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FILIAL RESPONSIBILITY AS A MODERATOR OF WITNESSING DOMESTIC VIOLENCE AND BEHAVIORAL OUTCOMES IN LATINO CHILDREN

by

DHAKIRAH AMELIA HAMIN

Under the Direction of Julia Perilla

ABSTRACT

Children's perceptions of the fairness of their filial responsibility was examined as a moderator between witnessing domestic violence and behavioral outcomes in children. Hierarchical Multiple Regressions revealed that children's perceptions of the fairness of their family responsibility influenced the relation between the psychological violence in the household and child reports of internalizing behavior problems. Specifically, higher levels of psychological violence predicted higher levels of internalizing only under perceptions of unfair filial responsibility. In addition, increased levels of reported psychological violence in the household significantly predicted increased levels of mother-reported externalizing problems. Descriptive analyses revealed that for 12 of the 27 families all of the children had very small levels of reported behavior problems, as compared to the rest of the sample. These resilient families had lower level of psychological violence and physical violence in the household than the other families in the sample.

INDEX WORDS: Domestic Violence, Witnessing, Fairness, Filial Responsibility, Latino, Children

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By

DHAKIRAH AMELIA HAMIN

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Master of Arts

in the College of Arts and Sciences

Georgia State University

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Dhakirah Amelia Hamin

2006

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by

DHAKIRAH AMELIA HAMIN

Major Professor: Julia Perilla
Committee: Sarah Cook
Roderick Watts

Electronic Version Approved:

Office of Graduate Studies
College of Arts and Sciences
Georgia State University
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Introduction

Domestic violence is a social problem that affects millions of families throughout the world. In the United States, approximately 1.3 million women are physically assaulted by an intimate partner annually (Tjaden and Thoennes, 2000). In the same time period and country, 3 to 10 million children witness domestic violence (Carter, Weithorn, & Behrman, 1999; Reuben, 1996). These prevalence statistics are collected primarily from samples of European Americans (Cummings & Davies, 2002). The research literature has focused on Caucasian, middle-class samples. Several meta-analyses and literature reviews suggest that domestic violence is just as prevalent, if not more prevalent, in communities of color (Johnson & Ferraro, 2000; Perilla, under review; Torres, 1991). Therefore, it is important to examine domestic violence in communities of color. In addition, it is essential to understand these families within their cultural context.

Little is known about the effects of witnessing domestic violence amongst children of color. It has been consistently found that middle-class, European American children who witness domestic violence experience more psychological and behavioral problems than children who have not witnessed this violence (Cummings & Davies, 2002; Edleson, 1999; Kolbo & Blakely, 1996; Rudo et al., 1998). The dearth in research on children of color is particularly noteworthy in Latino families, who present a language barrier for English-speaking researchers. Cummings and Davies (2002) described a notable gap in the domestic violence research on Latin American families, particularly those who do not speak English. The few investigators who have utilized samples that contain Latino families required the participants to be fluent in English (Fantuzzo et al., 1991; Grych et al., 2000). Therefore these studies did not adequately represent this

ethnic group, because approximately 40% of Latinos in the United States are foreign born (U.S. Census Bureau, 2004) and one can assume that a large proportion of them have limited English fluency. Thus, it is important to examine factors that may promote or impair the functioning of Spanish-speaking Latino children who witness domestic violence.

The current study investigates the relation between children's presence in a household where there is domestic violence and their behavioral outcomes in a sample of Spanish-speaking, immigrant Latino families. This relation is examined in the context of children's perceptions of fairness concerning their responsibilities in their families.

Definition of Witnessing Domestic Violence

Domestic violence is defined as controlling behaviors that are used by adults against their partners, including physical, sexual, psychological, and economic restraint (Salzman et al., 1999). For purposes of this study, the term domestic violence will be used to refer to male aggression toward a female partner.

In the literature many researchers have defined witnessing domestic violence uni-dimensionally as solely being an eyewitness to the violence (Rudo et al., 1998). However, Edleson (1999) suggested that a more comprehensive definition is needed to describe the phenomenon of children witnessing domestic violence that includes various aspects of children's experience with this violence. This experience includes not only being an eyewitness to the violence, but also being used as a tool in the violence and experiencing the aftermath of the violence. Being an eyewitness involves seeing or hearing the event. Children are used as tools when they are forced to do things that would lead to more victimization of the woman, such as spying on the victim, putting

pressure on the victim to remain in the home, or directly participating in the abuse. In addition, sometimes children are taken hostage or used as physical weapons against the victim. Experiencing the aftermath of a violent event may include taking care of an injured mother, experiencing police intervention, or moving to a shelter (Edleson, 1999; Rudo et al., 1998). The aftermath may also include changes in the "atmosphere" (i.e. increasing tension) of the house after a violent episode occurs as well as the experience of attending community-based intervention programs for families affected by domestic violence.

The current study utilizes Edleson's comprehensive definition of witnessing domestic violence. Specifically, this research examines the effects of violence on children who are present in a household where there is psychological and/or physical violence.

Effects of Witnessing Domestic Violence

Researchers have long investigated the negative effects of witnessing domestic violence on middle-class, European American children. For example, Graham-Bermann (1996) found that more witnesses were above the clinical cutoff level for child maladjustment than comparison children. Similarly, Kitzman and colleagues (2003) found in their meta-analytic review, that 63% of children who witnessed domestic violence had more behavioral problems than children who did not witness this violence.

In comprehensive reviews of research on children who witnessed domestic violence, Edleson (1999), Kolbo and Blakely (1996), and Rudo and colleagues (1998) summarized the general findings in this field by examining the results of more than 60 studies. The results of these studies were inconsistent and hence equivocal. At least half

of the studies found no significant differences between children who witnessed domestic violence and control children. However, the other half of the studies found that children who witnessed domestic violence showed increased rates of problems in one or more of the following areas: behavioral, emotional, cognitive, and social. In the behavioral domain they exhibited externalizing (e.g. aggressive and antisocial) and internalizing problems (e.g. displaying fear or inhibition). Emotionally these children demonstrated symptoms of post-traumatic stress disorder, anxiety, and depression. They also exhibited difficulties with self-esteem and temperament. In addition, children who witnessed domestic violence showed lower cognitive functioning, lower social competence, and more problematic attitudes toward the use of violence and conflict resolution than children who did not witness domestic violence.

These reviewers noted that research on children who witness domestic violence relies exclusively on parental report, particularly the mothers' report (Edleson, 1999; Kolbo & Blakely, 1996; Rudo et al., 1998). This exclusive dependence on maternal report lacks the additional reporting strength possible when different data sources are combined. This over-reliance is also problematic because the data provided by different informants may vary. For example, McCloske, Figuerdo, and Koss (1995) found that mothers' and children's reports about violence were significantly correlated. However, O'Brien and colleagues (1994) found alarming discrepancy between the parents' and children's reports of interparental violence in the home. Specifically, O' Brien and colleagues found that 1 in 5 children reported no physical aggression when both parents agreed that physical aggression occurred in front of the child. In addition, 10% of children reported physical aggression when both parents agreed that physical aggression

never occurred. These authors suggest that these discrepancies may result from attempts to keep the family's secret. Additionally, parents may be unaware of the children's witnessing or awareness of violent incidents.

The inconsistent findings on the effects of witnessing domestic violence may be attributed to differences in the designs of the studies. First, these studies varied in the measures they used to assess witnessing domestic violence (Rudo et al., 1998). Three common methods used to determine children's exposure to domestic violence include: (a) maternal report of children having witnessed the violence, (b) the children's status of living in homes with domestic violence, and (c) standardized measures of the domestic violence (Rudo et al., 1998). The first method to determine the child's exposure assumes a different definition of witnessing domestic violence than the second two methods (i.e. b and c). Specifically, the first method requires the child's presence during the violence, while the other two methods do not. Thus a child may or may not be categorized as a witness depending on the method utilized. In addition, the first two methods result in a dichotomous measure of witnessing (i.e. yes or no) that does not account for the type or level of violence witnessed. The current study utilizes the final method to measure children's exposure to domestic violence. Measuring the amount of violence in the household is consistent with Edleson's expanded definition of witnessing domestic violence (i.e. children's presence in a violent household). Also, this method more precisely assesses the amount of violence present in the home by measuring violence as a continuous variable.

Second, some of the investigators did not measure or account for differences in the type of the violence witnessed by the children (Smith, Berthelsen, & O'Connor, 1997;

Fantuzzo et al., 1991). Fantuzzo and colleagues (1991) investigated the differential impact of types of violence. They found that children who witnessed domestic violence (verbal only or verbal and physical) had higher levels of internalizing behaviors than children who did not witness this violence. Furthermore, they noted that children who witnessed both verbal and physical violence exhibited significantly higher rates of externalizing behavior than the children who witnessed only verbal violence. Due to the differential impact of verbal and physical violence, it is imperative that researchers measure both types of violence.

Third, not all studies have provided information about the level of violence that children have witnessed (Rudo et al., 1998). According to Smith, Berthelsen, and O'Connor (1997), the number of violent occurrences witnessed was positively related to higher levels of externalizing behavior. Therefore, in order to examine the relation between witnessing domestic violence and children's outcomes it is important to consider the frequency of violence that has occurred in the household.

Fourth, these studies differed in the informants used to assess the children's behavioral problems (Holden & Ritchie, 1991; McCloske, Figueredo, & Koss, 1995; Rudo et al., 1998). Children's behavioral problems have been measured using reports from mothers, school personnel (e.g. teacher or counselor), and the children themselves. McCloske and colleagues (1995) found that mothers' and children's reports about symptoms were significantly correlated. However, the information provided by the different informants was not always related. For example, Holden and Ritchie (1991) found a correlation between maternal and counselor reports on the Child Behavior Checklist (CBCL) of .61. Also, Achenbach, McConaughy, & Howell (1987) found that

correlations between parent and child reports of behavior problems are usually low. Not surprisingly, when comparing children's and mothers' ratings to those of professionals (clinicians and other health care providers), children appear to provide more accurate estimates of internalizing symptoms (Weissman et al., 1987), whereas their parents give more accurate ratings of externalizing symptoms (Loeber, Green, & Lahey, 1990).

Finally, many studies utilized samples of shelter residents, who are not representative of children who witness domestic violence (Edleson, 1999). Fantuzzo and colleagues (1991) investigated the impact of residence at the time of assessment (home vs. shelter) on children who witnessed both verbal and physical violence between their parents. Both groups of children had comparable levels of externalizing behavior problems (within the clinical range); however, the shelter group had higher levels of emotional problems and lower levels of social functioning and perceived maternal acceptance compared to the home group. Furthermore, when statistically controlling for aggression witnessed (both verbal and physical), the shelter group had significantly more internalizing problems than all of the other groups (control, children who witnessed verbal violence and lived at home, and children who witnessed verbal and physical violence and lived at home). These increased internalizing problems may result from the disruption in their living arrangement, which does not occur in children who remain in their homes. Additionally, the domestic violence may be a more recent experience for children who are living in shelters as compared to those who are living in homes.

In summary, five major differences may account for the inconsistent findings in the literature on children who witness domestic violence. Specifically, previous studies have used inconsistent methods to measure witnessing domestic violence, which

subsequently altered the definition of this variable. In addition, many investigators did not measure or account for differences in the type and/or frequency of the violence witnessed by the children. In order to understand how witnessing domestic violence affects children's outcomes, it is essential to specify the type and frequency of the violence in the household. These studies also utilized various informants, without considering the validity of these reports. Finally, many studies utilized a non-representative sample.

The current study addresses some of these gaps in the research literature, specifically those related to (a) the use of reporters without considering the validity of the reports, (b) the lack of data on the level and type of violence witnessed, and (c) the reliance on shelter samples. In the current study multiple reporters are used to measure children's behavioral outcomes (children's reports for internalizing behaviors and mothers' reports for externalizing behaviors) to provide a more valid assessment of the impact of witnessing. Also, the level of psychological and physical violence in the home is assessed through a standardized measure completed by the mother. Finally, the current study utilizes a community sample of immigrant Latino families affected by domestic violence.

In addition to addressing methodological gaps in the literature, the current study looks at the context of Latino families to determine if this context influences the relation between children's presence in a household with violence and behavioral outcomes. The literature on witnessing domestic violence supports the possible existence of moderating factors that influence the relation between witnessing and children's outcomes.

Moderators

Three general types of moderating factors have been investigated in the literature: children's demographic characteristics, parent-child violence, and family context (Edleson, 1999). Although these potential moderators will not be examined in the present study, this research highlights the importance of investigating factors that may influence the impact of witnessing domestic violence.

First, children's demographic characteristics are often investigated. The most common characteristics examined include age and gender (Rudo et al., 1998). Sociocultural variables (such as ethnicity and socioeconomic status) have also been studied occasionally (Osofsky & Scheeringa, 1997). However, reviewers have noted inconclusive results concerning how children representing different ages, genders, and sociocultural variables are impacted by witnessing domestic violence (Osofsky & Scheeringa, 1997; Rudo et al., 1998). Several researchers have found little effect for age and gender (Fegusson & Horwood, 1998; Kitzman et al., 2003). In contrast, other researchers have found males to have more adjustment problems (externalizing, internalizing, and/or total adjustment problems) than females after witnessing interparental violence (Kerig, 1998; Stagg, Wills, & Howell, 1989), while others have found more internalizing problems in girls (Holden & Ritchie, 1991). Holden and Ritchie (1991) also found that younger children had fewer problems than older children.

Second, parent-child violence is also a common focus because children who are exposed to interparental violence are at an increased risk for being physically and/or sexually abused themselves (McCloske et al., 1995; Silvern et al., 1995) Dubowitz and colleagues (2001) found that harsh parenting from the mother was directly associated

with children's internalizing and externalizing problems. Some evidence exists that children who witness spouse abuse and are physically abused themselves may suffer greater effects than children who are only witnesses (Rudo et al., 1998). In contrast, in their meta-analysis Kitzmann and colleagues (2003) found no significant differences between children who were exposed to only domestic violence and those who were exposed to both domestic violence and child abuse.

Finally, Fergusson and Horwood (1998) highlight the importance of investigating the family context of children who witness domestic violence. These researchers found that witnessing domestic violence explained depression, suicide attempts, substance use (other than alcohol), and violent crimes. They also discovered that families with high levels of interparental violence were characterized by high rates of social disadvantage, family dysfunction, and child abuse. When these contextual factors were accounted for, the previous relation between domestic violence and outcome variables was no longer significant.

The present study examines children's perceptions of their responsibility in the family as a moderator, an important variable that has not yet been examined in the research literature. The traditional moderators that have been examined in the literature (e.g. children's demographic characteristics and parent-child violence) will not be investigated in this study because of the inconsistent results that have been found regarding these moderators. Furthermore, the proposed moderator of family responsibility is very relevant to the cultural context for the current sample of immigrant Latino families who have experienced domestic violence.

First, children who are exposed to domestic violence may be at an increased risk for having to take on additional responsibilities in their families. In fact, some of the situations that are part of the definition of witnessing domestic violence, such as being used as a tool in the violence and experiencing the aftermath of the violence, require children to take on family responsibilities such as mediating between the parents or taking care of their injured mother (Edleson, 1999; Rudo et al., 1998). Furthermore, if interparental violence leads to separation, one or more of the older children will be encouraged to be a parental assistant to the single parent (Nichols & Schwartz, 2001). Due to this likelihood of increased family responsibility, it is important to look at this variable as a moderator of the relation between domestic violence and behavioral outcomes.

Second, this type of family responsibility is particularly important to consider when studying immigrant Latino samples because of the different stressors that are linked to immigration, such as poverty, language barriers, and social isolation. Overcoming these barriers requires strong collaboration among family members. Children are often called on to assist the family through such means as earning income, interpreting for parents, providing emotional support, etc. (Jurkovic et al., 2004).

The sample for the current study is at a heightened risk for increased responsibilities in their families because of their status as children who have witnessed domestic violence and because of their status as immigrant Latinos. It would be important to see how this additional responsibility impacts internalizing and externalizing behavior displayed by these children.

Fairness of Filial Responsibility as a Moderator

There has been a recent shift in the terminology used to describe increased responsibility in the family. The term "parentification" was used to describe this concept until 1998. However, the term "filial responsibility" was recently coined by Jurkovic and his colleagues to provide a label for this concept that could carry both positive and negative elements. Jurkovic theorized that this type of responsibility in the family, which involves caretaking, could be adaptive or maladaptive depending on the context of fairness in the family (Thirkield, 2001).

Filial responsibility is the provision of instrumental and emotional assistance by children to their families (Jurkovic et al., 2004). Instrumental caretaking involves tasks that contribute to the physical maintenance of the household (e.g. cooking, cleaning, earning money, and taking care of siblings). Emotional caretaking is meeting psychological needs of family members (such as being a confidant, mediating conflict, and providing comfort) (Jurkovic et al., 2004).

In a sample of Latino adolescents, Jurkovic and Casey (2000) found that instrumental and emotional caregiving were sources of both competence and personal distress. Youth with high levels of instrumental caregiving were rated more positively by their teachers. They were seen as more competent and as having fewer behavioral problems. However, the relation between care giving and various outcomes was moderated by the adolescents' perception of fairness. In fact, fairness played an important role, either independently or as a moderator, in most variables that Jurkovic and Casey (2000) investigated. Youths' perception of the fairness of their responsibilities predicted self-reported measures of distress, restraint, and interpersonal self-efficacy as

well as a teacher-reported measure of school-based problems. Specifically, fairness was positively related to measures of competence and negatively related to measures of distress/problems. Thus, perceptions of fairness may be protective factors that can lead to resilience in children. Resilience can be defined as types of protective processes that allow someone to adapt to adverse, challenging, or threatening situations. These processes involve a combination of broad contextual variables (e.g., extended familial support, schools, neighborhood), the family environment (e.g., parenting, home environment, relationship with parents) and the individual attributes (e.g., temperament, intellectual functioning, self-esteem) (Tedeschi & Kilmer, 2005). Jurkovic and Casey (2000) recommend additional research on perceptions of fairness in order to further their exploratory findings.

The topic of fairness (or justice) has been explored within families and communities (Peterson, 1975; Lerner, 1975). Kowal and colleagues (2002) found that children displayed more externalizing behaviors when they perceived that preferential treatment by their parents toward their siblings was unfair. However, when children perceived such preferential treatment as fair, they displayed less internalizing behavior problems and greater self-esteem. Given the above, it appears that the concept of perceived fairness in family responsibilities as a moderator between witnessing parental violence and behavioral outcome measures could provide important information for theory and practice. This moderator is particularly important to study given the possibility that perceptions of fairness may encourage resilience.

Research Questions

In light of the previous literature, the main research question of this study is: Do perceptions of fairness moderate the relation between violence witnessed and behavior problems? The study hypotheses are: (1) The relation between behavior problems (i.e. internalizing and externalizing) and psychological violence in the household will be moderated by children's perceptions of the fairness of filial responsibility in the household. (2) The relation between behavior problems (i.e. internalizing and externalizing) and physical violence in the household will be moderated by children's perceptions of the fairness of filial responsibility in the household. Regardless of whether the children witness psychological or physical violence, it is predicted that children who perceive their responsibility in the household as unfair will have the most behavior problems.

In the current study, the independent variables are the frequency of psychological and physical violence in the household, as reported by the mothers. The dependent variables are the internalizing (as reported by the children) and externalizing (as reported by the mother) behaviors. The moderator is the children's reports of the perceived fairness of their filial responsibility in the household.

One of the strengths of this study is, of course, its focus on an immigrant, Spanish-speaking population. However, it is important to note that the results of the present study can generalize only to Latino immigrant children and children of immigrants who have lived in households where there is domestic violence.

Also, compared to previous research this study will provide a more valid assessment of the impact of witnessing through the use of Edleson's (1999) expanded

definition of witnessing domestic violence (i.e. presence in a home where there is violence). In addition, multiple reporters will be used to measure children's behavioral outcomes (children's reports for internalizing behaviors and mothers' reports for externalizing behaviors), thus strengthening the measurement of these outcomes. This study will also extend the current literature by obtaining preliminary psychometrics on bilingual versions of scales not previously used with children who have witnessed domestic violence. The measures that will be used in this study are particularly appropriate for the sample because they have been utilized with other Latino samples.

Methods

Participants

All participants were enrolled in an intervention program for families affected by domestic violence. The data used in this study were a subset of the data collected as part of a comprehensive evaluation of this domestic violence intervention program. The sample consisted of 74 immigrant Latino children who have witnessed domestic violence. The average age was 9.85 (SD=2.41). Forty seven percent of the sample was male. Most of the children were born in Mexico (63 percent). The rest of the sample included children born in the following countries: Columbia, El Salvador, Guatemala, Honduras, Dominican Republic, and the United States. Participants from each of these countries made up six percent or less of the sample. When children reported their birthplace, 67% reported that they were born in the United States and 33% reported that they were born in Mexico. This child-reported place of birth was further investigated in the statistical analyses.

Caminar Latino, Inc. is a community-based culturally-specific intervention program for Latino families. This family based domestic violence program includes intervention groups for men who batter, support groups for abused women, and sharing groups for their children. The weekly program takes place at a building that serves as a church and community center. This location is well known and commonly used by immigrant Latino families in the area and easily accessible by public transportation. Participants of the program include any Spanish-speaking family that is affected by domestic violence and requests services. Some of these families are self-referrals and others are referred by the courts and other agencies. Participants of the present study

were recruited in-person before the weekly intervention groups began and through follow-up phone calls to families with children in the targeted age range.

Instruments

Bilingual translation; modification. Two separate interview batteries were used to collect data from the mothers and children. The interview batteries for the mothers and children were made up of semi-structured, open-ended questions and a set of standardized instruments. In addition to demographic information, the questionnaires contain standardized instruments that were translated into Spanish for this study. The mothers' questionnaires were all in Spanish, since the overwhelming majority of adult participants are monolingual Spanish-speakers. In contrast, the children's questionnaires contained both English and Spanish versions of each question. It was important to note that many youth participants commonly used a mixture of English and Spanish to communicate among themselves and with interviewers and group facilitators. Providing a bilingual questionnaire allowed the children to choose one or both languages throughout the interview process. The entire translated questionnaire (open-ended questions and modified standardized scales) was reviewed by persons from various Latin American countries (e.g. Colombia, Cuba, Mexico, Nicaragua, and Puerto Rico) to assure that the final version would be correctly understood by a wide variety of Spanish speakers. Back translation and centering (when appropriate) techniques were completed by a bilingual native-English speaker who was unfamiliar with the original version of the questionnaire. These techniques were conducted as suggested by Brislin, Lonner, and Thorndike (1973). Before implementation, the final version of the entire interview was

pilot tested to assure that the instrument would be understood by members of the target population.

Additional modifications to the standardized instruments were informed by previous studies with this population. Specifically, the current study used a 3-point scale for all standardized instruments. This adaptation was made after researchers realized that Latino participants appeared to be confused by a large number of options and consistently tended to endorse only the middle and extreme choices. This made it necessary to collapse the data into three categories for analysis. The 3-point Likert scales have been found much easier to use with Latino populations in the U.S. as well as with research participants in seven Mexican cities (J. Perilla, personal communication, October 2003).

Interviewing. Recruiters approached the mothers while they were waiting to attend the intervention groups. A brief synopsis of the study was provided and families were asked if they were interested in participating. If time permitted, recruiters scheduled an appointment for completing the questionnaires. If scheduling could not be completed on-site, a follow-up phone call was used to arrange a meeting time.

The program evaluation, of which this study is one component, utilizes a pretest-posttest design. Data for the current study was obtained at the pre-intervention assessment conducted at least three weeks after the children had been attending the pyschoeducational/support group. This waiting period was necessary so that the families, especially the children, were comfortable with the researchers. Although this time delay may have increased social desirability displayed by the children, the rapport that was established in that time period was essential. Jaffe, Wolfe, & Wilson (1990) have

suggested that this time delay increases the likelihood that children will provide valid answers to the questionnaire.

Questionnaires were completed on site in order to maximize the safety of the women and children as well as that of the interviewers. Transportation was provided (e.g. tokens for public transportation or provision of a taxi cab driven by a female) for the family if necessary. The recruiter read the consent form to the mother and her child(ren) and made sure that all their questions were answered before obtaining the woman's signature. Assent forms were obtained from each child under the age of 18. The assent and consent were obtained from the mother and children together (i.e. at the same time and place). As part of this process, confidentiality and the limits to confidentiality were explained. Therefore, children were less likely to think that they might be getting their parents in trouble by completing the questionnaire. Following consent, the family completed the study measures with separate interviewers. As stated previously, the mothers' interviews were conducted in Spanish, whereas the children's interviews were conducted in Spanish and/or English, depending on the children's comfort level with each language. All assessments were verbally administered. Response options were provided through concrete manipulatives for the younger children. For example, to illustrate a 3-point Likert scale the children were presented with three plates containing representative levels of candy (i.e. empty, 5 pieces, and 10 pieces).

Measures

Demographic information. Mothers and children reported demographic information about the target child (e.g. date and place of birth). In addition, the number

of intervention sessions that children attended was retrieved from the Caminar Latino database.

Family violence. Mothers reported the violence that they had experienced from their partner in the previous six months. These 35 questions were an adaptation and translation of the following three measures: Conflict Tactics Scale (CTS; Straus, 1979), Psychological Maltreatment of Women Inventory (PMWI; Tolman, 1988), and Index of Spouse Abuse (ISA; Hudson & McIntosh, 1981). These items asked about the frequency of psychological (26 questions) and physical violence (9 questions). Sample items included, "Your partner criticizes your physical appearance," and "Your partner hit or tried to hit you with an object." A 5-point Likert scale version of this amalgamated measure had an alpha of .88 and .97 for the physical and psychological violence subscales, respectively (Baker, Perilla, & Norris, 2001). For the reasons stated above, this study used a 3-point Likert scale (never, sometimes, and frequently), which rendered alphas for the psychological and physical violence scales of .95 and .85, respectively.

Behavior problems. Children's externalizing behaviors were assessed using reports from the mother, while their internalizing behaviors were measured using self-reports. The mothers completed a short form about the target child's behavior. These items were taken from the Eyberg Child Behavior Inventory (ECBI; Robinson, Eyberg, & Ross, 1980), which is a 36-item assessment of conduct disorders. Internal reliability was found for this measure using a 7-point Likert scale at .98 using a low-income Caucasian sample of children ages 2-10 (mean age was 6.5). The 3-pont Likert scale used (never, sometimes, and always) in the current study, had an alpha of .90.

The children completed a translated, shortened version of the Subjective Experience of Distress subscale in Weinberger's Adjustment Inventory (WAI; Weinberger, 1991, 1997). These 12 items measured four internalizing domains: anxiety (e.g. "Do you feel nervous or afraid that things won't work out the way you would like them to?); self-esteem (e.g. "Do you like yourself?"); depression (e.g. "Do you get into such a bad mood that you don't want to do anything?"); and emotional well-being (e.g. "Are you the kind of boy/girl who has a lot of fun?"). Children answered these questions on a 3-point Likert scale (never, sometimes, many times). Internal reliability alpha of .86 was found in a sample of Latino adolescents using a 4-point Likert scale (Jurkovic & Casey, 2000). The current study had an alpha of .74.

Filial responsibility. Children completed seven questions that ask about their perceived fairness of family responsibilities. These questions are a shortened adaptation of the Fairness subscale of the Filial Responsibility Scale-Youth (FRS-Y; Jurkovic, Kuperminc, & Casey, 2000). In Jurkovic's study, 12 items were used in a sample of Latino adolescents to assess the child's perceived fairness (e.g. "In my family I am often asked to do more than my share."). The items were answered on a 4-point Likert scale. These authors found adequate internal reliability (.81). In the current study 7 of these items are asked on a 3-point Likert scale (never, sometimes, and many times). Also, the statements are modified as questions for the interview format of the study (e.g. "In your family are you asked to do more than your share?"). For the current study, an alpha of .61 was found.

Data Analysis Plan

The current study explored the relation between witnessing domestic violence and behavior problems in immigrant Latino children. Hierarchical Multiple Regressions (HMR) were conducted to investigate how much of the behavioral problems could be explained by witnessing different types and levels of domestic violence. Furthermore, the study investigated whether this relation changed based on the child's perception of fairness. Additionally, due to a lack of independence (multiple children interviewed in each family), HMR analyses were conducted using only the oldest child in each family. Descriptive analyses of the data were also conducted to provide a more in-depth understanding of participant families. Individual children within families were categorized on internalizing and externalizing scores using quartile cutoffs. Also, families were grouped based on their pattern of children's scores to explore potential groupings that would provide additional information. The small size of the sample did not allow the person-centered analyses that had been originally been proposed.

A power analysis suggested that with a sample size of 48 (largest sample size available for each regression analysis) an alpha of .05 would not have enough power to detect a medium effect (Bakeman & McArthur, 1999). As a result, this study used an alpha of .10.

Results

Preliminary Analyses

Assumptions of HMR. The use of Hierarchical Multiple Regression (HMR) requires that the data meet several assumptions. Prior to conducting the regression, the assumption of normality was investigated by examining the distributions of the dependent and independent variables. Specifically, the data were screened for the presence of outliers, skewness, and kurtosis. None of the variables had outliers and the externalizing behavior variable was normally distributed; however, positive skewness was found for internalizing behavior, physical violence, and fairness of filial responsibility (herein referred to as fairness). In addition, kurtosis was found for internalizing, psychological violence, and fairness. Log transformations were conducted to improve the normality of the aforementioned variables that displayed skewness and kurtosis. Table 1 contains the kurtosis and skewness values divided by their respective standard errors for these variables before and after transformation. For all subsequent analyses transformed variables were used for internalizing behavior, physical violence, and fairness. Table 2 illustrates the descriptive statistics of the variables used in this study.

Table 1

Kurtosis and Skewness Values for Variables of Interest Before and After Log Transformation

Variable	Before Transformation		After Transformation	
	Skewness	Kurtosis	Skewness	Kurtosis
Internalizing	6.16	7.16	2.52	1.88
Physical violence	2.97	-1.36	1.53	-2.09
Psychological violence	0.40	-2.85	-0.71	-2.72
Fairness of filial responsibility	2.52	-2.01	-0.79	1.52

Table 2

Descriptive Statistics for Variables of Interest

Scale	N	Mean	SD	Minimum	Maximum
Psychological violence	89	49.98	15.62	26.00	76.00
Physical violence*	89	2.61	0.32	2.20	3.18
Internalizing*	79	3.01	0.26	2.48	3.83
Externalizing	54	66.00	14.20	40.00	93.00
Fairness of filial responsibility*	75	2.74	0.24	1.95	3.33

* Transformed values for these scales were used for all analyses

The data were screened for multicollinearity by examining zero-order correlations between predictor variables. Although the correlations between physical and psychological violence were significantly related, multicollinearity was not reached

because the correlation term was less than .80 (see Table 3) (Mertler & Vannatta, 2001). Also, to prevent multicollinearity in the interaction term, the independent variables were centered by subtracting the mean from each value.

Finally, a scatterplot of standardized and predicted residuals indicated that a linear relation existed between the independent variable and dependent variable. An examination of the prediction errors indicated that homoskedasticity was met.

Correlations. The relations between continuous demographic variables and outcome variables were investigated using the Pearson product-moment correlation coefficient. Displayed in Table 3 are a number of significant relations between variables. Specifically, the number of intervention sessions children attended was significantly and negatively related to psychological violence and physical violence. In addition, psychological violence was positively related to the number of children in the family. Not surprisingly, psychological and physical violence were positively related to each other. Father-to-mother psychological violence was positively related to externalizing child behavior problems, whereas physical violence was positively related to internalizing child behavior problems.

Table 3

Intercorrelations for Continuous Demographic and Outcome Variables

	1	2	3	4	5	6	7
1. Number of children	--						
2. Age	-.00	--					
3. Number of sessions	-.11	.06	--				
4. Psychological Violence	.20*	.02	-.34*	--			
5. Physical Violence	.11	-.18	-.41*	.74*	--		
6. Fairness of Filial Responsibility	-.01	.13	.05	-.23	-.22	--	
7. Internalizing	.08	.18	-.19	.15	.28*	-.00	--
8. Externalizing	.11	-.19	-.11	.28*	.11	-.13	.18

*p < .10

The relation between categorical demographic variables and outcome variables was investigated using the Spearman's rho correlation coefficient and are displayed in Table 4. Specifically, birthplace was significantly correlated with externalizing behaviors. Mothers of children born in the United States reported more child externalizing behaviors than those of children born in Mexico. It was also interesting to note that birth place was significantly related to the number of sessions children attended. Specifically, children born in Mexico had attended more sessions that those who were born in the United States.

Table 4

Intercorrelations for Categorical Demographic and Outcome Variables

	Gender	Birth Place
Number of children	-.00	-.01
Age	.14	.06
Number of sessions	-.08	.28*
Psychological Violence	-.14	-.23
Physical Violence	-.16	-.11
Fairness of Filial Responsibility	-.05	.13
Internalizing	.07	.19
Externalizing	.04	-.31*

*p < .10

Overview of Inferential Statistical Analyses

The aforementioned correlations were explored prior to conducting regression analyses. As a result the demographic variables that were significantly correlated with outcome variables were controlled.

Hypothesis 1, which stated that the relation between behavior problems (i.e. internalizing and externalizing) and psychological violence in the household would be moderated by children's perceptions of fairness of filial responsibility in the household, was tested using two HMRs.

Hypothesis 2, which stated that the relation between behavior problems (i.e. internalizing and externalizing) and physical violence in the household would be

moderated by children's perceptions of fairness of filial responsibility in the household, was tested using two HMRs.

In each analysis Adjusted R^2 was to describe the overall goodness of fit of the model in the population rather than R^2, which tends to overestimate the total variance explained in the dependent variable by the model. To interpret the results of these analyses, participants were classified into three groups for all independent and moderator variables. Specifically, participants were classified as either "low" if they scored one standard deviation or more below the mean for that scale, "high" if they scored one standard deviation or more above the mean for that scale, or "medium" if they scored within -.99 and +.99 standard deviations.

Predicting Behavior Problems using Psychological Violence Witnessed

Internalizing Behavior Problems. After controlling for the number of children in the family and the number of sessions that the child attended, there was a significant interaction effect (see Figure 1). Specifically, under conditions of low fairness internalizing behavior considerably increased as levels of psychological violence increased. Under conditions of medium fairness, internalizing behavior increased slightly as levels of psychological violence increase. Under conditions of high fairness, internalizing behavior decreased slightly as levels of psychological violence increase. In contrast, there were no main effects. In other words, internalizing behaviors were not predicted by the independent variable (i.e. level of psychological violence witnessed) or the moderator variable (i.e. fairness) (see Table 5). The complete regression model explained 5.9% of the variance in internalizing behaviors (see Table 5).

Figure 1. Moderating Effect of the Fairness of Filial Responsibility on the Relation between Psychological Violence and Internalizing Behavior Problems

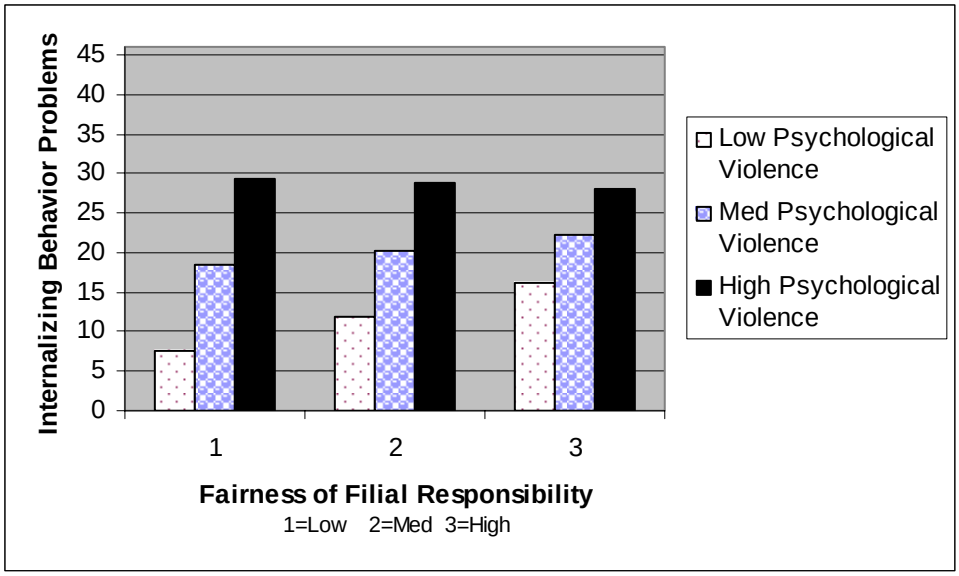


Table 5

Hierarchical Regression Analysis Predicting Internalizing with Witnessing Psychological Violence

Step and predictor variables	R^2_Δ	F	β	t
Step 1	.03	.69	--	--
Number of children	--	--	.05	.34
Number of sessions attended	--	--	-.03	-.21
Step 2	.02	.77	--	--
Psychological Violence	--	--	.18	1.13
Step 3	.02	.78		
Fairness of Filial Responsibility	--	--	.19	1.31
Step 4	.09	1.60*	--	--
Fairness X Psychological Violence	--	--	-.32	-2.15*

*p < .10

Externalizing Behavior Problems. After controlling for the number of children in the family, the number of sessions that the child attended and the child-reported place of birth the independent variable (i.e. level of psychological violence witnessed) significantly predicted externalizing behaviors (see Table 6). Specifically, increased levels of witnessing psychological violence predicted increased levels of externalizing behaviors. There were no other significant effects in this regression (i.e. no main effect for the moderator variable or an interaction effect). Overall, the complete regression model explained 6.9% of the variance in externalizing behaviors.

Table 6

Hierarchical Regression Analysis Predicting Externalizing with Witnessing Psychological Violence

Step and predictor variables	R^2_Δ	F	β	t
Step 1	.12	1.57	--	--
Child-reported birth place	--	--	-.31	-1.85*
Number of children	--	--	.03	.18
Number of sessions attended	--	--	.12	.72
Step 2	.08	2.10*	--	--
Psychological Violence	--	--	.26	1.48
Step 3	.02	1.82	--	--
Fairness of Filial Responsibility	--	--	-.12	-.56
Step 4	.00	1.48	--	--
Fairness X Psychological Violence	--	--	-.03	-.15

*p < .10

Predicting Behavior Problems using Physical Violence Witnessed

Internalizing Behavior Problems. After controlling for the number of sessions that the child attended, internalizing behaviors were not predicted by the independent variable (i.e. level of physical violence witnessed), the moderator variable (i.e. fairness of filial responsibility), or the interaction between these variables. Although the model was not significant for any of the steps of the HMR, the F change was significant when physical violence was entered into the regression (step 2). In addition, Table 7 shows

that the t value of physical violence was significant at every applicable step of the regression (steps 2, 3, and 4). Overall, the complete regression model explained 5.8% of the variance in internalizing behaviors.

Table 7

Hierarchical Regression Analysis Predicting Internalizing with Witnessing Physical Violence

Step and predictor variables	R^2_Δ	F	β	t
Step 1	.01	.46	--	--
Number of sessions attended	--	--	.02	.14
Step 2	.06	1.75	--	--
Physical Violence	--	--	.27	1.71*
Step 3	.03	1.60		
Fairness of Filial Responsibility	--	--	.23	1.52
Step 4	.04	1.74	--	--
Fairness X Physical Violence	--	--	-.22	-1.43

*p < .10

Externalizing Behavior Problems. After controlling for the number of sessions that the child attended and the child-reported place of birth there were no main effects (i.e. level of physical violence witnessed and fairness) nor interaction effects for externalizing.

HMR with Eldest Child

Psychological violence and Internalizing. After controlling for the number of children in the family and the number of sessions that the child attended, internalizing

behaviors were significantly predicted by the independent variable (i.e. level of psychological violence witnessed) (Table 8). Increased levels of psychological violence predicted increased levels of internalizing behavior. There were no other significant effects in the model (i.e. main effects for the moderator or interaction effects). Overall, the complete regression model explained 10% of the variance in internalizing behaviors.

Table 8

Hierarchical Regression Analysis Predicting Internalizing with Witnessing Psychological Violence for the Eldest Child

Step and predictor variables	R^2_Δ	F	β	t
Step 1	.07	.92	--	--
Number of children	--	--	.18	.86
Number of sessions attended	--	--	.09	.40
Step 2	.20	2.72*	--	--
Psychological Violence	--	--	.47	2.17*
Step 3	.01	2.04	--	--
Fairness of Filial Responsibility	--	--	-.11	-.43
Step 4	.00	1.56	--	--
Fairness X Psychological Violence	--	--	.00	-.02

*p < .10

Psychological violence and Externalizing. After controlling for the number of children in the family, the number of sessions that the child attended, and the child-

reported place of birth there were no main effects (i.e. level of psychological violence witnessed and fairness) nor interaction effects for externalizing.

Physical violence and Internalizing. After controlling for the number of sessions that the child attended, internalizing behaviors were significantly predicted by the independent variable (i.e. level of physical violence witnessed) (see Table 9). Specifically, increased levels of physical violence predicted increased levels of internalizing behavior. There were no other significant effects in the model (i.e. main effects for the moderator or interaction effects). Overall, the complete regression model explained 23.7% of the variance in internalizing behaviors.

Table 9

Hierarchical Regression Analysis Predicting Internalizing with Witnessing Physical Violence for the Eldest Child

Step and predictor variables	R^2_Δ	F	β	t
Step 1	.01	.27	--	--
Number of sessions attended	--	--	.14	.72
Step 2	.33	6.00*	--	--
Physical Violence	--	--	.59	3.02*
Step 3	.02	4.11*	--	--
Fairness of Filial Responsibility	--	--	-.12	-.59
Step 4	.00	2.94*	--	--
Fairness X Physical Violence	--	--	-.02	-.08

*p < .10

Physical violence and Externalizing. After controlling for the number of sessions that the child attended and the child-reported place of birth, externalizing behaviors were not predicted by the independent variable (i.e. level of physical violence witnessed) nor by the moderator variable (i.e. fairness of filial responsibility). There was also no interaction effect.

Comparison of HMRs with entire sample and HMRs with eldest children

As Table 10 indicates, different results were found when HMRs were conducted on the entire sample (with multiple children from one family) and when HMRs were conducted with only the oldest child in each family. When the entire sample was analyzed, both internalizing and externalizing behavior problems were significantly predicted by the model in which psychological violence was the independent variable. However, there were no significant predictions when physical violence was the independent variable. In contrast, both internalizing and externalizing behaviors were significantly predicted by the model when the eldest child was selected. However, externalizing behavior problems were not significantly predicted by either model.

Table 10

Comparison of Adjusted R^2 for the Entire Sample and for the Eldest Children

Regression (IV,DV)	Adjusted R^2 Entire Sample (N)	Adjusted R^2 Eldest Child Selected (N)
Psychological violence, internalizing	.06 (49)	.10 (26)
Psychological violence, externalizing	.07 (40)	NS (22)
Physical violence, internalizing	NS (49)	.24 (26)
Physical violence, externalizing	NS (40)	NS (22)

NS = not significant

Descriptive Analyses

Overview of Descriptive Analyses. For all descriptive analyses, the raw data were utilized (none of the data were transformed). These analyses were conducted in order to explore family patterns. Twenty-seven families were included in these analyses with a range of one to three children per family (11 families had one child, 13 families had two children, and 3 families had 3 children). A series of steps were followed with individual data scores to create family groups based on behavior problems (i.e. internalizing and externalizing problems):

Step 1: Created 3 groups (i.e. high, medium, and low) for the internalizing variable by dividing the sample into equal thirds.
Step 2: Created 3 groups (i.e. high, medium, and low) for the externalizing variable by dividing the sample into equal thirds.
Step 3: Placed individual children into 4 groups based on the scores created in steps 1 and 2.
A) Children in the *resilient group* obtained a medium or low score on both internalizing and externalizing scales.
B) Children in the *internalizing group* obtained a high score on internalizing and a medium or low score on externalizing scales.
C) Children in the *externalizing group* obtained a high score on externalizing and a medium or low score on internalizing scales.
D) Children in the *both group* obtained a high score on both externalizing and internalizing scales.
Step 4: Placed families into 4 groups based on the scores created in step 3.
A) Families in the *all resilient group* had all resilient children.
B) Families in the *mixed group* had at least one resilient child and at least one child who reported high internalizing or externalizing behavior problems.
C) Families in the *intern/extern group* had either all internalizers in the family or all externalizers in the family.
D) Families in the *both group* had both internalizers and externalizers in the family.

Family groups. Table 11 displays the number of families in each group. Most of the families were classified as resilient and the smallest number of families was classified as both. Based on the defining characteristics of the family groups stated in step 4,

families in the “mixed group” had a minimum of two children. In contrast, families with only one child were placed in any of the other three groups. For example, a family could be place in the “both group” if their only child displayed high levels of both internalizing and externalizing behavior problems.

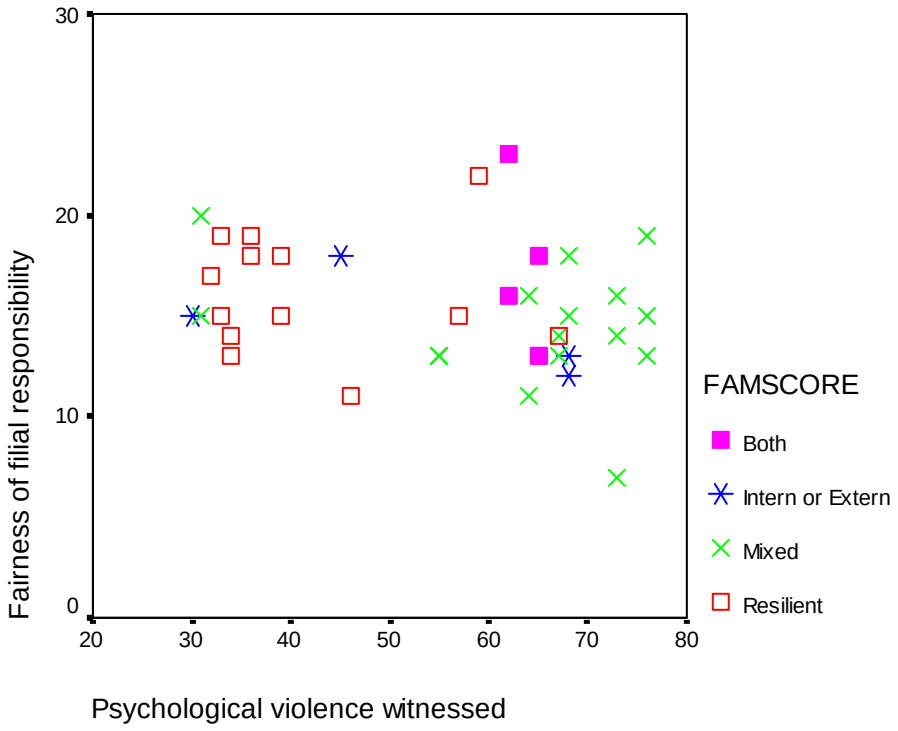
Table 11

Number of Families in Each Group

Classification	Number of families
Resilient	12
Mixed	7
Mixed Intern	4
Mixed Extern	3
Intern/Extern	5
Intern	3
Extern	2
Both	3

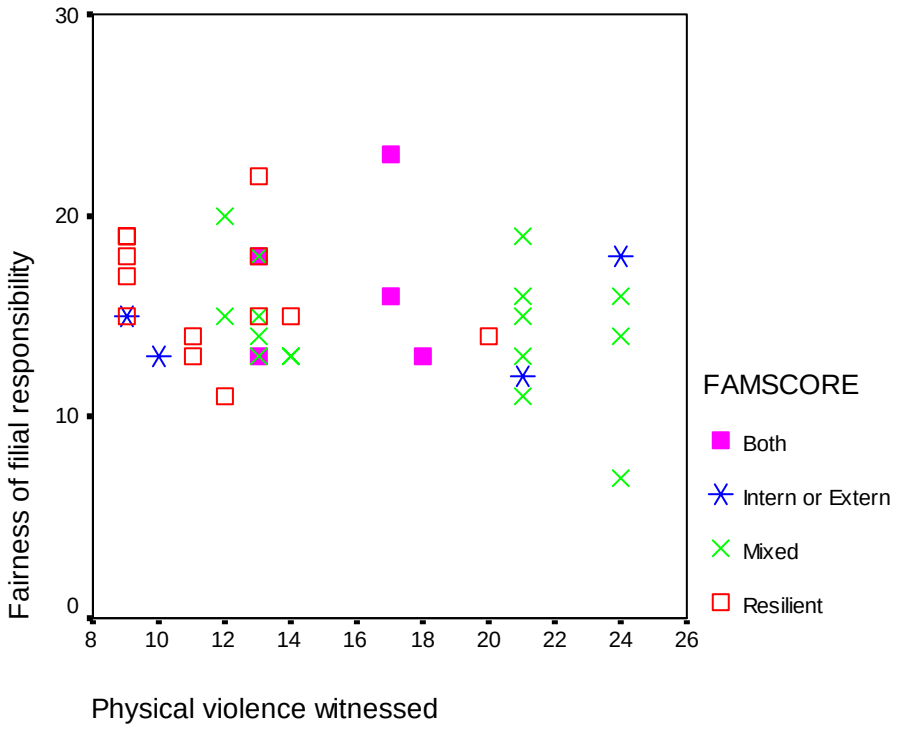
Psychological violence and family patterns. Figure 2, which is grouped by the family classification ("famscore"), shows the scores for individual children on fairness and psychological violence witnessed. This graph shows that families in the "all resilient group" clustered at the low scores of psychological violence witnessed (a score less than 39). In addition, families in the "mixed" and "both" groups clustered at the high scores of psychological violence witnessed (a score greater than 61). The "intern/extern" group did not show any patterns of scores on psychological violence witnessed. Concerning fairness, most of the scores for all groups of families fell in the medium or high fairness ranges (i.e. medium = 14 – 17 and high >17). However, the scores on fairness did not show a pattern that was dependent on the family classification. These families also did not show any patterns when other demographic variables (e.g. children's birth place, gender, age, and birth order) were examined.

Figure 2. Family Patterns on Fairness and Psychological Violence Witnessed



Physical violence and family patterns. Figure 3 shows the scores for individual children on fairness and physical violence witnessed. This figure is grouped by the family score. In the "all resilient" group most of the scores clustered in the medium or low ranges (i.e. low <11 and medium = 11-15) of physical violence witnessed. The other three groups of families (i.e. "mixed," "intern/extern," and "both") did not show any patterns of scores on physical violence witnessed. Although most of the scores for all groups of families fell in the medium or high fairness ranges (i.e. medium = 14 – 17 and high >17), there was no pattern based on family classification. These families also did not show any patterns when other demographic variables (e.g. children's birth place, gender, age, and birth order) were examined.

Figure 3. Family Patterns on Fairness and Physical Violence Witnessed



Subsequent to completing statistical analyses for this study, findings were presented to members of Caminar Latino intervention team (made up of community members with extensive experience in domestic violence), who serve as community consultants to students and other academic investigators with research conducted at that organization. Whereas the presentation of study findings to the team helps to enhance the interpretation of results for the researchers, the data helps Caminar Latino to fine-tune its programs and interventions.

Discussion

Children's behaviors are intimately related to their experiences and the home environment in which they live. Thus, an understanding of this family context is essential to understanding potential relations between household levels of domestic violence, children's perceived fairness in filial responsibility, and children's behavioral outcomes. The overall goal of this study was to examine whether children's perceptions of fairness moderated the relation between violence (i.e. physical and psychological) witnessed and behavior (i.e. external and internal) problems. One of the main findings in this study was that children's perceptions of fairness moderated the relation between psychological violence and internalizing behavior. Specifically, when children perceived their family responsibilities as fair, psychological violence did not appear to affect the children's internalizing behaviors in a significant manner. However, under perceptions of unfair filial responsibility, children reported higher levels of internalizing behaviors when there were higher levels of psychological violence in the home. The study was able to provide other important insights in this area as described below.

Relation between Psychological Violence and Demographic Variables

As previously stated, Caminar Latino is an intervention program for Latino families who experience domestic violence. Correlational analyses found that increased child attendance at Caminar Latino was related to decreased household violence (male-to-female psychological and physical violence as reported by the mother). This finding suggests that attending Caminar Latino is associated with decreased levels of household violence. Although the correlational nature of these results precludes a claim of causality, these findings do suggest that attending Caminar Latino may have helped to

decrease the level of violence in the household. It is important to note that the number of sessions children attend is an excellent proxy for the number of sessions parents attend, since the youth participants can only participate when one of their parents is attending the program. Therefore, decreased violence may be a result of immediate family members attending sessions and obtaining skills and knowledge with regards to family violence.

The team also pointed out that the relation found between psychological violence and the number of children within the household corroborated their experience. The level of stress of multiple children present in the home could likely lead to an increase in verbal arguments. Team members cited instances in which male batterers reported verbally degrading their partners because child care responsibilities, which they considered the sole responsibility of the woman, had not been completed or the children were misbehaving when they got home (Caminar Latino, personal communication, September 29, 2005). Current psychological literature on Latino families affected by domestic violence is quite limited and to our knowledge there are no studies that can substantiate Caminar Latino team members' assertions regarding the relation between number of children in the home and male-to-female psychological violence. Qualitative studies with Latino couples are needed to understand more fully this dynamic.

Relation between Psychological Violence and Physical Violence

The current study also found a significant relation between psychological and physical violence, which is well known to advocates who work with women who have been abused and to facilitators of interventions for men who batter. Indeed, members of the Caminar Latino intervention team indicated that in cases when physical violence was present it was always accompanied by psychological violence.

Surprisingly, high levels of psychological violence were associated with increased externalizing behavior problems and high levels of physical violence were associated with increased internalizing behavior problems. Children who witness higher levels of physical violence may be afraid to exhibit externalizing behavior; whereas, children who witness higher levels of psychological violence may feel less inhibited in externalizing their problems. Specifically, children who live in households where there is physical violence are often told that they should not disclose the violent events to others ("family secrets"). Previous research supports the presence of "family secrets" in households where there is physical violence (O'Brien et al., 1994). In addition to keeping "family secrets", children are frequently told by the mothers that they should remain quiet when their fathers are home in order to prevent him from becoming angry. Thus, children who live in households where there is physical violence may internalize their problems in order to protect their mother from further physical abuse (Caminar Latino, personal communication, September 29, 2005). These directives encourage the children to keep their problems to themselves (internalize) and discourage externalizing.

However, this finding partially contradicts previous research conducted by Fantuzzo and colleagues (1991). These researchers found that household levels of both verbal and physical violence were related to internalizing behaviors, while household levels of physical violence were related to externalizing behaviors. This last finding is contradictory to our study results and may be explained by the differences in the age of study participants. Specifically, Fantuzzo and colleagues utilized a sample of children under the age of 6 while the current study utilized an older sample. The children under

the age of 6 may have been too young to understand the potential effects of their externalizing behaviors.

Relation between Externalizing Behavior and Demographic Variables

The current study found that children who reported being born in Mexico were likely to attend more sessions and report less externalizing behaviors than children who reported being born in the United States. Children born in Mexico are more likely to be recent immigrants to the United States; therefore, they have less established support systems in the United States. These families may be more likely than families who have been in the United States longer to rely on Caminar Latino as a source of social support (Caminar Latino, personal communication, September 29, 2005). Current psychological literature on immigrant, Mexican families is quite limited and to our knowledge there are no studies that can substantiate Caminar Latino team members' assertions regarding the relation between birth place and externalizing behavior problems. Future studies with immigrant, Latino families are needed to understand more fully this relation.

The increased number of sessions attended by Mexican born children may also explain the association between birth place and externalizing behavior problems. Mexican born children may hold more traditional beliefs with regards to parent-child interactions; specifically, they may be less likely to "act out" compared to more acculturated children. Santisteban and colleagues (2002) describe that traditional families often follow hierarchical parent-child relationships in which open disagreement between parents and children are seen as disrespectful and unacceptable. In contrast, less traditional families (e.g. American families) utilize collateral parent-child relationships in which open disagreements are tolerated and may even be encouraged. The families of

children born in Mexico are the newest immigrants in our sample and thus would tend to have more traditional beliefs, values and attitudes.

Psychological Violence and Behavior Problems

Internalizing Behavior Problems. The current study provided the opportunity to explore the variables of interest with entire sibling groups and with the oldest child in each family. These analyses gave important insights into the dynamics of domestic violence within an immigrant Latino family. There is no doubt that psychological violence predicts internalizing behaviors of children, regardless of their birth order. This finding is consistent with previous literature (Edleson, 1999; Kowal et al., 2002). In addition, the role that the perception of fairness plays in the internalizing behaviors of children who witness psychological violence against their mother is an interesting one that had not been reported in the literature. When children perceived their family responsibilities as fair, psychological violence did not appear to affect the children's internalizing behaviors in a significant manner. However, under perceptions of unfair filial responsibility, children reported higher levels of internalizing behaviors when there were higher levels of psychological violence in the home. The filial responsibility scale includes questions regarding children's perceptions of parents' appreciation for the work the children do at home and whether they are asked to do more than their share of work. Children who perceive a lack of fairness may feel as though they are not recognized for their efforts and are powerless to effect change in the household. Thus, under conditions of increasing psychological violence about which there is little they can do, they may experience a sense of helplessness, often accompanied by depression. Symptoms of depression contribute substantially to internalizing behavior problems.

In contrast, fairness may not seem to have the same effect on the oldest child in a Latino family in which there is violence. In our sample the eldest child was more likely to be born in Mexico and thus be more strongly influenced by traditional, hierarchical family roles in which the questions about fairness may not measure the same construct in the sample of eldest children as it measures in more acculturated samples. For example, it may be normative for children with these traditional values to perform many household responsibilities, thus they may not think about issues of fairness concerning these responsibilities.

Externalizing Behavior Problems. In contrast to the findings for internalizing behavior problems, the children's mothers reported higher levels of externalizing problem behaviors in the presence of high levels of psychological violence. This finding is consistent with previous literature (Edleson, 1999; Kolbo and Blakely, 1996). Interestingly, these effects were not found when the eldest child was selected. As previously discussed, in our sample the eldest child was more likely to be born in Mexico and thus be more strongly influenced by traditional, hierarchical family roles that disapprove of externalizing behaviors. The current study did not find the relation between perceived fairness and externalizing problem behaviors in children (regardless of their birth order) that Kowal and colleagues found in their research (2002). This may be due to the fact that the Kowal study differed from the current study on a number of key areas. First, their study was conducted on a primarily Caucasian sample with families that were not affected by domestic violence. It is of importance that Kowal and colleagues (2002) examined perceptions of fairness in the context of preferential treatment of siblings by the parents, whereas the current study examined fairness in the

context of family responsibilities. In our study the construct of fairness may measure the degree to which children feel noticed/acknowledged by their parents. If the child already perceives that he/she is ignored, engaging in externalizing behaviors may be futile. There have been no studies to date examining the relation between children's perceptions of fairness in the context of family responsibilities and externalizing behaviors. Future studies should continue to explore the relation between these variables to determine whether or not this relation exists in the context of Latino families affected by domestic violence.

Physical Violence and Behavior Problems

Internalizing Behavior Problems. Physical violence did not predict internalizing behavior problems in the entire sample; however, when the eldest child was selected high levels of physical violence predicted increased levels of internalizing. There is a possibility that there is an authentic difference between these two samples. Children in the entire sample, which included children who were not first-born, were more likely than the eldest children to demonstrate externalizing behavior. Thus, these children had alternate ways to cope with physical violence in their home. Previous literature on the effects of physical violence has not shown consistent results (Edleson, 1999; Kolbo and Blakely, 1996). An alternate explanation for this difference in the prediction of internalizing behaviors in both samples is the lack of power that may have been present in the entire sample resulting from the small, non-independent sample. This explanation is highly plausible due to the relation between internalizing behaviors and physical violence found in the entire sample during preliminary analyses. The current study did not find the relation between perceived fairness and internalizing behaviors in children

(regardless of their birth order) that Kowal and colleagues found in their research (2002). As previously discussed, this may be due to the fact that the Kowal study differed from the current study on a number of key areas.

Externalizing Behavior Problems. Physical violence did not predict externalizing behavior, regardless of the birth order. As previously mentioned children who live in households where there is physical violence may refrain from externalizing their problems in order to protect their mother from further physical abuse. In addition, in our sample the eldest child was more likely to be born in Mexico and thus be more strongly influenced by traditional, hierarchical family roles that disapprove of externalizing behaviors. Similar to the internalizing behavior problems, this study did not find the relation between perceived fairness and externalizing behaviors problems in children (regardless of their birth order) that Kowal and colleagues found in their research (2002).

Family Patterns

The descriptive data in this study evidenced several resilient families in which all of the children had relatively few behavior problems compared to the rest of the sample. In general, these families had less psychological and physical violence than families in which one or more of the children had externalizing or internalizing behavior problems. One potential explanation for these family patterns is the impact of participation in Caminar Latino, as discussed previously. The resilient families may have been implementing techniques learned during their participation in the intervention program. In addition to resilient families, there were resilient children in families in which other children were reported to exhibit internalizing or externalizing behavior (mixed families). Compared to resilient families, families that were categorized as mixed reported

increased levels of psychological and physical violence. In the current study, these resilient children were not different than the other children in the sample on any of the measured demographic variables or on their perceptions of fairness. Future research should examine these resilient children in order to discover the attributes and coping mechanisms that allow them to thrive in violent households. This information can be used to modify existing interventions used with families that experience domestic violence.

Implications for Practice and Research

The results of this study suggest that the effects of psychological violence on children's internalizing behavior problems differ as a result of their perceptions of fairness with regards to their family responsibilities. It is important to investigate children's perceptions of fairness in more depth and its implications for other outcomes such as academic achievement, relationships with parents, and engagement in at-risk behavior. For example, future research could examine perceptions of fairness in other familial contexts (such as fairness of domestic violence or fairness in general) and examine the implications of birth order and fairness. It would also be informative to examine the impact of fairness in a longitudinal study. It is imperative that future studies continue to examine potential moderators of behavior problems, particularly those that may encourage resilience. Protective processes are important to study in all populations; however, it is extremely important to identify factors that encourage children to adapt in the threatening context of domestic violence. In addition, it is very important to search for moderators of internalizing behaviors (such as birth order, family support, and peer

support) because they are more difficult to detect than externalizing behaviors, which are more overt.

Information from this study and future studies may also be empowering to battered women. In households where there is domestic violence, women often worry about the impact of violence on their children; however, they do not perceive much control over the situation. Regardless of their control in other areas, these women can foster an environment where their children feel more valued by acknowledging the help they receive from their children and request feedback from the children concerning their perceptions of fairness.

Based on the results of this study it seems that physical violence may predict internalizing behavior problems and psychological violence may predict externalizing behavior problems. This information is valuable for application and interpretation purposes. For families who attend Caminar Latino physical violence usually decreases faster than psychological violence (Caminar Latino, personal communication, September 29, 2005). As such the facilitators of the children's groups may detect an increase in children's externalizing behavior as the families continue to attend the intervention group. Also, the Caminar Latino team often uses the children's change in behavior problems as an indicator of the level of violence that is occurring in the families when the parents do not report violence. These findings may help inform these assumptions. For example, an increase in internalizing (such as social withdrawal and sadness) may suggest an increase in physical violence while an increase in externalizing (such as aggression) may suggest an increase in psychological violence.

These findings also have implications for research. For example, several current and past studies have failed to differentiate among the different types of violence witnessed (Smith, Berthelsen, & O'Connor, 1997; Fantuzzo et al., 1991). However, the current findings show the importance of analyzing psychological and physical violence separately. Given the significant correlation between psychological and physical violence it may also be important for future research to look at the unique variance accounted for by each type of violence, in addition to the combined variance accounted for by both types of violence.

Furthermore, it was found that children born in Mexico and the sample of eldest children were less likely to have externalizing problems and household domestic violence was more predictive of internalizing problems. Future studies could test the aforementioned hypotheses concerning more traditional family roles by studying the following factors: length of time in the United States, levels of acculturation, and the degree of hierarchy in the parent-child relationship.

Strengths and Limitations

One of the limitations of this study was the lack of power due to the small sample size and the lack of independence of the original sample. In order to address the concern about the lack of independence, additional analyses were conducted using the oldest child from each family. However, this technique resulted in an even smaller sample size. Although the lack of independence results in decreased variance and statistical power, the use of multiple children in one family is more externally valid. In real life, all of the children within a household are affected by the presence of violence in the household, but it is often the case that not all children within a family are affected in the same manner.

This implies that all of the children in the family should be studied in order to understand the true impact of domestic violence on a family.

Another limitation of this study was the limited generalizability of the findings because the sample was comprised of immigrant, Latino families who attend a weekly domestic violence intervention. In addition, the findings of the smaller sample of eldest children will only be generalizable to eldest child within these immigrant Latino families. Although these findings are not generalizable to a large population, this study extends the literature to include a sample of Spanish-speaking, immigrant Latino families. This study can serve as a base to future research on Latino families that experience domestic violence.

The measurements that were utilized in this study are a strength. Specifically, this study extended the current literature by obtaining preliminary psychometrics on bilingual versions of scales not previously used with children who have witnessed domestic violence. In addition, multiple reporters were used to measure children's behavioral outcomes (children's reports for internalizing behaviors and mothers' reports for externalizing behaviors) allowing for multiple perspectives.

Conclusion

It is apparent that the presence of domestic violence in a household can predict behavior problems in children from Latino immigrant families. This study has extended the domestic violence literature to include immigrant, Spanish-speaking families and has immediate relevance to families that experience domestic violence and the people who work with them. Information from this study can be used with battered women so they can foster an environment where their children feel more valued, which may lead to less

behavior problems. In addition, people who work with children who witness domestic violence may have a better understanding of the behavior problems that they perceive and the possible causes of those problems. This information may be valuable to informally assess changes of violence in the household when none of the family members disclose the necessary information. This study demonstrates the urgent need for future research to distinguish between psychological and physical violence in the household.

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