

12-20-2012

The Effects of Intimate Partner Violence on Child Maltreatment Risk: Exploring Moderators and Mediators

Melissa A. Cowart
Georgia State University

Follow this and additional works at: http://scholarworks.gsu.edu/iph_theses

Recommended Citation

Cowart, Melissa A., "The Effects of Intimate Partner Violence on Child Maltreatment Risk: Exploring Moderators and Mediators." Thesis, Georgia State University, 2012.
http://scholarworks.gsu.edu/iph_theses/244

This Thesis is brought to you for free and open access by the School of Public Health at ScholarWorks @ Georgia State University. It has been accepted for inclusion in Public Health Theses by an authorized administrator of ScholarWorks @ Georgia State University. For more information, please contact scholarworks@gsu.edu.

THE EFFECTS OF INTIMATE PARTNER VIOLENCE ON CHILD
MALTREATMENT RISK: EXPLORING MODERATORS &
MEDIATORS

Melissa A. Cowart
B.A., Berry College

A Thesis Submitted to the Graduate Faculty of Georgia State University
in Partial Fulfillment of the Requirements for the Degree
MASTER OF PUBLIC HEALTH

Atlanta, Georgia 30303

APPROVAL PAGE

THE EFFECTS OF INTIMATE PARTNER VIOLENCE ON CHILD
MALTREATMENT RISK: EXPLORING MODERATORS &
MEDIATORS

by

MELISSA A. COWART

Approved:

Daniel Whitaker, PhD
Committee Chair

Shannon Self-Brown, PhD
Committee Member

Laura Salazar, PhD
Committee Member

December 7, 2012
Date

ABSTRACT

Intimate partner violence (IPV) is a public health problem that affects millions every year across the U.S., including families with young children. Children exposed to IPV can suffer consequences such as negative developmental and psychological outcomes and sometimes physical harm. Previous research has found an association between IPV victimization and risk of child maltreatment. In addition to further examining the relation between IPV and child maltreatment risk, this study tested maternal depression and parental stress as mediators and social support as a moderator in the IPV-child maltreatment risk relation. The research was conducted using data from a study of low-income, first-time mothers who were enrolled in a home visitation program. Results show that IPV physical and psychological victimization is significantly associated with child maltreatment risk, and this relation is mediated by maternal depression. These findings provide valuable information for those in the child welfare field, IPV victim advocacy, and home visitation services. A multi-system response should be employed to ensure that services for victims are comprehensive and address all areas of need. This approach is necessary in order to improve outcomes for IPV victims as well as their children.

AUTHOR'S STATEMENT

In presenting this thesis as a partial fulfillment of the requirements for an advanced degree from Georgia State University, I agree that the Library of the University shall make it available for inspection and circulation in accordance with its regulations governing materials of this type. I agree that permission to quote from, to copy from, or to publish this thesis may be granted by the author or, in her absence, by the professor under whose direction it was written, or in his absence, by the Associate Dean, Institute of Public Health. Such quoting, copying, or publishing must be solely for scholarly purposes and will not involve potential financial gain. It is understood that any copying from or publication of this dissertation which involves potential financial gain will not be allowed without written permission of the author.

A handwritten signature in cursive script that reads "Melissa Cowart". The signature is written in black ink and is positioned above a solid horizontal line.

Melissa A. Cowart, Author

Curriculum Vita

Melissa A. Cowart, B.A.

CONTACT INFORMATION

Work Address: Center for Healthy Development
National SafeCare Training & Research
Center
Institute of Public Health
Georgia State University
Atlanta, Georgia 30303

Work Phone: (404) 413-1384

Cell Phone: (706) 264-7763

Email Address: mcowart6@gsu.edu

SUMMARY OF QUALIFICATIONS

Melissa A. Cowart is a project coordinator and MPH candidate with experience in child maltreatment investigation and research. As a case manager in the Investigations Unit of the Division of Family & Children Services, she saw first-hand the effects of abuse and neglect on children. This experience led to an interest in child maltreatment research, and in January 2011 she joined the National SafeCare Training & Research Center (NSTRC) as a graduate research assistant. In this capacity she worked on an RCT of the SafeCare program, an evidence-based parenting program. She now works as a project coordinator for NSTRC where she coordinates SafeCare trainings in Georgia and manages data on providers in Georgia. Melissa has experience with SPSS, QDS, ACASI, and the Microsoft Office Suite, including Access.

EDUCATION

Georgia State University, Atlanta, Georgia
Master of Public Health, December 2012
Concentration: Prevention Sciences

Berry College, Mount Berry, Georgia
Bachelor of Arts, Sociology, May 2007
Major: Sociology
Minors: Women's Studies, Spanish

PROFESSIONAL EXPERIENCE

Project Coordinator (August 2011 – Present)

*Georgia State University, National SafeCare Training & Research Center
Atlanta, Georgia*

Duties: Coordinate trainings in SafeCare, an evidence-based parenting program, organize webinars for interested organizations, develop program-related reports, organize weekly team meetings, prepare presentations and materials for meetings with external partners, develop surveys and manage survey data as needed, and manage data of SafeCare providers in Georgia

Graduate Research Assistant (January 2011 – July 2011)

*Georgia State University, National SafeCare Training & Research Center
Atlanta, Georgia*

Duties: Coordinated activities for a randomized controlled trial of SafeCare, developed a survey using Questionnaire Development System (QDS) for the RCT, completed the IRB application and amendments, reviewed the literature as necessary, conducted in-home research assessments with study participants using ACASI

Social Services Case Manager (September 2007 – April 2010)

*Division of Family and Children Services, Investigations Unit
Rome, Georgia*

Duties: Investigated allegations of child abuse and neglect, interviewed parents and children as part of the investigation process, assessed family needs and child safety and acted accordingly including providing resources to families or removing children from dangerous situations, responded to calls from law enforcement during a regular on-call period, and consulted with legal counsel, appeared in court, and completed court paperwork

PUBLICATIONS

Whitaker DJ, Murphy CM, Eckhardt CI, Hodges AE, *Cowart M.* (In Press).
A review of programs to prevent intimate partner violence: Findings from the
Partner Abuse State of Knowledge Project. *Partner Abuse*.

RESEARCH ACTIVITIES

Journal of Family Psychology, March 2012
Partner Abuse, July 2012

HONORS

Robert L. Geisel Award, for excellence in Sociology, May 2007

PROFESSIONAL MEMBERSHIPS

American Public Health Association

NOTICE TO BORROWERS

All theses deposited in the Georgia State University Library must be used in accordance with the stipulations prescribed by the author in the preceding statement.

The author of this thesis is:

Melissa Cowart
675 Youngs Mill Rd.
Kingston, Georgia 30145

The Chair of the committee for this thesis is:

Dr. Daniel J. Whitaker
Center for Healthy Development
Institute of Public Health
Georgia State University
P.O. Box 3995
Atlanta, Georgia 30302-3995

Users of this thesis who are not regularly enrolled as students at Georgia State University are required to attest acceptance of the preceding stipulation by signing below. Libraries borrowing this thesis for the use of their patrons are required to see that each user records here the information requested.

NAME OF USER	ADDRESS	DATE	TYPE OF USE (EXAMINATION ONLY OR COPYING)

ACKNOWLEDGEMENTS

First, I would like to thank Dr. Lynette Feder and everyone involved in the An Enhanced Nurse Home-Visitation Program study for allowing me to use their data for this research. Next, I would like to thank my thesis committee: Dr. Daniel Whitaker (Chair), Dr. Shannon Self-Brown, and Dr. Laura Salazar. I am incredibly grateful to have had their time, expertise, and perspectives on this project. Finally, I express my appreciation to my family, friends, and especially my fiancé, who have provided immense support as I completed this thesis.

TABLE OF CONTENTS

	Page
ACKNOWLEDGEMENTS.....	vi
LIST OF TABLES.....	viii
LIST OF FIGURES.....	ix
CHAPTER	
1. INTRODUCTION.....	1
2. REVIEW OF THE LITERATURE.....	3
Intimate Partner Violence (IPV).....	3
IPV and Child Maltreatment (CM).....	4
Potential Mediators and Moderators in the IPV-CM Link.....	6
Summary and Hypotheses.....	10
3. METHODS AND PROCEDURES.....	12
Participants.....	12
Procedures.....	13
Measures.....	13
Analysis.....	16
4. RESULTS.....	18
Dependent and Independent Variables.....	18
Hypothesis One: IPV Victimization and Risk of CM.....	19
Hypothesis Two: Mediators in the IPV-CM Relation.....	20
Hypothesis Three: Social Support’s Role as Moderator.....	22
5. DISCUSSION AND CONCLUSION.....	26
Discussion.....	26
Limitations of the Current Study.....	28
Future Research.....	30
Implications for Practice.....	31
Conclusion and Future Directions.....	32
REFERENCES.....	35
APPENDIX.....	44

LIST OF TABLES

	Page
1. Participant Descriptive Information.....	13
2. Descriptive Statistics of Dependent and Independent Variables.....	19
3. Linear Regression Predicting Risk of Child Maltreatment.....	20
4. Mediation and Moderation Test Details.....	25

LIST OF FIGURES

	Page
1. Testing Maternal Depression as a Mediator between Physical Assault IPV and Risk of Child Maltreatment.....	21
2. Testing Maternal Depression as a Mediator between Psychological IPV and Risk of Child Maltreatment.....	22
3. Testing Social Support as a Moderator between Physical Assault IPV and Risk of Child Maltreatment.....	24
4. Testing Social Support as a Moderator between Psychological IPV and Risk of Child Maltreatment.....	24

Chapter I - Introduction

Intimate partner violence (IPV), which includes any physical, psychological, or sexual harm perpetrated by a current or former intimate partner (Centers for Disease Control and Prevention, 2010), is a public health problem that has many negative effects including its negative impacts on the family in relation to parenting. Children in homes where IPV is present also experience negative outcomes including poor mental health outcomes (Bayarri, Ezpeleta, & Granero, 2011; Chemtob & Carlson, 2004; Crusto et al., 2010; Finkelstein & Yates, 2001; Graham-Bermann & Perkins, 2010; Kitzmann, Gaylord, Holt, & Kenny, 2003). Research suggests there are various ways that this is manifested. Women experiencing IPV have higher levels of parental stress than those in non-IPV situations, higher levels of depression, and exhibit less desirable parenting behaviors (Casanueva, Foshee, & Barth, 2005; Casanueva, Martin, Runyan, Barth, & Bradley, 2008; Kelleher et al., 2008; Renner, 2009; Taylor, Guterman, Lee, & Rathouz, 2009). Research has established a link between experiencing IPV and potential for child maltreatment (Casanueva, Martin, & Runyan, 2009; Casanueva et al., 2008; Kelleher et al., 2008; Lee, Kotch, & Cox, 2004; Taylor et al., 2009; Windham et al., 2004), and maternal depression has been found to be significantly associated with IPV (Casanueva et al., 2005, 2009; Renner, 2009; Windham et al., 2004), indicating that it may mediate this relation (Levendosky, Leahy, Bogat, Davidson, & Von Eye, 2006; Rea & Rossman, 2005). However, relatively few studies have examined mediators and moderators of the IPV-child maltreatment link.

This study will examine maternal depression, parental stress, and social support as possible moderators and mediators in the relation between IPV and risk of child maltreatment in a sample of first-time mothers. The use of young mothers in research of this kind is especially pertinent as women of reproductive age are more likely to be in violent relationships than other age groups,

violence is negatively correlated with age, and children under five years of age are more likely to be exposed to IPV than older children (Edleson, Mbilinyi, Beeman, & Hagemester, 2003; Slep & O'Leary, 2005; Tjaden & Thoennes, 2000). The mediators being explored in this research are maternal depression and parental stress, and the moderator being examined is social support.

The first two hypotheses in this research are that IPV victimization will be related to child maltreatment risk, and that maternal depression and parental stress will mediate that relation. It is also hypothesized that social support will act as a moderator of the IPV-child maltreatment risk relation, such that the relation between IPV and child maltreatment risk will be weaker at higher levels of social support compared to lower levels of social support.

Chapter II - Review of the Literature

Intimate Partner Violence: A Significant Public Health Problem

Intimate partner violence (IPV) is a public health problem that affects millions of people and families every year. The Centers for Disease Control and Prevention estimate that, in 2010, 12 million men and women in the U.S. were victims of IPV (Centers for Disease Control and Prevention, 2011). IPV can have a range of physical and mental health consequences on the individual, and it also impacts society as a whole. In addition to injuries that may be sustained during an IPV incident, there are other adverse physical health consequences that result from IPV. People experiencing IPV are at greater risk of having depressive symptoms, heavy alcohol or drug use, and chronic disease (Coker et al., 2002). These problems increase as the duration of IPV increases (Bonomi et al., 2006). Furthermore, IPV has consequences for society in addition to the consequences to the individual. Recent estimates of the economic toll of IPV in the U.S. reach \$8.3 billion (Max, Rice, Finkelstein, Bardwell, & Leadbetter, 2004). There is an impact on the workforce as well with 8 million days of work lost per year due to IPV victimization (Lloyd & Taluc, 1999).

Adults are not the only individuals impacted by IPV; children are also victims as a result of IPV in the home. It is estimated that 15.5 million children live in homes in which IPV has occurred at least once in the past year (McDonald, Jouriles, Ramisetty-Mikler, Caetano, & Green, 2006). Children exposed to such violence are at risk for various poor physical and mental health problems. It is estimated that 40-60% of school-age children exposed to IPV are in the clinical range for some sort of mental health problem (Wolfe, Crooks, Lee, McIntyre-Smith, & Jaffe, 2003) In a study of over 1,800 primary caregivers, 85.6% of whom were mothers, and their children, researchers found that in approximately 30% of the homes, there was severe violence

present, and 31% of the children were victims of severe abuse. Findings indicated that internalizing and externalizing disorders were significantly associated with presence of IPV in the home (Emery, 2011). Other research has found that children's anxiety and depression increased as the severity of violence increased (Johnson et al., 2002). In addition to the potential for mental health problems, children are also at risk for other issues when they are exposed to violence. Research has shown that children's school performance, neurological development, and physical health as an adult are negatively affected by IPV exposure (Crusto et al., 2010).

Intimate Partner Violence and Child Maltreatment

IPV victimization has been shown to be strongly related to child maltreatment and poor or negative parenting behaviors. The overlap between partner violence and child maltreatment is well documented and ranges from 40-60% depending on the sample and measurement (Appel & Holden, 1998). Although there is a clear and strong overlap, the mechanism underlying the overlap is not well explicated.

Many studies have found a relationship between experiencing IPV and poor parenting practices (e.g. high levels of conflict, use of discipline). For example, a recent study of a nationally representative sample of almost 2,000 families recruited from the child welfare system found that mothers who were currently in an abusive relationship scored significantly less favorably on an assessment that measured parental responsiveness, learning stimulation, and use of spanking than mothers with prior but not current abuse, or no past abuse (Casanueva et al., 2008).

Another study reported similar results with regard to child maltreatment outcomes. This study involved over 3,000 mothers who had also been referred to child welfare services (Kelleher et al., 2008). The study found that, after controlling for confounding variables such as

child behavior, demographic information, and other maternal characteristics, mothers who had experienced IPV (either recent or past), reported using more psychological aggression with their children than women who did not experience any IPV. Women who experienced recent IPV also reported using significantly more physically aggressive or neglectful behaviors compared with those who experienced past violence or no violence at all.

In another large-scale study of over 2,000 mothers who were part of the Fragile Families Child Well-Being Study, researchers explored the relationship between IPV and maternal risk factors for child maltreatment (Taylor et al., 2009). Using items from the Parent-Child Conflict Tactics Scale (CTS-PC), they determined the frequency of physical aggression, psychological aggression, spanking, and neglect over the past 12 months. The results from this research showed that women who experienced IPV with their current partner had significantly higher frequencies of psychological aggression, physical aggression, spanking, and neglect than mothers who were not victims.

Similarly, a study of approximately 600 mothers who were enrolled in a home visiting program and determined to be at risk for child maltreatment yielded significant results in this area as well. The researchers examined aggressive behaviors using the CTS-PC, and found that women in an abusive relationship were more likely to engage in aggressive acts toward their child (AOR=6.44, 95% CI=2.93-14.15) (Windham et al., 2004). Yet another study that utilized the CTS-PC to measure psychological aggression and physical assault and found similar outcomes. Using a large sample size (n=1,232) of mothers who were surveyed using a random digit-dialing technique, the researchers found that IPV was associated with a greater odds of physical (AOR=2.57, 95% CI=1.11-5.97) or psychological aggression (AOR=9.58, 95% CI=4.27-21.49). toward their child (Zolotor, Theodore, Coyne-Beasley, & Runyan, 2007).

These studies support the notion that mother's parenting behaviors are negatively impacted by their experiences of IPV. However, a few studies have shown evidence to the contrary. For instance, in the study done by Casanueva and her colleagues (2008) mentioned previously, conflicting results were reported. Although they found that mothers currently in a violent relationship had lower parenting scores than mothers who had been in a violent relationship in the past, they also found that there was no difference with regard to self-reported use of spanking in the past week. In another study, mothers' parental warmth was assessed using several items from two measures of parenting behaviors. The results showed no differences in parental warmth between the group of mothers who were IPV victims and those who were not (Renner, 2009).

Rea and Rossman (2005) looked at the effects of parenting styles on child functioning. In this study, two samples of women who had experienced IPV, women from a shelter and a community-based sample of women, and another community-based sample of women who had not experienced IPV were compared on types of parenting style. The results showed that both groups of mothers who experienced IPV reported less confidence in their parenting and had less consistent parenting styles than the mothers with no IPV. In addition, the IPV community-based sample reported less parental warmth than women in the other two groups. The type of parenting style utilized by the mothers was a predictor of child functioning, emphasizing the importance that parenting has on child outcomes.

Potential Mediators and Moderators of the IPV-Child Maltreatment Risk Link

Introduction to mediation and moderation. The terms mediator and moderator are sometimes used interchangeably, but they are two different concepts. A mediator explains why a relation occurs between an independent and dependent variable. For example, if maternal

depression mediates the relation between IPV victimization and child maltreatment risk, then it can be said that IPV victimization is a significant predictor of child maltreatment risk because of maternal depression. A moderator changes the strength or direction of a relation between two variables. For example, if social support moderates the IPV-child maltreatment risk relation, it may be that the IPV-child maltreatment risk relation is weaker at high levels of social support (because social support buffers IPV victims from child maltreatment risk) compared to low levels of social support where the relation may be stronger (because there is no buffer) (Baron & Kenny, 1986). The specific steps for testing mediation and moderation in this study are outlined during the discussion of methods.

The effect of maternal depression. Mothers may experience depression if they are victims of IPV, and maternal depression is a potential mediator in the relation between IPV and parenting behaviors. There are several studies in the literature that have investigated the relationship between IPV and depression and between depression and child maltreatment risk. Many studies have shown that women experiencing current or past IPV are more likely to experience depression (Bonomi et al., 2006), and mothers with depression have been found to have negative parenting behaviors (Casanueva et al., 2005, 2008; Renner, 2009). A random telephone survey of over 3,000 women ages 18 to 64 found that women who were victims of physical IPV or psychological IPV were at increased risk of severe or minor depressive symptoms (Bonomi et al., 2006). Researchers found that children of women in a child welfare sample who were experiencing depression were significantly more likely to have injuries that required an emergency room visit than those whose mothers were not experiencing depression. This was true even when controlling for lack of supervision (Casanueva et al., 2005). The effects of maternal depression have also been seen in more direct parenting behaviors. One

study of mothers deemed to be at-risk found that higher levels of maternal depression indicated a significantly higher risk for physical assault of the child as well as psychological abuse (Windham et al., 2004). Maternal depression has also been found to be a mediator between IPV and parenting stress, a variable associated with maltreatment that is discussed in more detail below (Renner, 2009).

Qualitative research has also delved into the issue of maternal depression in the context of IPV and parenting. Mothers in IPV relationships reported that their feelings of depression affected their ability to parent. One mother who was interviewed stated:

I was seriously, seriously depressed. And I think it's why I didn't function as a mother, because I was suffering with what he [ex-partner] was doing, plus the depression on top.

So he was making me even worse to cope with the children. (Lapierre, 2010, p. 1444)

Despite this demonstration of the negative effects of maternal depression on parenting, there has been conflicting evidence. For example, one study found that there was no association between maternal mental health and parenting behaviors (Levendosky et al., 2006). However, this was an unusual finding, a point that the authors of the study made note of.

Parental stress and the IPV-child maltreatment relation. Parental stress, a combination of parental, child, and situational variables that can cause stress for parents (R. R. Abidin, 1992), also plays a role in the relationship between IPV and parenting. A study of 190 mother-child dyads who were residing in a women's shelter found that parenting stress was significantly related to ineffective parenting (Huth-Bocks & Hughes, 2008). Other research has explored the effect that IPV has on mothers' levels of parenting stress. A study of low-income mothers found that women experiencing IPV had higher levels of parental stress than those women who were not in IPV relationships (Renner, 2009). Another study also found that

women experiencing IPV had significantly higher levels of parental stress than non-IPV mothers. This study also showed that higher parental stress resulted in a greater likelihood of child maltreatment (Taylor et al., 2009). Another study documenting this effect involved 118 parents of 5 to 10 year-old children who were recruited from the child welfare system. Parents' belief that their children behave in order to intentionally bother them was measured as an indication of negative parenting practices. Findings showed parenting stress to be significantly and positively correlated with negative parenting (Haskett, Scott, Grant, Ward, & Robinson, 2003).

The role of social support. Social support's impact on parenting has been documented through prior research. This is especially important for IPV mothers as there is indication that they may have low levels of social support (Kelleher et al., 2008). The influence of social support on maternal parenting behaviors was revealed through a meta-analysis of 66 studies which concluded that significant correlations exist between these two variables. Effect sizes were determined for six different types of social support and were small but significant, ranging from $r=.30$ for "material support and attitudes" to $r=.40$ for "informational support and behaviors" (Andresen & Telleen, 1992). Other more recent research has also shown that social support is a predictor of maternal mental health (Levendosky et al., 2006). However, some of the research has shown that a mother's social support does not directly affect her parenting behaviors. For example, in a study that compared outcomes for women who were currently experiencing IPV, experienced IPV in the past, or never experienced IPV, it was discovered that social support was not associated with parenting behaviors (Casanueva et al., 2008) Other research found that level of social support did not affect the likelihood of child maltreatment (Windham et al., 2004).

Though the direct effects of social support on child maltreatment risk are unclear, social support could play a moderating role, by buffering any negative impact of variables of child maltreatment risk. For example, social support may play a moderating role in the IPV-child maltreatment risk link. For victims of IPV, social support may help alleviate problems related to child maltreatment risk by providing an outlet for assistance with parenting, affect expression, and even concrete assistance that can help a parent avoid neglectful behaviors (e.g. leaving a young child home alone when a mother has an appointment related to her IPV victimization). Thus, it may be that the relation between IPV and child maltreatment risk is weakened when high levels of social support are present.

Summary and Hypotheses

Previous research has shown that parenting behaviors are negatively affected by the presence of IPV. Other factors may also play a role in the relation between IPV and child maltreatment potential. Studies have found that maternal depression has negatively affected parenting and that it is associated with the presence of IPV. Parental stress is also increased with the presence of IPV and it is related to parenting behaviors. Finally, social support is another factor that may affect parenting either directly or through a moderating effect. This research will examine mediators and moderators of the IPV-child maltreatment risk relation in a group of first-time mothers. There are three hypotheses:

- (1) Mothers' risk of perpetrating child maltreatment will be higher if they have been victims of physical or psychological IPV in the past year.
- (2) The relation between IPV and risk of child maltreatment will be mediated by:
 - (a) maternal depression and
 - (b) parenting stress

- (3) Social support will moderate the IPV-child maltreatment risk relation. The relation between IPV and child maltreatment risk is hypothesized to be weaker at high levels of social support compared to low levels of social support.

Chapter III - Methods and Procedures

Participants

The data for this research were obtained from a randomized controlled trial (n=240) comparing an evidence-based home visiting program (Nurse-Family Partnership or NFP) with an enhanced version of the program aimed at preventing IPV. This home-visiting program is for first-time mothers who are considered low income (i.e. their household income is at or below 185% of the federal poverty level) and are currently pregnant, having not yet reached 28 weeks of gestation. As part of the program, mothers begin participating in weekly or biweekly visits with a trained nurse during pregnancy and continue with the program over a three-year period. During the visits, the nurse provides the mother with information regarding child health and development specific to the child's age, as well as health behavior information for the mother (Olds, Kitzman, Cole, & Robinson, 1997). The research participants were asked to be in the study after being enrolled in the home visiting program at the county health department. If they agreed to be in the study, they were randomized to receive either the standard or enhanced version of NFP. A total of 162 women in the control group were approached about the study. The 57 women who did not participate in the study were not included either because of loss of contact after the initial approach or for other various reasons. All of the participants whose data were used for the purposes of this thesis research were in the control group, receiving the original version of the home visiting program (n=105). This was done to minimize differences that may occur between subjects in different arms of the study.

As mentioned above, all of the participants are pregnant, first-time mothers with low socio-economic status. The mothers in the sample are young with a mean age of 21.73 years. Almost half of the women (45.7 percent) are Hispanic, and a large number (42.2 percent) reported an

annual household income level of less than \$11,000. Many of the women completed only some high school (23.7 percent), but almost one-quarter completed some college (24.7 percent). It is important to remember that the participants are young, and education and income reports may be low partly due to the participants' age. See Table 1 for demographic information.

Table 1

Participant Descriptive Information

Variable	n (%)
Age of Mother – Mean (SD)	21.73 (4.54)
Race	
Caucasian	32 (34.8)
African-American (non-Hispanic)	10 (10.9)
Asian	2 (2.2)
Hispanic	42 (45.7)
Native American	2 (2.2)
Other	4 (4.3)
Education Level	
Elementary School	4 (4.3)
Junior High School	8 (8.6)
Some High School	22 (23.7)
GED	6 (6.5)
High School Diploma	23 (24.7)
Some College	23 (24.7)
College Degree	7 (7.5)
Income Level	
Under \$10,999	35 (42.2)
\$11,000 to \$15,999	23 (27.7)
\$16,000 to \$20,999	11 (13.3)
\$21,000 to \$25,999	8 (9.6)
\$26,000 to \$30,999	0
\$31,000 to \$35,999	2 (2.4)
Above \$36,000	4 (4.8)

Procedures

Women who were eligible for the home-visiting program were asked if they wished to participate in the study during initial contact with their nurse home visitor. Study participants took part in a baseline assessment shortly after being consented, in a follow-up assessment one year later, and in a second follow-up assessment two years post baseline. In order to complete the assessments, trained university student research assistants met with participants in their homes or an

agreed-upon public location. The measures that compose the assessments, described below, were delivered via audio-computer assisted self-interview (ACASI), and participants were compensated with a \$25 gift card for their time. The study protocol was approved by the Portland State University and Centers for Disease Control and Prevention Institutional Review Boards.

Measures

Demographics. Demographic information was collected in the assessment at each time point. Participants were asked ten demographic questions including age, race, highest level of education completed, and annual family income.

Intimate partner violence. IPV was measured using the revised Conflict Tactics Scale (CTS2) (Straus, Hamby, Boney-McCoy, & Sugarman, 1996). The original CTS and the revised version have both been used extensively in research and are widely recognized as valid and reliable measures of IPV. The CTS2 measures the extent to which partners use specific behaviors as a result of conflicts with one another and to what extent. Items on the CTS2 fall on one of five scales (negotiation, psychological aggression, physical assault, sexual coercion and physical injury) and as either minor or severe. For the purposes of this research, responses regarding both minor and severe behaviors from the physical assault victimization scale and the psychological aggression scale were used to determine the respondent's experiences of IPV. Scores for each participant were then calculated for frequency of minor and severe physical assault victimization and for minor and severe psychological aggression victimization based on the scoring rubric. In the analyses, scores from each scale were assessed separately. Cronbach's alpha for the physical assault subscale was .914; for the psychological aggression subscale it was .818.

Risk of child maltreatment. The mothers' risk of child maltreatment was measured using the 36-item Brief Child Abuse Potential Inventory (BCAP) (Ondersma, Chaffin, Mullins, & LeBreton, 2005). This shortened version of the Child Abuse Potential Inventory has been established as valid and reliable. Its assessment of child abuse risk is based on extensive research into the factors that predict child physical abuse. The BCAP is shorter than the full-length version of the measure and, thus, is not as time-consuming to complete for the respondent.

Scoring is also simpler in this adaptation of the measure. Respondents indicate that they either “Agree” or “Disagree” with each statement, and responses are assigned either a zero or one based on the item, with a higher score denoting a higher risk of child abuse. The BCAP has a seven-factor structure that includes distress, feelings of persecution, family conflict, rigidity, happiness, loneliness, and financial insecurity. For this research, each participant’s total risk score was utilized in the analyses ($\alpha=.916$).

Maternal depression. Each woman’s level of depression was determined using the Edinburgh Postnatal Depression Scale, a validated 10-item self-report scale. Items ask about feelings experienced over the past week. Women’s scores were calculated based on the scoring rubric established by the scale’s developers. A score of 10 or greater indicates possible depression; participants scoring above 13 likely suffer from depression (Cox, Holden, & Sagovsky, 1987). Cronbach’s alpha for all 10 items was .885.

Parenting stress. Participants were scored on their extent of parenting stress using the Parenting Stress Index/ Short Form (PSI/SF). The PSI/SF contains identical items from the full length Parenting Stress Index, but the short form takes less time to administer while maintaining the same reliability and validity standards found in the long form. Respondents are asked to rate statements on a Likert scale from (1) “Strongly Agree” to (5) “Strongly Disagree.” Scores from three subscales (parental distress, parent-child dysfunctional interaction, and difficult child) determine the total parenting stress score. A total raw score of 90 or above indicates clinically significant level of stress (R. Abidin, 1995). Analysis for the 36 items found that the alpha was .968.

Social support. The Prenatal Psychosocial Profile (PPP) social support scale was used to determine the amount of social support experienced by the mothers. The PPP was developed as

a way to measure the behavioral variables that are directly or indirectly associated with the outcome of a woman's pregnancy. The social support scale is based on the shortened version of Brown's Support Behaviors Inventory, a measure for which validity and reliability has been established (Brown, 1986). This measure contains 11 items, which the respondents rate on a scale of (1) "Very dissatisfied" to (6) "Very satisfied." Women who report having a partner first rate the statements about their partner. Respondents then rate the statements, considering their other sources of social support (Curry, Campbell, & Christian, 1994). Total scores for each participant were determined by obtaining the respondent's mean rating of social support from both their partner (if applicable) and others. For all of the items, Cronbach's alpha was .961.

Analysis

Data analyses were conducted using SPSS version 18 (IBM, 2009). As previously discussed, data used in this research were from women in the control group (n=105) of the larger study. The results presented in this thesis are from the first follow-up data of the control group participants (n=93). Control group participants were used as they received no specific intervention that focused on IPV. Also, though longitudinal data were available, only data from the first follow up assessment point were utilized for two main reasons. First, it was not until the first follow up assessment point that participants had children and responded to the BCAP items as parents. In addition, PSI data were not collected until the first follow-up time point. Second, the IPV measure assessed occurrence of IPV victimization during the past 12 months and thus it was appropriate to use the IPV measure at the same measurement point as the dependent measure (BCAP) and proposed mediators and moderator.

Linear regression was carried out controlling for the following demographic variables: age, race, and education. The test for social support as a moderator in the relation between IPV and

parenting behaviors was conducted as prescribed in the literature by creating an interaction variable and testing its statistical significance with the dependent variable (Baron & Kenny, 1986). Maternal depression and parenting stress as mediators were also tested per Baron and Kenny's recommendations (1986). In summary, mediation testing involved the following four steps:

- (1) Test for a significant association between IPV and risk of child maltreatment, controlling for demographic variables.
- (2) Determine if IPV significantly predicts the potential mediator, while adjusting for demographic variables.
- (3) Test the significance of the association between the potential mediator and risk of child maltreatment, controlling for demographic variables.
- (4) Repeat the first step, entering the demographic variables and the potential mediator into the linear regression model. To establish mediation, the mediator must remain significant, and the size of the IPV effect must be reduced.

Testing for moderation in this study involved the following three steps:

- (1) Examine the significance of IPV victimization and risk of child maltreatment, controlling for demographic variables.
- (2) Assess the significance of social support and child maltreatment potential, controlling for demographic variables.
- (3) Conduct analysis to test the significance of the interaction variable on the risk of child maltreatment, controlling for demographics, IPV, and social support.

A significant association found in the third step would indicate that social support does have a moderating effect.

Chapter IV – Results

Dependent and Independent Variables

The mean BCAP score, indicating the potential for child maltreatment, for the sample was 10.63 (SD=7.58); the maximum possible score on the BCAP is 34. Regarding IPV, 36.6% of participants (n=34) were victims of physical assault by an intimate partner in the previous year. The mean number of physical assault incidents experienced in the past year by victims was 2.53 (SD=6.13). The three most commonly reported physical assault behaviors were being pushed or shoved (23.1%), being grabbed (22.6%), and having something thrown at you (19.4%). A total of 63 participants (67.7%) reported being victims of psychological abuse in the past year. The following were the three most commonly reported psychologically abusive behaviors: being shouted or yelled at (50.0%), having a partner stomp out of the room during an argument (40.9%), and having a partner insult you (38.7%). The mean number of annual psychological abuse incidents was 5.88 (SD=7.46) for the sample.

The mean depression score in this sample was 6.97 (SD=5.97). Note that this is below the score of 10, which signifies possible depression on the Edinburgh Depression Inventory. The mean level of parental stress was similarly just below the level of concern, at an average of 86.29 (SD=37.80), slightly below the clinically significant stress score of 90 for the PSI. The mean social support score of the women was on the higher end of the satisfaction scale (Mean=4.77, SD=1.19). These results are displayed in Table 2.

Table 2

Descriptive Statistics of Dependent and Independent Variables

Variable	Mean (SD)	Minimum and Maximum Score on Scale	Actual Range of Scores
Risk of Child Maltreatment	10.63 (7.58)	0-34	0-28
IPV Physical Assault Victimization – n (%)	34 (36.6)	n/a	0-35^c
IPV Psychological Victimization – n (%)	63 (67.7)	n/a	0-37^c
Maternal Depression ^a	6.97 (5.97)	0-30	0-25
Parental Stress ^b	86.29 (37.80)	36-180	36-172
Social Support	4.77 (1.19)	1.00-6.00	1.18-6.00
^a A score of 10 indicates possible depression			
^b A score of 90 indicates a clinically significant level of stress			
^c Range of annual frequency reported			

Hypothesis One: IPV Victimization and Risk of Child Maltreatment

The first hypothesis of this research maintained that mothers' risk of perpetrating child maltreatment would be higher if they were victims of IPV in the past year. In order to test this, linear regression was performed with the total BCAP score as the dependent variable, and IPV victimization frequency as the independent variable. Participant age, race, and education were also entered in the model to control for possible confounding variables. As expected, IPV victimization was significantly associated with increased risk of child maltreatment, confirming the hypothesis. This was true for both physical assault victimization ($p < .01$, $R^2 = .114$) and for psychological abuse victimization ($p < .001$, $R^2 = .192$). Table 3 presents these results in models 1 and 2.

Table 3

Linear Regression Predicting Risk of Child Maltreatment

Variable	b	Standard Error	R ² Variable	R ² Model
<i>Model 1: IPV Victimization (Physical)</i>	.425*	.125	.114	.181
<i>Model 2: IPV Victimization (Psychological)</i>	.487**	.105	.192	.259
<i>Model 3: Maternal Depression</i>	.823**	.104	.399	.466
<i>Model 4: Parental Stress</i>	.079*	.027	.091	.158
<i>Model 5: Social Support</i>	-3.689**	.618	.286	.353

Note. All variables are continuous; all models control for maternal age, race, and education
* p<.01
** p<.001

Hypothesis Two: Mediators in the IPV-Child Maltreatment Relation

The next hypothesis dealt with mediators in the relation between IPV victimization and child maltreatment risk. One hypothesis was that maternal depression would mediate the relation between IPV and child maltreatment risk. After establishing that there was a significant association between both types of IPV and child maltreatment potential, a linear regression test was run on IPV and maternal depression with maternal age, race, and education entered as control variables. IPV physical assault victimization was found to significantly predict maternal depression ($p<.01$), as did psychological victimization ($p<.001$). Next, child maltreatment risk was regressed on maternal depression and was also determined to be a significant predictor ($p<.001$). Finally, IPV victimization was again entered into a linear regression model along with race, age, education, and maternal depression. In this model, IPV physical assault victimization was no longer a significant predictor ($p=.074$), and maternal depression remained significant ($p<.0001$). The unstandardized regression weight for physical assault victimization dropped from .425 to .190, and the coefficient of determination (R^2) dropped from .114 to .021. Also, the Sobel test was significant ($p=.0047$), indicating that the mediated, or indirect, effect of maternal

depression was significant. Thus, maternal depression does act as a mediator (see Figure 1.) between IPV physical assault victimization and child maltreatment risk. Similarly, when depression was included in the regression model simultaneously with IPV psychological victimization, the latter variable was no longer a significant predictor of child maltreatment risk ($p=.055$), while maternal depression remained significant ($p<.0001$), indicating that maternal depression mediated this relation as well (see Figure 2). The coefficient of determination for psychological IPV dropped from .192 to .024, and the Sobel test was significant ($p=0001$). Table 4, below, provides further details with regard to the mediation and moderation testing.

Figure 1. Testing Maternal Depression as a Mediator between Physical Assault IPV and Risk of Child Maltreatment

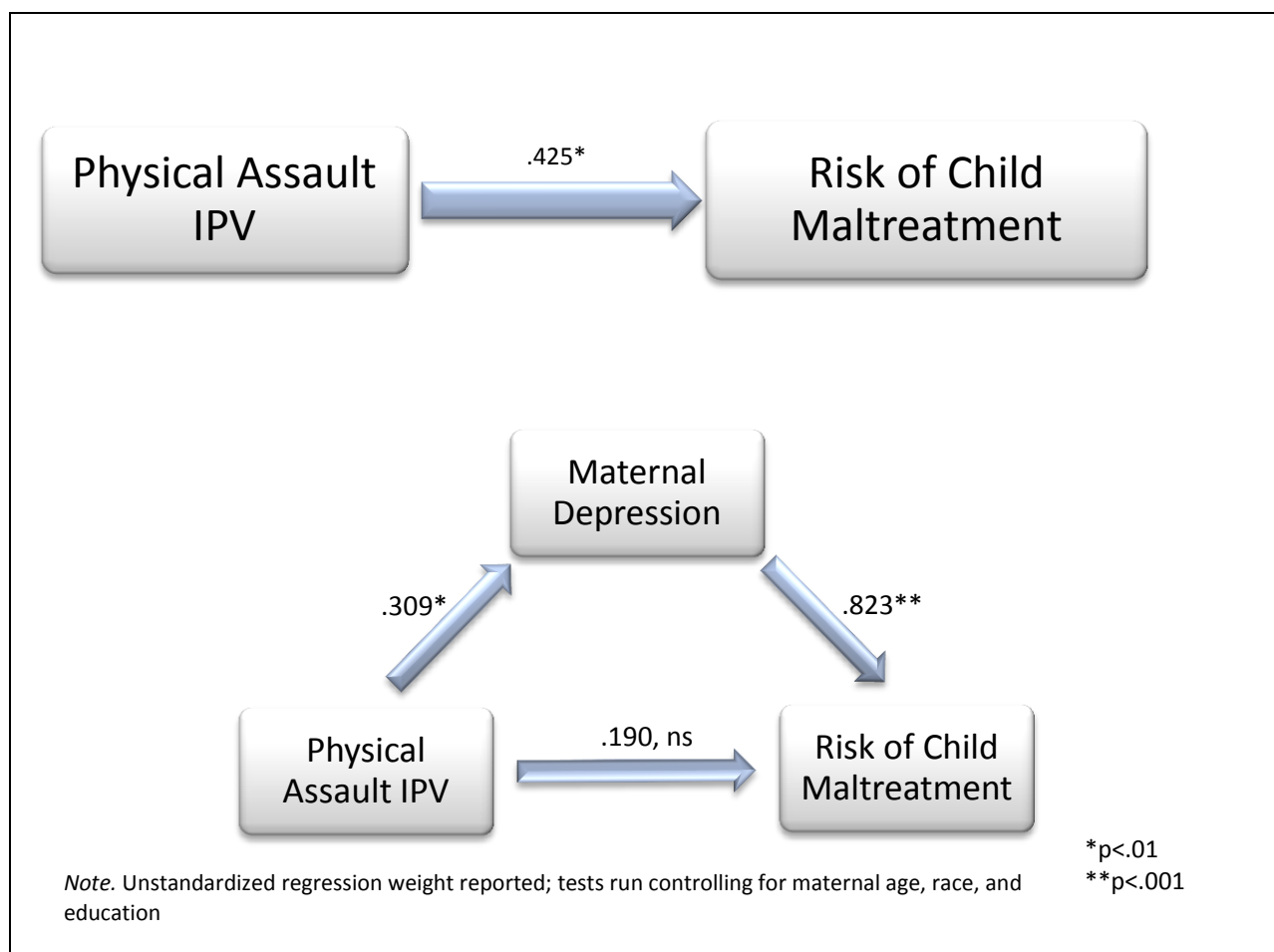
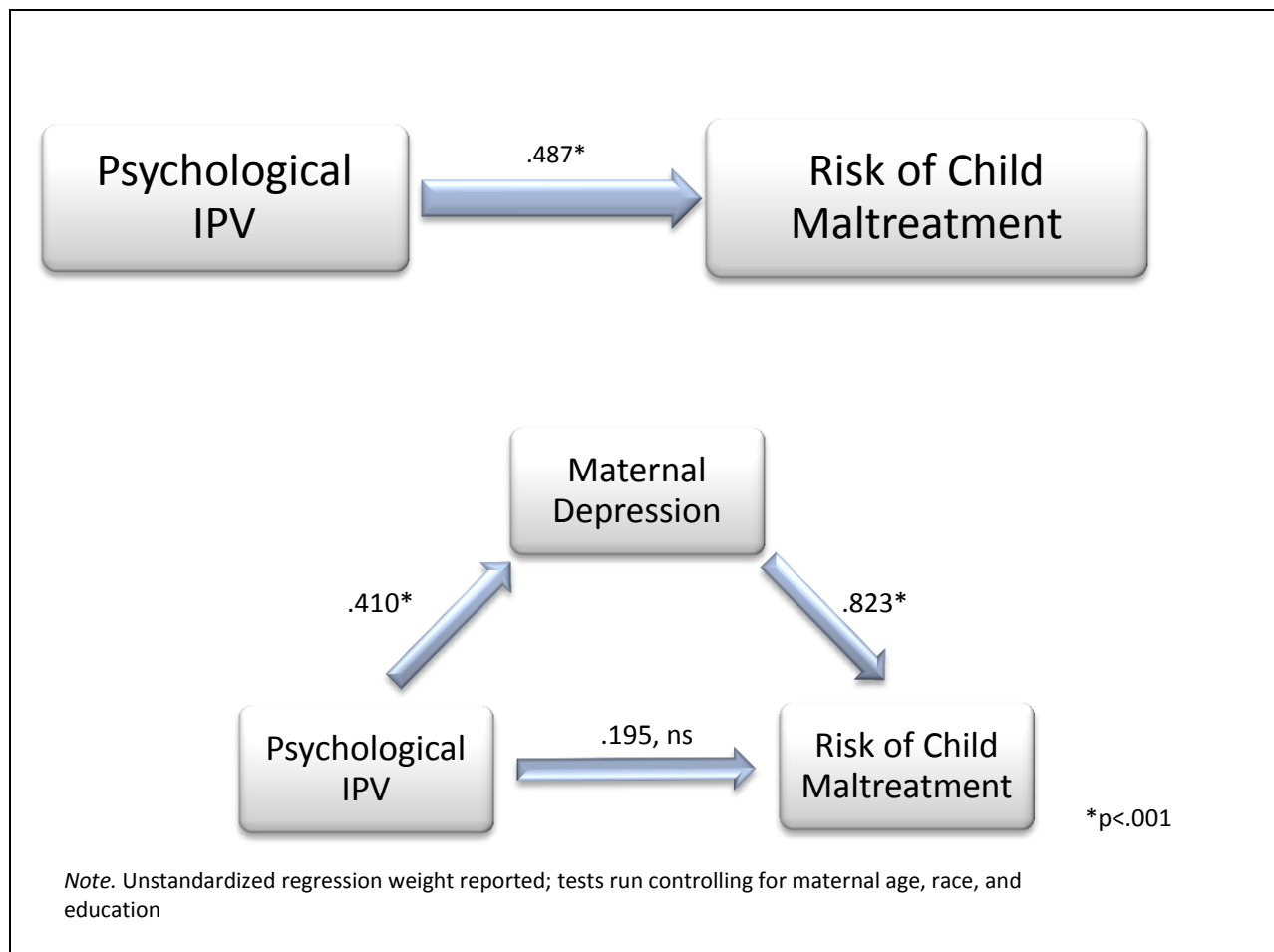


Figure 2. Testing Maternal Depression as a Mediator between Psychological IPV and Risk of Child Maltreatment



A second hypothesis stated that parenting stress would also mediate the relation between IPV and risk of child maltreatment. However the first condition of mediation was not met, as IPV victimization was not a significant predictor of parental stress. This was true for both physical assault victimization ($p=.993$) and for psychological victimization ($p=.836$). Because this condition was not met, further mediation analyses were not conducted with parental stress.

Hypothesis Three: Social Support's Role as Moderator

The third hypothesis of this study stated that social support would moderate the relation between IPV and risk of child maltreatment. Prior analyses showed that IPV victimization was a significantly predictor of risk of child maltreatment. Likewise, social support was significantly associated with risk of child maltreatment ($p < .001$), as shown in Table 3. To test social support as a moderator of the IPV—maltreatment risk relation, two interaction variables were created by first centering the IPV victimization variables and the social support variable, and then multiplying each centered victimization variable by the centered social support variable. Centering was done by subtracting the sample mean from each individual's score and is important to reduce the correlation between the main effects and the interaction term (Aiken & West, 1991). Each interaction term was entered into the linear regression model with the appropriate centered IPV victimization main effect, centered social support, and the demographic variables. In the model for physical assault victimization, there were slight changes in the unstandardized regression coefficients for IPV victimization ($b = .289$) and social support ($b = -3.269$). This was true for psychological aggression as well, where the coefficient changed for IPV victimization ($b = .327$) and social support ($b = -3.092$). The interaction variable was not significant in either case (both p -values $> .10$), indicating that social support does not moderate the IPV-child maltreatment risk relation. See Figure 3 and Figure 4 for more illustration of the moderation tests.

Figure 3. Testing Social Support as a Moderator between Physical Assault IPV and Risk of Child Maltreatment

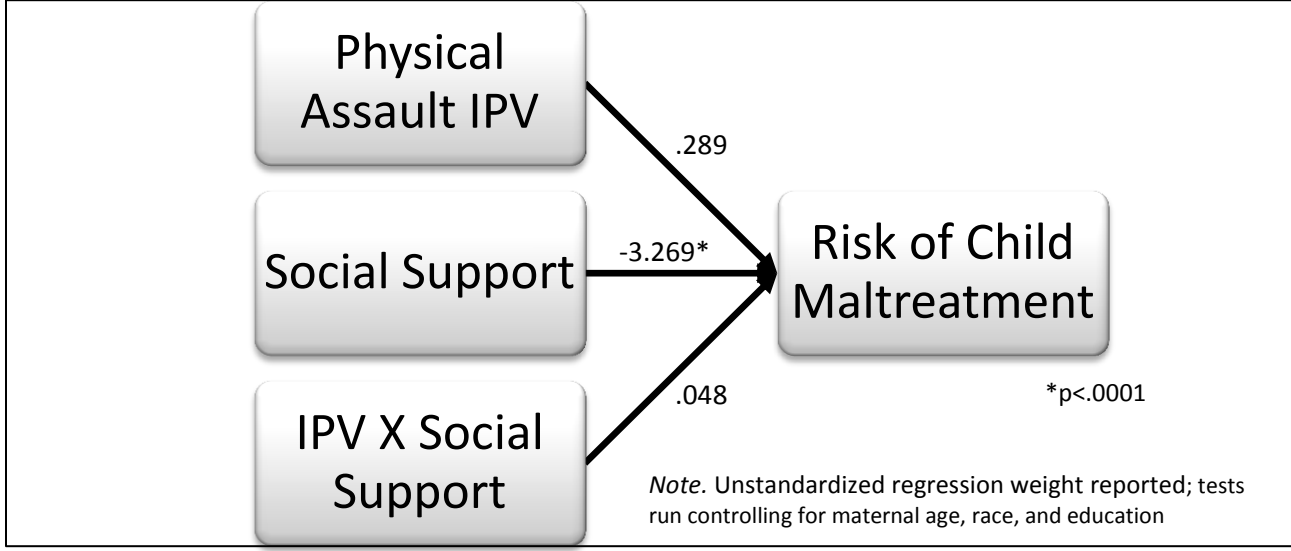


Figure 4. Testing Social Support as a Moderator between Psychological IPV and Risk of Child Maltreatment

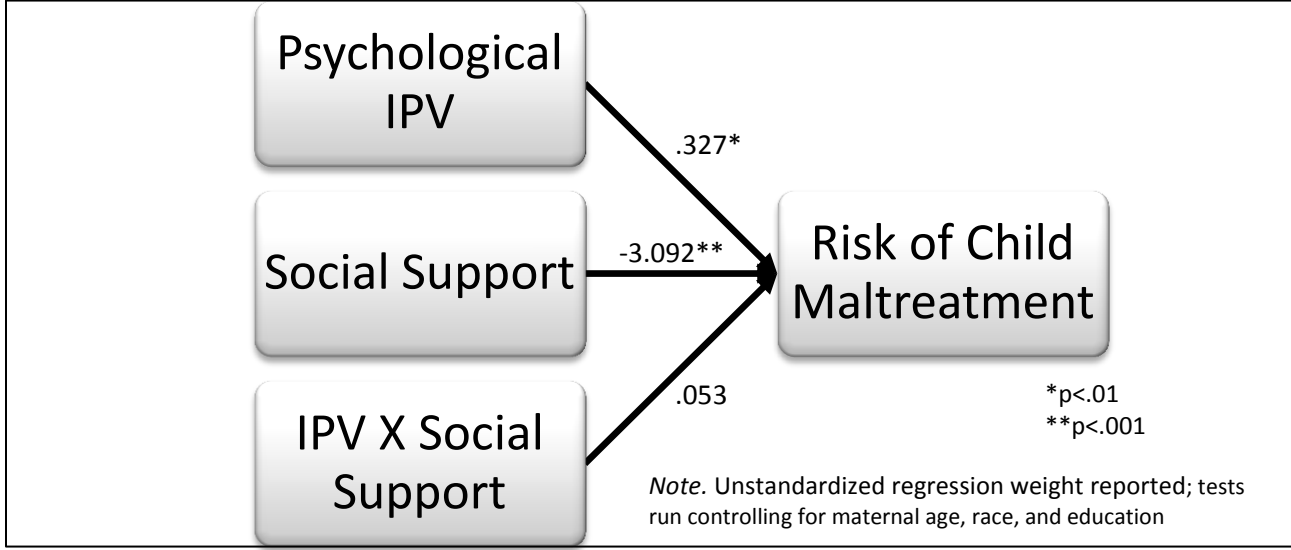


Table 4

Mediation and Moderation Test Details

Independent Variable	Dependent Variable	Control Variables	b	Standard Error	R ² Independent Variable	R ² Model
<i>Testing Maternal Depression as a Mediator</i>						
<i>Step 1a</i> : IPV Victimization (Physical)	Risk of CM	Demographics	.425^b	.125	.114	.181
<i>Step 1b</i> : IPV Victimization (Psychological)	Risk of CM	Demographics	.487^c	.105	.192	.259
<i>Step 2a</i> : IPV (Physical)	Maternal Depression	Demographics	.309^b	.100	.097	.155
<i>Step 2b</i> : IPV (Psychological)	Maternal Depression	Demographics	.410^c	.082	.218	.276
<i>Step 3</i> : Maternal Depression	Risk of CM	Demographics	.823^c	.104	.399	.466
<i>Step 4a</i> : IPV (Physical)	Risk of CM	Demographics Maternal Depression	.190	.105	.021	.487
<i>Step 4b</i> : IPV (Psychological)	Risk of CM	Demographics Maternal Depression	.195	.117	.024	.490
<i>Testing Paternal Stress as a Mediator</i>						
<i>Step 2a</i> : IPV (Physical)	Parental Stress	Demographics	-.005	.528	.000	.391
<i>Step 2b</i> : IPV (Psychological)	Parental Stress	Demographics	.098	.468	.000	.391
<i>Testing Social Support as a Moderator</i>						
<i>Step 2</i> : Social Support	Risk of CM	Demographics	-3.689^c	.618	.286	.353
<i>Step 3a</i> : IPV (Physical) X Social Support	Risk of CM	Demographics IPV (Physical) Social Support	.048	.084	.002	.379
<i>Step 3b</i> : IPV (Psychological) X Social Support	Risk of CM	Demographics IPV (Psychological) Social Support	.053	.061	.005	.415

Notes: All variables are continuous; CM=child maltreatment; demographic control variables are maternal age, race, and education; Step 1 is the same for all tests

^ap<.05

^bp<.01

^cp<.001

Chapter V – Discussion and Conclusion

Discussion

This study examined the relation between mothers' IPV victimization – both physical and psychological – has on their child maltreatment potential. It also investigated the role of maternal depression and parental stress as mediators and of social support as a moderator in this relation. It was hypothesized that there would be a significant association between IPV victimization and risk of child maltreatment and that maternal depression and parental stress would act as mediators in this relation. It was also hypothesized that social support would act as a moderator between IPV victimization and child maltreatment risk. This topic is valuable because it provides further information about the effect that IPV can potentially have on child health and well-being and a better understanding of other factors that play a part in this relation. This information can help steer child welfare practitioners and IPV victim advocates in developing programs and identifying more effective, collaborative, and comprehensive approaches to addressing this issue.

As expected, mothers' IPV victimization predicted their child maltreatment potential, which is consistent with findings from previous research that examines both physical assault victimization (Casanueva et al., 2009, 2008; Kelleher et al., 2008; Lee et al., 2004; Windham et al., 2004) and psychological assault victimization (Taylor et al., 2009; Zolotor et al., 2007). Also as anticipated, maternal depression mediated the relation between both physical and psychological IPV victimization and the risk of child maltreatment. Many studies have shown that IPV is related to maternal depression (Casanueva et al., 2005, 2009; Renner, 2009; Windham et al., 2004), and some research has shown a link between maternal depression and negative parenting behaviors (Windham et al., 2004). However, this study presents maternal

depression as a mechanism for the significant association between IPV and risk of child maltreatment.

Contrary to what was hypothesized, parental stress did not mediate the IPV-child maltreatment risk relation. In this sample, IPV and parenting stress were not related, and thus, no significant relation was present for mediational analyses. Many other studies have found a significant association between IPV and parenting stress (Holden & Ritchie, 1991; Owen, Thompson, & Kaslow, 2006; Renner, 2009; Taylor et al., 2009). One reason for this may have been that women involved in the current study were enrolled in a home visitation program that may have lessened their parenting stress. However, if the parenting program was affecting them in this manner, it would seem that their level of depression would also be affected. On the other hand, parental stress's lack of a mediation effect could also suggest that IPV was such an overarching issue for the mothers that the stress associated with it surpassed their stress specific to parenting. Additionally, the mothers in this study were first-time mothers, and, therefore, they only have one child. The previous research has included mothers with multiple children and children who are older than the children in this sample, which could have impacted the level of parenting stress. For instance, in all four of the studies mentioned above, the mean age ranged from 3 years old in one study (Taylor et al., 2009) to 10 years in another (Owen et al., 2006). Clearly, more research is warranted to further examine the association between parent stress, child maltreatment, and child developmental age.

Also contrary to hypotheses, social support did not emerge as a moderator. While there has not been a great deal of research on social support as a moderator of the IPV-child maltreatment relation, several studies have indicated that social support is associated with variables that have been found to be correlated with child maltreatment such as maternal

depression and stress (Andresen & Telleen, 1992; Ceballo & McLoyd, 2002; Mburia-Mwalili, Clements-Nolle, Lee, Shadley, & Yang, 2010). Despite the lack of finding regarding moderation, a significant negative association remained between social support and risk of child maltreatment. These results are important because they indicate that, although having some level of social support makes a difference with regard to her child maltreatment potential, having a low level of social support as opposed to a high level of support does not increase the risk for child maltreatment.

The results of this study emphasize the profound impact that IPV has on families and illuminate how IPV impacts families. Not only are women affected directly by violence perpetrated by a partner, but their mental health suffers, and, in turn, they are at greater risk for perpetrating child abuse. IPV is a complicated issue that, as demonstrated in this study, affects many aspects of victims' lives including their risk of child maltreatment. It is important to note that this does not mean that IPV victims are necessarily unable to parent their children, only that the risk of maltreatment increases with victimization, and thus services to these victims should include significant mental health support as well as parent training. This finding is a significant contribution to the current literature, and is particularly important for IPV programming. Victims of IPV who are also mothers should be screened and treated for depression, as this is a highly significant risk factor for maltreatment.

Limitations of the Current Study

There are several limitations to this study. First, this is a cross-sectional data analysis, and, therefore, the results do not establish the temporal ordering of variables necessary to indicate a causal relationship between IPV and the potential for child maltreatment. Although

longitudinal data was available in this sample, the use of cross sectional data was justified for a couple of reasons. The participants were enrolled in the study due to their enrollment in the evidence-based home visitation program, NFP. Examining variables from one time point to the next could have resulted in capturing a reduction in child maltreatment potential that was due to participation in the program. Use of the data from the first time point at which the women were parents may minimize the impact of the program on the mothers' BCAP scores. In addition, the IPV measure asks about victimization in the last 12 months, and thus, captures the time period prior to the measurement of the dependent variable (child maltreatment risk) and the proposed mediators (current depression and parenting stress) and moderator (social support).

Second, the sample in this study consisted of a group of women who were all participating in an evidence-based home visiting program as part of a larger study. The data used were from a one-year follow up interview, and thus participants had been enrolled in the program for about a year. Their participation may have impacted all of the variables measured in this study, and may have affected those variables to different degrees, which may have influenced the findings. For example, if NFP participation affected only participants' child abuse potential risk (i.e. their BCAP scores), the true relationship between IPV and child abuse potential would be affected. In an effort to lessen the impact of NFP participation on the results, data from only follow-up one were analyzed, as previously discussed.

A third limitation of this study is that the dependent variable is child abuse potential. The mothers' potential for child abuse does not mean that they would, in fact, perpetrate abuse or neglect. However, the BCAP, which was used to measure risk of child maltreatment in this study, has been widely used and is accepted as a valid measure of child abuse potential. Finally, this sample was obtained from a group of first-time, low-income mothers who were enrolled in a

home visitation program. A broader community sample may have yielded different results and made these findings more generalizable.

Future Research

Several topics for future research follow from the current study. The issue of parenting stress and its role between IPV and child maltreatment potential requires more in-depth study. In this research, it did not mediate the relation, but this may have been due to the young age of the mothers and children or the mothers being first-time parents, and only having one child. Future studies should further examine the effects of parenting stress utilizing a diverse sample of mothers in order to capture the impact that maternal age, child age, and number of children on reported parent stress and how this impacts association with IPV and child maltreatment risk. This could help to provide insight into which group of mothers would most benefit or have the most need for issues related to parenting stress. The use of a diverse sample is also important in order to make the results more generalizable overall.

Social support is another area in which more research is needed. The current study did not find that social support was a moderator. Future research in this topic should consider social support not only as a moderator but also as a mediator in the IPV-child maltreatment relation. Women who are victimized by IPV can be isolated from family and friends by their abusers, and thus, may suffer a decrease in social support as a result of IPV victimization leading to increased child maltreatment risk. This line of inquiry would provide better understanding as to how social support functions in the connection between IPV and child maltreatment. Another research question to consider in the future is the link between IPV and actual child maltreatment perpetration. The dependent variable in this study was child maltreatment potential, but further

studies could examine perpetration by using reports of abuse or neglect from child welfare agencies or by administering measures that assess abusive or neglectful behaviors, such as the Parent-Child Conflict Tactics Scales (Straus, Hamby, Finkelhor, Moore, & Runyan, 1998).

Implications for Practice

The results of this study have implications for practice in the child welfare field and for IPV victims' services. Adaptations of evidence-based home visiting programs - such as NFP, delivered to the mothers in this study, and SafeCare® (Silovsky et al., 2011) – have been developed specifically for families dealing with violence in the home. These programs will provide the holistic approach necessary to address such a complex problem. They work to direct attention to the needs of the mother while also presenting parent training skills that keep in mind the needs and development of the child. For instance, in the IPV intervention developed for the augmented version of NFP, home visitors are given special training in order to formally assess the presence of IPV and deliver a brochure-driven intervention as well as a curriculum intended to improve relationship decisions and outcomes. It is particularly important to bring this special attention to the issue of IPV in home visiting programs because some research has indicated that parents in these families do not receive the same level of treatment effect from evidence-based parent training programs as do parents who are not subjected to this problem (Eckenrode et al., 2000). Programs taking into account special situations such as IPV could bridge this gap in treatment effect. The curriculum Healthy Moms, Happy Babies, developed by Futures without Violence, is designed to train home visitors on what IPV is and how to screen for it, IPV's effect on perinatal health outcomes and on children, its impact on parenting, and other important topics. It also provides them with materials to help them discuss violence in the home with the mothers

they work with in home visitation programs and helps them to feel more comfortable in discussing this topic (Futures without Violence, 2012).

Services for victims of IPV should address multiple areas of concern. Mothers' mental health should be a high priority. These present results show the strong association between physical and psychological IPV and maternal depression, and the role that maternal depression plays as mediator between IPV and child maltreatment potential. Providing resources to mothers to help them address mental issues such as depression will ultimately aid in reducing children's risk of being maltreated. Resources related to mental health care should also include offering childcare for mothers, so that they do not have to worry about who will care for their children while they are receiving services. Other services for victims of IPV should include evidence-based parenting programs. In addition to improved parenting skills, participation in evidence-based home visitation programs has shown a reduction in maternal depression. A study of an American Indian sample receiving home visitation services demonstrated a significant reduction in maternal depression for those receiving SafeCare compared to those receiving services as usual (Chaffin, Bard, Bigfoot, & Maher, 2012). Another study showed that incorporating In-Home Cognitive Behavioral Therapy (IH-CBT), an evidence-based approach used to address maternal depression, resulted in a significantly greater reduction in maternal depression compared to participation in home visitation alone (Ammerman et al., 2011). While no assumptions should be made regarding victims' parenting abilities, parent training should be a service provided in IPV victims shelters, and victims' advocates should be trained to assess a mother's need for improved parenting skills and recognize signs of child maltreatment.

Conclusion and Future Directions

Intimate partner violence (IPV) is a public health problem that affects families around the U.S., and this study demonstrated the impact it has on mothers and their children. Home visiting programs should include a component that assesses for and, if necessary, addresses issues related to IPV such as maternal mental health and access to resources. This should be conducted as part of the program in addition to the parent training piece. Furthermore, providers of home visiting services should be given special instruction on IPV's effects on parents and children and important mitigating factors. Prior research suggests that home visitors are not comfortable assessing or intervening in issues regarding IPV (Duggan et al., 2004), underscoring the need to have this additional training.

Additionally, response to this problem requires multi-systemic action by many community and governmental players. Those who work with IPV victims such as community advocates and members of law enforcement should be aware of the possibility of child maltreatment and the effects IPV has on children. Conversely, those who work with victims of child abuse and neglect, such as child protective services workers, should recognize the co-occurrence of child maltreatment and IPV, and the implications therein. Communication between these groups is also an essential part of a multi-systemic response in order to share resources, information, and services. Many mothers may be reluctant to seek help in IPV situations for fear that they will be reported to child welfare, preventing both mothers and children from getting beneficial services. The partnering of child protective services workers and IPV victim advocates as part of the child welfare response to families with IPV is one way to improve the management of cases with co-occurring IPV and child maltreatment (Murphy, 2010). This may facilitate mothers' access to resources from victim advocates in order to address IPV issues, as well as from child welfare workers in order to address parenting matters,

ultimately promoting safer spaces for both mothers and their children and reducing the public health impact of these two issues simultaneously.

References

- Abidin, R. (1995). *Parenting Stress Index, Third Edition*. Odessa, FL: Psychological Assessment Resources.
- Abidin, R. R. (1992). The determinants of parenting behavior. *Journal of Clinical Child Psychology, 21*(4), 407–412. doi:10.1207/s15374424jccp2104_12
- Aiken, L. S., & West, S. G. (1991). *Multiple regression: Testing and interpreting interactions*. Thousand Oaks, CA US: Sage Publications, Inc.
- Ammerman, R. T., Putnam, F. W., Stevens, J., Bosse, N. R., Short, J. A., Bodley, A. L., & Van Ginkel, J. B. (2011). An open trial of in-home CBT for depressed mothers in home visitation. *Maternal and Child Health Journal, 15*(8), 1333–1341. doi:10.1007/s10995-010-0691-7
- Andresen, P. A., & Telleen, S. L. (1992). The relationship between social support and maternal behaviors and attitudes: A meta-analytic review. *American Journal of Community Psychology, 20*(6), 753–774. doi:10.1007/BF00942236
- Appel, A. E., & Holden, G. W. (1998). The co-occurrence of spouse and physical child abuse: A review and appraisal. *Journal of Family Psychology, 12*(4), 578–599. doi:10.1037/0893-3200.12.4.578
- Baron, R. M., & Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology, 51*(6), 1173–1182. doi:10.1037/0022-3514.51.6.1173
- Bayarri, E., Ezpeleta, L., & Granero, R. (2011). Exposure to Intimate Partner Violence, Psychopathology, and Functional Impairment in Children and Adolescents: Moderator

- Effect of Sex and Age. *Journal of Family Violence*, 26(7), 535–543. doi:10.1007/s10896-011-9390-4
- Bonomi, A. E., Thompson, R. S., Anderson, M., Reid, R. J., Carrell, D., Dimer, J. A., & Rivara, F. P. (2006). Intimate Partner Violence and Women's Physical, Mental, and Social Functioning. *American Journal of Preventive Medicine*, 30(6), 458–466. doi:10.1016/j.amepre.2006.01.015
- Brown, M. A. (1986). Social support during pregnancy: A unidimensional or multidimensional construct? *Nursing Research*, 35(1), 4–9.
- Casanueva, C., Foshee, V. A., & Barth, R. P. (2005). Intimate partner violence as a risk factor for children's use of the emergency room and injuries. *Children and Youth Services Review*, 27(11), 1223–1242. doi:10.1016/j.childyouth.2005.04.006
- Casanueva, C., Martin, S. L., & Runyan, D. K. (2009). Repeated reports for child maltreatment among intimate partner violence victims: Findings from the National Survey of Child and Adolescent Well-Being. *Child Abuse & Neglect*, 33(2), 84–93. doi:10.1016/j.chiabu.2007.04.017
- Casanueva, C., Martin, S. L., Runyan, D. K., Barth, R. P., & Bradley, R. H. (2008). Quality of maternal parenting among intimate-partner violence victims involved with the child welfare system. *Journal of Family Violence*, 23(6), 413–427. doi:10.1007/s10896-008-9167-6
- Ceballo, R., & McLoyd, V. C. (2002). Social Support and Parenting in Poor, Dangerous Neighborhoods. *Child Development*, 73(4), 1310–1321.

- Centers for Disease Control and Prevention. (2010). Intimate Partner Violence: Definitions. *Injury Center: Violence Prevention*. Retrieved November 30, 2012, from <http://www.cdc.gov/ViolencePrevention/intimatepartnerviolence/definitions.html>
- Centers for Disease Control and Prevention. (2011). National Intimate Partner and Sexual Violence Survey (NISVS). *Injury Center: Violence Prevention*. Retrieved August 14, 2012, from <http://www.cdc.gov/ViolencePrevention/NISVS/index.html>
- Chaffin, M., Bard, D., Bigfoot, D. S., & Maher, E. J. (2012). Is a structured, manualized, evidence-based treatment protocol culturally competent and equivalently effective among American Indian parents in child welfare? *Child Maltreatment, 17*(3), 242–252.
- Chemtob, C. M., & Carlson, J. G. (2004). Psychological Effects of Domestic Violence on Children and Their Mothers. *International Journal of Stress Management, 11*(3), 209–226. doi:10.1037/1072-5245.11.3.209
- Coker, A. L., Davis, K. E., Arias, I., Desai, S., Sanderson, M., Brandt, H. M., & Smith, P. H. (2002). Physical and mental health effects of intimate partner violence for men and women. *American Journal of Preventive Medicine, 23*(4), 260–268. doi:10.1016/S0749-3797(02)00514-7
- Cox, J. L., Holden, J. M., & Sagovsky, R. (1987). Detection of postnatal depression: Development of the 10-item Edinburgh Postnatal Depression Scale. *The British Journal of Psychiatry, 150*, 782–786. doi:10.1192/bjp.150.6.782
- Crusto, C. A., Whitson, M. L., Walling, S. M., Feinn, R., Friedman, S. R., Reynolds, J., ... Kaufman, J. S. (2010). Posttraumatic stress among young urban children exposed to family violence and other potentially traumatic events. *Journal of Traumatic Stress, 23*(6), 716–724. doi:10.1002/jts.20590

- Curry, M., Campbell, R., & Christian, M. (1994). Validity and reliability testing of the prenatal psychosocial profile. *Research in Nursing & Health, 17*(2), 127–135.
- Duggan, A., Fuddy, L., Burrell, L., Higman, S. M., McFarlane, E., Windham, A., & Sia, C. (2004). Randomized trial of a statewide home visiting program to prevent child abuse: Impact in reducing parental risk factors. *Child Abuse & Neglect, 28*(6), 623–643. doi:10.1016/j.chiabu.2003.08.008
- Eckenrode, J., Ganzel, B., Henderson, C. R., Smith, E., Olds, D. L., Powers, J., ... Sidora, K. (2000). Preventing child abuse and neglect with a program of nurse home visitation: The limiting effects of domestic violence. *JAMA: Journal of the American Medical Association, 284*(11), 1385–1391. doi:10.1001/jama.284.11.1385
- Edleson, J. L., Mbilinyi, L. F., Beeman, S. K., & Hagemester, A. K. (2003). How children are involved in adult domestic violence: Results from a four-city telephone survey. *Journal of Interpersonal Violence, 18*(1), 18–32. doi:10.1177/0886260502238538
- Emery, C. R. (2011). Controlling for Selection Effects in the Relationship Between Child Behavior Problems and Exposure to Intimate Partner Violence. *Journal of Interpersonal Violence, 26*(8), 1541–1558. doi:10.1177/0886260510370597
- Finkelstein, J., & Yates, J. K. (2001). Traumatic symptomatology in children who witness marital violence. *International Journal of Emergency Mental Health, 3*(2), 107–114.
- Futures without Violence. (2012). Home Visitation Programs Can Help More Families if They Address Domestic Violence. *Futures Without Violence*. Retrieved November 21, 2012, from <http://www.futureswithoutviolence.org/content/features/detail/1459/>

- Graham-Bermann, S. A., & Perkins, S. (2010). Effects of early exposure and lifetime exposure to intimate partner violence (IPV) on child adjustment. *Violence and Victims, 25*(4), 427–439. doi:10.1891/0886-6708.25.4.427
- Haskett, M. E., Scott, S. S., Grant, R., Ward, C. S., & Robinson, C. (2003). Child-related cognitions and affective functioning of physically abusive and comparison parents. *Child Abuse & Neglect, 27*(6), 663–686. doi:10.1016/S0145-2134(03)00103-0
- Holden, G. W., & Ritchie, K. L. (1991). Linking extreme marital discord, child rearing, and child behavior problems: Evidence from battered women. *Child Development, 62*(2), 311–327. doi:10.2307/1131005
- Huth-Bocks, A. C., & Hughes, H. M. (2008). Parenting stress, parenting behavior, and children's adjustment in families experiencing intimate partner violence. *Journal of Family Violence, 23*(4), 243–251. doi:10.1007/s10896-007-9148-1
- IBM. (2009). IBM: SPSS Software. *SPSS Software: Predictive Analytics Software and Solutions*. Retrieved from <http://www-01.ibm.com/software/analytics/spss/>
- Johnson, R. M., Kotch, J. B., Catellier, D. J., Winsor, J. R., Dufort, V., Hunter, W., & Amaya-Jackson, L. (2002). Adverse Behavioral and Emotional Outcomes from Child Abuse and Witnessed Violence. *Child Maltreatment, 7*(3), 179–186. doi:10.1177/1077559502007003001
- Kelleher, K. J., Hazen, A. L., Coben, J. H., Wang, Y., McGeehan, J., Kohl, P. L., & Gardner, W. P. (2008). Self-reported disciplinary practices among women in the child welfare system: Association with domestic violence victimization. *Child Abuse & Neglect, 32*(8), 811–818. doi:10.1016/j.chiabu.2007.12.004

- Kitzmann, K. M., Gaylord, N. K., Holt, A. R., & Kenny, E. D. (2003). Child witnesses to domestic violence: A meta-analytic review. *Journal of Consulting and Clinical Psychology, 71*(2), 339–352. doi:10.1037/0022-006X.71.2.339
- Lapierre, S. (2010). More Responsibilities, Less Control: Understanding the Challenges and Difficulties Involved in Mothering in the Context of Domestic Violence. *British Journal of Social Work, 40*(5), 1434–1451. doi:10.1093/bjsw/bcp080
- Lee, L.-C., Kotch, J. B., & Cox, C. E. (2004). Child Maltreatment in Families Experiencing Domestic Violence. *Violence and Victims, 19*(5), 573–591. doi:10.1891/vivi.19.5.573.63682
- Levendosky, A. A., Leahy, K. L., Bogat, G. A., Davidson, W. S., & Von Eye, A. (2006). Domestic violence, maternal parenting, maternal mental health, and infant externalizing behavior. *Journal of Family Psychology, 20*(4), 544–552. doi:10.1037/0893-3200.20.4.544
- Lloyd, S., & Taluc, N. (1999). The Effects of Male Violence on Female Employment. *Violence Against Women, 5*(4), 370–392. doi:10.1177/10778019922181275
- Max, W., Rice, D. P., Finkelstein, E., Bardwell, R. A., & Leadbetter, S. (2004). The Economic Toll of Intimate Partner Violence Against Women in the United States. *Violence and Victims, 19*(3), 259–72.
- Mburia-Mwalili, A., Clements-Nolle, K., Lee, W., Shadley, M., & Yang, W. (2010). Intimate partner violence and depression in a population-based sample of women: Can social support help? *Journal of Interpersonal Violence, 25*(12), 2258–2278. doi:10.1177/0886260509354879

- McDonald, R., Jouriles, E. N., Ramisetty-Mikler, S., Caetano, R., & Green, C. E. (2006). Estimating the number of American children living in partner-violent families. *Journal of Family Psychology, 20*(1), 137–142. doi:10.1037/0893-3200.20.1.137
- Murphy, R. A. (2010). Multi-system responses in the context of child maltreatment and intimate partner violence. *Child Abuse & Neglect, 34*(8), 555–557. doi:10.1016/j.chiabu.2007.07.013
- Olds, D., Kitzman, H., Cole, R., & Robinson, J. (1997). Theoretical foundations of a program of home visitation for pregnant women and parents of young children. *Journal of Community Psychology, 25*(1), 9–25. doi:10.1002/(SICI)1520-6629(199701)25:1<9::AID-JCOP2>3.0.CO;2-V
- Ondersma, S. J., Chaffin, M. J., Mullins, S. M., & LeBreton, J. M. (2005). A Brief Form of the Child Abuse Potential Inventory: Development and Validation. *Journal of Clinical Child and Adolescent Psychology, 34*(2), 301–311. doi:10.1207/s15374424jccp3402_9
- Owen, A. E., Thompson, M. P., & Kaslow, N. J. (2006). The mediating role of parenting stress in the relation between intimate partner violence and child adjustment. *Journal of Family Psychology, 20*(3), 505–513. doi:10.1037/0893-3200.20.3.505
- Rea, J. G., & Rossman, B. B. R. (2005). Children exposed to interparental violence: Does parenting contribute to functioning over time? *Journal of Emotional Abuse, 5*(1), 1–28. doi:10.1300/J135v05n01_01
- Renner, L. M. (2009). Intimate Partner Violence Victimization and Parenting Stress: Assessing the Mediating Role of Depressive Symptoms. *Violence Against Women, 15*(11), 1380–1401. doi:10.1177/1077801209346712

- Silovsky, J. F., Bard, D., Chaffin, M., Hecht, D., Burris, L., Owora, A., ... Lutzker, J. (2011). Prevention of child maltreatment in high-risk rural families: A randomized clinical trial with child welfare outcomes. *Children and Youth Services Review, 33*(8), 1435–1444. doi:10.1016/j.chilyouth.2011.04.023
- Slep, A. M. S., & O’Leary, S. G. (2005). Parent and Partner Violence in Families With Young Children: Rates, Patterns, and Connections. *Journal of Consulting and Clinical Psychology, 73*(3), 435–444. doi:10.1037/0022-006X.73.3.435
- Straus, M. A., Hamby, S. L., Boney-McCoy, S., & Sugarman, D. B. (1996). The revised Conflict Tactics Scales (CTS2): Development and preliminary psychometric data. *Journal of Family Issues, 17*(3), 283–316. doi:10.1177/019251396017003001
- Straus, M. A., Hamby, S. L., Finkelhor, D., Moore, D. W., & Runyan, D. (1998). Identification of child maltreatment with the Parent–Child Conflict Tactics Scales: Development and psychometric data for a national sample of American parents. *Child Abuse & Neglect, 22*(4), 249–270.
- Taylor, C. A., Guterman, N. B., Lee, S. J., & Rathouz, P. J. (2009). Intimate partner violence, maternal stress, nativity, and risk for maternal maltreatment of young children. *American Journal of Public Health, 99*(1), 175–183. doi:10.2105/AJPH.2007.126722
- Tjaden, P., & Thoennes, N. (2000). Extent, nature, and consequences of intimate partner violence: findings from the National Violence Against Women Survey. U.S. Dept of Justice, Office of Justice Programs, National Institute of Justice. Retrieved from <https://www.ncjrs.gov/pdffiles1/nij/181867.pdf>.

Windham, A. M., Rosenberg, L., Fuddy, L., McFarlane, E., Sia, C., & Duggan, A. K. (2004).

Risk of mother-reported child abuse in the first 3 years of life. *Child Abuse & Neglect*, 28(6), 645–667. doi:10.1016/j.chiabu.2004.01.003

Wolfe, D. A., Crooks, C. V., Lee, V., McIntyre-Smith, A., & Jaffe, P. G. (2003). The effects of

children's exposure to domestic violence: A meta-analysis and critique. *Clinical Child and Family Psychology Review*, 6(3), 171–187. doi:10.1023/A:1024910416164

Zolotor, A. J., Theodore, A. D., Coyne-Beasley, T., & Runyan, D. K. (2007). Intimate partner

violence and child maltreatment: Overlapping risk. *Brief Treatment and Crisis Intervention*, 7(4), 305–321. doi:10.1093/brief-treatment/mhm021

Appendix: Study Measures

Demographics

1. Age _____

2. Sex
 - Male
 - Female

3. What is your race/ethnicity?
 - Caucasian
 - Black/African American not Hispanic
 - Hispanic
 - Asian
 - Native American
 - Other
 - Don't Know

- 4A. Were you born in the US? Y or N
 - 4B. If no, how many years have you been in the U.S. _____

5. What is the highest level of education or degree that you have completed?
 - Elementary
 - Junior High
 - Some High School
 - GED
 - High School Diploma
 - Some College
 - College Degree
 - Post College

6. How much is your family yearly income?
 - Under \$10,000
 - \$11,000-\$15,000
 - \$15,000-\$20,000
 - \$21,000-\$25,000
 - \$26,000-\$30,000
 - \$31,000-\$35,000
 - Above \$35,000

7. What are the sources of your yearly income?
 - Employment
 - Social Services
 - Disability

Family support you
8. Other income source?

9. Who do you currently live with?

Biological Parent

Stepparent

Foster Parent

Sibling

Other Relative

Friend

Romantic Partner

10. How many times have you moved in the last year?

0

1

2

3

4

5 or greater

EDINBURGH DEPRESSION

Please indicate which response comes closest to describing how you have been feeling for the past 7 days.

- | | |
|--|---|
| 1. I have been able to laugh and see the funny side of things: | |
| As much as I always could | 0 |
| Not quite so much now | 1 |
| Definitely not so much now | 2 |
| Not at all | 3 |
| 2. I have looked forward with enjoyment to things: | |
| As much as I ever did | 0 |
| Rather less than I used to | 1 |
| Definitely less than I used to | 2 |
| Hardly at all | 3 |
| 3. I have blamed myself unnecessarily when things went wrong: | |
| Yes, most of the time | 3 |
| Yes, some of the time | 2 |
| Not very often | 1 |
| No, never | 0 |
| 4. I have been anxious or worried for no good reason: | |
| No, not at all | 0 |
| Hardly ever | 1 |
| Yes, sometimes | 2 |
| Yes, very often | 3 |
| 5. I have been scared or panicky for no very good reason: | |
| Yes, quite a lot | 3 |
| Yes, sometimes | 2 |
| No, not much | 1 |
| No, not at all | 0 |
| 6. Things have been getting on top of me: | |
| Yes, most of the time I haven't been able to cope at all | 3 |
| Yes, sometimes I haven't been coping as well as usual | 2 |
| No, most of the time I have copied quite well | 1 |
| No, I have been coping as well as ever | 0 |

7. I have been so unhappy that I have had difficulty sleeping:
- | | |
|-----------------------|---|
| Yes, most of the time | 3 |
| Yes, sometimes | 2 |
| Not very often | 1 |
| No, not at all | 0 |
8. I have felt sad or miserable:
- | | |
|-----------------------|---|
| Yes, most of the time | 3 |
| Yes, quite often | 2 |
| Not very often | 1 |
| No, not at all | 0 |
9. I have been so unhappy that I have been crying:
- | | |
|-----------------------|---|
| Yes, most of the time | 3 |
| Yes, quite often | 2 |
| Only occasionally | 1 |
| No, never | 0 |
10. The thought of harming myself has occurred to me:
- | | |
|------------------|---|
| Yes, quite often | 3 |
| Sometimes | 2 |
| Hardly ever | 1 |
| Never | 0 |

Conflict Tactics Scale 2

No matter how well a couple gets along, there are times when they disagree and couples have many different ways of trying to settle their differences. Below is a list of some things that might happen when you have differences. Please circle how many times you did each of these things in the past year and how many times your romantic partner did them in the past year. A romantic partner is a person you have been in a relationship with for at least 1 month. If you do not have a current partner, please complete this measure while thinking of your most recent romantic relationship that lasted for at least 1 month. (If you have multiple romantic partners, please answer this set of questions and all questions in this interview that are about romantic partners about one, main romantic partner.)

Severe physical and sexual items have been designated as SP and SS, respectively

0 = never in the past year

1 = once in the past year

2 = twice in the past year

3 = 3-5 times in the past year

4 = 6-10 times in the past year

5 = 11-20 times in the past year

6 = more than 20 times in the past year

- | | |
|---|---------------|
| 1a. Has your partner showed care for you even though you disagreed? | 0 1 2 3 4 5 6 |
| 1b. Have you showed your partner you cared even though you disagreed? | 0 1 2 3 4 5 6 |
| 2a. Has your partner explained his/her side of a disagreement to you? | 0 1 2 3 4 5 6 |
| 2b. Have you explained your side of a disagreement to your partner? | 0 1 2 3 4 5 6 |
| 3a. Has your partner thrown something at you that could hurt? | 0 1 2 3 4 5 6 |
| 3b. Have you thrown something at your partner that could hurt? | 0 1 2 3 4 5 6 |
| 4a. Has your partner insulted or sworn at you? | 0 1 2 3 4 5 6 |
| 4b. Have you insulted or swore at your partner? | 0 1 2 3 4 5 6 |
| 5a. Has your partner twisted your arm or hair? | 0 1 2 3 4 5 6 |
| 5b. Have you twisted your partner's arm or hair? | 0 1 2 3 4 5 6 |
| 6a. Have you had a sprain, bruise, or small cut because of a fight with your partner? | 0 1 2 3 4 5 6 |
| 6b. Has your partner had a sprain, bruise, or small cut because of a fight with you? | 0 1 2 3 4 5 6 |
| 7a. Has your partner shown respect for your feelings about an issue? | 0 1 2 3 4 5 6 |
| 7b. Have you shown respect for your partner's feelings about an issue? | 0 1 2 3 4 5 6 |
| 8a. Has your partner made you have sex without a condom? | 0 1 2 3 4 5 6 |
| 8b. Have you made your partner have sex without a condom? | 0 1 2 3 4 5 6 |
| 9a. Has your partner pushed or shoved you? | 0 1 2 3 4 5 6 |
| 9b. Have you pushed or shoved your partner? | 0 1 2 3 4 5 6 |
| 10a. Has your partner used force (like hitting, holding down, or using a weapon) to make you have oral or anal sex? (SS) | 0 1 2 3 4 5 6 |
| 10b. Have you used force (like hitting, holding down, or using a weapon) to make your partner have oral or anal sex? (SS) | 0 1 2 3 4 5 6 |
| 11a. Has your partner used a gun or knife on you? (SP) | 0 1 2 3 4 5 6 |

11b. Have you used a gun or knife on your partner? (SP)	0 1 2 3 4 5 6
12a. Have you passed out from being hit on the head by your partner in a fight?	0 1 2 3 4 5 6
12b. Has your partner passed out from being hit on the head by in a fight?	0 1 2 3 4 5 6
13a. Has your partner called you fat or ugly?	0 1 2 3 4 5 6
13b. Have you called your partner fat or ugly?	0 1 2 3 4 5 6
14a. Has your partner punched you or hit you with something that could hurt? (SP)	0 1 2 3 4 5 6
14b. Have you punched or hit your partner with something that could hurt? (SP)	0 1 2 3 4 5 6
15a. Has your partner destroyed something belonging to you?	0 1 2 3 4 5 6
15b. Have you destroyed something belonging to your partner?	0 1 2 3 4 5 6
16a. Have you gone to the doctor because of a fight with your partner?	0 1 2 3 4 5 6
16b. Has your partner gone to a doctor because of a fight with you?	0 1 2 3 4 5 6
17a. Has your partner choked you? (SP)	0 1 2 3 4 5 6
17b. Have you choked your partner? (SP)	0 1 2 3 4 5 6
18a. Has your partner shouted or yelled at you?	0 1 2 3 4 5 6
18b. Have you shouted or yelled at your partner?	0 1 2 3 4 5 6
19a. Has your partner slammed you against a wall? (SP)	0 1 2 3 4 5 6
19b. Have you slammed your partner against a wall? (SP)	0 1 2 3 4 5 6
20a. Has your partner said he/she was sure you and your partner could work out a problem?	0 1 2 3 4 5 6
20b. Have you said you were sure that you and your partner could work out a problem?	0 1 2 3 4 5 6
21a. Have you needed to see a doctor because of a fight with your partner, but didn't?	0 1 2 3 4 5 6
21b. Has your partner needed to see a doctor because of a fight with you, didn't?	0 1 2 3 4 5 6
22a. Has your partner beat you up? (SP)	0 1 2 3 4 5 6
22b. Have you beat your partner up? (SP)	0 1 2 3 4 5 6
23a. Has your partner grabbed you?	0 1 2 3 4 5 6
23b. Have you grabbed your partner?	0 1 2 3 4 5 6
24a. Has your partner used force (like hitting, holding down, or using a weapon) to make you have sex? (SS)	0 1 2 3 4 5 6
24b. Have you used force (like hitting, holding down, or using weapon) to make your partner have sex? (SS)	0 1 2 3 4 5 6
25a. Has your partner stomped out of the room or house or yard during a disagreement?	0 1 2 3 4 5 6
25b. Have you stomped out of the room or house or yard during a disagreement?	0 1 2 3 4 5 6
26a. Has your partner insisted on sex when you did not want to (but did not use physical force)?	0 1 2 3 4 5 6
26b. Have you insisted on sex when your partner did not want to (but did not use physical force)?	0 1 2 3 4 5 6
27a. Has your partner slapped you?	0 1 2 3 4 5 6

27b. Have you slapped your partner?	0 1 2 3 4 5 6
28a. Have you had a broken bone from a fight with your partner?	0 1 2 3 4 5 6
28b. Has your partner had a broken bone from a fight with you?	0 1 2 3 4 5 6
29a. Has your partner used threats to make you have oral or anal sex? (SS)	0 1 2 3 4 5 6
29b. Have you used threats to make your partner have oral or anal sex?(SS)	0 1 2 3 4 5 6
30a. Has your partner suggested a compromise to a disagreement?	0 1 2 3 4 5 6
30b. Have you suggested a compromise to a disagreement?	0 1 2 3 4 5 6
31a. Has your partner burned or scalded you on purpose? (SP)	0 1 2 3 4 5 6
31b. Have you burned or scalded your partner on purpose? (SP)	0 1 2 3 4 5 6
32a. Has your partner insisted you have oral or anal sex when you did not want to (but did not use physical force)?	0 1 2 3 4 5 6
32b. Have you insisted on oral or anal sex when your partner did not want to (but did not use physical force)?	0 1 2 3 4 5 6
33a. Has your partner accused you of being a lousy lover?	0 1 2 3 4 5 6
33b. Have you accused your partner of being a lousy lover?	0 1 2 3 4 5 6
34a. Has your partner done something to spite you?	0 1 2 3 4 5 6
34b. Have you done something to spite your partner?	0 1 2 3 4 5 6
35a. Has your partner threatened to hit or throw something at you?	0 1 2 3 4 5 6
35b. Have you threatened to hit or throw something at your partner?	0 1 2 3 4 5 6
36a. Have you felt a physical pain that still hurt the next day because of a fight with your partner?	0 1 2 3 4 5 6
36b. Has your partner a felt physical pain that still hurt the next day because of a fight with you?	0 1 2 3 4 5 6
37a. Has your partner kicked you? (SP)	0 1 2 3 4 5 6
37b. Have you kicked your partner? (SP)	0 1 2 3 4 5 6
38a. Has your partner used threats to make you have sex? (SS)	0 1 2 3 4 5 6
38b. Have you used threats to make your partner have sex? (SS)	0 1 2 3 4 5 6
39a. Has your partner agreed to try a solution to a disagreement that you suggested?	0 1 2 3 4 5 6
39b. Have you agreed to try a solution to a disagreement that your partner suggested?	0 1 2 3 4 5 6

Social support (from Prenatal Psychosocial Profile)

The next set of questions asks how satisfied you are with the amount of support you receive from your romantic partner and/or other people. First of all, do you have a partner?"

1. No (*ask only about support from others*)
2. Yes

If you do have a current partner, rate the following items on a scale from 1 to 6 (1 being very dissatisfied and 6 being very satisfied), in order to indicate how satisfied you are with the support you receive from your partner. If you don't have a current partner, skip A-K and answer questions L-V.

A. Shares similar experiences with me	1	2	3	4	5	6
B. Helps keep up my morale	1	2	3	4	5	6
C. Helps me out when I'm in a pinch	1	2	3	4	5	6
D. Shows interest in my daily activities and problems	1	2	3	4	5	6
E. Goes out of his/her way to do special or thoughtful things for me	1	2	3	4	5	6
F. Allows me to talk about things that are very personal and private	1	2	3	4	5	6
G. Lets me know I am appreciated for the things I do for him/her	1	2	3	4	5	6
H. Tolerates my ups and downs and unusual behaviors	1	2	3	4	5	6
I. Takes me seriously when I have concerns	1	2	3	4	5	6
J. Says things that make my situation clearer and easier to understand	1	2	3	4	5	6
K. Lets me know that he/she will be around if I need assistance	1	2	3	4	5	6

For the following items, on a scale from 1 to 6, (1 being very dissatisfied and 6 being very satisfied), please indicate how satisfied you are with the support you receive from others in your life.

L. Shares similar experiences with me	1	2	3	4	5	6
M. Helps keep up my morale	1	2	3	4	5	6
N. Helps me out when I'm in a pinch	1	2	3	4	5	6
O. Shows interest in my daily activities	1	2	3	4	5	6

	and problems						
P.	Goes out of his/her way to do special or thoughtful things for me	1	2	3	4	5	6
Q.	Allows me to talk about things that are very personal and private	1	2	3	4	5	6
R.	Lets me know I am appreciated for the things I do for him/her	1	2	3	4	5	6
S.	Tolerates my ups and downs and unusual behaviors	1	2	3	4	5	6
T.	Takes me seriously when I have concerns	1	2	3	4	5	6
U.	Says things that make my situation clearer and easier to understand	1	2	3	4	5	6
V.	Lets me know that he/she will be around if I need assistance	1	2	3	4	5	6

Brief Child Abuse Potential Inventory

Instructions: the following questionnaire includes a series of statements about feelings and beliefs that people sometimes have. Please read each statement and circle AGREE if you agree with the statement as it applies to you. Circle DISAGREE if you disagree with the statement as it applies to you. Be honest when giving your answers. Remember to read each statement, and be sure to answer all of them.

- | | | |
|--|-------|----------|
| 1. I am a happy person | AGREE | DISAGREE |
| 2. I know what is the right and wrong way to act..... | AGREE | DISAGREE |
| 3. People have caused me a lot of pain..... | AGREE | DISAGREE |
| 4. I sometimes act without thinking..... | AGREE | DISAGREE |
| 5. I am often lonely inside..... | AGREE | DISAGREE |
| 6. My family fights a lot..... | AGREE | DISAGREE |
| 7. Everything in a home should always be in its place..... | AGREE | DISAGREE |
| 8. I often feel very upset..... | AGREE | DISAGREE |
| 9. Sometimes I have bad thoughts..... | AGREE | DISAGREE |
| 10. I sometimes worry that I will not have enough to eat..... | AGREE | DISAGREE |
| 11. I am easily upset by my problems..... | AGREE | DISAGREE |
| 12. Sometimes I feel all alone in the world..... | AGREE | DISAGREE |
| 13. My family has problems getting along..... | AGREE | DISAGREE |
| 14. Children should never disobey..... | AGREE | DISAGREE |
| 15. I sometimes lose my temper..... | AGREE | DISAGREE |
| 16. I often feel worthless..... | AGREE | DISAGREE |
| 17. My family has many problems..... | AGREE | DISAGREE |
| 18. It is okay to let a child stay in dirty diapers for a while..... | AGREE | DISAGREE |
| 19. I am often upset and do not know why..... | AGREE | DISAGREE |
| 20. Children should be quiet and listen..... | AGREE | DISAGREE |
| 21. I sometimes fail to keep all of my promises..... | AGREE | DISAGREE |
| 22. I often feel very alone..... | AGREE | DISAGREE |
| 23. My life is good..... | AGREE | DISAGREE |
| 24. I am often upset..... | AGREE | DISAGREE |
| 25. Other people have made my life unhappy..... | AGREE | DISAGREE |
| 26. I sometimes say bad words..... | AGREE | DISAGREE |
| 27. I am often depressed..... | AGREE | DISAGREE |
| 28. Children should not learn how to swim..... | AGREE | DISAGREE |
| 29. My life is happy..... | AGREE | DISAGREE |
| 30. I sometimes worry that my needs will not be met..... | AGREE | DISAGREE |
| 31. I often feel alone..... | AGREE | DISAGREE |
| 32. A child needs very strict rules..... | AGREE | DISAGREE |
| 33. Other people have made my life hard..... | AGREE | DISAGREE |
| 34. People sometime take advantage of me..... | AGREE | DISAGREE |

PARENTING STRESS INDEX (SHORT FORM)-PSI

Instructions:

This questionnaire contains 36 statements. Read each statement carefully. For each statement, please focus on the child you are most concerned about, and mark the response that best represents your opinion.

Circle the **SA** if you **strongly agree** with the statements.

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 going to the movies, you would circle A in response to the following statement.

I enjoy going to the movies. SA A NS D SD

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

SA= Strongly agree A=Agree NS=Not Sure D-Disagree SD=strongly disagree

- | | |
|---|----------------------|
| 1. I often have the feeling that I cannot handle things very well | SA A NS D SD |
| 2. I find myself giving up more of my life to meet my children's needs than I ever expected. | SA A NS D SD |
| 3. I feel trapped by my responsibilities as a parent. | SA A NS D SD |
| 4. Since having this child, I have been unable to do new and different things. | SA A NS D SD |
| 5. Since having a child, I feel that I am almost never able to do things that I like to do. | SA A NS D SD |
| 6. I am unhappy with the last purchase of clothing I made for myself. | SA A NS D SD |
| 7. There are quite a few things that bother me about my life. | SA A NS D SD |
| 8. Having a child has caused more problems than I expected in my relationship with my spouse (or male/female friend). | SA A NS D SD |
| 9. I feel alone and without friends. | SA A NS D SD |

- | | | | | | |
|--|----|---|----|---|----|
| 10. When I go to a party, I usually expect not to enjoy myself. | SA | A | NS | D | SD |
| 11. I am not as interested in people as I used to be. | SA | A | NS | D | SD |
| 12. I don't enjoy things as I used to. | SA | A | NS | D | SD |
| 13. My child rarely does things for me that makes me feel good. | SA | A | NS | D | SD |
| 14. Sometimes I feel my child doesn't like me and doesn't want to be close to me. | SA | A | NS | D | SD |
| 15. My child smiles at me much less than I expected. | SA | A | NS | D | SD |
| 16. When I do things for my child, I get the feeling that my efforts are not appreciated every week. | SA | A | NS | D | SD |
| 17. When playing, my child doesn't often giggle or laugh. | SA | A | NS | D | SD |
| 18. My child doesn't seem to learn as quickly as most children. | SA | A | NS | D | SD |
| 19. My child doesn't seem to smile as much as most children. | SA | A | NS | D | SD |
| 20. My child is not able to do as much as I expected. | SA | A | NS | D | SD |
| 21. It takes a long time and it is very hard for my child to get used to new things. | SA | A | NS | D | SD |

For the next statement, choose your response from the choices "1 to 5: below.

- | | | | | | | |
|---|---|---|----|---|----|---|
| 22. I feel that I am: | 1. not very good at being a parent | 1 | 2 | 3 | 4 | 5 |
| | 2. a person who has some trouble being a parent | | | | | |
| | 3. an average parent | | | | | |
| | 4. a better than average parent | | | | | |
| | 5. a very good parent | | | | | |
| 23. I expected to have closer and warmer feelings for my child than I do and this bothers me. | SA | A | NS | D | SD | |
| 24. Sometimes my child does things that bother me just be me mean. | SA | A | NS | D | SD | |
| 25. My child seems to cry or fuss more often than most children. | SA | A | NS | D | SD | |
| 26. My child generally wakes up in a bad mood. | SA | A | NS | D | SD | |
| 27. I feel that my child is very moody and easily upset. | SA | A | NS | D | SD | |
| 28. My child does a few things which bother me a great deal. | SA | A | NS | D | SD | |

29. My child reacts very strongly when something happens that my child doesn't like. SA A NS D SD

30. My child gets upset easily over the smallest thing. SA A NS D SD

31. My child's sleeping or eating schedule was much harder to establish than I expected. 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 2 3 4 5

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

For the next statement, choose your response from the choices "10+" to "1-3".

33. Think carefully and count the number of things which your child does that bother you. For example: dawdles, refuses to listen, overactive, cries, interrupts, fights, whines, etc. 10+ 8-9 6-7 4-5

34. There are some things my child does that really bother me a lot. SA A NS D SD

35. My child turned out to be more of a problem than I had expected. SA A NS D SD

36. My child makes more demands on me than most children. SA A NS D SD