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INTERGENERATIONAL TRANSMISSION OF VIOLENCE: PARENT-CHILD  
PROFILES AND DATING VIOLENCE IN LATINO ADOLESCENTS

by

REBECCA RODRIGUEZ

Under the Direction of Kevin Swartout, PhD and Julia Perilla, PhD

ABSTRACT

Intimate partner violence (IPV) is a critical public health problem that has a broad range of negative consequences on not only the individuals in the relationship but also on their children. Although Latino adolescents experience dating violence at a higher rate than White adolescents, little research has investigated the risk and protective factors associated with this group. Witnessing domestic violence has been associated to an increased risk in experiencing dating violence as adolescents. The pattern of IPV exposed youth to later experience violent relationships has been described as the intergenerational transmission of violence (ITV).

Although youth exposed to IPV are at an increased risk for experiencing and perpetrating violence in their own relationships, not all do. This dissertation moves research on ITV beyond a deficit focus by using a resilience framework to investigate parenting relationships as protective factors for dating violence. A subsample of data Latino adolescents and their mothers' were analyzed from a larger Welfare, Children, and Families (WCF) study. This study extends previous cross-sectional research by using longitudinal data to assess risk and protective factors when youth were 10-14 years old and its relationship to their own use of violence seven years later. Latent class analysis was conducted to understand the contextual and cultural factors related to the development of adolescent dating violence: acculturation, gender, and positive parent-child relationships were examined as influencing ITV. Three classes emerged that indicate unique combinations of risk and resilience. Two of these classes predicted differential associations with adolescent dating violence. A class indicating moderate-risk/low-protection and mothers with high acculturation was significantly related to increased odds of adolescents experiencing dating violence, both as victims and as perpetrators. A class indicating low-risk/high-protection and mothers with low acculturation significantly predicted increased odds of perpetrating dating violence but no significant relationship was found with victimization. Findings suggest that holistic family based approach to dating violence and adult domestic violence may be most effective for Latino adolescents and their IPV exposed mothers.

INDEX WORDS: Dating violence, Domestic violence, Intimate partner violence, Families, Parenting, Latino, Resilience, Adolescents

INTERGENERATIONAL TRANSMISSION OF VIOLENCE: PARENT-CHILD PROFILES  
AND DATING VIOLENCE IN LATINO ADOLESCENTS

by

REBECCA RODRIGUEZ

A Dissertation Submitted in Partial Fulfillment of the Requirements for the Degree of

Doctor of Philosophy

in the College of Arts and Sciences

Georgia State University

2016

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Rebecca Rodriguez  
2016

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AND DATING VIOLENCE IN LATINO ADOLESCENTS

by

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August 2016

## **DEDICATION**

This dissertation is dedicated to the millions of mothers who have experienced intimate partner violence and yet continue to find strength within and for their children.

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Many thanks are in order to multiple people who have influenced my love for psychology and supported my long journey to the PhD. First, I would like to thank my partner, Sam, for supporting our family while helping me push through the toughest parts of this journey. Many thanks to my mother who provided me with the experiences that would shape my understanding of strengths within Latino families.

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## 1 INTRODUCTION

Children who live in homes where intimate partner violence (IPV) occurs between parents are at an increased risk of perpetrating (Aldarondo, Kaufman-Kantor, Jasinski, 2002; Caetano, Schafer, Clark, Cunradi, & Raspberry, 2000) and experiencing victimization of IPV (Tolan & Guerra, 1994) later in life. The Centers for Disease Control and Prevention (CDC) estimates that one in ten adolescents have experienced being hit, slapped, kicked, or physically hurt by a girlfriend or boyfriend in the past year (Grunbaum, Kann, Kinchen, Williams, Ross, et al., 2002). The intergenerational transmission of violence (ITV), also known as the cycle of violence, has been used to describe the phenomenon where children exposed to violence in their family of origin to later experience IPV (Stith, Rosen, Middleton, Busch, Lundeberg, & Carlton, 2000). Although youth exposed to parental IPV are at an increased risk for experiencing and perpetrating violence in their own relationships, not all do. It is important to understand why some youth do not engage in dating violence. Also neglected from the large body of dating violence literature is an examination of protective factors in ITV. For example, most ITV research assumes that mothers who experience IPV will go on to parent their children harshly (LaVoie, Hebert, Tremblay, Vitaro, Vezina, & McDuff, 2002; Kerr & Capaldi, 2011; Stocker & Richmond, 2007). Indeed, maternal IPV can have negative effects on parent-child relationships (Evans, Davies, & DiLillo, 2008); however, this research has neglected the larger proportion of women who maintain positive relationships with their children despite experiencing IPV (Greeson, Kennedy, Bybee, Beeble, Adams, & Sullivan, 2014; Lapierre, 2008). Positive parent-child relationships in the context of maternal IPV deserve a closer inspection. Lastly, another gap in the literature is an examination of ITV in Latino families. As more interventions for IPV are culturally adapted, it behooves us to understand the specific components that lead to resilience in

ITV for cultural groups such as Latinos. One such approach to strength-based research requires a resilience-based, intersectional examination of ITV protective factors (Martinez-Torteya, Bogat, VonEye, & Levendosky, 2009; Zimmerman, Stoddard, Eisman, Caldwell, Aiyer, & Miller, 2013). This dissertation moves research on ITV beyond a deficit focus by using a resilience framework to investigate protective factors for dating violence. Further, it adds an intersectional lens to aid in understanding resilience to ITV in a cultural specific community. Intersectionality suggests that one's social identities intersect to create unique experiences that cannot be explained by simply one social identity (Crenshaw, 1989). It is critical for explaining disparate outcomes in dating violence among adolescents.

### **1.1 Adolescent Dating Violence**

Dating violence refers to violence that occurs between two persons in a romantic or dating relationship in adolescence and early adulthood (Centers for Disease Control & Prevention [CDC], 2010). Violence between dating partners includes threats or actual acts of physical, psychological, and sexual harm. Physical violence often includes intentionally kicking, punching, and throwing items at one's partner (Saltzman, Fanslow, McMahon, & Shelley, 2002). Psychological violence often precedes physical violence (O'Leary, 1999) and may consist of insulting, degrading, and threatening the partner (Saltzman, Fanslow, McMahon, Shelley, 2002). Sexual violence in dating relationships may include rape, sexual coercion, and sexual harassment (Breiding, Basile, Smith, Black, & Mahendra, 2015). The definitions used by researchers have varied by the forms of violence examined, which has implications on our understanding of the extent of dating violence. For example, researchers examining multiple forms of violence (e.g. physical and psychological) generally report higher prevalence rates of dating violence than

researchers examining only one form of violence (Perilla, Lippy, Rosales, & Serrata, 2011). For this reason it is important to investigate dating violence as a whole.

Studies on dating violence typically report both male and female rates of perpetration and victimization. This may be in part because perpetration and victimization of dating violence are highly correlated for adolescent dating violence (Gray & Foshee, 1997; Linder & Collins, 2005, O'Keefe, 1997). Nonetheless, prevalence studies highlight dating violence as a social problem that affects a substantial portion of teens. For instance, a review of multiple studies found that 9% to 23% of high school teens have reported experiencing physical dating violence and 2% to 19% reported experiencing sexual dating violence (Hickman, Jaycox & Aronoff, 2004). National surveys data of high school students have reported 12-month incidence rates of physical dating violence in 9.9% (Rothman & Xuan, 2014) to 12% (Halpern, Oslak, Young, Martin, & Kupper, 2001) of respondents.

Rates of dating violence vary by gender and race/ethnicity (see Tables 1 & 2). As Table 1 shows, estimates of physical dating violence victimization for females range from 2% to 57%, whereas rates for males range from 4% to 41%. Physical violence perpetration rates range from 11% to 53% for females and 6% to 39% for males. The rates of female physical dating violence perpetration seem to be higher than the rate of male perpetration; however, women are more likely to be injured by violence perpetrated by male partners (Archer, 2000). Differences based on race/ethnicity also exist. Among rates of physical dating violence victimization, rates are lowest among White teens, followed by Latino teens, and African American teens (Ackard, Neumark-Sztainer, & Hannan, 2002; Eaton, Davis, Barrios, Brener, & Noonan, 2007; Howard & Wang, 2003a; Howard & Wang, 2003b; Malik, Sorenson, & Aneshensel, 1997; Rothman, & Xuan, 2014; Silverman, Decker, & Raj, 2007).



Although the studies cited above have found higher rates of dating violence among Latino adolescents when compared to White adolescents, studies focused on dating violence among Latino adolescents are severely underrepresented, with a wide range of rates. For example, a recent study of over 1,500 mostly heterosexual Latino adolescents found a very high rate (19.5%) of dating violence victimization experienced in the last year (Cuevas, Sabina, & Bell, 2014). A report analyzing the 2013 Youth Risk Behavior Surveillance System (YRBSS; Kann, Kinchen, Shanklin, Flint, Hawkins, Harris, et al., 2013) data found a lower rate of physical (10.4%) and sexual (11.5%) dating violence victimization than the rates reported by Cuevas and colleagues. Further, samples of Latino high school students report physical victimization rates from 7.6% to 9% in the last 12 months (Howard, Beck, Kerr, & Shattuck, 2005; Sanderson, Coker, Roberts, Tortolero, & Reininger, 2004). A study examining lifetime prevalence of dating violence perpetration found very high rate (34%) among Latino adolescents. A study of dating violence among 7,970 Latinos in MA produced rates of combined physical and sexual dating violence that were lower, at 10% (Silverman et al., 2007). In sum, rates of dating violence among adolescents vary by gender, race, and ethnicity. Prevalence rates for dating violence among Latino adolescents are mixed. Whether the true rate of dating violence is 10% or 34% for Latino adolescents, findings point to a substantial group of adolescents who experience victimization and perpetration of dating violence.

**Table 1 Physical Dating Violence by Gender**

Study	Sample	Measure	Physical Victimization (%)		Physical Perpetration (%)	
			<u>Female</u>	<u>Male</u>	<u>Female</u>	<u>Male</u>
<b>Lifetime Prevalence</b>						
Ackard, Neumark-Sztainer, & Hannan, (2002)	Nationally representative population-based sample (Commonwealth Fund Survey) of high school students; Majority White; N = 1728	Has a boyfriend or date ever threatened to or actually hurt you physically/sexually?" Lifetime	9.40	3.80	N/A	N/A
Banyard, & Cross, (2008)	7th - 12th grade students in New England; No ethnicity data; N= 2,101	Similar to YRBSS* Lifetime	16.80	17.10	N/A	N/A
Bergman (1992)	Urban, suburban, and rural Midwest high school students; Majority White; N = 631	Has any of the following ever happened to you: been hurt physically? Lifetime	15.70	7.80	N/A	N/A
Halpern, Oslak, Young, Martin, & Kupper (2001)	1994-1995 National Longitudinal Study of Adolescent Health adolescents in grades 7-12; 73.6% White; 13.7% Black; 11.8% Hispanic; N = 7493	Modified CTS Lifetime	12	12	N/A	N/A
Hamby, Finkelhor, & Turner (2012)	Nationally representative survey (NatSCEV) of youth 12 to 17 years old; 57.9% White; 18.7% Black; 18.3% Hispanic; N = 1,680	JVQ Lifetime	4.50	8.30	N/A	N/A
Molidor, Tolman, & Kober, (2000)	High school students 13 to 18 years old in Midwest; 50% White; N = 635	Modified CTS Lifetime	36.40	37.10	N/A	N/A
O'Keefe, M. (1997)	Los Angeles high school students: 53% Latino, 20% White; 51% low SES, 30% middle SES N = 939	Modified CTS Lifetime	N/A	N/A	43	39
Sears, Byers, & Price (2007)	Canadian adolescents; grades 7, 9, & 11; n = 633	7 item CTS Lifetime	29	41	28	15
<b>Incidence</b>						

Avery-Leaf, Cascardi, O'Leary, & Cano, (1997)	High school students; 80% White; N = 193	Modified CTS** Past 12 months	38.4	41.4	52.9	21.4
Cuevas, Sabina, & Bell, (2014)	National sample (DAVILAS) of Latino adolescents; N = 1,525	JVQ*** & CTS Past 12 months	1.80	11.80	N/A	N/A
DuPont-Reyes, Fry, Rickert, & Davidson, (2014)	Latino high school students in NYC. 43% Male; N = 677	CADRI **** Past 12 months	30	28	45	15
Eaton, Davis, Barrios, Brener, & Noonan, (2007)	2003 YRBS; Nationally representative sample of students ages 14 and older 61.5% White; N= 15,123	YRBSS Past 12 months	8.80	8.60	N/A	N/A
Foshee, Linder, Bauman, Langwick, Arriaga, Heath, et al., (1996)	8th-9th grade students in rural North Carolina; N = 1405	Physical dating violence	36.50	39.40	N/A	N/A
Foshee, Linder, MacDougall, & Bangdiwala. (2001)	8 <sup>th</sup> and 9 <sup>th</sup> graders in NC; 51.4% female; 77.3% white; N = 1,186	CTS perpetration	N/A	N/A	25.7	13.9
Grunbaum, Kann, Kinchen, Williams, Ross, Lowry, et al., (2002)	2001 YRBS; Nationally representative sample of high school students; N = 13,601	YRBSS Past 12 months	9.80	9.10	N/A	N/A
Haynie, Farhat, Brooks-Russell, Wang, Barbieri, & Iannotti (2013)	Nationally representative sample of 10th grade students (NEXT Generation Health Study); 57% White; 20% Hispanic; 18% Black; N = 2,203	Modified CTS Past 12 months	9.8	11.7	11.4	6.3
Howard & Wang (2003ab)	a. 1999 YRBSS; 9th - 12th grade females; N = 7434 b. 1999 YRBSS; 9th - 12th grade boys; N = 7824	YRBSS Past 12 months	9.23	9.13	N/A	N/A
Jaycox (2004)	Los Angeles 9th graders; 92% Latino; N = 318	Modified CTS Past 6 months	21	25	N/A	N/A
Rothman, & Xuan (2014)	12 year span of YRBSS data (1999, 2001, 2003, 2005, 2009, 2011); 43% White; 22% Black; 27% Hispanic; N = 103,957	YRBSS Past 12 months	9.20	9.40	N/A	N/A
Sanderson, Coker, Roberts, Tortolero, & Reininger (2004)	Latino high school students in Texas-Mexico border counties; N = 4,525	Similar to YRBSS Past 12 months	8.70	6.40	N/A	N/A

Schwartz, O'Leary, & Kendziora (1997)	Mostly White (90%) high school students N = 228	Modified CTS	N/A	N/A	44	16
Watson, Cascardi, Avery-Leaf, & O'Leary (2001)	New York City high school students from a largely low SES community: 32% White, 43% Hispanic, 16% Black; N = 401	Modified CTS Past 12 months	57	38	N/A	N/A
Wolfe, Scott, Wekerle, & Pittman (2001)	High school students in Ontario; 79% White; N = 1,419	CADRI Past 12 months	19	28	28	11
Yan, Howard, Beck, Shattuck, & Hallmark-Kerr (2010)	Youth ages 11 to 13 residing in suburban Washington, D.C. All Latino; N = 322	YRBSS Past 12 months	14.40	12.90	N/A	N/A

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\* Youth Risk Behavior Surveillance System (YRBSS) Single item asks "During the past 12 months, did your boyfriend or girlfriend ever hit, slap, or physically hurt you on purpose?"

\*\* Conflict Tactics Scales (CTS).

\*\*\*Juvenile Victimization Questionnaire (JVQ)

\*\*\*\*Conflict in Adolescent Relationships Inventory (CADRI)

**Table 2 Dating Violence by Race/Ethnicity**

Study	Sample	Measure	White (%)	Latino (%)	African American (%)
Howard & Wang (2003a)	1999 YRBSS; 9th - 12th grade females; N = 7434	YRBSS Past 12 months	7.43	11.31	14.15
Howard & Wang (2003b)	1999 YRBSS; 9th - 12th grade males; N = 7824	YRBSS Past 12 months	7.31	7.34	10.67
Rothman, & Xuan (2014)	12 year span of YRBSS data (1999, 2001, 2003, 2005, 2009, 2011); 43% White; 22% Black; 27% Hispanic; N = 103,957	YRBSS Past 12 months	7.96	10.48	12.92
Silverman, Decker, & Raj (2007).	1997, 1999, 2001 and 2003 Massachusetts YRBS data; All female; 74% White; 10% Latino; 8% Black; 14+ years old; N = 7,970	YRBS Lifetime	11.77	9.97	12.02
Wolitzky-Taylor, Ruggiero, Danielson, Resnick, Hanson, Smith, . . . Kilpatrick (2008)	2005 National Survey of Adolescents (NSA); 12 to 17 years N = 3,614	Serious dating violence	1.4	1.9	1.7
Watson, Cascardi, Avery-Leaf, & O'Leary (2001)	New York City high school students from a largely low SES community: 32% White, 43% Hispanic, 16% Black; N = 401	Modified CTS Past 12 months	47	41	60

## 1.2 **ITV and Resilience**

While much research has examined the intergenerational transmission of violence (ITV), inconsistencies remain in research linking witnessing parental domestic violence to adolescent dating violence. Some research has not found support for the ITV (Capaldi & Clark, 1998; Hotelling & Sugarman, 1990; MacEwen & Barling, 1988; Simons, Lin, & Gordon, 1998), suggesting that most exposed children do not go on to experience or perpetrate adolescent dating violence. This suggests there may be subgroups of adolescents who are more or less susceptible to ITV. By only focusing on risk factors in parent-child relationships, research has ignored important social contexts that may help to explain different outcomes among subgroups of the population.

An examination of risk and protective factors for dating violence is needed to inform programs that may interrupt the intergenerational transmission of violence. Although risk factors for interpersonal violence have garnered significant attention, less research has been conducted on protective factors (Sabina & Banyard, 2015). Similarly, while most research has focused on the individual level, researchers have begun to examine factors at the other ecological levels that may predict dating violence (Banyard & Cross, 2008; Connolly, Friedlander, Pepler, Craig, & LaPorte, 2010; Morris, Mrug, & Windle, 2015). This section provides a summary of research on risk and protective factors of dating violence with a focus on the relational level. The relational level refers to many family-level contexts, such as parental domestic violence and parent-child relationships that are critical to ITV. At the relational level, parenting competencies, such as parental acceptance (Tajima, Herrenkohl, Moylan, & Derr, 2011), maternal warmth (Harper, Arias, & House, 2003), and maternal authority (Levendosky & Graham-Bermann, 2000), are related to positive adjustment outcomes for youth exposed to IPV. A gap in the literature exists

for research that investigates the relationship between parent-child relationships and dating violence in the context of parental IPV.

### 1.3 Parental Domestic Violence

Central to the ITV hypothesis, witnessing violence between parents has been associated with both an increased risk in perpetrating (Aldarondo et al., 2002; Caetano, Schafer, Clark, Cunradi, & Raspberry, 2000) and being victimized by domestic violence as adults (Tolan & Guerra, 1994). A meta-analysis examining the relationship between witnessing violence as a child and domestic violence have reported effect sizes between  $r=.08$  to  $r=.35$  (Stith, Rosen, Middleton, Busch, Lundenberg, & Carlton, 2000). However, it is important to note that this meta-analysis was limited to studies with married adult couples, thus the small effect size reported may not accurately represent adolescent dating violence. Adolescent dating violence may be different given the shorter time span from exposure to domestic violence to experiencing dating violence when compared to married adult couples. Findings from studies examining adolescent dating violence suggest that exposure to violent parental conflict is associated with an increased risk for dating violence victimization and perpetration in adolescence (Arriaga, & Foshee, 2004; Foshee, Bauman, & Linder, 1999; Jouriles, Mueller, Rosenfield, McDonald, & Dodson, 2012; Malik et al., 1997; Tschann, Pasch, Flores, Marin, Baisch, & Wibbelsman, 2009). A 20-year prospective study of youth found that exposure to domestic violence between parents was a significant predictor of IPV victimization and perpetration in early adulthood (Ehrensaft, Cohen, Brown, Smailes, Chen, & Johnson, 2003). Similarly witnessing interparental violence was a significant predictor of dating violence victimization in an ethnically diverse sample of male and female adolescents (Karlsson, Temple, Weston, & Le, 2016).

#### 1.4 Parent-child Relationship Quality

Family can be a source of strength, providing caring relationships, even when there is violence between adults in the family (Howell, 2011; Ingram, 2007, Martinez-Torteya, et al., 2009). However, research has not directly investigated how positive parent-child relationships may protect against ITV. Findings from research examining direct effects of positive parent-child relationships on dating violence suggest these relationship serve a protective function. For example, higher levels of parental warmth were found to lower the risk of dating violence perpetration among adolescent males (Cleveland, Herrera, & Stuewig, 2003; Simons, Lin, & Gordon, 1998). Maternal warmth is negatively related to dating violence, suggesting a protective function (Furman, Simon, Shaffer, & Bouchey, 2002; Seiffge-Krenke, 2003; Seiffge-Krenke, Shulman & Klessinger, 2001). Studies examining the relationship between positive maternal relationships and dating violence *victimization* are sparse and provide mixed results. A longitudinal study found positive parental-child relationships were related to less dating violence victimization for both males and females (Magdol, Moffitt, Caspi, & Silva, 1998). A recent study with Latino adolescents found that parental caring and communication was related to less physical dating violence victimization for both males and females (Kast, Eisenberg, & Sieving, 2016). On the other hand, a longitudinal study with an all-female high school sample found no relationship between positive parental support and dating violence victimization (Richards, Branch, & Ray, 2014).

Much of the literature examining the relation between exposure to parental IPV and dating violence in adolescence has focused on negative parent-child relationships such as harsh parenting (LaVoie et al., 2002; McDonald, Jouriles, Tart, & Minze, 2009), unskilled parenting (Kerr & Capaldi, 2011), and parent-child hostility (Stocker & Richmond, 2007). This research



generally finds that harsh discipline is associated with dating violence perpetration among boys (Lavoie et al., 2002; Simons, Lin, & Gordon, 1998). Examining the relationship between harsh discipline and dating violence *victimization* has produced mixed results. Cross-sectional research suggests a positive relationship between harsh parenting practices and dating violence victimization (Chiodo, Crooks, Wolfe, McIsaac, Hughes, & Jaffe, 2012; Gover, Jennings, Tomsich, Park, & Rennison, 2011; Windle & Mrug, 2009); however, a longitudinal study suggests this relationship only for dating violence perpetration, not for victimization (Morris et al., 2015). A related factor in the parent-child relationship, parental monitoring, has received more attention as a protective factor against dating violence.

### 1.5 Parental Monitoring

Parental monitoring is described as parental awareness of children's activities and whereabouts (Dishion & McMahon, 1998), and negatively predicts adolescent problem behaviors. Parental monitoring may serve to protect youth from dating violence by limiting the opportunity to engage in violent relationships (Howard, Qiu, & Boekeloo, 2003). Parental monitoring was related to lower physical violence in a sample of Latino adolescents (Kerr, Beck, Shatuck, Kattar, & Uriburu, 2003). Similarly, low parental monitoring was related to an increased risk for perpetrating dating violence among low-income adolescent boys (LaVoie et al., 2002). Among a sample of Latino middle school students, higher levels of parental monitoring were related to lower rates of dating violence victimization (Yan et al., 2010). However, this relationship was only significant for females, not males. A study found that parental monitoring was negatively related to maternal IPV, such that adolescents who had high levels of parental monitoring tended to have a lower likelihood of perpetrating dating violence (Chapple, 2003).

For Latino families, complex associations emerge when examining parental monitoring along with important social characteristics, such as mothers acculturation and adolescent gender. In general, Latino parents have been found to be stricter in their monitoring of their children than White parents (Bulcroft, Carmody, & Bulcroft, 1996; Mogro-Wilson, 2008; Pong, Hao, Gardner, 2005; Varela, Vernberg, Sanchez-Sosa, Riveros, Mitchell, & Mashunkashey, 2004). Monitoring and rules often vary by child gender, with more controls set for girls than boys (Bacallao & Smokowski, 2007; Mogro-Wilson, 2008). In one study, parents and adolescents agreed that stricter rules are in place for daughters than sons, especially when it comes to limiting freedom and dating (Bacallao & Smokowski, 2007). Interestingly, the authors also found that parents suggested increased rules for their daughters as a means to counter “Americanization” – the belief that they were adopting the host culture and losing their Latino culture. This provides some evidence that acculturation may play a role in parental behaviors. Further, Latinas were more likely than their male siblings to be dissuaded from going on social outings with friends and were encouraged to stay home and commit to domestic chores and caretaking of their siblings. The consequences of differential parenting by gender are unclear, but including gender and parental monitoring in dating violence research would provide the ability to understand how parental IPV affects males and females differently (Champion, Foley, Sigmon-Smith, Sutfin, & DuRant, 2008).

Parental monitoring can influence children differently depending on parents’ levels of acculturation. Acculturation, as defined in this study, refers to the change in attitudes, beliefs, and behaviors, due to contact with a culture outside one’s own (Berry, 1997), such as would be expected for immigrant parents. Research on immigrant parenting practices finds that immigrant parents use more parental monitoring when compared to non-immigrant parents (Suarez-Orozco

& Qin 2006; Varela et al., 2004). Parental monitoring and expectations around dating behaviors are influenced by traditional gender role expectations, with less acculturated parents having more traditional general expectations (Haglund, Belknap, & Garcia, 2012). Thus the more traditional cultural beliefs that parents held, the more restricted daughters were in dating (Phinney & Flores, 2002). However, it is interesting to note that while young Latinas may have specific rules against dating, most seem to be dating regardless (Haglund et al., 2012). It may be that girls who are prohibited from dating and are dating without their parents' approval may have less knowledge about unhealthy relationships and less support from parents if they would occur. In this case, increased parental monitoring would limit dating experiences for these girls.

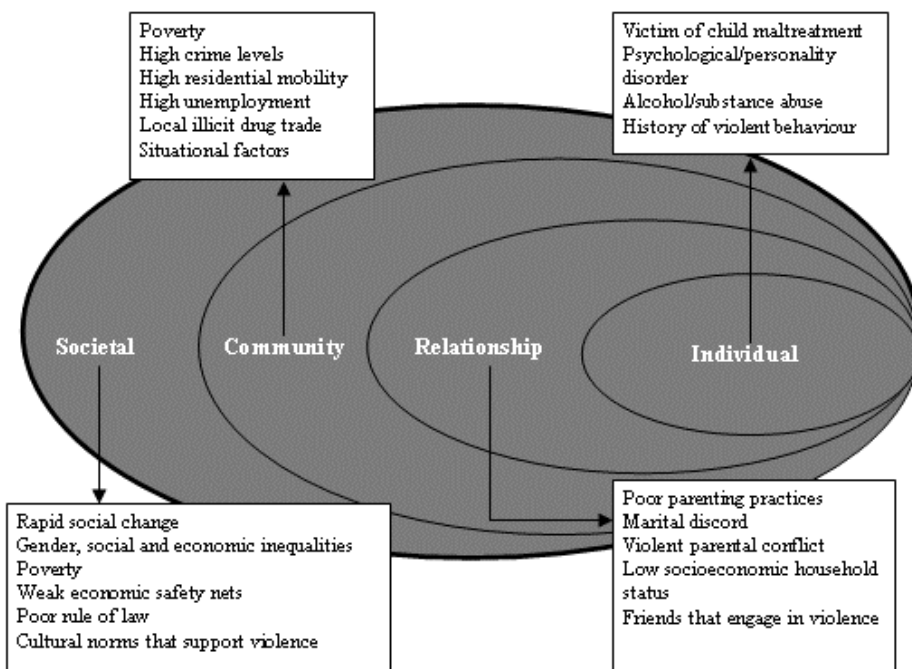
In sum, while prevalence estimates of dating violence in youth tend to vary by background characteristics, available rates indicate that a sizable population of adolescents experience violence in their relationships. Largely missing from the literature summarized above are cultural specific samples such as Latino adolescents. There is some evidence that Latino adolescents experience higher rates of dating violence than non-Latino White adolescents. Yet there is a dearth of research on Latino adolescents' experiences of dating violence or research exploring cultural variables involved in dating violence. The research literature summarized above finds that most research examining ITV has been largely deficit-focused. However, examining research on parenting competencies suggest family level protective factors of positive-child relationships and in parental monitoring. In addition, the research literature for parenting relationships and parental monitoring suggest that these protective factors may vary by gender and acculturation.

## 1.6 Theoretical Orientation

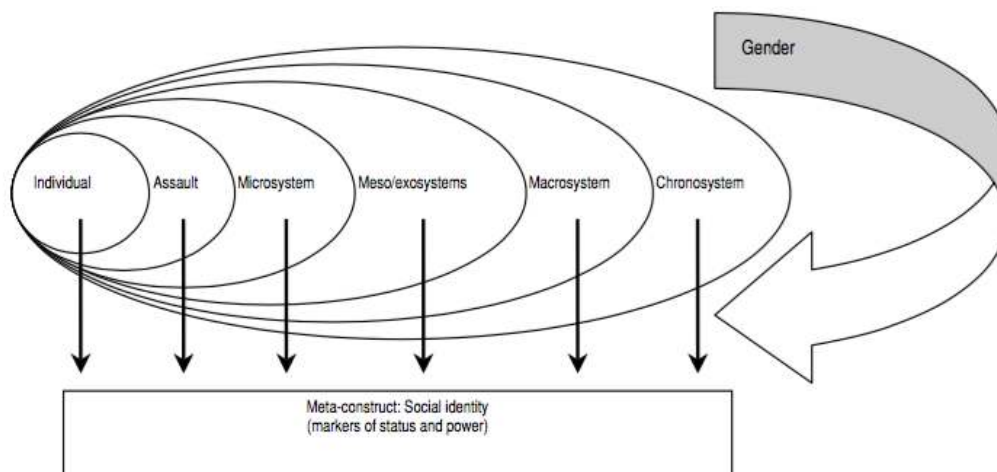
The bio-ecological model (Bronfenbrenner, 1986) emphasizes the need to move beyond the individual level to examine broader contexts in the etiology of dating violence. The World Health Organization (WHO) and the Center for Disease Control and Prevention (CDC) have adapted Bronfenbrenner's ecological model and developed a framework to understand how risk and protective factors influence violence against women (Figure 1; Dahlberg & Krug, 2002). This model explicates how risks may manifest at different levels to influence an adult woman's experience of IPV. These levels include the individual, relational, community, and societal levels. At each level there are multiple risk factors that influence violence against women. This model is directly applicable to both domestic violence and dating violence. As mentioned previously, this study is focused on the relational level, as that is where the many intergenerational processes occur. In fact the WHO model explicates several of these mechanisms. For example, the WHO model proposes that exposure to parental IPV, a key factor in ITV, and poor parenting factors increase the propensity for experiencing IPV. However, the WHO model is limited in that it does not explicate protective factors in tandem with risk. Nor does it include social characteristics, such as gender and race, which have been noted as powerful intersecting influences of violence against women and girls (Bograd, 1999). White (2009) makes the role of gender and other social identities prominent in the model of Gendered Adolescent Interpersonal Aggression (GAIA, see Figure 2). The GAIA model interweaves social identity characteristics as influencing and being influenced by every level of the ecological system. This model lends itself particularly well to intersectionality theory and in turn person-centered methods. Thus this model is useful for an examination of Latino adolescent dating violence as it allows the exploration of the varying within group differences inherent in Latino

populations. Further, it allows culture to be a central influencing factor, as violence can impact multiply marginalized groups differently.

Combined, these models provide a more holistic examination of dating violence within Latino adolescents. The WHO model explicates risks at the relational level, whereas White's model highlights gender other social identities that are core influencers of adolescent dating violence for Latinos. While both models in conjunction are excellent organizing frameworks, the theory behind how the models work can be explained by various facets of social learning and intersectionality theories.



**Figure 1: Ecological framework: Examples of risk factors for IPV (Dahlberg & Krug, 2002).**



**Figure 2: Gender-centered social-ecological model (as cited in White, 2009).**

### **1.6.1 Social theories.**

Various theories have been proposed on the mechanisms through which intergenerational transmission of violence occurs, from social learning theories of modeling behavior (Bandura, 1973) and personality typologies (Holtzworth-Munroe, & Meehan, 2004) to contextual environmental models (Bell & Naugle, 2008). Intergenerational family systems theory is useful in understanding the transmission of violence within families, particularly in explaining the outcome of experiencing violence, whether perpetration or victimization, in youths' future relationships (Rosen, Bartle-haring, & Stith, 2001). In general, it suggests that patterns of behavior learned in the family of origin are often reproduced in one's new relationships. Intergenerational family systems theory has been used to explain many behaviors transmitted across generations including the propensity for children of parents experiencing domestic violence to use violence themselves (Straus, Gelles, & Steinmetz, 1980). More specifically, intergenerational transmission of violence (ITV) describes a pattern of violence where children of parents experiencing domestic violence grow up to perpetrate violence themselves (Mihalic & Elliot, 1997; Straus, Gelles, & Steinmetz, 1980). It has been used to a lesser extent to investigate

intergenerational patterns of victimization. ITV has its origins in social learning theory and in attachment theory.

Social learning theory and attachment theory combined suggest that parental IPV and parent child relationships influence adolescent dating violence. Social learning theory posits that patterns of behavior learned in the family of origin are often reproduced in one's new relationships by way of social modeling (Bandura, 1973; O'Leary, 1988). Thus youth exposed to violence in their home may learn aggression as an appropriate and expedient response to conflict and may respond to conflict in other settings with violence (Foshee, Bauman, & Linder, 1999; Mihalic, & Elliott, 1997). Although witnessing parental IPV may have a direct impact on dating violence via modeling aggressive behavior, attachment theory suggests a more indirect effect of parental IPV on adolescent dating violence by way of disrupting parenting schemas (Levendosky, Lannert, & Yalch, 2012). Levendosky and colleagues propose when women are engaged in abusive romantic relationships, damaged internal working models may develop. In this context, the woman has experienced abuse and trauma in what should have been a safe and trusting relationship. The resulting damaged internal model of relationships may then carry over to influence women's caregiving models, because parent-child relationships are another avenue in which trust and caring would be normally expected. The attachment model is sometimes used to explain why harsh parenting occurs in mother-child relationships in which the mother has experienced IPV. Together, damaged parent relationship models and exposure to parental IPV increase an adolescent's risk for externalizing problems, such as interpersonal aggression (Evans, Davies, & DiLillo, 2008). Thus, the intergenerational cycle of violence is influenced across generations in multiple ways, including exposure to parental IPV and parent-child relationships (Osofsky, 2003). These theories are limited in explaining why the majority of mothers who have

experienced IPV go on to have positive caring relationships with their children. And neither of these theories explains why the majority of adolescents with IPV-exposed caregivers go on to violence-free dating relationships.

### ***1.6.2 Resilience.***

Resilience theory helps to understand why the majority of adolescents do not continue in the intergenerational cycle of violence. Indeed, resilience has been described as “ordinary magic”, a process which occurs more frequently than not (Masten, 2001). Masten (2014) defines resilience broadly as the “capacity of a dynamic system to adapt successfully to disturbances than threaten system function, viability, or development” (p. 10). For this study, focused on individual behavior, resilience is defined as an individual’s capacity for positive adjustment despite exposure to adversity. Thus, two criteria must be met for an individual to be considered resilient: (1) he or she must have experienced adversity or risk, and (2) have maintained positive adjustment under this adversity (Masten, 2001, 2007). One critique of resilience is that it is often ambiguously defined (Luthar, Cicchetti, & Becker, 2000); thus it is important for researchers to clearly conceptualize risk and positive adjustment in studies of resilience.

Risk factors are generally conceptualized as predictors that are statistically related to future negative functioning (Masten, 2007). Risk factors can include negative settings, life events, or processes that represent a threat to the developing individual (Masten, 2007). Central to this study, a risk factor for many children includes living in a home where the mother has experienced IPV. Positive adjustment has been defined in various ways; it has been investigated both as the manifestation of developmental competence and as the absence of maladjustment (Masten, 2014). Developmental competence has been frequently operationalized as attaining some age-appropriate developmental task (e.g., learning to walk and talk and establishing



employment; Masten, 2001). The lack of maladjustment is often operationalized as the lack of the behavior statistically related to the risk under investigation (e.g., psychopathology). The use of the lack of maladjustment as an indication of positive adjustment has been debated in the field (Luthar, Cicchetti, & Becker, 2000); however, maladjustment and adjustment can often be operationalized as two sides of the same coin (Masten, 2012, Kuperminc, Wilkins, Roche, & Alvarez-Jimenez, 2009).

Research on resilience has sought to understand the processes that lead to individual resilience, often by investigating intermediating variables that protect or ameliorate the impact of a risk factor on development (Masten & Tellegan, 2012). These variables are described in the research literature as protective and promotive factors, depending on the way they interact with the risk factor and outcome (Luthar, Cicchetti, & Becker, 2000). Protective factors are defined as variables that have an interactive or buffering effect on the risk factor to lessen the effect of risk on the outcome (Masten & Tellegan, 2012). Promotive factors are defined as variables that have a direct positive effect on the outcome regardless of the level of risk (Narayan, Sapienza, Monn, Lingras, & Masten, 2015). Promotive and protective factors have been operationalized as both individual characteristics (e.g., intellect, temperament, creativity, and, positive coping skills) and external factors (e.g. supportive relationships, environmental resources, and neighborhood safety; Ungar, 2011). The investigation of relationships between specific factors that may buffer risk represents a variable-centered approach.

Person-centered investigations of resilience focus on the whole individual and their unique experiences by examining underlying groups (Swartout & Swartout, 2012). By allowing researchers to understand how people who manifest resilience are different from those who do not, person-centered models can tell us what unique combinations of experiences characterize

resilience. For example, persons with high risk (e.g., growing up with interparental violence) may have other more positive aspects of their lives and may not show their own symptoms of maladjustment. Combined, person-centered and variable-centered methods are powerful tools for researchers to understand how naturally-occurring subgroups of individuals may have unique combinations of risk and protective factors that lead to differential outcomes. This approach has important implications for informing interventions by identifying subgroups of adolescents who are more at risk and targeting them in tailored interventions. Person-centered approaches to resilience would capture individual heterogeneity in their constellation of risk and protective factors related to IPV. This is in line with an intersectional and cultural nuanced understanding of resilience. Critiques of resilience theory argue that resilience cannot occur without consideration of social location such as culture, ethnicity, and gender (Arrington, & Wilson, 2000; Kuperminc et al., 2009; Kirmayer, Dandeneau, Marshall, Phillips, & Williamson, 2011). Intersectionality complements resilience theory, and our understanding of dating violence, as it provides a more holistic understanding of resilience among marginalized communities, such as Latino adolescents.

### ***1.6.3 Intersectionality.***

Intersectionality theory (Crenshaw, 1989) is critical for both explaining disparate outcomes among adolescents and for taking a culturally grounded approach to investigating resilience in ITV. As mentioned in the literature review, variation in rates of dating violence exists across social location, such as race and gender. Intersectionality is defined as the study of overlapping social identities (e.g. class, race, ethnicity, and gender) that combine to create distinct experiences (Crenshaw, 1993). Intersectionality theory has been used to frame domestic violence within a larger system of inequality and patriarchal oppression, which occur

concurrently with multiple marginalized identities such as gender, ethnic minority status, and culture (Perilla, 1999; Sokoloff, 2008). Thus, intersectionality helps to explain how someone's experience of dating and domestic violence is affected by their unique social location, given their multiple marginalized identities. For example, the contexts surrounding DV for a middle class, White, adolescent male are often quite different than those for a low-income, adolescent Latina. An analysis of dating violence without this contextual knowledge overlooks key social contexts that may help explain the subgroup differences that we see in the research literature.

A growing number of researchers utilize intersectionality theory when examining domestic violence in Latino families (Gonzales-Guarda, Florom-Smith, & Thomas, 2011; Szapocznik & Kurtines, 1993). It is at the heart of Latino specific investigations of DV (Serrata, Hernandez-Martinez, Rodriguez, Macias, & Perilla, 2015), and as Perilla (2014) writes, "intersectionalities must be part of our understanding and response to domestic violence, rather than 'controlling for' or ignoring other important elements in the lives of families and communities". Considering intersectionality includes studying how gender, ethnicity, and culture combine to influence ITV. One approach to modeling intersectional variables involves an in-depth, within-group analysis to examine those who are multiply marginalized such as individuals who reflect certain gender and ethnicity combinations (McCall, 2005).

Merging intersectionality with resilience allows for the examination of these social characteristics in tandem with risk and protective factors. As an example, positive parent-child relationships can be considered a protective factor against the experience of adolescent dating violence. Variations in parenting in Latino families often depend on intersectional variables – e.g., the level of parental acculturation and the gender of the child (Bacallo & Smokowski, 2007). This suggests culturally-specific factors that may play a role in ITV (Evans, Davies, &

DiLillo, 2008). The importance of culture in investigations of violence is critical to understanding more proximal processes in the ecological model such as parenting (Chan, Hollingsworth, Espelage, & Mitchell, 2016).

In summary, ITV suggests dating violence may be influenced by maternal experiences of domestic violence and parenting behaviors. Ecological theory provides an organizing framework to focus on the relational level of factors influencing ITV, whereas resilience theory ensures that we take more strength-based perspective when examining ITV. Together, intersectionality and resilience theory guide the understanding of ITV among Latino families. Resilience theory suggests that not all children exposed to domestic violence will develop negative outcomes such as dating violence. Incorporating intersectionality into this dissertation provides the ability to understand, in tandem, the social and protective characteristics related to resilience outcomes in Latino adolescents.

## 1.7 Current Study

The current study is informed by empirical research on the antecedents for ITV in combination with the theoretical models of resilience and intersectionality. Specifically this study examines dating violence in adolescence as one outcome of ITV. Although Latino adolescents experience high rates of dating violence, little research has investigated factors that may prevent dating violence in this culturally-specific group. Aligned with a resilience model, the current study sought to understand how family risk and protective factors in early adolescence relate to dating violence in late adolescence. Protective and risk factors most salient to an attachment perspective of ITV are examined, including the protective factors of maternal monitoring, positive parent-child relationships, and the risk of maternal IPV. Incorporating intersectionality, gender and acculturation variations within each group and how they align with

other risk and protective factors to predict adolescent violence differently are also examined. According to ITV theory, adolescents with high exposure to maternal IPV should have greater odds to perpetrate or become a victim of dating violence. However, when risk experiences are combined with protective factors, such as high in maternal monitoring or warmth, this risk may be mitigated, as would be suggested by a protective model of resilience. As noted in the literature review, parent-child relationship quality is an important promotive factor for adolescents and is one avenue in which resilience or risk occurs to influence ITV. Further, gender and culture may interact with parenting to influence one's experience of resilience. Thus in this study I combine resilience and intersectional approaches to investigate how parenting variables, social identities, gender, and culture combine to understand ITV in Latino adolescents. Thus, the overall research question in this study is: **Given the complex relationships of risk and protective factors along with differences in social characteristics of Latino adolescents, can subgroups of Latino adolescents and their mothers be identified that indicate resilience or risk for ITV?**

This study aims to fill a gap in the literature that predominately focuses on risk factors and is largely limited to cross-sectional research designs. It extends previous cross-sectional research by using longitudinal data to assess risk factors when youth were 10-14 years old, protective factors when youth were 13-17 years old, and dating violence outcomes when youth are 16-21 years old. The timing difference between the assessment of the risk and protective factors allowed for the risk factor, maternal IPV, to have more time to impact parenting behaviors. A focus on family-level factors may inform the development of prevention and intervention programs for families in which inter-parental violence is present.

### ***1.7.1 Approach***

A mixed model using person-centered and variable-centered approaches was used to understand resilience in ITV for Latino adolescents. The heterogeneity of factors predicting dating violence suggests that a person-centered analysis can be useful in distinguishing between adolescents who experience dating violence from those who do not (Bogat, Levendosky, & von Eye, 2005; Swartout & Swartout, 2012). A latent class analysis (LCA) was first used to determine if a sample of Latino adolescents could be categorized into homogenous subgroups based on their risk and protective factors and social characteristics. The LCA was conducted to uncover distinct classes comprised of several risk and protective factors including parent-child relationships, maternal monitoring, and maternal acculturation and adolescent gender. These observed variables were expected to form at least two classes indicating risk or resilience. It was expected that a class with high quality parent-child relationships, high maternal monitoring, and low acculturation may emerge. This class would be considered protective in accordance with the protective nature of these variables as indicated in the literature review. However if two groups emerged both high on maternal IPV, it was expected that they would differ on other facets. Conducting a LCA, rather than traditional moderation approaches, allows for gender and acculturation to combine with parenting characteristics which is consistent with intersectionality theory (Bauer, 2014; Garnett, Masyn, Austin, Miller, Williams, & Viswanath, 2014). In addition, the LCA may capture unique intersections of social identities and parenting characteristics.

Following the LCA, a distal outcome analysis was conducted to understand both if there were differences between the classes and how these classes predicted adolescent dating violence. This constituted using a model based approach where the outcome variable was added into the LCA and a classify-analyze approach which used class-probabilities in a regression analysis. The

different classes of risk and protective factors and social characteristics were expected to have unique associations with Latino adolescent experiences of victimization and perpetration of dating violence. The regression analyses aided in indicating which classes could be considered resilient dependent on the constellation of risk and protective factors within each class and the classes relationship to dating violence. Each class identified would indicate a unique group of experiences rather than assuming that all Latinos experience risk and resilience in the same manner. Similarly, each class that emerged was expected to be related to different experiences with dating violence victimization and perpetration.

## **2 METHODS**

### **2.1 Data**

The data for this investigation are from the Welfare, Children, and Families (WCF) study, also known as the Three-City Study (Winston, Angel, Burton, Chase-Lansdale, Cherlin, Moffitt, & Wilson, 1999). The purpose of the WCF study was to investigate the well-being of low-income families following the welfare reform act of 1996 (Personal Responsibility and Work Opportunity Reconciliation Act). The survey was designed to provide an overview of children's health, behavioral, cognitive, and emotional development, as well as to provide information about the primary caregivers' health, emotional well-being, and social service use. The WCF contains a wealth of data regarding past and current relationship violence along with emotional and behavioral well-being of both the mother and child thus allowing researchers to investigate the dyadic processes related to intergenerational transmission of violence. Further, the WCF includes a large sample of Latino families which allows for researchers to examine some within group variability. Lastly, while prior research with racial and ethnic minority families have been based on non-probability convenience samples and cross-sectional study designs, the WCF study

offers data based on a stratified random sample of families with data collected over three time points. Data was downloaded through the Inter-university Consortium for Political and Social Research website. All data used in this study was obtained de-identified.

## **2.2 Initial Inclusion Criteria and Recruitment**

The WCF data contains a stratified random sample of 2,402 low-income households in three metropolitan areas in the United States: Boston, MA; Chicago, IL; and San Antonio, TX. Multi-stage, stratified, area probability sampling was used to obtain a random sample of households in each city. This procedure is detailed elsewhere (Angel, Curton, Chase-Lansdale, Cherline, & Moffitt, 2009). In sum, households were identified based on clusters of census block groups. Block groups were then chosen by the percentage of families with incomes below the federal poverty line. Within each selected block group, door-to-door screenings of households were conducted to select participants depending on several family characteristics including, racial/ethnic characteristics, income level, welfare receipt, and single or two parent households. Further, families were eligible to participate in the study if they had at least one child between the ages of 0-4 or 10-14 years old at the time of the interview. In the case that parents had multiple children in the target age range, only one child was randomly selected. This sampling procedure resulted in a large sample of low-income families and a high proportion of African American and Latino families. Over 40% of this sample received welfare assistance (Winston et al., 2009).

## **2.3 Assessment and Incentives**

In each household, the primary caregiver and selected child completed a survey consisting of several measures to assess constructs related to welfare reform, childcare, family processes, child and caregiver health, child development outcomes, and contextual measures.



Surveys were administered in-person using an automated computer assisted survey interview technique. Sensitive topics, including maternal IPV, dating violence, and parent-child relationships, were administered via audio computer assisted self-interview. The questionnaire was provided in English or Spanish by respondent's preference. Please see Appendix A and B for full questionnaires. Participants were randomly selected to receive either \$30 or \$70 incentive for participating in the study.

#### **2.4 Subsample Selection for Current Study**

Households were assessed at three time points over 7 years. The first wave of data was collected in 1999, followed by the second wave in 2001, and the third wave was completed in 2006. For these analyses, variables were selected for use from all three time points. Thus three waves of data were merged using SPSS v.18 in order to create one large dataset. After data were merged, a subpopulation of the original sample was selected for analysis. As this study was focused on dating violence among Latino adolescents, only data from youth who reported Latino or Hispanic origin were selected ( $n = 1158$ ). In addition, because of the study focus on mother's acculturation, data were selected to include only adolescents with Latino mothers ( $n = 1137$ ). Lastly, only adolescents who indicated ever having a romantic relationship were included ( $n = 350$ ). Further, 20 adolescents were lost to attrition in wave 2 of the study, which resulted in a sample of 330 Latino adolescents and their mothers available for the present analyses.

#### **2.5 Participants**

The final subsample included 330 adolescents and their caregivers. Youth's caregivers were 330 Latino women including biological parents ( $n = 318$ ), maternal grandparents ( $n = 5$ ), stepparents ( $n = 5$ ), aunts ( $n = 2$ ) and adoptive parents ( $n = 1$ ). The subsample represented all three cities similarly including San Antonio (37.3%), Boston (36.7%) and Chicago (26.1). All

caregivers are referred to as mothers in this study. Youth participants included 330 Latino adolescents (46% male), ages 15-21 years old. Youth were majority Mexican origin, followed by Puerto Rican, and Dominican origins. A small percentage of adolescents were foreign born (13.3%). Mothers were of various Latino origins; the majority were Mexican ( $n = 172$ ), followed by Puerto Rican ( $n = 97$ ), Dominican ( $n = 46$ ), and other mixed Latino origins. See tables 3 and 4 for additional demographic information.

**Table 3 Youth Demographic Characteristics**

Demographic		
	<u>Mean (SD)</u>	<u>Range</u>
Age		
Wave 1	12.01 (1.46)	9-15
Wave 2	13.41 (1.51)	10-16
Wave 3	17.84 (1.5)	15-21
	<u>Frequency</u>	<u>Percentage</u>
Gender		
Male	153	46.4
Female	177	53.6
Latino origin		
Mexican	159	49.8
Puerto Rican	79	24.8
Dominican	38	11.9
Cuban	3	0.9
Other (e.g. Central American, mixed origin)	40	12.5
Foreign born	44	13.3

**Table 4 Mother's Demographic Characteristics**

Variable	<u>Mean (SD)</u>	<u>Range</u>
Age	37.2 (6.96)	22-67
	<u>Frequency</u>	<u>Percentage</u>
Gender		
Female	330	100
Latino origin		
Mexican	165	50
Puerto Rican	84	25.5
Dominican	41	12.4
Cuban	3	0.9
Other (e.g. Central American, mixed origin)	37	11.2
Foreign born	120	36.4
Marital Status		
Married	74	63.7
Not married	209	63.3
Separated	45	13.6
Education		
Less than 12th grade	140	0.42
High school diploma or equivalent	62	0.19
Some college or technical school	68	0.21
Completed college or technical school	60	0.18
English first language		
Yes	120	36.4
No	210	63.6
Acculturation		
Low	133	40.3
High	197	59.7

## 2.6 Measures

The following measures were selected for use in this study based on their theoretical and empirical relevance to adolescent dating violence and after careful consideration of their cultural appropriateness and psychometric properties. Surveys were administered using an automated computer assisted survey interview technique. Measures of more sensitive topics including

maternal IPV, dating violence, and parent-child relationships, were administered via audio computer assisted self-interview. Mothers' measures were all self-reported and include maternal linguistic acculturation and maternal IPV. Adolescents' measures were all self-reported and include gender, dating violence, parent-child relationship quality, and maternal monitoring.

### ***2.6.1 Demographics.***

Basic demographic information was collected as part of the initial interview. For adolescents, the following demographic information was assessed in wave 1 of the study: race, ethnicity, gender, age in years, and birthplace. For caregivers, demographics collected included race, ethnicity, gender, age in years, birthplace, marital status, highest level of education, and primary language. Additionally, information was collected about caregiver's relationship to the focal child.

### ***2.6.2 Maternal IPV.***

Mother's experiences of relationship violence in the past year were measured with nine items drawn from the Revised Conflict Tactics Scale (CTS2; Straus, Hamby, Boney-McCoy, & Sugarman, 1996) at Wave 1 of the study. Items measured physical, psychological, and sexually abusive behaviors received from a romantic partner in the last 12 months. For each item, the respondent was asked to indicate whether each behavior occurred or not in the last 12 months. If they indicated yes, a follow up question assessed the frequency to which the behavior occurred in the last 12 months on a 5-point Likert-type scale from 0 ("never"), 1 ("once or twice") to 5 ("often"). The CTS2 has been used in numerous studies with diverse groups of Latina women, including US born, immigrant, and migrant women (Cavanaugh, Messing, Amanor-Boadu, O'Sullivan, Webster, & Campbell, 2014; Hazen & Soriano, 2007). Further the Spanish version

of the CTS2 was found to have excellent reliability and construct validity among 1,266 Spanish speaking women (Calverte, Corral, & Estevez, 2007).

The CTS2 can be computed to provide two different scores, one indicating prevalence and the other chronicity (Straus, 2004). The chronicity score measures the frequency in which participants experienced violence. This score is limited in that it should only be computed for the small portion of the sample that experienced violence (Straus, 2004). On the other hand, a prevalence score can be computed for all respondents and indicates whether or not any of the behaviors occurred in the last year. This allows researchers to examine responses for those who indicated not experiencing any violence. A prevalence score is selected for use in this study, as it is equally important to have a sample that consists of cases in which violence was not experienced as well as cases in which violence was experienced. Thus a prevalence score was computed by first assigning participants a value of (1) if they had experienced the behavior in the last 12 months and (0) if they had not for each of the 9 items. Together these 9 items had strong reliability (Chronbach's  $\alpha = .90$ ) therefore an average score was computed if 6 out of 9 items were answered. Averaging the items allowed for cases to be retained if 3 or fewer items were missing values and is one of the procedures recommended by the author (Straus, 2004) to deal with missing data. Higher scores reflect higher numbers of IPV experiences in the past year.

### ***2.6.3 Parent-child relationship quality.***

The Inventory of Parent and Peer Attachment (IPPA; Armsden & Greenberg, 1987) was used to measure mother-child relationship quality at wave 2 of the study. The IPPA has been used with Latino youth and has shown adequate reliability in previous studies (de Guzman & Carlo, 2004; de La Rosa, Huang, Rojas, Dillon, Lopez-Quintero, Li, & Ravelo, 2015; Peacock, McClure, & Agars, 2003). Youth answered 12 items on the extent of trust, communication, and

warmth in their relationships with their mothers on a 5-point scale from 1 (“never true”) to 5 (“always true”). The IPPA includes two subscales: “warmth and communication” and “anger and alienation”. Example items from the warmth and communication subscale included, “I get a lot of attention from my caregiver” and “I trust my caregiver”. Examples items from the anger and alienation subscale included “I feel angry with my caregiver” and “My caregiver doesn’t understand what I’m going through these days”. In these items, caregiver was substituted for mother or grandmother, as appropriate. For the warmth and communication subscale items, mean scores were only calculated if four of the six items had valid responses. Higher scores represented higher ratings of positive relationship quality. For the anger and alienation subscale items, mean scores were calculated if four of the six items had valid responses. Higher scores represented higher ratings of negative relationship quality. Both the warmth and communication (Chronbach’s  $\alpha = .80$ ) and the anger and alienation (Chronbach’s  $\alpha = .73$ ) subscales had good internal consistency.

#### ***2.6.4 Maternal monitoring.***

Adolescents answered five items about their perceptions of monitoring by their mother at wave 2 of the study. Items included questions about their mother’s knowledge of their whereabouts, mother’s awareness of their friendships, and about how they spent their free time. For example, youth were asked, “How much does your relative know about who your friends are?” and “How much does your relative know about where you are during the day when you’re not at school or at work?” Youth rated mother’s awareness from 1 (“doesn’t know”) to 3 (“knows a lot”). All items were first recoded by dividing each item by the number of response options (i.e. 3). Then mean scores were computed if at least 3 out 5 items were present. This computation is

recommended by the author (Steinberg, 1991). The scale had good internal consistency and reliability (Cronbach's  $\alpha = .77$ ). Higher scores reflect higher maternal monitoring.

### ***2.6.5 Maternal linguistic acculturation.***

Maternal linguistic acculturation was assessed by a measure of English language proficiency as a proxy measure for acculturation. First mothers were asked their primary language. Of those who answered that Spanish was their primary language, three additional questions determined how well mothers could read, write, and speak English with response options ranging from 1 ("not at all") to 4 ("very well"). First all three questions were averaged so that higher mean scores reflect higher English language proficiency. Next, similar to previous research (Loukas, Suizzo, & Perlow, 2007), a dichotomous variable was created to indicate high and low acculturation groups. The low acculturation group consisted of mothers with mean scores under 3. Mothers with a mean score of 3 or more, indicating a high level of English proficiency, were assigned to the high acculturation group. Additionally, mothers who answered that English was their first language were also assigned to the high acculturation group. Dichotomizing the variable rather than using the variable as continuous allowed me to include data from Latina women who indicated English as their first language. While this was a measure of only one facet of acculturation, linguistic acculturation is important in the context of IPV as research finds that language access is important for accessing resources for IPV among Latina women (Rizo & Macy, 2011).

### ***2.6.6 Adolescent dating violence.***

Adolescent dating violence was assessed in the final wave of data collection (Wave 3). The CTS2 has been used in studies examining violence among Latino adolescents and young adults (Cervantes, Duenas, Valdez, & Kaplan, 2006; Newman, & Campbell, 2011, Toews &

Yazedjian, 2014). In addition, its cross-cultural construct validity and reliability was found to hold across international samples of college students, including among several US-Mexico border states (Straus, 2004). Similar to the measure of mother's IPV, the Revised Conflict Tactics Scale (CTS2; Straus et al., 1996) was used to measure adolescents' dating violence victimization. However, it was different in two notable ways. First, the referent period was lifetime experience of dating violence, secondly the adolescents were not asked about the frequency in which each behavior occurred. In addition to assessing victimization, adolescent also answered a companion scale for perpetration. Adolescents answered 9 items measuring physical, psychological, and sexual dating violence experienced in a romantic relationship over their lifetime using yes (1) or no (0) responses. Similar items were asked to measure perpetration. For example an item measuring victimization was, "In any romantic relationship you've had, has your partner ever threatened to hit you?" The companion item asked to assess perpetration was, "In any of your romantic relationships, have you ever threatened to hit them?" For both victimization and perpetration measures, one item was dropped that asked if the partner had ever threatened to take away their children. This item was dropped from the analysis given the very low number of adolescents with children. Similar to maternal IPV, a prevalence score was computed to by creating a mean score of the remaining 8 items if 6 out of 8 items were present. These 8 items had strong reliability for both victimization (Cronbach's  $\alpha = .85$ ) and perpetration (Cronbach's  $\alpha = .78$ ). Prevalence scores were then computed for each scale following Straus's (2004) recommendation where 0 indicated no experience and 1 indicated having experienced dating violence. This method was used because a primary aim of this study is predict the odds of dating violence by latent class.



## 2.7 Data Analysis

The primary analysis for this study consisted of a latent class analysis (LCA) using continuous and categorical indicators. LCA is a multivariate statistical model that uses a probabilistic clustering approach to identify subgroups (classes) of individuals that are similar to each other across a number of different observed variables (indicators) and that are at the same time different from other classes (Vermunt & Magidson, 2002). The LCA technique assigns individuals to various classes based on the patterns of responses of the observed variables and the probability of being assigned to each class. LCA allows for qualitative differences to emerge between groups of individuals, such that individuals may have high scores on one variable and a low score on others.

Mplus version 7 was used to conduct the LCA using the default settings (Muthen & Muthen, 2015). Mplus uses full maximum likelihood estimation with robust standard errors to estimate model parameters. LCA assumes that any relationships between two observed variables are accounted for by the latent class (Hagenaars & McCutcheon, 2002). In Mplus, the default LCA model freely estimates latent class means and fixes the covariances at zero (Muthen & Muthen, 2015). Model parameters in LCA include latent class and conditional response probabilities. The latent class probability is the probability that a case will occur in a certain class. The conditional response parameter in LCA is the probability that a member of a particular latent class will be at a certain level of an indicator variable. For binary indicators, this number is a proportion; for continuous indicators, this number includes average class means. Graphs and tables with model response parameters were created to aid in interpreting each solution and examining theoretical meaning.

LCA involves running multiple class models and examining each solution in comparison to other models. The final number of classes was selected based on goodness of fit indices, theoretical meaning, and model stability (Nylund, Asparouhov, & Muthén, 2006). Model fit statistics included examining the Akaike Information Criterion (AIC; Akaike, 1974) and the Bayesian Information Criteria (BIC; Schwartz, 1978) to determine the best fitting model. In general lower values indicate a better fitting model (Hagenaars, & McCutcheon, 2002). The entropy value indicates how well classes can be distinguished (Ramaswamy, DeSarbo, Reibstein, & Robinson, 1993). This value ranges from 0-1 with higher values indicating better fit. The Lo-Mendel-Rubin adjusted likelihood ratio test (aLMR; Lo, Mendell, & Rubin, 2001) was also examined. The aLMR tests for the best fitting model by comparing the number of selected latent classes ( $k$ ) to  $k-1$  classes. A significant  $p$ -value indicates that the model with  $k$  classes fits the data better when compared to the model with  $k-1$  classes. The aLMR test is recommended over the standard likelihood ratio test (LRT) as the LRT is more likely to overestimate the number of classes (Nylund, Asparouhov, & Muthén, 2006).

Once the number of classes was identified, tests to examine the predictive relationship of latent class probabilities on the distal outcome were conducted. Two ways have been typically used to examine distal outcomes, including the classify-analyze approach and the one-step approach. In the classify-analyze approach researchers first estimate the best fitting LCA model and then use the class assignments from the model to conduct post-hoc analyses. This is in contrast to the single-step approach in which researchers add the distal outcome variable into the LCA model along with the indicator variables. Most researchers contend that a single-step approach to estimate distal outcomes in relation to class membership is usually better than using a classify-analyze approach because it avoids distorted estimates and incorrect standard errors

associated with treating class membership as an observed rather than an estimated variable (Clark & Muthén, 2009). Treating class membership as an observed variable is problematic because a LCA assigns class membership based on estimated probabilities. In models with imperfect assignment (entropy < 1.00), each case is assigned a probability of belonging to each class with a certain margin of error. The single-step approach avoids this problem by estimating the LCA and the distal outcome in one step. However the single-step approach has the potential to shift the original latent classes (Clark & Muthén, 2009). The shift can become so flagrant that the original class solutions no longer have the same meaning. Thus alternative methods have been investigated to understand the impact on LCA solutions when adding a distal outcome variable and several approaches have been developed to remedy this issue, including: the pseudo class method (Wang, Brown, Bandeen-Roche, 2005), the classification-error corrected method (DE3STEP; Asparouhov & Muthen, 2014), Lanza's distal as covariate method (DCON, Lanza, Tan, & Bray, 2013) and the measurement error weighted method (BCH; Bakk & Vermunt, 2014). A discussion of the technical aspects of each procedure is beyond the scope of this study; however, each procedure attempts to take into account the error in assigning posterior class probabilities. The DCON approach was selected because it did not change the classes and it does not assume equal variance across the classes (Asparouhov & Muthen, 2014). Thus DCON was used to calculate and class membership probabilities were extracted for the logistic regression analyses.

After selecting the best-fitting LCA model either mean comparisons tests or regressions are used to interpret the differential impact of class assignment on the distal outcome. For this study a mean comparison test was conducted using the DCON method followed by a logistic regression analysis to understand how the different classes predict dating violence. The mean

comparison tests were conducted first to understand if classes differed across outcomes. The DCON method allowed for an interpretation of mean differences without changing the class assignments and works best when entropy is high ( $>.60$ ; Asparouhov & Muthen, 2014). A logistic regression was chosen because the focal outcome variable, dating violence, was dichotomous. One of the primary aims of the study was to test adolescent dating violence incidence, i.e. whether or not adolescents experienced dating violence victimization and perpetration dependent on their latent class assignments. To test this research aim, logistic regressions were conducted using the probabilities of class membership as the predictor variable and each dating violence outcome as the dependent variable. Estimated class probabilities rather than most likely class membership were used in the logistic regression because this approach leads to less biased regression coefficients (Clark & Muthen, 2009) Thus two logistic regressions are run for each latent class. The logistic regression provides odds ratios that can be used to predict the odds of experiencing dating violence victimization and perpetration based on latent class assignment.

### **3 RESULTS**

#### **3.1 Preliminary Data Analyses**

All variables were visually inspected for potential outliers and erroneous values, and all values fell within the expected values for each scale. Data were checked for missingness at the item level, and only a small number of missing data were found ( $< 1\%$ ). LCA employs a full information maximum likelihood (FIML) method to handle missing data on indicators of class membership. Next, data were converted to scale scores as indicated above and all scales had good reliability. See table 5 for psychometric properties of all scales. Since latent class analysis uses ML estimation, data were inspected for multivariate normality by examining univariate



Victimization	8	.85	330	.11	.21	0 – 1	0 – 1	2.15	4.32
Perpetration	8	.78	330	.09	.16	0 – 1	0 – .75	1.90	2.61

### 3.2 Latent class analyses.

In order to determine the best fitting model, a one-class model was fit along with a series of mixture models, including two-, three-, and four- class models. In addition a five-class model was attempted but had difficulty replicating log-likelihood values, which is indicative of decreased model stability (Geiser, 2012). The model fit statistics for each model are provided in Table 6 and were used to compare each class solution. Each class solution is summarized below followed by an interpretation of each of the classes. Overall sample means and class means are used to aid in interpretation of the classes.

**Table 6 Comparison of Model Fit Indices for Class Solutions**

Indicator	Number of Classes			
	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>
Log likelihood	-1221.98	-1077.86	-1033.11	-996.61
# Parameters	10.00	17.00	24.00	31.00
AIC	2463.96	2189.72	2114.22	2055.21
BIC	2502.85	2254.30	2205.40	2172.98
aBIC	2471.13	2200.38	2129.27	2074.65
Entropy	NA	0.86	0.83	0.86
aLMR <sup>1</sup> LRT	NA	212.62	87.35	71.26
p value		0.00	0.03	0.08
<u>Final class proportions based on estimated model</u>				
	1	0.80	0.17	0.02
	2	0.20	0.24	0.18
	3		0.59	0.55
	4			0.25
	5			

<sup>1</sup>Lo-Mendell-Rubin adjusted test

<sup>2</sup>Parametric bootstrapped likelihood ratio test

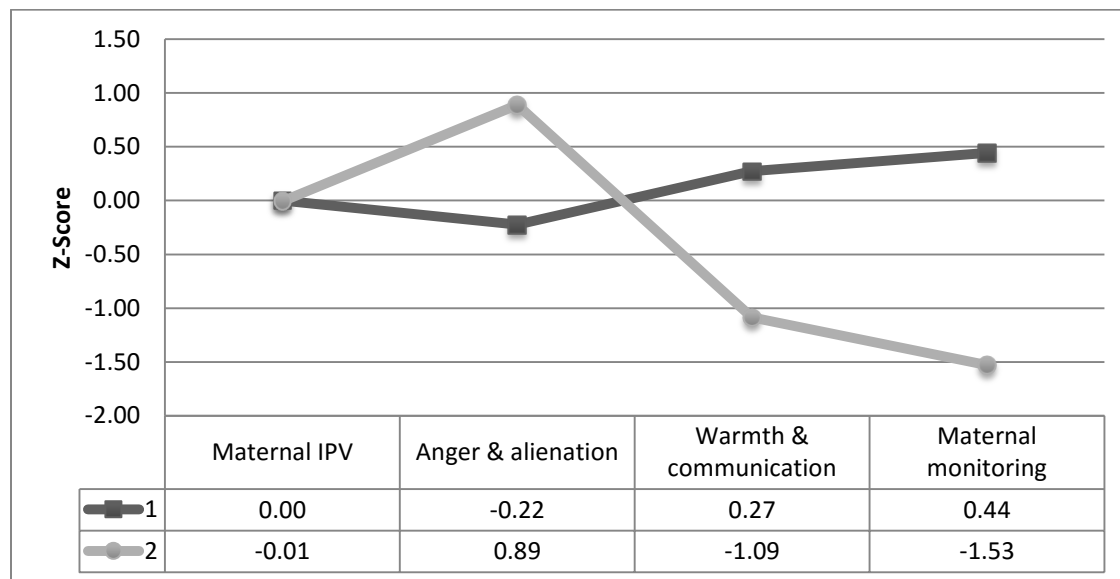
### 3.2.1.1 Two-class solution.

The AIC, BIC, and adjusted BIC values are listed in Table 6 and were used to compare the model fit between the various class solutions. The aLMR test statistic was significantly different from zero, indicating that the two-class model provided a better solution than the one-class model. The posterior probabilities for class assignment among the two-class solution ranged from 0.92-0.97, indicating high agreement between probable and actual class assignment (Table 7). The entropy value, a statistic of how well the model differentiates the classes, was high (.86).

Class 1 was the largest class and included 263 adolescents (80%). Class 2 included 66 adolescents (20%). Standardized means for each class are graphed in figure 4 and are provided to aid in interpretation. For the two-class solution, the differences were driven by the parent-child relationship variables (Table 7). Class one had lower anger and alienation, higher warmth and communication, and higher maternal monitoring than class two. The two classes were similar in terms of child gender and maternal acculturation level. There was no apparent difference in the mean score of maternal IPV between the two classes.

**Table 7 Means and Proportions for 2-Class Model**

Variable	Overall Sample	Classes	
		1	2
<u>Proportions</u>			
Child gender			
Male	0.46	0.47	0.44
Female	0.54	0.53	0.56
Maternal acculturation			
Low	0.40	0.40	0.40
High	0.60	0.60	0.60
<u>Means</u>			
Maternal IPV	0.30	0.31	0.30
Anger & alienation	2.42	2.22	3.19
Warmth & communication	4.04	4.26	3.18
Maternal monitoring	0.87	0.92	0.65
<u>Average class probabilities</u>			
	1	0.97	0.03
	2	0.08	0.92



**Figure 3: Standardized Means for 2-class Model**

### 3.2.1.2 Three-class solution.

The BIC and the AIC for the three-class model were lower than those in the two-class model indicating that the three-class model was a better fit (see Table 6). Further, the aLMR was significant ( $p < .05$ ), providing further support that the three-class model was a better fit to the data than the two-class solution. However, the posterior probabilities were slightly lower (ranged from 0.88-0.94) in the three-class solution compared to the two-class solution. The entropy value for the three-class model was slightly lower than the entropy value for the two-class model (.83 vs. .86) but it indicated good class separation.

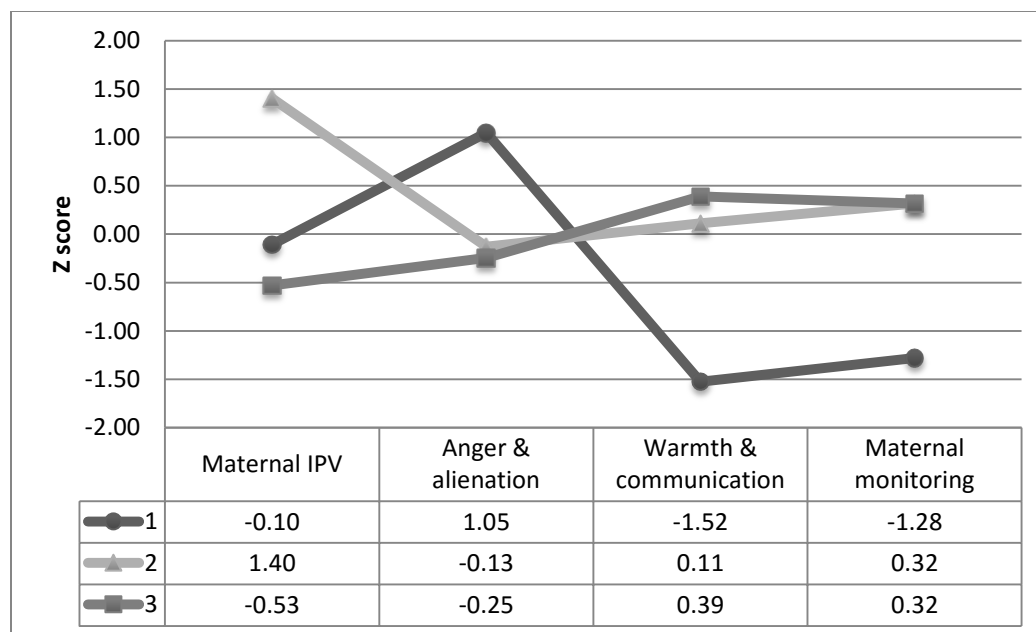
Class 1 consisted of 56 adolescents (17% of the sample), class 2 included 78 adolescents (24%), and class 3 included 196 adolescents (59%). The classes for the three-class model were markedly different in terms of the degree of maternal IPV experienced (Table 8, Figure 5). Class 1 had a moderate mean score of maternal IPV, high anger and alienation (1 *SD* above the sample mean), low warmth and communication (1.5 *SD* below the mean), and low maternal monitoring



(over 1 *SD* below the mean). Class 1 has a high proportion of mothers in the high versus the low acculturation group. It also has a high proportion of female (60%) adolescents than male adolescents. Class 2 had the highest mean score of maternal IPV (nearly 1.5 *SD* above the sample mean) but low anger and alienation, high warmth and communication, and high maternal monitoring. Class 2 has the highest proportion of mothers in the high acculturation group (86%) and had more female (57%) than male adolescents. Class 3 had the lowest mean score of maternal IPV (.5 *SD* below the mean), low anger and alienation, high warmth and communication, and high maternal monitoring. Class 3 had slightly more mothers in the low acculturation group (52%) than the high acculturation group and about equal proportion of female (51%) and male adolescents

**Table 8 Means and Proportions for 3-Class Model**

Variable	Overall Sample	Classes		
		1	2	3
<u>Proportions</u>				
Child gender				
Male	0.46	0.41	0.43	0.49
Female	0.54	0.60	0.57	0.51
Maternal acculturation				
Low	0.40	0.36	0.14	0.52
High	0.60	0.64	0.86	0.48
<u>Means</u>				
Maternal IPV	0.30 (.33)	0.27	0.77	0.13
Anger & alienation	2.42 (.87)	3.33	2.30	2.20
Warmth & communication	4.04 (.79)	2.83	4.13	4.35
Maternal monitoring	0.87 (.14)	0.69	0.90	0.90
<u>Average class probabilities</u>				
	1	0.88	0.04	0.08
	2	0.02	0.92	0.06
	3	0.03	0.04	0.94



**Figure 4: Standardized Means for 3-class Model**

### 3.2.1.3 Four-class solution.

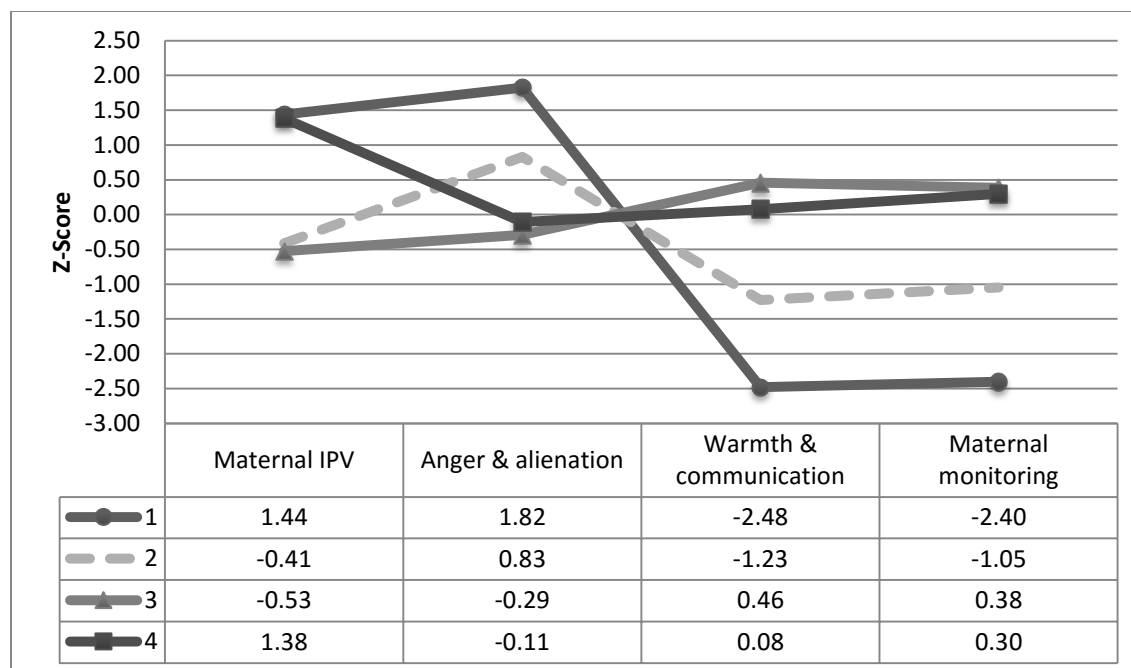
The BIC and the AIC for the four-class model were lower than those in the three-class model indicating that the four-class model was a better fit to the data (see Table 6). However, the aLMR test statistic was not significantly different from zero ( $p = .08$ ), indicating that the four-class model did not fit the data significantly better than the three-class model. The posterior probabilities for class assignment among the four-class model ranged from 0.88-0.97. The entropy value (.86) for the four-class model was slightly higher than the entropy value for the three-class model (.84).

The four-class solution was characterized by differences in the combination of mothers IPV and mother-child relationship quality. The smallest class ( $n = 7, 2\%$ ), class 1, was characterized by high maternal DV and poor mother-child relationship quality (as indicated by low warmth and communication and high anger and alienation). Class 1 also had the lowest maternal monitoring of all four classes. In examining their social characteristics, class 1 also had the highest proportion of mothers with low acculturation and all female adolescents. Class 2 ( $n =$

57, 17%) was characterized by a low mean score of maternal IPV, high anger and alienation, low warmth and communication, and low maternal monitoring. More mothers in this class belonged to the high acculturation group and the adolescents were equal male and female. Class 3, the largest class (n = 182, 55%), was marked by low maternal IPV, low anger and alienation, high warmth and communication and high maternal monitoring. Class 4 (n = 84, 25%; Table 10) was high on maternal IPV but had positive mother-child relationship as indicated by low anger and alienation and high warmth and communication. Class 4 for also had the largest proportion of highly acculturated mothers and slightly more females than males were represented in this group.

**Table 9 Means and Proportions for 4-Class Model**

Variables	Overall Sample	Classes			
		1	2	3	4
<u>Proportions</u>					
Child gender					
Male	0.46	0.00	0.49	0.49	0.44
Female	0.54	1.00	0.51	0.51	0.56
Maternal acculturation					
Low	0.40	0.67	0.36	0.53	0.15
High	0.60	0.33	0.64	0.48	0.85
<u>Means</u>					
Maternal IPV	0.30	0.78	0.16	0.12	0.76
Anger & alienation	2.42	4.01	3.14	2.16	2.32
Warmth & communication	4.04	2.09	3.07	4.40	4.11
Maternal monitoring	0.87	0.53	0.72	0.91	0.90
<u>Average class probabilities</u>					
	1	0.97	0.03	0.00	0.00
	2	0.00	0.88	0.11	0.02
	3	0.00	0.03	0.94	0.03
	4	0.00	0.03	0.05	0.92

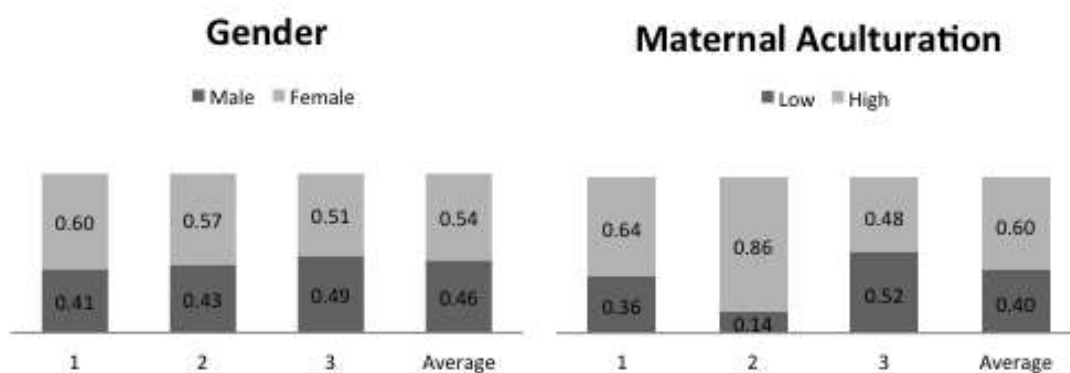


**Figure 5: Standardized Means for 4-Class Model**

### 3.2.2 Class Descriptions.

Overall, the conceptual and statistical evidence suggested that the three- class model had the most accurate and conceptually-significant classification. The three-class model fit significantly better than the two-class model while the four-class model did not fit the data significantly better than the three-class model. Further, the classes for the three-class model are congruent with research on parenting and maternal IPV. Class 1 consisted of adolescents whose mothers experienced a moderate level of IPV and who reported negative relationships with their mothers and low maternal monitoring. Thus class 1 is described as a “moderate-risk/low-protective” class. Class 2 consisted of adolescents whose mothers experienced high IPV yet who reported positive parenting relationships and high monitoring. This combination of markers suggests a “high-risk/high-protective” class. Adolescents in this class had mothers with high experiences of IPV, generally positive relationship with their mothers, and high maternal monitoring. Also for this class maternal warmth and the high maternal monitoring could be

considered promotive factors rather than protective factors. Class 3, the largest of the 3 classes, consisted of adolescents with mothers who experienced low IPV, and who reported positive relationships with their mothers along with high maternal monitoring. This class could also be described as the normative class as it was the largest class and had very low risk factors and generally high positive factors. Class 3 is described as the “low-risk/high-protective” class. Examining the gender proportions for each class, we see that there were not big differences in the proportion of males and females between the classes. For maternal acculturation there were apparent differences between the different classes with class 2 having the greatest proportion of high-acculturated mothers (see Figure 6).



**Figure 6: Intersectional Variables for 3-Class Model**

### 3.3 Distal Outcome Analyses

Following the LCA, chi-square difference tests were run to examine mean differences among the outcomes of interest, adolescent dating violence victimization and perpetration. The DCON Auxiliary command in Mplus was added to the three-class solution syntax to conduct pairwise comparisons of the class means for each hypothesized outcome. Mean scores for perpetration and victimization are provided in Table 10 and results of the DCON chi-square difference tests are presented in Table 11. For both adolescent dating violence victimization and

perpetration the overall chi-square was significant ( $p < .05$ ). There were significant mean differences between class 1, the “moderate-risk/low-protective” class, and class 3, the “low-risk/high-protective” class, for both victimization and perpetration. No other significant differences were found between the classes. Significant mean differences suggest that we can examine the predictive validity of the classes.

**Table 10 Dating Violence Means for Each Class**

	Class		
	1	2	3
Dating Violence			
Victimization	0.20	0.12	0.09
Perpetration	0.14	0.11	0.06

**Table 11 Pairwise Comparisons Equality Test of Means**

Dating Violence		Comparison Tests			
		Overall	1 vs. 2	1 vs. 3	2 vs. 3
Victimization	$\chi^2$	8.68	2.62	7.79	1.80
	p-value	0.01	0.11	0.01	0.18
Perpetration	$\chi^2$	9.99	1.03	7.55	3.81
	p-value	0.01	0.31	0.01	0.05

Regression analyses were conducted to examine the predictive validity of latent class membership on dating violence outcomes. Cross-tabs are provided for descriptive information in Table 15. Logistic regressions were run using the probabilities of class membership as the predictor variable and each of the dating violence outcomes (victimization and perpetration) as

the dependent variable. This resulted in 6 logistic regressions and the results are presented in Table 12. In a traditional logistic regression a one-unit change in the predictor is related to a change in the estimate. In the class probability based logistic regression, the overall likelihood of being in each class as opposed to every other class is related to the change in the outcome. The probability of being in class 1, the moderate-risk/low protective group, significantly predicted victimization,  $\beta = 1.04$ ,  $SE = .34$   $p < .0$ , and perpetration,  $\beta = 0.87$ ,  $SE = .34$ ,  $p = .01$ . Such that an individual highly likely to be a member of this class ( $P = 1$ ) was 2.84 times as likely to experience dating violence victimization and 2.39 times as likely to perpetrate dating violence compared to an individual not likely to be a member ( $P = 0$ ). The probability of being in class 2, the high-risk/high-protective class, did not significantly predict victimization,  $\beta = -0.39$ ,  $SE = .32$ ,  $p = .23$ , or perpetration,  $\beta = 0.14$ ,  $SE = .31$   $p = .67$ . The probability of being in class 3, the low-risk/high-protective group, did not significantly predict victimization  $\beta = -0.36$ ,  $SE = .23$ ,  $p = .18$  but did significantly predict lower perpetration,  $\beta = -0.64$ ,  $SE = .27$ ,  $p = .02$ . Individuals with a high probability of being in the low-risk/high-protective class were .47 times less likely to perpetrate dating violence than those with a low probability.

**Table 12 Logistic Regression Analysis**

	$\beta$	SE	Wald $\chi^2$	p-value	OR	OR 95% CI
Victimization						
Class 1	1.04	0.34	9.63	<b>0.00</b>	2.84	1.47-5.49
Class 2	-0.39	0.32	1.44	0.23	0.68	0.36-1.28
Class 3	-0.36	0.27	1.85	0.17	0.70	0.41-1.17
Perpetration						
Class 1	0.87	0.34	6.56	<b>0.01</b>	2.39	1.23-4.66
Class 2	0.14	3.13	0.19	0.67	1.15	0.62-2.12
Class 3	-0.64	0.27	5.47	<b>0.02</b>	0.53	0.31-0.90

**Table 13 Cross-Tabs: Frequency of Dating Violence by Class**

Latent Class	Victimization		Perpetration	
	No	Yes	No	Yes
1	30	26	32	24
2	54	20	51	23
3	139	59	151	47
Total	223	105	234	94

## 4 DISCUSSION

The current study used a strength-based approach to understand the intergenerational transmission of violence among Latinos. The aim of this study was to examine the unique combinations of parent-child relationships, maternal IPV, along with maternal acculturation and adolescent gender to understand differences in the perpetration and victimization of adolescent dating violence. An important goal of this study was to explore a strengths-based view on maternal experiences of violence by examining positive parenting qualities in addition to harsh parenting relationships. This study examined within-group differences, culture, and gender by combining intersectional and resilience frameworks. Modeling intersectional factors along with risk and protective factors allowed for interactive relationships to emerge from the data. Overall, findings from the latent class analysis suggest heterogeneity in the intergenerational transmission of violence for Latino adolescents.

### 4.1 Latent Class Analysis

Three distinct groups of adolescents were identified representing relational-level profiles, including (a) moderate-risk/low protective, (b) high-risk/high-protective, and (c) low-risk/high-protective classes. This study also provided some evidence that cultural variation was important in class membership. In relation to the proportion of mothers with low acculturation in the overall sample, mothers with high acculturation were more common in the high-risk/high-protective class, and mothers with low acculturation were slightly overrepresented in the low-



risk/high-protective class. The finding that high acculturated mothers also experienced high IPV is in line with prior research that finds that more acculturated Latina women experience higher rates of IPV when compared to less acculturated women (Caetano, Ramisetty-Mikler, Vaeth, & Harris, 2007). Class 3, which grouped low acculturated mothers with low IPV, corroborates research that finds low acculturation to be a general protective factor for women (Lara, Gamboa, Kahramanian, Morales, & Bautista, 2005).

A primary goal of this study was to explore how intersectional social characteristics combined with parenting. This was important because the research literature on parenting in Latino families pointed to differences in how Latino children were parented depending on maternal acculturation and child gender (Haglund et al., 2012). Those findings did not point to classes that varied in parenting relationships by mother's acculturation. In this study, both class 2, high-risk/high-protective, and class 3, low-risk/high-protective classes, had high maternal monitoring, positive parent child relationships, and varying levels of maternal acculturation. Thus this finding does not provide evidence for this intersection of mother's acculturation and parenting relationships. Similarly, an intersection of adolescent gender with maternal acculturation was not found in the class makeups. Only Class 2, with a higher probability of acculturated mothers, also had a higher probably of female adolescents. Although this was an important part of the class the proportion of female adolescents was only 3% higher than the total sample proportion (54%).

Interestingly, gender seemed to be influence only one of the classes, even though some evidence suggested that gender and parenting relationships are intertwined, especially for Latino families (Bacallo & Smokowski, 2007, Mogro-Wilson, 2008). Only class 1, the moderate-risk/low-protective class had a higher percentage of adolescent females than the overall

percentage of adolescent females in the sample. Adolescent gender did not vary substantially between classes (i.e. 60% vs. 57% vs. 51%). Although more research is needed, the current findings suggest gender is not the primary basis for parenting decisions investigated in this sample of low-income Latino families.

Additionally, the results from the LCA provide some insight to understanding how risk and protective factors are distributed in this sample. Examining the proportion of the sample in each class indicated that the smallest class was the moderate-risk/low-protective class (17%), followed by the high-risk/high-protective class (24%), and the low-risk/high-protective class (59%). Thus the most common class, the low-risk/high-protective class, indicated that low maternal IPV and high parenting relationships are the norm. The second largest group, the high-risk/high-protective class, suggests that a large group of women are maintaining positive parenting relationship despite high-risk. The smallest class, moderate-risk/high-protective class, suggests that a small percentage of women who experience IPV use harsh parenting and low monitoring of their adolescents. Examining how the classes are distributed in the sample is important, as it provides information on the frequency to which risk and protective factors are prevalent among this group of Latino adolescents and their mothers. Combined, these results suggest that maternal IPV and negative parenting are not the norm in this sample.

#### **4.2 Distal Outcome Analysis of Parent Classes**

The results of the logistic regression analyses suggest that class membership predicted dating violence outcomes. Specifically, membership in class 1, the moderate-risk/low-protective class, and 3, the low-risk/high-protective class significantly affected likelihood of adolescence dating violence. Increased probability of membership in class 1, the moderate-risk/low-protective class, corresponded with increased odds of both experiencing victimization and perpetrating

adolescence dating violence. Increased probability of membership in class 3, the low-risk/high-protective class, corresponded with decreased odds of perpetrating dating violence. Interestingly, class 3, low-risk/high-protective class, did not significantly predict adolescent dating violence victimization even though it had positive parenting relationships. This is similar to past research that suggests a link between parenting and dating violence perpetration, but not victimization (Morris et al., 2015).

Together the LCA combined with the regression analysis examined the relationship of ITV in Latino adolescents and their mothers. This study determined that in this group of participants, a risk class and a promotive class could be extracted from the larger group of participants. Of note, a resilient class did not emerge. A resilient class would have been indicated by moderate or high-risk, high protective factors and a significant relationship to less dating violence. The high-risk/high-protective class had the highest probability of mothers with high acculturation, a risk factor in itself for maternal IPV. So it could be that maternal acculturation negated any protective function of maternal warmth or maternal monitoring. However, it could also be that the risk of IPV was too high for maternal warmth or maternal monitoring to act as a protective function. In fact, this was found in a study on the longitudinal effects of exposure to maternal IPV on youth outcomes (Sousa, Herrenkohl, Moylan, Tajima, Klika, Herrenkohl, & Russo, 2011). In that study, positive parental relationships in the context of exposure to maternal violence did not lessen the risk of maternal IPV on adolescent risk behaviors. While LCA is beneficial for examine for unique combinations to predict and outcomes, a clear limitation emerges in that one cannot easily understand how strongly each indicator contributed to the model.

### 4.3 Limitations and Future Directions

The sample size of the current study may have limited the number of parent classes that could be extracted from the data. For example, although the four-class model was not the best fitting solution, this model suggested a high-risk/high-protective class with primarily low acculturated mothers, and a high-risk/high-protective class with primarily high acculturated mothers. This is in contrast to only one group of high-risk/high-protective class with high acculturated mothers that emerged in the retained 3 class model. With a larger sample, perhaps the classes varying by mother's acculturation level may have shown differential association with adolescent dating violence, which would have been an indicator of intersectional influences on ITV.

With regards to measurement, a choice was made to dichotomize the measure of linguistic acculturation to retain the data from mothers whose first language was English (a proxy for high acculturation) and who therefore did not answer the question about language proficiency. Although this decision allowed for retaining data from the primarily English-speaking mothers, it was not without its drawbacks. Dichotomizing the measure of acculturation may have impacted the sensitivity of this measure to influence class membership. Additionally, acculturation is a complex phenomenon and is more appropriately viewed as multidimensional continuum of native cultural beliefs, behaviors, and values negotiated in the context of a host culture. The proxy measure used in this study only measured one discrete dimension of acculturation. However, linguistic acculturation was an important factor to understand in the context of IPV since higher levels of linguistic acculturation is related to increased help seeking among Latina women (Riza & Macy, 2011). Additional dimensions of acculturation should be investigated in the future to understand how mothers' acculturation relates to parenting among

Latino families. Acculturation was selected for use in this study because it represented different associations to cultural beliefs and values. Mother's cultural beliefs and values can be tied to values that they pass on to their children about the appropriateness of dating, and the degree to which they monitor their children's behaviors. In future research it would be important to go beyond acculturation to measure facets that underlie differences in parenting by adolescent gender.

Several limitations regarding measurement emerged. Mother's IPV captured only incidences of IPV experienced in the preceding 12 months, when their adolescent was 10-13 years old. Parenting was measured at the second time point; it's not certain if mothers' experience of IPV influenced parenting at wave 2 of the study 3 years later. Another limitation in this study is that adolescents did not provide reports of actual exposure to mothers IPV. Instead this study examines an indirect effect of maternal IPV by way of effecting parent-child relationships. Including direct exposure to IPV as well as parent-child relationships allows for the testing of the two underlying theories of IPV: social modeling and attachment theories. Future research should compare the multiple models of IPV within one model. Structural equation modeling could be used to test the various paths from maternal IPV to adolescent dating violence. One path would test whether direct exposure to maternal IPV leads to attitudes about aggression and then to adolescent dating violence. An alternate model would examine how attachment between parent and adolescent changes parenting practices to predict adolescent dating violence. In addition future research should examine other relational supports beyond the mother-child relationship including father-child relationship quality and peer supports.

There are many facets of resilience at each level of the one's social ecology that may influence the intergenerational transmission of violence. This study focused on the relational

level where positive parent-child relationships were prioritized. This decision was made as a counter narrative of sorts to the overwhelming research focused on parental deficits in the context of IPV. Just as researchers choose to examine deficit-oriented approaches, researchers can also choose to understand strengths-based perspectives. This study provided some considerations for future research on resilience in Latino families. The finding that positive parenting relationships acts as a promotive factor, by lessening the experience of perpetrating adolescent dating violence regardless of risk is in line with the understanding of promotive factors as those factors that generally have a positive impact on an outcome regardless of the presence of a risk factor (Narayan et al., 2015). Findings from this study may be used to inform future research to examine the various models of resilience.

Masten (2014) proposes three models to explain how protective factors mitigate risk to explain positive adaptation: compensatory, protective, and challenge models. The compensatory model proposes that resources have a positive and independent effect from risks (a main effect model). The protective model describes protective factors interacting with risks to buffer the risks' effect on the outcome (a moderation effects model). The challenge model proposes that moderate exposure to risk can elicit positive outcomes (Zimmerman et al., 2013). This study identified that maternal IPV is a risk factor for adolescent victimization and perpetration of dating violence for Latino adolescents. Testing under what conditions positive parent-child relationships influences this risk would be a logical next step in examining and would provide support for either compensatory or protective models of resilience.

For this study focused on Latino families, it was especially important to examine intersecting identities under a resilience framework. Maternal acculturation and youth gender were chosen as the intersectional variables due to research that links these characteristics to

different risk and protective factors. This was also in line with a theoretical framework that centered gender as a primary construct that influences violence. In addition, examining acculturation allowed for cultural variability within a Latino sample to emerge in the data. Past research consistently points to the fact that Latinos are not monolithic groups, although they continue to be treated in research as such. Examining an intersectional variable such as acculturation somewhat addressed this limitation. However, other intersectional characteristics, such as immigration status and specific cultural subgroup, were not included in this study and may also influence resilience for Latino adolescents (Kuperminc et al., 2009). Similarly, there are many protective factors that may contribute to resilience that were not investigated in this study. For example individual characteristics, such as intelligence and temperament, and other relational factors, such as positive peer relationships are also factors of resilience (Masten, 2007). Also of note, more specific cultural models of resilience may prioritize facets of resilience that are central to the lives of Latino youth. For example, religiosity, bicultural ethnic identity, and filial responsibility may be protective factors for Latino adolescents (Kuperminc, et al., 2009).

Future research should delve more deeply in examining why acculturation influenced the various classes. It may be that gender and acculturation to capture larger social construct which indicate that there is something unique about being a woman and an immigrant who holds traditional views that influences the way that mothers talk to their children about gender. Future research could further explicate how gender and acculturation intersect to influence parenting practices in Latino families. This type of investigation could be answered through qualitative methods. For example, the content of dyadic conversations between mothers and their children could be examined and compared across whether the mother experience IPV or not.

#### 4.4 Implications for practice

Despite the limitations, several important implications arise from this study. The current findings suggest that a high-risk group of mothers can be identified with moderate levels of IPV and negative parenting child relationships whose adolescents are at an increased risk for victimization and perpetration of dating violence. This points to a clear group of individuals that should be targeted in holistic IPV and dating violence intervention and prevention efforts. For example, mothers who receive intervention services for their own experiences of IPV could be assessed for parent-child relationship quality and additional parenting supports provided if needed. In addition to adding parenting services, programs could also offer support groups for adolescents of mothers experiencing IPV. Targeting services to adolescents whose mothers have experienced IPV in tandem with providing services to the mother about IPV and parenting would be a more holistic approach to dating violence prevention. This approach would fit well as an addition to existing domestic violence intervention programs and is similar to an approach is used by Caminar Latino, a cultural specific community based domestic violence program for Latino families. Caminar Latino provides weekly support groups for the entire family, including men, women, and their children. In addition they offer parenting skills training for those who request it. See Perilla, Serrata, Weinberg, and Lippy, (2012) for a full description of this approach. Evidence for family based programs that tailor interventions to mothers and children is developing but preliminary results suggest that mothers parenting skills are improving (Sullivan, Egan, Gooch, 2004).

The findings of this study also suggest that primary prevention efforts are needed. This study found a large majority of adolescents did not go on to perpetrate dating violence if their mothers had low IPV and low acculturation and if they reported high warmth, communication,



and high maternal monitoring. This points to several characteristics that could be targeted to reduce dating violence perpetration. First, more should be done to reduce the number of mothers who experience IPV. Perhaps programs targeting new mothers could be developed. Secondly, because low acculturation is generally protective against experiencing IPV and was a significant characteristic negatively predicting dating violence perpetration in this study, perhaps more efforts should be made to encourage retaining aspects of one's culture. This aspect could be easily integrated into parenting programs that work with Latino families.

#### 4.5 Implications for Policy

The finding that a substantial percentage of adolescents in this sample experienced positive parenting relationship in the context of high maternal IPV cannot be understated. A large body of research suggests that adolescents in homes where violence occurs are at risk for developing a wide array of negative outcomes. Much of this research assumes mothers experiencing IPV are putting their children at risk and are poor parents by not leaving these relationships (Greeson, et al., 2014; Lapierre, 2009, Magen, 1999). This assumption is so prevalent in the general discourse that child abuse and neglect laws attempting to protect children in homes where there has been domestic violence have been enacted (Ewen, 2007). While at first glance these laws seem beneficial numerous studies have pointed to the unintended consequences of these laws. For example, "failure to protect" laws have been linked to increased risk of deportation of abused Latina mothers who lack documentation (Rogerson, 2012) and to increased likelihood of state removal of the child from the home (Ewen, 2007). In addition, they have been cited as reducing the likelihood of reporting domestic violence and seeking help (Alaggia, Jenny, Mazzuca, & Redmond, 2007). Latina mothers are already less likely to seek help in the context of IPV (Dutton, Orloff, & Hass, 2000) and coupled with the "failure to

protect” laws dangerous consequences could emerge. This study provides some evidence to counter this narrative, that for most Latino families, maternal IPV is not necessarily related to poor parenting.

#### 4.6 Conclusion

This study was carried out in response to a call for strengths-based and resilience focused studies on violence (Sabina & Banyard, 2015). It added a contextual examination to current research by way of adding in intersectional characteristics of the sample. This study revealed insights into the variability within Latino mother’s and adolescents experiences and how factors combine uniquely to contribute to the intergeneration transmission of violence. Three classes emerged that indicate unique combinations of risk and protection. Two of these classes predicted differential associations with adolescent dating violence. A class indicating moderate-risk/low-protective and mothers with high acculturation was significantly related to increased odds of adolescents experiencing dating violence, both as victims and as perpetrators. A class indicating low-risk/high-protective and mothers with low acculturation significantly predicted increased odds of perpetrating dating violence but no significant relationship was found with victimization. Findings suggest that holistic family based approach to dating violence and adult domestic violence may be most effective for Latino adolescents and their IPV exposed mothers.

## REFERENCES

- Ackard, D. M., Neumark-Sztainer, D., & Hannan, P. (2002). Dating violence among a nationally representative sample of adolescent girls and boys: Associations with behavioral and mental health. *The Journal of Gender-Specific Medicine* 6(3), 39-48.
- Aldarondo, E., Kantor, G. K., & Jasinski, J. L. (2002). A risk marker analysis of wife assault in Latino families. *Violence Against Women*, 8(4), 429-454.
- Alaggia, R., Jenney, A., Mazzuca, J. & Redmond, M. (2007) In whose best interest? A Canadian case study of the impact of child welfare policies in cases of domestic violence. *Brief Treatment and Crisis Intervention*, 7, 275–290.
- Andrews, J. A., Foster, S. L., Capaldi, D., & Hops, H. (2000). Adolescent and family predictors of physical aggression, communication, and satisfaction in young adult couples: A prospective analysis. *Journal of Consulting and Clinical Psychology*, 68(2), 195.
- Angel, R., Burton, L. P., Chase-Lansdale, L., Cherlin, A., & Moffitt, R. Welfare, Children, and Families: A Three-City Study. ICPSR04701-v7. Ann Arbor, MI: Inter-university Consortium for Political and Social Research [distributor], 2009-02-10.  
<http://doi.org/10.3886/ICPSR04701.v7>
- Archer, J. (2000). Sex differences in aggression between heterosexual partners: A meta-analytic review. *Psychological Bulletin*, 126, 651–680.
- Armsden, G. C., & Greenberg, M. T. (1987). The inventory of parent and peer attachment: Individual differences and their relationship to psychological well-being in adolescence. *Journal of Youth and Adolescence*, 16(5), 427-454.

- Arriaga, X. B., & Foshee, V. A. (2004). Adolescent dating violence: Do adolescents follow in their friends', or their parents', footsteps? *Journal of Interpersonal Violence, 19*(2), 162–184. doi:10.1177/0886260503260247.
- Arrington, E. G., & Wilson, M. N. (2000). A re-examination of risk and resilience during adolescence: Incorporating culture and diversity. *Journal of Child and Family Studies, 9*(2), 221-230.
- Asparouhov T. & Muthen B. (2014). Auxiliary variables in mixture modeling: Three-step approaches using Mplus. *Structural Equation Modeling: A Multidisciplinary Journal, 21*, 329-341.
- Avery-Leaf, S., Cascardi, M., O'Leary, K. D., & Cano, A. (1997). Efficacy of a dating violence prevention program on attitudes justifying aggression. *Journal of Adolescent Health, 21*, 11-17.
- Bakk, Z. & Vermunt, J.K. (2014). Robustness of stepwise latent class modeling with continuous distal outcomes. Forthcoming in *Structural Equation Modeling: A Multidisciplinary Journal*. <http://members.home.nl/jeroenvermunt/bakk2014.pdf>
- Bell, K. M., & Naugle, A. E. (2008). Intimate partner violence theoretical considerations: Moving towards a contextual framework. *Clinical Psychology Review, 28*(7), 1096-1107.
- Bacallao, M. L., & Smokowski, P. R. (2007). The costs of getting ahead: Mexican family system changes after immigration. *Family Relations, 56*(1), 52-66.
- Bandura, A. (1973). *Aggression: A social learning analysis*. Englewood Cliffs, NJ: Prentice Hall.
- Banyard, V. L., & Cross, C. (2008). Consequences of teen dating violence: Understanding intervening variables in ecological context. *Violence Against Women, 14*, 998-1013
- Bergman, L. (1992). Dating violence among high school students. *Social Work, 37*, 21–27.

- Bergman, L. R., & Trost, K. (2006). The person-oriented versus the variable-oriented approach: Are they complementary, opposites, or exploring different worlds? *Merrill-Palmer Quarterly*, 52, 601–632. doi: 10.1353/mpq.2006.0023
- Bermudez, J. M., & Mancini, J. A. (2013). Familias fuertes: Family resilience among Latinos. In D. Becvar (Ed.) *Handbook of family resilience* (pp. 215-227). New York, NY: Springer.
- Berry, J. W. (1997). Immigration, acculturation, and adaptation. *Applied Psychology*, 46(1), 5-34.
- Black MC, Basile KC, Breiding MJ, Smith SG, Walters ML, Merrick MT, Chen J, Stevens MR. 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, 2011.
- Bogat, G. A., Levendosky, A. A., & von Eye, A. (2005). The future of research on intimate partner violence: Person-oriented and variable oriented perspectives. *American Journal of Community Psychology*, 36(1/2), 49-70.
- Breiding, M. J., Black, M. C., & Ryan, G. W. (2008). Prevalence and risk factors of intimate partner violence in eighteen U.S. states/territories, 2005. *American Journal of Preventative Medicine*, 34, 112-118.
- Bronfenbrenner, U. (1986). Ecology of the family as a context for human development: Research perspectives. *Developmental Psychology*, 22, 723–24.
- Bulcroft, R. A., Carmody, D. C., Bulcroft, K. A. (1996). Patterns of parental independence giving to adolescents: Variations by race, age, and gender of child. *Journal of Marriage and Family*, 58(4): 866-883.

- Caetano, R., Ramisetty-Mikler, S., Vaeth, P. A. C., & Harris, T. R. (2007). Acculturation stress, drinking, and intimate partner violence among Hispanic couples in the US. *Journal of Interpersonal Violence, 22*(11), 1431-1447.
- Caetano, R., Schafer, J., Clark, C. L., Cunradi, C. B., & Raspberry, K. (2000). Intimate partner violence, acculturation, and alcohol consumption among Hispanic couples in the United States. *Journal of Interpersonal Violence, 15*(1), 30-45.
- Capaldi, D. M., & Clark, S. (1998). Prospective family predictors of aggression toward female partners for at-risk young men. *Developmental psychology, 34*(6), 1175.
- Cardoso, J. B., & Thompson, S. (2010). Common themes of resilience among Latino immigrant families: A systematic review of the literature. *Families in Society: The Journal of Contemporary Social Services, 91*(3), 257-265.
- Cavanaugh, C. E., Messing, J. T., Amanor-Boadu, Y., O'Sullivan, C. S., Webster, D., & Campbell, J. (2014). Intimate partner sexual violence: A comparison of foreign-versus US-born physically abused Latinas. *Journal of Urban Health, 91*(1), 122-135.
- Centers for Disease Control & Prevention (2010). Understanding Teen Dating Violence Fact Sheet. Retrieved on September 29, 2014 from:  
<http://www.cdc.gov/violenceprevention/pdf/teen-dating-violence-factsheet-a.pdf>
- Cervantes, R. C., Duenas, N., Valdez, A., & Kaplan, C. (2006). Measuring violence risk and outcomes among Mexican American adolescent females. *Journal of Interpersonal Violence, 21*(1), 24-41.
- Champion, H., Foley, K. L., Sigmon-Smith, K., Sutfin, E. L., & DuRant, R. H. (2008). Contextual factors and health risk behaviors associated with date fighting among high school students. *Women & Health, 47*(3), 1-22.

- Chapple, C. L. (2003). Examining intergenerational violence: Violent role modeling or weak parental controls?. *Violence and Victims, 18*(2), 143-162.
- Chiodo, D., Crooks, C. V., Wolfe, D. A., McIsaac, C., Hughes, R., & Jaffe, P. G. (2012). Longitudinal prediction and concurrent functioning of adolescent girls demonstrating various profiles of dating violence and victimization. *Prevention Science, 13*(4), 350–359. doi:10.1007/s11121-011-0236-3.
- Clark, S. L., & Muthén, B. (2009). Relating latent class analysis results to variables not included in the analysis. *Submitted for publication*.  
<https://www.statmodel.com/download/relatinglca.pdf>
- Cleveland, H. H., Herrera, V. M., & Stuewig, J. (2003). Abusive males and abused females in adolescent relationships: Risk factor similarity and dissimilarity and the role of relationship seriousness. *Journal of Family Violence, 18*(6), 325–339.
- Cohen, J. A., Mannarino, A. P., & Iyengar, S. (2011). Community treatment of posttraumatic stress disorder for children exposed to intimate partner violence: a randomized controlled trial. *Archives of Pediatrics & Adolescent Medicine, 165*(1), 16-21.
- Connolly, J., Friedlander, L., Pepler, D., Craig, W., & Laporte, L. (2010). The ecology of adolescent dating aggression: Attitudes, relationships, media use, and socio-demographic risk factors. *Journal of Aggression, Maltreatment & Trauma, 19*(5), 469–491.  
doi:10.1080/10926771.2010.495028.
- Cox, M. J., & Paley, B. (1997). Families as systems. *Annual Review of Psychology, 48*(1), 243-267.
- Crenshaw, K. (1991). Mapping the margins: Intersectionality, identity politics, and violence against women of color. *Stanford Law Review, 1241-1299*.

- Cuevas, C. A., Sabina, C., & Bell, K. A. (2014). Dating violence and interpersonal victimization among a national sample of Latino youth. *Journal of Adolescent Health, 55*(4), 564-570.
- Cui, M., Durtschi, J. A., Donnellan, M. B., Lorenz, F. O., & Conger, R. D. (2010). Intergenerational transmission of relationship aggression: A prospective longitudinal study. *Journal of Family Psychology, 24*(6), 688-697.
- Cyr, M., McDuff, P., & Wright, J. (2006). Prevalence and predictors of dating violence among adolescent female victims of child sexual abuse. *Journal of Interpersonal Violence, 21*, 1000–1017.
- Dahlberg, L.L., & Krug, E.G. (2002). Violence - a global public health problem. In E Krug, L. L. Dahlberg, J. A. Mercy, A. B. Zwi, & R. Lozano (Eds.), *World report on violence and health* (pp.1–56). Geneva, Switzerland: World Health Organization
- Dasgupta, S. D. (2002). A framework for understanding women's use of nonlethal violence in intimate heterosexual relationships. *Violence Against Women, 8*(11), 1364-1389.
- Davalos, D. B., Chavez, E. L., & Guardiola, R. J. (2005). Effects of perceived parental school support and family communication on delinquent behaviors in Latinos and White non-Latinos. *Cultural Diversity and Ethnic Minority Psychology, 11*, 57-68.
- Davidson, T. M., & Cardemil, E. V. (2009). Parent-child communication and parental involvement in Latino adolescents. *The Journal of Early Adolescence, 29*(1), 99-121.
- DeKeseredy, W. S., & Schwartz, M. D. (2001). Definitional issues. In C.M. Renzetti, J.L.Edleson, & R.K. Bergen (Eds.), *Sourcebook on violence against women* (pp. 23-34). Thousand Oaks, CA: Sage.
- De Guzman, M. R. T., & Carlo, G. (2004). Family, peer, and acculturative correlates of prosocial development among Latinos. *Great Plains Research, 185-202*.



- De La Rosa, M., Dillon, F. R., Rojas, P., Schwartz, S. J., & Duan, R. (2010). Latina mother–daughter dyads: Relations between attachment and sexual behavior under the influence of alcohol or drugs. *Archives of sexual behavior, 39*(6), 1305-1319.
- Dishion, T. J., & McMahon, R. J. (1998). Parental monitoring and the prevention of child and adolescent problem behavior: A conceptual and empirical formulation. *Clinical Child And Family Psychology Review, 1*(1), 61-75.
- Dumka, L. E., Roosa, M. W., & Jackson, K. M. (1997). Risk, conflict, mothers' parenting, and children's adjustment in low-income, Mexican immigrant, and Mexican American families. *Journal of Marriage and Family, 59*(2): 309-323.
- DuPont-Reyes, M., Fry, D., Rickert, V., & Davidson, L. L. (2015). Adolescent relationship violence and acculturation among NYC Latinos. *Maternal and Child Health Journal, 19*(7) 1543-1552.
- Dutton, M. A., Orloff, L. E., & Hass, G. A. (2000). Characteristics of help-seeking behaviors, resources and service needs of battered immigrant Latinas: legal and policy implications. *Georgetown Journal on Poverty Law & Policy, 7*, 245.
- Eaton, D. K., Davis, K. S., Barrios, L., Brener, N. D., & Noonan, R. K. (2007). Associations of dating violence victimization with lifetime participation, co-occurrence, and early initiation of risk behaviors among U.S. high school students. *Journal of Interpersonal Violence, 22*, 585–602.
- Ehrensaft, M. K., Cohen, P., Brown, J., Smailes, E., Chen, H., & Johnson, J. G. (2003). Intergenerational transmission of partner violence: A 20-year prospective study. *Journal of Consulting and Clinical Psychology, 71*(4), 741.

- 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*(2), 131-140.
- Ewen, B. M. (2007). Failure to protect laws: protecting children or punishing mothers?. *Journal of Forensic Nursing, 3*(2), 84-86.
- Fleming, J. E., Ledogar, R. (2008). Resilience, an evolving concept: A review of literature relevant to Aboriginal research. *Pimatisiwin: A Journal of Aboriginal and Indigenous Community Health, 6*(2), 7–23.
- Foshee, V. A., Bauman, K. E., Arriaga, X. B., Helms, R. W., Koch, G. G., & Linder, G. F. (1998). An evaluation of Safe Dates, an adolescent dating violence prevention program. *American Journal of Public Health, 88*, 45–50. doi:10.2105/AJPH.88.1.45
- Foshee, V. A., Bauman, K. E., Ennett, S. T., Linder, G. F., Benefield, T., & Suchindran, C. (2004). Assessing the long-term effects of the Safe Dates program and a booster in preventing and reducing adolescent dating violence victimization and perpetration. *American Journal of Public Health, 94*, 619–624. doi:10.2105/ AJPH.94.4.619
- Foshee, V. A., Bauman, K. E., Ennett, S. T., Suchindran, C., Benefield, T., & Linder, G. F. (2005). Assessing the effects of the dating violence prevention program “Safe Dates” using random coefficient regression modeling. *Prevention Science, 6*(3), 245-258.
- Foshee, V. A., Bauman, K. E., & Greene, W. F. (2000). The Safe Dates program: 1-year follow-up results. *American Journal of Public Health, 90*, 1619–1622.  
doi:10.2105/AJPH.90.10.1619
- Foshee, V. A., Bauman, K. E., & Linder, G. F. (1999). Family violence and the perpetration of adolescent dating violence: Examining social learning and social control processes. *Journal of Marriage and the Family, 61*(2), 331-342

- Foshee, V. A., Benefield, T. S., Ennett, S. T., Bauman, K. E., & Suchindran, C. (2004). Longitudinal predictors of serious physical and sexual dating violence victimization during adolescence. *Preventive Medicine, 39*(5), 1007–1016.
- Foshee, V. A., Benefield, T., Suchindran, C., Ennett, S. T., Bauman, K. E., Karriker-Jaffe, K. J., ... Mathias, J. (2009). The development of four types of adolescent dating abuse and selected demographic correlates. *Journal of Research on Adolescence, 19*(3), 380–400.
- Foshee, V. A., Ennett, S. T., Bauman, K. E., Benefield, T., & Suchindran, C. (2005). The association between family violence and adolescent dating violence onset does it vary by race, socioeconomic status, and family structure?. *The Journal of Early Adolescence, 25*(3), 317-344.
- Foshee, V. A., Linder, G. F., Bauman, K. E., Langwick, S. A., Arriaga, X. B., Heath, J. L., ... & Bangdiwala, S. (1996). The Safe Dates Project: Theoretical basis, evaluation design, and selected baseline findings. *American Journal of Preventive Medicine 12*, 39-47.
- Foshee, V. A., Linder, F., MacDougall, J. E., & Bangdiwala, S. (2001). Gender differences in the longitudinal predictors of adolescent dating violence. *Preventive Medicine, 32*(2), 128–141.
- Foshee, V. A., & Matthew, R. A. (2007). Adolescent dating abuse perpetration: A review of findings, methodological limitations, and suggestions for future research. In D. J. Flannery, A. T. Vazsonyi & I. D. Waldman (Eds.), *The cambridge handbook of violent behavior and aggression* (pp. 431-449). New York: Cambridge University Press.
- Foshee, V. A., Reyes, H. L., & Ennett, S. T. (2010). Examination of sex and race differences in longitudinal predictors of the initiation of adolescent dating violence perpetration.

- Journal of Aggression, Maltreatment and Trauma*, 19(5), 492–516. doi:  
10.1080/10926771.2010.495032
- Foshee, V. A., Reyes, H. L. N., Ennett, S. T., Suchindran, C., Mathias, J., ... Benefield, T. S. (2011). Risk and protective factors distinguishing profiles of adolescent peer and dating violence perpetration. *Journal of Adolescent Health*, 48, 344–350. doi:10.1016/j.jadohealth.2010.07.030
- Furman, W., Simon, V. A., Shaffer, L., & Bouchey, H. A. (2002). Adolescents' working models and styles for relationships with parents, friends, and romantic partners. *Child Development*, 73(1), 241-255.
- Geiser, C. (2012). *Data analysis with Mplus*. New York: Guilford Press.
- Gonzalez-Guarda, R. M., Cummings, A. M., Pino, K., Malhotra, K., Becerra, M. M., & Lopez, J. E. (2014). Perceptions of adolescents, parents, and school personnel from a predominantly Cuban American community regarding dating and teen dating violence prevention. *Research in Nursing & Health*, 37(2), 117-127.
- González-Guarda, R. M., Florom-Smith, A. L., & Thomas, T. (2011). A syndemic model of substance abuse, intimate partner violence, HIV infection, and mental health among Hispanics. *Public Health Nursing*, 28(4), 366-378.
- Gover, A. R., Jennings, W. G., Tomsich, E. A., Park, M., & Rennison, C. M. (2011). The influence of childhood maltreatment and self-control on dating violence: A comparison of college students in the United States and South Korea. *Violence and Victims*, 26(3), 296–318. doi:10.1891/0886-6708.26.3.296

- Graham-Bermann, S. A., Gruber, G., Howell, K. H., & Girz, L. (2009). Factors discriminating among profiles of resilience and psychopathology in children exposed to intimate partner violence (IPV). *Child Abuse & Neglect, 33*(9), 648-660.
- Gray, H. M., & Foshee, V. (1997). Adolescent dating violence differences between one-sided and mutually violent profiles. *Journal of Interpersonal Violence, 12*(1), 126-141.
- Greeson, M. R., Kennedy, A. C., Bybee, D. I., Beeble, M., Adams, A. E., & Sullivan, C. (2014). Beyond deficits: Intimate partner violence, maternal parenting, and child behavior over time. *American Journal of Community Psychology, 54*(1-2), 46-58.
- Grunbaum, J. A., Kann, L., Kinchen, S. A., Williams, B., Ross, J. G., ... Kolby, L., (2002). Youth risk behavior surveillance—United States, 2001. *Surveillance summaries, 51*(SS-4), 1-21. <http://www.cdc.gov/mmwr/preview/mmwrhtml/ss5104a1.htm>
- Guerra, N. G., Tolan, P. H., & Hammond, W. R. (1994). Prevention and treatment of adolescent violence.
- Hagenaars, J. A., & McCutcheon, A. L. (2002). Applied latent class analysis. New York, NY: Cambridge University Press.
- Haglund, K., Belknap, R. A., & Garcia, J. T. (2012). Mexican American female adolescents' perceptions of relationships and dating violence. *Journal of Nursing Scholarship, 44*(3), 215-222.
- Halgunseth, L. C., Ispa, J. M., and Rudy, D. (2006). Parental control in Latino families: An integrated review of the literature. *Child Development, 77*(5), 1282-1297.
- Halpern, C. T., Oslak, S. G., Young, M. L., Martin, S. L., & Kupper, L. L. (2001). Partner violence among adolescents in opposite-sex romantic relationships: Findings from the

- National Longitudinal Study of Adolescent Health. *American Journal of Public Health*, 91(10), 1679-1685.
- Hamby, S., Finkelhor, D., & Turner, H. (2012). Teen dating violence: Co-occurrence with other victimizations in the National Survey of Children's Exposure to Violence (NatSCEV). *Psychology of Violence*, 2(2), 111.
- Harper, F. W. K., Arias, I., & House, A. S. (2003). The moderating role of parental warmth on the effects of exposure to family violence. *Violence and Victims*, 18(3), 353–67.
- Haynie, D. L., Farhat, T., Brooks-Russell, A., Wang, J., Barbieri, B., & Iannotti, R. J. (2013). Dating violence perpetration and victimization among U.S. Adolescents: Prevalence, patterns, and associations with health complaints and substance use. *Journal of Adolescent Health*, 53(2), 194-201. doi:10.1016/j.jadohealth.2013.02.008
- Hirschi T. (1969). Causes of delinquency. Berkeley, CA: University of California Press.  
[https://books.google.com/books?hl=en&lr=&id=i13b00vhluoC&oi=fnd&pg=PR10&ots=at\\_VyAO1Qf&sig=\\_tdW15d1Wp2Bq79DDrhe7Kvo2Iw](https://books.google.com/books?hl=en&lr=&id=i13b00vhluoC&oi=fnd&pg=PR10&ots=at_VyAO1Qf&sig=_tdW15d1Wp2Bq79DDrhe7Kvo2Iw)
- Hickman, L. J., Jaycox, L. H., & Aronoff, J. (2004). Dating violence among adolescents: Prevalence, gender distribution, and prevention program effectiveness. *Trauma, Violence, & Abuse*, 5(2), 123-142.
- Hotaling, G. T., & Sugarman, D. B. (1990). A risk marker analysis of assaulted wives. *Journal of Family Violence*, 5(1), 1-13.
- Howard, D. E., Beck, K., Kerr, M. H., & Shattuck, T. (2005). Psychosocial correlates of dating violence victimization among Latino youth. *Adolescence*, 40, 319-331.
- Howard, D. E., & Wang, M. Q. (2003a). Psychosocial factors associated with adolescent boys' reports of dating violence. *Adolescence*, 38(151), 519-533.

- Howard, D. E., & Wang, M. Q. (2003b). Risk profiles of adolescent girls who were victims of dating violence. *Adolescence*, 38(149), 1-14.
- Howard, D., Qiu, Y., & Boekeloo, B. (2003). Personal and social contextual correlates of adolescent dating violence. *Journal of Adolescent Health*, 33, 9–17.
- Howell, K. H. (2011). Resilience and psychopathology in children exposed to family violence. *Aggression and Violent Behavior*, 16(6), 562-569.
- Ingram, E. M. (2007). A comparison of help seeking between Latino and non-Latino victims of intimate partner violence. *Violence Against Women*, 13(2), 159-171.
- Jaycox, L. H. (2004). Unpublished preliminary data from the Break The Cycle evaluation study. Arlington, VA: RAND. (AS REPORTED IN HICKMAN ET AL. 2004)
- Jouriles, E. N., McDonald, R., Rosenfield, D., Stephens, N., Corbitt-Shindler, D., & Miller, P. C. (2009). Reducing conduct problems among children exposed to intimate partner violence: A randomized clinical trial examining effects of Project Support. *Journal of Consulting and Clinical Psychology*, 77(4), 705.
- Jouriles, E. N., Mueller, V., Rosenfield, D., McDonald, R., & Dodson, M. C. (2012). Teens' experiences of harsh parenting and exposure to severe intimate partner violence: Adding insult to injury in predicting teen dating violence. *Psychology of Violence*, 2(2), 125–138. doi:10.1037/a0027264
- Kann, L. Kinchen, S., Shanklin, S. L., Flint, K. H., Hawkins, J., Harris, W. A., . . . Zaza, S. (2013). Youth risk behavior surveillance - United States, 2013 (Vol. 63). Atlanta, GA: Centers for Disease Control and Prevention.

- Karlsson, M. E., Temple, J. R., Weston, R., & Le, V. D. (2016). Witnessing interparental violence and acceptance of dating violence as predictors for teen dating violence victimization. *Violence Against Women, 22*(5), 625-646.
- Kast, N. R., Eisenberg, M. E., & Sieving, R. E. (2016). The role of parent communication and connectedness in dating violence victimization among Latino adolescents. *Journal of Interpersonal Violence, 31*(10), 1932-1955. doi:10.1177/0886260515570750
- Katz, L. F., Hessler, D. M., & Annet, A. (2007). Domestic violence, emotional competence, and child adjustment. *Social Development, 16*(3), 513-538.
- Kerr, M. H., Beck, K., Downs Shattuck, T., Kattar, C., & Uriburu, D. (2003). Family involvement, problem and prosocial behavior outcomes of Latino youth. *American Journal of Health Behavior, 27*(1), S55-S65.
- Kerr, D. C. R., & Capaldi, D. M. (2011). Young men's intimate partner violence and relationship functioning: Long-term out-comes associated with suicide attempt and aggression in adolescence. *Psychological Medicine, 41*, 759–769. doi: 10.1017/S0033291710001182
- Kirmayer L. J., Sedhev M., Whitley R., Dandeneau, S. F., & Isaac, C. (2009). Community resilience: Models, metaphors and measures. *Journal of Aboriginal Health, 7*(1), 62–117.
- Kirmayer, L. J., Dandeneau, S., Marshall, E., Phillips, M. K., & Williamson, K. J. (2011). Rethinking resilience from indigenous perspectives. *Canadian Journal of Psychiatry, 56*(2), 84-91.
- Kuperminc, G. P., Wilkins, N. J., Roche, C., & Alvarez-Jimenez, A. (2009). Risk, resilience, and positive development among Latino youth. *Handbook of US Latino psychology: Developmental and community-based perspectives, 213-233.*



- Lanza S. T., Tan X., & Bray B. C. (2013). Latent class analysis with distal outcomes: A flexible model-based approach. *Structural Equation Modeling*, 20, 1-26.
- Lapierre, S. (2008). Mothering in the context of domestic violence: The pervasiveness of a deficit model of mothering. *Child & Family Social Work*, 13(4), 454-463.
- Lara, M., Gamboa, C., Kahramanian, M. I., Morales, L. S., & Bautista, D. E. (2005). Acculturation and Latino health in the United States: a review of the literature and its sociopolitical context. *Annual Review of Public Health*, 26, 367-397.
- Lavoie, F., Herbert, M., Tremblay, R., Vitaro, F., Vezina, L., & McDuff, P. (2002). History of family dysfunction and perpetration of dating violence by adolescent boys: A longitudinal study. *Journal of Adolescent Health*, 30, 375–383.
- Leadbeater, B. J., Banister, E. M., Ellis, W. E., & Yeung, R. (2008). Victimization and relational aggression in adolescent romantic relationships: The influence of parental and peer behaviors, and individual adjustment. *Journal of Youth and Adolescence*, 37(3), 359–372. doi:10.1007/s10964-007-9269-0
- 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 & Trauma*, 3(1), 25-35.
- Levendosky, A. A., Lannert, B., & Yalch, M. (2012). The effects of intimate partner violence on women and child survivors: An attachment perspective. *Psychodynamic psychiatry*, 40(3), 397-433.
- Linder, J. R., & Collins, W. A. (2005). Parent and peer predictors of physical aggression and conflict management in romantic relationships in early adulthood. *Journal of Family Psychology*, 19, 252–262.

- Lindhorst, T., & Tajima, E. (2008). Reconceptualizing and operationalizing context in survey research on intimate partner violence. *Journal of Interpersonal Violence, 23*(3), 362-388.
- Lippy, C. A., Serrata, J. V., & Perilla, J. L. (2008). Community psychology and the issue of gender symmetry/asymmetry in intimate partner violence. *The Community Psychologist, 41*(3/4), 42-45.
- Loukas, A., Suizzo, M. A., & Prelow, H. M. (2007). Examining resource and protective factors in the adjustment of Latino youth in low income families: What role does maternal acculturation play?. *Journal of Youth and Adolescence, 36*(4), 489-501.
- Luthar, S. S. (2006). Resilience in development: A synthesis of research across five decades. In D. Cicchetti, & D. J. Cohen, (Eds.), *Developmental psychopathology: Risk, disorder, and adaptation* (pp. 740-795). New York, NY: Wiley.
- Luthar, S. S., Cicchetti, D., & Becker, B. (2000). The construct of resilience: A critical evaluation and guidelines for future work. *Child development, 71*(3), 543.
- MacEwen, K. E., & Barling, J. (1988). Multiple stressors, violence in the family of origin, and marital aggression: A longitudinal investigation. *Journal of Family Violence, 3*(1), 73-87.
- Magdol, L., Moffitt, T. E., Caspi, A., & Silva, P. A. (1998). Developmental antecedents of partner abuse: A prospective-longitudinal study. *Journal of Abnormal Psychology, 107*, 375-389.
- Magidson, J., & Vermunt, J. (2004). Latent class models. In D. W. Kaplan (Ed.), *The Sage handbook of quantitative methodology for the social sciences* (pp. 176-199). Thousand Oaks, CA: Sage. doi:10.4135/9781412986311.n10

- Masten, A. S., & Tellegen, A. (2012). Resilience in developmental psychopathology: Contributions of the project competence longitudinal study. *Development and psychopathology, 24*(02), 345-361.
- Molidor, C., & Tolman, R. M. (1998). Gender and contextual factors in adolescent dating violence. *Violence Against Women, 4*(2), 180-194.
- Malik, S., Sorenson, S. B., & Aneshensel, C. S. (1997). Community and dating violence among adolescents: Perpetration and victimization. *Journal of Adolescent Health, 21*(5), 291-302.
- Martinez-Torteya, C., Bogat, A. G., 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.
- Masten, A. S. (2014). Ordinary Magic: Resilience in Development
- Masten, A. S. (2001). Ordinary magic: Resilience processes in development. *American Psychologist, 56*, 227-238.
- McCloskey, L. A., & Lichter, E. L. (2003). The contribution of marital violence to adolescent aggression across different relationships. *Journal of Interpersonal Violence, 18*(4), 390–412.
- McCubbin, H. I., McCubbin, M. A., & Thompson, A. I. (1993). Resiliency in families. In T. H. Brubaker (Ed.), *Family relations: Challenges for the future* (pp. 153–177). Newbury Park: Sage.
- McCutcheon, A. L. (2002). Basic concepts and procedures in single- and multi-group latent class analysis. In J.A. Hagenaars, A. L. McCutcheon (Eds.), *Applied latent class analysis* (pp. 56-85). Cambridge, England: Cambridge.

- McDonald, R., Jouriles, E. N., Tart, C. D., & Minze, L. C. (2009). Children's adjustment problems in families characterized by men's severe violence toward women: Does other family violence matter? *Child Abuse and Neglect*, *33*(2), 94–101.
- Mihalic, S. W., & Elliott, D. (1997). A social learning theory model of marital violence. *Journal of Family Violence*, *12*(1), 21-47.
- Mogro-Wilson, C. (2008). The influence of parental warmth and control on Latino adolescent alcohol use. *Hispanic Journal of Behavioral Sciences*, *30*(1): 89-105.
- Molidor, C., & Tolman, R. M. (1998). Gender and contextual factors in adolescent dating violence. *Violence Against Women*, *4*(2), 180-194.
- Morris, A. M., Mrug, S., & Windle, M. (2015). From family violence to dating violence: testing a dual pathway model. *Journal of Youth and Adolescence*, *44*(9), 1819-1835.
- Muthén, L.K. & Muthén, B.O. (2015). Mplus User's Guide. Seventh Edition. Los Angeles, CA: Muthén & Muthén.
- Narayan, A. J., Sapienza, J. K., Monn, A. R., Lingras, K. A., & Masten, A. S. (2015). Risk, vulnerability, and protective processes of parental expressed emotion for children's peer relationships in contexts of parental violence. *Journal of Clinical Child & Adolescent Psychology*, *44*(4), 676-688.
- Nettles, S. M., & Pleck, J. H. (1994). Risk, resilience and development: The multiple ecologies of Black adolescents in the United States. In R. Haggerty, L. Sherrod, N. Garmezy, & M. Rutter (Eds.), *Stress, risk, and resilience in children and adolescents* (pp. 147–181). NY: Cambridge University Press.

- Nylund, K. L., Asparouhov, T., & Muthén, B. O. (2007). Deciding on the number of classes in latent class analysis and growth mixture modeling: A Monte Carlo simulation study. *Structural Equation Modeling, 14*, 535–569. doi:10.1080/10705510701575396
- O'Donnell, L., Stueve, A., Myint-U, A., Duran, R., Argonick, G., & Wilson-Simmons, R. (2006). Middle school aggression and subsequent intimate partner physical violence. *Journal of Youth and Adolescence, 35*, 693–703.
- O'Keefe, M. (1997). Predictors of dating violence among high school students. *Journal of Interpersonal Violence, 12*(4), 546–568. doi: 10.1177/088626097012004005
- O'Keefe, M., & Treister, L. (1998). Victims of dating violence among high school students. *Violence Against Women, 4*, 195–223.
- O'Leary, D. K. (1999). Psychological abuse: A variable deserving critical attention in domestic violence. *Violence and Victims, 14*, 3–23.
- O'Leary, K. D. (1988). Physical aggression between spouses: A social learning theory perspective. In V. B. Van Hasselt, R. L. Morrison, A. S. Bellack, & M. Hersen (Eds.), *Handbook of family violence* (pp. 31–55). New York, NY: Plenum.
- O'Leary, K. D., Malone, J., & Tyree, A. (1994). Physical aggression in early marriage: prerelationship and relationship effects. *Journal of Consulting and Clinical Psychology, 62*(3), 594.
- Osofsky, J. D. (2003). Prevalence of children's exposure to intimate partner violence and child maltreatment: Implications for prevention and intervention. *Clinical Child and Family Psychology Review, 6*(3), 161-170.
- Peacock, M. J., McClure, F., & Agars, M. D. (2003). Predictors of delinquent behaviors among Latino youth. *The Urban Review, 35*(1), 59-72.

Perilla, J. L. (2014). Conceptual framework for cultural specific community based change.

Unpublished manuscript.

Perilla, J. L. (1999). Domestic violence as a human rights issue: The case of immigrant

Latinos. *Hispanic Journal of Behavioral Sciences*, 21(2), 107-133.

Perilla, J. L., Lippy, C., Rosales, A., & Serrata, J. V. (2011). Prevalence of domestic violence. In

J. White, M. P. Koss & A. E. Kazdin, (Eds.), *Violence against women and children* (pp.

199-200). Washington DC: American Psychological Association.

<http://dx.doi.org/10.1037/12307-009>

Perilla, J. L., Serrata, J. V., Weinberg, J., & Lippy, C. A. (2012). Integrating women's voices and

theory: a comprehensive domestic violence intervention for Latinas. *Women &*

*Therapy*, 35(1-2), 93-105.

Phinney, J. S., & Flores, J. (2002). "Unpackaging" acculturation aspects of acculturation as

predictors of traditional sex role attitudes. *Journal of Cross-Cultural Psychology*, 33(3),

320-331.

Poitras, M., & Lavoie, F. (1995). A study of the prevalence of sexual coercion in adolescent

heterosexual dating relationships in a Quebec sample. *Violence and Victims*, 10(4), 299-

313.

Pong, S., Hao, L. & Gardner, E. (2005). The roles of parenting styles and social capital in the

school performance of immigrant Asian and Hispanic adolescents. *Social Science*

*Quarterly*, 86(4), 928-950.

Ramos, M. M., Green, D., Booker, J., & Nelson, A. (2011). Immigration status, acculturation,

and dating violence risk for Hispanic adolescent girls in New Mexico. *Maternal and*

*Child Health Journal*, 15(7), 1076-1080.

- Renner, L. M., & Slack, K. S. (2006). Intimate partner violence and child maltreatment: Understanding intra-and intergenerational connections. *Child Abuse and Neglect*, 30(6), 599–617.
- Richards, T. N., Branch, K. A., & Ray, K. (2014). The impact of parental and peer social support on dating violence perpetration and victimization among female adolescents: A longitudinal study. *Violence and Victims*, 29(2), 317-331. doi:10.1891/0886-6708.VV-D-12-00141R1
- Rizo, C. F., & Macy, R. J. (2011). Help seeking and barriers of Hispanic partner violence survivors: A systematic review of the literature. *Aggression and Violent Behavior*, 16(3), 250-264. doi: 10.1016/j.avb.2011.03.004
- Rogerson, S. (2012). Unintended and unavoidable: The failure to protect rule and its consequences for undocumented parents and their children. *Family Court Review*, 50(4), 580-593.
- Rothman, E. F., & Xuan, Z. (2014). Trends in physical dating violence victimization among U.S. High school students, 1999–2011. *Journal Of School Violence*, 13(3), 277-290. doi:10.1080/15388220.2013.847377
- Sabina, C., & Banyard, V. (2015). Moving toward well-being: The role of protective factors in violence research. *Psychology of Violence*, 5(4), 337.
- Sabina, C., Cuevas, C. A., & Zadnik, E. (2015). Intimate partner violence among Latino women: Rates and cultural correlates. *Journal of Family Violence*, 30(1), 35-47.
- 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.

Sanderson, M., Coker, A. L., Roberts, R. E., Tortolero, S. R., & Reininger, B. M. (2004).

Acculturation, ethnic identity, and dating violence among Latino ninth-grade students. *Preventive Medicine, 39*(2), 373-383.

Schnurr, M. P., & Lohman, B. J. (2008). How much does school matter? An examination of adolescent dating violence perpetration. *Journal of Youth and Adolescence, 37*, 266–283. doi: 10.1007/s10964-007-9246-7

Schwartz, M., O’Leary, S. G., & Kendziora, K. T. (1997). Dating aggression among high school students. *Violence and Victims, 12*(4), 295-305.

Sears, Byers, & Price (2007). The co-occurrence of adolescent boys’ and girls’ use of psychologically, physically, and sexually abusive behaviours in their dating relationships. *Journal of Adolescence, 30*, 487-504.

Seiffge-Krenke, I. (2003). Testing theories of romantic development from adolescence to young adulthood: Evidence of a developmental sequence. *International Journal of Behavioral Development, 27*(6), 519-531.

Seiffge-Krenke, I., Shulman, S., & Kiessinger, N. (2001). Adolescent precursors of romantic relationships in young adulthood. *Journal of Social and Personal Relationships, 18*(3), 327-346.

Sellers, C. S. (1999). Self-control and intimate violence: An examination of the scope and specification of the general theory of crime. *Criminology, 37*, 375-404.



- Shorey, R. C., Cornelius, T. L., & Bell, K. M. (2008). A critical review of theoretical frameworks for dating violence: Comparing the dating and marital fields. *Aggression and Violent Behavior, 13*(3), 185-194.
- Simons, R. L., Lin, K. H., & Gordon, L. C. (1998). Socialization in the family of origin and male dating violence: A prospective study. *Journal of Marriage and the Family, 60*(2) 467-478.
- Silverman, J. G., Decker, M. R., & Raj, A. (2007). Immigration-based disparities in adolescent girls' vulnerability to dating violence. *Maternal & Child Health Journal, 11*(1), 37-43.
- Simons, R. L., & Johnson, C. (1998). An examination of competing explanations for the intergenerational transmission of domestic violence. In Y. Danieli (Ed.), *International handbook of multigenerational legacies of trauma* (pp. 553-570). Springer US.
- Simons, T. L., Lin, K., & Gordon, L. C. (1998). Socialization in the family of origin and male dating violence: A prospective study. *Journal of Marriage and the Family, 60*, 467–478.
- Smith, P. H., White, J. W., & Holland, L. J. (2003). A longitudinal perspective on dating violence among adolescent and college-age women. *American Journal of Public Health, 93*, 1104–1109.
- Sousa, C., Herrenkohl, T. I., Moylan, C. A., Tajima, E. A., Klika, J. B., Herrenkohl, R. C., & Russo, M. J. (2011). Longitudinal study on the effects of child abuse and children's exposure to domestic violence, parent-child attachments, and antisocial behavior in adolescence. *Journal of Interpersonal Violence, 26*(1), 111-136.
- Spencer, G. A., & Bryant, S. A. (2000). Dating violence: A comparison of rural, suburban, and urban teens. *Journal of Adolescent Health, 27*(5), 302-305.

- Stein, B. D., Jaycox, L. H., Kataoka, S., Rhodes, H. J., & Vestal, K. D. (2003). Prevalence of child and adolescent exposure to community violence. *Clinical Child and Family Psychology Review, 6*(4), 247-264.
- Stith, S. M., Rosen, K. H., Middleton, K. A., Busch, A. L., Lundenberg, K., & Carlton, R. P. (2000). The intergenerational transmission of spouse abuse: A meta-analysis. *Journal of Marriage and the Family, 62*, 640-656.
- Stocker, C. M., & Richmond, M. K. (2007). Longitudinal associations between hostility in adolescents' family relationships and friendships and hostility in their romantic relationships. *Journal of Family Psychology, 21*(3), 490.
- Straus, M. A., Gelles, R. J., & Steinmetz, S. K. (1981). *Behind closed doors: Violence in the American family*. Garden City, NY: Anchor Books.
- Straus, M. A., Hamby, S. L., Boney-McCoy, S., & Sugarman, D. B. (1996). The revised conflict tactics scales (CTS2) development and preliminary psychometric data. *Journal of Family Issues, 17*(3), 283-316.
- Suárez-Orozco, C., & Qin, D. B. (2006). Gendered perspectives in psychology: Immigrant origin youth. *International Migration Review, 40*(1), 165-198.
- Sullivan, M., Egan, M., & Gooch, M. (2004). Conjoint interventions for adult victims and children of domestic violence: A program evaluation. *Research on Social Work Practice, 14*(3), 163-170.
- Swartout, K. M., & Swartout, A. G. (2012). Shifting perspectives: Applying person-centered analyses to violence research. *Psychology of Violence, 2*(4), 309.
- Szapocznik, J., & Kurtines, W. M. (1993). Family psychology and cultural diversity: Opportunities for theory, research, and application. *American Psychologist, 48*(4), 400.

- Tajima, E. A., Herrenkohl, T. I., Moylan, C. A., & Derr, A. S. (2011). Moderating the effects of childhood exposure to intimate partner violence: The roles of parenting characteristics and adolescent peer support. *Journal of Research on Adolescence, 21*(2), 376–94.
- Taylor, R. D. (1994). Risk and resilience: Contextual influences on the development of African-American adolescents. In M. C. Wang & E. W. Gordon (Eds.), *Educational resilience in inner-city America: Challenges and prospects* (pp. 119–137). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Tolan, P. H., & Guerra, N. G. (1994). Prevention of delinquency: Current status and issues. *Applied and Preventive Psychology, 3*(4), 251-273.
- Tyler, K. A., Brownridge, D. A., & Melander, L. A. (2011). The effect of poor parenting on male and female dating violence perpetration and victimization. *Violence and Victims, 26*(2), 218–230. doi:10.1891/0886-6708.26.2.218
- Tschann, J. M., Pasch, L. A., Flores, E., Marin, B. V. O., Baisch, E. M., & Wibbelsman, C. J. (2009). Nonviolent aspects of interparental conflict and dating violence among adolescents. *Journal of Family Issues, 30*(3), 295–319. doi:10.1177/0192513 X08325010
- Ungar, M. (2008). Resilience across cultures. *British Journal of Social Work, 38*(2), 218-235.
- Ungar, M. (2003). Qualitative contributions to resilience research. *Qualitative Social Work, 2*(1), 85-102.
- Ungar, M. (2011). The social ecology of resilience: Addressing contextual and cultural ambiguity of a nascent construct. *American Journal of Orthopsychiatry, 81*(1), 1-17.
- Ungar, M. (2013). Resilience, trauma, context, and culture. *Trauma, Violence, & Abuse, 14*(3), 255-266.

- Ulloa, E., Jaycox, L., Skinner, S., & Orsburn, M. (2008). Attitudes about violence and dating among Latino/a boys and girls. *Journal of Ethnic & Cultural Diversity in Social Work, 17*, 157–176.
- Ulloa, E. C., Jaycox, L. H., Marshall, G. N., & Collins, R. L. (2004). Acculturation, gender stereotypes, and attitudes about dating violence among Latino youth. *Violence and Victims, 19*, 273-287.
- Varela, R. E., Vernberg, E. M., Sanchez-Sosa, J. J., Riveros, A. Mitchell, M., & Mashunkashey, J. (2004). Parenting style of Mexican, Mexican American, and Caucasian - non-Hispanic families: Social context and cultural influences. *Journal of Family Psychology, 18*(4): 651-657.
- Vermunt, J. K., & Magidson, J. (2002). Latent class cluster analysis. In J.A. Hagenaars, A. L. McCutcheon (Eds.), *Applied latent class analysis* (pp. 89-106). Cambridge, England: Cambridge.
- Wang C.P., Brown, C.H., Bandeen-Roche, K. (2005). Residual diagnostics for growth mixture models: Examining the impact of preventive intervention on multiple trajectories of aggressive behavior. *Journal of the American Statistical Association, 100* (3), 1054-1076.
- Watson, J. M., Cascardi, M., Avery-Leaf, S., & O’Leary, K. D. (2001). High school students’ responses to dating aggression. *Violence and Victims, 16*(3), 339-348.
- White, J. W. (2009). A gendered approach to adolescent dating violence: Conceptual and methodological issues. *Psychology of Women Quarterly, 33*, 1-15.
- Windle, M., & Mrug, S. (2009). Cross-gender violence perpetration and victimization among early adolescents and association with attitudes toward dating conflict. *Journal of Youth and Adolescence, 38*, 429–439. doi:10.1007/s10964-008-9328-1

- Winfield, L. (1991). Resilience, schooling, and development in African-American youth: A conceptual framework. *Education and Urban Society*, 24, 5–14.
- Winston, P., Angel, R. J., Burton, L. M., Chase-Lansdale, P. L., Cherlin, A. J., Moffitt, R. A., & Wilson, W. J. (1999). *Welfare, Children, and Families: A Three City Study. Overview and Design*. Baltimore, MD: Johns Hopkins University. Retrieved from [http://web.jhu.edu/threecitystudy/images/publications/02\\_overviewanddesign.pdf](http://web.jhu.edu/threecitystudy/images/publications/02_overviewanddesign.pdf)
- Wolfe, D. A., Scott, K., Wekerle, C., & Pittman, A. L. (2001). Child maltreatment: Risk of adjustment problems and dating violence in adolescence. *Journal of the American Academy of Child and Adolescent Psychiatry*, 40(3), 282- 289.
- Wolitzky-Taylor, K. B., Ruggiero, K. J., Danielson, C. K., Resnick, H. S., Hanson, R. F., Smith, D. W., ... & Kilpatrick, D. G. (2008). Prevalence and correlates of dating violence in a national sample of adolescents. *Journal of the American Academy of Child & Adolescent Psychiatry*, 47(7), 755-762.
- Yan, F., Howard, D., Beck, K., Shattuck, T., & Hallmark-Kerr, M. (2010) Psychosocial correlates of physical dating violence victimization among Latino early adolescents. *Journal of Interpersonal Violence* 25(5), 808-831.
- Zimmerman, M. A., Stoddard, S. A., Eisman, A. B., Caldwell, C. H., Aiyer, S. M., & Miller, A. (2013). Adolescent resilience: Promotive factors that inform prevention. *Child Development Perspectives*, 7(4), 215-220.

## APPENDICES

### Appendix A

Caregiver Measures (Welfare, Children, and Families: A Three-City Study; Dataset 15: Main Interview Data, Wave 1)

Variable Label	Value Labels
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Demographics Characteristics	
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Caregiver sex: Is [mother] male or female?	1 = Male 2 = Female
Now, I'd like to ask some other background questions. Are you Spanish, Hispanic or Latino?	-2 = Refused -1 = Don't know 1 = Yes 2 = No
Which of the following groups best describes you? Are you...	-2 = Refused -1 = Don't know 1 = Cuban 2 = Dominican 3 = Mexican 4 = Puerto Rican 5 = Other
Adult respondent's foreign-born status	1 = Born in the US 2 = Born in US territory 3 = Foreign-born
Focal child's foreign-born status	1 = Born in the US 2 = Born in US territory 3 = Foreign-born
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Maternal Linguistic Acculturation	
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Is English your first language?	-2 = Refused -1 = Don't know 1 = Yes 2 = No
How well do you speak English? Would you say...	-2 = Refused -1 = Don't know 1 = Not at all 2 = Not very well 3 = Pretty well 4 = Very well

How well do you read English? (Would you say...)

-2 = Refused  
 -1 = Don't know  
 1 = Not at all  
 2 = Not very well  
 3 = Pretty well  
 4 = Very well

How well do you write English? (Would you say...)

-2 = Refused  
 -1 = Don't know  
 1 = Not at all  
 2 = Not very well  
 3 = Pretty well  
 4 = Very well

Maternal Intimate Partner Violence Revised Conflict Tactics Scale (CTS2; Straus, Hamby, Boney-Mc-Coy, & Sugarman, 1996)

Has anyone you have been in a romantic relationship with ever threatened to hit you?

1 = Yes  
 2 = No → gotoDV2

How often has this occurred in the past 12 months?

1 = never  
 2 = once or twice  
 3 = several times  
 4 = often

Has anyone you have been in a romantic relationship with ever thrown something at you?

1 = Yes  
 2 = No → gotoDV3

How often has this occurred in the past 12 months?

1 = never  
 2 = once or twice  
 3 = several times  
 4 = often

Has anyone you have been in a romantic relationship with ever pushed, grabbed or shoved you?

1 = Yes  
 2 = No → gotoDV4

How often has this occurred in the past 12 months?

1 = never  
 2 = once or twice  
 3 = several times  
 4 = often

Has anyone you have been in a romantic relationship with ever slapped, kicked, bit, or punched you?

1 = Yes  
 2 = No → gotoDV5

How often has this occurred in the past 12 months?

1 = never  
 2 = once or twice  
 3 = several times  
 4 = often

Has anyone you have been in a romantic relationship with ever beaten you?

1 = Yes  
 2 = No → gotoDV6

How often has this occurred in the past 12 months?

1 = never  
 2 = once or twice  
 3 = several times  
 4 = often

Has anyone you have been in a romantic relationship with ever choked or burned you?	1= Yes 2= No→gotoDV7
How often has this occurred in the past 12 months?	1 = never 2 = once or twice 3 = several times 4 = often
Has anyone you have been in a romantic relationship with ever used a weapon or threatened to use a weapon on you?	1= Yes 2= No→gotoDV8
How often has this occurred in the past 12 months?	1 = never 2 = once or twice 3 = several times 4 = often
Has anyone you have been in a romantic relationship with ever forced you into any sexual activity against your will?	1= Yes 2= No→gotoDV9
How often has this occurred in the past 12 months?	1 = never 2 = once or twice 3 = several times 4 = often
Has anyone you have been in a romantic relationship with ever threatened to hurt your children/child or take them away from you?	1= Yes 2= No→gotoDV13
How often has this occurred in the past 12 months?	1 = never 2 = once or twice 3 = several times 4 = often

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## Appendix B

### Adolescent Measures (Welfare, Children, and Families: A Three-City Study (Focal Child

#### Interview Data, Wave 3, Public-Use)

Variable Label	Value Labels
<b>Demographics Characteristics</b>	
Child gender	1 = Male 2 = Female
Are you Spanish, Hispanic or Latino?	-2 = Refused -1 = Don't know 1 = Yes 2 = No
Which of the following groups best describes you? Are you...	-2 = Refused -1 = don't know 1 = Cuban 2 = Dominican 3 = Mexican 4 = Puerto Rican 5 = Other
City in which caregiver and focal child interviewed at wave 1	1 = Boston 2 = Chicago 3 = San Antonio
<b>Dating Violence: Victimization (CTS2; Straus, Hamby, Boney-McCoy, et al., 1996)</b>	
In any romantic relationship you've had, has your partner ever done any of the following to you: Threatened to hit you?	1 = Yes 2 = No -1 = Don't know -2 = Refused
In any romantic relationship you've had, has your partner ever thrown something at you?	1 = Yes 2 = No -1 = Don't know -2 = Refused
In any romantic relationship you've had, has your partner ever pushed, grabbed, or shoved you?	1 = Yes 2 = No -1 = Don't know -2 = Refused
In any romantic relationship you've had, has your partner ever slapped, kicked, bit, or punched you?	1 = Yes 2 = No -1 = Don't know -2 = Refused

In any romantic relationship you've had, has your partner ever beaten you?	1 = Yes 2 = No -1 = Don't know -2 = Refused
In any romantic relationship you've had, has your partner ever choked or burned you?	1 = Yes 2 = No -1 = Don't know -2 = Refused
In any romantic relationship you've had, has your partner ever used a weapon or threatened to use a weapon against you?	1 = Yes 2 = No -1 = Don't know -2 = Refused
In any romantic relationship you've had, has your partner ever forced you into any sexual activity against your will?	1 = Yes 2 = No -1 = Don't know -2 = Refused
In any romantic relationship you've had, has your partner ever threatened to hurt or take your child away from you?	1 = Yes 2 = No 3 = Does not have child -1 = Don't know -2 = Refused

Dating Violence: Perpetration (CTS2; Straus, Hamby, Boney-McCoy, et al., 1996)

In any of your romantic relationships, have you ever done any of the following to any of your partners? Threatened to hit them?	1 = Yes 2 = No -1 = Don't know -2 = Refused
In any romantic relationship you've had, have you ever thrown something at your partner?	1 = Yes 2 = No -1 = Don't know -2 = Refused
In any romantic relationship you've had, have you ever pushed, grabbed, or shoved your partner?	1 = Yes 2 = No -1 = Don't know -2 = Refused
In any romantic relationship you've had, have you ever slapped, kicked, bit or punched your partner?	1 = Yes 2 = No -1 = Don't know -2 = Refused
In any romantic relationship you've had, have you ever beaten your partner?	1 = Yes 2 = No -1 = Don't know -2 = Refused

In any romantic relationship you've had, have you ever choked or burned your partner?	1 = Yes 2 = No -1 = Don't know -2 = Refused
In any romantic relationship you've had, have you ever used a weapon or threatened to use a weapon against your partner?	1 = Yes 2 = No -1 = Don't know -2 = Refused
In any romantic relationship you've had, have you ever forced your partner into any sexual activity against their will?	1 = Yes 2 = No -1 = Don't know -2 = Refused
In any romantic relationship you've had, have you ever threatened to hurt or take your partner's child away from them?	1 = Yes 2 = No 3 = Does not have child -1 = Don't know -2 = Refused

Parent-child relationship quality Inventory of Parent and Peer Attachment (IPPA; Armsden & Greenberg, 1987)

My [caregiver] accepts me as I am.	-2 = refused -1 = Don't know 1 = Never true 2 = Rarely true 3 = Sometimes true 4 = Often true 5 = Always true
I like to get my [caregiver]'s point of view on things I'm concerned about.	-2 = refused -1 = Don't know 1 = Never true 2 = Rarely true 3 = Sometimes true 4 = Often true 5 = Always true
Talking over my problems with my [caregiver] makes me feel ashamed or foolish.	-2 = refused -1 = Don't know 1 = Never true 2 = Rarely true 3 = Sometimes true 4 = Often true 5 = Always true
My [caregiver] expects too much from me.	-2 = refused -1 = Don't know 1 = Never true 2 = Rarely true 3 = Sometimes true 4 = Often true 5 = Always true

I get upset a lot more than my [caregiver] knows about.

-2 = refused  
 -1 = Don't know  
 1 = Never true  
 2 = Rarely true  
 3 = Sometimes true  
 4 = Often true  
 5 = Always true

When we discuss things, my [caregiver] cares about my point of view.

-2 = refused  
 -1 = Don't know  
 1 = Never true  
 2 = Rarely true  
 3 = Sometimes true  
 4 = Often true  
 5 = Always true

My [caregiver] has her own problems, so I don't bother her with mine.

-2 = refused  
 -1 = Don't know  
 1 = Never true  
 2 = Rarely true  
 3 = Sometimes true  
 4 = Often true  
 5 = Always true

I tell my [caregiver] about my problems and troubles.

-2 = refused  
 -1 = Don't know  
 1 = Never true  
 2 = Rarely true  
 3 = Sometimes true  
 4 = Often true  
 5 = Always true

I feel angry with my [caregiver].

-2 = refused  
 -1 = Don't know  
 1 = Never true  
 2 = Rarely true  
 3 = Sometimes true  
 4 = Often true  
 5 = Always true

I get a lot of attention from my [caregiver].

-2 = refused  
 -1 = Don't know  
 1 = Never true  
 2 = Rarely true  
 3 = Sometimes true  
 4 = Often true  
 5 = Always true

I trust my [caregiver].

-2 = refused  
 -1 = Don't know  
 1 = Never true  
 2 = Rarely true  
 3 = Sometimes true  
 4 = Often true  
 5 = Always true

My [caregiver] doesn't understand what I'm going through these days.

-2 = refused  
 -1 = Don't know  
 1 = Never true  
 2 = Rarely true  
 3 = Sometimes true  
 4 = Often true  
 5 = Always true

### Parental Monitoring

How much does your [caregiver] know about who your friends are?

1 = doesn't know  
 2 = knows a little  
 3 = knows a lot  
 -1 = doesn't know  
 -2 = refused

How much does your [caregiver] know about where you are during the day when you're not at school or at work?

1 = doesn't know  
 2 = knows a little  
 3 = knows a lot  
 -1 = doesn't know  
 -2 = refused

How much does your [caregiver] know about where you go at night?

1 = doesn't know  
 2 = knows a little  
 3 = knows a lot  
 -1 = doesn't know  
 -2 = refused

How much does your [caregiver] know about what you do with your free time?

1 = doesn't know  
 2 = knows a little  
 3 = knows a lot  
 -1 = doesn't know  
 -2 = refused

How much does your [caregiver] know about how you spend your money?

1 = doesn't know  
 2 = knows a little  
 3 = knows a lot  
 -1 = doesn't know  
 -2 = refused