THE USE OF VIDEO TO FACILITATE PARENT EMPOWERMENT
IN EARLY INTERVENTION

A Dissertation by

Jane L. Eby

MA, Wichita State University, 2005

MFA, Wichita State University, 1979

Submitted to the Department of Psychology
and the faculty of the Graduate School of
Wichita State University
in partial fulfillment of
the requirements for the degree of
Doctor of Philosophy

May 2009
THE USE OF VIDEO TO FACILITATE PARENT EMPOWERMENT IN EARLY INTERVENTION

The following faculty have examined the final copy of this dissertation for form and content, and recommend that it be accepted in partial fulfillment of the requirement for the degree of Doctor of Philosophy, with a major in Psychology

________________________________
James J. Snyder, Committee Chair

________________________________
Linda M. Mitchell, Committee Member

________________________________
Louis J. Medvene, Committee Member

________________________________
Victoria A. Shaffer, Committee Member

________________________________
Rhonda K. Lewis-Moss, Committee Member

Accepted for the College of Liberal Arts

________________________________
William D. Bischoff, Dean

Accepted for the Graduate School

________________________________
J. David McDonald
Associate Provost for Research and Dean of the Graduate School
ACKNOWLEDGEMENTS

I thank Jim Snyder, my dissertation chair, for his support and guidance, patience to see me through, and steady encouragement. This research has benefited from my experience of working in Jim Snyder’s lab, where we graduate students have been motivated by community spirit to collaborate and bring out the best in ourselves. Thank you to Jim Snyder and Neil Bontrager for their expertise and support in planning and producing the video. I am grateful to all of the families who participated in this project, especially the remarkable women who provided interviews for the video.

I appreciate the support of my committee members: Rhonda Lewis-Moss, Louis Medvene, Linda Mitchell and Victoria Shaffer. I have benefited from their perspectives and generous feedback throughout this project. I am grateful to Serena Tuck and Angela Gatschet for their assistance with data entry and interpretation, their dedication throughout this project and their interest in the findings. Thank you to Serena for persevering through the content analysis, and to the parents who critiqued our work.

This project would not have been possible without the enthusiasm, flexibility and graciousness of Debbie Mai, Lorraine Dold, Benith MacPherson, Deb Voth, and the staff of Rainbows United, Inc., and Frances Jackson of Youth Development Services, Inc. Thank you to Isabela Basombrio-Hoban, who encouraged me to pursue this profession.

Words will not suffice to thank Randy Kust, my husband, for his incredible sacrifices, and our children, Laura Kust and Leo Kust, who have become scholars in their own right. Thank you to all the people who have helped our family at home, especially Kendra Chanda.
ABSTRACT

This quasi-experimental study piloted a video that was designed to increase parent empowerment. Participants were parents of children ages 0-3 with special needs who had recently qualified for early intervention services. A mixed methods approach using quantitative and qualitative data was used to test the hypothesis that parents who saw the video would be more empowered than parents who did not see the video. Multiple regression analyses showed that the video significantly predicted empowerment for parents when parent education and the interaction of video and parent education were included as predictors. Watching the video was associated with increased empowerment for parents with some college and decreased empowerment for parents with four or more years of college. Results suggest that parent education also moderates parent empowerment in the context of child gender and child disability. Content analysis of qualitative data indicated that parents who saw the video were not more empowered than the comparison group. Two major themes that emerged from the qualitative inquiry were restored confidence and inspired action. This study concludes that targeted intervention may benefit parents who are beginning to receive early intervention services.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td>2. LITERATURE REVIEW</td>
<td>4</td>
</tr>
<tr>
<td>Empowerment as a Process</td>
<td>4</td>
</tr>
<tr>
<td>Empowerment as an Outcome</td>
<td>9</td>
</tr>
<tr>
<td>Measurement</td>
<td>9</td>
</tr>
<tr>
<td>3. PURPOSE OF THE RESEARCH</td>
<td>13</td>
</tr>
<tr>
<td>Development of the Videotape</td>
<td>14</td>
</tr>
<tr>
<td>Statement of the Problem</td>
<td>15</td>
</tr>
<tr>
<td>The Research Hypothesis</td>
<td>16</td>
</tr>
<tr>
<td>4. METHOD</td>
<td>18</td>
</tr>
<tr>
<td>Host Agency</td>
<td>19</td>
</tr>
<tr>
<td>Participants</td>
<td>20</td>
</tr>
<tr>
<td>Power Analysis</td>
<td>25</td>
</tr>
<tr>
<td>Research Design</td>
<td>25</td>
</tr>
<tr>
<td>Production of the Video</td>
<td>26</td>
</tr>
<tr>
<td>Development of Interview Questions</td>
<td>26</td>
</tr>
<tr>
<td>Recruiting and Interviewing Parents</td>
<td>27</td>
</tr>
<tr>
<td>Measures</td>
<td>28</td>
</tr>
<tr>
<td>Family Empowerment Scale</td>
<td>29</td>
</tr>
<tr>
<td>Family Outcomes Survey</td>
<td>30</td>
</tr>
<tr>
<td>Rating Scales and Questionnaires Created for this Study</td>
<td>31</td>
</tr>
<tr>
<td>IFSP Coordinator Rating of Parent Participation in the IFSP Process</td>
<td>31</td>
</tr>
<tr>
<td>Survey of Parent Reactions to the Video</td>
<td>31</td>
</tr>
<tr>
<td>Semi-structured Interview Questions</td>
<td>31</td>
</tr>
<tr>
<td>Questions Used Before and After the Family Empowerment Scale</td>
<td>32</td>
</tr>
<tr>
<td>Rating of Family’s Use of Services as Written in the IFSP</td>
<td>32</td>
</tr>
<tr>
<td>Procedures</td>
<td>33</td>
</tr>
<tr>
<td>Recruitment of Participants</td>
<td>33</td>
</tr>
<tr>
<td>“IFSP as Usual” Group</td>
<td>33</td>
</tr>
<tr>
<td>Intervention Group</td>
<td>34</td>
</tr>
<tr>
<td>Quantitative Procedures</td>
<td>35</td>
</tr>
<tr>
<td>Survey Data Collection</td>
<td>35</td>
</tr>
<tr>
<td>Data Analysis</td>
<td>38</td>
</tr>
</tbody>
</table>
# TABLE OF CONTENTS (continued)

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>4. METHOD (continued)</td>
<td></td>
</tr>
<tr>
<td>Qualitative Procedures</td>
<td>39</td>
</tr>
<tr>
<td>Participants</td>
<td>39</td>
</tr>
<tr>
<td>Qualitative Interviews</td>
<td>40</td>
</tr>
<tr>
<td>Data Collection Strategy</td>
<td>41</td>
</tr>
<tr>
<td>Data Analysis</td>
<td>42</td>
</tr>
<tr>
<td>5. RESULTS</td>
<td>45</td>
</tr>
<tr>
<td>Preliminary Analyses</td>
<td></td>
</tr>
<tr>
<td>Group Differences</td>
<td>45</td>
</tr>
<tr>
<td>Assessment of Dependent Variables</td>
<td>49</td>
</tr>
<tr>
<td>Reliability</td>
<td>49</td>
</tr>
<tr>
<td>Testing the Assumptions of Multiple Regression</td>
<td>50</td>
</tr>
<tr>
<td>Assessment of Predictor Variables</td>
<td>51</td>
</tr>
<tr>
<td>Parent Responses to the Video</td>
<td>52</td>
</tr>
<tr>
<td>Main Analyses</td>
<td>54</td>
</tr>
<tr>
<td>Sequential Multiple Regression</td>
<td></td>
</tr>
<tr>
<td>Service System Scale Regressed on Parent Education and Video Condition</td>
<td>56</td>
</tr>
<tr>
<td>Family Scale Regressed on Parent Education and Video Condition</td>
<td>60</td>
</tr>
<tr>
<td>Summary of Hypothesis Testing</td>
<td>63</td>
</tr>
<tr>
<td>Supplementary Analyses</td>
<td>64</td>
</tr>
<tr>
<td>Service System Scale Regressed on Gender and Parent Education</td>
<td>64</td>
</tr>
<tr>
<td>Family Scale Regressed on Gender and Parent Education</td>
<td>68</td>
</tr>
<tr>
<td>Service System Scale Regressed on Parent Education and Child Disability Status</td>
<td>72</td>
</tr>
<tr>
<td>Qualitative Content Analysis</td>
<td>77</td>
</tr>
<tr>
<td>Differences Between Conditions</td>
<td></td>
</tr>
<tr>
<td>Worry</td>
<td>79</td>
</tr>
<tr>
<td>Being Not Alone</td>
<td>79</td>
</tr>
<tr>
<td>Relating to Other Parents</td>
<td>80</td>
</tr>
<tr>
<td>Importance of Timing</td>
<td>81</td>
</tr>
<tr>
<td>Proactive Stance</td>
<td>81</td>
</tr>
<tr>
<td>Conclusion About the Research Hypothesis</td>
<td>82</td>
</tr>
<tr>
<td>Categories Common to Both Conditions</td>
<td>83</td>
</tr>
<tr>
<td>Validation as a Parent and Relationship Factors</td>
<td>83</td>
</tr>
<tr>
<td>Instrumental Support</td>
<td>84</td>
</tr>
</tbody>
</table>
## TABLE OF CONTENTS (continued)

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.</td>
<td></td>
</tr>
<tr>
<td>RESULTS (continued)</td>
<td></td>
</tr>
<tr>
<td>Restored Confidence as a Main Theme</td>
<td>85</td>
</tr>
<tr>
<td>Inspired Action as a Main Theme</td>
<td>87</td>
</tr>
<tr>
<td>Relating Qualitative Content Analysis Results to Empowerment Literature</td>
<td>88</td>
</tr>
<tr>
<td>The Mixed-Methods Approach to Testing the Hypothesis</td>
<td>90</td>
</tr>
<tr>
<td>Feedback from Parents</td>
<td>90</td>
</tr>
<tr>
<td>6.</td>
<td>92</td>
</tr>
<tr>
<td>DISCUSSION</td>
<td></td>
</tr>
<tr>
<td>Limitations of the Study</td>
<td>103</td>
</tr>
<tr>
<td>Recommendations for Practice</td>
<td>105</td>
</tr>
<tr>
<td>Recommendations for Future Research</td>
<td>107</td>
</tr>
<tr>
<td>REFERENCES</td>
<td>108</td>
</tr>
<tr>
<td>APPENDIXES</td>
<td>118</td>
</tr>
<tr>
<td>A. Severity Rating Codes</td>
<td>119</td>
</tr>
<tr>
<td>B. Pre-Interview Questions for Parent Participants in the Videotape</td>
<td>120</td>
</tr>
<tr>
<td>C. Family Empowerment Scale</td>
<td>122</td>
</tr>
<tr>
<td>D. Family Outcomes Survey</td>
<td>124</td>
</tr>
<tr>
<td>E. IFSP Coordinator Rating of Parent Participation in the Initial IFSP Meeting</td>
<td>127</td>
</tr>
<tr>
<td>F. Survey of Parent Reactions to the Video</td>
<td>129</td>
</tr>
<tr>
<td>G. Semi-structured Interview Questions</td>
<td>131</td>
</tr>
<tr>
<td>H. Questions Used with the Family Empowerment Scale</td>
<td>133</td>
</tr>
<tr>
<td>I. Rating of Family’s Use of Services as Written in the IFSP</td>
<td>134</td>
</tr>
<tr>
<td>J. Brief Consent</td>
<td>135</td>
</tr>
<tr>
<td>K. Full Consent and Release of Information</td>
<td>137</td>
</tr>
<tr>
<td>L. Handout to Parents in the Video Group</td>
<td>139</td>
</tr>
</tbody>
</table>
# LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Parent and Family Demographic Variables</td>
<td>21</td>
</tr>
<tr>
<td>2.</td>
<td>Child Characteristics</td>
<td>22</td>
</tr>
<tr>
<td>3.</td>
<td>Chi-Square Goodness of Fit Indices for Categorical Demographic Variables</td>
<td>24</td>
</tr>
<tr>
<td>4.</td>
<td>Data Collection Plan by Condition</td>
<td>29</td>
</tr>
<tr>
<td>5.</td>
<td>Summary of t-tests for Mean Differences on Demographic Variables</td>
<td>48</td>
</tr>
<tr>
<td>6.</td>
<td>Cronbach’s Alpha for Dependent Measures</td>
<td>49</td>
</tr>
<tr>
<td>7.</td>
<td>Descriptive Statistics for Dependent Variables</td>
<td>51</td>
</tr>
<tr>
<td>8.</td>
<td>Regression of FES Service System Scores on Video Condition, Parent Education, and Their Interaction</td>
<td>57</td>
</tr>
<tr>
<td>9.</td>
<td>Regression Equations for Three Levels of Parent Education and Video Status Predicting Scores on the FES Service System Scale</td>
<td>60</td>
</tr>
<tr>
<td>10.</td>
<td>Regression of FES Family Scale Scores on Video Condition, Parent Education, and Their Interaction</td>
<td>61</td>
</tr>
<tr>
<td>11.</td>
<td>Regression Equations for Three Levels of Parent Education and Video Status Predicting Scores on the FES Family Scale</td>
<td>63</td>
</tr>
<tr>
<td>12.</td>
<td>Regression of FES Service System Scale Scores on Parent Education, Child Gender, and Their Interaction</td>
<td>65</td>
</tr>
<tr>
<td>13.</td>
<td>Regression Equations for Three Levels of Parent Education and Child Gender Predicting Scores on the FES Service System Scale</td>
<td>68</td>
</tr>
<tr>
<td>14.</td>
<td>Regression of FES Family Scale Scores on Parent Education, Child Gender, and Their Interaction</td>
<td>69</td>
</tr>
<tr>
<td>15.</td>
<td>Regression Equations for Three Levels of Parent Education and Child Gender Predicting Scores on the FES Family Scale</td>
<td>72</td>
</tr>
<tr>
<td>16.</td>
<td>Regression of FES Service System Scale on Parent Education, Child Disability, and Their Interaction</td>
<td>73</td>
</tr>
<tr>
<td>Table</td>
<td>Description</td>
<td>Page</td>
</tr>
<tr>
<td>---------</td>
<td>------------------------------------------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>17.</td>
<td>Regression Equations for Three Levels of Parent Education and Child</td>
<td>76</td>
</tr>
<tr>
<td></td>
<td>Disability Status Predicting Scores on the FES Service System Scale</td>
<td></td>
</tr>
<tr>
<td>18.</td>
<td>Qualitative Coding Categories</td>
<td>79</td>
</tr>
<tr>
<td>Figure</td>
<td>Description</td>
<td>Page</td>
</tr>
<tr>
<td>--------</td>
<td>------------------------------------------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>1.</td>
<td>Flow chart of participants</td>
<td>36</td>
</tr>
<tr>
<td>2.</td>
<td>Interaction of video and parent education</td>
<td>59</td>
</tr>
<tr>
<td>3.</td>
<td>Regression of family scale on video and parent education</td>
<td>62</td>
</tr>
<tr>
<td>4.</td>
<td>Interaction of gender and parent education</td>
<td>67</td>
</tr>
<tr>
<td>5.</td>
<td>Regression of family scale on gender and parent education</td>
<td>71</td>
</tr>
<tr>
<td>6.</td>
<td>Regression of service system scale on child disability and parent education</td>
<td>75</td>
</tr>
</tbody>
</table>
CHAPTER 1
INTRODUCTION

Early intervention for children birth to age 3 who have developmental disabilities or who are at risk for developmental delays is required by law to use a family focus (Individuals with Disabilities Act (IDEA), P. L. 108-446; Joanning, Demmitt, Brotherson, & Whidden, 1994; Katz & Scarpati, 1995; McLean, Wolery, & Bailey, 2004; Turnbull & Turnbull, 2001; Turnbull, Turnbull, Erwin, & Soodak, 2006). Family-focused or family-centered practices are derived from an ecological model in which the child with a disability must be viewed in the context of the family (Brinker, 1992; Thompson et al., 1997). Ecological, contextual approaches to working with children recognize the potential for parents to guide decisions made on behalf of the child. The ecological approach to working with families that developed in the 1970s and 1980s (Bruder, 2000; Mahoney & Bella, 1998) was influenced by the work of Bronfenbrenner (1979) and Sameroff (Sameroff, 1982; Sameroff & Chandler, 1975). Dunst, Trivette, and Deal (1994) called for integrating family support principles, family empowerment, and family-centered focus. These researchers maintain that the primary goal of early intervention is to enable families to access needed services and supports, and make major decisions about allocations of time and resources. Thus, early intervention seeks to empower families through true collaboration with service providers (Dunst, Trivette, & Johanson, 1994; Turnbull & Turnbull, 2001; Turnbull et al., 2006).

Families come into early intervention through three different routes (a) the child has a measurable developmental delay, (b) the child’s diagnosed condition will likely result in a developmental delay, or (c) the child is at risk of having a delay if he or she is denied early intervention services (IDEA, P. L. 108-446; McLean et al., 2004). Once a child is found to be
eligible for services, the law requires that service planning be done within a certain time frame (McLean et al.). In Kansas, service providers must complete the first Individualized Family Service Plan (IFSP) within 45 days of written parental consent if eligibility is determined (Kansas Department of Health and Environment, 2006). Service planning as a process should evolve over several meetings (Joanning et al., 1994).

Parents coming in to early intervention may experience a range of emotions (Joanning et al., 1994; Peterson & Cooper, 1989). Some have children who are gravely ill. Others have children who appear to be happy and well-adjusted. Parents need support in adjusting to new and changing ideas about their child (Joanning et al.; Zhang & Bennett, 2003). The IFSP process cannot wait for parents to come to terms with their child’s special needs. The law requires that parents participate in the IFSP process. The IFSP document is important as it is the “only documentation of services provided to individual children and their families” (McWilliam et al., 1998, p. 70).

Parents may not be ready to make important decisions when the IFSP is written; therefore, service planning is best viewed as a process extending over time. Service providers include families in the IFSP process in ways that are considered to be empowering to families (Dunst & Trivette, 1994). Families decide which family members will be involved in the IFSP, and their level of involvement (Allen & Petr, 1996). In developing the IFSP, service providers build on family strengths (Dunst, Trivette, & Mott, 1994) to increase family members’ capacity to enhance the child’s learning and development (Bennett, Zhang, & Hojnar, 1998; Dunst, 2000).

Parents coming to early intervention may be at a disadvantage, when compared to professionals in the early intervention system, because they lack the professional’s knowledge and resources. Parents may be under stress (Nachshen & Minnes, 2005), which can potentially
compromise their ability to make good decisions (Peterson & Cooper, 1989). Parents may have to adjust to facing a lifetime of caring for a child with special needs. By stating that these parents of infants and toddlers need to be empowered, the service delivery system acknowledges that there may be daunting struggles ahead.

There is a need for materials that can help families transition into early intervention services. Parents of children with special needs are encouraged to seek out information and to contact other parents who have gone through similar experiences (Turnbull et al., 2006). However, parents of young children often do not have time to follow up on these recommendations. One way to orient parents to the requirements of early intervention services is through the use of video. Video uses the potential for learning by observing models (Bandura, 1977b) and has been successfully used in other interventions for parents. Videotape has also been used successfully to prepare clients for counseling (Tinsley, Bowman, & Barich, 1993; Whitaker, 2004).

The current project produced a contemporary video, *Parent Empowerment in Early Intervention (PEEI)*, which shows parents talking about their experiences with early intervention services. As an orientation to the IFSP process, the *PEEI* video is intended to give parents insight into what it is like to work with professionals in early intervention and knowledge of what to expect from service providers. It was designed to raise parents’ level of awareness about their role in early intervention.
CHAPTER 2
LITERATURE REVIEW

Empowerment has been described as a process (Rappaport, 1981), an outcome (Bailey, et al., 1998), or both (Gutierrez, Parsons, & Cox, 1998; Perkins & Zimmerman, 1995; Zimmerman, 1995). Empowerment is population-specific and context-specific (Zimmerman), for example, empowerment of low-income urban youth. This means that people are empowered relative to their situation. Empowerment of parents in early intervention may, therefore, look and operate differently than empowerment in other areas of life (Rappaport; Rappaport, 1987). This chapter will review the literature on empowerment, using cross-disciplinary sources to develop and describe what is most relevant to parents’ experiences in early intervention.

Empowerment as a Process

Nachshen and Minnes (2005) investigated empowerment as “a positive adaptation to stress” (p. 899). They operationalized parent empowerment as capacity, in which the parent meets the demands placed on him or her. Self-efficacy, the belief that one is capable of handling tasks (Bandura, 1977b), and persistence are qualities that engender empowerment (Turnbull et al., 2006). Morrow and Malin (2004), drawing on organizational psychology, describe empowerment as a condition that is necessarily relationship-based, develops through feedback from valued sources, and influences one’s identity. Empowerment is achieved through building on parents’ existing strengths and developing confidence and skills (Morrow & Malin; Webster-Stratton & Herbert, 1993). Empowerment is a “complex, multidimensional construct that incorporates much more than components of personal control” (Dempsey & Dunst, 2004, p. 49).

Hur (2006) reviewed the empowerment literature across six disciplines including community psychology, social welfare, education, and women’s studies. He outlined a five-step
sequential process based on findings common to diverse sources. His conceptualization of the first two steps of empowerment can be applied to the ways that empowerment is described in the early intervention literature. In order for empowerment to evolve, there must be a disturbance within the individual or group (Hur). This does not have to be an event such as the birth of a child with a disability. It is possible that sudden awareness of a pre-existing problem creates the unsettled state. In the case of a parent who considered her child to be developing normally, the sudden realization that the child has missed a developmental milestone can create disturbance. Such disturbance is accompanied by a sense of powerlessness (Hur). In the case of parents with children who have been identified as requiring early intervention, parents may feel powerless to change the facts regarding their child’s condition. Being required to participate in service planning for the child can add to their perception of being at a disadvantage (Joanning et al, 1994).

The second step of people’s empowerment involves gaining awareness of the limitations of their power, the potential for action, and developing power (Hur, 2006). This involves consciousness-raising and coming to an understanding of what is possible (Carr, 2003; DeLois, 1998; Renz-Beaulaurier, 1998). It is this second step that is most often described in the early intervention literature as gaining confidence, self-determination, and mastery. Both steps are necessary for individuals as well as groups to become empowered. As individuals develop personal power, they become better able to help others. The other three steps: mobilizing collective action, maximizing activity, and creating a new social order (Hur) are enacted in the context of groups. Collective action of parent advocates led to the “original special education law,” P. L. 94-142, the Education of All Handicapped Children Act of 1975 (Holcomb, Amundson, & Ralabate, 2002; Rosenbaum, King, Law, King, & Evans, 1998).
Individual empowerment prepares people for community involvement (Speer, 2000). Participating in community life and influencing social structures is a natural progression for empowered individuals. The components of empowerment, meaning, competence, self-determination, impact, collective belonging, involvement in the community, control over organizations in the community, and community building, affect people at all successive steps of empowerment (Hur, 2006).

Empowerment can be defined as adaptation in which a person uses knowledge, develops skills and increases capacity to function as a change agent. This definition draws on multiple sources, including the Turnbulls’ concept of empowerment (2001; Turnbull et al., 2006) and Nachshen and Minnes’ (2005) definition. Other primary sources include Koren, DeChillo, and Friesen’s (1992) description of the components of empowerment, Gutierrez et al.’s (1998) empowerment model, and Bandura’s (1977a, 1977b, 1982) social learning theory. Empowerment is always context specific. This definition can be applied to both the process of empowerment and the outcome of being empowered in the context of parenting a child who has a delay or disability. Parents as change agents influence the development of the child in a positive direction, toward optimal functioning. They may also influence other parents, early intervention professionals, and others in the service delivery system.

The example of Webster-Stratton’s (1997; Webster-Stratton & Herbert, 1993) parent training program shows how parents develop the capacity to change their children’s behavior and help other parents. Webster-Stratton (Webster-Stratton & Herbert) uses a collaborative approach to group parent training to empower parents who are challenged by their children’s behavior. The relationship between the therapist-leader and the parent is a partnership or collaborative model as opposed to an expert model. In this coping model, distinguished from an expert model
in which the professional imparts knowledge to the learner, parents reframe their child’s problems as opportunities for change and learn skills to manage their child. Video models and group discussions help parents choose the solutions that would work best in their family contexts. Webster-Stratton’s model also anticipates that parents will assert their power by resisting training at some point.

Webster-Stratton’s (1997) method illustrates how parent empowerment begins as personal agency and subsequently extends to developing the agency of others. Through the training exercises, parents gain confidence in their parenting skills and increase their capacity to deal with childrearing situations that may arise. This is consistent with Morrow and Malin’s (2004) concept of empowerment wherein parents develop a new identity as capable parents through the relationships they develop with the group leader. As group members strengthen their own family units, they encourage each other, creating a support system (Webster-Stratton). The therapist provides valuable feedback from his or her perspective as an authority on child development and behavior management, but parents have the “ultimate responsibility for judging what will be workable in his or her family situation and particular community” (Webster-Stratton & Herbert, 1993, pp. 424-425).

The point at which parents identify with other parents who are in a similar situation is the beginning of collective belonging (Hur, 2006). The collective experience (Gutierrez et al., 1998) involving identification with another (Gutierrez & Lewis, 1999) is a basis from which individuals can operate on the environment. Collective efficacy is the sense that members of a group can bring about change that will improve their own lives and the lives of other members of the group (Bandura, 1982).
Being a change agent requires goal setting, motivation, effort, and self-appraisal. Social learning theory (Bandura, 1977a, 1977b, 1982) explains how goals are related to effort and self-efficacy. Self-efficacy, the belief in one’s ability, is a component of empowerment (Gutierrez & Lewis, 1999; Hur, 2006; Scheel & Rieckmann, 1998; Zimmerman, 1995). Self-efficacy can be enhanced by (a) mastering an activity, (b) seeing diverse others master the activity, (c) being persuaded that one is capable of mastering the activity, and (d) managing one’s level of anxiety while attempting the activity (Bandura, 1977a). In the context of the Individualized Family Service Plan (IFSP), the goals that parents define are important to the empowerment process. Parents will be motivated to expend a great amount of energy in pursuit of a difficult goal if they feel it is attainable and will be satisfying. The goals stated in the IFSP can motivate parents to expend energy if they are attainable and meaningful. “Cognitive representations of future outcomes function as current motivators of behavior” (Bandura, 1977b, p. 161). Bandura (1977a) asserts that one’s perceived self-efficacy determines the amount of effort expended to achieve goals. Parents who are more self-efficacious will continue to work until they achieve success (Webster-Stratton & Herbert, 1993).

In describing the process of empowerment for people who have developmental disabilities, Sprague and Hayes (2000) assert that empowerment emerges from their relationships with others. In their view, empowerment serves to allow self-determination. Sprague and Hayes see empowerment as inextricably tied to the individual’s connections with others. They call for attention to the relationship between the caregiver and the person with a disability and ways that this relationship can be mutually empowering. Thus, a parent and a child with special needs can empower each other. Sayers, Cowden, and Sherrill (2002) conducted interviews with parents who implemented a pediatric strength intervention at home and found that parents felt
empowered when they considered their child’s progress to be a direct result of their efforts. Turnbull et al. (2006) describe mutually empowering relationships between caregivers and professionals. In their framework of partnership principles and practices, professionals share power with families and foster empowerment to establish an equal partnership.

Empowerment as an Outcome

Empowerment is one of the family outcomes to be expected from early intervention (Bailey et al., 1998; Nachshen, 2005). Turnbull and Turnbull (2001) see empowerment as an outcome for both parents and professionals involved in collaboration. It is possible to maximize this outcome as “collective empowerment” leading to improved ways of addressing community needs. The outcome of empowerment must be defined by the people who see the problem. To use examples from DeLois (1998), a person coming out as a homosexual can constitute empowerment for that person. For other gays and lesbians, however, empowerment means substantial changes in society that eliminate all forms of discrimination against them. As we study empowerment among parents of children with disabilities, we should see how their conceptualizations of empowerment compare to our definitions.

Measurement

There are two ways to measure empowerment. We can use an instrument that captures the evolving attitudes, knowledge, and behaviors associated with empowerment, as Koren et al. (1992) and Akey (Akey, Marquis, & Ross, 2000) have done, or we can study what people do as a result of being empowered (Narayan, 2005; Zimmerman, 1995). It is generally agreed that there is no single construct of empowerment to be measured (Koren et al.; Narayan; Rappaport, 1987; Zimmerman). Zimmerman argues that it is insufficient to base the measurement of
empowerment on people’s perceptions and that we must include measures of actions in our research.

Many authors, including several within community psychology, have proposed that empowerment begins with the individual, progresses to group involvement and matures in activities that influence social systems (Gutierrez et al., 1998; Rappaport, 1987). In the U.S., groups of people including persons with disabilities (Renz-Beaulaurier, 1998) and the gay and lesbian community (DeLois, 1998) have operationalized this conceptualization of empowerment. Speer (2000) observes that community psychology’s indicator of empowerment has been “citizen participation in community contexts” (p. 53).

While it is reasonable to expect that parents of children with special needs will come together and act collectively, their situation as caregivers impinges on these activities. Parents have a dual role as (a) members of a community of parents of children with special needs and (b) advocates for their children with special needs. Parents have to balance self-interest and the interests of the family with the needs of the child, and constantly consider both the short-term and the long-term. The way that parent empowerment has been defined and measured shows the importance of parent knowledge, attitudes, and behaviors in relation to a caregiving advocate role (Koren et al., 1992). Parent empowerment through contact with other parents should be integrated into our measures.

Scheel and Rieckman (1998) used Koren et al.’s (1992) family subscale as a measure of self-efficacy and used the entire Family Empowerment Scale (FES) to measure empowerment. They suggest that parent self-efficacy and empowerment could be increased through interventions that allow parents to discuss mutual concerns or identify with other parents. Farber and Maharaj (2005) used the FES before and after intervention to show increase in
empowerment after a comprehensive parenting education program for urban, low income African American parents whose children had developmental delays. Singh et al. (1995) conducted a factor analysis of the FES and described a four-factor solution consisting of (a) systems advocacy, (b) knowledge, (c) competence, and (d) self-efficacy. They define empowerment as “a process by which families access knowledge, skills and resources that enable them to gain positive control of their lives as well as improve the quality of their life-styles” (Singh et al., p. 85). Singh et al. (1997), using the FES, found that belonging to a parent support group was a strong predictor of family empowerment among parents of children who had severe emotional disturbance (SED) and SED combined with attention-deficit hyperactivity disorder.

In an effort to develop a measure of empowerment specific to parents of children with a disability, Akey, Marquis, and Ross (2000) validated Akey’s Psychological Empowerment Scale (PES). The PES, based on Zimmerman’s (1995) theory of empowerment, was developed to assess empowerment among parents of children with disabilities. Their factors, (a) attitudes of control, (b) perceived skills, (c) informal participation, and (d) formal participation in organizations, follow constructs reflecting attitudes of control and competence, knowledge and skills, and participatory behaviors that the scale was designed to measure. Their results led them to suggest that self-reported measures of parent skills may not measure skills per se but actually reflect perceived competence and self-efficacy. They found a strong correlation, $r = .738$, $p < .05$, between the PES and the FES.

Other strategies for measuring empowerment include locus of control scales (Bailey et al., 1998) and measures of parenting competence. Johnston and Mash’s (1989) principal components analysis of the Parenting Sense of Competence scale (PSOC) produced two factors: (a) satisfaction, and (b) efficacy. They distinguished between parents’ feelings of anxiety,
frustration, and lack of motivation on the satisfaction factor, and the efficacy factor, which appears to capture parent self-assurance. They concluded that the PSOC was able to measure parenting self-esteem.

Cowen (1994) identifies empowerment and competence as necessary to psychological wellness. He cautions against using proxy measures of empowerment in which a specific outcome is the evidence that the process has occurred. Zimmerman (1995) calls for measures of intrapersonal, interactional, and behavioral dimensions of empowerment. He acknowledges that a qualitative approach using open-ended interviews or personal stories could be used if they could produce information about all three dimensions. The challenge is to devise measures “connected to the experience of the research participants as they state it, and contextually grounded in their life experiences” (Zimmerman, p. 596). Valid measures of empowerment for one group such as parents of children with special needs may not be generalizable to other populations.
CHAPTER 3

PURPOSE OF THE RESEARCH

The purpose of this study is to test the following hypothesis: Parents of children receiving early intervention services who are exposed to video models of parents whose children have benefited from early intervention will be more empowered than parents of children receiving early intervention services who are not exposed to video models. Webster-Stratton, Kolpacoff, and Hollinsworth (1988) established the efficacy of self-administered videotapes using peer models as a method for helping parents of children with conduct problems learn to manage their children’s behavior. In a follow-up study three years later, Webster-Stratton (1990) found that parents who received therapist-led group discussion along with the videotapes had outcomes that surpassed those of the parents who received only the self-administered videotapes and those who received therapist-led group discussion without videotapes. Webster-Stratton’s (1981) approach relies on peer models to whom parent participants can relate.

Bandura (1977b) found that self-efficacy, a component of empowerment, can be enhanced by seeing others master an activity. This study used parents who have been successful collaborators in early intervention as peer models for parents who are new to the system. The video, Parent Empowerment in Early Intervention (PEEI), that was created and piloted for this research was developed to orient parents to the Individualized Family Service Plan (IFSP) process and beginning early intervention. It was anticipated that parents’ exposure to videotape as they started the process of working with a home visitor/therapist would positively influence their empowerment more than interaction with the home visitor/therapist alone.
Development of the Videotape

This research involved creating and piloting a videotape to facilitate parent involvement in the IFSP process. Video has been used to orient parents to special education and to help them choose among treatment options. Cripe produced a videotape, “A Family’s Guide to the Individualized Family Service Plan,” in 1995, which was copyrighted by the University of Kansas and nationally distributed. The 17-minute video was designed to help parents prepare for the IFSP planning meeting. It is no longer in circulation because some of the content has become outdated in relation to revisions in the law regarding the IFSP. In a similar effort to orient parents of older children, Plunge (1998) found that a commercially available videotape to introduce parents of children ages 3-5 to the Individualized Education Plan (IEP) in special education increased parent self-efficacy as measured by a survey that she developed.

McConkey, McEvoy, and Gallagher (1982) integrated video lessons into an educational package to help parents work with their children who have cognitive disabilities. Their goal was to reach parents who did not have access to a teaching specialist. The videos showed children with cognitive disabilities engaged in play activities in their communities. This approach allowed parents to choose which play activities they used with their children.

Video has also been used successfully in precounseling. In Whitaker’s (2004) experiment, a 9-minute videotape of a simulated first session of career counseling was used as an intervention to create more realistic expectations of counseling. She showed that participants’ unrealistic expectations could be improved by watching the videotape.

The PEEI video that was created for this research was intended to promote parent self-efficacy following Webster-Stratton’s use of a coping model (Webster-Stratton & Herbert, 1993). The video was designed to be family-friendly and very basic in its approach, similar to
Cripe’s production. The 22-minute video shows five parents talking about their experiences in early intervention. Currently there is no known comparable resource in circulation for parents entering early intervention as the primary audience.

Statement of the Problem

The results of the “National Early Intervention Longitudinal Study (NEILS)” (Bailey, Scarborough, & Hebbeler, 2003; Hebbeler et al., 2007) demonstrate a need to help families absorb information about the IFSP process. The NEILS used a nationally representative sample of 3,338 families, each of whom had a child in early intervention. Although all of the families in the study had recently completed an IFSP, 18% of respondents were not aware of the IFSP, even though they had signed it. Twenty-two percent of families surveyed said they wanted more involvement in decision-making around the IFSP. The video developed for this project addresses this problem by showing parents talking about the IFSP and how they work with the service provider to meet their child’s and family’s needs.

The NEILS study also found that families who were of lower income, had less education, or were ethnic minority were more likely to report negative experiences in early intervention, more likely to report that it took a lot of effort to locate and begin early intervention services, and were less aware of the IFSP (Bailey et al., 2003). Minority families were more likely to think that professionals ignored their opinions. Respondents with less education were less likely to have good feelings about professionals and were also less likely to believe that professionals made them feel hopeful about their child’s future. This project seeks to create greater awareness of the IFSP among ethnic minority families by including ethnic minority families in the video.

Since the NEILS study, professionals have been concerned that families may not be participating in the IFSP at the level that is best for the child and the family (Gross, 2003).
Service providers have been considering changes in training of the direct service staff to facilitate parent involvement in the IFSP. With respect to families, a change in how families are oriented to the IFSP might also make a difference. Parents of children with special needs are encouraged to seek out information and to contact other parents who have gone through similar experiences (Turnbull et al., 2006). We know that parents of children with special needs often do not have time to follow up on these recommendations. The video intervention introduced by this project was designed to be brief and to be accessible when it is most convenient for parents.

The literature on empowerment suggests that parents may benefit from exposure to others who are in a similar situation. Identification with others may be necessary for empowerment in the fullest sense. Parents new to early intervention are often encouraged to attend parent support groups, or contact a parent support person (Seligman & Darling, 2007). These strategies may be well-intentioned and well-supported, but the effort required to connect with other parents may be more than parents can manage when they are just entering the early intervention system. As previously noted, there is a need for materials that help families adjust to aspects of early intervention. A video that communicates in a way that parents can readily absorb regardless of their level of education may fill this need.

The Research Hypothesis

The research hypothesis tests whether parents of children receiving early intervention services who are exposed to video models of parents whose children have benefited from early intervention will be significantly more empowered than parents of children receiving early intervention services who are not exposed to video models. The video, Parent Empowerment in Early Intervention (PEEI), presents video interviews with five parents who have experienced self-efficacy, self-determination, competence-building, and other aspects of empowerment in
collaborating with service providers in early intervention. In this study, the hypothesis is that parents who view the *PEEI* video shortly after beginning early intervention will self-report as more empowered than parents who enter early intervention without seeing the video.
CHAPTER 4

METHOD

This study used a quasi-experimental design and mixed methods approach to answer the research question: Are parents of children receiving early intervention services who are exposed to video models of parents whose children have benefited from early intervention more empowered than parents of children receiving early intervention services who are not exposed to video models? The target population was parents who had recently completed an Individualized Family Service Plan (IFSP). All had one or more children ages birth to age 3 who qualified for early intervention services under Part C of the Individuals with Disabilities Act of 2004 (IDEA). Two groups of parents were recruited: (a) an intervention group, and (b) a non-equivalent “IFSP as usual” comparison group. The intervention group of parents watched the video, Parent Empowerment in Early Intervention (PEEI). A non-equivalent comparison group went through the same IFSP process but did not watch the video. A mixed methods approach was chosen to investigate how individual parents met the challenges of their unique situations and how they perceived the early intervention service delivery system (Rappaport, 1981). All procedures met Wichita State University Institutional Review Board (IRB) approval, and included receipt of informed consent from all participants in the study.

The independent variable in this pilot study is the PEEI video of parents who had experienced empowerment in the early intervention process. The dependent variables are parent scores on (a) the Family Empowerment Scale (FES, Koren et al., 1992), a measure of parent empowerment, (b) the Family Outcomes Survey (FOS, Bailey, Hebbeler, & Bruder, 2006), a measure of the degree to which Part C services have helped the child and family, and (c) a single survey item asking parents about feeling connected to other parents whose children have special
needs. Quantitative research methods were used to statistically analyze parent survey data. Qualitative methodology was used to describe parents’ experiences in beginning to access the services provided through the IFSP.

Host Agency

The project was conducted in cooperation with a large non-profit agency serving two counties of a metropolitan statistical area in the Great Plains. The agency is the area’s state-designated coordinator for Part C services within this area’s network. In the most recently completed fiscal year the agency served a total of 1,528 children age birth through five. Eighty-nine percent of these children had special needs; 56% were under age 3. Of children with special needs, 64% were Caucasian, 15% were African American, 16% were Hispanic, 4% were Asian or Pacific Islander, and 1% were Native American. The agency typically conducts an average of 40 initial IFSP meetings each month through its Infant-Toddler program. During the nine months of the project recruitment period, the agency conducted 432 initial IFSP meetings in the two counties it serves, an average of 48 per month.

During the research participant recruitment period for the “IFSP as usual” families, the agency implemented a Primary Coaching model of service delivery for home-based services (Rush, Shelden, & Hanft, 2003). The transition to primary coaching agency-wide was complete by the time that parents were recruited for the video condition. For consistency, primary coach will be used in describing outcomes for this study, although the first families who provided data were served by a social worker or therapist rather than a primary coach. Primary coaching “shifts the focus from expert-driven to learner-focused service” (Rush et al., p. 35) and underscores the key role of the parent as collaborator with the service provider. In primary coaching, the early interventionist acts as a coach who promotes parents’ confidence and
competence in facilitating the child’s active learning. This approach seeks to empower parents by making them aware of how their child learns and helping them to recognize teachable moments. Through primary coaching, parents learn to set up learning opportunities for their child and evaluate the success of their efforts.

Participants

Participants for the study were parents who had a child age 0-3 who was eligible for Part C early intervention services and who had just completed initial IFSP service planning. Their children had special needs that ranged from mild delays to severe and multiple disabilities. At the time of recruitment many of these families were experiencing a high level of stress. Parents were excluded from recruitment if they were teens in the custody of their parents, if their preferred language was not English, or if the child was living with a non-relative foster parent.

The research pool for the study was the group of all families who entered early intervention services through the agency during the nine months of the project recruitment period. Family information on this population obtained from IFSP documents and child files maintained by the host agency included child, parent, and household demographics. Parent demographic variables are presented in Table 1; child demographic variables are presented in Table 2. Although household income was of interest, it was often missing (48%). The agency regards family income as private and therefore does not require it as part of the enrollment process. It was decided that parents would not be asked about their household income. Parent’s highest level of education was obtained at the first interview at which time it was also determined whether they had prior experience in early intervention, either with the child who was just beginning services or another child. Twelve parents (26.7%), in the IFSP as usual condition and seven parents (19.4%) in the video condition had previous experience in early
Table 1

*Parent and Family Demographic Variables*

<table>
<thead>
<tr>
<th></th>
<th>All new IFSPs</th>
<th>No-video</th>
<th>Video</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Parent Education Level</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Below High School</td>
<td>-</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>High School or GED</td>
<td>-</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>Some College</td>
<td>-</td>
<td>15</td>
<td>14</td>
</tr>
<tr>
<td>Bachelor’s Degree</td>
<td>-</td>
<td>15</td>
<td>6</td>
</tr>
<tr>
<td>Working on Master’s Degree</td>
<td>-</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Master’s Degree and beyond</td>
<td>-</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td><strong>Parent Marital Status</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Married</td>
<td>179</td>
<td>33</td>
<td>30</td>
</tr>
<tr>
<td>Single</td>
<td>85</td>
<td>11</td>
<td>5</td>
</tr>
<tr>
<td>Co-parenting</td>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Unknown</td>
<td>166</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td><strong>Household Income</strong></td>
<td>$40,411</td>
<td>$51,000</td>
<td>$49,999</td>
</tr>
<tr>
<td>(SD)</td>
<td>(22,587)</td>
<td>(22,688)</td>
<td>(19,273)</td>
</tr>
<tr>
<td><strong>Family size</strong></td>
<td>3.99</td>
<td>4.49</td>
<td>4.36</td>
</tr>
<tr>
<td>(Range)</td>
<td>(2-10)</td>
<td>(3-8)</td>
<td>(2-9)</td>
</tr>
<tr>
<td><strong>Siblings</strong></td>
<td>1.31</td>
<td>1.49</td>
<td>1.39</td>
</tr>
<tr>
<td>(Range)</td>
<td>(0-7)</td>
<td>(0-5)</td>
<td>(0-6)</td>
</tr>
</tbody>
</table>

*a* Not available for parents in the research pool

*b* Provided by 34% of participants in the research pool of all new IFSPs, and 52% of participants in the research sample

*c* Provided by 95% of participants in the research pool

*d* Provided by 85% of participants in the research pool
<table>
<thead>
<tr>
<th>Child Characteristics</th>
<th>All new IFSPs</th>
<th>No-video</th>
<th>Video</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Child gender</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>273</td>
<td>31</td>
<td>17</td>
</tr>
<tr>
<td>Female</td>
<td>159</td>
<td>14</td>
<td>19</td>
</tr>
<tr>
<td><strong>Ethnicity</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Caucasian</td>
<td>293</td>
<td>37</td>
<td>26</td>
</tr>
<tr>
<td>Hispanic</td>
<td>60</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Black</td>
<td>56</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Asian/Pacific Is.</td>
<td>14</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Native American</td>
<td>6</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Middle Eastern</td>
<td>2</td>
<td>&lt;1%</td>
<td>0</td>
</tr>
<tr>
<td><strong>Diagnosis/Disability</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mild</td>
<td>191</td>
<td>30</td>
<td>13</td>
</tr>
<tr>
<td>Developmental Delay</td>
<td>162</td>
<td>10</td>
<td>14</td>
</tr>
<tr>
<td>Mental Retardation</td>
<td>13</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Physical Impairment</td>
<td>4</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Severe Multiple Delays</td>
<td>7</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Visual Impairment</td>
<td>4</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Hearing Impairment</td>
<td>8</td>
<td>2%</td>
<td>1</td>
</tr>
<tr>
<td>Not rated</td>
<td>43</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Child age at IFSP<sup>bc</sup> \(M\) \((SD)\) 15.56 \(9.46\) 15.05 \(10.18\)

<sup>a</sup>See Appendix A for definitions of these categories
<sup>b</sup>Not calculated for all new IFSPs
<sup>c</sup>Age calculated in months
Participants were almost all women (96.3%), with only three men providing study data.

There were more married parents in the research sample than in the research pool, however marital status was unknown for 38% of the research pool. One-sample t-tests for differences between means show that the variables of household income and family size were significantly larger for the research sample, \( t(41) = 3.149, p = .003 \), and \( t(80) = 2.947, p = .004 \), respectively, for two-tailed tests. A one-sample t-test shows that the number of siblings in the research sample was not significantly different from the research pool, \( t(80) = .972, p = .334 \).

Child ethnicity is composed of Caucasian or other ethnicity. Ethnicity was collapsed because of the small numbers in many of the ethnic categories. Diagnosis/disability is a rating applied by the family service coordinator using criteria set by the agency (see Appendix A). Mild disability is defined as a delay in only one developmental area, such as speech, that meets the special education requirements. Demographics for all study participants were compared as a whole to demographics for all families in the research pool.

Chi square goodness of fit tests were conducted for categorical demographic variables. All variables were originally dichotomous (gender is composed of male or female; marital status is composed of married or single, with co-parenting coded as single) or were dichotomized because one or more cells lacked the minimum number of five (expected) to conduct the analysis. Child disability was dichotomized as mild delay versus all other disability codes set by the agency including physical impairment, sensory impairment, developmental disability, and severe disability. Chi square goodness of fit test results show that for the total sample of 81 participants, a representative sample was achieved; results for child gender, ethnicity, and child
diagnosis/disability were all nonsignificant (see Table 3). Differences between research participants in the two conditions will be discussed in the Results chapter.

Table 3

<table>
<thead>
<tr>
<th>Observed</th>
<th>Expected</th>
<th>Child Gender</th>
<th>Child ethnicity&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Child disability&lt;sup&gt;b&lt;/sup&gt;</th>
<th>Marital status&lt;sup&gt;c&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research sample (n = 81)</td>
<td>Research pool</td>
<td>$X^2 = .540$</td>
<td>$X^2 = 3.573$</td>
<td>$X^2 = .415$</td>
<td>$X^2 = 4.772$</td>
</tr>
<tr>
<td>(N = 432)</td>
<td></td>
<td>$p = .462$</td>
<td>$p = .059$</td>
<td>$p = .519$</td>
<td>$p = .029$</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$w = .082$</td>
<td>$w = .210$</td>
<td>$w = .072$</td>
<td>$w = .243$</td>
</tr>
<tr>
<td>IFSP as usual (n = 45)</td>
<td>Research pool</td>
<td>$X^2 = .626$</td>
<td>$X^2 = 4.195$</td>
<td>$X^2 = 5.298$</td>
<td>$X^2 = .747$</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$p = .429$</td>
<td>$p = .041$</td>
<td>$p = .021$</td>
<td>$p = .387$</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$w = .118$</td>
<td>$w = .305$</td>
<td>$w = .343$</td>
<td>$w = .129$</td>
</tr>
<tr>
<td>Video group (n = 36)</td>
<td>Research pool</td>
<td>$X^2 = 3.949$</td>
<td>$X^2 = .299$</td>
<td>$X^2 = 2.582$</td>
<td>$X^2 = 5.400$</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$w = .331$</td>
<td>$w = .091$</td>
<td>$w = .268$</td>
<td>$w = .387$</td>
</tr>
<tr>
<td>Video group</td>
<td>IFSP as usual</td>
<td>$X^2 = 7.885$</td>
<td>$X^2 = 2.463$</td>
<td>$X^2 = 15.125$</td>
<td>$X^2 = 2.740$</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$p = .005$</td>
<td>$p = .117$</td>
<td>$p &lt; .001$</td>
<td>$p = .098$</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$w = .468$</td>
<td>$w = .262$</td>
<td>$w = .648$</td>
<td>$w = .276$</td>
</tr>
</tbody>
</table>

<sup>a</sup>One child with unknown ethnicity in the research pool  
<sup>b</sup>26 children with unknown disability status in the research pool  
<sup>c</sup>166 parents with unknown marital status in the research pool; one parent with unknown marital status in the video group  
<sup>d</sup>Alpha set at .05, df = 1 for all tests
Power Analysis

The minimum sample required for the study was set after conducting a power analysis. Average ratings and standard deviations on the Family Empowerment Scale (FES, Koren et al., 1992) service system scale used as a pre- and post-test were obtained from a study by Dixon et al. (2001) involving 37 parents. The Dixon et al. study had an effect size of .60 (using the formula in Kirk, 1990, p. 334 for Cohen’s $d$) for the subscale. The Dixon study’s $M$s and $SD$s applied to Kirk’s prospective power analysis formula resulted in a minimum sample of 30, 15 in each group. Since it was possible that the convenience sample could produce a larger standard deviation than the Dixon study, the minimum number in each condition was set at 30. The target number for recruitment was 130, 65 in each group. It was anticipated that there would be a high attrition rate given the many demands on parents of a young child with special needs.

Research Design

A quasi-experimental research design using a comparison group was used. Although a randomized experimental design would have strengthened this study, it was determined through discussions with host agency program management staff that a randomized design would be unrealistic and unreliable. We concluded that random assignment would be a burden to the agency, therefore an intervention group and a comparison group were used. The two conditions in this study are the “IFSP as usual” condition in which parents had their initial IFSP meeting in the manner that it is customarily held by the agency, and an intervention group who were also given the PEEI video. Parents were assigned to conditions depending upon when they enrolled in Part C. Parents for the IFSP as usual condition were recruited first, drawing from parents participating in their initial IFSP meeting. The intervention group was not recruited until the desired number of parents in the “IFSP as usual” condition had been enrolled.
Production of the Video

A local video production company was hired for this project. Pre-interviews were recommended by the professional videographer as a way to increase parents’ comfort level and prepare them for videotaping. Pre-interview questions were developed through the literature review (see Appendix B for the questions). Individual interviews with five parents were video recorded in a studio. Post-production involved editing the video to highlight parents’ initiative, strengths, and successes in early intervention.

Development of Interview Questions

Questions about parents’ initial responses to early intervention were included because it is assumed that parents begin as relatively unempowered (Hur, 2006). Questions about the collaborative relationship were developed based on Turnbull et al.’s (2006) description of mutually empowering relationships between parents and service providers and Morrow and Malin’s (2004) concept of contextual power.

The concept of parents’ adaptation to the situation and to their child was included in the questions following Nachshen and Minnes’ (2005) research using the FES family scale and Turnbull et al.’s (2006) view of adaptation as capacity for change. Based on the literature on empowerment emphasizing confidence as an important element, parents were asked about their developing sense of confidence in parenting their child (Melnyk, Crean, Feinstein, Fairbanks, & Alpert-Gillis, 2007; Morrow & Malin, 2004; Rush et al., 2003; Webster-Stratton & Herbert, 1993).

Questions about parents feeling responsible for the child’s progress, or experiencing a breakthrough were based on first person accounts (Harrison, 1983; Senator, 2006), and description of parents’ positive experiences with their children (Beatson & Prelock, 2002;
Thompson et al., 1977). Additional sources for these questions describe the relationship between parent empowerment and child progress (Farber & Maharaj, 2005; Sayers et al., 2002).

Recruiting and Interviewing Parents

The host agency’s five service coordinators and one early care and education site coordinator received an overview of the project and were asked to nominate parents whom they considered to be good collaborators in early intervention. Service coordinators nominated 12 parents whom they believed would be willing to be videotaped, and the site coordinator nominated two. The service coordinators asked the parents they had nominated for permission to have the investigator call them in regard to the project, and all of the parents gave their verbal consent. The site coordinator allowed the investigator to call the remaining two parents directly. The investigator attempted to contact all 14 parents to invite participation, and made appointments with the first eight parents who responded. A pre-interview was held with each of eight parents separately, at the parent’s home, to explain the project and explore areas of the parent’s experiences that could be highlighted in the videotape. The investigator obtained the parent’s signed informed consent at the pre-interview.

As a result of eight pre-interviews, seven parents were invited to participate in videotaping. The investigator did not invite the eighth parent to continue because the parent seemed hesitant about being interviewed. Of the parents who were invited to continue, one did not respond. Another parent did not come to the taping appointment and did not respond to the investigator’s call to reschedule.

The result was that five parents provided a 45-minute to one hour videotaped interview. They confirmed their informed consent and signed a release of the videotape prior to the taping session. All elected to be videotaped at the production company’s studio. The interview was
based on the pre-interview questions (Appendix B) and the investigator’s notes from the parent’s
pre-interview. The objective of using a culturally diverse group of parents was met with two
African American mothers and three Caucasian mothers. Two families opted to have their
children included. One father appeared with his child in the video while the mother was
interviewed. The video, approximately 22 minutes in length, was produced in DVD and VHS
formats and is available from the author.

The video used a voice-over announcer to introduce the IFSP as the service planning
document. Three general topics were presented from the parents’ point of view. In the first
section, the parents talked about starting services and how the service provider made them
comfortable with home visits. In the middle section, parents described some of their challenges
with their children and tell a story about how they were instrumental in helping the child learn a
skill or overcome a problem. The stories were used to show how parents can drive decision-
making in service delivery, and how parents contribute to the collaborative working relationship
with the service provider. In the final section, each parent talked about an important milestone or
developmental goal that her child had met. Vignettes were chosen to show the parents’
commitment to their children and their involvement in early intervention services. The parents
created the impression that all of the children would continue to use and benefit from early
intervention services.

Measures

Two existing instruments were used as dependent measures in this study. Permission was
obtained from the first authors, respectively, to use the Family Empowerment Scale (FES,
Koren, et al., 1992), and the Family Outcomes Survey (FOS, Bailey et al., 2006) (see
Appendixes C and D for the survey questions). Rating scales, a manipulation check and
interview questions were developed for this study. See Table 4 for an overview of the data collection plan.

Table 4

*Data Collection Plan by Condition*

<table>
<thead>
<tr>
<th>IFSP as Usual</th>
<th>Video</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Video</td>
<td>Parents watch <em>PEEI</em> video</td>
</tr>
<tr>
<td></td>
<td>Survey of parent reactions to the video</td>
</tr>
<tr>
<td><em>Interview</em></td>
<td><em>Interview</em></td>
</tr>
<tr>
<td></td>
<td>Questions about the video</td>
</tr>
<tr>
<td>Family Empowerment Scales (FES)</td>
<td>Family Empowerment Scales (FES)</td>
</tr>
<tr>
<td>Family Outcomes Survey</td>
<td>Family Outcomes Survey</td>
</tr>
</tbody>
</table>

*Family Empowerment Scale*

The Family Empowerment Scale (FES, Koren et al., 1992) (Appendix C) was developed to assess empowerment of parents of children who have emotional disabilities. Koren et al. specified a two-dimensional framework of levels of empowerment and ways that parents express empowerment. FES questions tap parent attitudes, knowledge, and behaviors across the levels of family, service system, and community/political activities. The instrument has demonstrated substantial internal consistency with Cronbach’s alpha coefficients of .87-.88. The results of Koren et al.’s factor analysis gave more support to the conceptualization of levels than to categories of the expression of empowerment. The FES has since been used in studies with
parents of other populations including children with disabilities who have IEPs (Lefkowitz, 2002) and children with diabetes (Florian & Elad, 1998). Only the family and service system subscales were used in this study.

*Family Outcomes Survey*

The Family Outcomes Survey (FOS, Bailey et al., 2006) (Appendix D) was developed as an evaluation tool for Part C programs and is currently used in several states. Bailey, Hebbeler, Olmsted, Raspa, and Bruder (2008) defined a family outcome as “a benefit experienced by families as a result of services received” (p. 195). They described five outcomes of early intervention for families: (a) understanding the child’s strengths, abilities and special needs, (b) knowing their rights and advocating effectively for the child, (c) helping the child develop and learn, (d) having support systems, and (e) accessing desired services, programs and activities in the community. The instrument consists of three questions on each outcome, and three summary questions about the helpfulness of early intervention. The sum of the first 15 questions was used as the dependent measure, as advised by the survey’s first author (D. B. Bailey, personal communication, April 3, 2008). Although the Family Outcomes Survey was not created to measure empowerment, it includes statements and questions about knowledge and behaviors that empowered parents may be expected to endorse, for example: “Families work with professionals to help their children learn and practice new skills at home or in their communities. How often does your family help your child learn and practice these new skills?” A question, “How much of a connection do you feel with other parents who have children with special needs?” was added to the end of the FOS.
Rating Scales and Questionnaires Created for this Study

Five sets of questions were developed for this study: (a) rating of parent participation in the initial IFSP meeting, (b) a brief questionnaire regarding the video, (c) semi-structured interview questions, (d) introductory questions used with the FES, and (e) rating of family’s use of services (see Appendixes E, F, G, H and I).

IFSP coordinator rating of parent participation in the IFSP process.

A seven-item scale for service coordinators to rate parents’ participation in the initial IFSP meeting and their understanding of their child’s needs (Appendix E) was developed. The ratings were designed to identify parents who were atypical in their participation in the IFSP, both those who were exceptionally well-prepared, at one extreme, as well as those who were under-prepared and had difficulty participating in the process, at the other extreme.

Survey of parent reactions to the video.

This rating scale questionnaire included with the PEEI video sent to parents was created as a manipulation check to confirm that parents in the video condition actually watched the video (Appendix F). Parents are asked to rate six items using the scale provided, to indicate the number of times they watched the video, and to answer an open ended question about the helpfulness of the video.

Semi-structured interview questions.

Interview questions to be asked of a purposive sample of parents were developed from the results of interviewing parent participants in the making of the PEEI video (Appendix G). It was expected that parents who were empowered according to our definition of empowerment as adaptation in which a person uses knowledge, develops skills, and increases capacity to function
as a change agent, would talk about their adaptation to their situation, their knowledge, developing skills and capacity, and their role as a change agent.

*Questions used before and after the Family Empowerment Scale.*

Four statements were developed to orient parents to some of the content of the study and the use of a 5-point rating scale similar to that used in the FES (Appendix H). Four open-ended questions were developed to be asked following the FES, to elicit parents’ reactions to the video and opinions about the helpfulness of the video. These were (a) What did you think of the video, overall?, (b) Is there anything that you remember from the video, such as a person or something someone said?, (c) Was the video helpful to you at the time that you saw it?, and (d) Would you recommend this video to other parents who are just starting in services? Empowerment literature proposes that parents can benefit from exposure to others who are in a similar situation, and that such identification is an important step in empowerment (Gutierrez et al., 1998; Hur, 2006). It was anticipated that parents in the study would identify with the video models, and that their answers to questions about the video would reflect a connection to these models. The questions were also intended to elicit parents’ feelings about their own situation.

*Rating of family’s use of services as written in the IFSP.*

Three questions were developed to permit service coordinators or primary coaches to rate the family’s use of services provided, and an open-ended question allowed respondents to explain barriers to the family’s use of services (Appendix I). This measure was designed as a way to identify families who did not use the services as planned in the IFSP. Because there are often circumstances that prevent parents from using services, we wanted to have knowledge of such situations before analyzing the dependent measures.
Procedures

Recruitment of Participants

Different recruitment protocols were used for the two groups, the “IFSP as usual” group and the intervention group. The “IFSP as usual” group was recruited first. See Table 4 for an overview of the two conditions and data collected from each.

“IFSP as usual” group.

Parents in the comparison group, the “IFSP as usual” condition, were recruited by the social worker who conducted the IFSP meeting. At the end of the meeting, after legal paperwork had been signed, the social worker introduced the study, explained its purpose, and gave parents a handout and a brief consent form to sign (see Appendix J). After the IFSP meeting, the social worker completed a rating of parent participation in the IFSP process (Appendix E). We used this rating to decide whether to ask the parent for a semi-structured interview to be tape recorded. The criterion for identifying a parent to interview was scores of three or four on most of seven items of the service coordinator’s rating of parent participation, thereby excluding parents who demonstrated exemplary aptitude or knowledge of the process (those rated “excellent”) and those who had difficulty following the process (rated “poor” or “very poor”). The investigator followed up with a phone call requesting to interview and survey the parents about their experiences. Full Consent forms (Appendix K) and a cover letter were mailed to all participants who agreed to continue in the study. The cover letter referred to the appointment time and date and the purpose of the visit.

Sixty-two parents of a possible 240 (26%) were recruited for the “IFSP as usual” condition, and of these, 45 (19% of all parents with new IFSPs) provided all of the study data. Because several social workers were sensitive to the family’s level of stress, they chose not to
take the time to explain the study at the IFSP meeting and present the brief consent form when they felt that parents were overwhelmed, for example, if the IFSP was held in the hospital. In these situations, the investigator recruited the family by phone. Twenty-eight of the 45 parents were recruited by the social worker at the IFSP meeting; the remaining 17 parents were recruited by the investigator over the phone. All of the 11 parents who were invited to provide a semi-structured audio-recorded interview agreed to do so and all completed the face-to-face interview.

*Intervention group.*

Intervention group participants were not recruited until all of the “IFSP as usual” participants had been enrolled. The intervention consisted of a brief written introduction handed to parents at the IFSP meeting, the *PEEI* disc mailed to the home, and a brief rating survey.

For the intervention group, the social worker gave the parents a handout (Appendix L) at the IFSP meeting and explained that the investigator would be calling them to invite them to participate in the study. The investigator called the parent to obtain the parent’s verbal consent to send the *PEEI* video by mail. In this initial phone call, the investigator briefly stated that she was calling on behalf of the agency, that there was a new video that showed parents talking about their experiences in early intervention that could be helpful to parents, and that she would send it by mail if the parent was willing to watch it. The investigator explained that there was a brief survey enclosed with the video and that because the video was new, the parent could help the agency determine whether the video was something that parents found useful. The investigator added that there would be two follow-up surveys. If the parent expressed interest in the video, the investigator explained that there would be consent forms and a self-addressed mailer in the packet. The investigator instructed the prospective participant to read the consent form, watch the video, complete the survey, and mail the packet to the investigator. The mailing included the
PEEI video, a cover letter, the Survey of Parent Reactions to the Video (Appendix F), and two copies of the Full Consent form. One or two weeks after mailing the video, the investigator called to verify that the parent had received it. When the video, survey and Full Consent form was returned in the mail, the investigator called the parent to set up two home visits. After mailing videos, the investigator made periodic phone calls to participants to determine whether participants had received the video, had watched the video, and intended to continue in the study. Face-to-face meetings were scheduled over the phone. Ninety-six parents of a possible 192 (50%) were recruited for the video condition, and of these, 78 (81%) accepted the video. Of 46 parents in the video condition who agreed to provide survey data, 36 parents (19% of all parents with new IFSPs) provided all of the survey data. Of 15 parents who were invited to provide a semi-structured interview, 10 accepted, but only six completed the interview.

A flow chart of participants (Figure 1) shows how parents in each condition were recruited (“IFSP as usual,” on the left, were recruited first) and how they progressed through the data collection steps. Semi-structured interviews were conducted with a purposive sub-sample of parents from each condition. There was attrition of subjects in the video condition, as shown by 43 participants who watched the video, 39 who completed the FES, and 36 who completed the FOS.

Quantitative procedures

Survey data collection.

The two dependent measures, the Family Empowerment Scale (FES) and the Family Outcomes Survey (FOS) were administered on separate occasions. The FES family and service system level questions were intended to be given within 4-6 weeks of the IFSP, however the period between
Figure 1. Flow chart of participants

- Child age 0-3 found eligible for early intervention services
- IFSP as usual with consent to phone call, n=62.
  Service coordinator rates parent participation on 28.
  Video was introduced after all "IFSP as usual" parents were recruited.
  Phone call, explanation of research, verbal consent to interview.
- Between 1-4 weeks of IFSP
  Phone call, invitation to watch video, brief explanation of research, verbal consent to send video. Recruited parents to watch video, n=78.
- 2-12 weeks after IFSP
  Parents watch video, return brief questionnaire, n=43
  11 parents selected for semi-structured interview
  15 parents selected for semi-structured interview
  Face-to-face Family Empowerment Scale plus semi-structured interview with informed consent, n=45
  Face-to-face Family Empowerment Scale plus semi-structured interview with informed consent to audiotape, n=11
  Between 4-17 weeks of IFSP
  Between 10-22 weeks of IFSP
  Face-to-face Family Outcomes Survey, n=36
  Rating of family's use of services, n=15
  Rating of family's use of services, n=36
  Face-to-face Family Empowerment Scale plus semi-structured interview with informed consent to audiotape, n=6
the IFSP and the FES ranged from less than one week to 14.5 weeks for the IFSP as usual condition and from 4.5 to 22 weeks for the video condition. The time frame was longer for parents in the video condition because participants’ names and phone numbers were not available immediately after the IFSP. Additionally, many parents had the video for several weeks before they found the time to watch it.

The investigator requested to meet face-to-face to administer both FES and FOS surveys, however several parents (five in the IFSP as usual condition and 11 in the video condition) opted to do one or both surveys over the phone. Consent forms for parents who did not meet face-to-face were handled through the mail. At the first face-to-face interview, the investigator reviewed the Full Consent form with the parent and obtained the parent’s signature.

Service coordinator ratings of parent involvement in the initial IFSP meeting were used to select parents for semi-structured interviews in the IFSP as usual condition. Interviewees were to be interested but relatively inexperienced in IFSP development who could be considered representative of parents entering early intervention services. Parents who were rated as either having an unusually high level of understanding, or lacking capacity to participate in the IFSP process were not selected. Parents selected for the semi-structured interview were interviewed before the FES was administered, to avoid exposing them to the vocabulary in the items.

In administering the surveys, the investigator asked the questions and marked the parent’s answers. Parents who were surveyed face-to-face were given a copy of the survey to follow along. The investigator explained that only two sections of the FES would be used in the study. Parents were curious about the surveys, so the investigator read two of the questions from the third section of the FES, “About Your Involvement in the Community,” and explained that
parents would not be expected to be able to answer many of the questions in this section, as they had just started receiving services and their child was very young.

A follow-up face-to-face interview of all parents in the study was made to administer the FOS between 3 and 17 weeks following the FES. The amount of time between surveys was $M = 6.80$, $SD = 2.31$ for the IFSP as usual group and $M = 5.23$, $SD = 2.58$ for the video condition.

After three months of providing early intervention services, service coordinators (or primary coaches) were asked to rate parents’ use of services. A rating of parent use of services as specified in the IFSP (Appendix I) was requested from the service coordinator after all parent data had been obtained so that parents who had not used services as intended could be identified. Only 15 ratings of parents in the “IFSP as usual” condition were returned by primary coaches, and none were rated as unreceptive. Of all 36 parents rated in the video condition, only one was rated as unreceptive. Circumstances that service coordinators noted to have affected parents’ use of services as specified in the IFSP included parents’ work schedules, scheduling problems, missed visits, child surgery, child’s medical condition, and the family being out of town.

*Data analysis.*

Multiple regression procedures were chosen to answer the research question as flexibility to use both categorical and continuous independent variables and their possible significant interactions in the analyses was desired (Pedhazur, 1997; Warner, 2008) and, more importantly, it was expected that participant characteristics would influence their scores on dependent measures. All procedures were conducted using SPSS, version 11.5, or Excel, version 2002 (XP). G*Power (Faul, Erdfelder, Lang, & Buchner, 2007) was used to calculate Cohen’s $d$. 38
Descriptive analyses were completed first, followed by chi-square, reliability, and assessment of variables’ suitability for parametric tests.

The assumptions of regression were tested before running the multiple regression analyses. Statistics were described and reported for the significant findings and were followed up with graphs of the significant interactions of predictor variables.

**Qualitative Procedures**

As a way to explore and understand the perspectives of participants, qualitative methods were included in the study. Face-to-face interviews using the researcher’s derived questions relative to the topic were used to collect data. After obtaining the perspectives of the participants, the researcher organized the data into categories, looking for patterns to emerge. This inductive process of analysis, working back and forth between categories, produced distinct themes, which supported answers to the research questions.

**Participants.**

The study design called for a purposive sample of 11 participants from each condition to be interviewed about their experiences. These audio-taped interviews were to be done at the first face-to-face meeting with the parent, at the same time that the FES survey was given. A representative sample of parents was desired, across the demographics of income level, ethnicity, parent level of education, and child eligibility for Part C services. Parents who scored very low on service coordinator ratings of their participation in the IFSP, or parents who had exceptional knowledge of early intervention or the social service system (e.g. a parent with a Master of Social Work degree), were not selected. The participants who provided interviews were fairly representative of the research pool on child gender, child disability, and number of siblings. Two-thirds of respondents were married. Respondents reflected the range of parent education
levels in the research sample, with more parents at high school or below, and fewer at the master’s level or beyond: (a) below high school (12%), (b) high school or GED (24%), (c) some college (41%), (d) bachelor’s (18%), and (e) master’s and beyond (6%). The ethnicity of their children was mostly Caucasian (82%), with one African American child and two Hispanic children represented. All of the participants were interviewed in their homes.

Qualitative interviews.

A semi-structured interview script was created using a combination of questions selected from the pre-interview questions asked of parents in the PEEI video, and questions added as a result of the PEEI video interviews (see Appendix G for the script). The semi-structured interview followed the same considerations of the literature as the pre-interview for video participants in asking parents about beginning services, developing power in the collaborative relationship with the service provider, adapting to their child, developing confidence, and feeling responsible for the child’s progress. Two questions from the pre-interview, ―What has it been like for you in trying to get the help you need?” and ―How did you get used to working with members of your child’s team?” were cut from the semi-structured interview script because they were not as productive as other questions. A few other questions from the pre-interview were cut because of time considerations. These included questions about what keeps parents going, and what inspires them about their child. The question, “What kind of feedback do you value the most as a parent?” was added to the semi-structured interview because several video participants voiced that they felt motivated by feedback from the service provider. Another line of questioning, “Are there goals you have for your child or your family that you have not shared with service providers? If yes, could you tell me about one of these goals?” was added because some video participants had taken the initiative to try new things to help the child without
waiting for the service provider to suggest them. Parental initiative reflects the literature on developing personal power (Hur, 2006; Morrow & Malin, 2004; Sayers et al., 2002).

In the face-to-face interviews, questions were asked verbatim, in order, and were restated or elaborated as needed to help parents understand what was being asked. The interview process was flexible, and additional questions were asked to clarify what parents said or to have them elaborate on a topic. All semi-structured interviews were audio-recorded. Eleven semi-structured interviews were completed for parents in the IFSP as usual condition. All but one of these parents also completed both surveys. This number was considered sufficient to reveal major themes that parents describe when coming into early intervention services. Interviewing large numbers of participants can lead to saturation of information (Seidman, 2006).

For the intervention group, the investigator used the Survey of Parent Reactions to the Video instead of the IFSP Coordinator Rating of Parent Participation in the Initial IFSP Meeting to determine whether to ask parents for an audio-recorded interview. The criterion for requesting this interview was a parent rating of “some” to “all” on the question about how much of the information in the video was new. Of 15 parents in the video condition who were invited to provide a semi-structured recorded interview, 10 parents agreed, and six parents completed it.

Data collection strategy.

Qualitative data for this study consisted of audio-recorded interviews of a purposive sample of parents from both conditions, and open-ended questions asked of intervention parents only. Eleven parents in the “IFSP as usual” condition and six parents in the intervention condition provided semi-structured interviews. The questions pertaining to the video were asked only of intervention parents. The first of these was the open-ended question, “In what ways, if any, did you find this video helpful?” on the Parent Reactions to the Video survey. Parents
responded in writing. Other questions were asked of parents at the first face-to-face (or phone) interview, after the semi-structured interview and FES survey were completed. These questions were, (a) What did you think of the video, overall?, (b) Is there anything that you remember from the video, such as a person or something someone said?, (c) Was the video helpful to you at the time that you saw it?, and (d) Would you recommend this video to other parents who are just starting in services? The investigator wrote down parent responses to these questions, or audio-recorded them if the parent had provided a semi-structured interview. If a parent did not understand the question, the investigator elaborated and explained further. If a parent said that he or she would recommend the video to other parents, the investigator asked about the timing of the video, such as whether new parents should see the video when they first come into the service delivery system.

Data analysis.

As recommended by Seidman (2006), qualitative data were analyzed using a team approach. Two research assistants with a bachelor’s degree in psychology who were familiar with the aims of the study transcribed the audio recordings, and then the primary researcher reviewed the transcriptions against the audio recordings, making any corrections needed. Parent answers to questions about the video were transcribed into word processing documents. For the remainder of the data reduction process, the primary researcher and one of the research assistants continued to meet weekly to discuss the development of categories and major themes until they reached agreement.

Content analysis of the data was conducted using coding procedures described by Strauss and Corbin (1990). Data from parents in each condition, the “IFSP as usual,” and the intervention group, were analyzed separately. Data reduction began with reading each interview
narrative or set of answers and making notes as to what ideas were perceived in the data. During the first reading of transcriptions, the goal was to begin formulating conceptual labels for the material. Concurrently, the team wanted to develop sensitivity to parent comments that seemed impersonal, such as “If your child needs help, it gives you the idea that [the agency] is there to help,” as opposed to statements that were personal, such as, “It was a little awkward at first…”

The primary researcher and research assistant wrote memos on the transcripts using a few words or a sentence or two to characterize the concepts that were found, for example, “the therapist sees the issues that mom sees.”

The next step in data reduction was to disengage the concepts from their original context (Dey, 1993). A constant comparison method (Glaser & Strauss, 1967) of coding across all of the parent responses, by condition, was used to arrive at categories of conceptual labels. Using this method, distinct categories containing multiple conceptual labels were generated within each condition. Thus, two conceptual labels formed a category if they expressed the same idea. All of the conceptual labels were reviewed and placed into categories as appropriate. There were no limits on the number of categories that could be identified. The primary researcher and research assistant worked separately to create conceptual labels and form categories, and then compared their results. Of categories identified in the in the “IFSP as usual” interviews, the team agreed on six out of a total of eight categories, or 75%. The team agreed on five out of nine categories identified from the intervention condition interviews, or 62%. Agreement on categories found in the video comments from 33 parents was six out of seven categories, or 86%.

The team then discussed all of the distinct categories and their meaning and found agreement on five categories in the “IFSP as usual” condition and eight categories in the intervention condition. At this stage there was 100% agreement between the two coders on all of
the categories. Relationships between the categories within the two study conditions and across them were discussed. Of nine distinct categories identified across all of the qualitative data, four were common to both conditions, four were found only in the intervention group data, and one was found only in the “IFSP as usual” interview data. The last step in data reduction was the collapsing of the four common categories into two major themes.

Member checking to determine whether participants agreed with the findings was attempted with four study participants, only one of whom responded. The primary researcher also contacted two parents who had experience in early intervention and asked them to provide feedback on the qualitative component of the study. Both of these parents provided feedback.
CHAPTER 5
RESULTS

Quantitative data were analyzed using multiple regression, and content analysis was used to analyze qualitative data. Preliminary analyses were conducted on four dependent variables: (a) scores on the family scale of the Family Empowerment Scale (FES), (b) scores on the FES service system scale, (c) scores on 14 items of the Family Outcomes Survey (FOS), and (d) a single item question about connection to other parents that was added to the FOS as Item 19. Predictor variables used in the multiple regression were: (a) video condition, (b) child gender, (c) child disability status, and (d) parent education level. The independent variable in this study was the intervention using a video, Parent Empowerment in Early Intervention (PEEI) to orient parents to the early intervention system. The intervention group of parents watched the PEEI video; the “IFSP as usual” comparison group did not receive the video intervention. Multiple regression analyses were used to answer the research question: Are parents who are exposed to a video of peer models more empowered than parents who are not exposed to video models?

Preliminary Analyses

Group Differences

This was a quasi-experimental study; therefore, the extent to which the two groups are comparable was examined as a check of internal validity. First, demographics for each of the two study groups were compared to those of the research pool. Then, the groups were compared to each other. Parent demographic variables of interest included parent marital status, parent education level, household income, number of siblings, and number of persons in the household (see Table 1). Child demographic variables of interest included child gender, child ethnicity, child age at the Individualized Family Service Plan (IFSP), and child’s disability status (see
Table 2). Chi-square goodness of fit tests were used to compare the study conditions by categorical variables of child gender, child ethnicity, child disability, and marital status (see Table 3). Variables with multiple categories were dichotomized. Child ethnicity was comprised of Caucasian and all other ethnicities; child disability was comprised of mild disability versus all other disability categories collapsed as more severe disability, and marital status was dichotomized as single versus married.

Chi square results for dichotomized variables show that the “IFSP as usual” group was representative of the research pool on child gender and marital status, but was significantly different with regard to child ethnicity and child disability. The IFSP as usual group had a higher percentage of Caucasian children and children with mild disability than the research pool. The video group was representative of the research pool with respect to child ethnicity and child disability, but differed significantly from all possible participants on child gender and marital status, having more girls and more parents who were married.

The video group and the “IFSP as usual” group were comparable on child ethnicity and parents’ marital status, but were significantly different on child gender and child disability. Compared to the IFSP as usual group, the video group had significantly more girls, also proportionally more than the research pool. The two groups differed most on child disability, with almost twice as many children with mild delays/disabilities in the “IFSP as usual” group, at 67%, compared to 36% for the video group.

We collapsed two of the parent education levels to create a parent education variable with three levels: (a) high school (incorporating parents with less education), (b) some college (including Associate degrees), and (c) 4-year degree (education at or beyond a Bachelor’s degree, including Master’s degrees and beyond). For ease of description, these categories will be
referred to as (a) high school, (b) some college, and (c) 4-year degree. The chi square for this parent education variable by video condition was not significant, \( \chi^2 = 1.830, df = 2, p = .400, w = .225 \), indicating that parent education levels were comparable across conditions. Parent education status was not available for all parents in the research pool, so no comparison of parent education for the research sample could be made to the research pool. There were more than twice as many parents with a bachelor’s degree in the “IFSP as usual” condition (see Table 1); all other parent education subcategories were comparable.

Group differences on child age at IFSP, household size, number of siblings, and parents’ income were compared using \( t \)-tests. An arbitrary cutoff using a \( z \)-score absolute value of 3.30 was set to identify outliers. The assumptions for \( t \)-tests: normality of distribution, approximately equal variance, and measurement on at least interval scale were met for the number of siblings. Histograms showed the distribution for child age at IFSP is U-shaped for both groups, and the distribution for family income is negatively skewed because the maximum income recorded is $70,000 for all families regardless of higher income. One family in the video condition was responsible for an outlier \( z \)-score value of 3.66 in the number of siblings and 3.38 in the number in household. The \( t \)-tests were non-significant, indicating that the groups are roughly equivalent on these four demographic variables (see Table 5).

Compared to the research pool of all families who had IFSPs during the recruitment period, there were no significant differences in the number of siblings for either condition by \( t \)-test. Both conditions had significantly higher family income than families in the research pool, \( t(19) = 2.087, p = .051 \) for the “IFSP as usual” condition, and \( t(21) = 2.334, p = .030 \) for the video condition. The mean family size was significantly larger for the “IFSP as usual” condition.
than for the research pool, \( t(44) = 3.042, p = .004 \), while there was no significant difference for the video condition. Child age at IFSP was not computed for the research pool.

Table 5

*Summary of t-tests for Mean Differences on Demographic Variables*

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>( t )</th>
<th>( df )</th>
<th>( p )</th>
<th>Cohen’s ( d )</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Child age at IFSP</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IFSP as usual</td>
<td>45</td>
<td>15.56</td>
<td>9.46</td>
<td>.235</td>
<td>72.53</td>
<td>.815</td>
<td>.05</td>
</tr>
<tr>
<td>Video</td>
<td>36</td>
<td>15.05</td>
<td>10.18</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Number in household</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IFSP as usual</td>
<td>45</td>
<td>4.49</td>
<td>1.10</td>
<td>.404</td>
<td>59.08</td>
<td>.688</td>
<td>.10</td>
</tr>
<tr>
<td>Video</td>
<td>36</td>
<td>4.36</td>
<td>1.62</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Number of siblings</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IFSP as usual</td>
<td>45</td>
<td>1.49</td>
<td>1.08</td>
<td>.346</td>
<td>63.35</td>
<td>.730</td>
<td>.08</td>
</tr>
<tr>
<td>Video</td>
<td>36</td>
<td>1.39</td>
<td>1.44</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Family Income</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IFSP as usual</td>
<td>20</td>
<td>$51,000</td>
<td>$22,688</td>
<td>.154</td>
<td>37.50</td>
<td>.879</td>
<td>.05</td>
</tr>
<tr>
<td>Video</td>
<td>22</td>
<td>$49,999</td>
<td>$19,272</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\(^a\)Child age calculated in months

Equal variances not assumed for all tests

Alpha set at \( p = .05 \) for all tests
Assessment of Dependent Variables

Reliability

Because the two surveys, FES and FOS are not widely known, their reliability was tested using Cronbach’s alpha. None of the alpha reliability coefficients were below .70 for the dependent measures (see Table 6). Nunnally and Bernstein (1994) describe a reliability coefficient of .70 as “modest” (p 265).

Table 6

Cronbach’s Alpha for Dependent Measures

<table>
<thead>
<tr>
<th>Measure</th>
<th>Research Sample</th>
<th>IFSP as Usual Condition</th>
<th>Video Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number of items</td>
<td>N</td>
<td>Alpha</td>
</tr>
<tr>
<td>FES Family Scale</td>
<td>12</td>
<td>81</td>
<td>.76</td>
</tr>
<tr>
<td>FES Service System Scale</td>
<td>12</td>
<td>79</td>
<td>.76</td>
</tr>
<tr>
<td>FOS 1-15 (skipping 14)</td>
<td>14</td>
<td>64</td>
<td>.75</td>
</tr>
</tbody>
</table>

The FOS survey instructs parents to skip question 14, on child care and 15, on participating in community activities, if they do not apply (see Appendix D). To include question 14 in the sum of the first 15 FOS questions would have meant having an n of only 19 for the reliability analysis, so we dropped question 14 from the reliability analysis and did not use question 14 in other analyses. With item 14 eliminated, there were 64 cases included in the reliability analysis of items 1-15. An additional item created for this study was placed at the end of the FOS. The reliability for 17 items of the FOS (the original items 1-18, skipping item 14)
plus the 19th item was tested. The alpha coefficient was .777, indicating that the 19th item was related to the other items in the scale. The item-total statistics showed an alpha of .785 if item 19 was deleted, a result that is only slightly better.

Testing the Assumptions of Multiple Regression

Each of the dependent variables: FES family scale (sum of 12 items); FES service system scale (sum of 12 items); FOS 14 items (sum of items 1-15, skipping 14); and FOS Item 19 were assessed for missing data, normality of distribution, outliers, and homogeneity of variance. There were no missing values on any of the variables. Preliminary data screening included examination of histograms and boxplots for all variables. The two FES variables were found to be approximately normally distributed. The FOS 14-item variable was found to be normally distributed. The histogram of FOS item 19 was multimodal and showed that parents were drawn to the odd-numbered items with descriptors. This non-normal distribution suggests that it is not optimal as a dependent variable in multiple regression, but because it was our only quantitative measure of parent connectedness, we determined to use it with caution. An arbitrary cutoff using a z-score absolute value of 3.30 was set to identify outliers in the dependent measures scores (Warner, 2008). For these four dependent measures there were no z scores with absolute value greater than 3.30. Descriptive statistics are presented in Table 7.

Homogeneity of variance was assessed by independent samples t-tests, with video condition as the grouping variable. The Levene’s test was nonsignificant for all four dependent variables, indicating homogeneity of variance.
Table 7

**Descriptive Statistics for Dependent Variables**

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>Skewness</th>
<th>Kurtosis</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FES Family Scale</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IFSP as usual</td>
<td>45</td>
<td>52.89</td>
<td>4.69</td>
<td>.918</td>
<td>.932</td>
</tr>
<tr>
<td>Video</td>
<td>36</td>
<td>52.33</td>
<td>4.44</td>
<td>-.290</td>
<td>-.633</td>
</tr>
<tr>
<td><strong>FES Service System Scale</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IFSP as usual</td>
<td>45</td>
<td>52.64</td>
<td>4.74</td>
<td>-.727</td>
<td>.379</td>
</tr>
<tr>
<td>Video</td>
<td>36</td>
<td>53.11</td>
<td>5.39</td>
<td>-.960</td>
<td>1.131</td>
</tr>
<tr>
<td><strong>FOS 1-15, skipping 14</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IFSP as usual</td>
<td>45</td>
<td>75.76</td>
<td>9.43</td>
<td>.306</td>
<td>.102</td>
</tr>
<tr>
<td>Video</td>
<td>36</td>
<td>73.44</td>
<td>10.03</td>
<td>.309</td>
<td>.171</td>
</tr>
<tr>
<td><strong>FOS Item 19</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IFSP as usual</td>
<td>45</td>
<td>4.33</td>
<td>1.83</td>
<td>.172</td>
<td>-.828</td>
</tr>
<tr>
<td>Video</td>
<td>36</td>
<td>4.13</td>
<td>1.89</td>
<td>.158</td>
<td>-.868</td>
</tr>
</tbody>
</table>

**Assessment of Predictor Variables**

The predictor variables of video condition, gender, parent education, and child disability status were assessed to determine whether the assumptions of regression were met. Video intervention had unequal distribution with 45 participants in the comparison group and 36 in the intervention group. There were no extreme bivariate outliers, as determined by scatterplots of each predictor by the dependent variable for the full data set and also by video condition. When the scatterplots were run by video condition with a regression fit line, they showed different
slopes for two pairs: FES service system scale by parent education; and FOS Item 19 by child disability status, indicating the presence of interactions.

**Parent Responses to the Video**

Parents in the video condition were asked several questions about the video as part of the qualitative component of the study. Their responses were analyzed with other qualitative data and are reported within the content analysis results. In this section, parent responses to these questions are reported in quantitative terms. Open ended questions were dichotomized as positive or negative. The questions were (a) What did you think of the video, overall?, (b) Is there anything that you remember from the video, such as a person or something someone said?, (c) Was the video helpful to you at the time that you saw it?, and d) Would you recommend this video to other parents who are just starting in services?

Thirty-three of 36 parents in the video condition were asked these questions after they completed the FES survey. Data were missing for three parents (8%). When asked what they thought of the video overall, 26 parents (72%) responded positively and seven parents (19%) made negative comments. Those who answered favorably referred to the other parents in the video, communication with the service providers, and described the video as comforting and encouraging. A typical response was, “It was helpful to see what other parents were experiencing and how they were managing.” Two of these parents said it would have been better if they had seen the video right away when starting services. One parent said, “I could see how it would be helpful to someone who had a child with special needs who had never received assistance before.” Parents who responded negatively and/or did not like the video said it did not apply to their child, it was unrealistic in showing only positive outcomes, it was too long, the parents were all saying the same thing, and that it was not practical enough.
The majority of parents (22, 61%) who saw the video and subsequently provided all survey data said that the video was not helpful to them at the time when they saw it. Fifteen of the parents who said it was not helpful qualified their answers. Several expressed that the video did not provide new information, while others said that it did not apply to their situation. A few said that it would have been helpful if they had seen the video earlier, as one parent said, “It would have been helpful earlier – at first, at the time when we got the diagnosis.” Eleven parents (31%) said the video was helpful at the time when they saw it. Data were missing for three parents.

When asked whether they would recommend the video to other parents coming into early intervention, 30 parents (83%) said that they would. Half of the parents qualified their answers, with seven saying that parents should see the video as they start services, five parents saying it would be helpful for parents to see it when the need is identified, before services start, and three saying it would be more helpful after visits have been established. Two parents said they would not recommend the video to other parents. Data were missing for four parents.
Main Analyses

Sequential multiple regression was used to test the research hypothesis. Possible moderating effects of gender, child disability status, and parent education were of specific interest. Multiple regression permits control for these variables in testing for a significant effect of the video.

*Sequential Multiple Regression*

In preparation for multiple regression analyses, the dichotomous categorical predictors of video condition and child disability were dummy coded. Video was coded “IFSP as usual” = 0 and video = 1, and child disability was coded mild = 0 and more severe disability = 1. Parent education was dummy coded (using the same scheme described in the section on group differences) as three variables (Aiken & West, 1991): (a) high school, (b) some college, and (c) 4-year degree. In multiple regression using a categorical variable with three levels, only two levels are included in the analysis. The variable left out is used as a reference group. The significance test for the parent education variables tests each predictor against this reference group. Parents who had some college were used as the reference group for parent education because they were well-defined, comprised a large group relative to parents with high school or 4-year degree, and were nearly balanced in numbers by video condition (Cohen, Cohen, West, & Aiken, 2003; Hardy, 1993). Interaction terms were created using the product of pairs of the predictors (Aiken & West; Warner, 2008).

For all analyses, sequential multiple regression was performed in two steps. For each multiple regression predicting a dependent variable, predictors were entered as Step 1, followed by the interaction terms entered as Step 2 (Cohen & Cohen, 1983). The order of entry in two
steps was done to evaluate the contribution of the interaction term to the overall regression and to assess potential moderating effects (Aguinis, 2004; Warner, 2008).

Multiple regression was used to test the research hypothesis that parents who watched the PEEI video were more empowered, as measured by the FES and FOS surveys. The significance tests for the parent education predictor variables determine whether there are significant differences between mean empowerment scores for the specified group (high school or 4-year degree) compared to the some college category. The interaction terms estimate the differential effect of parent education by video (Hardy, 1993). There was a main effect for video, qualified by a significant interaction between video and 4-year degree in the regression using parent education to predict FES service system scores. The results are presented below.

All four dependent variables were used in multiple regression analyses to test the hypothesis. Video condition by itself was not a significant predictor for any of the four dependent variables. Child gender and child disability status were next used as predictors because they had significant chi-square values for differences between video conditions. Video condition, gender and their interaction were not significant predictors of the dependent measures, nor were child disability status, video, and their interaction. Parent education, video and their interaction were used in sequential multiple regression predicting scores on the dependent variables, producing significant results for the FES service system scale (see Table 8) and a marginally significant result for FES family (see Table 10). Regression results using parent education and video to predict scores on the FOS 14 item survey and the single item on parent connectedness were not significant.

For all multiple regression analyses, there were no multivariate outliers. There was no indication of serial correlation of residuals for the regression analyses reported here; the Durbin
Watson statistic was in the range of 1.29 – 2.20, indicating independence of errors. Collinearity statistics showed no evidence of multicollinearity; for the regressions using video as a predictor, the VIF value was 2.97. For other analyses, the VIF values were larger, 3.57 – 4.37, but there were no condition indices larger than 10.55. Examination of the scatterplots of the residuals showed that residuals were fairly normally distributed, indicating no serious violations of normality, linearity, or homoscedasticity (Tabachnick & Fidell, 2001). There were no extreme outliers in the plots of the residuals. Significant main effects and interactions are reported and presented graphically in the following section.

*Service System Scale Regressed on Parent Education and Video Condition*

The regression of FES service system scores on video condition, two dummy variables representing parent education (high school and 4-year degree), and the interaction of each parent education variable with video status showed that the full model was significant, \( F = 3.029, p = .015 \) (see Table 8). The \( t \)-test was significant for the main effect of video condition, \( t(75) = 2.212, p = .030 \), indicating a significant difference between empowerment means by video condition. The squared semipartial correlation coefficient, an indicator of the variance in service system scores that is attributable to the video condition when all other variables are controlled, was \( sr^2 = .054 \). Thus, about 5% of the variance in service system scores was uniquely predictable by video condition. When the interaction of video and parent education is controlled, the video does have a significant main effect. This effect supports the hypothesis that watching the video is associated with an increase in empowerment for the subgroup of parents with some college. However, significance is achieved at some loss of support for our hypothesis. It was predicted that empowerment would increase as a main effect for parents in the video condition;
however, a decrease in empowerment between the “IFSP as usual” and video conditions for parents with the highest level of education was found.

Table 8

*Regression of FES service system scores on video condition, parent education, and their interaction (N = 81)*

<table>
<thead>
<tr>
<th>Step</th>
<th>Independent Variable</th>
<th>R²</th>
<th>Adj R²</th>
<th>B</th>
<th>(SE B)</th>
<th>β</th>
<th>sr²</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Video Condition</td>
<td>.050</td>
<td>.013</td>
<td>.227</td>
<td>1.121</td>
<td>.023</td>
<td>.001</td>
<td>1.347</td>
</tr>
<tr>
<td></td>
<td>Parent Ed (high school)</td>
<td></td>
<td></td>
<td>1.139</td>
<td>1.448</td>
<td>.099</td>
<td>.008</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Parent Ed (4-year degree)</td>
<td></td>
<td></td>
<td>-1.589</td>
<td>1.283</td>
<td>-.156</td>
<td>.019</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Video Condition</td>
<td>.168</td>
<td>.113</td>
<td>3.881*</td>
<td>1.775</td>
<td>.387</td>
<td>.054</td>
<td>3.029*</td>
</tr>
<tr>
<td></td>
<td>Parent Ed (high school)</td>
<td></td>
<td></td>
<td>2.367</td>
<td>1.928</td>
<td>.205</td>
<td>.017</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Parent Ed (4-year degree)</td>
<td></td>
<td></td>
<td>1.767</td>
<td>1.613</td>
<td>.173</td>
<td>.013</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Video x Parent Ed</td>
<td></td>
<td></td>
<td>-2.581</td>
<td>2.746</td>
<td>-.170</td>
<td>.010</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(high school)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Video x Parent Ed</td>
<td></td>
<td></td>
<td>-7.898*</td>
<td>2.460</td>
<td>-.563</td>
<td>.114</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(4-year degree)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*<p >.05

The interaction between video condition and parent education (represented by the contrast of 4-year degree and some college) was a significant predictor of empowerment, $t(75) = -3.210, p = .002$. The negative sign of the $t$-ratio indicates that the video negatively impacted service system scores for parents at the 4-year degree level. The interaction term’s unique share of variance in the dependent variable, the squared semipartial correlation coefficient, was $sr^2 = .114$. About 11% of the variance in FES service system scores is explained by specifying a differential effect of parent education on empowerment by video condition. The
results indicate that empowerment depends upon the parent’s level of education and status with regard to video condition.

A graph representing FES service system means at each level of parent education by video condition shows the empowerment differential between parents with some college and those with 4-year degrees (see Figure 2). The positive slope of the regression line for some college versus the negative slope of the line for 4-year degree represents the interaction of video and parent education. The positive slope for parents with some college indicates that parents who saw the video rated the FES service system higher than parents who did not see the video. In contrast, the slope for the highest educated group is negative, indicating lower service system ratings for the intervention condition, a difference of six points. Results for the group of parents with high school education are not interpreted because the parent education variable representing the contrast between high school and some college did not distinguish between high school and some college categories, \( t(75) = 1.228, p = .223 \).

The results of the multiple regression together with the graphical representation of the interaction indicate that parents with some college who saw the video were more empowered than parents who did not see the video. In contrast, parents with 4-year degrees who saw the video were less empowered than those who did not see the video. Parents who did not see the video gave similar ratings of the service delivery system, but parents who saw the video rated the service delivery system differently depending upon their level of education. The regression equations and \( R^2 \) values are presented in Table 9.
Figure 2

Interaction of Video and Parent Education

- High School
- Some College
- 4-year Degree

FES Service System Scale

0 = IFSP as Usual

Video Condition

1 = Video
Table 9

Regression equations for three levels of parent education and video status predicting scores on the FES service system scale

<table>
<thead>
<tr>
<th>Parent Education Level</th>
<th>N</th>
<th>R²</th>
<th>Regression Equation*</th>
<th>Mean of FES Service System for Video Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>High School</td>
<td>20</td>
<td>.029</td>
<td>Y = 1.300x + 53.700</td>
<td>55.000</td>
</tr>
<tr>
<td>Some College</td>
<td>29</td>
<td>.174</td>
<td>Y = 3.881x + 51.333</td>
<td>55.214</td>
</tr>
<tr>
<td>4-year Degree</td>
<td>32</td>
<td>.123</td>
<td>Y = -4.017x + 53.100</td>
<td>49.083</td>
</tr>
</tbody>
</table>

*The intercept is the mean for the “IFSP as usual” condition

Family Scale Regressed on Parent Education and Video Condition

The regression of FES family scale scores on video condition and parent education (represented by the dummy variables, high school and 4-year degree, and their interaction terms) was not significant for the full model or for individual predictors. The variable contrasting high school with some college was marginally significant, \( t(75) = 1.729, p = .088 \), indicating that there is a difference in mean empowerment scores between the high school and some college groups, but not enough to be statistically significant (see Table 10). Figure 3 shows the means for FES family scale at each level of parent education by video condition. In the graph, the difference in FES family scores between parents with some college who did not see the video and those who did shows a slight increase for parents who saw the video. In contrast, the regression line for high school shows decreasing empowerment between the IFSP as usual and video conditions. The regression equations and \( R^2 \) values are presented in Table 11. The regression line for 4-year degree is not interpreted because the significance test indicated less of a difference between mean empowerment for 4-year degree versus some college, \( t(75) = 1.130, p = .264 \).
\[ p = .262, \] than for high school versus some college. The result of the multiple regression, together with the graphical representation of means for levels of parent education suggest that parent empowerment is conditional on the level of parent education.

Table 10

*Regression of FES family scale scores on video condition, parent education, and their interaction (N=81)*

<table>
<thead>
<tr>
<th>Step</th>
<th>Independent Variable</th>
<th>( R^2 )</th>
<th>Adj ( R^2 )</th>
<th>( B )</th>
<th>(SE ( B ))</th>
<th>( \beta )</th>
<th>( sr^2 )</th>
<th>( F )</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Video Condition</td>
<td>.042</td>
<td>.004</td>
<td>-.663</td>
<td>1.025</td>
<td>-.073</td>
<td>.005</td>
<td>1.116</td>
</tr>
<tr>
<td></td>
<td>Parent Ed (high school)</td>
<td></td>
<td></td>
<td>2.092</td>
<td>1.324</td>
<td>.199</td>
<td>.031</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Parent Ed (4-year degree)</td>
<td></td>
<td></td>
<td>.078</td>
<td>1.173</td>
<td>.008</td>
<td>&lt;.001</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Video Condition</td>
<td>.075</td>
<td>.013</td>
<td>1.386</td>
<td>1.685</td>
<td>.152</td>
<td>.008</td>
<td>1.216</td>
</tr>
<tr>
<td></td>
<td>Parent Ed (high school)</td>
<td></td>
<td></td>
<td>3.200</td>
<td>1.851</td>
<td>.304</td>
<td>.037</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Parent Ed (4-year degree)</td>
<td></td>
<td></td>
<td>1.750</td>
<td>1.549</td>
<td>.189</td>
<td>.016</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Video x Parent Ed (high school)</td>
<td></td>
<td></td>
<td>-2.286</td>
<td>2.636</td>
<td>-.166</td>
<td>.009</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Video x Parent Ed (4-year degree)</td>
<td></td>
<td></td>
<td>-3.869</td>
<td>2.362</td>
<td>-.303</td>
<td>.033</td>
<td></td>
</tr>
</tbody>
</table>

\( *p < .05 \)
Regression of Family Scale on Video and Parent Education

- High School
- Some College
- 4-year Degree

FES Family Scale

0 = IFSP as Usual

Video Condition

1 = Video
Table 11

Regression equations for three levels of parent education and video status predicting scores on the FES family scale

<table>
<thead>
<tr>
<th>Parent Education Level</th>
<th>N</th>
<th>R²</th>
<th>Regression Equation*</th>
<th>FES Family M for Video Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>High School</td>
<td>20</td>
<td>.014</td>
<td>Y = -.900x + 54.600</td>
<td>53.700</td>
</tr>
<tr>
<td>Some College</td>
<td>29</td>
<td>.018</td>
<td>Y = 1.386x + 51.400</td>
<td>52.786</td>
</tr>
<tr>
<td>4-year Degree</td>
<td>32</td>
<td>.087</td>
<td>Y = -2.483x + 53.150</td>
<td>50.667</td>
</tr>
</tbody>
</table>

*The intercept is the mean for the “IFSP as usual” condition

Summary of Hypothesis Testing

Overall, the hypothesis was not supported; parents were not more empowered when they saw the video. The results indicate that parent empowerment was conditional on the level of parents’ education. The results of testing the hypothesis through multiple regression, and following up significant or marginally significant results with graphical representations of means on FES scores by levels of parent education indicate parents with some college benefited from seeing the video. Parents with some college who saw the video were more empowered than parents who did not see the video. For parents with more education (4-year degree), the results were the opposite; parents with more education were less empowered when they saw the video than when they did not see it. Results for parents with the least education (high school) were not significant and were not consistent across FES measures. In the regression of the service system scale, parents at the high school level who saw the video were slightly more empowered than those who did not, but in the regression of the family scale, parents at the high school level who saw the video were slightly less empowered than those who did not see it.
Supplementary Analyses

The results of the regression using parent education as a predictor, showing that scores on the FES service system and family scales depend on the level of parents’ education, led to testing gender and child disability status along with parent education, without video, as predictors. A significant main effect and interaction were found for FES service system scores regressed on gender and parent education. FES family scores regressed on gender and parent education produced marginally significant results. The dichotomized child disability variable (mild versus more severe disability) and the three-level parent education variable (represented by high school and 4-year degree) were then used to predict FES service system and family scale scores. The interaction term created from the product of child disability and 4-year degree was marginally significant in predicting FES service system. The findings, presented below, add to our understanding of the potential moderator variable of parent education on empowerment.

Service System Scale Regressed on Gender and Parent Education

The regression of FES service system scale on gender, parent education (represented by the variables high school and 4-year degree), and their interaction with gender was nearly significant for the full model, $F = 2.327, p = .051$ (see Table 12). A significant main effect was found for 4-year degree (contrasted with some college), $t(75) = -2.550, p = .013$, in the presence of a significant interaction between 4-year degree and gender. This main effect captures the difference in empowerment for some college relative to 4-year degree. The regression coefficient, $B = -5.833$, represents the difference in service system scale means between the two levels of parent education for groups coded 0 on gender (female). For parents of girls, the mean service system scale rating for parents with some college was almost six points higher than the mean for parents with 4-year degrees. The squared semipartial correlation coefficient for 4-year
degree, \( sr^2 = .075 \), indicates the variable’s unique contribution to explained variance in the dependent variable. This means that about 8% of the variance in FES service system scores is explained by the empowerment differential between 4-year degree and some college. When other predictor variables are statistically controlled, 8% of the variance in parent empowerment scores is explained by the difference in mean service system scores between the parent education levels of 4-year degree and some college.

The interaction of 4-year degree and gender was also significant, \( t(75) = 2.405, p = .019 \), indicating a differential effect of child gender depending upon level of parent education. The positive sign of the \( t \)-ratio indicates that male gender positively impacted service system scores.

---

### Table 12

**Regression of FES service system scale scores on parent education, child gender, and their interaction (N=81)**

<table>
<thead>
<tr>
<th>Step</th>
<th>Independent Variable</th>
<th>( R^2 )</th>
<th>Adj ( R^2 )</th>
<th>( B ) (SE ( B ))</th>
<th>( \beta )</th>
<th>( sr^2 )</th>
<th>( F )</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Child Gender</td>
<td>.049</td>
<td>.012</td>
<td>-.009 1.183 .099 .007</td>
<td></td>
<td></td>
<td>1.332</td>
</tr>
<tr>
<td></td>
<td>Parent Ed (high school)</td>
<td></td>
<td></td>
<td>1.140 1.489 .099 .007</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Parent Ed (4-year degree)</td>
<td></td>
<td></td>
<td>-1.616 1.334 -.159 .018</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Child Gender</td>
<td>.134</td>
<td>.077</td>
<td>-3.312 2.208 -.327 .026</td>
<td></td>
<td></td>
<td>2.327</td>
</tr>
<tr>
<td></td>
<td>Parent Ed (high school)</td>
<td></td>
<td></td>
<td>-.333 2.487 -.029 .001</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Parent Ed (4-year degree)</td>
<td></td>
<td></td>
<td>-5.833* 2.287 -.572 .075</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Gender x Parent Ed (high school)</td>
<td></td>
<td></td>
<td>1.012 3.085 .067 .001</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Gender x Parent Ed (4-year degree)</td>
<td></td>
<td></td>
<td>6.712* 2.791 .523 .067</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\( *p < .05 \)
for parents with 4-year degrees. The squared semipartial correlation coefficient for the interaction was $sr^2 = .067$, indicating the amount of variance in service system scores that is explained by the interaction when all other variables are controlled. This means that about 7% of the variance in the dependent variable is explained by specifying an empowerment differential between female and male children by level of 4-year degree (versus some college education). Child gender was unbalanced in the some college group; the number of girls was only 6, compared to 23 boys. Gender in the other two parent groups was more balanced.

A graph of the mean service system scale scores at each level of parent education by child gender shows the difference in means for parents with 4-year degrees compared to those with some college (see Figure 4). The differential effect of gender on 4-year degree compared to some college is shown by higher mean scores for parents of females who had some college, relative to parents of females who had more education. Parents of boys, relative to parents of girls, had lower mean scores when they had some college. Parents of boys with 4-year degrees had higher mean scores than parents of girls with the same level of education. This is further evidence of the moderating effect of parent education. Although the regression line for high school is roughly similar to that for some college, it is not interpreted here because the comparison was not significant, $t(75) = -.134, p = .894$. Also, with a squared semipartial correlation coefficient of less than .001, high school’s share of unique variance in service system scores was negligible. The regression equations and $R^2$ values are presented in Table 13.
Interaction of Gender and Parent Education

- High School
- Some College
- 4-year Degree

FES Service System Scale

0 = Female  Gender  1 = Male

Figure 4
Table 13

Regression equations for three levels of parent education and child gender predicting scores on the FES service system scale

<table>
<thead>
<tr>
<th>Parent Education Level</th>
<th>N</th>
<th>R²</th>
<th>Regression Equation*</th>
<th>FES Service System M for Male</th>
</tr>
</thead>
<tbody>
<tr>
<td>High School</td>
<td>20</td>
<td>.089</td>
<td>$Y = -2.300x + 55.500$</td>
<td>53.200</td>
</tr>
<tr>
<td>Some College</td>
<td>29</td>
<td>.043</td>
<td>$Y = -3.312 + 55.833$</td>
<td>52.522</td>
</tr>
<tr>
<td>4-year Degree</td>
<td>32</td>
<td>.094</td>
<td>$Y = 3.400x + 50.000$</td>
<td>53.400</td>
</tr>
</tbody>
</table>

*The intercept is the mean for female

Family Scale Regressed on Gender and Parent Education

The regression of FES family scale on gender, parent education (represented by high school and 4-year degree), and their interaction terms did not yield significant results for the full model (see Table 14). The $t$-test for gender, $t(75) = -1.789$, $p = .078$, was marginally significant, suggesting that there is a differential effect of gender on parent empowerment. The squared semipartial correlation coefficient estimate of unique variance in family scale scores predicted by gender was $sr^2 = .039$. Thus, about 4% of the variance in FES family scale scores was uniquely predictable by child gender when the other independent variables were controlled.
Table 14

Regression of FES family scale scores on parent education, child gender, and their interaction (N=81)

<table>
<thead>
<tr>
<th>Step</th>
<th>Independent Variable</th>
<th>$R^2$</th>
<th>Adj $R^2$</th>
<th>$B$</th>
<th>(SE $B$)</th>
<th>$\beta$</th>
<th>$sr^2$</th>
<th>$F$</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Child Gender</td>
<td>.039</td>
<td>.002</td>
<td>-5.28</td>
<td>1.083</td>
<td>-.057</td>
<td>.003</td>
<td>1.053</td>
</tr>
<tr>
<td></td>
<td>Parent Ed (high school)</td>
<td></td>
<td></td>
<td>1.926</td>
<td>1.363</td>
<td>.183</td>
<td>.025</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Parent Ed (4-year degree)</td>
<td></td>
<td></td>
<td>-.022</td>
<td>1.221</td>
<td>-.002</td>
<td>&lt;.001</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Child Gender</td>
<td>.086</td>
<td>.025</td>
<td>-3.696</td>
<td>2.066</td>
<td>-.400</td>
<td>.039</td>
<td>1.418</td>
</tr>
<tr>
<td></td>
<td>Parent Ed (high school)</td>
<td></td>
<td></td>
<td>-1.800</td>
<td>2.327</td>
<td>-.171</td>
<td>.007</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Parent Ed (4-year degree)</td>
<td></td>
<td></td>
<td>-2.706</td>
<td>2.140</td>
<td>-.292</td>
<td>.019</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Gender x Parent Ed (high school)</td>
<td></td>
<td></td>
<td>5.596</td>
<td>2.886</td>
<td>.406</td>
<td>.046</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Gender x Parent Ed (4-year degree)</td>
<td></td>
<td></td>
<td>3.535</td>
<td>2.610</td>
<td>.303</td>
<td>.022</td>
<td></td>
</tr>
</tbody>
</table>

$^*$p < .05

The interaction term (for the product of gender and high school), $t(75) = 1.939, p = .056$, approached significance, suggesting a differential effect of gender by level of parent education (high school versus some college). The squared semipartial correlation coefficient, $sr^2 = .046$, indicates the differential effect of gender by parent education. About 5% of the variance in family scale scores was uniquely attributable to differences in empowerment by gender when high school and some college are differentiated. The results suggest that empowerment is influenced by child gender, and that parent education in combination with child gender influence parent empowerment.
A graph showing each level of parent education by child gender shows an interaction of
gender and high school compared to some college (see Figure 5). The regression line for 4-year
degree shows no difference in means for girls compared to boys. Table 15 shows the regression
equations and $R^2$ values. The negative slope of the regression line for parents with some college
is similar to the negative slope that was observed for the group with some college in the
regression of service system scores on gender and parent education, but the contrast in this
regression is high school and some college rather than 4-year degree and some college. Parent
empowerment is greater for parents of boys when parents have a high school education, relative
to parents of boys who have some college. The findings suggest that the degree of parent
empowerment depends on both child gender and parent education.
Figure 5

Regression of Family Scale on Gender and Parent Education

- High School
- Some College
- 4-year Degree

FES Family Scale

0 = Female
1 = Male
Table 15

*Regression equations for three levels of parent education and child gender predicting scores on the FES family scale*

<table>
<thead>
<tr>
<th>Parent Education Level</th>
<th>N</th>
<th>$R^2$</th>
<th>Regression Equation*</th>
<th>FES Family M for Male</th>
</tr>
</thead>
<tbody>
<tr>
<td>High School</td>
<td>20</td>
<td>.064</td>
<td>$Y = 1.900x + 53.200$</td>
<td>55.100</td>
</tr>
<tr>
<td>Some College</td>
<td>29</td>
<td>.082</td>
<td>$Y = -3.696x + 55.000$</td>
<td>51.304</td>
</tr>
<tr>
<td>4-year Degree</td>
<td>32</td>
<td>&lt; .001</td>
<td>$Y = -.161x + 52.294$</td>
<td>52.133</td>
</tr>
</tbody>
</table>

*The intercept is the mean for female

*Service System Scale Regressed on Parent Education and Child Disability Status*

Scores on the service system section of the Family Empowerment Scale were predicted from two dummy coded variables representing parent education (high school and 4-year degree) the dummy coded child disability status, and two interaction terms (see Table 16). The interaction terms test the respective parent education level against some college, the reference variable. The full model was not significant. The $t$-test of the interaction of child disability with 4-year degree was marginally significant, $t(75) = -1.884$, $p = .063$, suggesting that there is a differential effect of child disability on empowerment by parent education level (4-year degree versus some college). Although the interaction of 4-year degree and child disability does not meet the alpha level for significance, it is reported because it indicates that child disability status in combination with parent education may moderate empowerment. The squared semipartial correlation estimates the interaction term’s unique contribution to variance in service system scores. The amount of variance uniquely predicted from this interaction was $sr^2 = .043$. About 4% of the variance in FES service scores was uniquely predictable from the interaction of child...
disability status and parent education (as 4-year degree contrasted with some college) when all other variables were statistically controlled.

Table 16

*Regression of FES service system scale on parent education, child disability, and their interaction (N = 81)*

<table>
<thead>
<tr>
<th>Step</th>
<th>Independent Variable</th>
<th>R²</th>
<th>Adj R²</th>
<th>B</th>
<th>(SE B)</th>
<th>β</th>
<th>sr²</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Child Disability</td>
<td>.052</td>
<td>.015</td>
<td>-.501</td>
<td>1.131</td>
<td>-.050</td>
<td>.002</td>
<td>1.401</td>
</tr>
<tr>
<td></td>
<td>Parent Ed (high school)</td>
<td></td>
<td></td>
<td>1.142</td>
<td>1.446</td>
<td>.099</td>
<td>.008</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Parent Ed (4-year degree)</td>
<td></td>
<td></td>
<td>-1.717</td>
<td>1.297</td>
<td>-.169</td>
<td>.022</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Child Disability</td>
<td>.095</td>
<td>.035</td>
<td>1.769</td>
<td>1.838</td>
<td>.177</td>
<td>.011</td>
<td>1.584</td>
</tr>
<tr>
<td></td>
<td>Parent Ed (high school)</td>
<td></td>
<td></td>
<td>2.103</td>
<td>2.135</td>
<td>.182</td>
<td>.012</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Parent Ed (4-year degree)</td>
<td></td>
<td></td>
<td>.436</td>
<td>1.738</td>
<td>.043</td>
<td>.001</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Child Disability x Parent Ed (high school)</td>
<td></td>
<td></td>
<td>-1.739</td>
<td>2.877</td>
<td>-.120</td>
<td>.004</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Child Disability x Parent Ed (4-year degree)</td>
<td></td>
<td></td>
<td>-4.890</td>
<td>2.596</td>
<td>-.336</td>
<td>.043</td>
<td></td>
</tr>
</tbody>
</table>

*p < .05*

A line graph of the interaction of child disability with parent education (Figure 6) shows that compared to parents of children with mild disabilities, parents of children with more severe disabilities rated the FES service system scale lower when they had the highest level of education (4-year degree). Parents who had some college were more empowered than parents
with a 4-year degree when their child had more severe disability than when their child had mild
disability. Parents with the highest level of education whose children had the greatest needs gave
the service system the lowest ratings. The regression line for high school shows a negligible
difference in service system means between child disability conditions.

The result for this regression is similar to that of the regression analyses using video and
parent education as predictors, with a 4.45 point difference between parents with some college
and those with 4-year degrees on service system scores. We inspected the service system scores
for parents with the highest level of education and found that the six parents in the video group
whose children have severe disabilities reported scores with a mean of 46.83, whereas the mean
for the six parents in the video group whose children had mild disability was 51.33. We
conclude that empowerment may depend upon a combination of parent education and child
disability. The results of regression using child disability as a predictor may be confounded with
the results using video as a predictor, for parents at the highest level of education. For our
research sample, parents who have the most education and children with the greatest needs feel
the least empowered. Table 17 shows the regression equation, $R^2$ values and means for each
parent education group.
Figure 6

Regression of Service System Scale on Child Disability and Parent Education

- High School
- Some College
- 4-year Degree

FES Service System Scale

0 = Mild Disability
1 = More Severe Disability

Child Disability
Table 17

*Regression equations for three levels of parent education and child disability status predicting scores on the FES service system scale*

<table>
<thead>
<tr>
<th>Parent Education Level</th>
<th>N</th>
<th>$R^2$</th>
<th>Regression Equation*</th>
<th>FES Service System M for More Severe Disability Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>High School</td>
<td>20</td>
<td>&lt; .001</td>
<td>$Y = 0.030x + 54.333$</td>
<td>54.364</td>
</tr>
<tr>
<td>Some College</td>
<td>29</td>
<td>.036</td>
<td>$Y = 1.769x + 52.231$</td>
<td>54.000</td>
</tr>
<tr>
<td>4-year Degree</td>
<td>32</td>
<td>.071</td>
<td>$Y = -3.121x + 52.667$</td>
<td>49.546</td>
</tr>
</tbody>
</table>

*The intercept is the mean for the mild disability condition*
Qualitative Content Analysis

The research question used for qualitative analysis was whether parents who received an intervention consisting of exposure to peer video models would be more empowered than parents who were not exposed to peer video models. Parents whose children had recently begun receiving early intervention services were asked about (a) their experiences with service delivery staff, (b) early intervention services, and (c) their perceived success in developing skills to help their child. All interviews were conducted face-to-face, and all were audio recorded following receipt of written informed consent. Content analysis of the qualitative data was performed to answer the research question of whether there were differences in self-reported parent empowerment among study participants depending upon whether they had seen a video of parents whose children had benefited from early intervention. Parent empowerment was defined as adaptation in which a person uses knowledge, develops skills and increases capacity to function as a change agent.

In this component of the mixed-methods study, qualitative data were first analyzed by study condition. Parents in the intervention condition watched the video, *Parent Empowerment in Early Intervention, (PEEI)*; the “IFSP as usual” group did not see the video. There were 45 parents in the “IFSP as usual” group, and 36 parents in the video group. Interviews with a purposive sample of 11 parents in the “IFSP as usual” condition and six parents in the video condition were conducted using a semi-structured interview script (see Appendix G). All interviews were conducted face-to-face, and all were audio recorded. Parents in the video condition (a total of 33, as data were missing for 3 parents), were asked four questions about the video they had seen. Most of the parents who saw the video also wrote answers to the question,
“In what ways, if any, did you find this video helpful?” on a survey that was included with the video (see Appendix F).

As a result of data reduction procedures, there were five distinct categories that emerged from the “IFSP as usual” condition (a) worry; (b) relationship factors with service delivery staff, (c) instrumental support from service delivery staff, (d) validation as a parent, and (e) motivation to action (see Table 18). Four of these categories, with the exception of “worry,” were also found in the analysis of video condition data. The video condition also yielded four categories that were not found in the “IFSP as usual” condition, (a) being not alone, (b) relating to other parents, (c) importance of timing, and (d) proactive stance. All together, we found eight distinct categories in the video condition. The categories were explored by condition, then collapsed into the four categories that were common to both conditions. These four categories were sorted into two major themes: restored confidence and inspired action. Restored confidence was distilled from the three categories relating to service delivery staff: relationship factors, instrumental support and validation as a parent. Inspired action, a main theme that emerged from the category of motivation to action, most closely expresses our definition of empowerment. In the following section, the categories and how they contribute to the major themes are described.
Table 18

*Qualitative Coding Categories*

<table>
<thead>
<tr>
<th>Common to both “IFSP as usual” condition and Video condition</th>
<th>Present in “IFSP as usual” condition only</th>
<th>Present in Video condition only</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relationship factors with staff</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Instrumental support from staff</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Validation as a parent</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Motivation to action</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Worry</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Differences between Conditions

Worry

Parents in the “IFSP as usual” condition expressed more worry and described more concerns and difficulties relating to their child than parents in the video condition. Two parents said they worried about how their children’s disabilities would be regarded by others. Another parent said it is frustrating to not be able to get the child to respond in the way that the parents want. Two parents expressed frustration with the service delivery system; one felt that it was taking too long to get services started, and the other was not comfortable with the home visitor. Other than worry, there were no categories in the “IFSP as usual” condition that were not also found in the video condition.

Being Not Alone

Parents in the video condition expressed feelings of not being alone after seeing the video that parents in the “IFSP as usual” condition did not express. Interviewed parents expressed
feelings of being “not alone,” but most instances of this category came from questions about the video, including written comments such as, “The video does really well to help you feel hopeful about the child and that you’re not alone.” Another parent wrote, “I liked how they had parents on the video instead of professionals. It made me appreciate that there are other parents out there. That I am not alone.” One parent wrote, “I felt less isolated and alone. I realized I could be doing more to help my child (i.e. being unafraid to get my own books and try new methods to help my child with her particular issues).” One parent in the “IFSP as usual” condition expressed the home visitor’s ability to appreciate her situation and join with her, “Just knowing that there is someone out there who can help, knowing that we are not totally alone in the area that we have no idea what we are doing.”

Relating to Other Parents

Another quality that parents in the video condition expressed was the ability to relate to other parents and empathize with them, “Watching other parents describe their feelings and reactions and identifying with them based on my personal experiences.” Parents shared comments such as, “Fortunately, my son is on the borderline of needing services, and the children in the video seemed more severe. However, I can still relate to the relief and excitement of seeing my son develop and improve,” and, “I liked hearing the parents’ comments. I think hearing them one on one, and having them tell first hand how it has impacted their lives... makes more of a difference than hearing somebody just give a speech about it.” Another parent said,

I thought it was good to see other parents talk about their kids, and they seemed to have a lot of hope in the future of what was going on. I don’t come into contact, in our – in my world, with a lot of parents with kids that have special needs, and even if they do, they don’t really talk about it. So it was nice to watch that video.
One parent criticized the video, saying that it was too positive, and that it only showed successes. She is facing a situation in which her child’s progress is very slow, and frequent hospitalizations interfere with his development. No parents in the “IFSP as usual” condition mentioned identifying with other parents.

*Importance of Timing*

The importance of timing in early intervention emerged from parent comments about the video. One of the dimensions of this category was the video’s usefulness to parents who are just starting early intervention. According to parent respondents, as an introduction to early intervention, the video would provide information, show how parents advocate for their children, and let parents know what to expect. Another take on the video was that it would be better for parents to see it after they have engaged with their primary coach, “I think after a few visits would probably be best, that way they kind of know how things work.” Parent comments reveal that there is a point before services begin, where knowledge about how parents interact with the home visitor and how they are empowered to help their child, fills a need and can be considerably helpful. On the other hand, parent comments indicated that after they have been in services for one to three months, they have the knowledge of what is presented in the video, and by then, because they know how early intervention works first-hand, the video does not add to their knowledge.

*Proactive stance*

Although parents in both conditions talked about helping the child, and seeing progress, parents who saw the *PEEI* video were more proactive in their stance toward early intervention. One parent said,
Well, at first I didn’t know what she needed. And I think the reason I contacted [the agency] in the first place, is I was getting things from 20 different places. And saying [my daughter] should be doing this, or shouldn’t, or because she’s not doing this, this is going to happen, and I was getting all of this… I was like, I just need someone who knows what they are doing, to come in and tell me.

Another parent who sought help from her pediatrician had bristled when the doctor suggested, “Well let’s just see what happens.” She immediately contacted early intervention services. One mom acknowledged the importance of her daily efforts to help her child develop muscle control, “But, I understand I am the most important one here,” and described how she involved all family members in the child’s daily routines.

**Conclusion about the Research Hypothesis**

Although these findings of qualitative differences between the two conditions show that the video impacted parents, they do not confirm that parents who saw the video were more empowered than parents who did not see the video. According to our definition of empowerment, we looked for evidence of parents’ adaptation to their situation with their child, and the use of knowledge and skills to be a change agent for the child.

Parents in the video condition did not present themselves as being more involved as change agents than parents who did not see the video, even though they took a more proactive stance. Two other topics raised by parents in the video condition, relating to other parents and feeling that they are not alone, show that the video successfully gave parents a way to identify with other parents in a similar situation, which was one of the aims of this study, but do not conclusively show that parents in the video condition are more empowered. These two topics were generated in response to questions that were asked only of parents who saw the video.
Therefore, it was concluded that the overall research hypothesis was not supported by the qualitative data analysis. The next process of the content analysis was to determine the core categories, or major themes of the qualitative data.

*Categories Common to Both Conditions*

Of the four categories that were common to both conditions, (a) relationship factors with staff, (b) instrumental support from staff, (c) validation as a parent, and (d) motivation to action, motivation to action came closest to our concept of parent empowerment. Parents provided examples of how they had been empowered: they adapted to their child and used knowledge, developed skills, and increased their capacity to function as a change agent. They talked about setting up the home environment for the child’s benefit. They talked about adapting to the child, increasing their awareness of what they need to do to help the child, using information, and ways in which the child’s progress influenced them to be more involved.

*Validation as a Parent and Relationship Factors*

The other three categories, (a) validation as a parent, (b) relationship factors, and (c) instrumental support were related to early intervention services. Parents received validation through positive feedback, most often from the primary coach. The primary coaching model builds confidence in the parent through a collaborative relationship that capitalizes on parent motivation and understanding of the child’s capabilities (Rush et al., 2003). Hearing from the primary coach that their child was improving, or on track developmentally, was reassuring for parents. One mother expressed that she felt good when the primary coach noticed the child’s improvement because it reflected positively on her. Other parents felt validated to know that they were not doing the wrong thing for their child.
Relationship factors are the conditions that the primary coach sets for delivering services, or the qualities of the primary coach that parents identify as important. Many parents expressed satisfaction with having services delivered in the home. Parents valued the relationship factors of open communication, rapport, honesty, trust, and being comfortable and at ease with the primary coach. The effect of the partnership with the primary coach is expressed in a parent’s statement,

I feel I’m more in charge than she is even, because she is asking me questions instead of just telling me this is what you need to do and this is the way to do it. She is letting me take the lead.

Behaviors of the primary coach that parents most appreciated included being “normal,” “down-to-earth,” and “easy to talk with,” fitting in with the family, or creating a relaxed atmosphere. Some parents considered the primary coach to be a friend.

Relationship factors that parents cited as barriers included not being friendly, giving the impression of just being there to do a job, and not letting the parent know “how involved to be” during visits. A few parents would have preferred to have more than one person provide the services; they seemed to be uncomfortable with having to work closely with the primary coach.

*Instrumental Support*

Instrumental support is the hands-on teaching strategies and coaching that the primary coach provides. Parents appreciate the primary coach’s demonstrations of how to set up the environment for the child and instructions for breaking down goals into small steps. One parent explained how she benefited from the primary coach’s guidance,

Well, the fact that we met every couple, more often at the beginning, really helped me, because if I had a question about something, it wasn’t that long until she was coming
again, so we could kind of re-evaluate. Or I could have her show me. Like she had had me put—spend time with [her] laying over my leg to get into that hands and knees position. And [she] was completely squirming out of it. So she—So I had some questions about how to make that really work and she showed me some new ways to do that. And that was nice at the beginning ‘cause it was more often.

The primary coach provides feedback that helps parents be more effective. One parent explained, “…she’ll show me what to, you know, well this really needs to be done this way to get this muscle working properly, or direction like that. Yeah. That’s helped the most.” Parents see the primary coach as a resource and an ally.

**Restored Confidence as a Main Theme**

From the four categories that were common to both the “IFSP as usual” and video conditions, two main themes were extracted: restored confidence and inspired action. As a main theme, inspired action incorporates motivation to action and shows more independence with regard to parenting and being a change agent. The other three categories common to both of our study conditions, (a) validation as a parent, (b) relationship factors, and (c) instrumental support fit together to create the theme of restored confidence. The process of restoring confidence helps to dispel parents’ fears, uncertainty and other negative emotions associated with the child’s disability or their own lack of confidence (Melnyk et al., 2007; Morrow & Malin, 2004; Webster-Stratton & Herbert, 1993). Parents in both study conditions acknowledged the difficulty of adjusting to their child’s delay or disability as they talked about starting early intervention. One parent said she would be “lost” without early intervention. Another parent said it was, “In some ways a little scary, because I had dealt with it in the past, and finding we had problems with another child, it’s a little spooky at first, but everybody was pretty reassuring,
and pretty helpful.” Other parents spoke of being frustrated, feeling helpless, or somehow implicated in their child’s difficulties.

The realization that a child has a delay can make a parent feel vulnerable, as one parent said, “People told me all kinds of things that would be wrong if she never crawled.” The subsequent evaluation that showed her daughter qualified for early intervention was also a relief, ‘Cause when you think that there may be something wrong, or a delay, or something, it was very reassuring for someone to tell me that she was ‘way ahead with her fine motor skills—I mean they were doing, assessing—you know, her fine motor skills—she was putting pegs in pegboard at 10 months old.

A parent shared her relief to hear the results of her child’s evaluation, “So, it was nice to know that he was excelling in some areas and in some areas he was lacking, but he could use some help.”

Reassurance, or confidence restored, is associated with parent emotions. One parent wrote, in response to the open-ended question about whether the video was helpful, “Increased confidence and reassurance regarding my emotions as a mom to a needy child. It reminded me to count every blessing and celebrate all the small victories along the way.” Another parent wrote in regard to the PEEI video, “It was encouraging to hear others who are or have experienced the same emotions regarding early intervention.” Reassurance is also associated with a new or different way to think about the child. One mother described how the therapist helped her put her son’s needs in perspective.

Some parents found reassurance as soon as they were connected with the early intervention service. One parent said, “I was really relieved that they came and signed her up for services and seemed very knowledgeable about what they were doing. So that was reassuring to
me that we could do something and help her.” For other parents, reassurance came through the primary coach telling them that they are doing a good job. A parent of twins said, “They like to congratulate me when I’ve done good things and helped them reach new levels of things, and it makes me feel a lot easier about what I’m doing.”

**Inspired Action as a Main Theme**

The main theme of inspired action embodies parents’ self-efficacy, the feeling that they are capable to manage situations and get results. This theme captures our definition of empowerment as adaptation in which the parent uses knowledge, develops skills and increases capacity to function as a change agent. Parents in both conditions described excitement about the early intervention partnership, seeing positive results in the child, and feelings of accomplishment and pride. Feeling responsible for positive results excites and encourages parents. A parent who acknowledged that she is the most important member of her daughter’s team said, “You know, they have made me very aware of what we have to do to push her.” A mother who thought at first that her infant son was too young to be in early intervention soon saw the benefits of helping him reach milestones,

And for [the primary coach] to come and tell us that we are doing things, like speaking to him and interacting with him as if nothing were wrong, not treating him any different, that helps him and pushes him to go farther than he possibly would have on his own. Another parent explained how watching the therapist helped her understand how her child learns, and how she applied that knowledge, “So it’s the good days that give you the confidence to overcome the daily difficult situations that frustrate, you know, and for everyone it’s different but everyone has that frustrating situation that they have to overcome.” Parents expressed their
excitement at seeing their child’s progress and their desire to do more. One parent said in regard to the speech therapy her child receives and the part that she plays in her child’s development,

That’s really the only thing right now that I have control over. …it’s probably the only thing right now that helps me know that I’m helping her deal with, live with—I don’t want to say overcome, but just cope with what she’ll have.

Parents in the video condition were no more likely to provide evidence of inspired action than parents who did not see the video. The relationship between restored confidence and inspired action was examined and there was no evidence that one main theme was conditional on the other. Several parents talked about the two main themes in tandem. Some parents emphasized their self-efficacy, motivation and action in early intervention, hardly mentioning experiencing restored confidence. Other parents increased their confidence after they saw the results of their actions. Parents who had not yet had regular home visits when they were interviewed were less likely to talk about inspired action.

**Relating Qualitative Content Analysis Results to Empowerment Literature**

The main themes of restored confidence and inspired action that emerged across both study conditions are consistent with the empowerment literature that informed the both the pre-interview (Appendix B) and semi-structured interview questions (Appendix G). Parents in the video condition described feelings of being not alone and relating to other parents that theorists consider necessary for empowerment. In the following section, the results of the content analysis will be linked back to the literature sources that were used to generate interview questions.

In describing restored confidence, the first main theme, parents revealed their fears and difficulties in adjustment, the psychological disturbance that Hur (2006) presents as a necessary first step of empowerment. Some of the participants’ feelings of inadequacy corresponded to

In the second main theme, inspired action, participants’ responses parallel the feelings of commitment and readiness that Sayers et al. (2002) found among parents of children with Down syndrome. Inspired action also corresponds to other parents’ efforts to be change agents for their children, as in Senator’s (2006) persistence in finding a way to help her child sleep through the night. Participants provided instances of adaptation to the child, a positive result of family interaction in the face of stressful events (Turnbull et al, 2006). The concept of empowerment that emerged through this theme is related to both Morrow and Malin’s (2004) definition of personal power and Hur’s (2006) description of developing power.

The categories of being not alone and relating to other parents confirmed that video peer models activated participants’ interest in other people who face similar challenges. Identification with other parents is a marker for readiness to engage with others (Gutierrez & Lewis, 1999; Hur, 2006). This potential is important, because as parents become conscious of the larger community and connect in meaningful ways, they can empower others as they continue to develop their own capacity as change agents (Webster-Stratton, 1997; Webster-Stratton & Herbert, 1993).
The Mixed-Methods Approach to Testing the Hypothesis

This study gave equal emphasis to the quantitative and qualitative methodologies used to answer the research question. Using mixed methods provided a complementary way (Clark, Huddelston-Casas, Churchill, Green, & Garrett, 2008) of investigating parent empowerment in the context of early intervention. Using more than one research method was important in this quasi-experimental mixed-methods study, because without an experimental design, it is not possible to say with certainty whether our video intervention is the cause of the effects that were observed. In the quantitative research component, a significant main effect for video in the presence of a significant interaction between the video condition and parent education was found in the regression predicting the FES service system scale. A follow-up regression analysis suggests that child disability also interacts with parent education to moderate empowerment. In the parallel, qualitative component, content analysis applied to parent interviews and written comments facilitated our understanding of parents’ experiences at the beginning of early intervention services, although the hypothesis was not supported. Across both of these research methods, for our two groups of parents, those who saw the video and those who did not, watching the video was not associated with greater empowerment. Within the intervention group of parents who saw the video, there were differences in empowerment, depending upon parents’ level of education.

Feedback from Parents

The primary researcher solicited feedback on the qualitative results from four of the parents who had provided interviews (two from each study condition). One parent who did not see the video provided feedback, saying that she agreed with the findings. As an alternative to member checking with the participants, two mothers with experience in early intervention,
whose kindergarten-age children had aged out of the early intervention service system, were invited to read the findings of the qualitative study. Both confirmed that the findings were true to their experience.
CHAPTER 6
DISCUSSION

This mixed-methods study piloted a video aimed to orient parents to the community of parents who have children with special needs. The video showed experienced parents as peer models talking about how early intervention has helped them and how they, in turn, have helped their children. This strategy, suggested by previous success in using video and peer modeling to increase parent competence and skills (Webster-Stratton, 1981; Webster-Stratton & Herbert, 1993; Webster-Stratton et al., 1988), was intended to be empowering to parents who have children with special needs. Using parents whose children have special needs as peer models was thought to foster the collective belonging that Hur (2006) considers an important step in the process of empowerment. The potential of using video at the start of the early intervention process, when the Individualized Family Service Plan is written, was of interest. Empowerment was defined as adaptation in which the parent uses knowledge, develops skills and increases capacity to function as a change agent.

Quantitative and qualitative methods were used to test the hypothesis and answer the research question that parents who saw the video would be more empowered than parents who did not see the video. For the quantitative component, it was found that the hypothesis was not supported; the video was not associated with greater empowerment for all 36 parents who saw it. Multiple regression analyses showed that video significantly predicted empowerment for parents when parent education and the interaction between video and parent education were included as predictors. Further investigation showed that parent education may also interact with gender and appears to interact with child disability. The results of the parallel, qualitative inquiry also suggests that the video was not associated with greater parent empowerment. The main themes
that emerged from the qualitative content analysis, restored confidence and inspired action, were expressed by parents in both study conditions.

This discussion begins with consideration of the intervention, the Parent Empowerment in Early Intervention (PEEI) video. This was a brief (22-minute) intervention that was intended to raise participants’ awareness and orient them to two aspects of early intervention. First, it presented the Individualized Family Services Plan (IFSP) as an important document. Second, it showed parents talking about their relationship with the primary coach and the positive benefits they received through their involvement with early intervention. The video was intended to present a coping model, in which the parents in the video were not experts, but representative parents, on the same level as the audience targeted for the video. The result, however, was that the parents who served as peer models were exceptionally articulate and capable in parenting their child with special needs. They appeared in the video as above-average parents. This departure from a true coping model may have affected participants’ ability to relate to the parents in the video.

As an intervention, the PEEI video operates at an initial awareness level to show the parent’s point of view about early intervention services. It was intended to orient new parents to the community of parents who have young children with special needs. In discussing their experiences in early intervention, and the progress they have seen in their child, the parents in the video showed themselves to be empowered. The purpose of the video was to expose new parents to other parents who have been through a process of empowerment in early intervention. It was expected that exposure to other parents through this medium would have a positive effect on participants and that there would be qualitative and quantitative differences between parents who saw the video and parents who did not see it.
In testing the quasi-experimental hypothesis that parents who saw the video would report as more empowered than parents who did not see it, moderating effects of parent education were found. There were differential video by parent education effects on parent empowerment on the service system scale. Parents with some college who saw the video were more empowered than parents who did not see the video, but parents with at least four years of college who saw the video were less empowered than the parents who did not see it. The results for the family scale criterion, although not as pronounced and not significant, also showed an interaction when graphed. The most compelling finding of the quantitative component of the study was that the effect of the brief video intervention depended upon the parent’s level of education.

In the supplementary analyses, parent education continued to moderate outcomes, regardless of the video. The supplementary analysis using gender, parent education and their interaction to predict FES service system scores differentiated between parents with some college and parents with higher education. Parents of male children rated the service system similarly regardless of their level of education; whereas parents of female children who had some college rated the service system significantly higher than parents of girls with more education. Parents of girls who had higher education rated the service system lower than parents of boys at the higher education level.

For parents with some college, the graph of the results for family scores by gender and parent education was similar to that of the service system scores. Parents of girls who had some college rated the service system higher than parents of boys at the same education level. High school, the contrast in this analysis, had an effect that was opposite that of some college. Parents of boys at the high school level rated the service system higher than parents of girls at the high school level. These findings suggest that parents may experience empowerment differently
depending upon their child’s gender and their level of education. Across both empowerment measures, the results were similar for parents with some college. In regard to the family scale, the results suggest that parents with high school whose children were male were more empowered than parents whose children were female.

The results for the regression of service system scores on child disability and parent education suggests that these variables combine to influence parent empowerment. It appears that parents of children with more severe disability who had higher education were less empowered than parents with less education. Parents with some college whose children had more severe disability were more empowered than parents at the same education level whose children had mild disability. For parents with some college and higher education, the graph is similar to that for the interaction of parent education and video condition. This may be an indication of confounding of results for parents at the highest level of education whose children have more severe disability. The results suggest that child disability together with parent education moderate parent empowerment.

The reasons for these differential effects are not clear but three possibilities will be considered. One concerns the intervention approach, a second relates to parents’ expectations, and a third has to do with the parents’ psychological and practical adjustments to having a child with special needs. At the outset, it should be acknowledged that the interactions that were found could be statistical artifacts, attributable to small sample size and quasi-experimental design, and that the findings may not be replicable.

As noted, the video was intended to raise the level of participants’ awareness about other parents and families who have also experienced the beginning of early intervention services. It referenced experiences parents in the video and participants might have in common (i.e. parents
did not know what to expect at first but then became comfortable with the primary coach). The video was not meant to instruct in the sense of showing how the primary coach works with the parent or the child. It does not tell parents what they should do with their child, or what to do if they are having problems. It is possible that this video approach had a greater impact for parents with some college than for parents with more education. Parents with some college may have been inspired or empowered by the video in ways that parents with more education were not. It is possible that parents with more education did not experience the video in the same way as parents with some college. Parents with more education may already have been aware of the concepts that the video was designed to convey. This reasoning may explain increased empowerment among parents with some college, but does not account for the lower scores among parents with more education.

An alternate explanation of the differential effect of parent education on empowerment is that parents’ expectations of the service delivery system may have influenced their empowerment scores. Previous research on parents in early intervention (Hebbeler et al., 2007) suggests that mothers who have four or more years of college might experience greater benefits from early intervention relative to mothers with less education. Empowerment is one of these benefits (Thompson et al., 1997). Empowerment in relation to the service delivery system may be a function of parents’ perception and appreciation of the help they receive from early intervention. For parents with some college, the video may contribute to feeling that their expectations for services have been met or exceeded. They may rate they service system higher than parents who did not see the video because they have the feeling that the help they receive through early intervention will meet their needs. Parents with more education, however, were disempowered as a result of viewing the video. For parents who saw the video, appraisal of the
service delivery system was lower than that of parents who did not see it. More highly educated parents may regard the video as inadequate to empower them. If parents with more education have expectations of the service delivery system that are not being met, the video may be one more thing that strikes them as being insufficient in the context of having a child with a delay or disability. It may be that parents who have college degrees may be more aware of the challenges of raising a child who has a disability and, therefore, have lowered expectations of the service delivery system.

Another possible reason for lowered empowerment of parents with more education may involve their process of adjusting to having a child with a delay or disability. Rix and Paige-Smith (2008) describe parents’ displaced expectations and a “disruption of parental identity” (p. 211). Displaced expectations and internalized ideas may contribute to the differences we found in parent empowerment depending upon parent education. Highly educated parents may have expectations of success or achievement for themselves and their children that make their process of adjustment more complicated than the process of adjustment for parents with less education. Or, highly educated parents who find that their child has special needs may experience more disruption to their lives than parents with less education. For these parents, seeing the video may arouse feelings of being lost, alone, or other negative emotions associated with the adjustment process. Difficulty in adjustment by parents with more education could contribute to their lowered empowerment. The qualitative comments from parents with four or more years of college who saw the video did not help to explain the service scale findings.

The results of the parallel, qualitative inquiry confirmed that the video was not associated with greater parent empowerment. The main themes, of restored confidence and inspired action were expressed by parents in both study conditions.
Restored confidence signifies a parent’s adjustment to aspects of the child’s disability. McLaughlin, Goodley, Clavering, and Fisher (2008) assert that adjustment is much more complex than simply accepting the child’s disability. They describe a dynamic process that is informed by social forces and parents’ internalized ideas. Social forces include definitions of normal development and social exclusion of the disabled. Internalized ideas include schemas of motherhood, fatherhood, and parenting. McLaughlin et al. maintain that the way parents feel about and think about their young child in the context of disability is malleable.

Burke (2008) proposes that resolution starts when parents receive a diagnosis. Parents in the current study pointed to an event, such as qualifying for services, or hearing that their child was improving, as reassuring. Confidence is restored in relation to others through the help parents receive. In this study, parents mentioned receiving help from the primary coach, the PEEI video, the Internet, family members, professionals in various disciplines and community programs. These activities promote personal power at the individual level (Morrow & Malin, 2004).

The main theme of inspired action encompasses all of the elements of empowerment as defined in the current study. By their own accounts, inspired action gives parents freedom to experiment, to try new things, and determine what works for their individual situation. In contrast to confidence restored, this theme is based in the parent’s relationship with the child. McLaughlin et al. (2008), in their longitudinal ethnographic study of parents of children with disabilities, call this a “productive” identity (p. 101). Rather than being home-bound, this identity “calls upon parents, then, to create new forms of community within which they can participate in ways that value them and their disabled children” (Goodley & McLaughlin, 2008a, p. 106). Rix and Paige-Smith (2008) call for developing parent agency and identity apart from
relation to service providers’ knowledge and power. Through inspired action, parents realize their power to influence others, or relationship power (Morrow & Malin, 2004).

Differences in the content of the qualitative interviews by condition emerged from additional questions asked of parents in the intervention condition. Parents who did not see the video expressed more worry in regard to their child. Jackson, Traub, and Turnbull’s (2008) qualitative study of parents of children diagnosed with deafness also found that parents worried about the future. In contrast, parents who saw the video presented a more proactive stance than parents who did not see it, acknowledging positive outcomes of seeking and using early intervention services. Parents who answered questions about the video mentioned that it made them feel less alone, and that they could relate to the parents in the video.

Timing was another concept that emerged from the qualitative content analysis. The timing of the video made a difference to parents. However, there was no consensus as to when the video could be most constructively seen. Some participants said that it might be most helpful when parents first suspect that their child might have a disabling condition, even before there is a diagnosis or evaluation. Most parents said that the best time to watch the video would be when the child is determined to be eligible for services, because there is often a gap of several days before a primary coach is assigned. Other parents felt it would be better for the primary coach to introduce the video after services have started. Several parents who said that the video was not helpful to them at the time when they saw it indicated that it would have been helpful if they had seen it earlier. These comments demonstrate how parents feel strongly about what is helpful and when they most need it.

The timing of the video relative to parents’ experience in early intervention may have been a factor in the differential effects on empowerment observed in the quantitative data.
analysis. Timing is a charged concept for parents who have recently learned that their child has a condition that requires intervention; whatever they perceive as a need, including information, a diagnosis, resources, or intervention, cannot be provided too soon. It is possible that a video designed to raise parent awareness can have a positive impact on parents if the timing is right, that is, if the parents see the video when they are just beginning to develop awareness of their role as a change agent in early intervention. If parents had already developed personal and relationship power before they saw the video, they may have had a neutral, aloof, or negative reaction to it. If this was the case, it could explain the lower service system scores of parents with higher education who were in the intervention condition, compared to service system scores of parents with higher education who did not see the video. The video was designed to stimulate awareness of parents’ active agency in early intervention. The impact of this intervention on parents who are already empowered may be negative, and therefore less welcome than no intervention.

One of the themes that emerged in the qualitative analysis was the need for parents to reduce their isolation with regard to having a child with special needs. A number of participants were able to relate to parents in the video and said it left them feeling that they were not alone. These key findings underscore parents’ need to connect and develop collective belonging (Hur, 2006). Contact with other parents through support groups is a major source of support for parents of children who are deaf (Jackson et al., 2008). We acknowledge that watching a video is not the same as engaging on a personal level with another parent, but participants said that it decreased their sense of being alone. A video to which parents can relate may provide parents with ideas for “how to be” a parent to their child (Goodley & McLaughlin, 2008a, p. 107) that they would not have otherwise considered.
In testing the hypothesis, significant effects were found for the Family Empowerment Scale (FES) service system scale but not the other dependent measures. The service system scale asks parents about their knowledge, attitudes and behaviors (Koren et al., 1992) with regard to services available to them and their engagement with the service delivery system. This scale roughly corresponds to the construct of restored confidence, one of two main themes in the qualitative component of this study. The maximum possible score is 60. Survey results showed that participants in our study were highly empowered; the overall mean was 52.85. While this reflects well on parents and the early intervention services they receive, the measure limits increases in parent empowerment, as some parents’ scores reached the upper limits of the scale. Ceiling effects may have constrained the amount of change that could have been engendered by the intervention. We set out to measure parent empowerment early in parents’ engagement with the service system, but did not use repeated measures. It would be desirable to have a measure of empowerment at service entry that could capture change over time.

The results for the FES family scale also indicated a high level of parent empowerment in terms of knowledge, attitudes and behaviors, with an overall mean of 52.64. The maximum for this scale is also 60. The family scale measures the level of empowerment parents feel in their parenting and their situation at home. It roughly corresponds to the construct of inspired action that emerged from the qualitative content analysis. It appears from our marginally significant results that parent education moderates the effect of the video on family empowerment in the same way that it does for the service system, but with a weaker relationship between parent education (the contrast of 4-year degree with some college) and the video condition.

In developing the Family Empowerment Scale, Koren et al. (1992) included three levels of empowerment: service system, family, and involvement in the community. Only the service
system and family scales were used because the questions at the community level referred to political activities and influencing other parents. It was felt that it was too early in parents’ experience with early intervention to ask such questions. Instead, the Family Outcomes Survey (FOS) was used, which includes three questions about the family’s involvement in the community. None of the analyses using the FOS were statistically significant.

The results of the qualitative interviews show individual differences in the way that parents negotiate the early intervention system and become empowered as agents of change. Their responses reinforce the need to individualize services, based on needs that parents expressed. Strategies designed to empower parents in the early intervention process should be relevant to parents’ characteristics including their level of education and the severity of the child’s disability. This study found that some parents believed information and support should be readily available at the earliest possible point in time, possibly at the point at which a delay or disability is suspected. For example, many parents desired information about their child’s condition and treatment options. Parents were also curious about how other children with similar delays and disabilities make progress. The findings of the quantitative component also suggest that once parents are accustomed to early intervention and know what to expect from the system, interventions to enhance awareness may be counterproductive.

The results from both quantitative and qualitative components of this study indicate that the context in which we are delivering the intervention makes a difference. In order to facilitate parent empowerment, an understanding of the context in which the intervention is delivered is needed, including such fixed factors as parent education. Parent empowerment is desirable in early intervention. It is a motivating force that helps parents manage the responsibility of raising a child with special needs. Empowerment moves parents forward. Influencing empowerment,
for parents of infants and toddlers with developmental delays or disabilities, is more complicated than the researchers thought when the study began. The results of this study indicate that a brief intervention needs to fit parents’ awareness of their role in early intervention, their education, and the severity of their child’s disability.

The process of accepting early intervention and starting services can be empowering to parents. Early intervention services provide skilled professionals who collaborate with, guide and support parents in successfully adapting to their child. This study was conceived with the understanding that the service system does a remarkable job of empowering parents to produce positive changes in their children, but may stop short at connecting parents to each other. The results showed that a very brief intervention can introduce parents to the wider community of their peers. Parents benefit from knowing that they are not alone in having a child with a disability. Parents need additional opportunities to develop community belonging on their terms and to become empowered outside of the early intervention system.

Limitations of the Study

The biggest limitations to this study were recruitment issues and sample size. The goal to recruit 60 parents in each condition was not met; there was a lower number of parents in the intervention condition, and an imbalance of children with more severe disabilities between the two study conditions. It would have been preferred to have the additional power for the analyses that having more participants would have provided. A smaller number of participants than desired was used because of time constraints.

The video group was representative of the research pool on child disability status. The “IFSP as usual” group, enrolled first, had significantly fewer children with more severe disabilities than the research pool. The comparability of our two groups is an issue of internal
validity. This study would have been stronger if the two groups would have had equivalent numbers on child gender and child disability status. The lack of equivalence between the two groups makes interpretation of the findings more difficult.

The representativeness of our sample to the larger group of parents who receive early intervention services is an issue of external validity. Recruitment of a fairly representative sample on child gender and child disability status was achieved, but the sample had more married parents and fewer ethnic minority children than the research pool. The child disability status of most of the children in the research pool was known, but it was not known how many of their parents were excluded from our study because they were teens in the custody of their parents, if the child was living with a non-relative foster parent, or if their preferred language was not English. Participation was voluntary, and parents were not asked why they declined to participate.

Selection bias, a threat to validity, may have been a factor in the recruitment process (Rossi, Lipsey, & Freeman, 2004). Recruitment procedures for the “IFSP as usual” group had to be enhanced because some of the service coordinators were concerned about burdening parents whose children had more severe disabilities. Incentives for participation were not offered to parents in the “IFSP as usual” condition. In the video condition, it is possible that parents saw the video as an incentive to participate, and self-selected on that basis. A greater, more representative number of parents whose children had more severe disabilities may have been recruited because they were curious about the video. The study would have been stronger if the two groups had been comparable on child disability.

Although we recruited enough participants to interview (21), several parents in the intervention condition did not follow through with their interviews. It would have been
preferable to have had equal numbers representing both conditions. Even so, there were sufficient data to analyze and a strong enough basis for drawing conclusions.

Recommendations for Practice

The pilot study has several implications for practice. The first is the utility of the video as a targeted intervention. Collins, Murphy, and Bierman (2004) advocate tailoring interventions using participant variables to determine the level of dosage to be delivered. In situations where “treatment effects vary systematically across individuals” (p. 193), adaptive interventions avoid negative outcomes for participants who do not respond well to treatment, and avoid applying interventions that have no effect. The current study suggests parent education may be an important tailoring variable. Using the video intervention adaptively, instead of providing it uniformly to all families, may be more effective. Tailoring the video intervention to different levels of parent education is recommended, with benefits engendered by providing the video to parents with some college education to watch on their own. Parents with college education or high school education may need a different approach to being oriented to the community of parents of children with special needs. Therefore, it is not recommended to provide the PEEI video to parents with more education because it appeared to decrease parent empowerment, an unintended negative effect (Collins et al.). It is also not recommended for parents with high school education because a consistent trend was not observed between the two Family Empowerment Scales of family and service system.

The service delivery system could be instrumental in helping to develop collective belonging among families in early intervention (Jackson et al., 2008). Strengthening connections to other parents and families should be an adjunct activity to formal early intervention services. Bailey, Nelson, Hebbeler, and Spiker (2007) highlighted the importance of informal support
systems for families of children with special needs. It would be important to ask parents what supports they would find most helpful, facilitate the connection process, and then follow up to determine the outcomes.

Brief, targeted interventions have the potential to draw parents of children with special needs into the community (Goodley & McLaughlin, 2008a). Rather than being home-bound, this identity “calls upon parents, then, to create new forms of community within which they can participate in ways that value them and their disabled children” (Goodley & McLaughlin, p. 106). Empowerment, or parent agency, should not be limited to the home and the service delivery system (Rix & Paige-Smith, 2008).

Another implication for practice is parents’ desire for information about early intervention. Several parents said they wished the video would have shown how early intervention works with children and parents. As suggested by parents, it would be helpful to show a wide variety of children, including those with very mild disabilities. Materials in different media and facilitated conversations about specific parenting and child development concerns could be empowering to parents. There may be a need for more advanced materials that show how parents solve problems and address complex issues with regard to their children’s development. Although parents need individualized services, there are many commonalities, child behavior problems, for example, that affect a wide range of families. There is opportunity to create additional self-administered videos to emphasize the diversity within early intervention and to engender community belonging (Goodley & McLaughlin, 2008b) through parents’ keen interest in other children and families (Jackson et al., 2008).
Recommendations for Future Research

A recommended follow-up to this study would be to conduct focus groups to ask parents about the most appropriate timing for viewing the *PEEI* video. Research could start with parents who have some college and children who have more severe disabilities, because the parents in this category who saw the *PEEI* video had higher empowerment scores than parents at other education levels. The results could be used to make the *PEEI* video more effective in raising parent awareness and facilitating empowerment. The results may also point to other low-cost resources that could orient parents to early intervention.

Early intervention recognizes that services must be individualized. The primary coaching approach respects the parents’ level of knowledge and preparation, and engages the parent in conversations to bring out what the parent wants to do (Hanft, Rush, & Shelden, 2004). The primary coach uses parent motivation as a strategy to help parents learn and apply knowledge to meet goals they have set for their child and family. Future research could address ways that the primary coach could use coaching techniques to help parents connect to informal supports and community resources. This research could also be used to help build networks among families. Future research should also identify widespread supports (Jackson et al., 2008) that help families operate on their various community environments and fully participate in community life.
REFERENCES
REFERENCES


APPENDIXES
APPENDIX A

SEVERITY RATING CODES

These codes are used by the agency and were developed to aid the agency in describing its program outcomes for children who receive early intervention services. The person who has the most contact with the child, usually the Primary Coach, rates the child using only one of the categories.

Categories:

Mild = a delay in one developmental area that meets the special education requirements

VI (Visually Impaired) = cognitively functions within the normal range and meets the certificate of eligibility requirements for VI

HI (Hearing Impaired) = cognitively functions within the normal range and meets the certificate of eligibility requirements for HI

PI (Physically Impaired) = cognitively functions within the normal range and meets the certificate of eligibility requirements for PI

DD (Developmental Delays) = demonstrates global delays across all or most domains

MR (Mental Retardation) = for children 0 - 3 with known diagnosis which will result in
MR (example: person with Down Syndrome, brain injury, etc.) and for children 3 - 5 who meet the certificate of eligibility requirements for MR

SMD (Severely Multiply Disabled) = for children 0 - 3 with known diagnosis which will result in an educational diagnosis of SMD (example: medically fragile, severe CP, etc.) and for children 3 - 5 who meet the certificate of eligibility requirements for SMD
APPENDIX B

PRE-INTERVIEW QUESTIONS FOR PARENT PARTICIPANTS IN THE VIDEOTAPE

We want to present a videotape to parents who are new to having their child in services so that they will feel more comfortable in working with their child’s team.

I’m going to ask you about three things:
   a) How it was for you when you started in early intervention
   b) Your experiences in early intervention
   c) How you work with your child’s team now

1) What was it like for you when you first met with the people at Rainbows?
   How did you feel?

2) What was it like for you when you first started to work with the people who come to your home?

3) What has it been like for you in trying to get the help you need?

4) What things helped you to be comfortable in working with name of person who comes to the home?
   How does your team make you feel?

5) Many parents starting out may have a hard time believing that they are in a true partnership with professionals. How did you get used to working with members of your child’s team?
   How do you talk with your team about what you do with your child?

6) As you went along, could you tell me about any thing that happened that made you think that you were making a difference in child’s name’s development?
   What was it like when you first felt that sense of “I can do this!”
   How did that feel?
   Do you describe this as having “power”?

7) What kind of changes have you seen in your child as a result of the services you get from Rainbows?

8) How would you describe your relationship with your child’s therapists/team?
9) When you think about your child, what excites you? What’s inspiring about that?

10) What keeps you going?

11) How has being child’s name’s parent changed you?

12) How would you describe your outlook for the future?

13) What would you like to say to parents about collaborating with their service coordinator or other professionals?

Other ways of wording these questions, if parents seem to be comfortable with the vocabulary: We would like you to talk about starting early intervention, collaboration, empowerment, and any “breakthrough” moments you had in early intervention. Many parents have felt that it is empowering to work in partnership with professionals and that they develop knowledge of their child and experience that gives them confidence. What things have helped you to become more confident in parenting your child? As you worked with your child’s therapists and service providers did you feel that you learned how to do things that were empowering? What should professionals do to provide opportunities for parents to experience empowerment?
APPENDIX C

FAMILY EMPOWERMENT SCALE, KOREN ET AL., 1992

The first two sections: About Your Family and About Your Child’s Services, questions 1-24 were used. The section, About Your Involvement in the Community, questions 25-34 was not used. For the full copyrighted survey instrument please contact the Regional Research Institute, Portland State University, P. O. Box 751, Portland, OR 97207-0751.

Question 11 was modified from the original survey. The change is shown in italics.

These questions ask about several areas of your life—your family, your child’s services, and your community. The questions include many different activities that parents may or may not do. For questions that do not apply to you, please answer “Never”. Also, we know that other people may be involved in caring for and making decisions about your child, but please answer the questions by thinking of your own situation. Feel free to write any additional comments at the end.

The scale is as follows:

Never Seldom Sometimes Often Very Often
1 2 3 4 5

ABOUT YOUR FAMILY…

1. When problems arise with my child, I handle them pretty well.
2. I feel confident in my ability to help my child grow and develop.
3. I know what to do when problems arise with my child.
4. I feel my family life is under control.
5. I am able to get information to help me better understand my child.
6. I believe I can solve problems with my child when they happen.
7. When I need help with problems in my family, I am able to ask for help from others.
8. I make efforts to learn new ways to help my child grow and develop.
9. When dealing with my child, I focus on the good things as well as the problems.
APPENDIX C (continued)

10. When faced with a problem involving my child, I decide what to do and then do it.

11. I have a good understanding of my child’s disorder, or the reason my child qualifies for early intervention.

12. I feel I am a good parent.

ABOUT YOUR CHILD’S SERVICES…

13. I feel that I have a right to approve all services my child receives.

14. I know the steps to take when I am concerned my child is receiving poor services.

15. I make sure that professionals understand my opinions about what services my child needs.

16. I am able to make good decisions about what services my child needs.

17. I am able to work with agencies and professionals to decide what services my child needs.

18. I make sure I stay in regular contact with professionals who are providing services to my child.

19. My opinion is just as important as professionals’ opinions in deciding what services my child needs.

20. I tell professionals what I think about services being provided to my child.

21. I know what services my child needs.

22. When necessary, I take the initiative in looking for services for my child and family.

23. I have a good understanding of the service system that my child is involved in.

24. Professionals should ask me what services I want for my child.

Comments _____________________________________________________________
APPENDIX D

FAMILY OUTCOMES SURVEY, PART C VERSION, BAILEY ET AL., 2006

Questions 1-18 are from the copyrighted survey. For the full survey, please contact staff@the-ECO-center.org.

Notes in italics and Question 19 are not part of the copyrighted survey and were added for this study.

Instructions:
This survey should be filled out by the person in your family who has the most interaction with early intervention.
All of the responses include the word “we” or “our.” This refers to your family. Usually this means parents and others who support and care for your child. But every family is different, so think of what “family” means to you when answering.
The scale is one to seven, with one being the least and seven being the most. There is a description for all of the odd numbers. The example is silly, but it shows you what the descriptions are like. The question is,

How much does your family know about dinosaurs?

The description for number one is “We know a little about dinosaurs.” The description for number three is “We know some about dinosaurs.” For number five it is, “We know a good amount about dinosaurs,” and for number seven, it is “We know a great deal about dinosaurs.” The even numbers are left blank. If your answer falls between a three and a five, for example, you can say “four.”

If you do not know how to answer a question, or if you are not comfortable answering the question, skip it and go to the next question.

UNDERSTANDING YOUR CHILD’S STRENGTHS, ABILITIES, AND SPECIAL NEEDS

1. Your child is growing and learning. How much does your family understand about your child’s development?
2. Some children have special health needs, a disability, or are delayed in their development. These are often referred to as “special needs.” How familiar is your family with your child’s special needs?
3. Professionals who work with you and your child want to know if the things they do are working. How often is your family able to tell if your child is making progress?

KNOWING YOUR RIGHTS AND ADVOCATING FOR YOUR CHILD

4. A variety of programs and services may be available to help your child and family. How much does your family know about the programs and services that are available?
5. Families often meet with early intervention professionals to plan services or activities. How comfortable is your family participating in these meetings?
6. Families of children with special needs have rights, including what to do if you are not satisfied. How familiar is your family with your rights?

HELPING YOUR CHILD DEVELOP AND LEARN
7. Families help their children develop and learn. How much does your family know about how to help your child develop and learn?
8. Families try to help their children behave the way they would like. How much does your family know about how to help your child learn to behave the way your family would like? *Here, we are not asking about your child’s behavior, but how much you know about how to help your child behave the way you would like.*
9. Families work with professionals to help their children learn and practice new skills at home or in their communities. How often does your family help your child learn and practice these new skills?

HAVING SUPPORT SYSTEMS
10. Many people feel that talking with another person helps them deal with problems or celebrate when good things happen. How often does your family have someone your family trusts to listen and talk with when they need it?
11. Families sometimes must rely on other people for help when they need it, for example to provide a ride, run an errand, or watch their child for a short period of time. How often does your family have someone you can rely on for help when your family needs it?
12. Most families have things they enjoy doing. How often is your family able to do the things your family enjoys?

ACCESSING YOUR COMMUNITY
13. All children need medical care. How well does your family’s medical care meet your child’s special needs? *If your child’s special needs are not medical, you can answer for how well your child’s medical care meets your child’s needs.*
14. Many families have a need for quality childcare. By this, we do not mean occasional babysitting, but regular childcare, either part-day or full-day. How well does your family’s childcare meet your child’s needs? Check here if your family has not wanted child care, and go to question 15. Check here if your family has wanted child care but it is not currently available, and go to question 15. *If your family has not wanted child care, we are to make note and skip this question. If your family has wanted child care but it is not currently available, we are to make note and skip this question.*
15. Many families want their child to play with other children or participate in religious, community, or social activities. How often does your child participate in these activities right now? Check here if your family has not wanted your child to participate in such activities and go to question 16. *These would be age-appropriate activities that you choose. If your family has not wanted your child to participate in any of these activities we are to skip this question.*

THE HELPFULNESS OF EARLY INTERVENTION
The next questions ask how well early intervention has helped your family. When answering, think about the early intervention services you have received.
16. To what extent has early intervention helped your family know and understand your rights?
17. To what extent has early intervention helped your family effectively communicate your child’s needs?
18. To what extent has early intervention helped your family be able to help your child develop and learn?
19. How much of a connection do you feel with other parents who have children with special needs?
APPENDIX E

IFSP COORDINATOR RATING OF PARENT PARTICIPATION IN THE INITIAL IFSP MEETING

From your perspective as the service coordinator, and your experience in working with parents and families, we ask that you rate parent/guardian participation in the initial Individualized Family Service Plan (IFSP) meeting. The rating scale is as follows:

**Exceptionally good**  
The parent showed an unusually high level of understanding, preparation, or capacity to participate in the IFSP process. The parent’s contributions were used verbatim to develop parts of the IFSP. Parent’s ability to participate at this level could be because of education, experience, understanding of child’s needs, or desire to contribute to the process.

**Good**  
The parent was well prepared to participate in the IFSP process. The parent’s contributions were helpful. Could be because of interest in working with service providers, ability to meet the child’s needs, or communication skills. Parent played an instrumental part in helping to write the service plan.

**Adequate**  
Met the expectations of the team in providing information, asking questions, and arriving at consensus about services to be provided. Parent participated at a level that allowed the process to go forward. Parent depended a great deal on the other members of the team to write the service plan.

**Minimal**  
Parent “went along” with the team during the IFSP meeting. Parent was cooperative but did not contribute much to the process. This could be due to lack of basic education and literacy. This could be due to a lack of familiarity with what service providers were talking about, understanding of child development, or the child’s needs.

**Was not evident**  
Parent did not appear to follow what was going on in the IFSP meeting. Parent did not contribute at all to the process. The team has concerns about the parent’s ability to follow through on aspects of the service plan. Parent may not have basic literacy or capacity to participate in writing the service plan.

<table>
<thead>
<tr>
<th>Exceptionally Good</th>
<th>Good</th>
<th>Adequate</th>
<th>Minimal</th>
<th>Was not evident</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>

Understanding of written materials
APPENDIX E (continued)

Understanding of the reason(s) child qualifies for Part C services
Questions the parent asked before or during the IFSP meeting
Participation in the IFSP meeting
Responses to questions from service providers
Knowledge of child development in general
Understanding of the child’s needs

Please comment on the parent’s participation in the IFSP meeting:
APPENDIX F

SURVEY OF PARENT REACTIONS TO THE VIDEO

The video, Parent Empowerment in Early Intervention features parents who have received early intervention services. This video was created for parents whose children qualify for early intervention and who are just starting to use services. As a parent, you may feel that things are happening too fast, or too slow. You may be experiencing different emotions. We hope that watching this video is helpful to you at this time. We ask that you return the enclosed survey and DVD in the self-addressed envelope provided. Thank you!

Please take a few moments to complete a survey on the video, Parent Empowerment in Early Intervention. Your responses will be kept confidential.

Please answer each of the following questions by circling the number that best expresses your reaction. Use the following scale for questions 1-5:

<table>
<thead>
<tr>
<th>None</th>
<th>Some</th>
<th>A Fair Amount</th>
<th>Most</th>
<th>All</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

1. How much of the information in the video was new to you?
2. How many of the problems that these parents experiences are like the problems you are experiencing now?
3. Have you had some of the same reactions that the parents in the video described? If so, how many of those kinds of feelings have you had?
4. How much of what parents expressed in the video do you believe showed their true feelings about professionals?
5. In how much of the video did you see parents talking about their successes?

Please read the scale for question 6 and circle the number that best expresses your reaction.

6. How confident did the parents seem to be in being able to help their children?

<table>
<thead>
<tr>
<th>Not at all</th>
<th>Slightly confident</th>
<th>Somewhat confident</th>
<th>Very confident</th>
<th>Extremely confident</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

7. Did you watch the video more than once? Yes ________ No ________
   If yes, how many times? __________

8. In what ways, if any, did you find this video helpful?
Thank you for taking the time to complete this survey. Please return it in the prepaid envelope to: Jane Eby, Box 34, Psychology Department, Wichita State University, 1845 Fairmount, Wichita, Kansas 67260-0034.

Parent survey number ________
APPENDIX G

SEMI-STRUCTURED INTERVIEW QUESTIONS

This interview was given to a purposive sample of parents in each of two conditions at a face-to-face interview 5-6 weeks after the initial IFSP.

1) What was it like for you when you first started receiving services, when the people first came to your home? (Or at a center, if applicable). How did you feel?

2) What kinds of things have helped you to be comfortable in working with name of person who comes to the home? How does your team make you feel?

3) How do you talk with your therapist/team about what you do with your child? Do you feel comfortable telling them what you think your child needs?

4) How would you describe your relationship with your child’s therapists/team? Do you feel like a partner with the therapist/social worker? Do you feel comfortable telling them what you think your family needs?

5) What kind of feedback do you value the most as a parent?

6) Are there goals that you have for your child or your family that you have not shared with service providers? If yes, could you tell me about one of these goals?

7) Could you tell me about any thing that has happened that made you think that you are making a difference in child’s name’s development? Have you had an experience in early intervention that boosted your confidence in your ability to help your child? If so, what was it?

8) What aspects of the early intervention program have helped you the most so far? How do you feel about early intervention services now?

9) What kinds of things have helped you to feel confident in your role in parenting child’s name?

The remaining questions were asked of parents in the intervention/video condition only:

10) What did you think of the video?

11) What do you remember from the video?

12) Was the video helpful to you at the time when you saw it?
APPENDIX G (continued)

13) Would you recommend the video to other parents who are coming in to early intervention?
APPENDIX H

QUESTIONS USED WITH THE FAMILY EMPOWERMENT SCALE

The first four questions were asked before the Family Empowerment Scale was administered. Please answer these first few questions using the following scale:

1 = not at all
2 = a little
3 = some
4 = a lot
5 = very much

A. I am in tune with my child.
B. I feel hopeful about my child’s development.
C. I feel confident about being able to help my child.
D. I feel a connection with other parents whose children have special needs.

The following four questions were asked after the Family Empowerment Scale survey was completed. Now I would like to ask you a few questions about the video you saw.

1. What did you think of the video?
2. What do you remember from the video?
3. Was the video helpful to you at the time when you saw it?
4. Would you recommend the video to other parents who are coming in to early intervention?
APPENDIX I

RATING OF FAMILY’S USE OF SERVICES AS WRITTEN IN THE IFSP

The service coordinator or staff person who has worked with the family the most will complete this rating scale at 12-13 weeks after the initial IFSP is written.

1. On a scale of 4-0, how well did the family’s actual use of services follow the IFSP?

<table>
<thead>
<tr>
<th>Exactly as written/intended</th>
<th>Not at all</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

2. On a scale of 4-0, how receptive was the parent to your suggestions and instructions?

<table>
<thead>
<tr>
<th>Highly receptive</th>
<th>Not at all</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

3. On a scale of 4-0, how do you rate the parent’s contribution to the parent-professional partnership?

<table>
<thead>
<tr>
<th>Parent contributes a great deal</th>
<th>Parent contributes an average amount</th>
<th>Parent contributes very little</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0</td>
</tr>
</tbody>
</table>

4. Please explain any circumstances that prevented the family from using the services that were specified in the IFSP:

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
APPENDIX J

BRIEF CONSENT

Parent Empowerment in the IFSP Process

PURPOSE: You are invited to participate in a study of Parent Empowerment in the IFSP Process. Through this study, we hope to learn about what factors parents consider to be helpful in starting early intervention services, and how professionals can facilitate parent empowerment in the IFSP process.

PARTICIPANT SELECTION: You were selected as a possible participant in this study because your child is eligible for early intervention services and you have just completed an initial Individualized Family Service Plan (IFSP) with Rainbows United, Inc. Approximately 130 other parents in Sedgwick and Butler Counties who have just completed initial IFSPs through Rainbows United, Inc. or Bright Beginnings will also be invited to participate.

EXPLANATION OF PROCEDURES: If you decide to participate, researchers from Wichita State University will read your family’s IFSP and Rainbows United, Inc. enrollment forms. A project staff member will call you in the next two weeks to arrange two meetings with you. You will be asked to complete two surveys. You may be asked to watch a video called “Parent Empowerment in Early Intervention,” and to complete a brief survey about this video. You may be asked additional questions about your participation in the IFSP process and early intervention.

DISCOMFORT/RISKS: You may be uncomfortable talking about your child, your family, and/or your experiences in early intervention. You may be reluctant to disclose personal information.

BENEFITS: You may learn more about early intervention and your rights in early intervention. You may learn ways to help your child and your family. The information that you provide may help professionals improve their ability to serve children, parents and families.

CONFIDENTIALITY: Any information obtained in this study in which you can be identified will remain confidential and will be disclosed only with your permission.

REFUSAL/WITHDRAWAL: Participation in this study is entirely voluntary. Your decision whether or not to participate will not affect your future relations with Rainbows United, Inc., Bright Beginnings and/or Wichita State University. If you agree to participate in this study, you are free to withdraw from the study at any time without penalty.

CONTACT: If you have any questions about this research, you can contact Jane Eby at (316) 267-1933 with any questions or concerns. If you would like to talk with Ms. Eby’s academic supervisor at WSU about this research please call Dr. James J. Snyder, Department of Psychology at (316) 978-3083. If you have questions about your rights as a research subject, you can contact the Office of Research Administration, Wichita State University, at (316) 978-3285.
You are under no obligation to participate in this study. Your signature indicates that you have read the information provided above and have voluntarily decided to participate.

You will be given a copy of this consent form to keep.

Name of parent ________________________________________________________________

____________________________________  __________________________
Signature of parent                                  Date

____________________________________  __________________________
Signature of Rainbows United, Inc. or Bright Beginnings representative  Date

__________________________________________
Rainbows United, Inc. Unique Child I.D. Number
APPENDIX K

FULL CONSENT AND RELEASE OF INFORMATION

Parent Empowerment in the IFSP Process

PURPOSE: You are invited to participate in a study of Parent Empowerment in the IFSP process. Through this study we expect to learn about what parents consider to be helpful in starting early intervention services, parent empowerment through the IFSP process, parent-professional collaboration, and parent reactions to entering early intervention services. We hope to learn more about how professionals can facilitate parent empowerment in the IFSP process.

PARTICIPANT SELECTION: You were selected as a possible participant in this study because your child is eligible for early intervention Part C services and you recently completed an initial Individualized Family Service Plan (IFSP) at Rainbows United, Inc. or Bright Beginnings. You were selected because you are a parent and are at least 18 years of age. A total of 130 parents in Sedgwick and Butler counties who have also recently completed IFSPs through Rainbows United, Inc. or Bright Beginnings are being invited to participate in this study.

EXPLANATION OF PROCEDURES: If you decide to participate, project staff will read your family’s IFSP and early intervention enrollment forms and have access to your family’s file and your child’s progress notes. Project staff will request to meet with you. You will be asked to complete two different surveys about your experience in early intervention and your participation in the IFSP process. A project staff person will arrange to meet with you to administer the surveys. Each survey will take approximately 30 minutes to complete. The first meeting will be approximately five weeks from the date of your IFSP. The second meeting will be approximately eleven weeks from the date of your IFSP.

You may be asked additional questions about your family, your participation in the IFSP process and early intervention in an interview that may take up to 45 minutes to complete. This interview will be audio-recorded. We may use direct quotations from this interview.

You may be asked to watch a video called “Parent Empowerment in Early Intervention,” and to complete a brief survey about this video.

DISCOMFORT/RISKS: You may be uncomfortable talking about your child, your child’s needs, your family, and/or your experiences in early intervention. You may be reluctant to disclose personal information. You may be reluctant to express your reactions to early intervention services. You may be reluctant to talk about negative experiences, concerns or emotions regarding the IFSP process. If you are asked to provide an interview, you may be uncomfortable or embarrassed about being audio-recorded.

BENEFITS: You may learn more about early intervention and your rights in early intervention. You may learn ways to help your child and your family. You may enjoy the opportunity to talk about your child and your experiences. The information that you provide may help professionals
improve their ability to serve children, parents and families. Your insights and responses may help other parents who are just starting to use early intervention services.

CONFIDENTIALITY: All information that you provide or that will be taken from your child’s IFSP will be kept in strict confidence. Any information obtained in this study in which you can be identified will remain confidential and will be disclosed only with your permission. Information that could be used to identify your child, such as a diagnosis, will be excluded from the study. Audio recordings will be transcribed, and the transcriptions will be kept confidential. All surveys, interview data and audio recordings will be stored securely.

REFUSAL/WITHDRAWAL: Your participation in this study is entirely voluntary. You have the right not to answer any question, and to stop the survey or interview at any time. If you agree to participate in this study, you are free to withdraw from the study at any time without penalty. Your decision whether or not to participate will not affect your child’s services through Rainbows United, Inc., Bright Beginnings, or your future relations with Rainbows United, Inc., Bright Beginnings, or Wichita State University.

CONTACT: Please contact Jane Eby at Box 34, Department of Psychology, Wichita State University, Wichita, KS 67260-0034, telephone (316) 267-1933 with any questions or concerns. If you would like to talk with Ms. Eby’s academic supervisor at WSU about this research please call Dr. James J. Snyder, Box 34, Department of Psychology telephone (316) 978-3083. If you have questions about your rights as a research subject, or about research-related injury, you can contact the Office of Research Administration, Wichita State University, Wichita, KS 67260-0007, telephone (316) 978-3285.

You are under no obligation to participate in this study. Your signature indicates that you have read the information provided above and have voluntarily decided to participate. You will be given a copy of this consent form to keep.

I have read and fully understand the contents of this release. I declare that I am over the age of 18 years, and am fully competent to sign this release on my own behalf.

__________________________________________________________  ______________________
Printed Name                                                                 Signature of Subject

_________________________         ______________________
Witness Signature                                           Date
APPENDIX L

HANDOUT TO PARENTS IN THE VIDEO GROUP

Parent Empowerment in the IFSP Process

As a parent who has just entered Rainbows’ early intervention services, you are invited to participate in a study of parent empowerment in early intervention. We invite you to watch a new video that features parents who have experience in early intervention. We understand that this may be a difficult time for you and your family and believe that you may find it helpful to hear other parents’ stories. Parents who have seen this 22-minute video have recommended it.

In a few days a representative will call you and offer to send you the video, Parent Empowerment in Early Intervention. If you would like to participate, we ask that you watch the video and respond using the questionnaire that will be enclosed. There is a stamped, self-addressed envelope for returning the video and your response. There will be two follow-up surveys. If you have questions please call Jane Eby at Rainbows United, Inc., at 316-257-5437.

We hope that this is something you want to do. Rainbows United, Inc. will appreciate your participation!