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ABSTRACT

YAMILE MORALES

Parent-Infant Interaction in a Latino Family

(Under the direction of John R. Lutzker, Ph.D.)

Child maltreatment is a significant public health problem that increases when children live in homes in which intimate partner violence (IPV) is present. Child maltreatment and IPV often co-occur, and the sequelae of IPV frequently appear in both the victimized mother and her children. Home visitation programs, such as SafeCare[®], are used as intervention strategies to reduce the risk of child maltreatment, but rarely are these programs adapted for Latino populations. The importance of cultural sensitivity in parenting programs has been highlighted as a means of producing successful outcomes when working with Latino families. The present single-case research design study evaluated the efficacy of SafeCare's Parent-Infant Interaction (PII) module when delivered in Spanish to a Latino mother with prior experiences of IPV. Observational data were used to document changes in parenting behaviors, while self-report measures assessed exposure to IPV and changes in mental health, parenting stress, and the risk of child maltreatment. Qualitative data provided suggestions for culturally adapting PII for Latino families. Data from this study suggest that PII improves parent-infant interactions when delivered in Spanish and reduces the risk of child maltreatment. Additionally, self-report measures indicate that IPV, parent mental health distress, and the risk of child maltreatment co-occur. This study also shares with the field the importance of providing culturally adapted programs when working with Latino families.

INDEX WORDS: SafeCare[®], child maltreatment, intimate partner violence, culture, Latino

PARENT-INFANT INTERACTION IN A LATINO FAMILY

By

YAMILE MORALES

B.S., EMORY UNIVERSITY

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

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PARENT-INFANT INTERACTION IN A LATINO FAMILY

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I want to thank my family for all their love and support as I continue to set new goals in life. Finally, thank you God, all I am is because of you.

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Table of Contents

Acknowledgements.....	iii
Introduction.....	1
Child Maltreatment.....	1
Intimate Partner Violence.....	3
Child Maltreatment Interventions.....	8
Culture in Interventions.....	12
Method.....	16
Participants.....	16
Setting.....	17
Materials.....	17
Observer Training.....	18
Dependent Variables.....	18
Independent Variable.....	23
Reliability.....	23
Experimental design.....	24
Procedures.....	25
Results.....	27
Discussion.....	33
References.....	41
Tables and Figures.....	50
Figure 1. Percent Occurrence of Non-Physical and Physical Skills.....	50
Table 1. SafeCare PII Consumer Satisfaction Survey Results.....	51
Table 2. Reliability Scores.....	51
Table 3. Intimate Partner Violence Self-Report Measures.....	51
Table 4. Child Maltreatment Self-Report Measures.....	52
Table 5. Mental Health and Parenting Stress Self-Report Measures.....	52
Table 6. Protective Factors Self-Report Measures.....	52
Appendices.....	53
Appendix A. Infant Parent Activities Training (iPAT) - HV Assessment Form.....	53
Appendix B. Demographic Survey.....	54
Appendix D. Parent Semi-Structured Interview Script.....	56
Appendix E. Parent Semi-Structured Interview Transcript.....	59

Introduction

Child Maltreatment

The Centers for Disease Control and Prevention (CDC) defines child maltreatment as "any act of commission or omission by a parent or caregiver that results in harm, potential for harm, or threat of harm to a child" (Center for Disease Control and Prevention [CDC], 2013). Child abuse (acts of commission) include physical, sexual, and psychological abuse. These are manifested as consequences on nonaccidental physical injury, inappropriate engagement in sexual behaviors, and impairing a child's "emotional development or sense of self-worth" (CDC, 2013). Child neglect, an act of omission and the most common type of child maltreatment, occurs when a caregiver does not provide a child with basic "physical, emotional, or educational needs or protection from harm or potential harm" (CDC, 2013). Examples of neglect include inadequate supervision, exposure to violence, and failure to provide for a child's physical, emotional, medical, and educational needs.

In 2011, it was estimated that 676,569 children were substantiated victims of maltreatment in the United States (U.S.), or a rate of 9.1 per 1000 children (United States Department of Health and Human Services [USDHHS], 2012). Among those children, 78.5% suffered from neglect, 17.6% suffered from physical abuse and 9.1% suffered from sexual abuse. Although child maltreatment is present in all races and ethnicities, the majority of reports occur among White children (43.9%), followed by Hispanic¹ (22.1%) and African-American (21.5%) children (USDHHS, 2012).

¹ The term "Latino" refers to people of Latin American descent. This term is preferred over "Hispanic," a term instituted by the United States government in 1977 to describe all whose culture or origin is Spanish (Office of Management and Budget, 1977). This connotation emphasizes language and the imposed Spanish colonialism, ignoring the powerful and rich historical roots of the multi-national region that is Latin America (Alcoff, 2005). The term "Latino," on the other hand, "speaks to struggles of empowerment" and describes Latinos' sense of community, identity, and respect (Oquendo, 1998). In the present study, the term "Latino," rather than "Hispanic," will be used, unless citing government reports.

It is estimated that 80% of all perpetrators, someone who "has been determined to have caused or knowingly allowed the maltreatment of a child" (USDHHS, 2012) are parents, of which 84.6% are between the ages of 20 and 49 years. An estimated 15.1% of perpetrators engage in more than one type of maltreatment. Perpetrator rates differ among race and ethnic backgrounds. Nearly half (48.4%) of all perpetrators are white, 20.2% are African-American and 19.2% are Hispanic (USDHHS, 2012).

The highest risk of victimization occurs in children under the age of five and also those with special needs (CDC, 2013). Additionally, a parent's perception of a child's needs and unreasonable developmental expectations can increase the probability of victimization (Lundahl, Nimer, & Parsons, 2006). Parent characteristics, including poor mental health, young age, low socioeconomic status, poor parenting skills, substance abuse, poor social networks, personal history of child maltreatment, and presence of intimate partner violence (IPV) can increase the risk of perpetration (Berger, 2005; CDC, 2013). Societal factors, such as community violence, poverty, inequality, and poor legal and enforcement awareness contribute to the risk of child maltreatment. In the face of multiple factors, maltreatment can be prevented, or minimized, by nurturing appropriate parent-child relationships, appropriate parenting skills, ensuring family stability, and assuring access to services and community networks (CDC, 2013).

The effects of negative childhood experiences have been documented extensively. The Adverse Childhood Experiences (ACE) study, conducted by the CDC and Kaiser Permanente since 1995, has documented the relationship between childhood maltreatment and future health outcomes. Data were collected from more than 17,000 adults about their childhood experiences of maltreatment and household dysfunction including parental divorce and separation, domestic violence, and criminal behavior (Anda et al., 2010). These experiences were assessed as risk

factors for future chronic diseases, health behaviors, victimization and perpetration, and adverse mental health, reproductive health and sexual behavior outcomes. Among its many correlations, the ACE study found that adults who were victims of negative childhood experiences to be at high-risk of experiencing adverse health and well-being outcomes including depression, anxiety, teen and unintended pregnancy, cancer, sexually transmitted diseases, alcohol abuse, intrapersonal violence, and ultimately, premature death (Larkin, Shields, & Anda, 2012). Additional studies have also documented the strong association between childhood abuse and mental health disorders, substance abuse, and risky sexual behavior (Edwards, Holden, Felitti, & Anda, 2003; Norman, Byambaa, De, Butchart, Scott, & Vos, 2012).

Child maltreatment can lead to fatalities, with approximately 81.6% child deaths occurring in children under four years of age, and 17.8% of deaths occurring in Hispanic children alone (USDHHS, 2012). In 2011 it is estimated that the child fatality rate as a result of maltreatment was 2.1 per 100,000 children (USDHHS, 2012). Putnam-Hornstein (2011) found that children who have experienced maltreatment were twice as likely to die from unintentional injuries, and 5.9 times more likely to die of intentional injuries than non-abused peers.

Child maltreatment also generates lasting economic burden on society. Fang, Brown, Florence and Mercy (2012) found that lifetime costs per victim of child maltreatment in nonfatal and fatal cases in 2010 amounted to \$210,012 and \$1,272,900, respectively.

Intimate Partner Violence

The CDC describes IPV as "physical, sexual, or psychological harm by a current or former partner or spouse" (CDC, 2012). This includes the intentional use of physical force with the intention of causing injury and harm, or to coerce someone to engage in unwanted sexual behaviors. IPV is also manifested in non-physical forms, as is the case of psychological and

emotional abuse (Tjaden & Thoennes, 2000). Verbal threats, including words and gestures, humiliation, intimidation, manipulation, isolation, and deprivation of basic needs and rights are all common forms of this type of violence (Saltzman, Fanslow, McMahon, & Shelley, 2002).

The experience of IPV is not gender specific; however, four out of five victims are women (Catalano, 2012). It is estimated that 5.3 million IPV incidents are committed against women every year in the U.S. alone (National Center for Injury Prevention and Control [NCIPC], 2003). In 2010 among only Hispanic women, the victimization rate was 4.1 per 1,000 compared to 6.2 per 1,000 in Non-Hispanic White and 7.8 per 1,000 Non-Hispanic Black women (Catalano, 2012).

Children of women who suffer IPV are also victimized. It is estimated that 29.4% of children in the U.S. live in a home where IPV has occurred in the past year (McDonald et al., 2006). Fucso and Fantuzzo (2009) report that an estimated 95% of children living in these homes have experienced indirect victimization (i.e., seeing or hearing IPV), with the likelihood of exposure increasing if the event results in injuries to the mother. Children are likely to become part of IPV events, with 52% of children intervening physically and 23% intervening verbally (Edleson, Mbilinyi, Beeman, & Hagemesiter, 2003).

Risk factors for IPV are numerous and present in all levels of the socio-ecological model of health (CDC, 2012). These include low socioeconomic status, substance abuse, poor mental health (i.e., depression, low self-esteem), poor parenting role models, emotional dependence, experiences of childhood maltreatment, and childhood exposure to IPV. Unhealthy family relationships, as well as marital instability and conflicts, can also increase the risk of violent episodes. Partners who are verbally abusive and jealous, use power as a form of control, and experienced abuse and violence during childhood are likely to become perpetrators of IPV

(CDC, 2012). Social and cultural gender norms, as well as poor intervention strategies and appropriate sanctions, are community and societal-level factors that put a person at risk of becoming a victim (CDC, 2012).

IPV is a significant public health problem that affects the victimized woman and her children alike, leaving lasting harmful physical and psychological sequelae. Adult female victims often experience bruises, cuts, broken bones, trauma, disability, mental illnesses, chronic diseases, and ultimately, death. In 2007 alone, an estimated 2,340 people died as a result of IPV, 70% of them being women (Catalano, 2012; Coker et al., 2002). Women who are continuously exposed to IPV often experience long periods of depression (Beck, 2001; Beydoun, Beydoun, Kaufman, Lo, & Zonderman, 2012; Chuang et al., 2012; Levendosky & Graham-Bermann, 2001), parenting stress and negative feelings (Huth-Bocks & Hughes, 2007; Levendosky & Graham-Bermann, 2000a), and posttraumatic stress disorder (Kelly, 2010; Levendosky, Huth-Bocks, Shapiro, & Semel, 2003). They may also have periods of emotional instability, such as cycling between being withdrawn, angry, loving, and warm (Levendosky & Graham-Bermann, 2000b). Victims of IPV often have difficulty establishing healthy relationships, managing anger and aggression, and often engage in harmful health behaviors including substance abuse and sexual risk behaviors (Black et al., 2011; CDC, 2012). The CDC estimates that the costs associated with victims of IPV amounted to more than \$8.3 billion in 2003, including medical, productivity, and welfare costs (NCIPC, 2003).

Despite the fact that exposure to IPV (indirect victimization) is in itself harmful to children, extensive research has concluded that IPV and other forms of child maltreatment often co-occur (Antle et al., 2007; Dube et al., 2002). An estimated 30% to 60% of children who witness IPV are often direct concurrent victims of maltreatment (Lamers-Winkelmann, Willemen,

& Visser, 2012). McGuigan and Pratt (2001) found that the presence of IPV during a child's first six months of life is significantly associated with child maltreatment and through age five. Of all child fatalities, 16.7% occur in children who have been exposed to IPV (USDHHS, 2012).

Child maltreatment in homes where IPV is present is often a result of the harmful effects of IPV on mental health, and in turn, parenting abilities (Martinez-Torteya, Bogat, Von Eye, & Levendosky, 2009; Levendosky & Graham-Bermann, 2000a, Levendosky & Graham-Bermann, 2001). IPV is associated with increasing parental dissatisfaction, maternal depression and damaging a mother's ability to show affection, warmth, and respond sensitively to a child's needs (Banyard, Williams, & Siegel, 2003; Berger, 2005; Levendosky et al., 2006). Mothers experiencing depression as a result of IPV often neglect their children's needs, have difficulty bonding with their children, and are often disengaged and withdrawn (Field, 2002; Lovejoy, Graczyk, O'Hare, & Neuman, 2000; Mason, Briggs, & Silver, 2011). As a result, infants often display negative behavioral outcomes, such as decreased movement, vocalization, and facial expressions (Field, 2008). Moreover, parenting stress, as a result of IPV, directly affects children's adjustment problems, social competence, and cognitive development (Huth-Bocks & Hughes, 2007).

Other behavioral observation and maternal report studies, however, contradict these findings. Victimized mothers often try to compensate for the exposure to violence on their children by improving and demonstrating positive parenting interactions (Letourneau, Fedick, & Willms, 2007; Levendosky et al., 2003). A study with Latino families found that IPV in the form of physical abuse increases maternal parenting stress, but does not affect her parenting competence (Baker, Perilla, & Norris, 2001). Hence, these studies suggest that mothers engage actively to safeguard their children from the harmful effects of IPV, finding ways of increasing

empathy and care toward their children thus perhaps stopping the cycle of violence (Levendosky, Lynch, & Graham, Bermann, 2000).

Various aspects of children's lives help mitigate the effects of IPV, including high self-esteem, cognitive developmental state, resilience, and positive parenting (Howell, 2011; Martinez-Torteya et al., 2009). Despite these factors, children's perception and experience of family stability play an important role in mediating the effects of IPV.

Exposure to IPV leaves negative behavioral, physical, cognitive, and emotional sequelae. Childhood exposure to IPV is correlated with risk-taking behaviors such as illicit drug use, alcohol abuse, and risky sexual behaviors (Bair-Merritt, Blackstone, & Feudtner, 2006; Dube et al., 2002). Children of depressed mothers often experience behavior and emotional disorders (English et al., 2009; Levendosky & Graham-Bermann, 2001). Exposure to violence and abuse in the home increases children's risk for internalizing and externalizing behavior problems (DeJonghe, Von Eye, Bogat, & Levendosky, 2011; Evans, Davies & DiLillo, 2008; Levendosky et al., 2006; Martinez-Torteya et al., 2009; Moylan et al., 2010; Sternberg, Baradaran, Abbott, Lamb & Guterman, 2006). Common internalizing problems include trauma symptoms such as anxiety, chronic stress, fear, post-traumatic stress disorder, and depression (Johnson et al., 2002; Howell, 2011; Kulkarni, Graham-Bermann, Rauch, & Seng, 2011). Feelings of helplessness, neglect and detachment from parents as a result of IPV also increase the risk of childhood depression (Howell, 2011). Externalizing behavior problems as a consequence of IPV exposure are more common among boys, and include anger and aggression (Berger, 2005; Johnson et al., 2002). Among these children, aggression is a common form of conflict resolution (Margolin, 2005). A study by Eriksen and Jensen (2009) found that higher levels of aggression between siblings occur in homes in which children are exposed to IPV. Further, sibling aggression might

be a result of a coping mechanism for girls, while in boys it could be a reflection of a learned behavior because children often imitate behaviors that are characteristic of the abusive parent. Consequently, violence becomes a learned acceptable behavior, and thus children who witness it may learn to use it.

The majority of children who are exposed to IPV experience high rates of victimization and bullying in environments outside the home (Bauer et al., 2006). Childhood exposure to IPV increases the likelihood of teen dating violence (Jouriles, Mueller, Rosenfield, McDonald, & Dodson, 2012) and IPV perpetration and victimization in adulthood (Ernst et al., 2008). According to Whitfield, Anda, Dube, and Felitti (2003), the risk of becoming a victim or perpetrator as adults increases 3.8 times in men and 3.5 times in women. Dube et al. (2003) reported that a combination of both child maltreatment and household dysfunction experienced during childhood lead to higher risk of illicit drug use during adolescence and adulthood.

Child Maltreatment Interventions

Home Visitation. Prevention strategies for child maltreatment, such as home visitation programs, generally focus on children under five, those at highest risk. Some home visitation programs have been shown to prevent and reduce risk factors for child maltreatment while improving parenting skills, parental mental health, and child health and development (Bilukha et al., 2005; Lutzker & Chaffin, 2012). These programs are also a promising cost-effective strategy and have been credited with reducing the economic burden of child maltreatment on society as a whole (Howard & Brooks-Gunn, 2009; Lee et al., 2012).

Home visitation programs work with individual families in their own home environments targeting contextual factors that affect a child's well-being (Lutzker & Bigelow, 2002). This individualized setting has proven to increase the program's ability to produce effective and

lasting behavioral changes in the family (Lundahl et al., 2006). Services are typically delivered by home visitors (HV), during in-home sessions averaging one hour in length. The HV serves as a source of information and social support while monitoring the health status of the family.

While these programs vary in content, family characteristics, age of the child, and frequency, their aim is usually that of improving parenting practices, child development and health, and the home environment of the child in families of low socioeconomic status (Bilukha et al., 2005).

Parents who participate in home visitation programs benefit from improved mental health, and the majority of first-time, depressed mothers see a reduction in depression levels through the course of their participation (Duggan et al., 2004; Ammerman et al., 2009; Chaffin & Bard, 2011; Chaffin, Bard, Bigfoot, & Maher, 2012; DePanfilis & Dubowitz, 2005; Sanders & McFarland, 2000). Furthermore, mothers engage in increased verbalization and praise toward their children (Timmer et al., 2011).

With regard to child outcomes, many programs focus on physical health, behavioral and emotional problems, and cognitive development (Howard & Brooks-Gunn, 2009), and have shown to effectively improve children's development and health (Peacock, Konrad, Watson, Nickel, & Muhajarine, 2013). Further, programs that intervene during prenatal stages and those that have higher frequency of home visits are more effective in improving child outcomes and parenting behaviors (Peacock, Konrad, Watson, Nickel, & Muhajarine, 2013).

Several home visitation programs for preventing child maltreatment have demonstrated through randomized controlled trials to be effective while meeting competency and fidelity standards. Parent-training programs such as Parent-Child Interaction Therapy (PCIT) and the Positive Parenting Program (Triple P), for example, provide parents with skills to manage child behavior problems and improve parent-child interactions (Chaffin & Friedrich, 2004; Sanders,

Turner, & Markie-Dadds, 2002; Sanders, 2008). Results of randomized trials demonstrate that PCIT reduces physical abuse recurrence and improves parent-child interactions (Chaffin & Friedrich, 2004), while families receiving Triple P services report a reduction in child maltreatment, child out-of-home placements, child maltreatment-related injuries, and parenting stress (Prinz, Sanders, Shapiro, Whitaker, & Lutzker, 2009).

SafeCare[®]. SafeCare, an evidence-based, parent-training home visitation program, for families with children under age five, is effective in reducing parenting stress and future risk for child maltreatment (Lutzker & Chaffin, 2012). SafeCare addresses contextual risk factors for child maltreatment, focusing on improving child health, home safety, and parent-child or parent-infant interactions (Lutzker, Frame, & Rice, 1982; Lutzker & Chaffin, 2012). At its most basic level, SafeCare teaches parents to increase bonding behaviors and attachment with their children.

SafeCare consists of direct behavioral observations and skills training to predetermined performance criteria (Edwards & Lutzker, 2008). Parent training consists of an initial assessment of parent's skills, which provides data on parent's current abilities and sets a baseline for the course of the intervention. Skills training occurs through the use of the "SafeCare 4" steps in which the HV *explains* and *models* each parenting behavior, allows the parent to *practice* the skill with her child, and ends by providing positive and corrective *feedback* on the parent abilities and progress (Guastafarro, Lutzker, Graham, Shanley, & Whitaker, 2012). Parents' progress and HV delivery of sessions are monitored throughout the intervention to assure the effectiveness and fidelity of the program.

Health and home safety training provide parents with skills to manage their child's healthcare needs and reduce the risk of hazards and injuries at home by creating a safe living environment (Bigelow & Lutzker, 2000; Jabaley, Lutzker, Whitaker, & Self-Brown, 2011).

Single-case research design studies have evaluated the effectiveness of health and home safety training, and have demonstrated that the use of technology during skills training enhances parent learning (Mandel, Bigelow, & Lutzker, 1998; Jabaley et al., 2011). Moreover, health and home safety have been successfully delivered in Spanish (Cordon, Lutzker, Bigelow, & Doctor, 1998).

The Parent-Child Interaction (PCI) module is aimed at parents with children from ambulatory stages to age five, giving them skills to plan interactive age-appropriate activities prevent challenging behaviors (Guastaferrero et al., 2012; Lutzker & Bigelow, 2002). Single-case research design studies have shown PCI to be successful when delivered in Spanish (Cordon et al., 1998), and when enhanced with training via video (Bigelow & Lutzker, 1998).

Parents with infants who are not ambulatory participate in the Parent-Infant Interaction module (PII), where they learn to increase positive interactions with their infants while improving bonding behaviors. Parents learn to incorporate physical (touching, rocking, holding) and non-physical (looking, talking, smiling, imitating) behaviors into daily routines, learn to recognize developmental milestones, and acquire skills to plan interactive activities as their infant develops and grows. The HV also works with the parent to improve daily activities that might be challenging for the parent, and works with them to develop problem-solving strategies as needed (Guastaferrero et al., 2012; Lutzker & Bigelow, 2002). Unlike the health, safety, and PCI modules of SafeCare, PII has not been validated in single-case research design studies, and its effectiveness when implemented in Spanish has not been evaluated.

Large-scale studies have shown SafeCare to be efficacious and effective in reducing the risk of child maltreatment (Guastaferrero et al., 2012), and have documented a reduction in recidivism rates in families receiving SafeCare services (Gershater-Molko, Lutzker, & Wesch, 2002; Hecht, Silovsky, Chaffin, & Lutzker, 2008; Lutzker & Rice, 1987). A six-year, statewide

randomized-controlled trial with 2,175 families and 219 home visitors found significantly lower child maltreatment recidivism rates among families receiving SafeCare services when compared to families receiving services as usual. Furthermore, it was found that SafeCare services could prevent up to 104 recidivism cases for every 1000 families in the program (Chaffin, Hecht, Bard, Silovsky, & Beasley, 2012).

Culture in Interventions

With a population estimate of 52 million, Latinos in the U.S. are the largest and fastest growing minority, accounting for 16.7% of the total U.S. population (Humes, Jones, & Ramirez, 2011). An increasing number of children (21%) in the U.S. have at least one parent who was born outside the country, and as a result, 22% of children and 76% of all Latinos living in the U.S. speak a language other than English at home (Federal Interagency Forum on Child and Family Statistics, 2012).

The Surgeon General's supplemental report to Mental Health on Culture, Race, and Ethnicity (2001), reports that Latinos are often underrepresented in treatment and services research (United States Department of Health and Human Services [USDHHS], 2001). This population is often underserved due to a U.S. mental health system that has failed to provide access to minorities, including specific barriers that prevent Latinos from seeking, and completing treatment. One barrier is the lack of an integration and understanding of people's culture into mental health services and behavioral treatments (USDHHS, 2001). Culture "denotes a common heritage and set of beliefs, norms, and values", and thus, it describes the unique learned and shared characteristics of groups of people, including country of origin, language, traditions, history, and religious beliefs (United States Department of Health and Human Services [USDHHS], 1999).

Another barrier is the widening gap between the growing Latino population rates and the body of knowledge and research on the Latino community (Bernal & Domenech-Rodríguez, 2009). An analysis of controlled clinical trials of treatment guidelines for health professionals revealed that none included minorities in their development research and implementation (USDHHS, 2001). Because of these factors, it has been demonstrated that Latinos are less likely to receive treatment that follows strict evidence-based guidelines (USDHHS, 2001). Consequently, having ignored the treatment relevance to the target population means that there is often a disparity between the intervention and the reality of minorities (Parra Cardona et al., 2009).

Previous studies have demonstrated that culturally-adapted evidence-based treatments are more effective and reduce drop-out rates (USDHHS, 2001). Programs that are culturally adapted are those which are culturally sensitive to another culture's values and traditional worldviews, having made adaptations to both program content and providers (Kumpfer, Alvarado, Smith, & Bellamy, 2002). Castro, Barrera, and Martinez (2002) suggest this process requires making adaptations to program content and training culturally competent providers. Guidelines set forth by the American Psychological Association encourage providers to be culturally sensitive when providing services to clients (American Psychological Association [APA], 2002). The Surgeon General's report also proposes providing services in client's own language, that are compatible with cultural norms, and with trained providers who understand and respect client's "worldview and experiences" (USDHHS, 2001). These adaptations produce interventions that are culturally-equivalent while adhering to fidelity standards.

Cultural sensitivity is fundamental in parenting programs. Due to the fact that parenting is influenced by cultural values, it is important to understand and consider the parent's cultural

background in order to influence a change in parenting behavior (Calzada, 2010). Parra Cardona et al. (2009) found that although Latino parents have a strong desire to learn about how to improve their parenting abilities, they report cultural differences and a lack of cultural sensitivity as the main obstacle for their participation.

Research conducted to study cultural adaptations on evidence-based programs parenting programs has found adaptations to be satisfactory to Latino families. Borrego et al. (2006) found PCIT to be successful and produce positive outcomes when delivered in Spanish. Matos, Torres, Santiago, Jurado, and Rodríguez (2006) created a culturally-adapted version of PCIT that received high parent satisfaction ratings as well as positive PCIT outcomes. A culturally-adapted version of PCIT was also developed using empirical literature and input from Mexican-American therapists and families, and was compared to PCIT as usual in a large randomized controlled trial (McCabe, Yeh, Garland, Lau, & Chavez, 2005; McCabe & Yeh, 2009; McCabe, Yeh, Lau & Argote, 2012). They found that the adapted version of PCIT improved child internalizing symptoms, but no significant difference in outcome measures was found between both versions. This study showed that the culturally-adapted version of PCIT was just as effective as the standard, maintaining treatment outcomes over time.

Although SafeCare has proven successful in different contexts, possible cultural adaptations have not been studied extensively. A sub analysis of data from a large statewide randomized controlled trial looked at American Indians and found that structured cultural adaptations were not necessary for the SafeCare model when working with this population (Chaffin, Bard, Bigfoot, & Maher, 2012). High ratings were also found for SafeCare cultural competency and client satisfaction, and consequently there were no problems with family engagement. Although it was not studied, this could be a result of provider's extensive

experience working with diverse populations, thus allowing providers to make their own adaptations with these families. In other studies, parents have also rated SafeCare as being more culturally-competent when compared to similar services (Damashek, Bard, & Hecht, 2012; Silovsky et al., 2011). Self-Brown et al. (2011) conducted interviews with SafeCare providers to investigate the need for cultural adaptations to the SafeCare program. Among their recommendations, providers stressed the need for SafeCare to provide cultural sensitivity and competency training to its HV and creating Spanish translations of its parent materials. Providers also recommended that to increase retention and acceptability of the program, it is important to match families and HVs based common culture and language. Finally, providers suggested including an acculturation measure as part of the initial SafeCare session, allowing HV to provide best services to Latino families.

With regard to specific SafeCare modules, only Cordon et al. (1998) conducted a single-case research design study to evaluate home safety, health, parent-child interaction training and Spanish-language delivery with one Spanish-speaking family. The intervention received high ratings from the family, and the data showed that the modules were delivered effectively in Spanish. Nevertheless, the Parent-Infant Interaction module of SafeCare has not been evaluated in a similar manner.

The purpose of the present study was to investigate how a Latina mother with prior exposure to IPV might improve her parenting skills and parent-infant interaction through her participation in the SafeCare PII module. The study evaluated the efficacy of the SafeCare PII module delivered in Spanish using a single-case research design. Moreover, the study examined how her participation in PII might affect the mother's psychiatric symptoms, parenting stress, perceived protective factors, as well as the risk for child maltreatment as observed in self-report

measures. Further, this study aimed to investigate the potential need for Latino cultural adaptations to the PII module. The study participant provided feedback and suggestions on the program to develop a SafeCare PII curriculum that is culturally competent for Latino families.

Method

Participants

One mother and her 12-month-old son (who had been born one-month premature) were recruited after meeting the following criteria: Latina mother between 18-40-years-old, with an infant under 12-months-old who was not ambulatory, interested in improving parenting skills and her relationship with her child, and currently participating in a program for Latino families affected by IPV. The participant was a 40-year-old single mother of three from Mexico who had been living in the U.S. for 7 years. The language spoken in her home was Spanish. The highest level of education attained was a high-school degree, and she reported an annual income of \$12,000.

The mother was recruited from an organization that provides direct services for Latino families who are victims of IPV, including individual counseling, advocacy, parenting classes, and support groups. The mother had been receiving services at the organization for a year and a half, participating in support groups and receiving individual counseling sessions. However, she had never been part of any parenting classes in or outside of the organization. The study was conducted by a bilingual researcher (hereafter referred to as HV) who met with the organization's staff to explain the purpose and procedures of the study. The organization's women's advocate identified the mother as a potential participant and briefed her about the

study. The HV then met individually with the mother and discussed and provided her an informed consent document.

Setting

Although the mother was not living with a partner, research sessions were not conducted at the family's residence due to safety concerns as a result of the ex-partner's use of violence. To facilitate the training, the referring organization provided the HV with private space in their office facility to conduct all observations and training with no disruptions or distractions. The room was adapted to simulate a home setting with a living room-like space, and toys were brought in to be used during parent-infant interaction activities.

Each session was held once-a-week and lasted an average of 45 minutes. Seven sessions occurred with an additional follow-up visit at one-month postintervention.

Materials

SafeCare Parent-Infant Interaction (PII) parent materials used during training sessions were provided in Spanish. All materials had been previously translated by SafeCare bilingual research staff. During the translation process, words and themes that are not used in the Latino culture, for example "peek-a-boo" or lullabies and bedtime stories, were taken out and replaced with appropriate ones for the Latino context. During each session, the HV also verbally incorporated concepts of the Latino culture into the training, such as beliefs and traditions during a child's development and learned parenting. This allowed for both the HV and mother to share and discuss the training in the Latino context.

PII materials included cards containing information on: developmental milestones, infant physiological states, description of interaction skills, and infant age-appropriate activities. The HV supplied toys to be used during PII activities, and the mother also brought to each session

several of her infant's toys that could be useful during the sessions, as well as any baby supplies she would need for that day (i.e., diapers, food, clothing).

Parent self-report measures were administered using a laptop computer provided by the HV. The measures were delivered using an Audio Computer Assisted Self-Interview (ACASI) software, which read individual questions out loud to the mother in Spanish.

Observer Training

All research staff were graduate research assistants and trained home visitors at the National SafeCare Training and Research Center (NSTRC). Training for the PII module consisted of didactic sessions during which NSTRC training specialists provided standard PII written materials. This was complemented by observations of pre-recorded videos of PII home sessions, role-play exercises, and feedback and discussions from the trainers. Training concluded with a written assessment of knowledge and skills, for which research staff obtained 85% or greater correct responses.

Dependent Variables

Observational measure. Observers used the SafeCare infant Parent Activities Training (iPAT) HV Assessment form, on which partial interval recording was used to document the occurrence of seven parent skills during one play and two daily activities (Appendix A). Each activity was observed for three minutes, and a stopwatch was used to signal the intervals. The decision to observe certain daily activities was made by completing the Daily Activities Checklist (DAC) with the mother. This form lists daily routine activities, such as mealtime or diapering, and asks the mother to rate how much change is needed in each. Response options range from "a lot of change" to "no change" needed. Based on this form, the activities indicated to be the most challenging for the mother were chosen to be observed throughout the training.

The seven parent skills included looking, talking, touching, smiling, imitating, rocking, and holding (Appendix A). The seven behaviors were separated and scored into two separate categories: physical skills (touching*, holding, rocking) and non-physical skills (smiling*, looking*, talking*, imitating). A check mark (✓) was used to indicate the occurrence of skills during each one-minute interval. Skills marked with an asterisk (*) are those which, as per the SafeCare curriculum, were determined to be core skills and should be performed during any activity with a child. Conversely, non-core skills (holding, rocking, and imitating) are those in which it is not always possible to engage in during every activity with the child. Such skills were scored as "N/A" if observers agreed that in the context of the activity, the particular skill could not be performed (i.e., rocking cannot be demonstrated during diapering, so the skill can be scored as "N/A"). A final percentage score for each set of skills was derived by dividing the total number of occurrences (✓) by the total number of intervals observed, and multiplying by 100.

Parent self-report measures. Parent self-report measures were delivered using Audio Computer Assisted Self-Interview (ACASI) software, from which each question was read out loud to the mother in Spanish. The mother was informed all answers would remain anonymous, and that the HV would be available to answer any questions. The assessment was conducted during the first baseline session, upon completion of the intervention, and at the one -month follow-up sessions. The parent self-report data were used to document parent progress throughout the intervention and make pre and postintervention comparisons. All data was translated and verified by two bilingual research assistants.

Revised Conflict Tactics Scale, short form. The Revised Conflict Tactics Scale short form (CTS2), is a 20-item scale that measures the level of family violence by asking the number of times an event has occurred in an intimate partner relationship over the past year, and whether

the event was performed by the partner or the respondent. Events described are categorized into five subscales: negotiation, physical assault, injury, sexual coercion, and psychological aggression. The scale is scored following procedures by Straus, Hamby, Boney-McCoy and Sugarman (1996). Construct validity ranges from .77 to .89 for perpetration of the behavior, and .65 to .94 victimization by a partner. The scale has been used with diverse populations, including battered women and Latinos, and has been found to be highly reliable (Straus, Hamby, Boney-McCoy, & Sugarman, 1996; Straus, Hamby, Finkelhor, Moore, & Runyan, 1998; Straus & Douglas, 2004).

Brief Child Abuse Potential Inventory. The Brief Child Abuse Potential Inventory (BCAP), a short form of the Child Abuse Potential Inventory (CAP), is a 34-item agree/disagree questionnaire used to screen for the risk of parental child abuse, reporting on family conflict, feelings of persecution, distress, rigidity, happiness, loneliness, and financial insecurity. The inventory is scored following CAP guidelines. Sensitivity and specificity for a cutoff score of 9 (risk of abuse) are .93, with an internal consistency of .89. The BCAP has demonstrated to yield similar results to the widely used CAP, with correlations for development and validation samples of $r=.96$ (Milner, 1986; Ondersma, Chaffin, Simpson, & LeBreton, 2005).

Multidimensional Neglectful Behavior Scale. The Multidimensional Neglectful Behavior Scale-Parent Report (MNBS-P), is a 37-item scale that measures emotional, physical, cognitive, and supervisory parental neglect in infants 0-5. The scale provides statements on examples of parent-infant interactions, where the respondent rates how frequent they have participated in each of those events using a 4-item Likert scale ("never happened" to "always happened"). A total score, the neglectful behaviors count, is derived by dichotomizing each item and summing the items reporting neglectful behavior. The scale has shown to have satisfactory

to high levels of reliability and construct validity (Kaufman Kantor, Holt, & Straus, 2004; Straus, 2004; Holt, Straus, & Cantor, 2009).

Brief Symptom Inventory. The Brief Symptom Inventory (BSI) is used to provide a profile on nine primary symptom dimensions (Somatization, Obsessive-Compulsive, Interpersonal Sensitivity, Depression, Anxiety, Hostility, Phobic Anxiety, Paranoid Ideation, and Psychoticism) and three global indices of distress (Global Severity Index, Positive Symptom Total, and Positive Symptom Distress Index). It contains 53 items rated on a 5-point Likert scale of distress ("not at all" to "extremely"). T-scores are derived from raw scores, and any T-scores of 65 or above are considered high and identified as a clinical case. Internal consistency for subscales ranges from .71 to .85 and test-retest reliability ranges from .68 to .91 (Derogatis, 1993).

Parenting Stress Index, short form. The Parenting Stress Index short form (PSI), derived from the longer form, is a 36-item, 5-point Likert scale ranging from "strongly agree" to "strongly disagree." The index provides a Defensive Responding score, which assesses the extent to which the parent is trying to present a favorable impression of themselves or minimize problems, and a Total Stress score, which provides an overall parenting stress level. Three additional subscales assess the level of distress the parent experiences in their role as a parent (Parental Distress), the parent's perception on whether their child meets their expectations and whether their relationship reinforces their parental role (Parent-Child Dysfunctional Interaction), and their child's behavioral characteristics that make them easy or difficult to manage (Difficult Child). Individual scores are derived by summing item responses and converting to percentile scores, with scores at or above the 85th percentile identified as high or clinically significant.

Internal reliability ranges from .80 to .91. The scale has been validated and found to be reliable when administered to battered women and Latinos (Abidin, 1995; Solis & Abidin, 1991).

Protective Factors Survey. The Protective Factors Survey (PFS) is a 20-item, 7-point Likert scale used to measure protective factors against child maltreatment. The PFS examines five different subscales: family functioning and resiliency ("never" to "always"), social emotional support ("strongly disagree" to "strongly agree"), concrete support ("strongly disagree" to "strongly agree"), child development and knowledge of parenting ("strongly disagree" to "strongly agree"), and nurturing and attachment ("never" to "always"). Scores are obtained by summing the item responses in each subscale and dividing by the number of items completed; higher scores are a reflection of higher level of protective factors. The survey has shown high levels of internal consistency, with subscale reliability ranging from .76 to .89 (Counts, Buffington, Chang-Rios, Rasmussen, & Preacher, 2010; FRIENDS National Resource Center, 2011).

Demographic and consumer satisfaction survey. A demographic survey was administered during the first baseline session to gather basic information on the mother's characteristics, cultural variables, and parenting preferences (Appendix B). The standard SafeCare PII parent satisfaction survey was administered upon completion of the intervention, prior to the follow-up session (Appendix C). This is an 11-item, 5-point Likert scale ranging from "Strongly Agree" to "Strongly Disagree" used to obtain an evaluation of the program training and HV.

Semi-structured interview. A second bilingual research assistant with prior interviewing experience delivered an audio-recorded semi-structured interview in Spanish at the end of the intervention, prior to the follow-up session (Appendix D). The purpose of this interview was to

obtain feedback and suggestions on the implementation of the PII module with Latino families, as well as to gather information on parenting and cultural variables that could guide SafeCare's to the Latino community. The mother was asked about cultural aspects of parenting programs and parenting cultural variables in the Latino community.

Independent Variable

The goal of SafeCare PII is to improve the quality and quantity of parent-infant interactions, which is achieved by the demonstration of the seven skills with her infant across various daily activities. During the PII training, skills were taught using the "SafeCare 4" steps: Explain, Model, Practice, and Feedback. The HV used SafeCare iCards, parent materials with a description of each skill, to *explain* the skill and its importance to the attachment and development of her infant. Subsequently, the HV *modeled* each skill for the parent with her infant. The mother was then asked to *practice* and demonstrate the skill with her son, followed by positive and corrective *feedback* from the HV. The mother was taught the importance of engaging in each skill, was trained on recognizing infant developmental milestones, and learned to engage in developmentally appropriate activities with her infant. Upon closing of each session, the mother was provided with additional activity materials that would allow her to practice the skills learned throughout the week.

Reliability

Interobserver reliability training occurred between the HV and a research staff member who served as the reliability observer (RO). Training consisted of reviewing parent-infant interaction videos and rating them independently by scoring the occurrence of each parent skill. Scores were compared by calculating percentage agreement using the following calculation: $\text{agreements}/(\text{agreements} + \text{disagreements}) \times 100$. A satisfactory interobserver reliability score

was considered 85% or above. A total of four videos were observed, at which time the reliability score had reached the desired criteria.

Interobserver reliability was assessed in 43% of sessions in each condition (baseline and training). During reliability sessions, both the HV and RO observed one play activity and two daily activities between the mother and her son. The HV and RO used the SafeCare iPAT sheet and scored independently the occurrence of the seven PII skills during one-minute intervals, with each activity lasting three minutes. Reliability was then calculated from the two score sheets.

Experimental design

A multiple baseline design across behaviors was used to evaluate the effect of the PII training on parent-infant bonding behaviors. Single-case research design studies with multiple baselines across behaviors seek to document the functional relationship between an intervention (independent variable) and targeted behaviors (dependent variable) (Kazdin, 2001). In single-case research, the intervention is introduced in a staggered manner over a sequence of treatment conditions at different points in time, while the behavior is measured repeatedly within and across treatment conditions. Each participant serves as their own control, allowing researchers to document and compare behavioral performance pre-and postintervention (Barlow, Nock & Hensen, 2009). Data collected during observations are descriptive and predictive (Risley & Wolf, 1972), guiding future intervention decisions. The decision to move from one intervention condition to another depends on variability, level or mean, and increasing or decreasing trends of behavior performance in each phase. The relationship between the intervention and behavior is established once there is an observed stable trend in the desired direction with little or no changes in mean behavior performance, and there is an immediate effect in the dependent variable when the independent variable is modified (Horner et al., 2005).

The mother was taught two clusters of parenting skills (physical and nonphysical) that she could perform with her infant during any activity. Data were collected throughout baseline and training conditions to monitor trends. Intervention began first on the cluster of skills with the lowest baseline percentage score and which had remained stable. Once an ascending trend and high stable score was obtained for that cluster of skills, the intervention continued to the new cluster of skills.

Procedures

The study (protocol #H13180) was approved by the Institutional Review Board at Georgia State University. At enrollment, the mother signed an informed consent document and was informed she would be compensated \$10 per session and would be able to keep all parent training materials used during the sessions.

At the beginning of each session, data collection occurred by observing the mother interactions with her infant during one play activity and two daily activities (i.e., diapering, feeding, getting dressed, etc.), each activity lasting three minutes. This occurred without intervention from the HV to allow for the activity to take its natural course as it would on any other day, thus allowing for more typical observational data to be collected.

The two daily activities observed throughout the training were chosen based on what the mother had indicated on the DAC. The mother expressed that diapering and getting dressed were the two activities which were the most difficult with her son. The HV prioritized those activities during training sessions, which were assessed in addition to other daily routine activities.

Baselines. Following enrollment, the HV completed the DAC with the mother, and collected the first baseline data by observing parent skills during three activities (one play and two daily activities). At the second baseline session, after behavioral observations and data

collection was completed, the HV reviewed developmental milestones, physiological states of infants, including how to handle an upset baby, and how to plan age appropriate activities.

The mother completed the demographic survey during the first session, and the computer-delivered interview during the first two baseline sessions.

Training. Behavioral observations and data collection took place at the beginning of each training session. Training occurred first on nonphysical skills, those with the lowest score. After a stable data trend with high scores was observed, training continued to physical skills. Each skill was taught following the "SafeCare 4" steps as previously described. The mother was given SafeCare iActivity Cards, parent materials with age-appropriate activities for the mother to increase positive interactions with her infant. After every session, the mother was asked to incorporate the skills learned into her daily activities and play activities chosen from the iActivity Cards.

When the data showed a stable high trend for all skills (80% or higher), the HV introduced the SafeCare child Planned Activities Training (cPAT) skills. These skills help prepare the mother to interact with her infant as he grows older focusing on ways to increase positive interactions and prevent challenging behaviors. The mother was provided with skills on how to engage with her son before, during, and after an interactive activity (i.e., coloring, bathing). This included preparing materials in advance, setting rules and consequences, and maintaining appropriate interaction skills. The HV and the mother picked one activity and practiced using the SafeCare 4 steps.

End of training. Training ended once a stable trend was observed (at least three data points) with high percentages. After the final behavioral observations and data collection, the mother was asked to complete the computer-delivered measures again. Following the SafeCare

protocol, the mother was asked to complete a PII consumer satisfaction survey. The mother also participated in the audio-recorded, semi-structured interview conducted in Spanish by a bilingual research assistant.

Follow-up. The mother participated in a one-month follow-up session during which the HV again observed three interactive activities between the mother and her infant to assess retention of physical and nonphysical skills. She also completed the computer-delivered self-report measures.

Results

A total of three activities occurring for three minutes each were observed at the beginning of each session. The occurrence of non-physical and physical skills during one-minute intervals was recorded. The final percentage score for each set of skills was derived by dividing the total number of occurrences from all three activities by the total number of intervals observed, and multiplying by 100.

Figure 1 shows the percentage of parent demonstration of non-physical and physical skills throughout the course of the intervention. Overall, introduction of infant developmental milestones and PII training produced an immediate increase in the mother's demonstration of nonphysical and physical interactions skills with her infant.

Baseline

Demonstration of predetermined interaction skills was low during the two baseline sessions. Baseline scores for nonphysical skills were 59% and 78% during sessions 1 and 2, respectively, while physical skills scores were 44% and 77%, respectively. Both sets of skills

showed an increasing trend at baseline, with higher scores for non-physical skills. During session 2, developmental milestones were introduced, prior to the PII intervention.

Training

Although baseline data indicated a stable trend for both clusters of skills, intervention began on session 3 for nonphysical skills due to lower baseline scores and less stability when compared to the physical skills score. Upon introduction and training in PII nonphysical skills, there was an increase in percent occurrence from 80% in session 3 to 87% in session 4.

Based on the improved demonstration of nonphysical skills, intervention was then implemented for physical skills in the subsequent session. Training on PII physical skills produced an increase from 78% in session 4 to 89% in session 5.

During session 6, observing a stable trend with scores above 80% allowed introduction of Planned Activities Training. PII training concluded in session 7. At the final session, the demonstration of non-physical skills had a score of 97% and physical skills had a score of 100%.

Follow-up

The mother actively engaged in nonphysical and physical skills with her infant at the one-month follow-up. The percent occurrence of non-physical skills remained at 97%, and 100% for physical skills.

Reliability

Interobserver reliability was assessed in 43% of the sessions. Reliability was calculated in one of the baseline sessions, and in two training sessions. The mean reliability score for all three sessions was 97.7% (SD=2.52). Individual session reliability scores are presented in Table 2.

Parent self-report measures

Parent self-report measures were administered at pre-and postintervention, and at a one-month follow-up session. Table 3 shows the scores for the CTS2, which were the same at all data collection time points. The mother reported that both she and her partner had been able to engage in some positive conflict negotiation tactics, indicating the use of conflict resolution alternatives to abusive or coercive approaches. Both had been psychologically aggressive towards each other in the form of verbal abuse or aggressive displays. The mother also reported a history of physical assault and having been forced to engage in sexual acts, either by coercion or physical force.

The risk of child abuse and presence of neglectful behavior was measured using the BCAP and MNBS-P (Table 4). There was a decrease in BCAP scores, a measure of the potential for child abuse, at postintervention from clinically-significant levels (scores above 9) at preintervention to normal limit scores at postintervention and one-month follow-up. At preintervention, the mother indicated two items that reflect neglectful behavior (physical needs and abandonment), as reported in the MNBS-P. There was an immediate improvement at postintervention and one-month follow-up, with no reports of neglect.

Mental health and parenting stress were measured using the BSI and PSI (Table 5). BSI subscale scores showed a notable improvement at postintervention and one-month follow-up. Subscale scores for Interpersonal Sensitivity, Depression, and Paranoid Ideation improved from clinically-significant (scores equal to or above 63) at preintervention to normal limit scores at postintervention. Subscale scores for Psychoticism remained clinically-significant at pre-and post intervention. There was also a notable improvement in the Global Severity Index, the single overall indicator of distress, dropping from clinically significant (63) at preintervention to normal limit scores (49) at postintervention. The intensity of symptoms, as measured by the Positive Symptom Distress Index, decreased from clinically significant levels (63) to normal

limit scores (50) at postintervention. At the one-month follow-up, all BSI subscale scores remained at normal limits. The total parenting stress level, as measured by the Total Stress subscale of the PSI, remained at clinically significant levels at pre-and postintervention, as well as the one-month follow-up. Both the Parent-Child Dysfunctional Interaction and the Difficult Child subscales were at normal limit scores through all data collection points. Of all PSI subscales, only the Parental Distress subscale remained clinically high at pre-and post intervention, indicating that the source of this is not due to the parent-child relationship, but to the parent's personal adjustment. This score, however, improved to normal limit scores at the one-month follow-up.

As shown in Table 6, scores on the PFS improved at postintervention and at the one-month follow-up session, demonstrating an increase in protective factors against child abuse and neglect.

Consumer satisfaction survey and semi-structured interview

The mother completed the PII parent satisfaction survey (Table 1) and participated in a semi-structured interview at the end of the intervention, providing suggestions on program characteristics and cultural adaptations that would benefit Latino participants (Appendix E). Overall, she rated her satisfaction with the PII module as very positive, and expressed gratitude for the opportunity to learn more about her son's development and ways to interact with him, describing herself as someone who "tries to be updated on everything."

The mother 'strongly agreed' that interacting with her infant had become easier, especially on routine activities, and would recommend this training to other mothers. She stated, "I had a lot of problems with changing his clothes, and all I am learning with HV has helped me a lot...interacting with him, the way HV taught me, has helped me." She 'agreed' that now she had

more ideas on how to interact with her infant, adding that although she already talked a lot to her son, she learned that she should talk to her children "as if they were older." She indicated that she had applied some concepts learned during the sessions to her other children, stating that, "at home I have learned how to handle both my youngest children."

Although she expressed a desire that sessions be longer, she shared that practicing during the sessions was useful. She recommended that other people who live with her son be present during training sessions. For example, she stated it would be beneficial for her older children to attend the training, allowing them to learn better ways to interact with her youngest son.

She found the written training materials to be useful, and the translations and wording in Spanish "easy to understand." The mother highlighted the importance of including Latino cultural adaptations in parenting programs. She provided suggestions for the written material, such as including Latino traditions and stories, as well as traditional Latino games that could be used to increase parent-infant interaction. Furthermore, she recommended providing additional detailed information on infant development and milestones at different stages, and learning more about "ways to express our feelings through games or songs or words" with our children.

The mother rated the HV as competent and friendly during the training, having the "gift of interacting with children," and saw this as an important requirement for any HV. She drew attention to the importance of becoming acquainted with the HV prior to beginning the training, adding, "we met in person [with the HV] before we began [the sessions] and we talked," allowing her to become comfortable with the HV. In addition, the mother emphasized the importance of having a HV who understands the parent's culture and parenting practices. She saw language ability as another important requirement for the HV, stating that, "it is important that they speak the same language as the parents because that way we feel more comfortable to

ask questions or we can understand things better...I can express myself better and understand better when people talk to me in Spanish." She commented that this relationship between the mother and the HV also opens the way for her to share and discuss other matters unrelated to the program, but that have an effect on her parenting abilities.

The mother was asked to share her views on parenting practices in the Latino community. She explained that parenting in the Latino community is learned and passed on from generation to generation, and that she had learned how to parent from her own mother. She stated, "I am very similar to [my mother]. I saw how she treated my youngest brother, she sang to him or would talk to him when she was cleaning or feeding him. I learned those things for my children." With regard to discipline, there was never the use of "time-out" or corporal punishment in her family, but rather setting consequences for misbehavior.

She compared her parenting practices to those of families who are originally from the U.S., or those who are Latino descendants, and discussed the misunderstandings she has faced and ways she has made adaptations. Her son's paternal family, Latino descendants from the U.S., often do not understand her parenting practices. She states, "they always told me that I was exaggerating and overprotecting my children." However, she explained that the Latino culture emphasizes positive interactions with children, stating that, "in my family, this is what I have been taught...children are the priority." Furthermore, the mother explains that living in community, where parents and grandparents are in close contact, allows maternal instincts to come more naturally in a parent.

She noted that in the U.S., she has observed that children are given more freedom and are allowed to become independent at an early age. She describes mothers in the U.S. culture as being "very cold," contrasting to Latinos who "give more affection and contact" to children,

giving examples of mothers who give children "cold milk or water from the faucet," or leave children at the daycare all day so they can work. She explained that in Mexico, her country of origin, she was able to spend more time with her first son during work hours, but that in the U.S. she has had to leave her 12-month old infant at a daycare, like the other working mothers. This, she speculated, is what has caused developmental delays in her infant. Although he was born premature, she explains that a lack of contact with the mother, as a result of spending all day at a daycare while she works, has delayed his learning to walk. In contrast, her older son, born in her country of origin, learned to walk much sooner because she "was there with him," interacting more with him. She states, "I would hold his hand wherever he went, I would crawl with him, or play with him or take him to work or feed him."

Discussion

Research has supported the effectiveness of SafeCare. Single-case studies have validated the PCI, health, and home safety modules both with English and Spanish speaking families. However, no evaluations have previously been conducted of the PII module in single-case studies, or its effectiveness when delivered in Spanish. Further, cultural adaptations for working with Latino families in the SafeCare program have not been explored extensively.

PII was effective in improving parent-infant interactions as evaluated in this single-case study. Moreover, it was demonstrated that PII can be delivered effectively in Spanish. Data showed a considerable improvement from baseline in physical and nonphysical interactions between the mother and her infant. Data remained stable throughout the training and when assessed at follow-up session. This supports evidence that PII is effective in providing parent skills to manage daily activities while engaging in proper parent-infant interactions. Further, skills learned are maintained over time, as observed at the one-month follow-up. The mother's

anecdotal comments on routine activities that had become less challenging as a result of the training and practice during the sessions further support this finding. The mother's anecdotal comments of applying what she had learned during the sessions at home with her other children suggests generalization of learned parenting skills.

The results of the SafeCare PII consumer satisfaction survey add to preexisting data on high satisfaction with the module and its components (Damashek, Bard, & Hecht, 2012; Silovsky et al., 2011). In addition, the materials provided in Spanish were acceptable and easy to understand, indicating the need to use language-appropriate training materials. However, the mother's suggestions for adaptations when working with the Latino community should be noted and integrated into SafeCare. This is important because program development and implementation needs to consider Latino culture, language, values, acculturation, and family traditions (Barker, Cook, & Borrego, 2010; Bernal & Domenech-Rodríguez, 2009). Programs that lack cultural sensitivity have difficulty recruiting and retaining diverse families (Kumpfer et al., 2002), and thus it is necessary to first assess the acceptability of the program. This means that parents will rate a program as "acceptable" when they consider that it is relevant and culturally appropriate (Sanders & Kirby, 2012).

For a program to cause significant behavior change, it is necessary to study the social appropriateness of the treatment, allowing families to guide program development, evaluation, training and dissemination, especially because consumers are the best evaluators of their intervention (Sanders & Kirby, 2012; Wolf, 1978). Bernal and Domenech-Rodríguez (2009) note that interventions need to be "contextually grounded, culturally informed, and responsive to the unique conditions of the population." Such programs show increased rates of treatment participation, retention, and completion by Latino families (Parra Cardona et al., 2009, 2012).

Cultural integration and degree of inclusion of Latinos in services research exerts powerful influence on treatment acceptance, delivery, utilization, and retention. There is an urgent need to redefine and create interventions that are specific for different communities, taking into account language, ethnicity, culture, and acculturation levels.

Among Latino parents, there is often a strong desire to learn about how to improve parent-child relationships (Parra Cardona et al., 2009). However, cultural differences can represent the major obstacle to their participation in parenting programs. Parra Cardona et al. (2009) found that Latino parents often find that parenting programs lack cultural adaptations, and strongly stress the need for these programs to be respectful of their culture and parenting preferences, provide services in their language, and maintain the content culturally relevant.

It is important to note the mother's comments regarding the importance of delivering SafeCare in the parent's primary language, as well as having a HV who shares the same culture as the family. This allows for families to feel more comfortable and presumably open with HV, allowing for better communication, engagement, and a better understanding of socioecological factors contributing to the risk of child maltreatment (APA, 2002; USDHHS, 2001). As expressed by the mother, it is important to establish a relationship with the HV and be able to discuss other contextual factors affecting the family. This is supported by Self-Brown et al. (2011) who highlighted the importance of matching SafeCare HV to families based on culture and language, as well as providing cultural competency trainings to HV. Focusing on the HV characteristics is also important because positive outcomes of parenting programs, including improved maternal depression symptoms, have been found to be directly related to the HV-parent relationship and the HV's language and cultural sensitivity toward the family (Chaffin & Bard, 2011).

Another aspect to consider when working with Latino families in the U.S. is varying acculturation levels. Acculturation, a process of adapting one's cultural norms and values to those of the dominant culture, can lead to changes in parenting practices (Barker et al., 2010; USDHHS, 2001). As explained by the mother, first and second generation Latinos who live in the U.S. have experienced varying degrees of changes in their parenting practices. As suggested by Self-Brown et al. (2011), SafeCare would benefit from administering an acculturation measure when working with Latino families, prior to beginning parent training, to better understand the degree of cultural adaptations needed for the program.

Latinos' strong sense of community coupled with their strong sense of respect and value toward the family must also be considered in parenting programs. The mother's suggestion of including other family members (i.e., older siblings) in training sessions and her explanation of learned parenting which is passed from one generation to another are a reflection of *familismo*. The Spanish term *familismo* is used to describe attachment and sense of identity within Latino families, and is observed through strong family bonds, nurturing relationships, communal parenting, and the emphasis of the family over the individual (Barker, Cook, & Borrego, 2010). This supports the mother's comments that children are almost always a priority in a family, as well as the idea that warm and nurturing relationship, characteristic of the Latino culture, foster close bonds between parents and children, allowing children to reach developmental milestones and grow healthy and happy. Latinos' close-knit families often times means that family members are not likely to live alone, and that children stay with the family through adulthood until they get married (USDHHS, 2001), or elderly parents live in their adult children's homes. Within Latino families, there is a strong sense of respect towards elders, who decide appropriate and inappropriate behavior in children (Bernal, & Domenech-Rodríguez, 2009; Borrego, Anhalt,

Terao, Vargas, & Urquiza, 2006; Calzada, 2010). This emphasis on family and community is built with strong relationships, and friends are held close like family.

Research provides strategies for managing cultural variables when working with Latinos (Barker et al., 2010; Calzada, 2010). Matos, Torres, Santiago, Jurado, and Rodríguez (2006) collected information from Puerto Rican parents and clinical psychologists to create a culturally-adapted version of PCIT that included Spanish materials and language adaptations (i.e., using "stove" and "doll" rather than "chimney" and "snowman"). There were some skills taught during PCIT that were not readily accepted by parents, for example time-out and ignoring minor misbehavior, due to different cultural norms on handling children's misbehavior. Other findings from this study included parents' desire of integrating other family members into the parenting sessions, and the need to allot extra time for social interactions during sessions. McCabe, Yeh, Garland, Lau, and Chavez (2005) initiated the implementation of PCIT sessions that begin with a cultural assessment and inclusion of cultural variables such as Spanish translations, rapport building, inclusion of other family members, discussions about contextual stressors, and culturally-accepted forms of discipline. These cultural adaptations were found to be successful and acceptable to Latino families. Thus, it would be beneficial to explore similar successful adaptations, given the mother's feedback from this study, for the SafeCare program.

In the present study, self-report measures were administered to compare to anecdotal and observational data. This data confirmed that IPV, adverse mental health, and instances of child maltreatment often co-occur. As reported by the mother, she had experienced a history of physical and psychological abuse, as well as sexual coercion. Studies demonstrate that side effects of IPV include depression and parenting stress (Beydoun et al., 2012; Levendosky & Graham-Bermann, 2000a). Further, it has been shown that mothers with these characteristics,

and who participate in home visitation programs, will experience a reduction in depression levels upon completion of the program (Ammerman et al., 2009; Chaffin et al., 2012). This was evident in this study, where depression and other distress symptoms were clinically elevated but improved immediately at postintervention. The PSI subscale of Parental Distress, however, remained clinically high, indicating high overall parenting stress levels. The fact that only the Parental Distress subscale was clinically elevated at pre-and post intervention leads to conclude that parenting stress is independent of the child, and could be related to the mother's personal adjustment problems (Abidin, 1995).

Research suggests that children whose mothers are experiencing depression, parenting stress, or other adverse mental health symptoms are at higher risk of child maltreatment (Martinez-Torteya et al., 2009). In addition, children under age five who live in homes where IPV is present are likely to experience maltreatment, many times leading to fatalities (McGuigan & Pratt, 2001; USDHHS, 2012). This potential for child maltreatment was evidenced in elevated BCAP, MNBS-P, and PFS scores, all which improved at postintervention and one-month follow-up. The observed improvement in the mother's scores could be a direct result of her acquisition of proper parent-infant interaction skills through her participation in SafeCare. This was also evidenced in the direct behavioral observations, which has been demonstrated to be effective in reducing risk factors for child maltreatment (Lutzker & Chaffin, 2012).

While the findings of this study are promising and noteworthy, several limitations should be stated. It is important to note that this study was conducted in a controlled clinical setting, and behavioral observations could differ had the study been conducted in a home setting. Given that only one subject participated in this study, more research is needed to validate the mother's perspectives and suggestions on cultural adaptations of PII for the Latino community. Although

improvements were observed in the parent's mental health state as well as protective factors against child abuse and neglect, it is not possible to know whether this was a direct result of the mother's participation in PII or other outside factors, such as her weekly counseling sessions or participation in support groups. Further, it is not possible to know whether the mother's experience of IPV (as reported on the CTS2) or presence of adverse mental health symptoms had a direct effect on the risk of child maltreatment (as reported on the BCAP and MNBS-P). Future studies with more participants should focus on examining the relationship between the different scaled measures and parents' participation in PII. It would also be beneficial for SafeCare to explore how to work with families exposed to IPV, due to the strong association and co-occurrence of IPV and child maltreatment.

SafeCare, like many other evidence-based practices, did not include many minorities in its development and implementation. It is important to continue to examine how to best adapt the entire SafeCare program for the Latino community, especially because this program is far reaching and can effectively reduce child maltreatment costs on society. Based on the mother's feedback and the importance of family in the Latino community, SafeCare would benefit from exploring how to include other family members into training sessions (i.e., older siblings, grandparents). As suggested by the mother, SafeCare might examine how to integrate Latino-specific traditions, such as games, songs, and stories into its training materials. The integration of cultural variables in parenting programs will determine whether the parent engages in behavior change and will determine the success of the parenting program (USDHHS, 2001). It is important to highlight, however, that due to acculturation and other factors as previously mentioned, program adaptations for Latinos living in the U.S. will differ from those for Latinos

living in Latin America. If this program is to be implemented in Latin America, it is important to first study the uniqueness and richness of the culture.

Despite its limitations, this study adds to the large body of evidence for the effectiveness of SafeCare in reducing the risk of child maltreatment by improving parent-infant interactions. This study has also added to the knowledge that all modules of SafeCare can be delivered effectively in Spanish, and that appropriate Latino cultural adaptations could enhance the delivery and outcomes of the program.

References

- Abidin, R. R. (1995). *Parenting Stress Index: manual* (3rd ed.). Odessa, FL: Psychological Assessment Resources.
- Alcoff, L.M. (2005). Latino vs. Hispanic: The politics of ethnic names. *Philosophy and Social Criticism*, 31(4), 395-407.
- American Psychological Association. (2002). Guidelines on multicultural education, training, research, practice, and organizational change for psychologists. *American Psychologist*, 58, 377-402.
- Ammerman, R. R., Putnam, F. W., Altaye, M., Chen, L., Holleb, L. J., Stevens, J.,...Van Ginkel, J. B. (2009). Changes in depressive symptoms in first time mothers in home visitation. *Child Abuse and Neglect*, 33, 127-138.
- Anda, R. F., Butchart, A., Felitti, V. J., & Brown, D. W. (2010). Building a framework for global surveillance of the public health implications of adverse childhood experiences. *American Journal of Preventive Medicine*, 39(1), 93-98.
- Antle, B. F., Barbee, A. P., Sullivan, D., Yankeelov, P., Johnson, L., & Cunningham, M. R. (2007). The relationship between domestic violence and child neglect. *Brief Treatment and Crisis Intervention*, 7(4), 364-382.
- Bair-Merritt, M. H., Blackstone, M., & Feudtner, C. (2006). Physical health outcomes of childhood exposure to intimate partner violence: A systematic review. *Pediatrics*, 117(2), 278-290.
- Baker, C. K., Perilla, J. L., & Norris, F. H. (2001). Parenting stress and parenting competence among Latino men who batter. *Journal of Interpersonal Violence*, 16(16), 1139-1157.
- Banyard, V., Williams, L., & Siegel, J. (2003). The impact of complex trauma and depression on parenting: An exploration of mediating risk and protective factors. *Child maltreatment*, 8(4), 334-349.
- Barker, C. H., Cook, K. L., & Borrego, J. Jr. (2010). Addressing cultural variables in parent training programs with Latino families. *Cognitive and Behavioral Practice*, 17, 157-166.
- Barlow, D. H., Nock, M., & Hersen, M.(2009). *Single case experimental designs. Strategies for studying behavior change*. Boston, MA: Pearson Education, Inc.
- Bauer, N. S., Herrenkohl, T. I., Lozano, P., Rivara, F. P., Hill, K. G., & Hawkings, J. D. (2006). Childhood bullying involvement and exposure to intimate partner violence. *Pediatrics*, 118(2), 235-242.
- Beck, C. T. (2001). Predictors of postpartum depression: An update. *Nursing Research*, 50, 275-285
- Berger, L. M. (2005). Income, family characteristics, and physical violence toward children. *Child Abuse and Neglect*, 29, 107-133.
- Bernal, G. & Domenech-Rodríguez, M. (2009). Advances in Latino family research: Cultural adaptations of evidence-based interventions. *Family Process*, 48(2), 169-178.
- Beydoun, H.A., Beydoun, M.A., Kaufman, J.S., Lo, B., Zonderman, A.B. (2012). Intimate partner violence against adult women and its association with major depressive disorder, depressive symptoms and postpartum depression: A systematic review and meta-analysis. *Social Science & Medicine*, 75, 959-975.
- Bigelow, K.M., & Lutzker, J.R. (1998). Using video to teach planned activities to parents reported for child abuse. *Child & Family Behavior Therapy*, 20, 1-14.

- Bigelow, K.M., & Lutzker, J.R. (2000). Training parents reported for or at risk for child abuse and neglect to identify and treat their children's illnesses. *Journal of Family Violence, 15*, 311-330.
- Bilukha, O., Hahn, R. A., Crosby, A., Fullilove, M. T., Liberman, A., Moscicki, E., ... Briss, P. A. (2005). The effectiveness of early childhood home visitation in preventing violence. *American Journal of Preventive Medicine, 28*, 11-39.
- Black, M. C., Basile, K. C., Breiding, M. J., Smith, S. G., Walters, M. L., Merrick, M. T., ... Stevens, M. R. (2011). *The National Intimate Partner and Sexual Violence Survey (NISVS): 2010 summary report*. Atlanta, GA: National Center for Injury Prevention and Control, Centers for Disease Control and Prevention.
- Borrogo, J. Jr., Anhalt, K., Terao, S., Vargas, E. C., & Urquiza, A. J. (2006). Parent-Child Interaction Therapy with a Spanish-speaking family. *Cognitive and Behavioral Practice, 13*, 121-133.
- Calzada, E. J. (2010). Brining culture into parent training with Latinos. *Cognitive and Behavioral Practice, 17*, 167-175.
- Castro, F. G., Barrera, M., & Martinez, C. R. (2002). The cultural adaptation of prevention interventions: Resolving tensions between fidelity and fit. *Prevention Science, 5*(1), 41-45.
- Catalano, S. M. (2012). *Intimate partner violence, 1993-2010* (Publication No. NCJ 239203). Washington, DC: United States Department of Justice.
- Centers for Disease Control and Prevention. (2012). Intimate partner violence. Retrieved from <http://www.cdc.gov/violenceprevention/intimatepartnerviolence/index.html>
- Centers for Disease Control and Prevention. (2013). Child maltreatment. Retrieved from <http://www.cdc.gov/ViolencePrevention/childmaltreatment/index.html>
- Chaffin, M., & Bard, D. (2011). Changes in parental depression symptoms during family preservation services. *Child Abuse & Neglect, 25*, 448-458.
- 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.
- Chaffin, M., & Friedrich, B. (2004). Evidence-based treatments in child abuse and neglect. *Children and Youth Services Review, 26*, 1097-1113.
- Chaffin, M., Hecht, D., Bard, D., Silovsky, J. F., & Beasley, W. H. (2012). A statewide trial of the SafeCare[®] home-based services model with parents in child protective services. *Pediatrics, 129*(3), 509-515.
- Chaffin, M., Silovsky, J. F., Funderburk, B., Valle, L. A., Brestan, E. V., Balachova, T., ... Bonner B. L. (2004). Parent-Child Interaction Therapy with physically abusive parents: Efficacy for reducing future abuse reports. *Journal of Consulting and Clinical Psychology, 72*(3), 500-510.
- Chuang, C. H., Cattoi, A. L., McCall-Hosenfeld, J.S., Camacho, F., Dyer, A.M., & Weisman, C.S. (2012). Longitudinal association of intimate partner violence and depressive symptoms. *Mental Health in Family Medicine, 9*, 107-114.
- 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.

- Cordon, I. M., Lutzker, J. R., Bigelow, K. M., & Doctor, R. M. (1998). Evaluating Spanish protocols for teaching bonding, home safety, and health care skills. *Journal of Behavior Therapy and Experimental Psychiatry, 29*, 41-54.
- Counts, J. M., Buffington, E.S., Chang-Rios, K., Rasmussen, H.N., & Preacher, K.J. (2010). The development and validation of the protective factors survey: A self-report measure of protective factors against child maltreatment. *Child Abuse & Neglect, 34*, 762-772.
- Damashek, A., Bard, D., & Hecht, D. (2012). Provider cultural competency, client satisfaction, and engagement in home-based programs to treat child abuse and neglect. *Child Maltreatment, 17*(1), 56-66.
- DeJonghe, E. S., Von Eye, A., Bogat, A., & Levendosky, A. A. (2011). Does witnessing intimate partner violence contribute to toddler's internalizing and externalizing behaviors? *Applied Developmental Science, 15*(3), 129-139.
- DePanfilis, D., & Dubowitz, H. (2005). Family connections: A program for preventing child neglect. *Child Maltreatment, 10*, 108-123.
- Derogatis, L. R. (1993). *Brief Symptom Inventory*. San Antonio, TX: Pearson Education Inc.
- Dube, S. R., Anda, R. F., Felitti, V. J., Edwards, V. J., & Williamson, D. F. (2002). Exposure to abuse, neglect, and household dysfunction among adults who witnessed intimate partner violence as children: Implications for health and social services. *Violence and Victims, 17*(1), 3-17.
- Dube, S. R., Felitti, V. J., Dong, M., Champan, D. P., Giles, W. H., & Anda, R. F. (2003). Childhood abuse, neglect, and household dysfunction and the risk of illicit drug use: The Adverse Childhood Experiences Study. *Pediatrics, 111*, 564-572.
- 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*, 623-643.
- Edleson, J. L., Mbilinyi, L. F., Beeman, S. K., & Hagemesiter, 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.
- Edwards, V. J., Holden, G. W., Felitti, V. J., Anda, R. F. (2003). Relationship between multiple forms of childhood maltreatment and adult mental health in community respondents: Results from the adverse childhood experience study. *American Journal of Psychiatry, 160*, 1453-1460.
- Edwards, A., & Lutzker, J. R. (2008). Iterations of the SafeCare[®] model: An evidence-based child maltreatment prevention program. *Behavior Modification, 32*(5), 736-756.
- English, D. J., Graham, J. C., Newton, R. R., Lewis, T. L., Thompson, R., Kotch, J. B., & Weisbart, C. (2009). At-risk and maltreated children exposed to intimate partner aggression/violence: What the conflict looks like and its relationship to child outcomes. *Child Maltreatment, 14*(2), 157-171.
- Eriksen, S. & Jensen, V. (2009). A push or a punch: Distinguishing the severity of sibling violence. *Journal of Interpersonal Violence, 24*(1), 183-208.
- Ernst, A. A., Weiss, S. J., Hall, J., Clark, R., Coffman, B., Goldstein, L., ... Valdez, M. (2008). Adult intimate partner violence perpetrators are significantly more likely to have witnessed intimate partner violence as a child than nonperpetrators. *American Journal of Emergency Medicine, 27*, 641-650.
- Evans, S.E., Davies, C., & DiLillo, D. (2008). Exposure to domestic violence: A meta-analysis of child and adolescent outcomes. *Aggression and Violent Behavior, 13*, 131-140.

- Fang, X., Brown, D. S., Florence, C. S., Mercy, J. A. (2012). The economic burden of child maltreatment in the United States and implications for prevention. *Child Abuse and Neglect*, 36(2), 156-165.
- Federal Interagency Forum on Child and Family Statistics. (2012). *America's children in brief: Key national indicators of well-being, 2012*. Washington, DC: Government Printing Office.
- Field, T. M. (2002). Early interactions between infants and their postpartum depressed mothers. *Infant Behavior and Development*, 25, 25-29.
- Field, T. M. (2008). Problems in infancy. In M. Herson & A.M. Gross (Ed.), *Handbook of clinical psychology: Children and adolescents* (Vol. II, pp.966-1011). Hoboken, NJ: Wiley.
- FRIENDS National Resource Center for Community-Based Child Abuse Prevention. (2011). The protective factors survey user's manual. Retrieved from <http://friendsnrc.org/protective-factors-survey>
- Fucso, R. A., & Fantuzzo, J. W. (2009). Domestic violence crimes and children: A population-based investigation of direct sensory and the nature of involvement. *Children and Youth Services Review*, 31, 249-256.
- Gershater-Molko, R. M., Lutzker, J. R., & Wesch, D. (2002). Using recidivism data to evaluate Project SafeCare[®]: Teaching bonding, safety and health care skills to parents. *Child Maltreatment*, 7(2), 277-285.
- Golding, J. M. (1999). Intimate partner violence as a risk factor in mental disorders: A meta-analysis. *Journal of Family Violence*, 14, 99-132.
- Guastafarro, K. M., Lutzker, J. R., Graham, M. L., Shanley, J. R., Whitaker, D. J. (2012). SafeCare[®]: Historical perspective and dynamic development of an evidence-based scaled-up model for the prevention of child maltreatment. *Psychosocial Intervention*, 21(2), 171-180.
- Hay, D. F., Pawlby, S., Angold, A., Harold, G. T., & Sharp, D. (2003). Pathways to violence in the children of mothers who were depressed postpartum. *Developmental Psychology*, 39, 1083-1094.
- Hecht, D. B., Silovsky, J. F., Chaffin, M., & Lutzker, J. R. (2008). SafeCare[®]: An evidence-based approach to prevent child neglect. *The APSAC Advisor*, 20(1), 14-17.
- Holt, M. K., Straus, M. A., & Kaufman Kantor, G. (2009). *A short form of the Parent-Report Multidimensional Neglectful Behavior Scale*. Unpublished manuscript. Family Research Laboratory, University of New Hampshire, Durham, NH.
- Horner, R. H., Carr, E. G., Halle, J., McGee, G., Odom, S., & Wolery, M. (2005). The use of single-subject research to identify evidence-based practice in special education. *Council for Exceptional Children*, 71(2), 165-179.
- Howard, K. S., & Brooks-Gunn, J. (2009). The role of home-visiting programs in preventing child abuse and neglect. *Future of Children*, 19(2), 119-146.
- Howell, K. H. (2011). Resilience and psychopathology in children exposed to family violence. *Aggression and Violent Behavior*, 16, 562-569.
- Humes, K. R., Jones, N. A., & Ramirez, R. R. (2011). *An overview: Race and Hispanic origin in the 2010 Census* (C2010BR-02). U.S. Department of Commerce, Economics and Statistics Administration, U.S. Census Bureau.

- Jabaley, J.J., Lutzker, J.R., Whitaker, D.J., & Self-Brown, S. (2011). Using iPhones® to enhance and reduce face-to-face home safety sessions within SafeCare: An evidence-based child maltreatment prevention program. *Journal of Family Violence, 26*(5), 377-385.
- Johnson, R. M., Kothc, 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.
- Jouriles, E. N., Mueller, V., Rosenfield, D., McDonald, R., & Dodson, C. (2012). Teens' experiences of harsh parenting and exposure to severe partner violence: Adding insult to injury in predicting teen dating violence. *Psychology of Violence, 2*(2), 125-138.
- Kaufman Kantor, G. K., Holt, M. K., & Straus, M. A. (2004). *The Parent-Report Multidimensional Neglectful Behavior Scale*. Durham, NH: Family Research Laboratory.
- Kazdin, A. E. (2001). *Behavioral modification in applied settings* (6th ed.). Belmont, CA: Wadsworth/Thompson Learning.
- Kelly, U.A. (2010). Symptoms of PTSD and major depression in Latinas who have experienced intimate partner violence. *Issues in Mental Health Nursing, 31*, 119-127.
- Kulkarni, M. R., Graham-Bermann, S., Rauch, S. A., & Seng, J. (2011). Witnessing versus experiencing direct violence in childhood as correlates of adulthood PTSD. *Journal of Interpersonal Violence, 26*(6), 1264-1281.
- Kumpfer, K. L., Alvarado, R., Smith, P., & Bellamy, N. (2002). Cultural sensitivity and adaptation in family-based prevention interventions. *Prevention Science, 3*(3), 241-246.
- Lamers-Winkelmann, F., Willemen, A., Visser, M. (2012). Adverse Childhood Experiences of referred children exposed to intimate partner violence: Consequences for their wellbeing. *Child Abuse & Neglect, 36*, 166-179.
- Larkin, H., Shields, J. J., Anda, R. (2012). The health and social consequences of Adverse Childhood Experiences (ACE) across the lifespan: An introduction to prevention and intervention in the community. *Journal of Prevention & Intervention in the Community, 40*, 263-270.
- Lee, S., Aos, S., Drake, E., Pennucci, A., Miller, M., & Anderson, L. (2012). *Return on investment: Evidence-based options to improve statewide outcomes, April 2012* (Document No. 12-04-1201). Olympia: Washington State Institute of Policy.
- Letourneau, N. L., Fedick, C. B., & Willms, J. D. (2007). Mothering and domestic violence: A longitudinal analysis. *Journal of Family Violence, 22*, 649-659.
- Levendosky, A. A. & Graham-Bermann, S. A. (2000). Behavioral observations of parenting in battered women. *Journal of Family Psychology, 14*(1), 80-94.
- Levendosky, A. A. & Graham-Bermann, S. A. (2000). Trauma and parenting in battered women: An addition to an ecological model of parenting. *Journal of Aggression, Maltreatment and Trauma, 3*(1), 25-35.
- Levendosky, A. A., & Graham-Bermann, S. A. (2001). Parenting in battered women: The effects of domestic violence on women and their children. *Journal of Family Violence, 16*(2), 171-192.
- Levendosky, A., Huth-Bocks, A. C., Shapiro, D. L., & Semel, M. A. (2003). The impact of domestic violence on the maternal-child relationship and preschool-age children's functioning. *Journal of Family Psychology, 17*(3), 275-287.
- 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.

- Levendosky, A. A., Lynch, S. M., & Graham-Bermann, S. S. (2000). Mother's perceptions of the impact of woman abuse on their parenting. *Violence Against Women, 6*(3), 247-271.
- Lovejoy, M. C., Graczyk, P. A., O'Hare, E., & Neuman, G. (2000). Maternal depression and parenting behavior: A meta-analytic review. *Clinical Psychology Review, 20*(5), 561-592.
- Lundahl, B. W., Nimer, J., & Parsons, B. (2006). Preventing child abuse: a meta-analysis of parent training programs. *Research on Social Work Practice, 16*(3), 251-262.
- Lutzker, J. R., & Bigelow, K. M. (2002). *Reducing child maltreatment: A guidebook for parent services*. New York: The Guilford Press.
- Lutzker, J. R., & Chaffin, M. (2012). SafeCare[®]: An evidence-based constantly dynamic model to prevent child maltreatment. In H. Dubowitz (Ed.) *World Perspectives on Child Abuse*. (10th Ed.) (pp.93-96). Canberra, Australia: The International Society for the Prevention of Child Abuse and Neglect.
- Lutzker, J. R., Frame, R. E., & Rice, J. M. (1982). Project 12-Ways: An ecobehavioral approach to the treatment and prevention of child abuse and neglect. *Education and Treatment of Children, 5*(2), 141-155.
- Lutzker, J. R., & Rice, J. M. (1987). Using recidivism data to evaluate Project 12-Ways: An ecobehavioral approach to the treatment and prevention of child abuse and neglect. *Journal of Family Violence, 2*(4), 283-290.
- Mandel, U., Bigelow, K.M., & Lutzker, J. R. (1998). Using video to reduce home safety hazards with parents reported for child abuse or neglect. *Journal of Family Violence, 13*(2), 147-162.
- Margolin, G. (2005). Children's exposure to violence: Exploring developmental pathways to diverse outcomes. *Journal of Interpersonal Violence, 20*(1), 72081.
- Martinez-Torteya, C., Bogat, G. A., Von Eye, A., & Levendosky, A. A. (2009). Resilience among children exposed to domestic violence: The role of risk and protective factors. *Child Development, 80*(2), 562-577.
- Mason, Z. S., Briggs, R. D., & Silver, E. J. (2011). Maternal attachment feelings mediate between maternal reports of depression, infant social-emotional development, and parenting stress. *Journal of Reproductive and Infant Psychology, 29*(4), 382-394.
- Matos, M., Torres, R., Santiago, R., Jurado, M., & Rodríguez, I. (2006). Adaptations of Parent-Child Interaction Therapy for Puerto Rican families: A preliminary study. *Family Process, 45*(2), 205-222.
- McCabe, K., & Yeh, M. (2009). Parent-Child Interaction Therapy for Mexican Americans: A randomized clinical trial. *Journal of Clinical Child and Adolescent Psychology, 38*, 753-759.
- McCabe, K. M., Yeh, M., Garland, A. F., Lau, A. S., & Chavez, G. (2005). The GANA program: A tailoring approach to adapting Parent Child Interaction Therapy for Mexican Americans. *Education and Treatment of Children, 28*(2), 111-129.
- McCabe, K., Yeh, M., Lau, A., & Argote, C. B. (2012). Parent-Child Interaction Therapy for Mexican Americans: Results of a pilot randomized clinical trial at follow-up. *Behavior Therapy, 43*, 606-618.
- McGuigan, W. M., & Pratt, C. C. (2001). The predictive influence of domestic violence on three types of child maltreatment. *Child Abuse & Neglect, 25*, 869-883.
- Milner, J. S. (1986). *The Child Abuse Potential Inventory manual* (2nd ed.). Lutz, FL: PAR, Inc.

- Moylan, C. A., Herrenkohl, T. I., Sousa, C., Tajima, E. A., Herrenkohl, R. C., & Russo, M. J. (2010). The effects of child abuse and exposure to domestic violence on adolescent internalizing and externalizing behavior problems. *Journal of Family Violence, 25*(1), 53-63.
- National Center for Injury Prevention and Control. (2003). *Costs of intimate partner violence against women in the United States*. Atlanta, GA: Centers for Disease Control and Prevention.
- Norman, R. E., Byambaa, M., De, R., Butchart, A., Scott, J., Vos, T. (2012). The long-term consequences of child physical abuse, emotional abuse, and neglect: A systematic review and meta-analysis. *PLOS Medicine, 9*(11), 1-31.
- Office of Management and Budget. (1977). Directive 15: Race and ethnic standards for federal statistics and administrative reporting. Retrieved from <http://wonder.cdc.gov/wonder/help/populations/bridged-race/Directive15.html>
- Ondersma, D. J., Chaffin, M., Simpson, S., & LeBreton, J. (2005). The Brief Child Abuse Potential Inventory: Development and validation. *Journal of Clinical Child and Adolescent Psychology, 34*, 301-311.
- Oquendo, A. R. (1998). Re-imagining the Latino/a Race. In R. Delgado, & J. Stefancic (Eds.), *The Latino Condition: A Critical Reader* (pp. 60-75). New York: New York University Press.
- Parra Cardona, J. R., Domenech-Rodríguez, M., Forgatch, M., Sullivan, C., Bybee, D., Holtrop, K., ... Bernal, G. (2012). Culturally adapting an evidence-based parenting intervention for Latino immigrants: The need to integrate fidelity and cultural relevance. *Family Process, 51*, 56-72.
- Parra Cardona, J. R., Holtrop, K., Córdova, D., Escobar-Chew, A. R., Horsford, S., Tams, L., ... & Fitzgerald, H. E. (2009). "Queremos aprender": Latino immigrants' call to integrate cultural adaptations with best practice knowledge in a parenting intervention. *Family Process, 48*(2), 211-231.
- Peacock, S., Konrad, S., Watson, E., Nickel, D., & Muhajarine, N. (2013). Effectiveness of home visiting programs on child outcomes: a systematic review. *BMC Public Health, 13*(1), 1-14.
- Prinz, R. J., Sanders, M. R., Shapiro, C. J., Whitaker, D. J., & Lutzker, J. R. (2009). Population-based prevention of child maltreatment: The U.S. Triple P system population trial. *Prevention Science, 10*(1), 1-12.
- Putnam-Hornstein, E. (2011) Report of maltreatment as a risk factor for injury death: a prospective birth cohort study. *Child Maltreatment, 16*(3), 163-174.
- Risley, T. R., & Wolf, M. M. (1972). Strategies for analyzing behavioral change over time. In J. Nesselroade & H. Reese (Eds.), *Life-span Developmental Psychology. Methodological Issues* (pp. 175-183). New York: Academic Press.
- Saltzman, L. E., Fanslow, J. L., McMahon, P. M., & Shelley, G. A. (2002). *Intimate partner violence surveillance: Uniform definitions and recommended data elements, version 1.0*. Atlanta (GA): Centers for Disease Control and Prevention, National Center for Injury Prevention and Control.
- Sanders, M. R., & McFarland, M. (2000). Treatment of depressed mothers with disruptive children: A controlled evaluation of cognitive behavioral family intervention. *Behavior Therapy, 31*, 89-112.

- Sanders, M. R. (2008). Triple P-Positive Parenting Program as a public health approach to strengthening parenting. *Journal of Family Psychology, 22*(3), 506-517.
- Sanders, M. R., & Kirby, J. N. (2012). Consumer engagement and the development, evaluation, and dissemination of evidence-based parenting programs. *Behavior Therapy, 43*, 236-250.
- Sanders, M. R., Turner, K., & Markie-Dadds, C. (2002). The development and dissemination of the Triple P-Positive Parenting Program: A multi-level, evidence-based system of parenting and family support. *Prevention Science, 31*, 173-198.
- Self-Brown, S., Frederick, K., Binder, S., Whitaker, D., Lutzker, J., Edwards, A., & Blankenship, J. (2011). Examining the need for cultural adaptations to an evidence-based parent training program targeting the prevention of child maltreatment. *Children and Youth Services Review, 33*, 1166-1172.
- 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.
- Solis, M. L., & Abidin, R. R. (1991). The Spanish version Parenting Stress Index: A psychometric study. *Journal of Clinical Child Psychology, 20*, 372-378.
- Sternberg, K. J., Baradaran, L. P., Abbott, C. B., Lamb, M. E., & Guterman, E. (2006). Type of violence, age, and gender differences in the effects of family violence on children's behavior problems: A mega-analysis. *Developmental Review, 26*, 89-112.
- Straus, M. A. (2004). *Guide to the Multidimensional Neglectful Behavior Scales*. Durham, NH: Family Research laboratory, University of New Hampshire.
- Straus, M. A., & Douglas, E. M. (2004). A short form of the revised conflict tactics scales and typologies for severity and mutuality. *Violence and Victims, 19*(5), 507-520.
- Straus, M. A., Hamby, S. L., Boney-McCoy, S., & Sugarman, D. B. (1996). The Revised Conflict Tactics Scale (CTS2): Development and preliminary psychometric data. *Journal of Family Issues, 17*, 283-316.
- Straus, M. A., Hamby, S.L., Finkelhor, D., Moore, D.W., & Runyan, D.K. (1998). *The Conflict Tactics Scales Handbook, (CTS2: Revised Conflict Tactics Scales & CTSPC: Parent-Child version)*. Los Angeles, CA: Western Psychological Services.
- Timmer, S. G., Ho, L. K. L., Urquiza, A. J., Zebell, N., Fernandez y Garcia, E. & Boys, D. (2011). The effectiveness of parent-child interaction therapy with depressive mothers: The changing relationship as the agent of individual change. *Child Psychiatry and Human Development, 42*, 406-423.
- Tjaden, P., Thoennes, N. (2000). *Extent, nature, and consequences of intimate partner violence: findings from the National Violence Against Women Survey* (Publication No. NCJ 181867). Washington (DC): United States Department of Justice.
- U.S. Department of Health and Human Services. (1999). *Mental health: A report of the Surgeon General*. Rockville, MD: U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, Center for Mental Health Services, National, National Institutes of Health, National Institute of Mental Health.
- U.S. Department of Health and Human Services. (2001). *Mental health: Culture, race, and ethnicity-A supplement to mental health: A report of the Surgeon General*. Rockville, MD: U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, Center for Medical Services.

- U.S. Department of Health and Human Services. (2012). *Child Maltreatment 2011*. Washington, DC: Department of Health and Human Services, Administration for Children and Families, Administration on Children, Youth and Families, Children's Bureau.
- Whitfield, C. L., Anda, R. F., Dube, S. R., Felitti, V. J. (2003). Violent childhood experiences and the risk of intimate partner violence in adults: Assessment in a large health maintenance organization. *Journal of Interpersonal Violence, 18*, 166-185.
- Wolf, M. M. (1978). Social validity: The case for subjective measurement or how applied behavior analysis is finding its heart. *Journal of Applied Behavior Analysis, 11*, 203-214.

Tables and Figures

Figure 1. Percent Occurrence of Non-Physical and Physical Skills

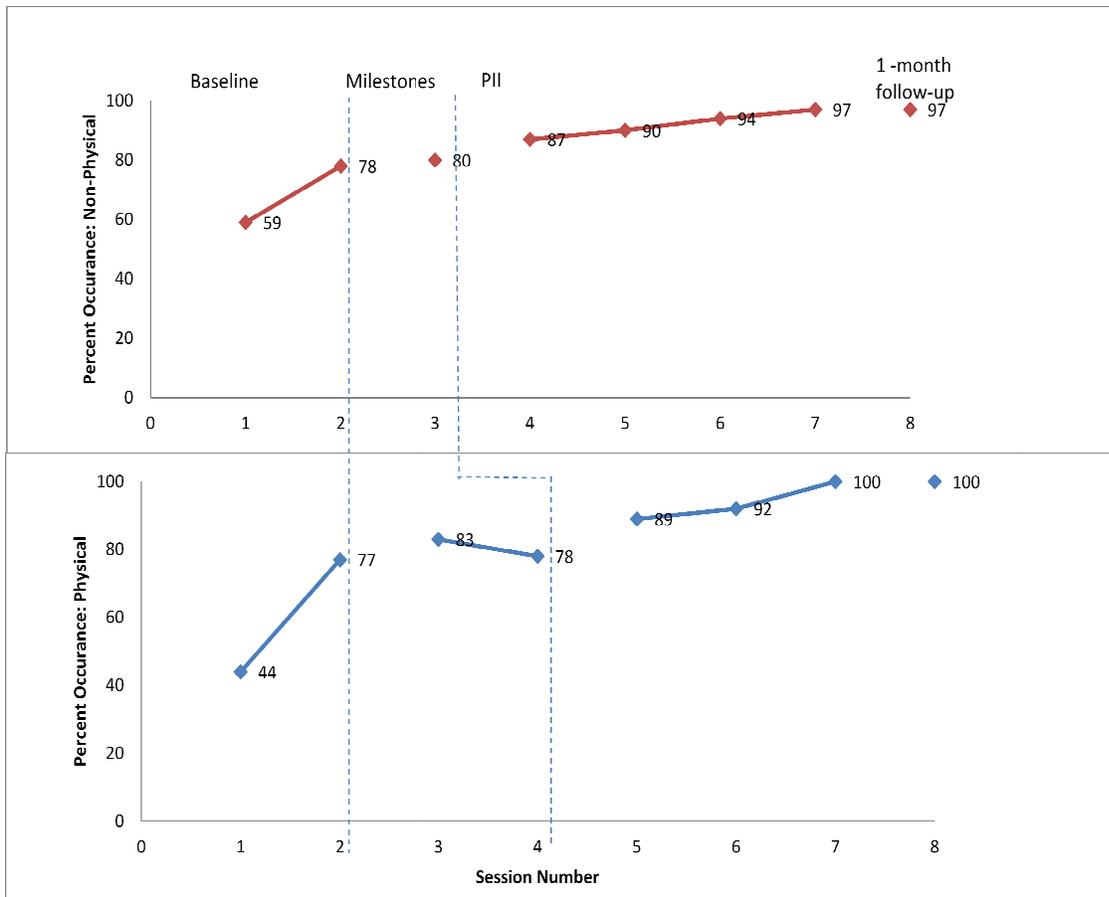


Table 1. SafeCare PII Consumer Satisfaction Survey Results

	Strongly Agree	Agree	Neutral	Disagree	Strong Disagree
1. Interacting with my infant has become easier.	①	2	3	4	5
2. I have more ideas about activities I would like to do with my infant.	1	②	3	4	5
3. Routine activities, like feeding my child and bathing him/her, have become easier.	①	2	3	4	5
4. I believe that this training would be useful to other parents.	①	2	3	4	5
5. I do not feel the PII training gave me new or useful information or skills.	1	2	3	4	⑤
6. Practicing during the sessions was useful.	1	②	3	4	5
7. The written materials were useful.	①	2	3	4	5
8. The Home Visitor was on time to appointments.	①	2	3	4	5
9. The Home Visitor was warm and friendly.	①	2	3	4	5
10. The Home Visitor was negative and critical.	1	2	3	4	⑤
11. The Home Visitor was good at explaining the material.	①	2	3	4	5

Comments: Thank you for giving me the opportunity to learn more about my child's development. Thank you for sharing your knowledge

Table 2. Reliability Scores

Baseline	Training 1	Training 2	Mean	SD
100%	95%	98%	97.7%	2.52

Table 3. Intimate Partner Violence Self-Report Measures

CTS2 (%)	Self		Partner	
Negotiation	1.3 ^a	33 ^b	1.3 ^a	33 ^b
Psychological aggression	0 ^a	100 ^b	0 ^a	100 ^b
Physical assault	0 ^a	33 ^b	0 ^a	67 ^b
Injury	0 ^a	0 ^b	0 ^a	100 ^b
Sexual coercion	0 ^a	0 ^b	0 ^a	50 ^b

Note. Scores at all different data collection time points were the same

^a Past year frequency

^b Lifetime frequency, not in the past year

Table 4. Child Maltreatment Self-Report Measures

Measures	Pre	Post	One-month follow-up
BCAP	10*	7	8
MNBS-P (count)			
Physical needs	1	0	0
Emotional needs	0	0	0
Supervision needs	0	0	0
Cognitive needs	0	0	0
Abandonment	1	0	0
Failure to protect	0	0	0
Alcohol-related	0	0	0

*Clinically significant

Table 5. Mental Health and Parenting Stress Self-Report Measures

Measures	Pre	Post	One-month follow-up
BSI (t-score)			
Somatization	53	41	49
Obsessive-compulsive	53	38	50
Interpersonal sensitivity	63*	60	59
Depression	64*	50	50
Anxiety	62	51	51
Hostility	59	51	49
Phobic anxiety	45	45	56
Paranoid ideation	73*	55	59
Psychoticism	74*	63*	46
Global Severity Index	63*	49	30
Positive Symptom Distress Index	63*	50	52
PSI (score)			
Parental distress	33*	33*	29
Parent-child dysfunctional interaction	21	25	27
Difficult child	25	25	28
Total stress	99*	104*	103*

*Clinically significant

Table 6. Protective Factors Self-Report Measures

Measures	Pre	Post	One-month follow-up
PFS (score)			
Family functioning/resiliency	4.2	5	5.2
Social emotional support	3.3	4.3	5
Concrete support	4.7	6	6
Child development/parenting knowledge	4.8	5.8	6.2
Nurturing and attachment	6	6.25	6.5

Appendices

Appendix A. Infant Parent Activities Training (iPAT) - HV Assessment Form

Parent _____ Child _____ HV _____
 Activity _____
 Date _____ Assessment Period _____ Baseline _____ Training _____ End of Module _____

Physical	Touching*									
	Holding									
	Gentle Movement									

Non-Physical	Smiling*									
	Looking*									
	Talking*									
	Imitating									

Notes:

Appendix B. Demographic Survey

1. I am a: Female Male
2. What year were you born? _____
3. Are you Latino? Yes No
4. What is your race?
White Black Asian Pacific Islander
Native American Other Prefer Not to Answer
If Other, please describe: _____
5. What is your country of origin?

6. How many years have you lived in the United States? _____
7. What is your marital status?
Single Married Separated Divorced Widowed
Living with a partner Prefer Not to Answer
8. What is the highest level of education you have completed?
Less than 8th Some High School High School Graduate/GED
Some College Community or junior college graduate 4-year college or university graduate
Graduate school or professional degree (post BA/BS)
9. Are you currently working? Yes No
10. What is your annual household income?
\$0 - \$4,999 \$5,000 - \$9,999 \$10,000 - \$14,999 \$15,000 - \$24,999 \$25,000 - \$34,999
\$35,000 - \$49,000 \$50,000 - \$74,999 \$75,000 - \$99,999 \$100,000 and up
Prefer Not To Answer
11. If you are unable to say what your annual income is, what is your monthly income?

12. What languages do you speak? _____
13. What is the primary language spoken at your home?

14. Is the answer to #13 the language you feel most comfortable in? Yes No
15. How many children do you have? _____
16. How many children live in your household for which you are the primary caregiver?

17. Who else is involved in raising your children/makes decisions on how your children are raised?
Children's grand-parents Partner Children's siblings Another relative
Friend Neighbor No one else Other _____
18. What are the total number of adults (18 years or older) living in your household?

19. How long have you attended the organization's programs?

20. Have you attended the parenting classes offered by the organization?

Thank you for your cooperation and participation.

Appendix C. SafeCare PII Consumer Satisfaction Survey

Thank you for being part of the Parent-Infant Interaction (PII) training offered by SafeCare®. We would like to learn some of your thoughts and feelings about the training. This will help us make the program better. Please read the following comments and circle the answer that best describes how you feel about each statement. Be as honest as you can. What you tell us will not affect your interactions with SafeCare® or other agencies. You can refuse to answer any question you don't want to. Please write any comments you have on the bottom of this form or on the back. Thank you for helping us by filling out this survey.

	Strongly Agree	Agree	Neutral	Disagree	Strong Disagree
1. Interacting with my infant has become easier.	1	2	3	4	5
2. I have more ideas about activities I would like to do with my infant.	1	2	3	4	5
3. Routine activities, like feeding my child and bathing him/her, have become easier.	1	2	3	4	5
4. I believe that this training would be useful to other parents.	1	2	3	4	5
5. I do not feel the PII training gave me new or useful information or skills.	1	2	3	4	5
6. Practicing during the sessions was useful.	1	2	3	4	5
7. The written materials were useful.	1	2	3	4	5
8. The Home Visitor was on time to appointments.	1	2	3	4	5
9. The Home Visitor was warm and friendly.	1	2	3	4	5
10. The Home Visitor was negative and critical.	1	2	3	4	5
11. The Home Visitor was good at explaining the material.	1	2	3	4	5

COMMENTS _____

Thank you for your help!

Appendix D. Parent Semi-Structured Interview Script

Thank you for talking to me today. I would like to speak to you about the SafeCare Parent-Infant Interaction program you recently completed. I would like to ask you some questions regarding the training and materials, and get your feedback on how we might improve this program for Latino families.

The interview should not take more than an hour. I am going to record the session with your permission so that I can listen to it later and take notes. When I do this, I will not use any names or other information you say that might identify you or someone else. All documents and recordings will be kept in a password-protected computer, and only the research staff will have access to it. We will destroy all data once the study is published.

Do you have any questions before we begin?

Parenting programs

To begin the interview, I would like to ask you some general questions about parenting programs.

1. Have you participated in any parenting programs in the past? If yes, can you describe them?

Prompts:

- *Describe content, activities, facilitators, participants*
- *Did anyone else go with you?*

2. Do you think it is important for parenting programs to make adaptations for Latino parents and include aspects of Latino culture? (Is it important for these programs to make adaptations for Latinos?) Why? What aspects of Latino culture do you think should be included in parenting programs?

Prompts:

- *Language, traditions taught by parents and grandparents, songs, games*

3. What characteristics of a parenting program would motivate/discourage you to participate?

Prompts:

- *language barriers, characteristics of the person delivering the program (i.e., race, culture), content, whether you think you need the program*

SafeCare PII

SafeCare was originally developed in the English language for English-speaking parents. I want to ask you what you think of the current training and materials, and what your suggestions are for improving them.

4. Did the SafeCare program teach you anything that was different or contradicted the way your parents raised you or parenting practices you use with your children?

Prompts:

- *is there something you were taught differently?*
- *i.e., learning that it is okay to let a baby cry, using rules and consequences, the importance of physical interactions*
- *What would you change? How can we improve it?*

5. What things from Latino culture do you think should be included in the SafeCare sessions (during the training)?

Prompts:

- *Norms for raising children, cultural values*
- *is it important to add aspects of Latino culture to the training?*

6. Would you make any changes to the SafeCare written material (i.e, activities, songs, word-choice) to make it more relevant to Latinos?

Prompts:

- *Give examples of changes to materials*
- *Traditions in the Latino culture about raising children, etc.*
- *What is important to add, or what is missing, from the Latino culture?*

7. What in general would you change in the SafeCare sessions?

8. What important characteristics are important that you would like to see in the person that delivers the parenting program?

Prompts:

- *For example, language ability, ethnicity, skills, personality, warm, friendly, respect, work experience with Latinos*

9. Do you think it is important for the person delivering the parenting program to understand your culture and common parenting practices before working with SafeCare with your family? Is it important for them to share your culture and know your language? Why?

10. Is it important for you and your family to get acquainted with the person delivering the program before beginning the sessions? Is it important to be able to discuss matters unrelated to parenting during the sessions?

Prompts:

- *For example, get to know the provider first, discuss other stressors/daily activities that might alter your parenting abilities, check-in phone calls during the week*

11. What language do you speak at home? In what language would you like to see SafeCare taught? Does the delivery language make any difference to you?

12. Do you think it is important to have your husband/partner, or another member of your family who is involved in the caretaking of your child present during the SafeCare sessions? Why?

13. Is there a difference in the way parents raise their children in the United States and the country where you are from (i.e. Latinos)? What differences have you noted?

Prompts:

- *Do you think that people originally from the United States understand why you raise your children the way you do?*
- *Have you had to change your parenting practices now that you live in the United States?*

14. What are some things that interfere with you doing your best as a parent?

Prompts:

- *i.e. immigration, economy, language barriers, discrimination, learned parenting behaviors, cultural values that contrast with what's taught in SafeCare, gender roles*
- *Do you think these should also be discussed during SafeCare sessions?*

15. Would you like to understand better why it is important to change some of the parenting behaviors learned and accepted in your culture?

Prompts:

- *Should SafeCare explain why some culturally-learned parenting practices might not be appropriate?*

16. Do you have any other suggestions for how to adapt or improve the SafeCare program for Latino families?

Thank you for taking the time to participate in this interview with me. Your feedback and suggestions are very important so that we can better serve the Latino community.

Appendix E. Parent Semi-Structured Interview Transcript

I: Interviewer

P: Parent

I: Okay, thank you for being here with us today. I have a list of questions I am going to ask you about your experience with the program. You can be completely honest with all your answers. This will not affect HV, or me, or the program. We just want information about your experience with the program, or changes that you recommend, and how you liked the program. Things like that, very simple. But I need your permission to record this, that way I don't have to take notes and the interview won't take long. Okay, the first questions are about general things. Have you ever participated in a parenting program?

P: No

I: This is the first? Okay. Do you think it is important that parenting programs for Latino parents include and teach things about Latino culture?

P: Yes

I: Why?

P: Because that way we can learn more and know more options about children's development. I have seen that children here are more advanced [developmentally] than other children.

I: Okay. And what things about the Latino culture would you like to see in the program, like language, traditions, all that?

P: Some traditions and customs. Well, first of all, language. And, traditions and stories about our background and origins.

I: Okay, good. And what things about parenting programs would encourage you to participate, or make the program more interesting?

P: Well, for me it was interesting what I learned with him [son]. Because I had a lot of problems with changing his clothes, and all I am learning with HV has helped me a lot, at least this week it was easier for me with my son. Interacting with him, the way she taught me, has helped me.

I: Very good. So, you liked the program. And what about the people that deliver the program, like HV, she is Latina, do you think that for the program to work with Latino families, the person that delivers it should be Latina?

P: I think that it is important that they speak the same language as the parents because that way we feel more comfortable to ask questions or we can understand things better. I don't speak English very well, I can express myself better and understand better when people talk to me in Spanish.

I: Okay, good. And I'm sure HV told you that this program was created for in English for people that speak English. I would like to know what you think about the training, materials, and if you have suggestions about how to make the materials better. All the papers, the cards that HV gave you, what do you think about those?

P: It's good. I read them, not everything, but I did read them. I think it is very easy to understand, the wording is easy to understand. Maybe if they could add more about games to interact with children.

I: Thank you. Let's see. Okay, the program was created for the American culture. Do you think that the content might contradict the way you raise your children, or the ways you saw your parents or grandparents raising your children?

P: No, well, I think it is very comprehensive. I am a person who tries to be updated on everything because children are not like they used to be. So, I think that it is appropriate to what children are living right now. I think it is okay.

I: And were there things that you had, that your family, that where, let me see how to ask this. Are there things that you would like to change or would like the program to include other things about interacting with babies?

P: No, well, what HV told me was that she had noticed since the beginning that I talk a lot with my son, and I learned that I should talk to them as if they were older. Maybe if they could include more explanation about their development in more details, so that we can learn about specific things that they should do at a specific age so that we can know if they are developing correctly.

I: Okay, so you would like to see more specific information

P: Yes according to his specific development. Like what things my son can do physically at the point he is at right now.

I: Okay. About the sessions, would you like to see change, like including more things, or what is repetitive?

P: I think that the sessions should be longer. Well, I was always late to the sessions because I get out late from work and my brother drops me off here. But, more time with the person that gives the program so that we can have more activities with my son.

I: And for you, what other things about language and race would you like to see in the person that is teaching you? What characteristics, like nice, personality?

P: Well, HV and the other person that was with us [reliability observer], I don't remember her name, have the gift of interacting with children, being able to be with them, because I have noticed that some people don't know what to do with children.

I: So that they know how to interact with children

P: Yes, I see that they can do it

I: And you already answered my next question about whether you think it is important that the person understands your culture and the way you raise your children. Is it important for you and your family to get to know the person that is delivering the program first, to trust them more? For example, before the start of the program, being able to have a session to get to know each other. Did you already know HV?

P: I had seen her. But about a month before they called me and explained who she was and what she was doing. And then the week after she called me personally and explained. And so then we met in person before we began and we talked.

I: So that made it more comfortable. Do you think it is important for your partner or another member of your family to participate in sessions?

P: Yes. In my closest family, it is only my children, and my mom who spends a little time with my children. But, I would like my children to have a better connection between them and be able to play together, they are very different in ages. That is why it would be important to have the siblings or other children.

I: So you think that it would be important for them to also know how to interact with a child.

P: yes

I: What differences have you noticed in the way people raise their children in the United States and in your country of origin?

P: Well, I have tried to give them the same type of education. But, in regard to other children, I see that they give them more freedom. They make them independent much earlier, and that has happened to me with my youngest child because from very early I had to send him to daycare.

I: And, what is your opinion about what American people think about the way you raise your children?

P: What I experienced with their dad's family, they are American, but Latino descendants, they always told me that I was exaggerating and that I was overprotecting my children and that it was not good. But in my family that is what I have been taught, that children are the priority.

I: Okay, very good. So, you have not changed the way you were taught to raise children after having your child's American family?

P: I have changed some things, but adapting to the way we live here. But, when it comes to education, hygiene, no. I have changed some customs I had in my country or in my family with my children that were born here.

I: What things affect, or don't allow you to be the best mother for your children?

P: I can't give them the time they deserve because I have to work. In my country I could work but I could bring my son with me.

I: So, that changed here

P: Yes

I: The majority of the moms. And, about the program, like the activities, did you see the activities? Do you think that the songs, or activities that they suggested for your child are appropriate for the Latino culture? Would you like to see games, or songs, or other suggestions? Do you think if the program had more things for Latinos it would be better, it would give you more suggestions, and it would help you interact better if you had better ideas?

P: Yes. I think that having more ways to express our feelings through games or songs or words with them.

I: And what suggestions would you have for the program to make it better for Latino families?

P: Well, I think we could have more materials, more information, more toys

I: Like at home

P: Yes, a place where they can move in their environment. Well, depending on their age.

I: Any other suggestion?

P: I don't think so

I: So you liked it? What were your favorite parts?

P: Spending time with my son. At home I have learned how to handle both my youngest children. I try to do games for both of them.

I: Good, so what you are saying is good, what you teach all your children at home, looking at them, touching, showing affection

P: Yes

I: Good. For other people, do you think the material would help grandparents that take care of children? Do you think there is a difference in the way you raise your children, interacting with them, and grandparents?

P: In my case, with regards to my mom, I am very similar to her. I saw how she treated my youngest brother. She sang to him, or would talk to him when she was cleaning or feeding him, things like that. I learned those things for my children, and maybe that happens with other grandmothers. With their dad's mother, the paternal grandmother, I think it would help her. Because one time she came to visit the children, a long time ago, and she didn't know how to bathe them.

I: So, you think that there is a big difference between generations. You said his grandparents have been here longer, they are more used to this culture. So you think that is different from Latino culture which emphasizes more interactions with children, talking, showing affection?

P: I think that it is more in the Latino culture. Their grandma was never rude to them, but she always tells me "if my child did that, I would spank him, and that is the cure." And, honestly, in my family there was never any spanking or hitting them to punish them.

I: So, to discipline children, putting them in time out, so sit in the corner. Do you use that technique?

P: Well, I have not used that with my daughter. When she does things that are not right, I unplug the TV. She says "Barney," but I say "there is no TV because you did not pick up your toys or you did not eat or any other thing." So she sits and reads a book and later she comes back and does what she was supposed to do. But, I don't turn on the TV until the next day.

I: We were talking about Latino culture and the importance of family. You were going to talk to me about the differences.

P: I think that for example when we have different generations, our maternal instinct comes out more, we give more affection or contact with our children. I think that the mothers here are very cold. I don't give my son cold milk or water from the faucet. I buy specifically for babies and clean his bottles and pacifiers with boiling water, I wash everything. But mothers here only rinse

them, and use cold milk taken straight out of the fridge. When I see that they put the formula in water taken from the faucet, I say "oh no!"

I: And, what you are saying is very important. I am going to bring you back again to the question we talked about things that affect or don't let mothers do the best job at interacting with their children. You said that it is different here than there, because here there are other problems like the economy, language barriers, discrimination. Do you think that the moms here have more responsibilities? Like you said, they have to work, and have to leave the baby, and are things that could have an effect?

P: Well, I think it affects a lot because when my son turned 6 months I had to leave him at the daycare. I felt a lot of pain, I still feel a lot of pain, leaving him so early and picking him up after so many hours, that affects their development. My son was born three weeks and four days before the due date, and they tell me that's why he is a little behind in walking, now he is crawling, and that is because he was born before time. But, I think that no, I think that it is because of a lack of contact with the mother. My oldest son started walking at 11 months because I was there with him, and would hold his hand wherever he went. Or I would crawl with him, or play with him or take him to work or feed him. All that hasn't happened with this son. I stopped breastfeeding him a little before he turned six months because I couldn't do it anymore.

I: Okay, thank you very much.