents get involved if they are from a minority (Latino/Hispanics in the current study) or are not married. These implications and suggestions are specifically very important for preschool educators and those that work in a rural population.
REFERENCES


Squires, J., Bricker, D., & Twombly, E. (2002). *Ages and stages questionnaires: Social-


APPENDICES
Appendix A: Informed Consent Form (English)
Informed Consent

"Exploring Predictors of Parent Involvement in a Mostly Rural Population"

Introduction/Purpose
Professor Ann Austin in the Family, Consumer and Human Development Department and Benjamin Wynn, a research assistant are asking for your participation in their research project. The purpose of their study is to learn and understand what helps predict how involved parents become in the Head Start program. Some of the things that we will look at are: how the children perform on social, emotional, and cognitive assessments and the type of class the child is in—whether it is an actual classroom (Center-Based) or if an educator visits the home (Home-Based). This is an independent research project and is not related to any other research on Head Start or Early Head Start. There will be approximately 160 parents and children involved in this study.

Procedures
If you agree to be in this study, you will be asked to:
1. Complete a demographic questionnaire with questions dealing with your family background, education level, income, and more.
2. Complete the Family Involvement Questionnaire which consists of 42 questions that ask how often you participate in Head Start school activities. All together it is expected that it may take you about 10 minutes to complete these questionnaires.
3. We are also asking for your permission to have access to your child’s files to review information obtained earlier by the Head Start staff already on file. Specifically, we would like to review your Head Start child’s outcomes on their DIAL 3, and the Ages and Stages Questionnaire (ASQ), assessments that were collected at the beginning of the school year. The DIAL 3 assessment is a screening test that Head Start does to find out what developmental level your child is at. The ASQ was filled out by one of the child’s parents and is a questionnaire about the child’s behaviors. Each family who participates will receive 5 ice cream vouchers from a local store.
4. Bear River Head Start is aware of our desire to do this research and they have given us their approval. (We now are asking permission from parents to participate).

New Findings
During the course of this study, you will be informed of any significant new findings, such as changes in the risks or benefits from participating in this research. If any changes are found, your consent to continue to participate will be obtained again prior to continuing the investigation.

Benefits/Risks
The benefits of this investigation is that we will be able to learn how the Head Start child’s performance on social, emotional, and academic measures and other demographic variables are related with how involved parents become in the program. Therefore, in the future, the Head Start program can then focus on the things that influence parent’s involvement in the Head Start program, so as to better help them become more involved in their Head Start child’s education. There are minimal risks by participating in this study and there is no cost involved in this study.

UDay     State
UNIVERSITY
DEPARTMENT OF FAMILY, CONSUMER, AND HUMAN DEVELOPMENT
College of Education and Human Services

3905 Old Main HI, Logan UT 84322-2905  Phone: (435) 797-1501  FAX: (435) 797-3345
Child Development Laboratory (435) 797-1544  MFT Program, Family Life Center (435) 797-7436  FCHO West (435) 797-1541

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1. Complete a demographic questionnaire with questions dealing with your family background, education level, income, and more.
2. Complete the Family Involvement Questionnaire which consists of 42 questions that ask how often you participate in Head Start school activities. All together it is expected that it may take you about 10 minutes to complete these questionnaires.
3. We are also asking for your permission to have access to your child’s files to review information obtained earlier by the Head Start staff already on file. Specifically, we would like to review your Head Start child’s outcomes on their DIAL 3, and the Ages and Stages Questionnaire (ASQ), assessments that were collected at the beginning of the school year. The DIAL 3 assessment is a screening test that Head Start does to find out what developmental level your child is at. The ASQ was filled out by one of the child’s parents and is a questionnaire about the child’s behaviors. Each family who participates will receive 5 ice cream vouchers from a local store.
4. Bear River Head Start is aware of our desire to do this research and they have given us their approval. (We now are asking permission from parents to participate).

New Findings
During the course of this study, you will be informed of any significant new findings, such as changes in the risks or benefits from participating in this research. If any changes are found, your consent to continue to participate will be obtained again prior to continuing the investigation.

Benefits/Risks
The benefits of this investigation is that we will be able to learn how the Head Start child’s performance on social, emotional, and academic measures and other demographic variables are related with how involved parents become in the program. Therefore, in the future, the Head Start program can then focus on the things that influence parent’s involvement in the Head Start program, so as to better help them become more involved in their Head Start child’s education. There are minimal risks by participating in this study and there is no cost involved in this study.
Exploring Predictors of Parent Involvement in a Mostly Rural Population

Confidentiality
Research records will be kept confidential. The completed questionnaires will be sealed in an envelope by the parent and mailed to the researcher to open and enter the data into a computer. Only the one researcher will have access to your child’s DIAL 3 and ASQ survey. Your name and the name of your child will be replaced with a code or case study number. The code will be kept separate from the data. When not in use the code and data will be in a locked file cabinet. At the end of the study the code will be destroyed.

Voluntary participation
Your participation in this research is entirely voluntary. You may refuse to participate or withdraw at any time without consequence. At any time that you wish to stop participating, you may do so by calling toll free 1-866-753-0951 extension 106.

Has the research study been approved?
Utah State University (USU) has an Institutional Review Board (IRB) that is responsible for making sure the research performed at USU is worthwhile and safe. The IRB at USU has approved this study. If you have questions about your rights or have concerns about the research, you may contact the IRB at (435) 797-1821.

Copies of Informed Consent
You have been given two copies of the Informed Consent. Please make sure to sign both copies. One copy goes to the investigator and you should keep the other copy.

Investigator Statement
"I certify that this paper explains in detail what is really going to occur with this research. I also certify that this consent form contains all the benefits and risks associated with this research that I am currently aware of. If you would like to discuss any questions or concerns about this research before your participation, you can call me at my toll free number listed below."

Professor Ann Austin, Ph.D. Date
Benjamin Wynn Date
Principal Investigator
Research Assistant
Family, Consumer & Human Dev. Dept.
Toll free 1-866-753-0951 extension 106
FCHD Department

Signature of Parent or Guardian: By signing below, I agree to participate.

Signature of Parent or Guardian Date

From now on you and your child will be referred to as Family Case Study #________.
Appendix B: Informed Consent Form (Spanish)
Forma de Consentimiento
Estudio Para Encontrar la Participación de los Padres en Actividades de Head Start

La Introducción y Prácticas: La Profesora Ann Austin en el departamento de Family, Consumer and Human Development de Utah State University y Benjamin Wynn, un asistente de investigación, están pidiendo su participación en este estudio. Estamos haciendo esta investigación para encontrar las razones porque los padres participan en algunas actividades de Head Start. Lo hemos seleccionado para participar en este estudio porque tiene un niño(a) que fue a Head Start. Esta investigación es independiente de todas las otras investigaciones con Head Start y Early Head Start y no tendrá conflictos con las demás investigaciones. Estamos pidiendo aproximadamente 160 padres y niños para participar en este estudio.

Procedimientos: La participación en este estudio incluye 3 partes. Estamos pidiéndole lo siguiente:
1. Que complete (llene) un cuestionario con preguntas acerca de su historia familiar, su nivel de educación, su nivel de ingresos, y más.
2. Que complete (llene) un cuestionario titulado – Family Involvement Questionnaire. Este Cuestionario tiene 42 preguntas acerca de su participación en actividades escolares de su niño(a) de Head Start. Los dos cuestionarios llevarán más o menos 10 minutos para completar.
3. También estamos pidiendo por su consentimiento de usar algunos de los arreglos de su niño(a) de Head Start. Especificamente, queremos usar los resultados de su niño(a) de la prueba que se llama DIAL 3, y el ASQ cuestionario. El DIAL 3 es un examen de pruebas usada para averiguar cómo su niño(a) está desarrollándose. El ASQ cuestionario fue llenado por uno de los padres al principio del año escolar. El ASQ tiene preguntas acerca del comportamiento de su niño(a). Cada familia que participa recibirán 5 copias de hechados de una tienda cercana a su hogar.

Beneficios/Riesgos: Los beneficios de este estudio será que podemos aprender que cosas apoyan padres a participar en actividades escolares de Head Start. Por ahora, el riesgo de participar en esta investigación es mínimo y no hay costos tampoco. Para evitar estrés, puede saltar preguntas que no quiera contestar.

Conclusiones Nuevas: Durante este estudio, será informado si encontramos conclusiones nuevas, tal como cambios en los riesgos o beneficios de participación en este estudio. Si encontramos conclusiones nuevas, le pediremos otra vez por su consentimiento antes de continuar el estudio.

Confidencialidad: Todos los datos y registros de este estudio serán protegidos de acuerdo a leyes estatales y federales. Los cuestionarios completados serán sellados en un sobre y manejado por correo al investigador para abrir e imprimir los datos. También, solo Benjamin usará las evaluaciones de DIAL 3, y ASQ de su niño(a). En lugar de su nombre y el nombre de su niño(a) usaremos un número. El código de los nombres y los números serán guardados aparte de los datos. Cuando no está en uso, el código será guardado en un fichero cerrado con llave. Al fin de esta investigación, el código será destruido.

Participación Voluntaria: Su participación en este estudio es completamente voluntario. Puede retirar su participación en cualquier momento y sin penalidad. Si tiene alguna preocupación acerca de la investigación o los procedimientos unidos, y no se siente cómodo discutiendo sus preocupaciones con Ann Austin o su asistente de investigación, puede comunicarse con True Rubal-Fox al 435-797-0567. Ella es la Administradora del Comité Institucional de Estudio (Institutional Review Board) en la Utah State University y es bilingüe.

Copias de esta forma de Consentimiento: Le hemos mandado dos copias de esta forma. Por favor, asegúrese de firmar las dos copias. Una de las copias va al investigador, y la otra puede guardarlo.

DECLARACIÓN DEL INVESTIGADOR: "Yo certifico que esta forma explica todo lo que vamos a hacer en este estudio. También yo certifico que esta forma contiene todos los beneficios y riesgos asociados con este estudio. Si tiene preguntas o preocupaciones, antes de su participación, usted puede llamarme a mi número gratis abajo."

Profesora Ann Austin, Ph.D. Fecha Benjamin Wynn Fecha
Investigador Principal Asistente de Investigación
Departamento de FCHD Número Grant 1-486-753-0951 extensión 196

La Firma del Guardián de los Participantes: He leído esta forma completa, y entiendo el propósito del estudio que Ann Austin y Benjamin Wynn están haciendo. Entiendo lo que debo hacer y con quien debo hablar si tengo alguna pregunta, duda, o preocupaciones. Con mi firma abajo, dey mi consentimiento para participar en este estudio.

Firma del Padre Fecha
De aquí y adelante en lugar de usar su nombre, usaremos un número de estudio. Su número de estudio será

2905 Old Main Hill, Logan UT 84322-2905 • Phone: 435-797-1301 • Fax: 435-797-3845
(Head of Department of Family, Consumer and Human Development) • (Assistant Professor)
Appendix C: Parent Demographic Questionnaire (English)
Parent Demographic Questionnaire

Please check the appropriate box for your current situation. All of your answers will be kept completely confidential, and you may skip any questions you don’t feel comfortable answering.

Family Background

1. The person completing this questionnaire is the Head Start child’s:
   □ Father □ Stepfather □ Grandfather □ Other relative
   □ Mother □ Stepmother □ Grandmother □ Guardian

2. What is your marital status?
   □ married □ remarried □ divorced or separated
   □ single – never married □ widowed □ common law (living together but not officially married)

3. How many children do you have?
   □ 1 □ 2 □ 3 □ 4 □ 5 □ 6 □ 7 □ 8 □ 9 □ 10 +

4. Please check the highest education level that the child’s father/father figure currently has completed.
   □ 1-8th grade □ high school graduate or GED □ college/university graduate
   □ 9-11 grade □ vocational or some college □ graduate or professional school

5. Please check the highest education level that the child’s mother/mother figure currently has completed.
   □ 1-8th grade □ high school graduate or GED □ college/university graduate
   □ 9-11 grade □ vocational or some college □ graduate or professional school

6. Please check your yearly income:
   □ less than $7,499 □ $7,500 - $14,999 □ $15,000 - $22,499 □ $22,500 - $29,999 □ $30,000 - $37,499
   □ $37,500 - $44,499 □ $45,500 - $52,499 □ $52,590 and above

7. Which best describes the ethnic background of the person filling out this questionnaire?
   □ White/Anglo □ African American/Black □ Middle Eastern □ European
   □ Latino/Hispanic □ Asian, Pacific Islander □ American Indian □ Other

8. How many consecutive years have you had your Head Start Child in an Early Intervention Program?
   □ 1 □ 2 □ 3 □ 4 □ 5

9. How many years altogether have you had your children in a Head Start program or other similar program?
   □ 1 □ 2 □ 3 □ 4 □ 5 □ 6 □ 7 □ 8 □ 9 □ 10 +

10. What religion are you?
    □ Catholic □ Protestant □ Baptist □ Agnostic
    □ Mormon □ Muslim □ Atheist □ Other

**Thank you for taking the time to fill out this questionnaire**
Appendix D: Parent Demographic Questionnaire (Spanish)
Un Cuestionario de Padres

Por favor, marque el cuadrado según su circunstancia. Todas las respuestas serán guardadas con confidencialidad, y no tiene que responder a las preguntas si no se le gusta.

Su Origen Familiar
1. La persona que está completando este cuestionario es el/la __________ del niño o niña de Head Start:
   - □ Padre
   - □ Madrastra
   - □ Abuelo
   - □ Otro pariente
   - □ Madre
   - □ Padastro
   - □ Abuela
   - □ Guardián

2. ¿Qué es su estado civil?
   - □ casado
   - □ soltero/a - nunca casado
   - □ divorciado o separado
   - □ viudo o viuda
   - □ ley común

3. ¿Cuántos niños tiene?
   - □ 1
   - □ 2
   - □ 3
   - □ 4
   - □ 5
   - □ 6
   - □ 7
   - □ 8
   - □ 9
   - □ 10 +

4. Para el padre/figura masculino del niño, por favor marque el nivel más alto que ha cumplido de educación.
   - □ 1-8° grado
   - □ escuela secundaria o GED
   - □ Se graduó de colegio/universidad
   - □ 9-11 grado
   - □ escuela industrial o 1-2 años de colegio
   - □ escuela postgrado

5. Para la madre/figura femenina del niño, por favor marque el nivel más alto que ha cumplido de educación.
   - □ 1-8° grado
   - □ escuela secundaria o GED
   - □ Se graduó de colegio/universidad
   - □ 9-11 grado
   - □ escuela industrial o 1-2 años de colegio
   - □ escuela postgrado

6. Por favor, marque su salario anual:
   - □ menos que $7,499
   - □ $7,500 - $14,999
   - □ $15,000 - $22,499
   - □ $22,500 - $29,999
   - □ $30,000 - $37,499
   - □ $37,500 - $44,999
   - □ $45,500 - $52,499
   - □ $52,500 o más

7. ¿Cuál es la historia familiar de la persona llenando este cuestionario?
   - □ Blanco/Anglo
   - □ Latino/Hispano
   - □ Otro __________

8. ¿Cuántos años en sucesiva ha registrado su niño de Head Start en un programa de intervención de niños?
   - □ 1
   - □ 2
   - □ 3
   - □ 4
   - □ 5

9. ¿Cuántos años en total ha tenido sus niños en el programa de Head Start u otro programa similar?
   - □ 1
   - □ 2
   - □ 3
   - □ 4
   - □ 5
   - □ 6
   - □ 7
   - □ 8
   - □ 9
   - □ 10 +

10. ¿Qué religión es su familia?
    - □ Católica
    - □ Protestante
    - □ Bautista
    - □ Noreligion específico
    - □ Mormona
    - □ Musulmán
    - □ Nada
    - □ Otro __________

** Gracias por completar este cuestionario**
Appendix E: Letter of Approval from Head Start Policy Council
JoLee Bottorff
Bear River Head Start, Policy Council Chairperson
700 Sunset Circle
Hyrum UT 84319
435-245-4282

May 26, 2006

To Whom it May Concern:

On April 20, 2006, Benjamin Wynn proposed a research project (Exploring Predictors of Parent Involvement Research Proposal) on factors that affect parent involvement. There would be a random sampling of 40 1st year families and 60 repeat families, both English and Spanish speaking. About 100 families would receive an informed consent. Families would receive an incentive if they choose to participate. Ben would use assessments (DIAL 3, HELP, ASQ) already used by BRHS so there would be no extra burden on teachers or staff. He would assign numbers to the families to maintain confidentiality. Head Start would receive ownership of the project.

This Motion was approved at our April 20, 2006 policy council meeting.

Sincerely

[Signature]

JoLee Bottorff
Policy Council Chairperson
Appendix F: Correlations Among Measures and Subscales
Table 11

Correlations Among Measures and Subscales

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*p < .05, **p < .01, ***p < .001