THE EFFECTS OF A PARENTING PROGRAM ON PARENTAL STRESS AND PERCEPTION OF CHILD BEHAVIOR

by

ROBERT M. FISHER III

B.A., Simpson College, 1996
B.A., University of Northern Iowa, 2000
M.A., University of Missouri – Kansas City, 2004

AN ABSTRACT OF A DISSERTATION

submitted in partial fulfillment of the requirements for the degree

DOCTOR OF PHILOSOPHY

Department of Special Education, Counseling and Student Affairs
College of Education

KANSAS STATE UNIVERSITY
Manhattan, Kansas

2014
Abstract

Assessment of parenting stress and child acting-out behavior was measured via pretest and posttest over the length of a seven-session parenting program, the Becoming a Love and Logic Parent program (BLLP). All participants (n=86) were randomly placed in either a seven-session BLLP program group (n=56) or placed on a waitlist (n=30) and offered the BLLP program following the completion of the posttest.

The BLLP program is a widely used parenting program with limited data available as to the effectiveness of the program. The data that are available utilizes the Becoming a Love and Logic Parent Before and After Questionnaire. A measurement tool designed specifically to measure the BLLP program. This study utilized two measurement tools widely used to evaluate parenting programs, the Parenting Stress Index/Short Form (PSI/SF) and the Eyberg Child Behavior Inventory (ECBI), in hopes of providing data that can be compared to other parenting programs.

Levels of parenting stress were measured with a widely used index, the PSI/SF. The PSI/SF provides a Total Stress (TS) score and scores from three scales measuring different aspects of parenting stress: Parental Distress (PD), Parent-Child Dysfunctional Interaction (P-CDI), and Difficult Child (DC).

Child acting-out behavior was measured with the ECBI. The ECBI measures disruptive child behavior using two scales: Intensity scale and a Problem scale. The intensity scale provides information regarding the frequency of certain acting-out behaviors, and the problem scale provides information as to whether or not parents view that particular behavior as problematic.

All participants were parents or caregivers of elementary school students from a large suburban school district near Kansas City, Missouri. The group was homogenous in nature and
had higher income and education levels than the average for the district and state, making it difficult to generalize finding from the study. Due to time and space limitations and attrition, the sample size of the study was small (n=86), which likely contributed to the outcome of the study.

The six hypotheses were not supported in this study. Though a decrease in parenting stress occurred for both treatment group and control group participants, there was not a statistically significant difference between the two groups on any of the PSI/SF scales. Child acting-out behavior also decreased for both the treatment group and the control group; however, there was not a statistically significant difference between the two groups. Further study on the effectiveness of the BLLP program is recommended.
THE EFFECTS OF A PARENTING PROGRAM ON PARENTAL STRESS AND PERCEPTION OF CHILD BEHAVIOR

by

ROBERT M. FISHER III

B.A., Simpson College, 1996
B.A., University of Northern Iowa, 2000
M.A., University of Missouri – Kansas City, 2004

A DISSERTATION

submitted in partial fulfillment of the requirements for the degree

DOCTOR OF PHILOSOPHY

Department of Special Education, Counseling and Student Affairs
College of Education

KANSAS STATE UNIVERSITY
Manhattan, Kansas

2014

Approved by:

Major Professor
Dr. Judy Hughey
Copyright

ROBERT M. FISHER III

2014
Abstract

Assessment of parenting stress and child acting-out behavior was measured via pretest and posttest over the length of a seven-session parenting program, the Becoming a Love and Logic Parent program (BLLP). All participants (n=86) were randomly placed in either a seven-session BLLP program group (n=56) or placed on a waitlist (n=30) and offered the BLLP program following the completion of the posttest.

The BLLP program is a widely used parenting program with limited data available as to the effectiveness of the program. The data that are available utilizes the Becoming a Love and Logic Parent Before and After Questionnaire. A measurement tool designed specifically to measure the BLLP program. This study utilized two measurement tools widely used to evaluate parenting programs, the Parenting Stress Index/Short Form (PSI/SF) and the Eyberg Child Behavior Inventory (ECBI), in hopes of providing data that can be compared to other parenting programs.

Levels of parenting stress were measured with a widely used index, the PSI/SF. The PSI/SF provides a Total Stress (TS) score and scores from three scales measuring different aspects of parenting stress: Parental Distress (PD), Parent-Child Dysfunctional Interaction (P-CDI), and Difficult Child (DC).

Child acting-out behavior was measured with the ECBI. The ECBI measures disruptive child behavior using two scales: Intensity scale and a Problem scale. The intensity scale provides information regarding the frequency of certain acting-out behaviors, and the problem scale provides information as to whether or not parents view that particular behavior as problematic.

All participants were parents or caregivers of elementary school students from a large suburban school district near Kansas City, Missouri. The group was homogenous in nature and
had higher income and education levels than the average for the district and state, making it difficult to generalize finding from the study. Due to time and space limitations and attrition, the sample size of the study was small (n=86), which likely contributed to the outcome of the study.

The six hypotheses were not supported in this study. Though a decrease in parenting stress occurred for both treatment group and control group participants, there was not a statistically significant difference between the two groups on any of the PSI/SF scales. Child acting-out behavior also decreased for both the treatment group and the control group; however, there was not a statistically significant difference between the two groups. Further study on the effectiveness of the BLLP program is recommended.
# Table of Contents

List of Figures ........................................................................................................... xi
List of Tables ................................................................................................................. xii
Acknowledgements ....................................................................................................... xiii
Dedication ...................................................................................................................... xiv

**CHAPTER 1 – Introduction** ...................................................................................... 1  
  Background ................................................................................................................. 1  
  Need for the Study ...................................................................................................... 5  
  Statement of the Problem ......................................................................................... 6  
  Theoretical Framework ............................................................................................. 7  
  Purpose of the Study ................................................................................................. 10  
  Research Questions .................................................................................................. 10  
  Hypothesis ................................................................................................................ 11  
  Limitations of the Study ........................................................................................... 11  
  Definition of Terms .................................................................................................. 13  

**CHAPTER 2 - Literature Review** .......................................................................... 14  
  The Importance of Parents and Families ............................................................... 14  
  Child Development ................................................................................................... 15  
    Physical and Motor Development ....................................................................... 17  
    Cognitive and Academic Development ........................................................... 18  
    Social and Emotional Development .................................................................. 19  
  Child Acting-out Behaviors ................................................................................... 20  
  Parenting Stress ........................................................................................................ 24  
  Effective Group Parenting Interventions ............................................................... 38  
  Becoming a Love and Logic Parent ........................................................................ 51  

**CHAPTER 3 - Methods** ......................................................................................... 72  
  Research Setting ........................................................................................................ 72  
  Measures ...................................................................................................................... 73  
    Parenting Stress Index (PSI) and Parenting Stress Index Short Form (PSI/SF) .... 74  
    Eyberg Child Behavior Inventory (ECBI) .............................................................. 83
Appendix I - Open Ended Posttest Questions from the Becoming a Love and Logic Parent Program Questionnaire ................................................................. 171
Appendix J - Treatment Groups Posttest Cover Letter for Participants Unable to Attend Final Session ................................................................. 172
Appendix K - Control Group Pretest Cover Letter ................................................................. 173
Appendix L - Control Group Posttest Cover Letter ................................................................. 174
List of Figures

Figure 2.1 Theoretical model of Transactional Development ..................................................21
Figure 2.2 Theoretical Model of Parenting Stress with Subscales on the PSI ..............................29
Figure 2.3 Theoretical Model for the PSI/SF ........................................................................30
Figure 4.1 PSI/SF Percentage of Total Stress Level ..................................................................116
Figure 4.2 Treatment Group PSI/SF PD ................................................................................118
Figure 4.3 PSI/SF Percentage of Parental Distress Level .........................................................120
Figure 4.4 PSI/SF Percentage of Parent-Child Dysfunctional Interaction Level .......................122
Figure 4.5 Grouped Difficult Child Pretest/Posttest Comparison .............................................124
Figure 4.6 PSI/SF Percentage of Difficult Child Level ..............................................................126
List of Tables

Table 2.1 Components of a General Theory of Stress Applied to Parenting Stress .................27
Table 2.2 Intervention Levels of Triple P Positive Parenting Program ..................................45
Table 2.3 Goals of the Incredible Years Parent Interventions ..............................................49
Table 2.4 Five Principles of Love and Logic ........................................................................52
Table 2.5 Love and Logic Problem Solving Process Steps ....................................................55
Table 2.6 Program Objectives of the Becoming a Love and Logic Parent Program ...............58
Table 2.7 Outline of the Becoming a Love and Logic Parent Program ..................................59
Table 2.8 Problem Solving Steps .........................................................................................64
Table 2.9 Logical Consequences vs. Punishment ...............................................................67
Table 3.1 Test-Retest and Internal Consistency for the PSI/SF .............................................81
Table 3.2 Correlations Between the PSI/SF and the PSI .......................................................82
Table 4.1 Sample Size .........................................................................................................96
Table 4.2 Gender and Marital Status of Participants and Relationship to the Target Child ....98
Table 4.3 Education level of Participants ............................................................................99
Table 4.4 Race and Ethnicity of Participants .....................................................................100
Table 4.5 Household Income of Participants .....................................................................101
Table 4.6 Grade Level of Target Children .........................................................................102
Table 4.7 Race and Ethnicity of Target Children ...............................................................103
Table 4.8 Gender of Target Children ................................................................................104
Table 4.9 Percentage of Participants with Different Levels of Total Stress Levels ..........105
Table 4.10 Percentage of Participants with Different Levels of Parental Distress .............07
Table 4.11 Percentage of Participants with Different Levels of Parent-Child Dysfunctional Interaction Levels .................................................................................................109
Table 4.12 Percentage of Participants with Different Levels of Difficult Child Levels .....111
Table 4.13 Percentage of Participants with ECBI Scores Above and Below Cutoff ...........113
Acknowledgements

There are so many people to thank for contributing to this dissertation; it has certainly been a group effort. Professors, colleagues, family, and friends have made it possible for this research to take place.

Dr. Judy Hughey has supported me from day one. When I came her office having recently been accepted into the program, and, also having recently found out that Katie and I were expecting our first child, Judy assured me that I would be fine and she has guided and supported me throughout the process; thank you.

To my committee members, Dr. Bronwyn Fees, Dr. Fred Bradley and Dr. Sheryl Hodge, Dr. Richard Goe, thank you for supporting me in this process. Your influences have helped me grow as a counselor and researcher. Dr. Bradonn Harris, Dr. Aaron Carlstrom, and Dr. Zachary Hughes all contributed to the success of this dissertation as well; thank you.

I want to thank the parents and grandparents who participated in the Becoming a Love and Logic Parent program. Thank you for taking time to share your stories with me. The knowledge that I gained through our interactions has made me a better practitioner and parent.

My thanks go out to my colleagues at school and throughout the district; without your support, I could not have accomplished this research. Special thanks go to Mrs. Becky Starnes, who has been my mentor and friend for many years; thank you for assisting me with the Love and Logic modules.

To my parents, and parents-in-law; you have all contributed so much to this process. Thank you, for not only supporting me throughout this process, but, also, for providing wonderful examples of how great parenting looks. I am fortunate to have you all in my life.

xiii
Dedication

This dissertation is dedicated to my wife, Katie Fisher, who has been by my side throughout this journey and has supported me the entire way. When I wanted to give up, she kept me going with encouragement; I could not have gotten this far without her. I love her more than she can ever know.

This dissertation is also dedicated to Charlie and Spencer, my two sons. They have cheered me on and provided me with so many opportunities to practice parenting techniques; I am so lucky to be their dad.
Chapter 1 - Introduction

Background

Parents and families in the U. S. face a number of challenges and stressors including financial troubles, time management, lack of social support, lack of public investment in child welfare and changes in family structure. Families have undergone many changes in the last 40 years that have increased stress on the family and child relationship. Between 1970 and 2000, there was a decrease in the number of 2-parent household from 85% to 69%. Twenty-six percent of children live in single-parent homes, and 30% of children live in a stepfamily, either with remarried parents or a parent cohabitating (Family Pediatrics Task Force on the Family [AAPTFF], 2003). These major stress producing life events are occurring on top of regular daily and weekly hassles of parenting that happen within most families and that accumulate over time and cause stress (Deater-Deckard, 2004).

Thirty-five percent of people surveyed in 2007 American Psychological Association (APA) Stress in America online survey indicated that stress has a negative effect on their parent and child relationship, 64% say that children are a significant source of stress in their lives, 6% of respondents indicated that stress has caused alienation from their children, 43% of employed respondents indicate that home and family responsibilities have interfered with their work and 52% indicate that work has interfered with family responsibilities. Of particular relevance to this study, due to the sample population, parents of school-aged children indicate that work interfering with children is a very significant source of stress, 67% indicated that work interfered with family responsibilities, 57% indicate problems with intimate relationships, and 52% say that they are more likely to argue with their spouse or partner (APA, 2007). The 2010 survey indicated that 73% of respondents considered family responsibilities as a significant source of
stress; this was on par with stress associated with the economy, financial situations and work (APA, 2010). The same survey revealed that 91% of children surveyed indicated that they could tell their parents were stressed because of their parents’ behaviors and 17% of children indicated feeling stressed as a result of their parents stress.

Parents report feeling that it is more difficult to parent now than it once was. They report feeling more alone, and that social and media influences seem to be creating ever increasing pressure and enticements for their children, making the world appear more dangerous (AAPTFF, 2003). Many parents are concerned by their children’s behavior (O’Brien, 1996). Many parents would like to have some guidance with their role of parent (Hamner & Turner, 2001; O’Brien, 1996). Traditional family support systems, such as grandparents and extended family members are frequently less available for parents to call upon for support and parenting advice as they once may have been (Hamner & Turner, 2001). Many parents would like to have some guidance with their role of parent; however, they may not know what advice to take as they are inundated by suggestions from friends, churches, schools, and mass media, such as books, television, videos and the Internet (Hamner & Turner, 2001). Many parents parent as they were parented and integrate information from other sources (Hamner & Turner, 2001). Because there is a prevalent myth in our society that parents just “know” how to parent, some parents may not be comfortable turning to others for support, as they may feel so makes them a failure as a parent (Hamner & Turner, 2001).

Stress is taking its toll on children and families as is evident by the number of children dealing with critical behavioral and mental health issues (AAPTFF, 2003). An estimated 15 million children ages 1-year to 19-years in the U. S. are be diagnosed with a mental disorder; one in ten youth have a serious mental health problem and an additional 10% have a mild to
moderate mental health issue (Surgeon General of the United States, 2001). The U. S. Department of Health and Human Services (Surgeon General of the United States, 2000), indicates that 21% of children between the ages of 9-years and 17-years of age have a diagnosable mental or addictive disorder. Youth with mental disorders are more likely to struggle with addictions, learning problems, school behavior problems and school dropout (Surgeon General of the United States, 2000). Children with acting-out behaviors can develop a pattern of disordered behavior, Oppositional Defiance Disorder, and, later, Conduct Disorder (McMahon & Estes, 1997). The U.S. Centers for Disease Control and Prevention (CDC, 2013) report that the survey results from the National Children's Health Survey indicated that 4.6% of children had a history of behavioral problems and 3.6% had a current behavior problem.

The American Psychological Association recognizes that in order to meet the needs of children, we must train parents to recognize and meet the needs of their children. Lack of parent training and parental stress contribute to a parents' inability to successfully function in the parenting role (Honaker, 2000; as cited in Lepeltier, 2008). Kumpfer and Alvarado (2003) indicate that parent education is the most powerful way to decrease adolescent behavior problems suggesting that interventions that improve parenting and family dynamics from pre-birth through adolescence can minimize many of the precursors of serious adolescent problems. There is a need for cost effective parenting classes that address primary concerns in children's mental health (Honaker, 2000; as cited in Lepeltier, 2008). There is a need for identification of effective parenting interventions that are supported by research (Kumpfer & Alvarado, 2003; Weissberg, Kumpfer & Seligman, 2003).

For decades it has been recognized that family interactions affect children’s academic, emotional, behavioral, and social adjustment (Bloss, 1995; Hill & Craft, 2003). Behavior
patterns, attitudes, perceptions of self, and relationships learned within the family influence how children function at school (Nicoll, 1984). Literature suggests a need for effective interaction between school and home to facilitate school success (Lindle, 1989). Professional school counselors can be a major contributor to a successful collaboration between school and home (Rowell & Hong, 2002; Nicoll, 1984). A number of authors view parenting education as a valuable service offered by school counselors (Conroy & Meyers, 1994; Hayes, Cunningham, & Robinson, 1977; Kelly, 1976). The American School Counselor Association considers it of major importance for school counselors to work with parents, including the use of parent education, to assist parents in learning effective parenting skills, promoting academic achievement, preventing child behavior problems and learning about bullying (ASCA, 2012, 2013). Parents, teachers, administrators and school counselors view parent education and consultation as one possible important function of school counselors (Bloss, 1995; Ibrahim, Helms, & Thomson, 1983; Miller, 1989; Paulson & Edwards, 1997; Samis, Allan & Echols, 1993). Considering the recognition that parent education is a desirable and important function of the school counselor, little research is available on school counselors’ involvement in parent education (Bloss, 1995; Ritchie & Partin, 1994; Samis et al., 1993). Of the few studies available, most suggest that, despite the perceived importance of parenting education, school counselor involvement in these areas is minimal with most school counselors focusing their time on direct interventions with students (Ibrahim, et al., 1983; Miller, 1989; Ritchie & Partin, 1994).

Research indicates a connection between parent behaviors and school performance (Dornbusch, Ritter, Leiderman, Roberts, & Fraleigh, 1987; Grolnick & Ryan, 1989; Hamner & Turner, 2001; Stevens & Baker, 1987). School based parent education programs have been successful at reducing problem behaviors in the home and at school and at increasing improving
academic outcomes (Barrera et al., 2002; Hamner & Turner, 2001; Kelly, 1976). One study suggested parenting interventions can be more successful than individual counseling interventions involving children with behavior problems (Hayes, et al., 1977).

**Need for the Study**

Parenting is one of the most important jobs for the welfare of our society (Smith, Perou, & Lesesne, 2002). It is within the family that children develop the skills to function in the larger world (AAPTFF, 2003). Parenting practices shape a child's wellbeing in school and beyond (Hamner & Turner, 2001; Dornbusch, et al., 1987; Grolnick & Ryan, 1989; Stevens & Baker, 1987; Nicoll, 1984). The role of the family is held in high regard, in the United States and throughout the world, and, when social problems arise, fingers are frequently pointed at parents (AAPTFF, 2003; Defrain & Asay, 2007). Parents are facing great stresses and their difficulty coping with this stress can be seen in the many behavior problems evident in children today (AAPTFF, 2003).

Parenting education is recognized as one effective manner in which to address parental stress and child behavior problems (Honaker, 2000; as cited in Lepeltier, 2008; Kumpfer & Alvarado, 2003; Weissberg et al., 2003). Despite this recognition, more research is needed to establish the effectiveness of parenting education programs that are being run in our communities (Griffin, Guerin, Drumm, & Sharry, 2005). Many programs run with little or no empirical support indicating their effectiveness (Taylor & Biglan, 1998). These programs should be used cautiously (Shriver & Allen, 2008). In 2000, 35 effective prevention programs had been identified (Kumpfer & Alvarado, 2003). The number of empirically supported prevention programs continues to grow. Several websites offer information on effective programs recognized by government agencies: the U. S. Department of Health and Human Services

**Statement of the Problem**

As previously indicated, parents are facing increasing challenges raising children. Parents are feeling stressed due these challenges and this plays a part in their emotions and behaviors. As a result, the child rearing practices and abilities of parents are being affected to the detriment of their children. This can be seen in the number child behavior problems displayed by children (Surgeon General of the United States, 2000). Parents and children are in need of an effective and empirically supported parenting intervention to assist children and families deal with child behaviors and stress (AAPTF, 2003; Honaker, 2000; as cited in Lepeltier, 2008; Kumpfer & Alvarado, 2003; Weisberg et al., 2003).

Literature on parenting education suggests a need for greater research on the effectiveness of parenting programs available (Kumpfer & Alvarado, 2003; MacMillan et al.,
One widely used parenting program is Becoming a Love and Logic Parent (BLLP, Fay, Cline & Fay, 2000). Limited research on the effectiveness of this program is mixed, and most of the existing research measures the effectiveness of the program using pretest/posttest surveys designed specifically for use with the BLLP program (Fay, 2005). There have been no published studies on the effectiveness of the program; however, research studies can be obtained by contacting the publisher. Additionally, one study is posted on the Love and Logic Website, and can readily be viewed (Fay, 2005). Due to the lack of empirical support for the program, Shriver and Allen (2008) suggest using the program with caution, if at all, in evidence based practice. Dr. Charles Fay, one of the co-authors of the BLLP program, indicated a need exists for studies with the program utilizing a control or comparison group (Fay, personal contact, May, 2011). The BLLP program is not listed on any of the government Websites mentioned above, due to a lack of empirical evidence. Because of this, groups and agencies, including this author, have had difficulty securing funding to run the program (Fay, personal contact, May, 2011).

**Theoretical Framework**

Eyberg, Schuhmann and Rey (1998) suggest that it is the early interactions within the family that influence the development of acting-out behaviors that may be disordered and problematic, for children, and those with whom they interact. These acting-out behaviors can range from extreme behaviors such as noncompliance, defiance, aggression and destructiveness to less extreme behaviors such as whining, pouting, dawdling and fidgeting (Eyberg & Pincus, 1999; McMahon & Estes, 1997). Bigner (2010) indicates that noncompliance and antisocial behaviors, such as lying and stealing are developmentally normal behavior problems that children display yet they are troubling to parents. Utilizing Sameroff’s (2009) concept of
transactional development, the authors suggest that behavior develops, not only from a combination of innate factors (constitutional system) and factors from the environment (environmental system), but also the reactions that are created by the interactions of these factors. Sameroff (2009) indicates that good parenting skills can compensate for poor child behavior and good child behavior can help in situations where parents have personality traits, or lack of parenting skills, that might lead to abusive behavior on the part of the parents.

There is a relationship between parenting stress and child behavior (Abidin, 1990, 1992, 1995; Crnic & Low, 2002; Deater-Deckard, 2004). Deater-Deckard (2004) indicates that there are essentially two theories of parenting stress: the Parent-Child-Relationship theory (P-C-R, Abidin, 1990, 1992, 1995), and, the daily hassles theory (Crnic & Low, 2002). P-C-R stress theory involves the interaction of three components: a parent domain, a child domain and a parent-child relationship domain. The parent domain contains aspects of parenting stress that are associated with the parent. Aspects of parenting stress contributed by the child makeup the child domain. The parent-child domain contains aspects of parenting stress that arise out of the relationship between a parent and child. When parenting stress is high in the family, there will be elevations apparent in any of the three domains. This stress will negatively affect parenting and children's development and behavior (Abidin, 1990, 1992, 1995).

The daily hassle theory examines how everyday stresses associated with parenting effect parents and children over time (Crnic & Low, 2002). Minor stressful events occur for most, if not all, parents on a daily basis. The stress associated with these events accumulates over time and effects the parent's functioning, which in turn affects the behavior and development of the child (Crnic & Low, 2002). As with the P-C-R stress theory, Crnic and Low (2002) recognize that these daily stresses occur with parents, children and in the family system as a whole.
Parenting stress is the result of parents' perceptions of, and reactions to events in life, either a major event such as divorce, or a minor event, such as a child not wanting to get dressed. An event occurs, perhaps due to something attributed to the child. The parent assesses the event and determines that the event is stressful. Parents evaluate how stressful the event is, and attempt to mitigate the stress in some way. Based on this process, parenting stress affects both parent and child well-being (Crnic & Low, 2002).

One way to mitigate the outcome of a stressful event is to provide parents with parenting education and training that will help them to better manage with their children's behavior (AAPTFF, 2003; Honaker, 2000; as cited in Lepeltier, 2008; Kumpfer & Alvarado, 2003; Weissberg et al., 2003). A variety of programs are available to educate and train parents; however, there is a need to determine the degree to which programs are most effective in utilizing more effective parenting skills (Honaker, 2000; as cited in Lepeltier, 2008; Kumpfer & Alvarado, 2003; Taylor & Biglan, 1998; Weissberg et al., 2003).

The program utilized for this study is one such program in need of empirical evidence demonstrating the degree effectiveness on improving the behavior of children and reducing the stress of parents, the Becoming and Love and Logic Parent program (BLLP). BLLP is a video-based program intended to “…give parents…practical strategies for reducing behavior problems, increasing motivation, and building assets which contribute to life-long responsibility and resiliency (Fay, 200 , p. 1)” based on the idea that “… success for children of all ages rests on a balance of unconditional compassion, firm behavioral limits, and logical consequences (Fay, 2005, p.1).” According to Fay (2005), Love and Logic is based on the behavioral theories of Skinner (1953), Pavlov (1927), Thorndike (1905), and Bandura (1977), as well the more humanistic theories of Glasser (1969), Maslow (1954), and Rogers (1957, 1961).
The program emphasizes the importance of preserving and enhancing the child’s self-concept by creating situations that allow children to successfully solve their own problems with adult guidance, thereby enhancing their self-concept and strengthening the parent-child relationship. BLLP promotes the teaching of problem solving skills by allowing children to own and solve their own problems. In addition, adults must teach and model problem solving skills. The program provides guidelines for teaching problem solving skills (Fay, 2005). BLLP promotes the idea that healthy control is a basic human need. The program provides specific parent strategies for developing children’s perceptions of control. The program teaches parents how to provide logical consequences in a warm and empathetic manner.

**Purpose of the Study**

The purpose of this study was to evaluate the effect of attending a seven-module BLLP program on measures of parental stress and acting-out behavior of elementary school aged children. Outcome measures included parental stress and intensity of child behaviors. The study used an experimental design with a sample population comprised of parents who took part in the seven-module program, randomly assigned to a treatment group or a waitlist control group.

The current study addresses the following research questions:

**Research Questions**

RQ1 Does the Becoming a Love and Logic Parent program influence parenting stress as measured by the Parenting Stress Index/Short Form Total Stress score?

RQ2 Does the Becoming a Love and Logic Parent program influence parenting stress as measured by the Parenting Stress Index/Short Form Parental Distress Subscale score?

RQ3 Does the Becoming a Love and Logic Parent program influence parenting stress as measured by the Parenting Stress Index/Short Form Parent-Child Dysfunctional Interaction Subscale score?
RQ4 Does the Becoming a Love and Logic Parent program influence parenting stress as measured by the Parenting Stress Index/Short Form Difficult Child Subscale score?

RQ5 Does the Becoming a Love and Logic Parent program influence children’s behavior as measured by the Eyberg Child Behavior Inventory Intensity scale?

RQ 6 Does the Becoming a Love and Logic Parent program influence children’s behavior as measured by the Eyberg Child Behavior Inventory Problem scale?

**Hypothesis**

H1 There will be a statistically significant change in stress as measured by the Total Stress (TS) score on the Parenting Stress Index/Short Form (PSI/FS) for those parents exposed to the Becoming a Love and Logic Parent program as compared to the control group exposed to nothing.

H2 There will be a statistically significant change in stress as measured by the Parental Distress (PD) subscale score on the Parenting Stress Index/Short Form (PSI/FS) for those parents exposed to the Becoming a Love and Logic Parent program as compared to the control group exposed to nothing.

H3 There will be a statistically significant change in stress as measured by the Parent-Child Dysfunctional Interaction (P-CDI) score on the Parenting Stress Index/Short Form (PSI/FS) for those parents exposed to the Becoming a Love and Logic Parent program as compared to the control group exposed to nothing.

H4 There will be a statistically significant change in stress as measured by the Difficult Child (DC) score on the Parenting Stress Index/Short Form (PSI/FS) for those parents exposed to the Becoming a Love and Logic Parent program as compared to the control group exposed to nothing.

H5 There will be a statistically significant change in their target child's conduct problems as measured by the Intensity scale of the Eyberg Child Behavior Inventory (ECBI) for those children whose parents were exposed to the Becoming a Love and Logic Parent program as compared to the control group exposed to nothing.

H6 There will be a statistically significant change in their target child's conduct problems measured by the Problem Scale of the Eyberg Child Behavior Inventory (ECBI) for those children whose parents were exposed to the Becoming a Love and Logic Parent program as compared to the control group exposed to nothing.

**Limitations**

There are certain limitations of this study that should be mentioned. Ideally, the sampling of the group would have been accomplished via random selection; however, this sample was
made up of parents of elementary school aged children voluntarily signing up to take part in the BLLP program. Due to the population that the sample was pulled from, it is difficult to generalize the findings of the study to other populations.

Another limitation was that of attrition, despite the planning that went into limiting this. The basis for setting up the groups was based on input from a variety of sources, including input from the author of the BLLP program and a district wide survey. While the study began with 80 participants in the treatment group and 80 in the control group, only 56 parents completed both pretest and posttest in the treatment group and only 30 completed both pretest and posttest in the control group.

The experimenter effect could be a limitation, as well. The groups were conducted by two Masters level counselors with experience in running parenting groups, including this program, and, both facilitators have had some additional training in Love and Logic. It is likely that this influenced the group experience, as is the fact that, the information from this study was obtained from groups being run only by the two counselors mentioned above.

Self-report measures were utilized to measure changes in parenting stress and child behavior. It is possible that parents answers were influenced by the desire to answer questions in a manner that made their stress level seem lower and child's acting-out behavior seem less severe in order appear as though there was less of a problem. Self-report measures are a primary way to measure stress (Derogatis & Coons, 1993), and, the Parent Stress Index/Short Form was designed to detect this with the Defensive Responding scale (Abidin, 1995). In regards to child behavior, parents are considered a primary source of information about their children (Eyberg & Pincus, 1999).
Also, a follow-up evaluation would have been optimal to assess the long-term effectiveness of the BLLP program. Because the study was conducted during the second semester of the school year, and, the design of the study utilized a waitlist control group, it was not feasible to follow-up with participants.

**Definition of Terms**

**Evidence supported treatments (ESTs):** Treatments that have empirical support from research.

**Parenting Education:** The counselor facilitates educational meetings with a group of parents whose children may or may not be experiencing difficulties at school. The primary focus of these meetings is to help parents learn and use more effective parenting skills, thereby reducing the effects of stress on the parent and child, and, reducing the acting-out behavior of the child.

**Acting-out Behavior:** Disruptive behaviors that can range from to less extreme behaviors such as whining, pouting, dawdling and fidgeting to more extreme behaviors such as noncompliance, defiance, aggression and destructiveness (Eyberg & Pincus, 1999; McMahon & Estes, 1997).

**Parental Stress:** Parenting stress is the result of parents' perceptions of, and reactions to events in life, either a major event such as divorce, or a minor event, such as a child not wanting to get dressed (Crnic & Low, 2002).

**Parenting:** The process or the state of being a parent that includes nourishing, protecting and guiding the child through the course of development. Parenting is a series of continuous interactions between parent and child that has an effect on both parties (Hamner & Turner, 2001).

**Target Child:** The child parents were asked to focus on when in responding to all measures on both pretest and posttest. The child was an elementary school aged child (5-12) enrolled at one of 10 schools in the district.
Chapter 2 - Review of Literature

The chapter includes a review of literature on the importance of parents and families, child development and acting-out behavior, parenting stress, effective parenting programs, and an overview of the Becoming a Love and Logic Parent program (BLLP), including the program goals and information contained in the seven modules of the program, a review of the theories applied to the BLLP program, and research on the program’s effectiveness.

The Importance of Parents and Families

Parents and families are the foundation of, not only our society in the United States, but societies throughout the world (DeFrain & Asay, 2007). Within families, children learn how to effectively interact with the world at large (AAPTFF, 2003; DeFrain & Asay, 2007). It is to the benefit of society to support parents in raising children. By supporting parents in creating and maintaining strong supportive families, we create and maintain strong and healthy communities (DeFrain & Asay, 2007).

Strong healthy families tend to raise strong healthy children. Parenting behaviors have great impact on the behaviors and development of children from infancy into adulthood (AAPTFF, 2003). Children raised by parents who display loving supportive and consistent behavior tend to fare better than those who are raised by parents who are unsupportive, distant, inconsistent and harsh (AAPTFF, 2003). Often, the negative behaviors of parents have greater, lasting effects than positive (Kumpfer & Alvarado, 2003) as indicated previously, there is a great need for parent education programs that are effective (Honaker, 2000; as cited in Lepeltier, 2008; Kumpfer & Alvarado, 2003; Taylor & Biglan, 1998; Weissberg et al., 2003).

The American Academy of Pediatrics Task Force on the Family (AAPTFF, 2003) recognized the influence of family functioning, parents’ health and well-being, parenting
practices, and parenting stress on the development and behavior of children. AAPTFF (2003) indicated that "The health and well-being of children are inextricably linked to their parents' physical, emotional and social health, social circumstances, and child-rearing practices" (p. 1541). Experiences in the family and with parents shape their social interactions and behaviors in settings outside the family. Children's social development, physical and mental health and cognitive functioning are influenced by family functioning. "Children need good-quality parenting, including receiving unconditional love and adequate time from their parents" (AAPTFF, 2003, p. 1546). Parenting that includes a combination of warmth and unconditional love with firm, thoughtful limit setting, and an respect for children's logical abilities tend to produce "…children who are happy, creative, and cooperative; have high self-esteem; are achievement oriented; and do well academically and socially" (AAPTFF, 2003, p. 1546). Unfortunately, the issues affecting parents and families are increasing and parents are feeling stressed. One of the adverse effects of this parenting stress is that of an increase in child behavior problems.

Kumpfer and Alvarado (2003) indicate that "Strong families and effective parents are critical to the prevention of youth problems" (p. 457). Effective parenting practices have been shown to positively affect adolescent behavior, serving as a protective factor against substance abuse and other risky, unhealthy behaviors. There is a need to provided effective, empirically supported parenting education in order to improve parenting behaviors, reduce parting stress and reduce child behavior problems.

**Child Development**

One must be cognizant of child development when looking at children’s behavior (Bigner, 2010; Eyberg et al., 1998). The age and developmental level of the child may also effect
what people perceive as disordered behavior (Bigner, 2010; Eyberg & Pincus, 1999). What may be normal acting-out behavior for a young child may be viewed as abnormal for older children (Bigner, 2010; Eyberg & Pincus, 1999). Therefore, in looking at childhood behavior, it is important to distinguish normative childhood behavior from abnormal misbehavior or acting-out behavior (Bigner, 2010; Wakschlag, et al., 2007).

The ages of the children in this study were between 5 and 11 years of age. Referred to by some as school age (Levine, 1999), this age range falls in the developmental stage of middle childhood (Allen & Marotz, 2010; Bigner, 2010; Eccles, 1999; Harold & Hay, 2006; Levine, 1999; Rappley & Kallman, 2009). Depending on the source middle childhood encompasses the ages of 5-11 years of age (Harold & Hay, 2006), 6-11 years of age (Eccles, 1999), 8-12 years of age (Allen & Marotz, 2010), 6-12 years of age (Bigner, 2010), or 5-12 years of age (Rappley & Kallman, 2009). For a time considered a period of latency between early childhood and adolescence, middle childhood is a period of change from great dependence on parents to greater independence and interaction with peers and adults outside of the home (Bigner, 2010; Eccles, 1999; Harold & Hay, 2006; Levine, 1999; Rappley & Kallman, 2009). Within his eight stages of development, Erikson (1968) considered the primary task for this stage (7-11-years) to be “Industry versus Inferiority”, where children learn to feel confident and capable in their abilities or inferior and unable to do things well.

For many children, the beginning of middle childhood is marked by starting formal schooling as children enter kindergarten (Bigner, 2010; Eccles, 1999; Harold & Hay, 2006; Levine, 1999). Human development is influenced by environmental as well as biological factors (Eyberg, Schuhmann & Rey, 1998; Lavine, 1999; Rappley & Kallman, 2009, Sameroff, 2009). Eyberg, Schuhmann and Rey (1998) describe normal Childhood development as being
characterized by “…rapid, orderly changes in multiple dimensions of functioning including broad dimensions, such as cognitive, social, or emotional development…” (pg. 71). While a detailed description of development during middle childhood is beyond the scope of this paper, a summary of physical and motor, cognitive and academic and social and emotional development is provided.

**Physical and Motor Development**

Physical growth and development occurs in approximately three to six spurts per year, lasting about 8 weeks. Children gain approximately 7lbs and 2.5 inches per year (Rappley & Kallman, 2009). Lean body mass increases and baby fat is lost. Baby teeth are lost and are replaced by permanent teeth. Sexual maturation begins toward the later years of this stage normally between 10 and 11. The brain undergoes selective thinning and thickening during this period. Thinning occurs in areas associated with sensory perception and movement and then in areas of spatial orientation. Thickening occurs in the areas of the brain associated with language. Brain scans also reveal that as children age, the areas of the brain that become activated while performing various tasks develop from a pattern of wide and diffuse areas to more selective areas of the brain. This seems to support observations that children are better able to focus and control their bodies and impulses as they age (Rappley & Kallman, 2009).

Fine and gross motor control improves. As children gain greater dexterity, manual tasks such as writing and dressing themselves become easier. They are also better able to control random movements and, thus, increase attention to task. They have high levels of energy. Children increasingly enjoy group activities and games and become involved in sports and other physical activities (Bigner; 2010; Rappley & Kallman, 2009). These activities provide children
with social interactions outside of school, and a chance to develop skills that are nonacademic for which they can be recognized and feel positive about (Rappley & Kallman, 2009).

**Cognitive and Academic Development**

The stage encompasses Piaget’s preoperational substage, between 4-7-years-of-age, and concrete operational (Rappley & Kallman, 2009) Piaget regarded this time, the concrete operational stage, between 7-11-years-of-age, where children begin to use logic and reason and become more systematic and organized in their thinking. This is apparent in his classic experiment with conservation (Piaget & Inhelder, 1968). During this time working memory develops and increases in functional capacity as the child ages (Levine, 1999; Rappley & Kallman, 2009). Executive functions, or the ability to selectively focus on relevant stimuli and avoid distractions increase during this time (Levine, 1999; Rappley & Kallman, 2009).

Children’s abilities to communicate in both spoken and written language develop rapidly during middle childhood. Reading skills progress during this time from simple recognition of letters and sounds in kindergarten, to understanding word meaning from contextual clues and utilizing critical thinking to draw conclusions in sixth grade (Rappley & Kallman, 2009). Children progress in writing from drawing simple shapes and letters in kindergarten to more detailed shapes and words in later elementary school (Rappley & Kallman, 2009).

Children’s abilities in arithmetic and mathematics also advance at this time from simple number recognition and counting in kindergarten to solving more complicated math problems and algebra in fifth grade. Boys tend to be better with spatial skills and geometry. Girls tend to better with computation. Mathematic skills are tied to reading development and computation to the phonological process (Rappley & Kallman, 2009).
Vygotsky (Harold & Hay, 2005) emphasized the importance of social interaction with peers and adults during this time. Not only do children acquire new skills, such as reading and writing, they begin to learn how to learn and develop strategies to enabling them to be successful learners.

**Social and Emotional Development**

By engaging in a variety of new activities in and out of school, children develop a sense of what they do, and do not, enjoy and what they are, and are not, good at. Children gain greater self-awareness, while also becoming able to take the perspective of others (Eccles, 1999). In middle childhood, children begin to shift away from egocentric thinking and around 7-8, children become more aware of their emotions and experiences as being different than others. Between 8-10, children can see themselves from the perspective of others and consider the emotions and thoughts of others. From 6 to 10, children’s moral standards are rather pragmatic and based on absolute rules and punishment; if he/she breaks a rule, he/she will be punished. By, 11-years-of-age, children begin to recognize that rules can be arbitrary and that intent is important when judging right from wrong. This ability to consider another’s point of view, combined with a child’s increased ability to moderate expression of emotions, facilitates the development of empathy (Levine, 1999; Rappley & Kallman, 2009).

It is during this time children also begin to form close friendships and learn to navigate the social landscape. Friendships are vital at this age and become increasingly important in how a child develops a sense of self (Levine, 1999). Increased ability to manage emotions, resolve conflicts, and show empathy lend to the development of more sophisticated friendships. In the early years of elementary school, friendships tend to be based on mutual play and how the child themselves can benefit from the relationship. Children during middle childhood prefer to play
with same-sex peers (Bigner, 2010). As children progress to later elementary school years, they have an increased desire to fit in and be liked. There is a tendency to conform to social norms. Older school aged children report that emotional support is an important benefit of friendship (Levine, 1999; Rappley & Kallman, 2009).

While much of the focus of the development that takes place during middle childhood is placed on interactions outside the home, this is still a time when the influence of family is of great importance. Children desire to have greater independence within the family, while still needing parental support, encouragement and approval (Allen & Marotz, 2010; Eccles, 1999; Levine, 1999; Rappley & Kallman, 2009).

**Child Acting-out Behaviors**

As previously indicated, the developmental stage of a child should be considered when looking at behaviors (Bigner, 2010; Eyberg & Pincus, 1999; Eyberg et al., 1998; Wakschlag, et al., 2007). Eyberg et al. (1998) suggest that early interactions within the family influence the development of behaviors that may be disordered and problematic, for children and those they interact with. Utilizing Sameroff’s concept of transactional development, the authors suggest that behavior develops, not only from a combination of innate factors (constitutional system) and factors from the environment (environmental system), but also the reactions that are created by the interactions of these factors (Figure 2.1).
Figure 2.1 Theoretical model of Transactional Development


The constitutional system includes all of the bodily systems and functions as well as cognitive, temperament and psychological factors. The environmental system includes daily habits in eating, sleeping and exercise as well as exposure to toxins, disease and injury. Social interactions with family, friends and others are also included in the environmental system, as are overall cultural and societal expectations. Children are influenced by the individuals in their environment and those individuals are influenced by the children (Sameroff, 1975, 1995). Children make mental and physical adjustments depending on the demands of the environment. Developmental changes are defined by changes in the way the child interacts with experience (Sameroff, 2009, p. 8). When a child whines or throws a fit, the parent’s reaction to that behavior
will either help to reinforce the behavior or reduce the behavior (Eyberg, Schuhmann & Rey, 1998).

The transactional model of development of acting-out behavior can be illustrated by Patterson’s coercion theory (Eyberg et al., 1998; Patterson, DeBaryshe, & Ramsey, 1989). Patterson describes the way in which parent-child interaction shapes a child’s acting-out behavior. When parents’ are inconsistent with their positive reinforcement of a child’s prosocial behavior and inconsistent in their punishment for a child’s acting-out behavior, the effect is that the child’s acting-out behavior is reinforced. Some of the reinforcement for the acting-out behavior is positive in that parents may attend to the child or laugh. Other reinforcement is negative in that the child is allowed to get out of an undesirable situation due to their acting-out behavior. If unchecked, the acting-out behaviors can escalate to hitting and physical actions by both the child and the parents. While the acting-out behavior is reinforced, prosocial behavior is frequently either ignored or parents respond inappropriately. Sameroff (2009) indicates that good parenting skills can compensate for poor child behavior and good child behavior can help in situations where parents have personality traits or a lack of parenting skills that might lead to abusive behavior on the part of the parents. Parenting interventions implemented earlier in a child’s life have a greater chance of reducing child acting-out behaviors than those interventions implemented later in life (Patterson et al., 1989).

Eyberg and Pincus (1999) indicate that there are three diagnostic categories for classifying disruptive behavior disorders in children: Attention Deficit/Hyperactivity Disorder (ADHD), Oppositional Defiant Disorder (ODD) and Conduct Disorder (CD) (DSM-IV; American Psychiatric Association, 1994. These acting-out behaviors can range from extreme behaviors such as noncompliance, defiance, aggression and destructiveness to less extreme behaviors such
as whining, pouting, dawdling and fidgeting (Eyberg & Pincus, 1999; McMahon & Estes, 1997). The specific behaviors that were being evaluated in this study, were those indicated as part of the Eyberg Child Behavior Inventory (ECBI) in Appendix A.

Bigner (2010) indicates that, during middle childhood, certain behavior problems are normal for children. These include noncompliance and certain antisocial behaviors, such as lying and stealing. Limit testing begins in preschool age and continues into middle childhood. This can particularly be the case when children do not want to complete the task they are being asked to do. Parents also begin expecting that children comply with directions, and, comply more quickly than when the child was younger.

Antisocial behaviors, those that infringe upon the rights of others, are not uncommon in middle childhood and include lying and stealing (Bigner, 2010). Lying is considered deliberately falsifying information with the intent of deceiving others. Though children may innocently make up stories at when younger, by age 6 or 7, most children are able to understand how lying can interfere with their relationships with others. As with lying, stealing, or, intentionally taking another’s property without permission, may be rather innocuous, and easy to excuse when a child is younger; however, by middle childhood, adults become concerned when a child steals.

Eyberg and Pincus (1999) indicate that the severity of the behaviors is determined by the number of settings in which the behaviors take place and the frequency of the behaviors. While the behaviors specifically indicated in the ECBI were obtained from the reports of parents who had children in treatment for conduct-disorder behavior, “…the behavior problems of normal children are nevertheless annoying to parents and others. Many families can benefit from interventions for parenting of child problems that cannot be classified as psychopathological” (Eyberg & Pincus, 1999, pp. 19).
The normative development of acting-behavior during middle childhood seems to follow a pattern of greater acting-out at younger ages, with a gradual decline over time. This holds true for both boys and girl; although, boys tend to be more aggressive in general (Bongers, Koot, van der Ende, & Verhulst, 2003; Keiley, Bates, Dodge & Pettit, 2000; Stranger, Achenbach, & Verhulst, 1997). There is a slight increase in delinquent behaviors such as lying, cheating, stealing during adolescence for both boys and girls; however, this too shows a gradual decrease with age, lending support to the idea that these delinquent behaviors may be a part of rule testing that come with adolescent development (Bongers et al., 2003; Keiley et al., 2000; Stranger et al., 1997). If the acting-out behaviors persist and do not lessen, as in the normal developmental trajectory, it is possible that a disordered pattern can occur, leading the child to develop behavior disorders such as Oppositional Defiant Disorder and later Conduct Disorder (McMahon & Estes, 1997). Parent’s reaction to a child’s acting-out behavior can make a difference as to whether the behavior, improves, persists, or worsens (Eyberg et al., 1998; Sameroff, 2009).

**Parenting Stress**

Lazarus (2007) indicates that the study of stress came about due to World War I (WW I) and World War II (WW II). There became recognition that soldiers were showing symptoms of stress, from mild anxiety to debilitating emotional distress. During WW I, scientists and military personnel believed “shell shock” (p. 34) was a result of the brain’s reaction to repeated exposure to the noise of shells exploding. Later, during WW II this reaction, then referred to as “war neurosis” or “battle fatigue” (p. 34), was recognized as a psychological condition. Today, this condition is known as Post Traumatic Stress disorder, which is a term that originated with the Vietnam War. The interest in stress was due to a need to understand how to help soldiers cope with the events of battle and select individuals to serve in the military who could deal with these
events. Following WW II, there became a realization that no one could escape stress, and all of us had to learn to deal with it. This occurred due to the fact that war had begun involving citizens as well as soldiers and it became clear that stress was problem in peace time as well. Stress occurs daily anywhere we interact with others, such as work and family. This is evident in the APA (2010) annual *Stress in America Report*. Of those surveyed, 73% considered family responsibilities a major source of stress, 72% indicate that work is a major source of stress.

Lazarus (1993) indicates that four concepts must be considered when describing the stress process: “1) a causal external or internal agent (person-environment relationship and relational meaning); 2) an evaluation (by mind or a physiological system) that distinguishes what is threatening…from what is benign; 3) the coping process used by the mind (or body) to deal with stressful demands, and; 4) a complex pattern of effects on mind and body, often referred to as the ‘stress reaction’” (p. 4). He also draws a distinction between three types of stress: “1) *Harm* refers to psychological damage that had already been done; 2) *threat* is the anticipation of harm that has not yet taken place but may be imminent, and; 3) *challenge* results from difficult demands that we feel confident about overcoming by effectively mobilizing and deploying our coping resources” (p. 5).

Deater-Deckard (1998) applies this process to the stresses associated with parenting, which he defines as “the aversive psychological reaction to the demands of being a parent” (p. 315). He goes on to indicate that parenting stress must be understood as a complex process of “(a) the demands of parenting, (b) the parent’s psychological well-being and behavior, (c) the qualities of the parent-child relationship, and (d) the child’s psychosocial adjustment” (p. 315). Parenting stress is the experience of “…negative feelings towards the self and the child…directly attributable to the demands of parenthood” (p. 315). Parenting stress occurs on a continuum of
low to very high, and all parents experience it to some degree. Parenting stress is distinguishable from other domains of stress.

Deater-Deckard (2004) indicates that there are essentially two theories of parenting stress: the Parent-Child-Relationship theory (P-C-R, Abidin, 1990, 1992, 1995), and, the daily hassles theory (Crnic & Low, 2002). P-C-R stress theory involves the interaction of three components: a parent domain, a child domain and a parent-child relationship domain. Within the parent domain are the aspects of parenting stress that are associated with the parent. Aspects of parenting stress contributed by the child make up the child domain. Within the parent-child domain are the aspects of the parenting stress that arise out of the relationship between the parent and child. When parenting stress is high in a family, there will be elevations apparent in any of the three domains. This will negatively affect parenting and children's development and behavior (Abidin, 1990, 1992, 1995).

The daily hassle theory examines how everyday stresses associated with parenting effect parents and children over time (Crnic & Low, 2002). Minor stressful events occur for most, if not all, parents on a daily basis. The stress associated with these events accumulates over time and effects the parent's functioning, which in turn affects the behavior and development of the child (Crnic & Low, 2002). As with the P-C-R stress theory, Crnic and Low (2002) recognize that these daily stresses occur with parents, children and in the family system as a whole.

Utilizing Deater-Deckard’s (1998) application of Lazarus’s (1993) general theory of the stress process, Crnic and Low (2002) describe the process of parenting stress as follows. Parenting stress is the result of parents' perceptions of, and reactions to events in life, either a major event such as divorce, or a minor event, such as a child not wanting to get dressed. An event occurs, perhaps due to something attributed to the child. The parent assesses the event and
determines that the event is stressful. Parents evaluate how stressful the event is, and attempt to mitigate the stress in some way. Based on this process, parenting stress effects both parent and child well-being (Table 2.1).

Table 2.1
*Components of a General Theory of Stress Applied to Parenting Stress*

1) A child and/or parenting role serves as the causal external agent for the stress experience.
2) Parents must appraise child behavior or parenting events as stressful.
3) Parent coping interacts with stress to determine the degree effect of the stress.
4) Parenting stress has meaningful consequences to parental and child

(Crnic & Low, 2002, p. 248)

Deater-Deckard (1998) suggests that any theory of parenting stress must indicate that the children the parent has responsibility over or, in other words, “parenthood”, is the external causal event (p. 316). Parenthood is stressful. Infants demand a great deal of time and as children grow, their desire for independence creates new stress on the parent. In addition, parents must also take care of themselves and deal with the societal demands of being a parent, such as raising a well behaved productive child. There are individual differences in parents’ cognitive appraisal of stressors, between and within families. Parents’ inferences about the causes of child behavior are important. If a parent believes the child is acting-out on purpose then they are more likely to be stressed by the behavior. Parents coping strategies are particularly important in explaining parenting stress. When parents have adaptive coping strategies, which include a positive parental belief system and a focus on solving problems, they tend to have lower levels of parenting stress.
These adaptive strategies lessen both the stress reaction and the effects of the reaction on the parent-child relationship. The stress reaction is apparent in the parents’ behavior and affect. Parenting stress affects not only a parent’s feeling towards their children, but also affects their psychological health. The availability of emotional support provides a buffer for some parents to the effects of stress due to major life events and day-to-day stress. Theories of the determinants of parenting behavior indicate that the psychological stress reaction manifests itself in inept parenting.

Deater-Deckard (1998) states that in many theories of parenting stress “…the psychological stress reaction manifests itself in inept parental behavior. This deterioration in the quality of the parenting behavior, in turn, may lead to the problems in emotional, behavioral, cognitive, and physical development for the child” (p. 317) (Abidin, 1990, 1992). These theories frequently contain three hypotheses about parenting stress and child development: 1) Parenting stress causes poor parenting; 2) Poor parenting causes child maladjustment, and; 3) Parenting behavior mediates the link between parenting stress and child adjustment. These hypotheses have guided the development of measurement devices to determine levels and causes of parenting stress such as those used for this study, the Parenting Stress Index (PSI) and the Parenting Stress Index Short Form (PSI/SF, Abidin, 1990). The interactions of these three hypotheses are illustrated in Figures 2.2 and 2.3.
Figure 2.2. Theoretical Model of Parenting Stress with Subscales on the PSI

Reproduced by special permission of the Publisher, Psychological Assessment Resources, Inc.,
16204 North Florida Avenue, Lutz, FL 33549, from the Parenting Stress Index Manual by
Richard R. Abidin, Ed.D., Copyright 1990, 1995 by PAR, Inc. Further reproduction is prohibited
without permission from PAR, Inc.
The numbers of studies testing the hypothesis mentioned above are beyond the scope of this review; however, a few are presented below. In a study observing interaction between 74 mother-child pairs, Crnic and Greenberg (1990) found that minor parenting hassles as well as major life events were rated as stressful for parents. These stressful events affected child behavior. Daily hassles, or minor stressful events contributed to less satisfaction with parenting and dysfunction in family functioning. Daily hassles contributed to less responsive and more controlling parenting behavior that manifested in disruptive child behavior; however, the authors
indicate that they found no direct relationship between daily hassles and maternal behavior. It was also evident that parental support mediated the effects of the daily minor stressful events.

Anastopoulos, Guevremont, Shelton, and DuPaul (1992) found a relationship between child ADHD and parenting stress. One hundred four children referred for clinical treatment of Attention Deficit Hyperactivity Disorder (ADHD) and their parents participated in the studies. A variety of measurement devices were utilized including the Parenting Stress Index (PSI) and the Child Behavior Checklist (CBCL). The authors found that parenting stress in associated with children’s ADHD symptoms, aggressive behavior and health status. Children with more severe ADHD symptoms, higher levels of aggressive behavior and more health problems were related to greater parenting stress. In addition, maternal psychopathology, maternal work status, and, to a lesser degree, maternal relationship status, were also related to parenting stress. Mothers with greater psychopathology had higher levels of parenting stress, as did, working mothers and single mothers.

Eyberg, Boggs, and Rodriguez (1992) found a connection between maternal parenting stress and child disruptive behaviors. In their study of 165 children referred for evaluation, they found a significant correlation between child disruptive behavior and maternal stress related to both parent and child characteristic as measured by the PSI and ECBI; greater child misbehavior was related to greater parenting stress.

Deater-Deckard and Scarr (1996) found in the study of 589 parent couples that parents reporting greater amounts of parenting stress also reported using more authoritarian, power assertive discipline strategies, which related to greater child misbehavior. The effects of this relationship were small, but significant and the authors hypothesize that this was due to the relatively low levels of overall stress, and the high percentage of educated middle-class couples.
in the sample. Mothers and fathers were remarkably similar in their responses. Greater family stress was associated with lower income and parent education level. Parents unhappy in their marriages reported greater stress.

Rogers (1998) evaluated a sample of 85 non-referred mothers. She found that parenting stress directly and indirectly affected parenting behavior. Stress related to mothers’ multiple roles indirectly affected parenting behavior. Deficits in parenting behavior seemed to be most related to stress resulting from child misbehavior. The effects of stress were buffered by social support.

McBride, Schoppe, and Rane (2002) found variations in relationships between child characteristics, parenting stress, and parental involvement between fathers and mothers. One hundred two-parent families were involved in the study. Parents reported more stress in relation to children who were perceived as less emotionally intense. Mothers reported greater stress with highly emotional boys and fathers reported more stress with highly emotional girls. Fathers viewed more sociable children as less stressful; however, this relationship was not found with mothers. Less active children were viewed as less stressful for mothers, but, fathers did not relate child activity to stress. Less sociable girls had less involvement from fathers, but this was not the case for mothers. This same relationship did not exist for less sociable boys and father involvement. Less active girls received less involvement from their mothers than active girls; however, this same relationship was absent from boys relationships with their mothers.

Anthony et al. (2005) examined the relationships between parenting stress, parenting behavior and children’s behavior in the classroom. The authors report that parenting stress was significantly related to teacher reports of child social competence, internalizing behaviors and externalizing behaviors. Greater parenting stress was related to lower child social competence,
and higher incidences of child internalizing and externalizing behaviors. The parenting behaviors did not appear to mediate the relationship. Parent expectation did weakly moderate the relationship between child externalizing behaviors and parenting stress; when parents had higher expectation for child behaviors, they became more stressed when these expectations were not met.

Crnic, Gaze, and Hoffman (2005) assessed cumulative parenting stress across the preschool period with 125 typically developing children and their mothers. They found that stresses from daily hassles and major life events were relatively stable over time. Both daily hassles and major life events were found to affect parenting behavior, child behavior and the parent-child relationship. There was a relationship between greater stress and less responsive parenting behavior, and increased child misbehavior.

Costa, Weems, Pellerin, and Dalton (2006) examined the relationships between parenting stress and child psychopathology. From a sample of 300 families, the authors found that stress related to dysfunctional parent-child relationships, as measured by the Parenting Stress Index Short Form (PSI/SF) parent-child subscale was related to child internalizing behavior as measured by the Child Behavior Checklist (CBCL). Stress related to difficult child behavior, as rated by the PSI/SF difficult child subscale, was related to child externalizing and internalizing problems as measured by the CBCL. The PSI/SF parent distress scale was not related to either externalizing or internalizing child behavior as measured by the CBCL.

Fite, Greening, and Stoppelbein (2008) examined the relationships between parenting stress and child psychopathic traits. Participants were 212 children admitted to an acute child psychiatric inpatient treatment program. Parents completed three self-rated scales: the Child Behavior Checklist (CBCL), the Antisocial Process Screening Device (APSD), and the Parenting
Stress Index (PSI). After controlling for aggression, the authors found that high levels of stress on the PSI scale for attachment difficulties were related to high levels of child narcissism and callous/unemotional behavior. In addition, high stress levels indicated by the PSI subscale for parent role restriction were lower levels of narcissism in children, after controlling for aggression. None of the parenting scales on the PSI were found to be related to impulsivity.

Guajardo, Snyder, and Petersen (2009) examined the relationships between parenting practices, parental stress, child behavior, and children’s social-cognitive development. Eighty-three parents and their 3-year-old to 5-year-old children participated. The study included both self-report and direct observation measures. Lax parenting behavior and parenting stress predicted children’s theory of mind performance. Parents with lax parenting behavior tended to report greater levels of child externalizing and internalizing behaviors. Parents with overactive behaviors tended to report only greater levels of internalizing child behaviors. Greater parenting stress was related to lax and overactive parenting behaviors as well as increased internalizing and externalizing child behavior. In observations of parent-child interactions, parents who gave more commands and were more critical tended to have children who were less compliant. In addition, as parental praise increased, children did not do as well on theory of mind task. Also, parents who displayed more imitative behavior tended to have children who were lower in emotional competence. In addition, lax parenting behavior but not overactive parenting behavior predicted children’s theory of mind performance, but not children’s emotional understanding. Parenting stress was a predictor of children’s theory of mind performance but not emotional understanding. Children’s internalizing and externalizing behavior did not have an effect on theory of mind tasks. Children with greater externalizing behavior tended to perform better on tasks of emotional understanding.
Deater-Deckard (1998) states “Reducing levels of parenting stress is important not only for improving the psychological health of the parent but also because it may improve the efficacy of interventions that are targeting the child’s behavioral problems” (p. 315). The importance of improving parenting skills to reduce parenting stress and child behavior problems is shared by others as well (Honaker, 2000; as cited in Lepeltier, 2008; Kumpfer & Alvarado, 2003; Taylor & Biglan, 1998; Weissberg et al., 2003). The results of studies on effective treatments are mixed. While a few studies indicate that the effects of parenting stress can be mitigated by parent education programs, others have shown these programs produce no significant effects on parent stress. Some of these studies have shown effect sizes of at least a half of a standard deviation difference between control and treatment groups. A number of these studies are reviewed below.

Winton (1990) studied the effects of a parent support group for parents of children who had been sexually abused. The participants were 27 parents/caretakers involved in a support group as part of a multidisciplinary hospital-based treatment program for children who had experienced sexual abuse. Participation in the study was voluntary and there was no comparison/control group. The groups ran for 13 weeks for two hour at a time and utilized an eclectic approach to therapy with the parents and a variety of parenting material for teaching parenting skills. The author evaluated the effects of the program on child behavior and parenting stress. Results indicated significant changes in child behaviors such as fear, inhibition, intellectual/academic deficits, irritability, and deviant behavior. Parents stress levels, as measured by the PSI, remained high throughout the program and did not decrease as a result of participation in the group.

Anastopoulos, et al. (1993) examined the effects of a parenting program on child behavior and parenting stress for children with attention deficit hyperactivity disorder (ADHD)
and their parents. Thirty-four children who had been referred for clinical treatment of ADHD and their parents participated in the study. The participants were randomly placed in a treatment group or waitlist control group. Parents received parent training specific to parenting a child with ADHD. The authors found that compared to the control group, parents reported improvements in child behavior as indicated by a decrease in ADHD symptoms. In addition, parents indicated an increase in parenting self-esteem and reduced parenting stress. These results were not attributable to extraneous factors and were maintained at a 2-month follow-up.

Pisterman et al. (1992) examined the effects of a parenting program with parents of children diagnosed with attention deficit hyperactivity disorder (ADHD). Ninety-one families participated in one of two studies. Parents who attended the 12 weekly sessions reported significant increase in their sense of competence and positive feelings about parenting from pretest to posttest and at three-month follow-up as compared to the control group. Both treatment group and control group parents indicated a significant decrease in stress from pretest to posttest, with the treatment group experiencing slightly less stress than the control group; however, both groups still reported high levels of stress. The authors determined a relationship between improved parent sense of competence, decreased stress, and improved child behavior. As child behavior improved, parent stress decreased and parent sense of competence increased.

Felner et al. (1994) looked at the level of exposure to parenting education and its relation to changes in child behavior, parenting practices and parenting stress. Parents attending 80%-100% of workshops showed greater short-term and long-term effects. One hundred ninety-one parents were involved in a one hour parenting course offered via work, twice a week, for 12 weeks. Parents who attended at least 80% of the sessions saw a significant reduction in child misbehavior and increase in positive behaviors in the short-term and long term. Parents who
attended fewer sessions reported no increase in positive behavior and a decrease in misbehavior only in the short term. Parents attending more sessions showed a decrease in parental punitive behaviors and parental irritability, and an increase in child development knowledge. In comparison, parents receiving less exposure to the parenting sessions did not report a significant change in parental punitive behavior or parental irritability. Parents from both groups reported significantly less stress as a result of participation in the parenting sessions.

Webster-Stratton and Hammond (1997) examined a variety of treatment modalities for effectiveness in changing child and parent behavior and improving parent-child interaction. Participants were assigned to either a child treatment group, a parent treatment group, a combination of the two or a waitlist control group. Children participated in video-based skills group and parents participated in a video based skills group. The combined groups met at the same time, but did not interact. All three treatment groups reported significant behavior improvements in child behavior as compared to children in the control group. Parents also reported a decrease in parenting stress. Parent-child interactions in the treatment groups were also improved as compared to control group. Parenting behavior in the treatment groups improved compared to the control group.

Kazdin and Wassell (2000) examined the changes in child, parent and family function over a treatment period for children in treatment for conduct problems. Two hundred fifty children participated in the study. Participants were assigned to either a combination of cognitive problem solving skills training for children and parent management training for parents, or, parent management training only. The authors found that child, parent and family functioning improved over the course of treatment. The effects of the changes were greater for children than for parents. Changes in child, parent, and family functioning were moderately correlated.
Severity of child behavior, socioeconomic disadvantage and perceived barriers to treatment predicted treatment outcome. There were no significant differences between the two treatment groups.

Danforth, Harvey, Ulaszek, and McKee (2005) studied the effects of a parenting program on child behaviors and parent behaviors of children diagnosed with ADHD and their parents. Eighty-four families were recruited. The parenting program was presented in a group format for 57-90 minutes, for 8 weeks. The program was based on child behavior management research. Between pretest and posttest, there was a significant decrease in scores for children’s hyperactive behavior, aggressive behavior, pervasiveness of noncompliance and severity of noncompliance. Parents showed a decrease in overactive parenting and lax parenting. In addition, there was a significant decrease in parenting stress.

In an evaluation of the Parenting the Strong-Willed Child parenting program, Conners, Edwards, and Grant (2007) found a decrease in child misbehavior and parenting stress from pretest to posttest, with 71 parents enrolled in the parenting program. Both the intensity and frequency of child behaviors were reduced from pretest to posttest. In addition, parents reported a reduction in parenting stress during this time. Parents also reported improvements in their parenting practices from pretest to posttest. These results were maintained over a 6-month follow period.

**Effective Group Parenting Interventions**

Concern about parenting is not a new phenomenon; in fact, Gordon (1977) suggests that parent education probably took place in ancient caves as the first grandmother taught her daughter to care for a new infant. Hamner and Turner (2001) indicate that parent education can be traced by as far as ancient Greece. Pestalozzi’s (1801; as cited in Gordon, 1977) *How*
Gertrude teaches Her Children, is an early example of written parenting education. Ideas regarding appropriate parenting practices/behaviors and the behavior of children have varied depending on the time (Hamner & Turner, 2001).

Early parent education in the United States was imported from Europe (Croake & Glover, 1977; Gordon, 1977) and tended to focus on middle-class values. Parent education meetings took place as early as 1815 in Portland, Maine. These groups, referred to as maternal associations, met to discuss child rearing concerns and focused on moral and religious improvement of children (Croake & Glover, 1977). In addition to these informal mothers meetings, a number of periodicals focusing on the task of parenting were published in the 1800’s (Croake & Glover, 1977). In 1888, the Society for the Study of Child Nature was founded to provide parent training and continued with this role as the Child Study Association of America until 1985 (Croake & Glover, 1977; Glover, 1977; Schlossman, 1976).

Schlossman (1976) described parent education in the United States from 1888 – 1929. Some of the major influences of the times include Stanley G. Hall and the Child Study Movement, Freud, Watson, Dewey, and Gessel. At that time, educating parents in proper child rearing techniques was considered a method of raising emotionally well adjusted children. During and following WWII, large scale organized parenting education efforts waned, though parenting methods promoted by various authors continued to be produced (Croake and Glover, 1977; Schlossman, 1976).

In his 1946 work, Baby and Child Care, Dr. Benjamin Spock, provided national recognition for parent education (Boccella, 1988; Smith et al., 2002). In the 1960’s and 1970’s, various parenting programs were developed by individuals such as Skinner, Ginott, Gordon, Dinkmeyer, and Dreikurs (Hamner and Turner, 2001; Smith, et al., 2002). Some of these
programs include: *Between Parent and Child* (Ginott, 1965); *Children: The Challenge* (Dreikurs, 1964); *Parent Effectiveness Training* (P.E.T., Gordon, 1975); and *Systematic Training for Effective Parenting* (STEP, Dinkmeyer & McCay, 1976). The goal of many of these programs was to change parent attitude and behavior (Hamner & Tuner, 2001). The 1980’s and 1990’s there was continued recognition of the importance of parent education and greater emphasis was placed on outcome research to determine the effectiveness of programs (Hamner & Turner, 2001). In the past decade, there has been an increase in calls for the use of empirically support parenting education programs to assist parents with the role of rearing their children (AAPTFF, 2003; Honaker, 2000; as cited in Lepeltier, 2008; Kumpfer & Alvarado, 2003; Weissberg et al., 2003).

Today, there are a number of parent education programs that are offered to help parents with a variety of issues (Smith et al., 2002). Most programs are based on theoretical principals of various psychologists, developmental experts, and child educators (Shriver & Allen, 2008; Smith et al., 2002); however, many programs can be grouped into three categories (Shriver & Allen, 2008; Smith, et al., 2002): 1) active-listening, 2) Adlerian, and 3) behavioral.

Active listening programs are based on the theories of Carl Rogers. Parents learn to listen to their children’s feelings, understand and accept them and solve conflicts in a win-win manner (Hamner & Turner, 2001; Shriver & Allen, 2008; Smith et al., 2002). Parent Effectiveness Training is one example of an active-listening approach to parent education (Gordon, 1970).

Programs based on the work of Alfred Adler are commonly referred to as Adlerian. Adler believed that all behavior is purposeful in nature and was intended to help individuals fit into their social world. Parenting programs based on this program aim to teach parents to establish
democratic homes with clear and consistent family rules. There is also a focus on the use of natural and logical consequences (Hamner & Turner, 2001; Shriver & Allen, 2008; Smith et al., 2002). Systematic Training for Effective Parenting (STEP; Dinkmeyer & McCay, 1976) and Active Parenting Now (Popkins, 2003) are two examples of Adlerian based parenting programs.

Behavioral parenting programs are based on the work of B. F. Skinner. These programs focus on observable child behaviors and the situations in the environment that maintain those behaviors. Parents are taught behavior modification techniques to eliminate unwanted child behaviors and increase desirable child behaviors (Shriver & Allen, 2008; Smith et al., 2002). Promoting Positive Parenting is an example of a behavioral modification based parent education program (Barlow & Stewart-Brown, 2000).

While many programs rely heavily on the work of one particular theorist, there are frequently elements of other theories contained within parent education programs and there are some common elements present across many parenting programs (Barlow & Stewart-Brown, 2000; Hamner & Turner, 2001; Shriver & Allen, 2008; Smith, et al., 2002). Hamner and Turner (2001) identify four commonalities between parent education programs they reviewed. There is an emphasis on a democratic relationship between parents and children. Communication is viewed as an important component of a positive parent-child relationship. It is important to determine the cause of the child's behavior. Also, the goal of raising responsible children is emphasized.

In order to provide effective evidence-based parent support there must be some criteria on which to gauge what constitutes an effective or empirically supported program. There is discrepancy among the many fields involved in prevention and family support; however, many follow the criteria suggested by Chambliss and Hollon (1995.) They suggest that a criteria of at
least two randomized control trials by at least two independent teams of investigators. Biglan et al. (2003) suggest the use of a seven-tiered system for determining the effectiveness of programs in which only the highest two levels (Grade 1 and Grade 2) should be included on effective interventions lists. Grade 1 includes interventions that have evidence of effectiveness determined in a minimum of two independent replicated control trials; either randomized or time-series. Grade 2 shows evidence of success in two independent randomized or time-series trials with at least one of the trials being conducted by a research team other than the program developers. Grade 3 includes programs that have had multiple randomized or time-series trials conducted by a single research team. Grade 4 includes programs with only one control trial. Grade 5 programs are quasi-experimental comparison group studies. Grade 6 programs have evidence obtained via a nonexperimental trial and Grade 7 includes programs with only endorsements from leading authorities in the field. Shiver and Allen (2008) also suggest that a program that is considered evidence-based should include a standardized program manual that details the number of sessions and what is to be done in each session.

There are multiple definitions of what constitutes parent education and frequently the terminology used to describe parent or family interventions are interchanged. Croake and Glover (1977) describe parent education as "…the purposive learning activity of parents who are attempting to change their method of interaction with their children for the purpose of encouraging positive behavior" (p. 151). Schlossman (1996) defines parent education as "…any and all kinds of programs sponsored by lay groups or governments to upgrade child-care practices of parents in the home" (p. 438). Smith et al. (2003) defines parent education as "…educational efforts that attempt to enhance or facilitate parent behaviors that will influence positive developmental outcomes in the children" (p. 389). Hamner and Turner (2001) indicate
that a current explanation of parent education is "…a variety of experiences to assist persons who are already parents to be more effective in their roles as well as to educate individuals who plan to be parents in the near or distant future" (p. 25). Campbell and Palm (2004), in their book on group parent education, define parent education as "a process that involves the expansion of insights, understanding, and attitudes and the acquisition of knowledge and skills about the development of both parents and their children and the relationship between them" (p. 18).

Shriver and Allen (2008) make a greater distinction between parent education and parent training. "Parent training is defined as the active, targeted teaching of specific parenting skills with the goal of positively affecting child behavior" (p. 4). Shriver and Allen (2008) suggest that "It is the inclusion of active behavioral skills training component [instruction, modeling, practice, and feedback] that distinguishes parent training from parent education" (p. 8).

Kumpfer and Alvarado (2003) indicate that there is little support found in the literature for parent education described narrowly as "…highly marketed programs…characterized by short-term (less than 8-hours), didactic, knowledge-only sessions or affectively based…” (p. 458). Behavioral Parent Training, family skills training and family therapy where found to have the most empirical evidence of effectiveness (Kumpfer & Alvarado, 2003). Behavioral Parent Training is a structure program including only parents, in small groups lead by a trainer, following a curriculum guide. Generally there are 6 to 15, 2-3 hour sessions that focus on child behavior management strategies. Sessions frequently include review of homework, video presentations, lectures, discussions, interactive exercises, modeling and role playing for direct practice of parenting skills, charting and monitoring of parent and child behavior, assignment of homework and sessions on effective discipline through timeouts and removal of privileges. Family Skills Training is typically a multicomponent program that includes the parent only
training sessions previously mentioned, a child only training component and family practice sessions. The type of family therapy that Kumpfer and Alvarado (2003) found to be effective was brief (8 sessions), manualized, family therapy sessions. The sessions are typically run with individual families, by a mental health practitioner or prevention specialist, and involve families with children who show signs, but, who have not yet developed, mental or behavioral disorders.

Depending on the source, a variety of parenting programs are indicated as being empirically supported (Eyberg, Nelson & Boggs, 2008; Hutchings & Lane, 2005; Kumpfer & Alvarado, 2004; Pearl, 2009; Shriver & Allen, 2008; Smith et al., 2003). Two group parenting programs are found in multiple sources, Triple P - Positive Parenting Program (Sanders, 1999) and the Incredible Years (Webster-Stratton & Reid, 2003) (Eyberg et al., 2008; Hutchings & Lane, 2005; Kumpfer & Alvarado, 2004; Pearl, 2009; Shriver & Allen, 2008). Due to their inclusion in multiple sources on empirical and effective treatments, and their group parenting format, which is similar in format to the BLLP program, Triple P - Positive Parenting Program (Sanders, 1999) and the Incredible Years (IY) (Webster-Stratton & Reid, 2003) are review below.

**Triple P Positive Parenting Program**

The Triple P Positive Parenting Program is a multilevel, prevention oriented parenting and family support strategy developed at the University of Queensland in Australia, by Matthew Sanders and colleagues (Sanders, 1999). The program is intended for parents of children from birth to 12-years-of-age. The program is based on social learning and developmental theories. The goals of Triple P are to prevent severe behavioral, emotional, and developmental problems in children by teaching parents effective parenting skills and increasing parent’s beliefs that they are capable of overcoming child management problems. The program has five levels of
intervention increasing in strength from universal dissemination of parenting information at the first level and direct, in home family interventions at the fifth level (Table 2.2). Levels 2, 3, and 4 provide a group parenting program component that could be most easily compared to the BLLP program. Research demonstrating the efficacy of the program is presented below.

Table 2.2
*Intervention Levels of Triple P Positive Parenting Program*

<table>
<thead>
<tr>
<th>Level of Intervention</th>
<th>Target Population</th>
<th>Intervention Methods</th>
<th>Program Materials</th>
<th>Possible Target Behaviors</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Universal Triple P</td>
<td>All parents interested in information about promoting their child’s development</td>
<td>Anticipatory well-child involving the provision of brief information on how to solve developmental and minor behavior problems. May involve self-directed resources, brief consultation, group presentations and mass media strategies</td>
<td>Positive Parenting Booklet Positive Parenting Tip Sheets Family Video Series Every Parent Triple P Program Guide</td>
<td>Common everyday behavior difficulties</td>
</tr>
<tr>
<td>2) Selective Triple P</td>
<td>Parents with specific concerns about their child’s behavior or development</td>
<td>Provision of specific advice for discrete child problem behavior. May be self-directed or involve telephone or face-to-face clinician contact or group sessions</td>
<td>Level 1 Materials Primary Care Triple P Practitioner’s Manual Developmental wall chart Consultation flip chart</td>
<td>Bedtime routine Temper Tantrums Meal time behaviors Toilet training</td>
</tr>
<tr>
<td>3) Primary Care Triple P</td>
<td>Parents with specific concerns about their child’s behavior of development that require active skills training</td>
<td>Brief therapy program (1 – 4 clinical sessions) combining advice, rehearsal, and self-evaluation to teach parents manage a discrete child behavior</td>
<td>Level 1 and Level 2 Materials</td>
<td>Same as Level 2 Persistent eating problems Pain management</td>
</tr>
</tbody>
</table>
4) Standard Triple P

Parents of children with more severe behavior problems and wanting intensive training in positive parenting skills

Intensive program focusing on parent-child interaction and the application of parenting skills to a broad range of targeted behaviors. Includes generalization enhancement strategies. May be self-directed or involve telephone or face-to-face clinician contact or group sessions

Level 1 to Level 3 Materials
Every Parent’s Self-Help Workbook

General behavior management concerns
Aggressive behavior
Oppositional Defiant disorder
Conduct disorder
Learning difficulties

5) Enhanced Triple P

Parents of children with concurrent concerns of child behavior problems and family dysfunction

Intensive program with modules including home visits to enhance parenting skills, mood management strategies, and stress-coping skills, and partner support skills

Level 1 to Level 4 Materials
Enhanced Triple P Practitioner’s Manual
Every Parent’s Supplementary Workbook

Persistent conduct problems
Concurrent child behavior problems and parent problems
Child maltreatment


Bodenmann, Cina, Ledermann, and Sanders (2008) examined the efficacy of the Triple P Positive Parenting Program as compared to couples coping enhancement training (CCET) or no treatment. The 50 couples were randomly assigned to each group. The parents involved in the Triple P program attended four level 4 small group sessions, lasting two and a half hours each. Following these sessions, parents participated in four telephone consultations and received an “Every Parent’s Group Workbook” containing key components of the Triple P program.
Exercises were completed during and between sessions. Parents in the group to improve martial competence, the CCET group, attended a small group weekend workshop. Exercises were completed during and after the workshop. Control group parents receive no treatment. The strongest decrease in parental dysfunction was seen in the Triple P group, followed by the CCET group, with little decrease occurring in the control group. Parents involved in the Triple P program reported significant decrease in the intensity of child misbehavior, especially compared to the control group. These improvements held true at a year follow-up for women, but not men. Overall, women seemed to benefit from involvement in all groups more than men.

Wiggins, Sofronoff, and Sanders (2009) examined the effects of the Pathways Triple P (PTP) program on 60 parents of children with borderline to significant relationship disturbance and emotional and behavioral problems. Parents were randomly assigned to a treatment group or waitlist control group. The PTP was provided via a group format over 9 weeks with weekly 2-hour sessions. Parent-child relationships showed significant improvement between pretest and posttest as compared to the control group. There was a significant reduction in dysfunctional parenting practices compared to the control group. Compared to the control group, PTP parents indicated a significant reduction in externalizing child behavior but not internalizing child behavior. Parents in the treatment group also had a significant reduction in overactive parenting behaviors. These findings were still present at a 3-month follow-up.

In a German study, Hartung and Hahlweg (2011) found a relationship between defective parenting behaviors and individual parent stress. Forty-four parents who attended sessions of the empirically supported parenting program, Workplace Triple P, reported decreased levels of decreased levels of dysfunction parenting behavior and decreases levels of individual stress in pre-test and posttest evaluations. In addition, as individual stress levels decreased, work-related
stress decreased as well. Parental self-efficacy was not improved as a result of attending the program.

**Incredible Years**

Another program that has abundant empirical support is the Incredible Years (IY) parenting program developed by Carolyn Webster-Stratton (Webster-Stratton & Reid, 2003). The program is designed to be used with parents of children for 2-years-of-age to 8-years-of-age who are referred for conduct problems. As with Triple P, IY is based on social learning principles and with the recognition of the importance of parent-child interactions on child behavior, especially misbehavior (Shriver & Allen, 2008). Within the IY series, there are training programs for parents, children, and teachers. The programs consist of video vignettes of common behavior situations and how the different groups can handle them. The program also contains a detailed manual with checklist, group-leader scripts, highlighted program principles, homework materials, books, and practice activities (Pearl, 2009).

The IY BASIC-Program is a 12-week, facilitator lead parenting group, consisting of 2-hour sessions. The program consists of over 200 video vignettes covering topics such as, child-directed play, encouragement, praise, tangible reinforcement, monitoring, infringing, limit setting, natural and logical consequences, and time-out. Group leaders facilitate discussions, role-playing and problem solving activities based on the vignettes of common situations in the parent-child relationship. Weekly homework is assigned, consisting of reading and practicing techniques with children. There is also an ADVANCED Parent Training Program that teaches parents interpersonal skills, such as effective communication techniques, stress and anger management, problem solving skills. There are seven goals of the program aimed at promoting parent competencies and strengthening families (Table 2.3). The BASIC and ADVANCED
programs combined last 18-22-weeks. The IY has a great deal of empirical research establishing its effectiveness, some of these studies are reviewed below.

Table 2.3
Goals of the Incredible Years Parent Interventions

<table>
<thead>
<tr>
<th>Goals</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Increasing positive parenting, self-confidence, and parent-child bonding.</td>
</tr>
<tr>
<td>2) Teaching parents to coach children’s academic and verbal skills, persistence and sustained attention, and social emotional development.</td>
</tr>
<tr>
<td>3) Decreasing harsh discipline and increasing positive strategies such as ignoring, logical consequences, redirecting, monitoring, and problem solving.</td>
</tr>
<tr>
<td>4) Improving parents’ problem solving, anger management, and communication.</td>
</tr>
<tr>
<td>5) Increasing family support networks and school involvement/bonding.</td>
</tr>
<tr>
<td>6) Helping parents and teachers work collaboratively.</td>
</tr>
<tr>
<td>7) Increasing parent’s involvement in children’s academic-related activities at home.</td>
</tr>
</tbody>
</table>


Webster-Stratton (1998) examined the effectiveness of IY with 394 mothers of children enrolled in Head Start programs. Parents were randomly assigned to an IY group or to a group that continued to receive the regular Head Start program. Parents in the treatment group were observed in the home and found to use significantly fewer dysfunctional parenting behaviors, such as critical remarks and commands, use less harsh discipline, and to be more positive and
competent in their parenting in comparison to mothers in the control group. Teachers of the children reported significant improvements in mothers’ involvement in their child’s education and that children’s behavior improve. Children displayed fewer conduct problems, less noncompliance, less negative affect and more positive affect. Most of these behaviors were maintained a year later.

Reid, Webster-Stratton, and Beauchaine (2001) examined the effects of the IY program with a large sample of low-income mothers from various racial and ethnic backgrounds: African American, Asian American, Caucasian, and Hispanic. Mothers were assigned to treatment groups receiving the IY program, or, the normal Head Start program, as a comparison group. Mothers receiving the IY program showed significantly more positive, less critical, and more consistent and competent in parenting interactions with their children. Children from the IY group exhibited fewer behavior problems. There were no significant differences between the treatment groups of varying racial and ethnic backgrounds, and most of the behavior changes were maintained a year later.

Jones, Daley, Hutchings, Bywater, and Eames (2007) examined the effects of the IY program with 133 parents from a Sure Start program in Wales, UK. Participants were assigned to either a treatment group receiving the IY program or a waitlist control group. Children had early signs of developing conduct disorder and ADHD. IY program parents indicated a significant decrease in inattention and hyperactivity post intervention as compared to parent reports of the waitlist group.

Lau, Fung, Ho, and Liu (2011) examined the effects of a culturally responsive parent training program with 54 Chinese American parents in a treatment-waitlist control group study. IY was utilized in this study and consisted of 14 sessions. The authors report improved child
internalizing and externalizing behaviors and lower levels of negative discipline and increase positive involvement of practices with the school-aged children from pretest to posttest, as compared to the waitlist group. Neither group showed any change in parenting stress from pretest to posttest.

**Becoming a Love and Logic Parent**

Becoming a Love and Logic Parent (BLLP, Fay et al., 2000), commonly referred to as Love and Logic, is a video-based program intended to “…give parents…practical strategies for reducing behavior problems, increasing motivation, and building assets which contribute to lifelong responsibility and resiliency (Fay, 2005, p. 1)”, based on the idea that “… success for children of all ages rests on a balance of unconditional compassion, firm behavioral limits, and logical consequences (Fay, 2005, p.1).” Love and Logic was developed by Jim Fay and Dr. Foster Cline, M.D. in 1991. The BLLP program was later developed by the two authors mention above and Dr. Charles Fay, PhD. The program was developed to assist parents and educators in dealing with discipline and the rising numbers of at-risk youth.

BLLP emphasizes the importance of preserving and enhancing the child’s self-concept by creating situations that allow children to successfully solve their own problems with adult guidance, thereby enhancing their self-concept and strengthening the parent-child relationship. The program promotes the teaching of problem solving skills by allowing children to own and solve their own problems. In addition, adults must teach and model problem solving skills. The program provides guidelines for teaching problem solving skills (Fay, 2005). BLLP promotes the idea that healthy control is a basic human need. The program provides specific parent strategies for developing children’s perceptions of control. The program teaches parents how to provide logical consequences in a warm and empathetic manner.
Fay (2005) indicates that Love and Logic has roots in basic principles of learning and conditioning (Bandura, 1977; Skinner, 1953; Thorndike, 1905), as well as principles of human emotional needs and their relationship to motivation (Glasser, 1969; Rogers, 1961; Maslow, 1954). The program rests on five core principles that are evident throughout (Table 2.4). Each of these principles is examined below.

Table 2.4

<table>
<thead>
<tr>
<th>Five Principles of Love and Logic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principles</td>
</tr>
<tr>
<td>1. Preserve and enhance the child’s self-esteem.</td>
</tr>
<tr>
<td>2. Teach children how to own and solve the problems they create.</td>
</tr>
<tr>
<td>3. Share the control and decision making.</td>
</tr>
<tr>
<td>4. Combine consequences with high levels of empathy and warmth.</td>
</tr>
<tr>
<td>5. Build the adult-child relationship.</td>
</tr>
</tbody>
</table>

(Fay, 2005, p. 2)

Each technique and intervention taught in the BLLP program is designed to enhance and develop a child’s self-concept (Fay, 2005). The view that a person has of themselves has influence on behavior and cognition (Harter, 1986). Bandura (1986) indicates that self-concept is a composite view of oneself that consists of direct experiences and evaluations of those experiences that a person makes based on evaluations of significant others. Self-esteem is related to feelings of self-worth. Self-efficacy refers to judgments one has about his/her abilities to perform at a certain level at an activity (Bandura, 1986). A person’s self-efficacy is shaped by engagement in tasks and the successful or unsuccessful completion of the task. When a person is
successful, they begin to judge that they have the ability to successfully complete the same, or similar tasks. As one judges himself/herself to be able to successfully complete tasks, he/she is more likely to attempt tasks and complete them successfully. For children, this process begins with interactions in the family, primarily with parents. As infants and young children motivate parents to attend to them, they begin to judge themselves as capable and develop a positive self-efficacy, thereby prompting them to try, and successfully complete other tasks. Parents who are responsive to their children in a positive manner, who set clear limits, yet allow certain freedoms, have children who judge themselves as capable, and, who, by and large, attempt and successfully complete tasks. These children tend to be more cognitively and socially developed. The BLLP program promotes activities and strategies that build on this process and encourages parents to provide a balance of responsiveness and freedom in interactions with children. The program “focuses heavily on engineering situations that encourage children to struggle with solvable problems, receive guidance from adults, achieve success and attribute their success to effort” (Fay, 2005, p. 3).

Fay (2005) indicates that another concept of the BLLP program is to teach children how to own and solve the problems they create. In order for this to happen, two conditions must be met: 1) adults around them require them to think about and solve the problems they create and; 2) these adults model and instruct children in using problem solving skills. Kerr and Bowen (1988) suggest that it is important for individuals who are part of a family to develop clear boundaries regarding problem-ownership. A family system suffers when parents take ownership of children’s problems or children take ownership of parents’ problems. Family members have less capacity to solve their own problems because their energy has been focused on the problems of others. Instead, the family system functions more effectively when adults solve adult problems
and model the problem solving behavior and steps for children (Kerr & Bowen, 1988; Foster, Prinz & O’Leary, 1983).

Bandura (1973, 1986) indicates that modeling is one of the fundamental ways in which new behaviors are learned and existing behaviors are modified. Children learn many behaviors by observing important people around them, especially parents. Whether they are conscious of it or not, parents are constantly modeling behaviors for their children. It truly is a necessity to learn vicariously, as to do otherwise could have dangerous consequences. For example, if a child observes a parent reacting to the heat of a pan on a stove, they are able to learn that touching the stove may not be a good idea. The modeling process also speeds up the learning of new behavior that is purposefully being taught. Gleason and Schauble (2000) indicate parents are children’s first teachers and that research supports parents generally being effective at teaching children problem solving skills. The BLLP program stresses the need for parents to be aware of this modeling process that is continually taking place between parent and child, and model effective behavior. The Love and Logic program emphasizes a process that parents can model in order to help children learn to effectively solve problems (Table 2.5). By modeling this process, allowing the child to experiment with it, and proving feedback, parents can teach their children how to effectively problem solve. The BLLP program also emphasizes the need for parents to model taking good care of themselves by not engaging in arguments with children, and, by expecting children to behave in a respectful manner. It is through this process that children learn, not only how to treat others, but how they should expect to be treated in their relationships (Fay, et al., 2000).
Table 2.5

Love and Logic Problem Solving Process Steps

1. Identify and define the problem.
2. Brainstorm solutions.
3. Evaluate each solution.
4. Implement the solution chosen.

(Fay, 2005, p. 3)

One of the central concepts of the BLLP program is the need for parents to share control and decision making with their children (Fay, 2005; Fay, et al., 2000). The program views shared control as a basic human need. Glasser (1969) considers control over events in one’s life as one of five basic human needs and, that people’s behavior is motivated by a desire satisfy these basic needs. By providing children with opportunities to have control and share in the decision making process, we help them meet their basic need for control, strengthen our relationships with them, and motivate them to cooperate and work in the process (Wubbolding, 2007). Bishop and Rothbaum (1992) state that “Parents' acceptance of their children's need for control makes children more likely to behave in ways desired by their parents, thereby increasing their parents’ ability and motivation to be accepting” (p. 172). They found that parent’s acceptance of their children’s need for control, when measured at two-years of age, had an effect on children’s later social development when measured at five-years of age.

The idea of regarding the application of consequences in order to strengthen or reduce certain behaviors is a fundamental aspect of the BLLP program (Fay, 2005; Fay, et al., 2000). Fay (2005) indicates that this component of the program stems from the work of behavioral
psychologists Thorndike (1905) and Skinner (1953). From these behavioral scientists, we learn that behaviors that result in positive consequences tend to increase in frequency. Behaviors that produce negative consequences tend to diminish. However, these behavioral principals alone tend to not maintain behavioral change, teach appropriate replacement behaviors, and, also, contribute to “withdrawal, avoidance and retaliatory aggression” (Fay, 2005, p. 4). Instead, research has shown that when behavioral principals are combined with warmth, trust, and empathy, people are more likely to be motivated to change (Rogers, 1958).

Carl Rogers (1961, 1958) is arguably one of the most influential individuals in the fields of psychology, counseling, and human behavior. His work on the conditions needed to create and maintain, not only the helping relationship, but all human relationships, has influenced the BLLP program (Fay, 2005). Rogers (1961) presents a hypothesis of the conditions needed to assist people in growing and making change, “If I can provide a certain type of relationship, the other person will discover within himself the capacity to use that relationship for growth, and change and personal development will occur” (p. 33). The type of relationship Rogers indicates is one in which the helping individual presents themselves as authentic and genuine. This person must be aware of their own feelings and being willing to express these feelings. By providing this honesty, the helper allows the other person to feel comfortable enough to present themselves in a genuine manner. In addition, the more the helper can accept the other as they truly are and display that acceptance, the better the relationship will be. This unconditional acceptance creates a feeling of safety within the relationship for the individuals to explore and make changes. Another condition of this relationship is empathy. Rogers (1961) indicates that this is a “continuing desire to understand…the feelings and thoughts which seem so horrible to you [the individual receiving help]…it is only as I see them as you see them, and accept them and you,
that you feel really free explore all the hidden nooks and frightening crannies of your inner…experience” (p. 34). Rogers (1958) also indicates that empathy is to sense the other’s “…anger, fear, or confusion, as if it were your own, without your own anger, fear, or confusion getting bound up in it” (p. 5). When presenting empathy to a child, the BLLP program emphasizes the importance of the parent not displaying the anger that they may be feeling. It is when these conditions of the relationship are met that a person is motivated to explore, share, and take risks, and they are motivated to make changes for the better. Rogers (1961), indicates that these conditions are beneficial to all human relationships, including the relationship between parent and child. He says “…if the parent creates with the child a psychological climate such as we have described, then the child will become more self-directing, socialized, and mature” (p. 37). The use of genuine empathy between parent and child combined with logical consequences is fundamental to the BLLP program as indicated in program objectives 6 and 7 (Table 2.6), the “L” of the “C.O.O.L.” formula (Table 2.6), and Steps One and Four of the Problem solving steps (Table 2.9).
Table 2.6
Program Objectives of the Becoming a Love and Logic Parent program

1. Identify the four steps to responsibility
2. Recognize who has the control
3. Offer appropriate choices in order to share the control
4. Identify if a given problem belongs to the child or to the parent
5. Set limits for children using "thinking words" or enforceable statements
6. Recognize empathetic responses
7. Design appropriate consequences for inappropriate behavior
8. Design a strategy for resolving a problem situation, or problem behavior, using Love and Logic principles

(Fay, et al., 2000, p.11)

BLLP is a structured, manualized program consisting of seven sessions, or modules, lasting 2 to 3 hours each session. During the modules various components of the program are covered (Table 2.6). Each module consists of a review of homework, a pre-written lecture, video presentations, individual and group exercises, discussions, weekly handouts, and the assignment of homework. Facilitators follow a program manual and parents utilize a handbook. The sessions are for parents only; though, it is recommended that child care be provided. The modules are designed to be led by a facilitator; however, no specific training is required beyond following the manual. The goal of the seven models is to accomplish the eight BLLP program objectives (Table 2.7).
Table 2.7  
Outline of the Becoming a Love and Logic Parent program

<table>
<thead>
<tr>
<th>Module</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>One</td>
<td>Raising Responsible Kids</td>
</tr>
<tr>
<td>Two</td>
<td>The Love and Logic Formula</td>
</tr>
<tr>
<td>Three</td>
<td>&quot;C&quot; Stands for Control That's Shared</td>
</tr>
<tr>
<td>Four</td>
<td>&quot;O&quot; Stands for Ownership of the Problem</td>
</tr>
<tr>
<td>Five</td>
<td>&quot;O&quot; is Also for Opportunity for Thinking</td>
</tr>
<tr>
<td>Six</td>
<td>&quot;L&quot; Stands for Let Empathy and Consequences Do the Teaching</td>
</tr>
<tr>
<td>Seven</td>
<td>Let's Wrap it up and take it Home!</td>
</tr>
</tbody>
</table>

(Fay, et al., 2000)

In Module 1, the parents are introduced to the Love and Logic program. Parents also learn about raising responsible children. This includes a) preparing children for the real world; b) that children learn from models and; c) the four steps to responsibility.

Parents view a video and participate in a discussion about the importance of preparing children for the real world by allowing them to make mistakes while they are young, and, when the consequences for the mistakes are small, and to learn from the consequences of their actions. In addition, parents learn that children learn by imitating or modeling adults. Participants are taught that most parents learn to parent by watching the adults in their own life. Module 1 also teaches about the four steps of responsibility: 1) give the child a task he/she can handle, in order to build responsibility, prepare the them for the real world, and develop a self-concept; 2) hope that the child "blows" it, in order for them to have a learning experience while the price is small; 3) let equal parts empathy and consequences do the teaching, and; 4) give the same task again, so
children have an opportunity to learn from their mistakes and show that you trust that they are capable human beings.

The importance of providing empathy is stressed. Empathy helps the child to realize that their mistakes hurt them, and the adult cares about how they are feeling. This helps to build and strengthen the relationship with the child. In addition, it diffuses the anger in children that can occur as a reaction to an angry response from an adult. This helps the child to focus on their actions and decisions and not on the adult’s angry reaction. Five steps are suggested for this process: 1) develop your own empathetic statement that is natural for you, "Wow, what a bummer," "How sad," or "Oh, no" (p. 19b) are some examples provided; 2) write the statement down; 3) practice the statement repeatedly on your own; 4) "hope and pray for the opportunity to use the statement" (p. 19b), and; 5) it is best to use the same statement each time your child makes a mistake or breaks the rules. It may be helpful to practice this statement with group members to ensure that it sounds genuinely empathetic and not sarcastic. Once the adult has expressed empathy, he/she provides a consequence for the child's actions. Consequences allow the child to take ownership of the problem. These consequences should be tied as closely to the situation as possible. The BLLP facilitator’s manual suggests that learning how to show empathy and understanding prior to providing consequences in the key to success as a Love and Logic parent.

The "Uh, Oh song" is also taught during Module 1. This technique introduces the parents to the Love and Logic version of timeout and sets the stage for a concept that will be covered in detail during Module 3, shared control. When home, parents take the child to his/her room while, or after, singing the words "Uh, oh, a little bedroom time ‘till you can be sweat". The song is sung in order to show the child that the parent is not angry, while at the same time showing that
the parent is still in charge of the situation. Parents are encouraged to give the child the choice of having the door open or closed, and the lights on or off; however, parents may make the choice to close the door if the child is out of control. A few suggestions are provided for accomplishing the task of locking the door: hold the door shut, jam a towel between the door and the frame, or take the door handle and turn it around so the lock is on the outside of the door. Parents are encouraged not to interact with the child during the bedroom time. Parents are also instructed to stay near the room and not engage in activities that distract from hearing the child. Once the child has calmed down, a timer is set for 1 to 2 minutes per year of the child's age and then bedroom time can end. Parents are discouraged from talking with the child about why they had bedroom time, and instead instructed to ask the child if they want a hug, or, no hug. Video presentations illustrate each concept, followed by discussion. Then, a bonus video, “The ‘E’s’ of Love and Logic, is watched followed by a discussion, and, short readings and homework are assigned at the end of the session.

In Module 2, parents learn about the Love and Logic process, and an easier way to parent. Parents also receive an overview of the "C.O.O.L." formula for raising responsible kids. In Modules 3, 4, 5 and 6, each step of the "C.O.O.L." formula is examined in detail.

Module 2 begins with a discussion time and then moves on to an overview of the module. Next parents are introduced to the "C.O.O.L" formula, which is an acronym to illustrate basic concepts for raising responsible children. The acronym stands for: "Control That's Shared; Ownership of the Problem; Opportunity for Thinking/Decision Making, and; Let Empathy and Consequences Do the Teaching" (p. 28). This formula works interactively with the Four Steps to Responsibility taught in Module 1. Parents are also introduced to the Love and Logic concepts that children learn to take care of themselves by watching adults take care of themselves, and,
when children cause problems, adults should lovingly hand problems back to the children. Videos, activities and discussions are utilized to learn about the concept. Finally, reading for the upcoming week is assigned.

Module 3 goes into greater depth on the first step of the “C.O.O.L.” formula: control that’s shared. Parents learn about the art and science of control and to give choices that they can live with. By providing children choices about situations in their lives, parents allow children to have some control on the parents’ terms. If children have more control over areas of their life, they are less likely to spend time trying to manipulate situations to gain control. Sharing control between parents and children has the effect of building and strengthen the relationship. Parents are encouraged to give children two choices, both of them being choices that the parent can live with. For example, “Would you rather clean your room, or rake the lawn so I’ll have time to clean your room?” for an older child, or, “Would rather have water or milk?” for a toddler. Choices should be given prior to the child saying “no” to a direction, and, if the child is unable to make the choice in 2 to 3 seconds, the parent makes the choice. Parents also need to make certain they only give choices when they are willing to allow the child to live with the consequences of a poor choice. Parents are encouraged give children choices on many small issues, while making the big decisions themselves. Caution is given to not threaten children with choices such as, “Do you want to pick up your toys, or have me take them all away?”. The parents are given some examples of “magic phrases” to help choices sound less threatening. A number of videos illustrating the various concepts are shown and several activities are completed to allow parents to practice. Readings are also assigned.

Module 4 covers the first “O” of the formula, which is ownership of the problem. Parents learn about three different parenting styles: Helicopters, Drill Sergeants, and Consultants.
addition, parents discuss who actually owns the problem and how to guide children through the process of owning and solving their own problems.

Love and Logic encourages parents to allow children to be responsible for their own problems. Doing otherwise robs the child of the opportunity to learn from their mistakes. If children begin to rely on someone else fixing problems for them early in life, they may continue to expect this into adulthood, and be shocked when the parents are unable to do so. BLLP suggests that there are three ways that parents tend to behave in their role as parents. Helicopter parents tend to “hover, rescue, and protect” (p. 61) throughout their children’s lives. They do not want their children to have to deal with problems, disappointment, and pain. While well meaning, BLLP indicates that Helicopter parents send the message to their children that “You can’t make it without me [parent]!” (p. 61). Parents who are Drill Sergeants control their children and order them around. BLLP indicates Drill Sergeants send the message that children are incapable of solving problems on their own and need the parents to tell the children how to think and what to do. Drill Sergeants may be surprised when, later in life, their children are faced with making decisions on their own, and are unable to make good choices.

BLLP advocates the Consultant style of parenting in which the parents make themselves available to provide advice and let the children make decisions about their own problems. This allows children to learn from making minor mistakes early in life, when the stakes are not quite as high. Consultant parents offer advice, choices, and alternatives instead of giving orders. Children then learn that that the choices they make affect their lives. If the problem is truly one that will affect the parent, then the parent should solve the problem. Also, the general rule for safety is, children should be able to solve their own problems as long as there is no risk to life or limb (Cline, personal communication, May 2011). BLLP offers five steps for guiding a child into
solving their own problems (Table 2.8). Steps three and four can be repeated as parents offer a number of choices, good and bad, and have the child state the consequences of each choice. As with the other modules, videos, discussion, activities and assigned reading are used to teach the principles in Module 4.

Table 2.8
*Problem Solving Steps*

<table>
<thead>
<tr>
<th>Step</th>
<th>What parents say</th>
</tr>
</thead>
<tbody>
<tr>
<td>One: Empathy</td>
<td>“How sad.”</td>
</tr>
<tr>
<td></td>
<td>“I bet that hurts.”</td>
</tr>
<tr>
<td>Two: Send the “Power Message”</td>
<td>“What do you think you are going to do?”</td>
</tr>
<tr>
<td>Three: Offer Choices</td>
<td>“Would you like to hear what other kids have tried?”</td>
</tr>
<tr>
<td>Four: Have the Child State the Consequences</td>
<td>“And how will that work?”</td>
</tr>
<tr>
<td>Five: Give permission for the Child to Either Solve the Problem or Not Solve the Problem</td>
<td>“Good luck, I hope that works out.”</td>
</tr>
</tbody>
</table>

(Fay, et al., 2000, p. 71)

Module 5 covers the second “O” in the “C.O.O.L.” formula, which is the opportunity for thinking/decision making. In this module parents learn about setting limits, “Thinking words” verses “Fighting words” (p. 80), and enforceable statements.

BLLP indicates that parents can guide children in making good choices by having them think about the consequences of the decisions they will make. By making statements that allow children to think about choices they have, rather than demanding a behavior of the children,
parents decrease the chance of conflict. Within these statements, parents also set the limits of what behavior will be acceptable. Parents are coached to make statements that are enforceable, and that focus on what they will do, rather than what the child will do. An example of a statement that accomplishes these steps is “I’ll be glad to listen when your voice is as soft as mine” (p. 89).

Module 5 also introduces the idea of a “Strategic Training Session” (p. 90-91) in which the parent sets aside time to try out the concepts from the modules. Parents are cautioned that planning must be done and that these sessions could take a great length of time. Videos, activities and discussion are used to teach the concepts. Reading is assigned to reinforce the concepts taught.

In Module 6, parents learn about the “L” in the formula. “L” stands for “Let Empathy and Consequences Do the Teaching” (p. 96). This module covers using consequences instead of punishment, using empathy and consequences instead of anger, constructing logical consequences, and how a parent can destroy the teaching value of a logical consequence.

The BLLP program teaches that parents can best teach their children to learn from their mistakes if they can prevent anger from getting in the way. When parents display anger, the child not only gets angry or afraid, but, they learn that anger is the correct response to other peoples’ mistakes. If children are focused on the parent’s anger, they are unable to think about the decisions they need to make. Parents are also more likely to punish children when they are angry rather than applying a logical consequence to the situation. Parents are instead encouraged to make a genuine empathetic statement, before giving a logical consequence that fits the situation. There are a variety of ways that logical consequences differ from punishment (Table 2.8). Love and Logic suggests three ways that logical consequences can occur: 1) The consequences is
obvious and can be delivered quickly; 2) You consult with the child, allowing the child to do the thinking, and the child determines the consequences, and; 3) You are unsure what to do, or are too angry and you need to think about the situation and perhaps consult with others.

Consequences should be tied to what might happen in a similar situation to an adult in the real world, tied to the time and place of the infraction, and described in a manner that moves the child into the thinking state. The BLLP program suggests that parents can derail the teaching of a logical consequence by getting angry and punishing the child, by spending a great deal of time explaining the situation, or, feeling sorry for the child and not following through with a consequence. As with previous modules, videos are utilized to illustrate concepts and discussion and activities are used to build understanding. Readings for the week are also assigned.
Table 2.9  
*Logical Consequences vs. Punishment*

<table>
<thead>
<tr>
<th>Logical Consequences</th>
<th>Punishment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Offer an opportunity for the child to be involved in decision-making</td>
<td>1. The adult makes the decisions.</td>
</tr>
<tr>
<td>2. Allow the child to hurt from the inside-out.</td>
<td>2. Hurts the child from the outside in.</td>
</tr>
<tr>
<td>3. Child has no opportunity to displace his/her anger.</td>
<td>3. Adult provides opportunity for the child to be angry and resentful, rather than working toward a solution.</td>
</tr>
<tr>
<td>4. Child has the opportunity to develop a new plan of reacting or acting.</td>
<td>4. Child pays for his/her deed.</td>
</tr>
<tr>
<td>5. Child does his/her own judging</td>
<td>5. Adult is the judge.</td>
</tr>
<tr>
<td>6. Child sees adult modeling problem solving techniques.</td>
<td>6. Child feels the imposition of power (learns to use power).</td>
</tr>
<tr>
<td>7. Adult voice is helpful and friendly.</td>
<td>7. Adult displays anger.</td>
</tr>
</tbody>
</table>

(Fay, et al., 2000, p. 99)

In Module 7, parents learn to model taking care of one’s self and avoid arguing with a child. They also look at the value of chores and review the previous modules by applying the “C.O.O.L.” formula to one of their personal situations.

Parents are encouraged to model the importance of taking care of one’s self by avoiding arguments with children and not taking on problems that children can handle themselves. In
addition, parents learn that chores provide an opportunity for children to succeed, contribute to the family, learn that parents are loving authority figures, and, they are taught that chores can be used for consequences as well. The authors make suggestions for completion of chores. They suggest that children not be paid for chores, unless you are paying them to complete chores for you. Never demand that chores be completed. Provide a reasonable timeline, the end of the day for example. Never remind the child to complete the chores but plan what will happen if the chores are not completed, and let the consequences do the teaching. Finally, parents are given a worksheet to outline how they will effectively use the “C.O.O.L.” formula to solve a current issue they may facing with their child. These are reviewed by the facilitator, the group, small breakout groups, or with another member of the group depending on the size of the group and the time remaining. Videos are used to illustrate the concepts, and discussion and activities reinforce the concepts. Parents are encouraged to complete the final readings and seek additional information on Love and Logic from the facilitators or the Love and Logic company as needed.

While there is no record of the number of times the BLLP curriculum has been taught, or, the number of people who have been exposed to the curriculum, there are currently over 6000 BLLP curriculums owned by various organizations, agencies, schools, companies and individuals (P. Canon, personal communication, September 13, 2010). Despite the wide distribution of the program, research on BLLP is scant, and none has been published; however, research studies can be obtained by contacting the publisher. The results of these studies are reported below. Additionally, one study is posted on the Love and Logic Website, and can readily be viewed (Fay, 2005).

Fay (2005) looked at the results of post/pretests of approximately 1000 parents and reported significant results as indicated by questionnaires following participation in the BLLP
Training Program. Parents were given the first questionnaire, BLLP Before Program Questionnaire, at the start of the first of seven, two hour, weekly sessions and an identical follow-up questionnaire, BLLP After Program Questionnaire, at the completion of the final session. Questionnaires were designed to measure perceptions of parenting competence, parenting stress and their child’s behavior. A comparison of test results indicated statistically significant improvements of parents’ perceptions in these areas. Fay conceded that, while the results were promising, they needed to be interpreted with caution due to the methodology of the study. He indicated that additional research needed to be conducted to justify generalizing the results of the study to a broad spectrum of the population. Also, research needs to be conducted utilizing randomized selection and assignment of participants, and a control group. In addition, Fay suggested that a comparison to a group receiving an alternate parenting program is needed.

In a study conducted through the Livingston Family Center in Michigan, Hayek (2000, as cited in Fay, 2005) examined the effects of BLLP on parents going through divorce and parents whose children were involved with the juvenile justice system. She found that there were significant reductions in use of illegal substances, in conflict between parent and child, and negative child behavior.

In a report on the effectiveness of the BLLP, Clarke (2004), found positive results for the program as indicated by self-reports of the parents participating in the groups. The sample included a total of 637 adults, in 34 different BLLP groups, from Tarrant County, Texas. Pretest and posttest responses on rating scales designed to specifically evaluate the BLLP program, BLLP Before Program Questionnaire and a Becoming a Love and Logic After Program Questionnaire, reveal a majority of participants viewed the BLLP program as positive and effective. Sixty-seven percent to 86% of respondents indicated an improvement in child
behaviors and 89% to 93% of parents indicated an improvement in their parenting behaviors after using the BLLP techniques.

Dwyer and Farhood (2004) reported statistically significant improvements in child behavior and parenting behavior as a result of implementing the BLLP program with 174 parents of school children in six school districts near Cleveland, Ohio. Parents attended six-sessions of the BLLP and completed the BLLP Before Program Questionnaire and a Becoming a Love and Logic After Program Questionnaire both designed specifically to evaluate the BLLP program.

A search of the ProQuest Dissertation & Thesis: Full Text database found four studies utilizing the BLLP program. These studies reveal conflicting results of the effectiveness of the BLLP program.

Lewin (2005) found an increase in academic success and a decrease in behavior referrals for at-risk students whose parents participated in the BLLP program. In addition, there was an increase, though not statistically significant, in the 40 Developmental Assets. Of the 10 at-risk students from Venture High School in California, whose parents completed the BLLP, 50% received no further disciplinary referrals, 30% received only one discipline referral, and 20% received multiple discipline referrals. There was a medium gain in academic progress as measured by a review of GPA records.

Cerdorian (2006) conducted a study with existing BLLP groups throughout Boulder, Longmont, and Denver, Colorado. Three hundred seventy-four parents of children 1-year-of age to 18-years-of-age were involved in the treatment groups and twenty-five parents were included in the control group. She found that the BLLP program significantly reduced parenting stress as measured by the Parenting Stress Index Short Form. Also, parents indicated that children's acting-out behavior was significantly decreased as measured using Fay's Becoming a Love and
Logic Parent Questionnaire. In addition, parents had a more positive perception of their role as a parent after having attended the BLLP program as measured by Fay's Becoming a Love and Logic Parent Questionnaire.

Wilson (2006) compared pretest, posttest, and follow-up scores on the Parent-Child Relationship Inventory between groups of foster parents from the Colorado Springs, Colorado area. The foster parents selected between completing a seven-session BLLP program, reading the Parenting with Love and Logic book, or a control group receiving no treatment. Eleven foster parents completed the BLLP program, four read the Parenting with Love and Logic book, and eight were part of the control group. Wilson found no significant differences between the scores on the posttest and follow-up scores of the three groups, with one exception, the control group had a significantly higher score on the Support scale of the PCRI.

Benjamin (2010) looked at the effectiveness of two different parenting programs, the Benjamin Interactive Parenting Model (BIPM) and the BLLP (BLLP), at making behavioral changes in adopted children with attachment problems. She utilized the Child Behavior Checklist (CBCL) to evaluate change in children's behavior and the Revised Adult Attachment Scale (R-AAS) to evaluate changes in caregiver attachment characteristics. Twenty participants were included in each of the three groups, the two parenting groups and the control group. After controlling for pretest differences, no significant differences were found between the three groups on either the CBCL or the R-AAS; however, parents who attended the parenting classes did report feeling more confident in their parenting abilities.
Chapter 3 - Method

This chapter presents the methods, instruments, and procedures used for this study. The overriding goal of this study was to determine the effects of attending a seven-week Becoming a Love and Logic Parent (BLLP) program on parent stress and child behavior.

Research Setting

This study was conducted using the Becoming a Love and Logic Parent program. Currently over 6000 organizations, agencies or school own the training programs, though, the Love and Logic Institute had no record of how often the program is run, or, how many parents had been trained (P. Canon, personal communication, September 13, 2010).

Participants were solicited from the ten elementary schools in the Liberty Public School District (LPS) in Liberty, Missouri. The district is in a suburban setting north of Kansas City, Missouri. Elementary schools in LPS are Kindergarten through Fifth Grade and children range in ages of 5-years-old to 12-years-old, with a total enrolment of 5404 elementary students as of January 4, 2011 and a K-12 enrollment of over 10,700 students. The population of LPS was 51,101 as of 2010. The population breakdown by Race and Ethnicity was as follows: Whites made up 89% of the population, African Americans made up 3.8% of the population, Native Americans made up 0.4% of the population, Asians made up 1.8% of the population, Hispanics made up 4.4% of the population, and “Other” made up 0.1% of the population. The elementary student population at was 51.1% male and 48.9% female. Whites made up 84.9% of the elementary student population, African Americans made up 4.6% of the elementary student population, Native Americans made up 0.7% of the elementary student population, Asians made up 3.0% of the elementary student population, Hispanics made up 4.8% of the elementary student population, Pacific Islander made up 0.4% of the elementary student population, and
“Multi” made up 1.7% of the elementary student population. The percentage of students participating in the federal Free and Reduced lunch program is as follows: an average of 20.3%, with the highest percentage being 41.77% and the lowest being 3.41%.

Participants were 196 parents, stepparents or grandparents of elementary school children in LPS who voluntarily signed up to be a part of the BLLP program. Participants were required to be over the age of 18 years and have at least one child in attendance at an elementary school in the Liberty Public School district (LPS). Information regarding the groups was distributed to all parents of elementary students via district folders sent home with students (Friday Folders). Participants then completed the sign-up sheets and returned them to their child’s school counselor who in turn sent them to this researcher (Appendix B). As sheets were collected, names were placed in an Excel spreadsheet by the order they were received, and, according to what night participants had indicated they could participate. Using a random table of numbers, participants were randomly selected and placed in either the treatment group or waitlist control group. If two people had completed a sheet indicating their desire to participate, both were included in the group if one was randomly selected. Participants for the treatment group were then notified via email or phone of their selection in one of the two groups. If they were no longer able to participate, another participant was randomly selected and contacted. Eventually, 80 were randomly placed in one of two treatment groups, either on Tuesday evenings or Thursday evening. Eighty were randomly placed on a waitlist as a control group and were given the opportunity to participate in a 7-session BLLP group at a later date.

**Measures**

Measures used for this study were the short form of the Parenting Stress Index (PSI/SF, Abidin, 1995) and the Eyberg Child Behavior Inventory (ECBI, Eyberg & Pincus, 1999). The
PSI/SF was selected due to the ability of the instrument to examine parenting stress as related to the parenting role. The ECBI was used in this study to determine the effectiveness of the parent education program in decreasing the frequency of acting-out behaviors and changing the parents' perception of the behavior as problematic.

**Parenting Stress Index (PSI) and Parenting Stress Index Short Form (PSI/SF)**

The Parenting Stress Index/Short Form (PSI/SF, Abidin, 1995) was used in the present study. The PSI/SF is a 36-item self-report measure widely used for measuring stress related to parenting in three areas: parental distress, stresses from the child’s behavioral characteristics, and stresses from parent-child interactions. The PSI/SF is a direct derivative of the full-length Parenting Stress Index (PSI). The items contained on the PSI/SF are also contained on the PSI with the exact wording. The PSI/SF was developed to fulfill clinicians’ need to have a valid measure of the stresses within the parent-child system that could be completed in less than 10 minutes. The PSI/SF was developed directly from the PSI, which is a 120-item, self-report measure that takes 20 minutes to complete (Table 3.2). Both measures assess stress in the parent-child system in the areas of child characteristics, parent characteristics and situational life stress.

Abidin (1995) identified child characteristics, parent characteristics and situational/demographic life stresses as important factors contributing to stress in the parent-child system. The Parenting Stress Index (PSI) was developed to measure the effects of these factors on a child’s emotional/behavioral development and the development of the parent-child relationship. It is designed for use with parents of children 1 month to 12 years, with at least a fifth-grade education. Normative data were collected from 2,633 mothers of children ages 1 month to 12 years and 200 fathers of children ages 6 months to 6 years. The PSI has been validated in a number of U.S. samples and international cultures with comparable statistical
characteristics, suggesting that it is likely to maintain validity with a number of U. S. populations (Abidin, 1995).

The measure is completed by hand and respondents are instructed to respond to items on the answer sheet in one of three ways: by circling SA (strongly agree), A (agree), NS (not sure), D (disagree), or SD (strongly disagree), by circling 1 to 5, or, by circling a yes-no response on the Life Stress scale. The PSI produces 4 scores: a Total Stress score, Child Domain score, Parent Domain score and a Life Stress score. The higher the score in any scale indicates greater concern. Raw scores are totaled and converted into percentile scores. Total Stress raw score of 260 or above is considered high and these respondents should be considered for referral for intervention. Percentile scores between the 15th percentile and the 85th percentile are considered within normal range. Percentile scores at or above the 85th percentile are considered high.

The Total Stress score is obtained by combining the scores of the Child Domain scores and the Parent domain scores. The Life Stress score is not included in the Total Stress Score.

The Child Domain contains six subscales: Distractibility/Hyperactivity (DI), Adaptability (AD), Reinforces Parent (RE), Demandingness (DE), Mood (MO), and Acceptability (AC). It is designed to determine the effects of child characteristics on the overall stress in the parent-child system. There are 47 items contained within the Child Domain scale. The DI subscale contains nine items. The AD subscale consists of eleven items. The RE subscale consists of six items. The DE subscale consists of nine items. The MO subscale consists of five items. The AC subscale consists of seven items. The items assess the child’s temperament or behavior and the parents’ perceptions of its impact.

The Parent Domain contains seven subscales: Competence (CO), Isolation (IS), Attachment (AT), Health (HE), Role Restriction (RO), Depression (DP), and Spouse (SP).
are 54 items contained within the Parent Domain scale. The CO subscale contains thirteen items. The IS subscale contains six items. The AT subscale contains seven items. The HE subscale contains five items. The RO subscale seven items. The DP subscale consists of nine items. The SP subscale consists of seven items. The subscales are designed to measure the effect of the parent’s functioning on the stress and dysfunction on the parent-child system.

The Life Stress scale is an optional scale designed to measure stresses experienced by the parent existing outside the parent-child system. It consists of 19 Yes-No questions assessing life situational factors. It is not included as part of the Total Stress score.

Abidin (1995) discussed the test-retest reliability of the PSI as indicated by four studies. The PSI was administered to 30 mothers seeking consultation regarding child behaviors at a group pediatrics clinic. The assessment was readministered 1 to 3 months after the initial administration. Correlation coefficients between the first and second set of cores were .96 for Total Stress, .63 for the Child Domain, and .91 for the Parent Domain which indicate stability of scores across a 1-3-month time period.

The PSI was administered to 15 mothers who were visiting a well-care pediatrics clinic. Three weeks later the PSI was readministered. Correlation coefficients were .82 for the Child Domain and .71 for the Parent Domain. The author indicated a significant ($p < .01$) and strong relationship for scores (Burke, 1978; as cited in Abidin, 1995). These scores suggest stability over a 3-week time period.

Zakreski (1983; as cited in Abidin, 1995) found her test-retest reliability coefficients to be .69 for the Parent Domain, .77 for the Child Domain, and .88 for the Total Stress score in a sample of 54 parents involved in a study examining the relationship of stress, marital status, and infant development. These scores indicate stability over the 3-month time period.
Hamilton (1980; as cited in Abidin, 1995) studied the relationship of stress, coping, and support to the quality of the infant-mother attachment in 37 mothers utilizing the PSI. To determine test-retest reliability, the PSI was administered early in the study and then was readministered a year after the initial administration. The reliability coefficients were .55 for the Child Domain, .70 for the Parent Domain, and .65 for the Total Stress score. These scores show stability over a 1-year time period.

Abidin (1995) cites a number of studies to show support for the construct and predictive validity of the PSI among various populations and for various issues. Of particular interest to this current study are those references pertaining to child behavior problems and program evaluation.

Acton and During (1992) examined the effects of an aggression management program on reducing children’s aggressive behaviors and reducing parenting stress. In a study involving 29 parents enrolled in a 13-week treatment program for managing aggressiveness in their children, aggressive behavior was reduced and PSI scores were significantly reduced following the completion of the program.

MacInnis (1984; as cited in Abidin, 1995) found that a relationship exists between parents’ irrational beliefs about appropriate child behavior and physical abuse of the children. A comparison of 20 high-risk mothers and 29 nonabusive mothers revealed that high parenting stress scores on the PSI were associated with a greater risk of physical abuse. There was a significant correlation between measures of parenting stress, general irrationality, self-reported measures of discipline, and annoyance with child behavior.

McBride (1989) examined the relationship between perceived parenting competence and parental stress in 94 fathers. Fathers in the study were enrolled in a parent-child parenting education program examining the effects of a parenting education program for fathers and
children. Fathers were administered the PSI prior to beginning the parenting education program. An inverse relationship was found between fathers’ perceived competence as a parent and their level of stress related to parenting.

Abidin, Jenkins, and McGaughey (1992) examined the relationship of PSI scores to children’s behavioral adjustment in a sample of 100 white, middle-class mothers with children between 6 and 12 months at the time of initial administration of the measure. The measure was readministered when 4 ½ years later. The Child Domain and Parent Domain were significant predictors of subsequent child behavior related to conduct disorder, social aggression, attention problems, and anxiety withdrawal. All of the children whose mothers initially scored above the clinical significance level were identified as having behavior problems by their teachers at 4 ½ years.

The Parenting Stress Index/Short Form (PSI/SF) will be used during this study. It is a 36-item self-report measure developed directly from the PSI at the request of clinicians and researchers. The PSI/SF was developed by numerous factor analyses of the full-length measure. From this, it was determined that a three-factor solution was best to describe the data: Parental Distress (PD), Parent-Child Dysfunctional Interaction (P-CDI), and Difficult Child (DC). The PSI/SF produces scores for the three subscales above and a Total Stress score. Normative data were established with 530 mothers who brought their children for a 1-year well check visit with a pediatric clinic and with 270 mothers who brought their children to the practice for a well-check associated with a day-care, kindergarten or first grade (Abidin, 1995).

The PSI/SF consists of the PSI Professional Manual and a hand-scorable PSI/SF test sheet. One side of the form contains directions and an example. On the reverse side, the sheet contains an area for basic demographic information, the 36 items and an area for answering
items. It is designed for use with parents of children 1 month to 12 years, with a minimum fifth-grade education. The test takes approximately 10 minutes to complete. The measure is completed by hand and respondents are prompted to respond to items on the test sheet in one of two ways: by circling SA (strongly agree), A (agree), NS (not sure), D (disagree), or SD (strongly disagree), or, by circling 1 to 5. Raw scores are totaled and converted to percentile scores. Raw scores range from 12 to 60 on the three subscales: PD, P-CDI, and DC. On the Total Stress scale, the raw scores range from 36 to 180. Scores between the 15th percentile and the 85th percentile are considered within normal range. Scores at or above the 85th percentile are considered high.

The PSI/SF includes a Defensive Responding Scale that assesses the extent the respondent approaches the instrument with a desire to present a positive impression and minimize the problems and stress in the parent-child relationship. A raw score of 10 or below suggests one of the following hypotheses: a) the individual is trying to portray himself or herself as very competent and unaffected by the usual stresses associated with parenting; b) the individual is not interested in the parenting role and, therefore, is not experiencing the usual stresses associated with being a parent; or c) the individual is a very competent parent, capable of handling the stresses of childrearing and has good relationships with his or her spouse and others. Scores falling in the 10 or below range were interpreted with caution.

As with the PSI, the Total Stress Score was designed to determine a picture of the overall stress experienced by an individual due to the parental role. It is not intended to provide an assessment of stresses associated with other life events. A raw score is obtained by adding the total scores from the three other scales: Parental Distress (PD), Parent-Child Dysfunctional Interaction (P-CDI), and Difficult Child (DC). Raw scores rage from 36 to 180. Raw scores of 90 and above (at or above the 90th percentile) are indicative of a clinically significant level of stress.
The Parental Distress (PD) subscale establishes the level of stress that a parent is experiencing related to his or her role as a parent due to personal factors that are related to parenting. Stresses that are associated with the PD include impaired sense of parenting competence, restrictions placed on other life roles; conflict with the child’s other parent, lack of social support, and presence of depression. Raw scores on the PD subscale range from 12 to 60. Raw scores of 36 and above (at or above the 90th percentile) indicate that a respondent may be experiencing problems with personal adjustment.

The Parent-Child Dysfunctional Interaction (P-CDI) subscale examines the parent’s perception that his or her child does not meet the parent’s expectations and the parent-child interactions are not reinforcing to the parent. Scores on the P-CDI reveal how the parent feels about the parent-child relationship. Elevated scores indicate that the parent feels the child is a negative element of his or her life. The parent feels abused or rejected by the child and there is a sense of alienation from the child. Raw scores on the P-CDI subscale range from 12 to 60. Raw scores of 27 and above (at or above the 90th percentile) indicate that there are problems with the parent-child bond. Raw scores of 30 or higher (at or above the 95th percentile) may indicate the potential for child abuse, neglect, or rejection.

The Difficult Child (DC) subscale focuses on some of the behavioral characteristics that make a child either easy or difficult to manage. Items on this subscale examine behavioral characteristics associated with the child’s temperament. In addition, the DC looks at characteristic that may be associated with learned patterns of defiant, noncompliant, and demanding behavior. Raw scores on the DC subscale range from 12 to 60. Raw scores of 26 and above (at or above the 90th percentile) indicate that there are sever problems with the child’s behavior and some type of professional assistance is recommended.
A limitation of the PSI/SF is the limited research conducted with the instrument as compared with the PSI. While limited, the data that are available based on the normative samples suggest that test-retest and internal consistency is good to very good. Scores ranged from .68 to .84 for test-retest reliability and from .80 to .91 for the internal reliability coefficients. The test-retest reliability was determined with the first sample of mothers and the coefficient alpha was determined with the combined samples (Abidin, 1995) (Table 3.1).

Table 3.1
Test-Retest and Internal Consistency for the PSI/SF

<table>
<thead>
<tr>
<th>Scale</th>
<th>Number of items</th>
<th>Time Interval</th>
<th>Test-Retest</th>
<th>Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Stress</td>
<td>36</td>
<td>6 months</td>
<td>.84</td>
<td>.91</td>
</tr>
<tr>
<td>Parental Distress (PD)</td>
<td>12</td>
<td>6 months</td>
<td>.85</td>
<td>.87</td>
</tr>
<tr>
<td>Parent-Child Dysfunctional Interaction (P-CDI)</td>
<td>12</td>
<td>6 months</td>
<td>.61</td>
<td>.80</td>
</tr>
<tr>
<td>Difficult Child (DC)</td>
<td>12</td>
<td>6 months</td>
<td>.78</td>
<td>.85</td>
</tr>
</tbody>
</table>


The validity of the PSI/SF was determined via correlations of the PSI/SF and the PSI from the scores of the 530 mothers in the normative sample. The Total Stress PSI correlated .94 with the PSI/SF Total Stress. The PSI/SF Parent Distress correlated .92 with the Parent Domain. The Difficult Child on the PSI/SF correlated .87 with the Child Domain on the PSI. The PSI/SF Parent-Child Dysfunctional Interaction correlated .50 with the Child Domain and .73 with the
Parent Domain from the PSI (Abidin, 1995) (Table 3.2). Abidin (1995) indicated that the PSI/SF did not possess enough independent research to support the validity of the instrument; however, due to PSI/SF having been derived directly from the PSI, it should share the validity of the PSI. Sample questions from the PSI/SF can be found in Appendix C.

Table 3.2
*Correlations Between the PSI/SF and the PSI*

<table>
<thead>
<tr>
<th>PSI scale</th>
<th>Parental Distress (PD)</th>
<th>Parent-Child Dysfunctional Interaction (P-CDI)</th>
<th>Difficult Child (DC)</th>
<th>Total Stress</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Stress (TS)</td>
<td>.82</td>
<td>.68</td>
<td>.77</td>
<td>.94</td>
</tr>
<tr>
<td>Child Domain (CD)</td>
<td>.49</td>
<td>.73</td>
<td>.87</td>
<td>.86</td>
</tr>
<tr>
<td>Adaptability (AD)</td>
<td>.45</td>
<td>.49</td>
<td>.74</td>
<td>.70</td>
</tr>
<tr>
<td>Acceptability (AC)</td>
<td>.32</td>
<td>.77</td>
<td>.62</td>
<td>.68</td>
</tr>
<tr>
<td>Demandingness (DE)</td>
<td>.45</td>
<td>.48</td>
<td>.80</td>
<td>.72</td>
</tr>
<tr>
<td>Mood (MO)</td>
<td>.37</td>
<td>.64</td>
<td>.78</td>
<td>.73</td>
</tr>
<tr>
<td>Distractibility/Hyperactivity (DI)</td>
<td>.33</td>
<td>.38</td>
<td>.56</td>
<td>.53</td>
</tr>
<tr>
<td>Reinforces Parent (RE)</td>
<td>.29</td>
<td>.79</td>
<td>.47</td>
<td>.60</td>
</tr>
<tr>
<td>.92</td>
<td>.50</td>
<td>.54</td>
<td>.54</td>
<td>.83</td>
</tr>
<tr>
<td>Parent Domain (PD)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Depression (DP)</td>
<td>.77</td>
<td>.43</td>
<td>.47</td>
<td>.70</td>
</tr>
<tr>
<td>Attachment (AT)</td>
<td>.45</td>
<td>.65</td>
<td>.43</td>
<td>.62</td>
</tr>
<tr>
<td>Restriction of Role (RO)</td>
<td>.82</td>
<td>.27</td>
<td>.43</td>
<td>.65</td>
</tr>
<tr>
<td>Competence (CO)</td>
<td>.67</td>
<td>.54</td>
<td>.54</td>
<td>.72</td>
</tr>
<tr>
<td>Social Isolation (IS)</td>
<td>.78</td>
<td>.29</td>
<td>.24</td>
<td>.56</td>
</tr>
<tr>
<td>Relationship With Spouse (SP)</td>
<td>.65</td>
<td>.21</td>
<td>.30</td>
<td>.50</td>
</tr>
<tr>
<td>Health (HE)</td>
<td>.51</td>
<td>.18</td>
<td>.30</td>
<td>.43</td>
</tr>
</tbody>
</table>

Note. N=530. All correlation are significant at p<.0001. Reproduced by special permission of the Publisher, Psychological Assessment Resources, Inc., 16204 North Florida Avenue, Lutz, FL 33549, from the Parenting Stress Index Manual by Richard R. Abidin, Ed.D., Copyright 1990, 1995 by PAR, Inc. Further reproduction is prohibited without permission from PAR, Inc.
The Eyberg Child Behavior Inventory

The Eyberg Child Behavior Inventory (ECBI, Eyberg & Pincus, 1999) was used in this study to determine the effectiveness of the parent education program in decreasing the frequency of acting-out behaviors and in changing parental perception of the behavior as problematic. The ECBI is frequently used to measure the outcome of parenting education interventions. Due to the design of the instrument, utilizing a 7-point scale, gradual change can be measured. In addition, the respondents are directed to rate the frequency of a child’s current behavior, making it possible to measure current behavior prior to a parenting intervention and then following the intervention.

Designed to be completed by parents, the ECBI is a widely used rating scale used to measure conduct problems in children from ages 2 through 16 years. The ECBI consists of 36 items that assess typical behaviors reported by parents of children with conduct problems; however, the items are also considered to contain behaviors common to all children, and, has normative data on both children identified as conduct-disordered and those who do not have conduct problems. The assessment takes approximately 5-10 minutes to complete and requires at least a sixth grade reading level. Each behavior is rated on two scales: a 7-point intensity scale indicating the frequency of behaviors and a Yes-No Problem scale that identifies whether or not parents view the child's behavior as problematic.

The ECBI Intensity scale has a raw score range of 36 to 252. Raw scores are totaled and then converted to T scores using table provided in the test manual. T scores range from 33 to 94. The ECBI cutoff score for the Intensity scale is a raw score of 131 or above (T score of 60 or higher), indicating that the child needs further evaluation to determine potentially significant psychopathology. The ECBI Problem scale has a raw score range of 0 to 36. Raw scores are totaled and then converted to T scores using a table provided in the test manual. T scores range
from 41 to 88. For the Problem scale, a raw score of 15 or above (T score of 60 or higher) indicates that the parent is very bothered by the child's behavior. Normally, parents who indicate a high frequency of acting-out behaviors will also indicate that the behaviors are a significant problem. Conversely, parents indicating that the child's behavior falls within normal range, a raw score of 131 or below (T score of 60 or below), will indicate that the behavior is less problematic. Scores that are divergent, a high elevation on one scale and not the other should be interpreted carefully (Eyberg & Pincus, 1999).

In addition to its use as a diagnostic tool, the ECBI is frequently used as a measure of treatment outcome for conduct-disordered children and children who fall within the normal behavior range. Oglesby (1992, as cited in Eyberg & Pincus, 1999) found differences in scores following parent education workshops with mothers whose children were screened below the Intensity scale cutoff. This shows the inventories usefulness in measuring change due to parent education for parents of children whose behavior may be normal, but still frustrating to parents. Rogers (2007) found the ECBI to effectively measure a decrease in disruptive behaviors following a 14-week parent education program. Lepeltier (2008) found significant decreases in acting-out behaviors as measured by pretest and posttest scores for children whose parents attended a 5-week parenting education program. As this current study is intended to measure the behavioral change in a random sample of elementary school aged children, who may or may not have conduct problems, the ability of the ECBI to measure behavioral change with a wide range of children makes is important.

Originally, the ECBI was standardized on parents of children in 1980, and parents of adolescents in 1983. Both samples drew children from a pediatric outpatient clinic of a large urban medical school in the northwest U.S. Children were from primarily Caucasian, lower and
lower-middle income families. Later, children were drawn from one of five pediatric clinics in the northwest and from a metropolitan city school district. In 1999, the ECBI was restandardized with parents from six outpatient pediatric setting in the Southeast (Colvin, Eyberg, & Adams, 1999). The sample included 798 children between the ages of 2 and 16 years. The ethnic distribution was very similar to that of the 1992 U.S. census data. Correlation between the Intensity scale and the Problem scale was the same as the original 1980 standardization data, .75.

The ECBI manual provides scores for internal consistency, test-retest reliability, and interrater reliability. In the 1980 standardization, with 512 children from 2 to 12 years of age (Robinson, Eyberg, & Ross, 1980), and the 1983 standardization with 102 adolescents (Eyberg & Robinson, 1983), internal consistency coefficients were .98 for both the Intensity scale and the Problem scale in both studies. In the 1999 restandardization study (Colvin et al., 1999), with 798 children between the ages of 2 and 16 years, the internal consistency coefficients were .95 for the Intensity scale and .93 for the Problem scale. Test-retest correlations across a 3-week time span on the Intensity scale was .86 and .88 for the Problem scale (Robinson et al., 1980). Reliability coefficients over 12-week intervals for the Intensity scale and Problem scale have been found to be .80 and .85, respectively (Funderburk, Eyberg, & Behar, 1989; as cited and Eyberg & Pincus, 1999). Funderburk and associates (1989; as cited in Eyberg & Pincus, 1999) also found coefficients of .75 for both the Intensity scale and Problem scale over a 10-month interval. Eyberg and Robinson (1983) obtained interrater reliability coefficients of .86 for the Intensity scale and .79 for the Problem scale in a study with parents of normal teenagers, in which both parents completed the ECBI. In a study of 44 children identified as having conduct disorder, interrater reliability coefficients of .69 for the Intensity scale and .61 for the Problem scale were obtained (Eisenstadt, McElreath, Eyberg, & McNeil, 1994).
The ECBI manual provides information regarding validity in terms of construct validity, discriminative validity, and sensitivity to treatment (Eyberg & Pincus, 1999). In a sample of 159 children ages 4 to 16 years, the ECBI was significantly correlated with the total score of the Child Behavior Checklist (CBCL, Achenbach & Edelbrock, 1983) and the Intensity scale and Problem scale correlated with the CBCL Externalizing scale (r = .67 and .75, respectively) (Boggs, Eyberg, & Reynolds, 1990). Eyberg et al., (1992) found that the ECBI correlates significantly with the Child Domain scale of the Parenting Stress Index (PSI, Abidin, 1995) in a study of 165 children ages 2 to 10 years (r = .62 and .59, respectively).

In the ECBI restandardization study, Colvin et al. (1999) compared subgroups of children. Children who had been referred for and received treatment for behavior problems had significantly higher Intensity and Problem scores than the nonproblem group. Children who had been referred for treatment for behavior problems but did not receive treatment also had significantly high scores on the two scales than the nonproblem children.

Weis, Lovejoy, and Lundahl (2005) conducted an examination of the factor and discriminative validity of the ECBI with a sample of 115 mothers, grandmothers, and foster mothers of children ages 4 to 6 years who were referred to an outpatient psychology clinic. Their findings indicate that the ECBI does differentiate between children with significant behavior problems and those children without significant behavior problems. The ECBI was also able to differentiate between children with inattentive and oppositional behaviors from those children with more aggressive behaviors.

A number of treatment outcomes presented by Eyberg and Pincus (1999) indicated the ability of the ECBI to show change as a result of treatment. Two studies of particular relevance to the current study are those of Olgesby (1992, as cited in Eyberg & Pincus, 1999) and Brestan,
Eyberg, Boggs, and Algina (1997). Olgesby showed significant change at a 1-month follow-up resulting from parenting education workshops for parents of children specifically selected due to having behavior problems within the normal limits on the ECBI. Brenstan et al. found evidence of generalization effects of treatment with the siblings of children receiving treatment. Rogers (2007) found significant decrease in acting-out behaviors as measured by posttest and pretest scores for children whose parents were involved in a 14-week parent education and support group. Lepeltier (2008) found significant decreases in acting-out behaviors as measured by pretest and posttest scores for children whose parents attended a 5-week parenting education program. Sample questions from the ECBI can be found in Appendix A.

**Procedure**

**Research Design**

This study was an experimental, nonequivalent control group, repeated measures design, using an accessible population of parents who voluntarily signed up to attend parenting classes. The within subject factors measured over time were the parenting stress scores and the child behavior scores. The between-subject variables were the two levels of the treatment variable: treatment or control group.

**Treatment Condition**

The treatment condition was the completion of a seven module BLLP program (Appendix D). The control group was placed on a waitlist and was provided no treatment until after the study was completed when they were offered the opportunity to participate in a seven-session BLLP program.

On the evening of the first sessions, volunteers were present to sign parents in and direct them to the location of the child care providers. Group facilitators welcomed participants as they
entered and directed them to a seat. Each participant was given an envelope containing a pretest packet with a) a letter on informed consent (Appendix F), b) a questionnaire consisting of demographic questions (Appendix G), c) the PSI/SF (Appendix C), d) ECBI (Appendix A), and e) some open-ended questions from the BLLP pretest questionnaire (Appendix H). Participants were instructed to complete packets and turn them in to one of the volunteers. The facilitators were present to answer participants’ questions. Participants were directed to focus on one of their elementary school aged child, the Target Child, when completing the questionnaire. Parents unable to attend the first session were invited to come early for the following session to complete the packet prior to being exposed to the treatment. Upon completion of the packet, participants were given a Parent Handbook containing material and readings to be completed during and between sessions. Handbooks were provided free of charge by a $1000.00 grant from the district Parent Teacher Association Head Council. Following the collection of the packets, facilitators introduced themselves and began with the Module 1 material.

The sessions were conducted over an eight week time period, from January, 2012 to March, 2012. Groups were conducted following the manual of the BLLP program: in seven 2 – 2 ½ hour sessions. Content for the program is standardized and consisted of videos, lecture, group exercises, weekly handouts, and homework assignments discussed at the beginning of the following class. In order establish the optimal time and day for the groups, input was sought from all elementary school parents via a survey sent home with their child (Appendix E). Surveys were collected by the building school counselor and returned to the researcher. Based on the input provided by 179 parents, the best time and day to run the groups in order for a maximum number of participants was Thursdays from 6PM to 9PM. In order to accommodate the number of parents needed to have a sufficient sample size, while at the same time providing a
quality experience, a second class was added on Tuesdays from 6PM to 9PM. Both groups were run during the same weeks at the same locations by both presenters. Care was taken to schedule around events that many of the parents were likely to be involved in, such as parent teacher conferences and holiday breaks. It was impossible to find an uninterrupted seven-week time period; therefore, one week was taken off between sessions five and six to accommodate the district’s scheduled Spring Break. The two treatment groups were comprised of 40 participants. This number was based on the experiences of one of the co-facilitating counselors and input from Charles Fay (personal communication, April 15, 2011), one of the program authors.

Child care was provided to ensure that it was not an issue preventing parents from being involved in the groups. Child care providers were two district employees who were paid $250.00 for their time. A varying number of high school or junior high students who were involved in various groups through school also volunteered to assist. Volunteer students were recruited via their organization sponsors. Refreshments were provided by Parent Teacher Associations from participating elementary schools and care was taken ensure participants and children were not given foods that they may have an allergic reaction to. During the sessions, multiple participants indicated that they were only able to participate in the sessions due to the provided child care.

Groups were initially scheduled to be conducted at the district educational resource center in order to provide a central location; however, it was determined by the group members during the first session to move the remaining sessions to the elementary school where one of the group facilitators was a counselor. The rationale for the move was to make it easier to set up for the sessions and to provide a space more conducive to babysitting the 25-40 children brought to the sessions by their parents participating in the sessions.
The groups were co-conducted by two master’s level certified elementary school counselors employed by LPS, one male and one female. Both counselors had experience running parenting groups, one specifically with the BLLP program. The other counselor had facilitator training in using the BLLP program provided by the authors of the program.

BLLP was a structured, manualized program consisting of seven sessions, or modules, lasting 2 to 3 hours each session. During the modules various components of the program were covered. Each module consisted of a review of homework, a pre-written lecture, video presentations, individual and group exercises, discussions, weekly handouts and the assignment of homework. Facilitators followed a program manual and parents utilized a handbook. The sessions were for parents only; however, as previously indicated, childcare was provided. The modules were designed to be led by a facilitator; however, no specific training was required beyond following the manual. The goal of the seven modules was to accomplish the eight BLLP program objectives (Appendix D). Following the night of the first module, all videos, accept for those indicated as bonus video were shown. After the first session, it was determined that including the bonus videos kept the children in childcare too long (after 9 PM) and behavior problems began to occur.

On the evening of the final session, parents participated in the Module 7 session and then were given an envelope containing a posttest packet. Facilitators were present to answer questions and collect completed packets. Posttest parent questionnaires were identical to pretest parent questionnaires, minus the informed consent, and, with two different open ended questions (Appendix I). Parents unable to attend the final class, were sent the posttest via their student and returned to school via the student. This posttest included a letter of thanks with instructions on
how to return the packet (Appendix J). Calls and reminder emails were conducted in attempt to get as many posttests returned as possible.

Control group parents were contacted via phone and email to be informed that they had not been selected for the treatment groups, but, instead would be placed on a waitlist for a later group. If a parent indicated that they were no longer interested in participating, they were removed from the list and a new parent was randomly selected and contacted. The 80 participants eventually selected, were contacted the week prior to the first session of the treatment groups, and informed that a pretest packet would be sent home via their student via the district Friday Folder. The packet was identical to the treatment group packet, with the addition of a letter explaining their participation in the control group and instructions on how to return the completed packet (Appendix K). Parents then returned the completed posttests in an envelope provided. Phone calls and emails were conducted in order to get as many pretest returned as possible. Thirty-eight pretests were eventually returned after multiple attempts at getting all eighty to be returned.

The week prior to the final treatment session, the 38 control group participants who had returned completed pretest packet were notified via email and phone that a posttest packet, would sent home with their student in the district Friday Folder. Posttests questionnaires were sent home with students to control group parents via a sealed envelope during the final week of the BLLP program and returned to school via a sealed envelope when completed (Appendix L). After multiple phone calls and emails, thirty posttests were returned.

**Statistical Treatment**

This study involves one independent variable: the treatment condition of attending the seven module sessions of the BLLP program. The study involves six dependent variables: a)
Total Parent Stress as measured by the TS score on the PSI/SF, b) Parental Distress as measured by the PD score on the PSI/SF, c) Parent-Child Dysfunctional Interaction as measured by the P-CDI score on the PSI/SF, d) Difficult Child behavior as measured by the DC score on the PSI/SF, e) the Intensity score on the ECBI, and, f) the Problem score on the ECBI.

As previously indicated, the PSI/SF is utilized to measure stress related to parenting. The PSI/SF is made up of three subscales measuring various aspects of parenting stress: Parental Distress, Parent-Child Dysfunctional Interaction and Difficult Child behavior. In addition, the PSI/SF yields a Total Stress (TS) score composed of the scores on the three subscales. The ECBI is designed to measure perceptions of child misbehavior. The ECBI is made up of two scales. The Intensity scale measures the frequency of certain behaviors. The Problem scale measures whether or not those behaviors are considered to be bothersome to the respondent.

Assumptions

Certain assumptions must be met to draw inferences from the statistical testing. The first assumption is independence of observation. This is determined via sampling method and regards how likely respondents are related by more than chance. As the sample was made up of people who were interested in either parent education or the Becoming a Logic and Logic Parent program, and those who were able to attend at the established times, it is likely that they share commonalities.

Homoscedasticity, the assumption of equal variances within populations, was examined because the means of two groups will be compared. Leven's test was used to accomplish this. A \( p > .05 \) indicates that the variances are roughly equal and our assumptions are acceptable. A
score of $p < .05$ indicates the variances are significantly different and the assumption of homogeneity of variance were violated. Leven’s was violated on occasion in this current study and is noted accordingly in the results section.

**Research questions**

The current study addresses the following research questions:

1. Does the Becoming a Love and Logic Parent program influence parenting stress as measured by the Parenting Stress Index/Short Form Total Stress score?
2. Does the Becoming a Love and Logic Parent program influence parenting stress as measured by the Parenting Stress Index/Short Form Parental Distress Subscale score?
3. Does the Becoming a Love and Logic Parent program influence parenting stress as measured by the Parenting Stress Index/Short Form Parent-Child Dysfunctional Interaction Subscale score?
4. Does the Becoming a Love and Logic Parent program influence parenting stress as measured by the Parenting Stress Index/Short Form Difficult Child Subscale score?
5. Does the Becoming a Love and Logic Parent program influence children’s behavior as measured by the Eyberg Child Behavior Inventory Intensity scale?
6. Does the Becoming a Love and Logic Parent program influence children’s behavior as measured by the Eyberg Child Behavior Inventory Problem scale?

**Hypothesis**

1. There will be a statistically significant change in stress as measured by the Total Stress (TS) score on the Parenting Stress Index/Short Form (PSI/FS) for those parents exposed to the Becoming a Love and Logic Parent program as compared to the control group.
2. There will be a statistically significant change in stress as measured by the Parental Distress (PD) subscale score on the Parenting Stress Index/Short Form (PSI/FS) for those parents exposed to the Becoming a Love and Logic Parent program as compared to the control group.

3. There will be a statistically significant change in stress as measured by the Parent-Child Dysfunctional Interaction (P-CDI) score on the Parenting Stress Index/Short Form (PSI/FS) for those parents exposed to the Becoming a Love and Logic Parent program as compared to the control group.

4. There will be a statistically significant change in stress as measured by the Difficult Child (DC) score on the Parenting Stress Index/Short Form (PSI/FS) for those parents exposed to the Becoming a Love and Logic Parent program as compared to the control group.

5. There will be a statistically significant change in their target child's conduct problems measured by the Intensity scale of the Eyberg Child Behavior Inventory (ECBI) for those children whose parents were exposed to the Becoming a Love and Logic Parent program as compared to the control group.

6. There will be a statistically significant change in their target child's conduct problems measured by the Problem Scale of the Eyberg Child Behavior Inventory (ECBI) for those children whose parents were exposed to the Becoming a Love and Logic Parent program as compared to the control group.

**Protection of Human Subjects and Informed Consent**

Approval to conduct the study was obtained by the Kansas State University’s Institutional Review Board and the Assistant Superintendent of Curriculum and Instruction for the Liberty
Public School District. Participation in the research was voluntary; this was explained both verbally by the researcher and in the letter of informed consent accompanying each pretest questionnaire (Appendix F). This letter also explain the purpose of the research, including the participants roles, the estimated time of intervention, the potential risks and benefits of participating in the study. All questionnaires were collected and kept in a secure location and viewed only by the researcher. As previously stated, participants were given a free copy of the BLLP handbook utilized in the course.
Chapter 4 - RESULTS

Introduction

Chapter IV presents the results of this study in two sections. The first section describes the sample. The next section describes the results for the research questions and hypothesis.

Description of the Sample

A total of 196 people indicated an interest in taking part in the Love and Logic classes and research project. Of those 196, 80 were randomly assigned to the treatment group and 80 were randomly assigned to a waitlist group. Seventy-five participants of the treatment group completed pretest questionnaires. Thirty-four of the waitlist control group completed pretest questionnaires. Of the 75 treatment group parents completing pretest questionnaires, 56 completed posttest questionnaires. Of the waitlist control group completing pretest questionnaires, 30 completed posttest questionnaires. Data were collected on 86 parents/caregivers of elementary school age children attending one of 10 elementary schools in the Liberty Public School District who completed both the pretest and posttest (Table 4.1).

Table 4.1
Sample size

<table>
<thead>
<tr>
<th>Factor</th>
<th>Parents of Children</th>
<th>Parents of Children</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Treatment Group</td>
<td>Control Group</td>
<td></td>
</tr>
<tr>
<td>Pretest Sample Size ($n$)</td>
<td>80 (100%)</td>
<td>80 (100%)</td>
<td>160 (100%)</td>
</tr>
<tr>
<td>Posttest Sample Size* ($n$)</td>
<td>56 (70%)</td>
<td>30 (38%)</td>
<td>86 (54%)</td>
</tr>
</tbody>
</table>

Note. *Completed pretest and posttest
Demographic data are included on the 86 individuals who completed both pretests and posttests. As expected, more females (70%) than males (28%) participated in the study (Table 4.2). The percentage of men in the treatment group (25%) was less than in the control group (33%), whereas the percentage of females in the treatment group (75%) is higher than that of the control group (67%) (Table 4.2). The majority of participants were married (68%), with fewer married participants in the treatment group (73%) than in the control group (93%). Most of the participants were biological mothers (67%) or fathers (27%) to the Target Child (Table 4.2). The Mean age of participants was 38.72. Available data for the school district reports that this age falls within the age range of 50% of the district.
Table 4.2
*Gender and Marital Status of Participants and Relationship to the Target Child*

<table>
<thead>
<tr>
<th>Factor</th>
<th>Treatment group</th>
<th>Control group</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td></td>
<td>(Percentage)</td>
<td>(Percentage)</td>
<td>(Percentage)</td>
</tr>
<tr>
<td>Gender: Male</td>
<td>14 (25%)</td>
<td>10 (33%)</td>
<td>24 (28%)</td>
</tr>
<tr>
<td>Gender: Female</td>
<td>42 (75%)</td>
<td>20 (67%)</td>
<td>62 (70%)</td>
</tr>
<tr>
<td>Marital Status: Married</td>
<td>41 (73%)</td>
<td>28 (93%)</td>
<td>68 (79%)</td>
</tr>
<tr>
<td>Marital Status: Divorced</td>
<td>12 (21%)</td>
<td>2 (7%)</td>
<td>14 (16%)</td>
</tr>
<tr>
<td>Marital Status: Separated</td>
<td>1 (2%)</td>
<td>0 (0%)</td>
<td>1 (1%)</td>
</tr>
<tr>
<td>Marital Status: Widowed</td>
<td>1 (2%)</td>
<td>0 (0%)</td>
<td>1 (1%)</td>
</tr>
<tr>
<td>Marital Status: Never Married</td>
<td>1 (2%)</td>
<td>0 (0%)</td>
<td>1 (1%)</td>
</tr>
<tr>
<td>Relationship to the Target Child: Father</td>
<td>13 (23%)</td>
<td>10 (33%)</td>
<td>23 (27%)</td>
</tr>
<tr>
<td>Relationship to the Target Child: Mother</td>
<td>39 (67%)</td>
<td>20 (67%)</td>
<td>59 (67%)</td>
</tr>
<tr>
<td>Relationship to the Target Child: Stepfather</td>
<td>1 (2%)</td>
<td>0 (0%)</td>
<td>1 (1%)</td>
</tr>
<tr>
<td>Relationship to the Target Child: Stepmother</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
</tr>
<tr>
<td>Relationship to the Target Child: Grandmother</td>
<td>3 (5%)</td>
<td>0 (0%)</td>
<td>3 (3%)</td>
</tr>
</tbody>
</table>

The sample for the study reported an education attainment level slightly above that of the county and city that LPS resides within. All participants reported having a minimum of a high school or equivalent degree, with most reporting one or more years of college (91%), and nearly
half of the total participants having a Bachelor’s degree (42%) (Table 4.3). No education attainment level data were available for strictly the population of the school district; however, U. S. Census (Clay County, Missouri, 2014) data for Clay County, MO indicates that 91.7% have a high school degree or higher, with 30.6% having a bachelor’s degree or higher. U. S. Census (Liberty, Missouri, 2014) data for the city of Liberty, MO indicates that 92.5% have a high school degree or higher and 37.5% has a bachelor’s degree or higher.

Table 4.3
*Education level of Participants*

<table>
<thead>
<tr>
<th>Factor</th>
<th>Treatment Group</th>
<th>Control Group</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N (Percentage)</td>
<td>N (Percentage)</td>
<td>N (Percentage)</td>
</tr>
<tr>
<td>Education level:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High school graduate</td>
<td>4 (7%)</td>
<td>1 (3%)</td>
<td>5 (6%)</td>
</tr>
<tr>
<td>Some college credit, but less than 1 year</td>
<td>2 (4%)</td>
<td>1 (3%)</td>
<td>3 (3%)</td>
</tr>
<tr>
<td>One or more years of college, no degree</td>
<td>11 (20%)</td>
<td>1 (3%)</td>
<td>12 (14%)</td>
</tr>
<tr>
<td>Associate degree</td>
<td>8 (14%)</td>
<td>2 (7%)</td>
<td>10 (12%)</td>
</tr>
<tr>
<td>Bachelor's degree</td>
<td>30 (54%)</td>
<td>16 (53%)</td>
<td>36 (42%)</td>
</tr>
<tr>
<td>Master's degree</td>
<td>8 (14%)</td>
<td>6 (20%)</td>
<td>14 (16%)</td>
</tr>
<tr>
<td>Professional degree</td>
<td>1 (2%)</td>
<td>2 (7%)</td>
<td>3 (3%)</td>
</tr>
<tr>
<td>Doctorate degree</td>
<td>2 (4%)</td>
<td>1 (3%)</td>
<td>3 (3%)</td>
</tr>
</tbody>
</table>

*Note.* High school graduate was the lowest level completed.
The racial and ethnic makeup of the sample was very homogeneous, with most parents having identified themselves as white and not Hispanic or Latino (95%) (Table 4.4). Racial and ethnic data for the district are similar, with 89% white and 4.4% Hispanic.

Table 4.4  
Race and Ethnicity of Participants

<table>
<thead>
<tr>
<th>Factor</th>
<th>Treatment Group</th>
<th>Control Group</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N (Percentage)</td>
<td>N (Percentage)</td>
<td>N (Percentage)</td>
</tr>
<tr>
<td>Race:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>American Indian or Alaska Native</td>
<td>1 (2%)</td>
<td>0 (0%)</td>
<td>1 (1%)</td>
</tr>
<tr>
<td>Asian</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
</tr>
<tr>
<td>Black or African American</td>
<td>1 (2%)</td>
<td>1 (3%)</td>
<td>2 (2%)</td>
</tr>
<tr>
<td>Native Hawaiian or Other Pacific Islander</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
</tr>
<tr>
<td>White</td>
<td>54 (96%)</td>
<td>28 (93%)</td>
<td>82 (95%)</td>
</tr>
<tr>
<td>Other</td>
<td>0 (0%)</td>
<td>1 (3%)</td>
<td>1 (1%)</td>
</tr>
<tr>
<td>Ethnicity:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hispanic or Latino</td>
<td>3 (5%)</td>
<td>1 (3%)</td>
<td>4 (5%)</td>
</tr>
<tr>
<td>Not Hispanic or Latino</td>
<td>53 (95%)</td>
<td>29 (97%)</td>
<td>82 (95%)</td>
</tr>
</tbody>
</table>

Household income for the total group ranged from “Less than $10,000” to “$150,000 or more” with a median income of $80,000-$89,999. This median income is greater than both the county ($60,560) and city ($64,848) median income level (Table 4.5)
Table 4.5
Household Income of Participants

<table>
<thead>
<tr>
<th>Factor</th>
<th>Treatment Group</th>
<th>Control Group</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td></td>
<td>(Percentage)</td>
<td>(Percentage)</td>
<td>(Percentage)</td>
</tr>
<tr>
<td>Household Income:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than $10,000</td>
<td>1(2%)</td>
<td>0(0%)</td>
<td>1(2%)</td>
</tr>
<tr>
<td>$10,000 to $19,999</td>
<td>4 (10%)</td>
<td>0(0%)</td>
<td>4(7%)</td>
</tr>
<tr>
<td>$20,000 to $29,999</td>
<td>2 (5%)</td>
<td>0(0%)</td>
<td>2(3%)</td>
</tr>
<tr>
<td>$30,000 to $39,999</td>
<td>5 (12%)</td>
<td>1(5%)</td>
<td>6(10%)</td>
</tr>
<tr>
<td>$40,000 to $49,999</td>
<td>1 (2%)</td>
<td>1(5%)</td>
<td>2(3%)</td>
</tr>
<tr>
<td>$50,000 to $59,999</td>
<td>3 (7%)</td>
<td>1(5%)</td>
<td>4(7%)</td>
</tr>
<tr>
<td>$60,000 to $69,999</td>
<td>3 (7%)</td>
<td>0(0%)</td>
<td>3(5%)</td>
</tr>
<tr>
<td>$70,000 to $79,999</td>
<td>6 (14%)</td>
<td>2(11%)</td>
<td>8(13%)</td>
</tr>
<tr>
<td>$80,000 to $89,999</td>
<td>3 (7%)</td>
<td>2(11%)</td>
<td>5(8%)</td>
</tr>
<tr>
<td>$90,000 to $99,999</td>
<td>1 (2%)</td>
<td>3(16%)</td>
<td>4(7%)</td>
</tr>
<tr>
<td>$100,000 to $149,999</td>
<td>7 (17%)</td>
<td>4(21%)</td>
<td>11(18%)</td>
</tr>
<tr>
<td>$150,000 or more</td>
<td>6 (14%)</td>
<td>5(26%)</td>
<td>11(18%)</td>
</tr>
</tbody>
</table>

While filling out the questionnaires, parents were asked to focus on one child attending an elementary school in the district, the Target Child. A total of 67 children were represented in the data. Children were in grades Kindergarten to Fifth, with 22% of the students in First Grade.
and 9% to 13% in Kindergarten or Second Grade to Fifth Grade (Table 4.6). The mean age of children was 7.81 years of age.

Table 4.6
*Grade Level of Target Children*

<table>
<thead>
<tr>
<th>Factor</th>
<th>Treatment Group</th>
<th>Control Group</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>Grade:</td>
<td>(Percentage)</td>
<td>(Percentage)</td>
<td>(Percentage)</td>
</tr>
<tr>
<td>K</td>
<td>7 (16%)</td>
<td>4 (7%)</td>
<td>11 (13%)</td>
</tr>
<tr>
<td>1st</td>
<td>12 (27%)</td>
<td>7 (17%)</td>
<td>19 (22%)</td>
</tr>
<tr>
<td>2nd</td>
<td>8 (18%)</td>
<td>2 (5%)</td>
<td>10 (11%)</td>
</tr>
<tr>
<td>3rd</td>
<td>4 (9%)</td>
<td>6 (14%)</td>
<td>10 (11%)</td>
</tr>
<tr>
<td>4th</td>
<td>6 (13%)</td>
<td>2 (5%)</td>
<td>8 (9%)</td>
</tr>
<tr>
<td>5th</td>
<td>8 (18%)</td>
<td>1 (2%)</td>
<td>9 (10%)</td>
</tr>
</tbody>
</table>

Ninety percent of the children were identified as white and 94% of children were identified as Not Hispanic or Latino (Table 4.7). The elementary school student population for the school district was 84.9% white and Not Hispanic or Latino.
Table 4.7
Race and Ethnicity of Target Children

<table>
<thead>
<tr>
<th>Factor</th>
<th>Treatment Group</th>
<th>Control Group</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td></td>
<td>(Percentage)</td>
<td>(Percentage)</td>
<td>(Percentage)</td>
</tr>
<tr>
<td>Race:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>American Indian or Alaska</td>
<td>1 (2%)</td>
<td>0 (0%)</td>
<td>1 (1%)</td>
</tr>
<tr>
<td>Native</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asian</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
</tr>
<tr>
<td>Black or African American</td>
<td>1 (2%)</td>
<td>2 (10%)</td>
<td>3 (4%)</td>
</tr>
<tr>
<td>Native Hawaiian or Other</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
</tr>
<tr>
<td>Pacific Islander</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>42 (91%)</td>
<td>18 (86%)</td>
<td>60 (90%)</td>
</tr>
<tr>
<td>Other</td>
<td>2 (4%)</td>
<td>1 (5%)</td>
<td>2 (3%)</td>
</tr>
<tr>
<td>Ethnicity:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hispanic or Latino</td>
<td>3 (7%)</td>
<td>1 (5%)</td>
<td>4 (6%)</td>
</tr>
<tr>
<td>Not Hispanic or Latino</td>
<td>43 (93%)</td>
<td>20 (95%)</td>
<td>63 (94%)</td>
</tr>
</tbody>
</table>

Male children made up 55% of the population and female children made up 45% of the population (Table 4.8). The elementary school student population for the school district was 51.1% male students and 48.9% female students.
Table 4.8
*Gender of Target Children*

<table>
<thead>
<tr>
<th>Factor</th>
<th>Treatment Group</th>
<th>Control Group</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td></td>
<td>(Percentage)</td>
<td>(Percentage)</td>
<td>(Percentage)</td>
</tr>
<tr>
<td>Gender of children: Male</td>
<td>24 (53%)</td>
<td>13 (59%)</td>
<td>37 (55%)</td>
</tr>
<tr>
<td>Female</td>
<td>21 (47%)</td>
<td>9 (41%)</td>
<td>30 (45%)</td>
</tr>
</tbody>
</table>

**Research Questions and Hypothesis**

The main variables of interest were the participants’ stress scores on the PSI/SF scales and the scores related to participants’ perceptions of their identified child’s behavior on the ECBI scales. As previously indicated, the PSI/SF yields a Total Stress (TS) score composed of the scores on the three subscales: Parental Distress subscale (PD), Parent-Child Dysfunctional Interaction subscale (P-CDI); and the Difficult Child subscale (DC). Percentage levels from the PSI/SF are shown presented below.

While there was not a significant decrease in the TS scores for those who attended the BLLP program, from pretest to posttest, the percentage of those participants with scores “within normal limits” of TS increased for both the Treatment Group (from 44% to 67.2%) and the Control Group (from 57% to 63.3%) indicting that there was a decrease in total parenting stress as measured by the PSI/SF (Table 4.9). This would seem to support Research Question 1.
Table 4.9
Percentage of Participants with Different Levels of Total Stress Levels

<table>
<thead>
<tr>
<th>Total Stress</th>
<th>Treatment Group</th>
<th>Control Group</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Percentage</td>
<td>Percentage</td>
</tr>
<tr>
<td></td>
<td>(Frequency)</td>
<td>(Frequency)</td>
</tr>
<tr>
<td></td>
<td>Mean (sd)</td>
<td>Mean (sd)</td>
</tr>
<tr>
<td>Pretest:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clinically Severe</td>
<td>35% (19)</td>
<td>17% (5)</td>
</tr>
<tr>
<td></td>
<td>110.95 (9.77)</td>
<td>106.20 (3.03)</td>
</tr>
<tr>
<td>Clinically Significant</td>
<td>15% (8)</td>
<td>10% (3)</td>
</tr>
<tr>
<td></td>
<td>95.75 (2.43)</td>
<td>94.67 (3.79)</td>
</tr>
<tr>
<td>Borderline</td>
<td>7.2% (4)</td>
<td>17% (5)</td>
</tr>
<tr>
<td></td>
<td>87.75 (1.71)</td>
<td>87.80 (2.28)</td>
</tr>
<tr>
<td>Within normal limits</td>
<td>44% (24)</td>
<td>57% (17)</td>
</tr>
<tr>
<td></td>
<td>69.00 (10.23)</td>
<td>64.47 (14.92)</td>
</tr>
<tr>
<td>Posttest:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clinically Severe</td>
<td>11% (9)</td>
<td>17% (5)</td>
</tr>
<tr>
<td></td>
<td>105.17 (4.31)</td>
<td>110.00 (11.29)</td>
</tr>
<tr>
<td>Clinically Significant</td>
<td>18.1% (10)</td>
<td>10% (3)</td>
</tr>
<tr>
<td></td>
<td>94.10 (2.64)</td>
<td>93.00 (2.65)</td>
</tr>
<tr>
<td>Borderline</td>
<td>4% (2)</td>
<td>10% (3)</td>
</tr>
<tr>
<td></td>
<td>87.50 (2.12)</td>
<td>86.67 (.58)</td>
</tr>
<tr>
<td>Within normal limits</td>
<td>67.2% (37)</td>
<td>63.3% (19)</td>
</tr>
<tr>
<td></td>
<td>67.19 (12.76)</td>
<td>66.68 (12.37)</td>
</tr>
</tbody>
</table>
From pretest to posttest, the percentage of those participants with scores “within normal limits” of PD increased for the Treatment Group (from 47.2% to 87.5%) and the decreased for Control Group (from 93.3% to 90%); indicting that there was a decrease in parent distress as measured by the PSI/SF for the Treatment Group and an increase in parent distress as measured by the PSI/SF for the Control Group (Table 4.10). This would seem to support Research Question 2, as the PD scores did decrease in those participants who took part in the BLLP program.
Table 4.10
Percentage of Participants with Different Levels of Parental Distress Levels

<table>
<thead>
<tr>
<th>Parental Distress</th>
<th>Treatment Group</th>
<th>Control Group</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Percentage</td>
<td>Percentage</td>
</tr>
<tr>
<td></td>
<td>(Frequency)</td>
<td>(Frequency)</td>
</tr>
<tr>
<td></td>
<td>Mean (sd)</td>
<td>Mean (sd)</td>
</tr>
<tr>
<td>Pretest:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clinically Severe</td>
<td>5.4% (8)</td>
<td>3.3% (1)</td>
</tr>
<tr>
<td></td>
<td>42.67 (2.52)</td>
<td>43.00 (0)</td>
</tr>
<tr>
<td>Clinically Significant</td>
<td>9% (5)</td>
<td>0% (0)</td>
</tr>
<tr>
<td></td>
<td>36.00 (.55)</td>
<td>0 (0)</td>
</tr>
<tr>
<td>Borderline</td>
<td>15% (8)</td>
<td>3.3% (1)</td>
</tr>
<tr>
<td></td>
<td>34.50 (.76)</td>
<td>35.00 (0)</td>
</tr>
<tr>
<td>Within normal limits</td>
<td>47.2% (26)</td>
<td>93.3% (28)</td>
</tr>
<tr>
<td></td>
<td>25.03 (5.65)</td>
<td>23.00 (5.40)</td>
</tr>
<tr>
<td>Posttest:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clinically Severe</td>
<td>0% (0)</td>
<td>3.3% (1)</td>
</tr>
<tr>
<td></td>
<td>0 (0)</td>
<td>53.00 (0)</td>
</tr>
<tr>
<td>Clinically Significant</td>
<td>9% (5)</td>
<td>3.3% (1)</td>
</tr>
<tr>
<td></td>
<td>35.80 (2.28)</td>
<td>38.00 (0)</td>
</tr>
<tr>
<td>Borderline</td>
<td>5.4% (3)</td>
<td>3.3% (1)</td>
</tr>
<tr>
<td></td>
<td>33.67 (.58)</td>
<td>35.00 (0)</td>
</tr>
<tr>
<td>Within normal limits</td>
<td>85.4% (47)</td>
<td>90% (27)</td>
</tr>
<tr>
<td></td>
<td>22.68 (5.59)</td>
<td>21.93 (5.55)</td>
</tr>
</tbody>
</table>
From pretest to posttest, the percentage of those participants with scores “within normal limits” of P-CDI increased for the Treatment Group (from 53% to 87.2%) and the decreased for Control Group (from 80% to 77%); indicting that there was a decrease in dysfunctional interaction between parent and child as measured by the PSI/SF for the Treatment Group and an increase in dysfunctional interaction between parent and child as measured by the PSI/SF for the Control Group (Table 4.1). This would seem to support Research Question 3, as the P-CDI did decrease in those participants who took part in the BLLP program.
Table 4.1
Percentage of Participants with Different Levels of Parent-Child Dysfunctional Interaction Levels

<table>
<thead>
<tr>
<th>Parent-Child Dysfunctional Interaction</th>
<th>Treatment Group</th>
<th>Control Group</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Percentage (Frequency)</td>
<td>Percentage (Frequency)</td>
</tr>
<tr>
<td></td>
<td>Mean (sd)</td>
<td>Mean (sd)</td>
</tr>
<tr>
<td>Pretest:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clinically Severe</td>
<td>27.2% (15)</td>
<td>13.3% (4)</td>
</tr>
<tr>
<td></td>
<td>35.80 (4.63)</td>
<td>34.75 (3.30)</td>
</tr>
<tr>
<td>Clinically Significant</td>
<td>16.3% (9)</td>
<td>7% (2)</td>
</tr>
<tr>
<td></td>
<td>27.44 (.73)</td>
<td>27.33 (.58)</td>
</tr>
<tr>
<td>Borderline</td>
<td>4% (2)</td>
<td>0% (0)</td>
</tr>
<tr>
<td></td>
<td>26.00 (0)</td>
<td>0 (0)</td>
</tr>
<tr>
<td>Within normal limits</td>
<td>53% (29)</td>
<td>80% (24)</td>
</tr>
<tr>
<td></td>
<td>19.17 (3.76)</td>
<td>19.17 (4.34)</td>
</tr>
<tr>
<td>Posttest:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clinically Severe</td>
<td>16.3% (9)</td>
<td>13.3% (4)</td>
</tr>
<tr>
<td></td>
<td>32.78 (2.05)</td>
<td>34.00 (3.92)</td>
</tr>
<tr>
<td>Clinically Significant</td>
<td>11% (6)</td>
<td>7% (2)</td>
</tr>
<tr>
<td></td>
<td>27.50 (.84)</td>
<td>28.50 (.71)</td>
</tr>
<tr>
<td>Borderline</td>
<td>4% (2)</td>
<td>3.3% (1)</td>
</tr>
<tr>
<td></td>
<td>26 (0)</td>
<td>26.00 (0)</td>
</tr>
<tr>
<td>Within normal limits</td>
<td>87.2% (48)</td>
<td>77% (23)</td>
</tr>
<tr>
<td></td>
<td>19.42 (4.14)</td>
<td>18.48 (3.51)</td>
</tr>
</tbody>
</table>
From pretest to posttest, the percentage of those participants with scores “within normal limits” on the DC subscale increased for both the Treatment Group (from 38.1% to 64%) and the Control Group (from 43.3% to 47%); indicting that there was a decrease in parents perception of difficult child behavior as measured by the PSI/SF (Table 4.12).
Table 4.1
Percentage of Participants with Different Levels of Difficult Child Levels

<table>
<thead>
<tr>
<th>Difficult Child</th>
<th>Treatment Group</th>
<th>Control Group</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Percentage (Frequency)</td>
<td>Percentage (Frequency)</td>
</tr>
<tr>
<td></td>
<td>Mean (sd)</td>
<td>Mean (sd)</td>
</tr>
<tr>
<td>Pretest:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clinically Severe</td>
<td>40% (23)</td>
<td>23.3% (7)</td>
</tr>
<tr>
<td></td>
<td>43.83 (3.14)</td>
<td>44.43 (5.62)</td>
</tr>
<tr>
<td>Clinically Significant</td>
<td>11% (6)</td>
<td>23.3% (7)</td>
</tr>
<tr>
<td></td>
<td>38.00 (.63)</td>
<td>37.00 (.82)</td>
</tr>
<tr>
<td>Borderline</td>
<td>9% (5)</td>
<td>10% (3)</td>
</tr>
<tr>
<td></td>
<td>34.00 (1)</td>
<td>33.67 (.58)</td>
</tr>
<tr>
<td>Within normal limits</td>
<td>38.1% (21)</td>
<td>43.3% (13)</td>
</tr>
<tr>
<td></td>
<td>24.81 (5.04)</td>
<td>24.54 (6.05)</td>
</tr>
<tr>
<td>Posttest:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clinically Severe</td>
<td>15% (8)</td>
<td>30% (9)</td>
</tr>
<tr>
<td></td>
<td>42.00 (2.39)</td>
<td>43.67 (3.04)</td>
</tr>
<tr>
<td>Clinically Significant</td>
<td>18.1% (10)</td>
<td>7% (2)</td>
</tr>
<tr>
<td></td>
<td>37.50 (.71)</td>
<td>36.50 (.71)</td>
</tr>
<tr>
<td>Borderline</td>
<td>4% (2)</td>
<td>17% (5)</td>
</tr>
<tr>
<td></td>
<td>33.00 (0)</td>
<td>34.40 (.55)</td>
</tr>
<tr>
<td>Within normal limits</td>
<td>64% (35)</td>
<td>47% (14)</td>
</tr>
<tr>
<td></td>
<td>24.74 (6.01)</td>
<td>24.43 (5.40)</td>
</tr>
</tbody>
</table>
Scores on ECBI above cutoff levels are indicative of a possible disruptive behavior disorder (Eyberg & Pincus, 1999). From pretest to posttest, the percentage of those participants with scores above the cutoff level decreased for both the Treatment Group (from 27.2% to 16.3%) and the Control Group (from 40% to 23.3%) on Intensity scale; indicating a decrease in disruptive behavior as measured by the ECBI. From pretest to posttest, the percentage of those participants with scores above the cutoff level decreased for the Treatment Group (from 33% to 11%) and increased for the Control Group (from 20% to 30%) on Problem scale; indicating that the Treatment Group viewed the behavior of their children as less of a problem at posttest and the control group viewed the behavior of their children as more of a problem at posttest (Table 4.13).
Table 4.13
Percentage of Participants with ECBI Scores Above and Below Cutoff

<table>
<thead>
<tr>
<th>ECBI Scales</th>
<th>Treatment Group</th>
<th>Control Group</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Percentage (Frequency)</td>
<td>Percentage (Frequency)</td>
<td>Mean (sd)</td>
<td>Mean (sd)</td>
</tr>
<tr>
<td>Pretest:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intensity above cutoff</td>
<td>33% (18)</td>
<td>40% (12)</td>
<td>149.11 (17.27)</td>
<td>139.83 (7.87)</td>
</tr>
<tr>
<td>Intensity below cutoff</td>
<td>67.2% (37)</td>
<td>60% (18)</td>
<td>98.51 (18.21)</td>
<td>95.28 (22.13)</td>
</tr>
<tr>
<td>Problem above cutoff</td>
<td>27.2% (15)</td>
<td>20% (6)</td>
<td>20.60 (5.23)</td>
<td>20.33 (3.67)</td>
</tr>
<tr>
<td>Problem below cutoff</td>
<td>73% (40)</td>
<td>80% (24)</td>
<td>7.48 (4.57)</td>
<td>7.25 (4.50)</td>
</tr>
<tr>
<td>Posttest:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intensity above cutoff</td>
<td>11% (6)</td>
<td>23.3% (7)</td>
<td>141.00 (8.05)</td>
<td>142.86 (6.23)</td>
</tr>
<tr>
<td>Intensity below cutoff</td>
<td>89% (49)</td>
<td>77% (23)</td>
<td>99.23 (19.68)</td>
<td>95.13 (22.82)</td>
</tr>
<tr>
<td>Problem above cutoff</td>
<td>16.3% (9)</td>
<td>30% (9)</td>
<td>17.67 (1.66)</td>
<td>19.89 (4.68)</td>
</tr>
<tr>
<td>Problem below cutoff</td>
<td>84% (46)</td>
<td>70% (21)</td>
<td>5.06 (4.51)</td>
<td>6.14 (4.89)</td>
</tr>
</tbody>
</table>
**Hypothesis One**

H1 There will be a statistically significant change in stress as measured by the Total Stress (TS) score on the Parenting Stress Index/Short Form (PSI/FS) for those parents exposed to the Becoming a Love and Logic Parent program as compared to the control group exposed to nothing.

$H_0$ There will be no statistically significant change in stress as measured by the Total Stress (TS) score on the Parenting Stress Index/Short Form (PSI/FS) for those parents exposed to the Becoming and Love and Logic Parent Program as compared to the control group exposed to nothing.

Hypothesis 1 addressed parenting stress level as related to the role of parenting before and after participation in the BLLP program. It was addressed using a between factors ANCOVA run on the TS score of the PSI/SF. Examination of the interaction effect between group and time was carried out to determine differences between treatment and control group.

The results of this study did not support this hypothesis. Analysis of covariance failed to show a significant difference between the control group posttest scores on the PSI/SF Total Stress Scale and the treatment group posttest scores PSI/SF Total Stress Scale ($F= 1.643, p>.05$), indicating a failure to reject the null hypothesis.

Analysis of covariance showed that there was a significant difference, a decrease, in stress scores between the treatment group pretest scores on the PSI/SF Total Stress Scale and the treatment group posttest scores on the PSI/SF Total Stress Scale ($F=1.334, p<.05$). Levene’s was significant at <.01, indicating the scores were too heteroscedastic for results to be reliable.

Analysis of covariance failed to show a significant change in stress scores between control group pretest scores on the PSI/SF Total Stress Scale and the control group posttest scores on the PSI/SF Total Stress Scale ($F=2.74, p>.05$). These results indicate that there was no significant effect from being tested twice using the PSI/SF.

Analysis of covariance showed a significant difference between treatment group posttest scores on the PSI/SF Total Stress Scale and the control group posttest scores PSI/SF Total Stress
Scale when the control group posttest scores on the PSI/SF Parental Distress Scales where used as a covariate (F=8.92, p<.05). When PD is held as a covariate 98.7% of the variance in the dependent variable is accounted for by the treatment effect, indicating that the Parental Distress scales have a noticeable effect on PSI/SF Total Stress scores.

The percentage of treatment group participants scoring in the clinically severe range on the PSI/SF Total Stress score decreased from 35% to 11% from pretest to posttest. The percentage of treatment group participants scoring in the borderline range on the PSI/SF Total Stress score decreased from 7.2% to 4% from pretest to posttest.

There was a 6.3% (43.3% to 37%) decrease in total stress above normal limits between pretest and posttest for the control group. There was no movement in the percentage of control group participants from pretest to posttest in the clinically severe or clinically significant ranges; however, there was a decrease in the percentage of participants scoring in the borderline range from 17% to 10% from pretest to posttest (Figure 4.1).
Hypothesis Two

H2 There will be a statistically significant change in stress as measured by the Parental Distress (PD) subscale score on the Parenting Stress Index/Short Form (PSI/FS) for those parents exposed to the Becoming a Love and Logic Parent program as compared to the control group exposed to nothing.

H₀₂ There will be no statistically significant change in stress as measured by the Parental Distress (PD) subscale score on the Parenting Stress Index/Short Form (PSI/FS) for those parents exposed to the Becoming and Love and Logic Parent program as compared to the control group exposed to nothing.

Hypothesis 2 addressed parental distress level as related to the role of parenting before and after participation in the BLLP program. It was addressed using a between factors ANCOVA.
run on the PD score of the PSI/SF. Examination of the interaction effect between group and time was carried out to determine differences between treatment and control group.

The results of this study did not support the hypothesis. Analysis of covariance failed to show a significant difference between the control group posttest PSI/SF PD subscale scores and the treatment group posttest PSI/SF Parental Distress subscale scores (F=.96, p>.05) indicating a failure to reject the null hypothesis.

Analysis of covariance showed that there was a significant difference, a decrease, between the treatment group pretest PSI/SF PD subscale scores and the treatment group posttest PSI/SF PD subscale scores (F=3.41, p<.05). These results indicate that 71.7% of the variance in the dependent variable is accounted for by the BLLP program (Figure 4.2).
Analysis of covariance showed that there was a significant difference between the control group pretest PSI/SF PD subscale scores and the control group posttest PSI/SF PD subscale scores ($F=5.44, p<.05$). Levene’s test was significant at .00, indicating that the control group was too non-homoskedastic for results to be reliable.

This study did not find a statistically significant difference between the control and treatment groups on the PSI/SF PD subscale. There was, however, a decrease in total PD above normal limits of 38.5% (53% to 14.5%) between pretest and posttest for the treatment group, and a slight increase in total PD above normal limits of 2.9% (7% to 9.3%) between pretest and posttest for the control group.
The percentage of treatment group participants scoring in the clinically severe range on the PSI/SF PD score decreased from 5.4% to 0% from pretest to posttest. The percentage of treatment group participants scoring in the clinically significant range on the PSI/SF PD remained at 9% from pretest to posttest. The percentage of treatment group participants scoring in the Borderline range on the PSI/SF PD decreased 14.5% to 5.4% from pretest to posttest.

The percentage of control group participants scoring in the clinically severe range on the PSI/SF PD remained at 3.3% from pretest to posttest. The percentage of control group participants scoring in the clinically significant range on the PSI/SF PD increased from 0% to 3.3% from pretest to posttest. The percentage of control group participants scoring in the Borderline range on the PSI/SF PD remained at 3.3% from pretest to posttest (Figure 4.3).
**Hypothesis Three**

H3 There will be a statistically significant change in stress as measured by the Parent-Child Dysfunctional Interaction (P-CDI) score on the Parenting Stress Index/Short Form (PSI/SF) for those parents exposed to the Becoming a Love and Logic Parent program as compared to the control group exposed to nothing.

H₀₃ There will be no statistically significant change in stress as measured by the Parent-Child Dysfunctional Interaction (P-CDI) score on the Parenting Stress Index/Short Form (PSI/SF) for those parents exposed to the Becoming a Love and Logic Parent program as compared to the control group exposed to nothing.

Hypothesis 3 addressed parent-child dysfunctional interaction as related to the role of parenting before and after participation in the BLLP program. It was addressed using a between factors ANCOVA run on the P-CDI score of the PSI/SF. Examination of the interaction effect
between group and time was carried out to determine differences between treatment and control group.

The results of this study did not support this hypothesis. Analysis of covariance failed to show a significant difference between the control group posttest PSI/SF P-CDI subscale scores and the treatment group posttest PSI/SF P-CDI subscale scores (F=1.33, p>.05) indicating a failure to reject the null hypothesis.

Analysis of covariance showed that there was a significant difference between the treatment group pretest PSI/SF P-CDI subscale scores and the treatment group posttest PSI/SF P-CDI subscale scores (F=2.81, p<.05). Levene’s was significant at .016 indicating that the treatment group was too heterogenous for results to be reliable resulting in a failure to reject the null hypothesis.

Analysis of covariance showed that there was a significant difference between the control group pretest PSI/SF P-CDI subscale scores and the control group posttest PSI/SF P-CDI subscale scores (F=3.65, p<.05). Eighty-two percent of the variance in P-CDI posttest scores was accounted for by the effect of being tested twice, indicating that the P-CDI was not highly specific to its scale scores.

There was a decrease in percentage of total P-CDI scores above the normal limits of 16.2% (47.2% to 31%) between pretest and posttest for the treatment group. There was a slight increase in percentage of total P-CDI scores above the normal limits of 3.3% (20% to 23.3%) between pretest and posttest for the control group.

The percentage of treatment group participants scoring in the clinically severe range on the PSI/SF P-CDI score decreased from 27.2% to 16.3% from pretest to posttest. The percentage of treatment group participants scoring in the clinically significant range on the PSI/SF P-CDI
decreased from 16.3% to 11% from pretest to posttest. The percentage of treatment group participants scoring in the borderline range on the PSI/SF P-CDI remained constant at 4% from pretest to posttest.

The percentage of control group participants scoring in the clinically severe range on the PSI/SF P-CDI remained at 13.3% from pretest to posttest. The percentage of control group participants scoring in the clinically significant range on the PSI/SF P-CDI remained at 7% from pretest to posttest. The percentage of control group participants scoring in the Borderline range on the PSI/ P-CDI increased from 0% to 3.3% from pretest to posttest (Figure 4.4).

Figure 4.4 PSI/SF Percentage of Parent-Child Dysfunctional Interaction Level
**Hypothesis Four**

H4 There will be a statistically significant change in stress as measured by the Difficult Child (DC) score on the Parenting Stress Index/Short Form (PSI/FS) for those parents exposed to the Becoming a Love and Logic Parent program as compared to the control group exposed to nothing.

H_{04} There will be no statistically significant change in stress as measured by the Difficult Child (DC) score on the Parenting Stress Index/Short Form (PSI/SF) for those parents exposed to the Becoming a Love and Logic Parent program as compared to the control group exposed to nothing.

Hypothesis 4 addressed difficult child behavior as related to the role of parenting before and after participation in the BLLP program. It was addressed using a between factors ANCOVA run on the DC score of the PSI/SF. Examination of the interaction effect between group and time was carried out to determine differences between treatment and control group.

The results of this study did not support this hypothesis. Analysis of covariance failed to show a significant difference between the control group posttest PSI/SF DC subscale scores and the treatment group posttest PSI/SF DC subscale scores (F=1.38, p>.05). Levene’s was significant at .024 indicating that the treatment group was too non-homoskedastic for results to be reliable, resulting in an initial failure to reject the null hypothesis.

When the control group/treatment group posttest scores were then grouped into 6 even groups (bins x 13), treatment group averaged significantly lower than the control group average on the PSI/SF DC (F=3.76, p<.05). Thirty-eight percent of the variance in the dependent variable was accounted for by the model (Figure 4.5).
Analysis of covariance showed that there was a significant difference between the control group pretest PSI/SF DC subscale scores and the control group posttest PSI/SF DC subscale scores ($F=5.83, p<.05$). Ninety-four percent of the variance in posttest DC scores was accounted for by effect of being tested twice.

Analysis of covariance failed to show a significant difference between the treatment group pretest PSI/SF DC subscale scores and the treatment group posttest PSI/SF DC subscale scores ($F=1.38, p>.05$). These results indicate a failure to reject the null hypothesis.

There was a decrease in total PSI/SF DC scores above normal limits 25.7% (62% to 36.3%) between pretest and posttest for the treatment group. There was a decrease in total
PSI/SF DC scores above normal limits 3.7% (57% to 53.3%) between pretest and posttest for the control group.

The percentage of treatment group participants scoring in the clinically severe range on the PSI/SF DC score decreased from 40% to 15% from pretest to posttest. The percentage of treatment group participants scoring in the clinically significant range on the PSI/SF DC increased from 6% to 18.3% from pretest to posttest. The percentage of treatment group participants scoring in the borderline range on the PSI/SF DC decreased from 9% to 4% from pretest to posttest.

The percentage of control group participants scoring in the clinically severe range on the PSI/SF DC increase from 23.3% to 30% from pretest to posttest. The percentage of control group participants scoring in the clinically significant range on the PSI/SF DC decreased from 23.3% to 7% from pretest to posttest. The percentage of control group participants scoring in the Borderline range on the PSI/SF DC increased from 10% to 17% from pretest to posttest (Figure 4.6).
**Hypothesis Five**

H5 There will be a statistically significant change in their target child's conduct problems as measured by the Intensity scale of the Eyberg Child Behavior Inventory (ECBI) for those children whose parents were exposed to the Becoming a Love and Logic Parent program as compared to the control group exposed to nothing.

H₀₅ There will be no statistically significant change in the target child's conduct problems as measured by the Intensity scale of the Eyberg Child Behavior Inventory (ECBI) for those children whose parents were exposed to the Becoming a Love and Logic Parent program as compared to the control group exposed to nothing.
Hypothesis 5 addresses parents’ perception of the intensity their child’s acting-out behavior before and after parent participation in the BLLP program. It was addressed using a between factor ANCOVA on the scores of the Intensity scale of the ECBI.

The results of this study did not support this hypothesis. Analysis of covariance failed to show a significant difference in the ECBI Intensity Scale between control group and treatment group (F=1.94, p>.05) indicating failure to reject the null hypothesis. Analysis of covariance failed to show a significant difference in the treatment group ECBI Intensity Scale pretest and the ECBI Intensity Scale posttest (F=1.10, p>.05) indicating failure to reject the null hypothesis.

There was a decrease in the percentage of treatment group participants scoring above the cutoff line on Intensity scale the ECBI from 33% to 11% from pretest to posttest. There was a decrease in the percentage of control group participants scoring above the cutoff line on Intensity scale the ECBI from 40% to 23.3% from pretest to posttest.

**Hypothesis Six**

H6 There will be a statistically significant change in their target child's conduct problems measured by the Problem Scale of the Eyberg Child Behavior Inventory (ECBI) for those children whose parents were exposed to the Becoming a Love and Logic Parent program as compared to the control group exposed to nothing.

H_06 There will be no statistically significant change in their target child's conduct problems measured by the Problem Scale of the Eyberg Child Behavior Inventory (ECBI) for those children whose parents were exposed to the Becoming a Love and Logic Parent program as compared to the control group exposed to nothing.

Hypothesis 6 addressed parents’ perceptions of whether or not child acting-out behavior was problematic for them before and after the participation in the BLLP program. It was addressed using a between factor ANCOVA on the scores of the Problem scale of the ECBI.
The results of this study did not support this hypothesis. Analysis of covariance failed to show a significant difference in the control group ECBI Problem Scale and the treatment group ECBI Problem Scale (F=.34, p>.05) indicating a failure to reject the null hypothesis.

Analysis of covariance showed that there was a significant difference between the control group ECBI Problem Scale pretest and the control group ECBI Problem Scale posttest (F=2.63, p<.05). Levene’s was significant at .001 indicating that the control group was too non-homoskedastic for results to be reliable.

Analysis of covariance showed that there was a significant difference between the treatment group ECBI Problem Scale pretest and the treatment group ECBI Problem Scale posttest (F=2.45, p<.05). Sixty percent of the variance in posttest scores was accounted for by the BLLP program.

There was a decrease in the percentage of treatment group participants scoring above the cutoff line on Problem scale the ECBI from 27.2% to 16% from pretest to posttest. There was a increase in the percentage of control group participants scoring above the cutoff line on Problem scale the ECBI from 20% to 30% from pretest to posttest.

**Summary**

The results of this study failed to show a significant difference in stress levels of participants who attended the BLLP program and those who did not attend the program. In general, participants from both treatment and control groups were less stressed at the end of the treatment period; however, the Parental Distress subscale analysis of covariance indicates the possibility of a relationship between the BLLP program and reduction of stress as measured by the Parental Distress subscale.
The results of this study failed to find a significant difference as measured by the ECBI Intensity Scale in the behavior of the children whose parents attended the BLLP program as compared to those children whose parents did not attend the program. As with stress level, the intensity of the child’s behavior decreased in both groups over the treatment period. However, the Problem Scale analysis indicates the possibility of a positive relationship between the BLLP program and reduction of problematic child behaviors as measured by the ECBI.
Chapter 5 - Discussion

This study did not find significant differences in parenting stress reduction and child acting-out behavior between participants attending the Becoming a Love and Logic Parent (BLLP) program and those who were a part of the waitlist control group; however, this is not an indication that the program is not effective. While not statistically significant, results indicate decreases in parenting stress and decreases in child acting-out behavior of those attending the program.

For the treatment group, the decrease in parenting stress was seen on the three subscales of the PSI/SF and the Total Stress scale. Within measures, the percentage of participants scoring in the ranges above the normal range of stress decreased while the percentages of those scoring within the normal ranges of stress increased. In addition, this reduction in stress occurred at all stress levels above the normal level, with two notable exceptions, the percentage of those scoring at the clinically significant level. On all but the Parent-Child Dysfunctional Interaction subscale, the percentage of participants who scored in the normal range increased or remained constant from pretest to posttest. It is likely that the borderline range people dropped down to the normal range and the clinically severe participants dropped to the clinically significant category or lower. The percentage of treatment group participants scoring in the clinically significant range on the PSI/SF Total Stress score increased from 15% to 18.1% from pretest to posttest. This increase is likely attributed to participant’s scores shifting from the clinically severe range to the clinically significant range rather than an increase in the overall stress level of the group.

The results for the control group varied. From pretest to posttest, the percentage of participants scoring in the ranges above the normal range of stress decreased on the Total Stress scale and the Difficult Child subscale; however, the percentage of participants scoring in the
ranges of stress above normal increased within groups on the Parental Distress subscale and the Parent-Child Dysfunctional Interaction subscale, while percentages of those scoring within the normal ranges of stress decreased. This suggests that the Difficult Child subscale demonstrates a more robust effect initially than do the other two subscales. The Likert scale lends itself to varying the responses over multiple tests through simple test fatigue. Taking care of one’s self and recognizing that children are naturally going to act out and lash out at parents are components of the Love and Logic program. It is possible that, despite a reduction in parenting stress related to child behaviors on the DC subscale, there was an increase in parenting stress on the PD and P-CDI subscales because parents continued to perceive the child’s behavior to be their fault, or to be a problem, whereas those in the treatment group recognized that these are normal feelings and behaviors associated with parenting.

There was a decrease in the percentage of participants scoring above the cutoff line that determines possible conduct disorder in children, indicating a decrease in child acting-out behavior within measures. This decrease was observed in the ECBI Intensity scale for both the treatment (33% to 11%) and control groups (40% to 23%). Within measures, the scores on the ECBI Problem scale decreased for the treatment group (27.2% to 16%) and increased for the control group (20% to 30%). A component of the BLLP program is normalizing a child’s acting-out behavior; therefore, while both groups saw a decrease in acting-out behavior as measured by the Intensity scale, it is possible that the treatment group perceived the behavior as normal, and thus no longer a problem, after exposure to this principle.

While not to a statistically significant degree, this research does support Abidin’s model of parenting stress (1995) for the PSI/SF in which he theorizes that parental behavior, parent/child interaction and child behavior interact to effect parental stress which, in turn, affects
child behavior. For both treatment and control groups, the scores on the Total Stress scale and the Difficult Child subscale decreased over time, as did the ECBI Intensity scores, suggesting a positive correlation between parenting stress levels (as measured by the Total Stress scale) and child acting-out behaviors (as measured by the ECBI).

It is difficult to compare the results of this study to previous research on the BLLP program due the fact that most of those studies utilized the pretest and posttest questionnaires designed specifically to measure change before and after the BLLP program. This his current study utilized the PSI/SF and the ECBI in hopes of being able to compare the effectiveness of the BLLP program with other parenting programs that have been evaluated using these tools. As with the Cerdorian (2006) research, there was a decrease in the Total Stress scores; however, this decrease was not found to be significant. Also, no other research was found to contain information of scores on the subscales of the PSI/SF in evaluating the Becoming and Love and Logic Parent Training Program, making it difficult to compare the results of this current study to others.

Consulting Cohen (1988, 1992), the required sample size for a medium effect size \( f = .25 \), \( \alpha = .05 \), and power = .8, was \( n = 64 \) per groups; a total of 128 participants. Applying the Bonferroni correction to account for Type I errors, \( \alpha = .025 (.05/2) \) and prorating between effect sizes of .05 and .01, gives a sample size of \( n=80 \). It is likely that the small sample size (\( n=86 \)) was a factor in why there was not a significant difference between measures on the PSI/SF scales and ECBI scales.

Participants were randomly selected and placed in treatment and control groups. Sign up forms were sent home to with every elementary school child in the school district; approximately 5000. As forms were collected, names were placed in an Excel spreadsheet and table of random
numbers was used to place participants. If two people had completed a sheet indicating their desire to participate, both were included in the group if one was randomly selected. Participants for the treatment group were then notified via email or phone of their selection in one of the two groups. If they were no longer able to participate, another participant was randomly selected and contacted. Eventually, 80 were randomly placed in one of two treatment groups, either on Tuesday evenings or Thursday evening. Eighty were randomly placed on a waitlist as a control group and were given the opportunity to participate in a 7-session BLLP group at a later date.

Attrition played a role in the small sample size. While 80 treatment group participants took the pretest questionnaire, only 56 completed the posttest questionnaire. The participants who dropped out of the treatment group were very similar to those who remained; 90% were white, 85% were married, all had completed at least some college, and the median household income was $70,000-$79,000. Of the 80 control group participants who were sent a pretest, only 34 returned the completed pretest. Of those who completed the pretest, only 30 completed the posttest. Those participants who dropped out of the control group were very similar to the those who remained in the control group; 100% were white and married, all had completed at least some college, and the median household income was $90,000-$99,000.

The results of this current study of BLLP program are similar to those with smaller samples as well (Wilson, 2006; Benjamin, 2010). The Cerdorian (2006) study of the BLLP program, which also utilized the Total Stress scale of the PSI/SF, and showed a significant decrease in stress between treatment and control groups, had a sample size of 223 participants.

Another factor contributing to the lack of significant difference between the groups could be the number of participants in each class, 25-30 participants. Though the sizes of the groups were well below Charles Fay’s suggested size of “no more than 125” (personal communication,
April 15, 2011), the presenters in this study found it difficult to answer individual questions in the detail some participants may have needed to effectively implement the program’s content with their children. Having two facilitators and a group with 8 to 12 participants would be ideal (Childers & Couch, 1989; Yalom & Leszcz, 1995), allowing for participants to interact as well as allow time for questions to be effectively answered while not compromising the curriculum to be covered in each session.

The BLLP program indicates that the focus of the classes should be on providing content and not on answering questions. In this study, none of the bonus videos were shown due to time constraints. It is possible that this additional information could have helped improve the behavior of the participants’ children and in turn decreased participants’ stress levels.

While the current study did not find a significant difference between the control and treatment groups on the PSI/SF Total Stress scale, a significant difference was found when the scores from the Parental Distress subscale were held as a covariate. Parental distress, particularly maternal depression, is well established as a factor affecting parenting stress (Abidin, 1990, 1992, 1995); therefore, it is not surprising that scores from this particular subscale so strongly affected the effects of total stress. Only 16 participants were in the ranges above the normal and borderline levels of stress on the PC subscale compared to 24 on the P-CDI subscale and to 33 on the DC subscale. 30 participants were above the normal and borderline levels of overall stress. There was a 23.3% decrease (56.3% to 33%) in total stress above normal limits within measures for the treatment group.

The percentage of treatment group participants scoring in the clinically severe range on the PSI/SF Total Stress score decreased from 35% to 11% within groups. The percentage of treatment group participants scoring in the clinically significant range on the PSI/SF Total Stress
score increased from 15% to 18.1% within groups. This increase is likely attributed to participants’ scores shifting from the clinically severe range to the clinically significant range rather than an increase in the overall stress level of the group. The percentage of treatment group participants scoring in the borderline range on the PSI/SF Total Stress score decreased from 7.2% to 4% within groups.

There was a 6.3% (43.3% to 37%) decrease in total stress above normal limits between pretest and posttest for the control group. There was no movement in the percentage of control group participants from pretest to posttest in the clinically severe or clinically significant ranges; however, there was a decrease in the percentage of participants scoring in the borderline range from 17% to 10% from pretest to posttest.

The standard deviation of percentile scores on the PSI/SF (insert SD=x, Range=Y) was so broad in the analysis that a score which qualified as an outlier would also be beyond the maximum or minimum range for the possible scores. This indicates that any variance in percentile scores creating clustered groups was as a result of uniform grouping, as opposed to statistical or measurement error. This in turn leaves the influence of a robust experimental effect as the likely source of such pre-to-post score migration, as no persistent outlier errors are possible within the scoring framework.

It is also possible that the shift in percentile scores on the PSI/SF from higher to lower degrees of stress was a result of having been tested twice with parents wanting to show improvement. This would explain the shift from higher to lower degrees of stress in both control and treatment groups on the Total Stress and Difficult Child scores. This effect combined with a robust treatment effect could explain why the shift from higher to lower degrees of stress was more pronounced in the treatment group.
Limitations

The small sample size (n=86; treatment n=56, control n=30) and relative homogeneity of the group makes it difficult to generalize the findings of this study to the general US population; however, it is likely that generalizations can be made to other Midwestern suburban areas. Participants were from the same suburban school district. Participants were well-educated, with all having completed a high school degree and over 60% of participants having completed a Bachelor’s degree or higher. Ninety-five percent of participants identified as white and not Hispanic. Seventy-nine percent of participants were married. The median household income was $80,000-$89,999, which is higher than the US median household income reported by the US Census Bureau (http://www.census.gov/hhes/www/income/data/historical/household/2011/H08_2011.xls) of $50,054 and higher than the Missouri median household $45,774. Research with a more varied demographic sample is needed.

All participants were connected to elementary aged children, roughly 5-years to 12-years of age, in the same school district. While representing a broad age range, it is difficult to generalize the results of this study to the parents of children either younger or older than this group. Targeting populations with either younger or older children for future research would help to determine the effectiveness of the program with parents of these ages of children.

Participants were instructed to complete the PSI/SF and the ECBI with a single elementary aged child in mind, the Target child; no data were collected on other children in a household. If households had multiple children of varying ages, it is possible that this could affect parenting stress and the acting-out behavior of the Target child. During the course of the training program, participants expressed concerns for implementing the techniques of the program with siblings.
While data were not collected on whether or not children were diagnosed with conditions such as ADHD or ASD, it was revealed throughout the sessions that parents of children with ADHD and ASD were involved in the sessions. The BLLP program indicates that there may be some families that need more support than only the parenting program and that therapeutic interventions may be needed. Love and Logic publishes materials separate from the BLLP program for use with children diagnosed with ADHD but, this material was not utilized during these sessions because this study was looking at only the materials utilized in the BLLP program. Parents trying to implement the program with children who have specific learning or behavioral needs likely would benefit from material specifically tailored to the needs of the child and/or their child’s disability. The Love and Logic program does not specifically address the benefits of structure, especially for children with ADHD and ASD. Some parents may need assistance in learning how to structure their family’s lives in a manner that improves the behaviors of the children and lowers the stress level of the parents. Also, the Love and Logic program advocates that children do not need specific instructions on how to behave, nor do they need specific rewards for behavior; however, for children with ADHD, direct instruction in appropriate behavior along with tangible rewards for appropriate behavior or negative consequences for inappropriate behavior has been shown to be highly effective in changing behavior in children with ADHD (Piffner, Barkley & DuPual, 1998).

Data were not specifically collected on parents’ mental health status or personality traits in the current study; however, this too could have an effect on the parent’s ability to implement the program and improve child behavior. A major component of the program is the manner in which parents react to a child’s behavior; parents should not react in anger to the behavior of a child, they should either react with empathy or delay a reaction to avoid reacting angrily. If a
parent has a disorder that makes it difficult for them to regulate their emotions, bipolar disorder for example, they may struggle to implement that component of the program without specific interventions to address the parent’s mental health concerns.

During participation in the treatment group, two parents indicated that taking part in the group actually added to parental distress because the parents felt as though their previous methods of parenting were ineffective, yet they did not feel as though they had a good enough grasp of the Love and Logic Parenting program to effectively utilize it. This left them feeling as though they did not know what to do to handle some of their child’s acting-out behavior. Reassurance that their feelings are normal, along with additional practice and instruction with the Love and Logic program, would likely help participants better understand the material and techniques, and, in turn, feel more comfortable in implementing them.

There are limitations involved with the measures of this study. Ideally, there would have been an objective evaluation component to the study, such as observation of parent-child interactions; however, this was not feasible in the study. Instead, as with most research on parenting stress and child behavior, self-report measures were utilized, relying on the honesty and objectivity of the reporters (Derogatis & Coons, 1993; Eyberg & Pincus, 1999). Parents potentially provide insight into their child’s behavior that an objective observer would likely lack; therefore, the value of parent reporting should not be overlooked. A combination of observed parent/child interaction and self-report measures would offer a broader and potentially more accurate view of any changes that may occur as a result of participation in the parent-training program. In addition, despite wide use, there is limited information on the PSI/SF’s validity and reliability, and questions remain about the effectiveness of the measure.
Recommendation

Much of the research on the effectiveness of BLLP program utilized the pretest and posttest of the Becoming a Love and Logic Parent Questionnaire. This measure was designed by the authors of the BLLP program and the questions deal with child behaviors specifically addressed in the materials of the program, as such, it is difficult to compare the results of those studies to the current study that utilize the PSI/SF and the ECBI. Including the Becoming a Love and Logic Parent Questionnaire in the evaluation material could provide data to compare convergently against that of the PSI/SF and ECBI.

As with all research on the effectiveness of the BLLP program, there is very little in the way of comparing the program against other parenting programs. Running a similar study with a third sample group taking part in a different parent education program could provide information as to how the BLLP program compared with the alternative program as measured by the PSI/SF and ECBI.

The Love and Logic Company has a host of books designed to provide information on using the Love and Logic parenting method, Parenting with Love and Logic (Fay & Cline, 1991) being the main book about the method. A similar study including a third sample group comprised of those reading Parenting with Love and Logic (Fay & Cline, 1991) only could provide information as to how the BLLP program compared to the book that created the program on the PSI/SF and ECBI.

One aspect of the current study that could be improved upon would be to have a variety of BLLP program groups run by a variety of people. This could lessen the effects of only having the material presented by a single presenter, or in the case of this current study, a duo. This could also allow for groups with fewer participants to be conducted allowing for individual attention to specific participant concerns while at the same time potentially increasing the overall sample
size. If possible, all presenters would receive training in using the BLLP program, and a portion of their presentations would be video recorded and viewed by the researcher to ensure fidelity to the program. Future research could examine the longitudinal effects of the BLLP program. The PSI/SF and ECBI could be administered at 1-, 3-, 6-, 9-, and 12- month intervals following the final session of the program to determine the long term effectiveness of the BLLP program in reducing parenting stress and child acting-out behaviors.

Ideally, a study of the BLLP program’s effect on reducing parenting stress and child acting-out would be conducted with a larger sample size of a minimum 84 participants in the treatment group and a minimum 84 participants in the waitlist control group. Those participants in the waitlist control group would be invited to participate in a seven-week BLLP program following the conclusion of the study. The treatment group would be divided into seven groups of 12 participants. Participants would be randomly placed in either a waitlist control group or treatment group. The groups would be conducted by two trained co-facilitators over the same seven-week time period. Participants would be evaluated using a pretest that includes questions on demographics, including any known diagnoses of children and participant and the number of children in the household and their ages. In addition, the evaluation would utilize the full Parenting Stress Index, the Eyberg Child Behavior Inventory, and the Becoming a Love and Logic Parenting Program Questionnaire. Parents would take the pretest prior to the first module of the Love and Logic program. All video material would be shown, including the clips considered to be bonus material. Child care and refreshments would be supplied. The groups would be offered at varying times to accommodate participant schedules. Following the final class of the program, participants would take a posttest consisting of the same measures as the pretest. The evaluation would be administered at 1-, 3-, 6-, 9-, and 12- month intervals following
the final session of the program to determine the long term effectiveness of the program. Those participants on the waitlist control group would be offered the class after the end of the 12-month evaluation. The current research questions and hypothesis would be used, with the addition of asking if the BLLP program resulted in an improvement in parental stress and child acting-out behavior as measured by the program questionnaire.

School counselors wanting to conduct parent education programs have a wide variety of programs to select from. Due to the great amount of time and resources involved in implementing parenting education programs, care should be taken to select an effective program. Several websites offer information on effective programs recognized by government agencies: the U. S. Department of Health and Human Services Substance Abuse and Mental Health Services Administration's National Registry of Evidence-based Programs and Practices (http://nrepp.samhsa.gov/), U. S. Department of Justice Office of Justice Programs Office of Juvenile Justice and Delinquency Prevention (http://www.ojjdp.gov/programs/index.html), Strengthening America’s Families (http://www.strengtheningfamilies.org/html/programs_1999/programs_list_1999.html), National Institutes of Health National Institute on Drug Abuse (http://www.nida.nih.gov/Prevention/examples.html), U. S. Department of Education Office of Safe and Drug Free Schools (http://www2.ed.gov/about/offices/list/osdfs/programs.html#state), The U. S. Surgeon General's Office (http://www.surgeongeneral.gov/library/youthviolence/report.html). Many of the programs listed on these websites are family focused and center on parenting education as a manner to prevent various youth behavior problems. The costs of materials and training needed to conduct parenting education groups vary depending on the particular program, as does the number and
length of sessions. The BLLP program is not currently on the lists of effective programs provided by any of the sites mentioned above; however, the curriculum had previously been purchased by the school district. Checking as to whether or not a district has previously purchased a curriculum would be advisable; however, time should be taken to research literature on the effectiveness of the curriculum.

Literature on parenting education attendance indicates that certain factors influence the likelihood of participation in parenting education (Johnson, Harrison, Burnett & Harrison, 2003; Rowland & Wampler, 1983). These factors include the availability of knowledge of the offering of courses, convenience of the time courses where offered, location of courses offered, familiarity with the person/entity providing the course, childcare, and affordability. By offering parenting education courses in local schools taught by school counselors, there is a likelihood of parents being comfortable with the setting and provider of the courses. In order to best fit the particular needs of the school, a survey could be sent home via students and email to solicit input on times, days, and dates that would best serve parents. The same methods of disseminating information, student delivered notes and email, could be utilized to inform parents of the program and provide them with a way to register.

School counselors should consider offering free or affordable childcare to participants. Participants in this particular study indicated how helpful it was to have childcare provided as it allowed both parents to attend. To accomplish this, school counselor might consider reaching out to staff volunteers and student volunteers. In this particular study, high school students in need of volunteer hours were utilized for childcare. Staff members initially volunteered but were eventually compensated as the school district administration recognized the value of having trained adults available for child supervision. One aspect that should be considered, is that of the
potential behavior of the children to be cared for. As these are the children of parents seeking education to improve parenting skills and child behavior, these particular children may be difficult to manage. Advance preparation for activities and discipline should be considered.

Being able to provide the parenting education for minimal or no cost may increase the likelihood of having a variety of parents participate. Some participants in this study indicated that it was helpful to have the course and handbooks provided free of charge. Another BLLP program offered in the area charged $75.00 per participant and did not have enough participants enroll to begin. School counselors could look to local grants from school or community foundations or the school’s Parent Teacher Association for funding.

**Summary**

There is a need to address mental health issues facing children and assist parents in being effective parents and dealing with the stresses that accompany this vital role. Nearly 200 parents expressed an interest in taking the classes offered as part of this study, and others have inquired about further class offering since the conclusion of this study, indicating that parents are interested in investing time to improve their parenting skills. Agencies and school districts offering such programs must concentrate resources on those programs with a proven track record; studies to determine effective programs such as the BLLP program continue to be needed to address these issues.
References


Appendix A - Sample ECBI Questions

Below are a series of phrases that describe children’s behavior. Please (1) circle the number describing how often the behavior currently occurs with your child, and (2) circle either “yes” or “no” to indicate whether the behavior is currently a problem for you.

For example, if seldom, you would circle the 2 in response to the following statement:

<table>
<thead>
<tr>
<th>How often does this occur with your child?</th>
<th>Is this a problem for you?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never</td>
<td></td>
</tr>
<tr>
<td>Seldom</td>
<td></td>
</tr>
<tr>
<td>Sometimes</td>
<td></td>
</tr>
<tr>
<td>Often</td>
<td></td>
</tr>
<tr>
<td>Always</td>
<td></td>
</tr>
</tbody>
</table>

1. Refuses to eat his vegetables

Circle only one response for each statement, and respond to all statements. DO NOT ERASE!
If you need to change an answer, make an “X” through the incorrect answer and circle the correct response. For example:

<table>
<thead>
<tr>
<th>How often does this occur with your child?</th>
<th>Is this a problem for you?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never</td>
<td></td>
</tr>
<tr>
<td>Seldom</td>
<td></td>
</tr>
<tr>
<td>Sometimes</td>
<td></td>
</tr>
<tr>
<td>Often</td>
<td></td>
</tr>
<tr>
<td>Always</td>
<td></td>
</tr>
</tbody>
</table>

1. Refuses to eat his vegetables

1. Dawdles in getting dressed.

5. Refuses to do chores when asked.

25. Verbally fights with sisters and brothers

Adapted and reproduced by special permission of the Publisher, Psychological Assessment Resources, Inc., 16204 North Florida Avenue, Lutz, Florida 33549, from the Eyberg Child Behavior Inventory by Sheila Eyberg, Ph.D., Copyright 1998, 1999 by PAR, Inc. Further reproduction is prohibited without permission from PAR, Inc.
Appendix B - BLLP Sign-up Sheet

The seven session program, Becoming a Love and Logic Parent®, will be offered to parents of elementary students in Liberty Public Schools. In order to provide the best experience, two groups will be offered, one on Tuesday evenings from 6PM to 9PM and one on Thursday evenings from 6PM to 9PM. Each class will have a maximum capacity of 40 participants and people will be randomly selected for participation in the groups to ensure equal opportunity for all. Those people not selected will be placed on a waitlist and have an opportunity to participate in groups scheduled at a later time. People signing up for the groups will be asked to sign a consent form and complete two pretest questionnaires at the beginning of the program and two posttest questionnaires at the end of the program. Information will be used for a research study designed to evaluate the effectiveness of the program at reducing parenting stress and improving child behavior. All information will be kept confidential.

Becoming a Love and Logic Parent® provides answers to the following questions:

♥ “How do I get them out of bed in time to catch the school bus?”
♥ “How can I stop my children from bickering and fighting?”
♥ “How do I get my children to help with chores without constant argument?”
♥ “How do I get him to stop whining at dinner?”
♥ And many other day-to-day parenting challenges

This parenting program is designed to give you practical skills that can be used immediately!

<table>
<thead>
<tr>
<th>Group classes will be held at the Liberty School District Administrative Center, 600 Conistor Drive, Liberty, MO, from 6:00PM to 9:00PM. Child care and light refreshments will be provided. Groups will be taught by Rob Fisher, Manor Hill school counselor, and Becky Starnes, Shoal Creek school counselor. Classes will be free to participants and workbooks provided by the Liberty Public Schools PTA Council.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tuesday evening groups will be held on the following Tuesdays from 6:00PM to 9PM:</td>
</tr>
<tr>
<td>• Tuesdays, January 10th, January 17th, January 24th, January 31st, February 7th, February 21st, February 28th</td>
</tr>
<tr>
<td>Thursday evening groups will be held on the following Thursdays from 6PM to 9PM:</td>
</tr>
<tr>
<td>• Thursdays, January 12th, January 19th, January 26th, February 2nd, February 9th, February 23rd, March 1st</td>
</tr>
</tbody>
</table>

If you would like to participate please fill out the form below and return it to your child’s elementary school counselor by December 5th. Information regarding your selection for the group will be sent to you by December 16th.

For additional information about Love and Logic, visit www.loveandlogic.com or contact me.
Rob Fisher, Manor Hill Counselor
rfisher@liberty.k12.mo.us
816-736-6761

What night would you be most able to attend (select all that apply)?

________ Tuesday, 6:00 to 9:00
________ Thursday, 6:00 to 9:00

Elementary School that your child attends:

________

First and Last Name(s) of all adult(s) attending:

________

Phone: __________ Email: __________
Address: __________ City: __________ Zip: __________

To ensure adequate child care, please indicate the number of children you will bring and their ages:

________

Signature
Appendix C - Sample PSI/SF Questions

Read each statement carefully. For each statement, please focus on the elementary school child that you are most concerned about, and circle the response that best represents your opinion.

Circle the SA if you strongly agree with the statement.
Circle the A if you agree with the statement.
Circle the NS if you are not sure.
Circle the D if you disagree with the statement.
Circle the SD if you strongly disagree with the statement.

For example, if you sometimes enjoy the movies, you would circle A in response to the following statement:

I enjoy the movies. SA A NS D SD

While you may not find a response that exactly states your feelings, please circle the response that comes closest to describing how you feel. YOUR FIRST REACTION TO EACH QUESTION SHOULD BE YOUR ANSWER.

Circle only one response for each statement, and respond to all statements. DO NOT ERASE! If you need to change your answer, make an “X” through the incorrect answer and circle the correct response. For example:

I enjoy the movies. SA A NS SD

1. I often have the feeling that I cannot handle things very well. SA A NS D SD
13. My child rarely does things for me that make me feel good. SA A NS D SD

For the next statement, choose your response from the choices “1” to “5” below.
32. I have found that getting my child to do something or stop doing something is:
   1. much harder than I expected
   2. somewhat harder than I expected
   3. about as hard as I expected
   4. somewhat easier than I expected
   5. much easier than I expected

1 2 3 4 5

Adapted and reproduced by special permission of the Publisher, Psychological Assessment Resources, Inc., 16204 North Florida Avenue, Lutz, FL 33549, from the Parenting Stress Index Short Form by Richard R. Abidin, Ed.D., Copyright 1990, 1995 by PAR, Inc. Further reproduction is prohibited without permission from PAR, Inc.
Appendix D - BLLP Modules and Program Objectives

Module One:  Raising Responsible Kids

Objective 1  Identify the four steps to responsibility

Module Two:  The Love and Logic Formula

Objective 2  Recognize who has the control

Module Three:  “C” Stands for Control That’s Shared

Objective 3  Offer appropriate choices in order to share control

Module Four:  “O” is for Ownership of the Problem

Objective 4  Identify if a given problem belongs to the child of to the parent

Module Five:  “O” is Also for Opportunity for Thinking

Objective 5  Set limits for children using "thinking words" or enforceable statements

Module Six:  “L” Stand for Let Empathy and Consequences Do the Teaching

Objective 6  Set limits for children using "thinking words" or enforceable statements

Objective 7  Recognize empathetic responses

Module Seven:  Let’s Wrap It Up and Take It Home!

Objective 8  Design a strategy for resolving a problem situation, or problem behavior, using Love and Logic
Appendix E - BLLP Interest Survey

Dear Families,

I am interested in offering the Becoming a Love and Logic Parent® seven week parenting program to parents of elementary students in Liberty Public Schools. Evaluation results from this program will be used as part of a dissertation research project. To get an idea of your preferences and needs, please fill out the survey below and return these to your school counselor by May 25th, 2011. Further information about this opportunity will be available at the beginning of next school year. Thank you for your input!

Becoming a Love and Logic Parent® provides answers to the following questions:

- “How do I get them out of bed in time to catch the school bus?”
- “How can I stop my children from bickering and fighting?”
- “How do I get my children to help with chores without constant argument?”
- “How do I get him to stop whining at dinner?”
- And many other day-to-day parenting challenges...

This parenting program is designed to give you practical skills that can be used immediately!

For additional information about Love and Logic, visit www.loveandlogic.com or contact me.

Rob Fisher, Manor Hill Counselor
rfisher@liberty.k12.mo.us
816-736-6761

____ No, I would not like to attend.  ____ Yes, I would like to attend. If “yes”, please continue to answer below.

What elementary school does your child attend?

<table>
<thead>
<tr>
<th>Time Preference (Check all that apply):</th>
<th>Days (Check all that apply):</th>
</tr>
</thead>
<tbody>
<tr>
<td>___ Sometime between 8:00 to 12:00</td>
<td>___ Tuesday</td>
</tr>
<tr>
<td>___ Sometime between 12:00 to 4:00</td>
<td>___ Wednesday</td>
</tr>
<tr>
<td>___ 4:00 to 7:00</td>
<td>___ Thursday</td>
</tr>
<tr>
<td>___ 5:00 to 8:00</td>
<td></td>
</tr>
<tr>
<td>___ 6:00 to 9:00</td>
<td></td>
</tr>
</tbody>
</table>

Child care:

___ Yes, it would be needed for me to be able to attend.
___ Yes, it would be helpful.
___ No, it is not needed.

Food:

___ Yes, it would be helpful to have a meal provided.
___ Yes, snacks would be good.
___ No, they are not needed.

Fee (to cover price of workbook):

___ Yes, I could pay $9.00 to cover the cost of the Becoming a Love and Logic Parent workbook.
___ No, this would prevent me for being able to participate.
Appendix F - Informed Consent Letter

KANSAS STATE UNIVERSITY

INFORMED CONSENT

PROJECT TITLE: Effects of the Becoming a Love and Logic Parent Program on Parenting Stress and Child Behavior in Parents of Elementary School Children and their Elementary School Child

APPROVAL DATE OF PROJECT: December 21, 2011 EXPIRATION DATE OF PROJECT: December 12, 2012

PRINCIPAL INVESTIGATOR: Judith Hughey, EdD, Phone (316) 785-532-5527, jhughey@ksu.edu

CO-INVESTIGATOR(S): Robert Fisher, MA, PhD Candidate, Phone (816)-736-6761, rfisher@liberty.k12.mo.us

IRB CHAIR CONTACT/PHONE INFORMATION: (This information is for the subject in case he/she has questions, or needs or wants to discuss any aspect of the research with an official of the university or the IRB)

- Rick Scheidt, Chair, Committee on Research Involving Human Subjects, 203 Fairchild Hall, Kansas State University, Manhattan, KS 66506, (785) 532-3224.

- Jerry Jaax, Associate Vice President for Research Compliance and University Veterinarian, 203 Fairchild Hall, Kansas State University, Manhattan, KS 66506, (785) 532-3224.

SPONSOR OF PROJECT: Liberty Public Schools Parent Teacher Association

PURPOSE OF THE RESEARCH: This research is being completed as part of the requirement for a Ph.D. degree. The results of the study will help determine the effectiveness of the Becoming a Love and Logic Parent program in changing child behaviors and reducing parenting stress. The project will take approximately two months to complete. If you volunteer for this research study, you will be asked to complete two questionnaires prior to the beginning of the first Becoming a Love and Logic Parent class and again at the end of the class. The first questionnaire explores parenting stress and the second explores children's behavior. You will be asked to respond by circling a response on a scale. You are required to sign this consent form, however, it will be collected and kept in a locked cabinet with only the researcher having access. Neither you name, nor any identifying information will be reported in the final form of this study. Your responses will be combined with others and reported in group form.

There are no foreseeable risks to participation in the project. Participation in this project will provide you with practical parenting strategies designed to enhance your relationship with your child, relieve some stress associated with the role of being a parent and help your child to behave in a more responsible manner. Your involvement in this project will help determine the effectiveness of the Becoming a Love and Logic Parent program in relieving parenting stress and changing child behaviors.

TERMS OF PARTICIPATION: I understand this project is research, and that my participation is completely voluntary. I also understand that if I decide to participate in this study, I may withdraw my consent at any time, and stop participating at any time without explanation, penalty, or loss of benefits, or academic standing to which I may otherwise be entitled.

I verify that my signature below indicates that I have read and understand this consent form, and willingly agree to participate in this study under the terms described, and that my signature acknowledges that I have received a signed and dated copy of this consent form.

Participant Name: ___________________________ Date: __________

Participant Signature: ___________________________ Date: __________

Witness to Signature: (project staff) ___________________________ Date: __________

Last revised on May 20, 2004
Appendix G - Demographic Questions

Read each question or statement carefully. For each question or statement, please fill in the circle for the response that best represents your opinion.

For example, if you are a male, you would fill in the ○ before male in the following question:

What is your sex?
○ Male
○ Female

Your Name: ________________________________
Your Date of birth: __________________________
Today’s Date: ______________________________

Gender
What is your sex?
○ Male
○ Female

Marital Status
What is your marital status?
○ Now married
○ Widowed
○ Divorced
○ Separated
○ Never married

Education
What is the highest degree or level of school you have completed? If currently enrolled, mark the previous grade or highest degree received.

○ No schooling completed
○ Nursery school to 8th grade
○ 9th, 10th or 11th grade
○ 12th grade, no diploma
○ High school graduate - high school diploma or the equivalent (for example: GED)
○ Some college credit, but less than 1 year
○ 1 or more years of college, no degree
○ Associate degree (for example: AA, AS)
○ Bachelor's degree (for example: BA, AB, BS)
○ Master's degree (for example: MA, MS, MEng, MEd, MSW, MBA)
○ Professional degree (for example: MD, DDS, DVM, LLB, JD)
Doctorate degree (for example: PhD, EdD)

Household Income
What is your total household income?
- Less than $10,000
- $10,000 to $19,999
- $20,000 to $29,999
- $30,000 to $39,999
- $40,000 to $49,999
- $50,000 to $59,999
- $60,000 to $69,999
- $70,000 to $79,999
- $80,000 to $89,999
- $90,000 to $99,999
- $100,000 to $149,999
- $150,000 or more

Ethnicity
Please specify your ethnicity.
- Hispanic or Latino
- Not Hispanic or Latino

Race
Please specify your race.
- American Indian or Alaska Native
- Asian
- Black or African American
- Native Hawaiian or Other Pacific Islander
- White
- Other
Read each question or statement carefully. For each question or statement, please focus on the elementary school child that you are most concerned about, and fill in the circle for the response that best represents your opinion.

For example, if the child is male, you would fill in the ○ before male in the following question:

What is your child’s sex?
○ Male
○ Female

Child’s name: ____________________________________________
Child’s Date of birth: ____________________________________
Your Relationship to the Child: ______________________________

Gender
What is your child’s sex?
○ Male
○ Female

Ethnicity
Please specify your child’s ethnicity.
○ Hispanic or Latino
○ Not Hispanic or Latino

Race
Please specify your child’s race.
○ American Indian or Alaska Native
○ Asian
○ Black or African American
○ Native Hawaiian or Other Pacific Islander
○ White
○ Other

Education
What grade is your elementary school child in?
○ Kindergarten
○ 1st Grade
○ 2nd Grade
○ 3rd Grade
○ 4th Grade
○ 5th Grade
Appendix H - Open Ended Pretest Questions from the Becoming a Love and Logic Parent Program Questionnaire

Why did you sign-up for this parenting program?

By the time you complete this program, what question or questions would you most like answered?
Appendix I - Open Ended Posttest Questions from the Becoming a Love and Logic Parent Program Questionnaire

Identify the most valuable thing you learned from this class, and explain why you feel this way.

Describe a parenting situation you handled successfully with Love and Logic.

At the beginning of this program you identified a question or questions would you most like answered by the end of the program; was that question(s) answered?
Appendix J - Treatment Groups Posttest Cover Letter for Participants Unable to Attend Final Session

Thanks so much for being a part of the Love and Logic classes. I learned so much from interacting with you all on a weekly basis. Not only did I have to learn about Love and Logic, but, I learned from the ideas that you brought on a regular basis. I am a better counselor and dad because of you - Thank you!

Please take time to fill out the final survey and return it to your child counselor in the envelope provided by April 18. Thanks so much for your help with this; the final survey is so important to the research. Please let me know if you have any questions, about the research, or Love and Logic.

Take care,

Rob Fisher
rfisher@liberty.k12.mo.us
816-736-6761
Appendix K - Control Group Pretest Cover Letter

Thank you for your willingness to fill out this survey for the Becoming a Love and Logic Parent classes! I will take the information from your surveys and compare it with the surveys taken by the parents attending the classes; hopefully we will find that the classes were a great success! Your participation is so important, so, thank you!!!!

I have included a copy of the consent form that you must sign to take part in the study and a copy of the survey. These are standardized measures that are used to gauge your stress levels as a parent and your child’s behavior. They are used to evaluate many parenting programs.

Please fill out the packet and return it to your child’s school counselor in the folder provided, by January 27th. The school counselor will then make certain that it is given to me. If you have any questions, please feel free to contact me and I will do my best to answer them.

I will send out information to you in February regarding dates/times/location for the Becoming a Love and Logic Parent Classes that will begin in April. I will also, notify you of when I will send out the post-survey, the week of February 27th. It will most likely go out in the Friday folders February 24th.

Thank you,

Rob Fisher
816-7360-6761
rfisher@liberty.k12.mo.us
Appendix L - Control Group Posttest Cover Letter

Thank you for your willingness to fill out this post survey for the Becoming a Love and Logic Parent classes! Thanks also for filling out and returning the pre survey in January. Your participation is so important, so, thank you!!!!

Please fill out the packet and return it to your child’s school counselor in the folder provided, by March 9th. The school counselor will then make certain that it is given to me. If you have any questions, please feel free to contact me and I will do my best to answer them.

I am in the process of finalizing plans for the Love and Logic Classes to begin in April. After running the classes 14 times over the last 8-weeks, I believe I can reduce our number of sessions from 7 to 4/5 and still cover all of the information very well.

Thank you,

Rob Fisher
816-7360-6761
rfisher@liberty.k12.mo.us