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Behavior Problems Among Adolescents Exposed to Family and Community Violence in Chile

Research that simultaneously examines the relationship of multiple types of family and community violence with adolescent outcomes is limited in the previous research literature, particularly in Latin America. This study examines the relationship of adolescent exposure to family and community violence—parental use of corporal punishment, violence in the community, intimate partner physical aggression—with eight subscales of the Youth Self Report among a Chilean sample of 593 adolescent–mother pairs. Results from multilevel models indicated a positive association between adolescent exposure to violence in the family and community, and a wide range of behavior problem outcomes, in particular, aggression. With growing evidence concerning the detrimental effect of violence on adolescent well-being, these findings emphasize the need for a more comprehensive understanding of the various kinds of violence adolescents are exposed to within the family and community and the concomitant need to reduce multiple forms of violence.

The literature continues to highlight the pervasiveness of violence against children and adolescents in the family and community (Finkelhor, Turner, Shattuck, & Hamby, 2013;

Pinheiro, 2006). Whether children experience violence as victims or as witnesses, children who are exposed to violence in the family and community tend to also have lower levels of well-being than their counterparts who are not exposed to violence (Kennedy, Bybee, Sullivan, & Greeson, 2010; Mrug, Loosier, & Windle, 2008). The United Nations Secretary-General's Study on Violence Against Children—a global report documenting children's exposure to various forms of violence in 35 nations—estimated that between 133 million and 275 million children are exposed to violence in their family in a given year (Pinheiro, 2006). Children's exposure to community violence is also projected to be high and problematic across the globe (Krug, Dahlberg, Mercy, Zwi, & Lozano, 2002).

In Chile, where the present study was conducted, violence in the family and community continues to be a public health concern, despite substantial legislative progress in reducing violence by the enactment of a domestic violence law in 2005 (Cruz, 2000; Hassan et al., 2004; Oviedo & Rodríguez, 1999; Zlotnick et al., 2006). Population-based estimates show that between 25% and 31% of Chilean women are victims of physical intimate partner violence in their lifetimes (Ceballos, Ramirez, Castillo, Caballero, & Lozoff, 2004; Hassan et al., 2004). Also, parental corporal punishment is considered a socially acceptable method of child discipline in Chilean families (Vargas et al., 1995). Estimates suggest that 20% of mothers and 10% of fathers hit their children with their hands or an object (Ma,

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Han, Grogan-Kaylor, Delva, & Castillo, 2012). In addition, 16% of Chilean men and 12% of Chilean women living in urban areas have observed a physical assault or homicide in their lifetime (Zlotnick et al., 2006). The rates of interpersonal violence in Chilean families are likely to be underreported, partly because of an emphasis on patriarchy and parental authority in Latino culture (Ceballos et al., 2004; Fontes, 2002).

Current theory and research about victimization among children suggests that multiple forms of violence in the family and community that children are exposed to are likely interrelated (Bronfenbrenner, 2005; Margolin & Gordis, 2004; Turner, Finkelhor, & Ormrod, 2006). However, extant research on the effects of violence on child outcomes within an ecological and multilevel framework that jointly considers family- and neighborhood-level risk is largely limited to samples from Europe and North America (Zlotnick et al., 2006). Widespread concern about family and community violence, together with limited knowledge about the effects of violence in Latin American countries, has led us to investigate interpersonal and community violence in the context of Chilean adolescent development and outcomes.

Considerable literature documents links between adolescent exposure to family and community violence and adverse outcomes, even when adolescents are not the direct victims of the violence (Margolin & Gordis, 2004; Mrug et al., 2008). More specifically, research indicates that intimate partner violence, parents' use of violence against their children, and crime and violence in the community are linked to behavior problems as well as lower mental health, social competence, and academic performance (Buka, Stichick, Birdthistle, & Earls, 2001; Foster & Brooks-Gunn, 2009; Grogan-Kaylor, 2005; Kennedy et al., 2010; Long, Monoi, Harper, Knoblauch, & Murphy, 2007). In addition, exposure to family and community violence may have a long-term negative effect on adolescent emotional and behavioral development by socializing them to believe that such violence is normative (Margolin & Gordis, 2000).

A growing body of literature has found that exposure to and perpetration of multiple forms of violence occur at high rates (Finkelhor et al., 2013; Margolin & Gordis, 2004), and that polyvictimization is particularly detrimental to

children's emotional and behavioral outcomes (Turner et al., 2006). One line of inquiry highlights the co-occurrence of intimate partner violence and parent-to-child violence (Slep & O'Leary, 2005; Taylor, Lee, Guterma, & Rice, 2010). For instance, Taylor et al. (2010) found substantial associations between intimate partner violence and parental corporal punishment, such that the odds of corporal punishment doubled in families where intimate partner violence has occurred.

Another line of research suggests that children's exposure to intimate partner violence may pose a greater risk for experiencing community violence (Hughes, Humphrey, & Weaver, 2005; Mrug et al., 2008; Saunders, 2003; Turner et al., 2006). However, studies on children and adolescents who are victimized in the home and community by witnessing intimate partner violence *and* community violence are limited in comparison to research on children who are direct victims of family and community violence (Fantuzzo, Boruch, Beriama, Atkins, & Marcus, 1997; Kitzmann, Gaylord, Holt, & Kenny, 2003). This paucity of research may be because (a) there is a lack of agreement on how to define indirect (or witnessed) violence and (b) indirect victimization (however defined) is more challenging to measure (Buka et al., 2001). Nonetheless, in line with growing evidence on the deleterious consequences that children and adolescents who are victimized by witnessing violence suffer, more research studies are considering indirect exposure to violence as a potential form of child maltreatment (Kitzmann et al., 2003).

Although much scholarly attention has focused on outcomes for children who are exposed to multiple types of family and community violence, only a handful of studies have included parental corporal punishment along with other measures of family violence (e.g., Slep & O'Leary, 2005; Taylor et al., 2010). This may be somewhat attributable to the high public acceptance and prevalence of corporal punishment across a number of cultural contexts, including Chile and the United States, which in turn makes corporal punishment—in comparison to child abuse—a legitimate and normative childhood experience in these countries (Gershoff, 2002; Ma et al., 2012). In contrast, violence between partners and child abuse are against the law in Chile and the United States. Studies that examine the simultaneous

effects of corporal punishment and other forms of violence have yet to provide a comprehensive understanding of the patterns and sequelae of family and community violence, which might allow us to assess the unique influence of particular forms of violence—such as physical punishment or intimate partner violence—in a broader context of multiple types of violence.

A theoretical basis for understanding the interrelationship of family and community violence and their relationship with adverse developmental outcomes in adolescents can be grounded in Bronfenbrenner's (2005) ecological systems theory. Ecological systems theory emphasizes the confluence of multiple social systems that explain the developmental process throughout the life course. Further, the person-in-context perspective, an expansion of ecological systems theory, integrates contextual influences (e.g., neighborhood violence) and proximal factors (e.g., violence in the family) as well as the interplay between the child and the confluence of social systems in shaping child development.

While ecological systems theory provides a conceptual framework for the link between individual child, parent, family, and community factors on child outcomes, social learning theory and theories of stress outline the potential pathways through which exposure to violence may be transmitted to a child's problematic behaviors. Social learning theory posits that social learning is an integration of cognitive and behavioral processes during which the environment, cognition, and behavior are interdependent. According to this theory, children who are exposed to violence by adults in the family and community may integrate and process violence as normative and socially acceptable behavior for correcting others' undesirable behavior (Bandura, 1973). That is, the legitimacy of violence is reinforced in children exposed to corporal punishment, intimate partner physical aggression, and community violence. Consequently, social learning theory predicts that children exposed to violence are more likely to imitate violent acts in their own social situations and to exhibit externalizing behavior problems. For example, research has consistently found evidence that exposure to violence among children is positively linked with externalizing problems, including aggression and delinquent behaviors (Gershoff, 2002; Kitzmann et al., 2003; Ma et al., 2012).

Theories of stress offer broad explanations of the relationship between exposure to violence and internalizing problems and neurocognitive disorders (Becker & McCloskey, 2002; Foster & Brooks-Gunn, 2009). Environmental and social stressors such as chronic and acute exposure to family and community violence elevate the release of stress hormones in individuals, which results in an increased risk of developing a range of mental health problems (Peckins, Dockray, Eckenrode, Heaton, & Susman, 2012). To elaborate, experiencing violence elicits distress from children and can arouse fear, tension, and threat. The psychological distress triggered by exposure to family and community violence could eventually be linked to child psychopathology (Cummings & Davies, 2002; Perkins & Graham-Bermann, 2012). In accordance with the stress response pathway, prior research has found a positive association with exposure to violence and child psychopathology, including internalizing problems (Kitzmann et al., 2003), social problems (Perkins & Graham-Bermann, 2012), and neurocognitive problems such as attention problems (Becker & McCloskey, 2002).

On the basis of extant empirical and theoretical research that emphasizes the interrelatedness of micro- and macro-level contexts in shaping child development, the present study is designed to extend current knowledge on the associations among multiple forms of family and community violence and undesirable outcomes among adolescents, based on a population that is understudied in current literature (Ma et al., 2012; Pinheiro, 2006). Within the sociocultural contexts of Latin America, the findings are expected to have meaningful implications for practitioners working with Latin American adolescents and families who are affected by violence. Another goal of the study is to afford a broader view of the associations between family and community factors and problematic adolescent behavior. The comorbidity of multiple psychological and physiological symptoms among children, both within and across the broadband symptoms of internalizing and externalizing problems, has been well established in prior literature (Reynolds, O'Koon, Papademetriou, Szczygiel, & Grant, 2001; Saunders, 2003). Nevertheless, there has been little research that investigates the co-occurrence of internalizing and externalizing problems and mental health symptoms that are not categorized as

externalizing or internalizing, such as attention problems (Becker & McCloskey, 2002). In this study we addressed this limitation by using all eight subscales in the Achenbach set of child behavior problem measurements, which includes both more commonly studied outcome domains (e.g., aggression, anxiety, depression) and less commonly studied problems (e.g., somatic complaints, thought problems, attention problems; Achenbach & Rescorla, 2001), as the study outcomes. Understanding of family and community risk factors that are linked to a broader set of adolescent problem behaviors in a context outside the United States will have important implications for tailored interventions and family life education serving adolescents and parents in cross-cultural contexts.

Guided by the tenets of ecological systems theory as well as prior research that underscores the co-occurrence of violence against children in the family and community, this study examines the concurrent associations between multiple forms of family and community violence and adolescent behavior problems. In light of social learning theory, which underscores the cognitive and behavioral processes of observational learning, we hypothesized that adolescent exposure to family and community violence is associated with an elevated level of externalizing symptoms among a community sample of Chilean adolescents. According to the principles of stress theory, the emotional and physiological distress caused by violence is expected to increase internalizing symptoms. To address the scarcity of prior research that has considered the clustered nature of neighborhood-level risk factors, we account for aggregated neighborhood effects in relation to social problems such as violence at the neighborhood level using a multi-level analytical framework (Sampson, Morenoff, & Gannon-Rowley, 2002). Several child and family characteristics such as socioeconomic status (SES), gender, and age—which have been linked to child victimization in the family and community—are accounted for in our analysis. In detail, research found that males, older children, and children in low-SES backgrounds are more likely to experience family and community violence (Buka et al., 2001; Kennedy et al., 2010; Kim, Hetherington, & Reiss, 1999). Finally, to consider the broader context of family environment in which violent acts occur, warmth of parents is included as a covariate.

In view of previous literature that identifies parental warmth as a protective factor for child development (Hardaway, McLoyd, & Wood, 2012; Harper, Brown, Arias, & Brody, 2006), we expected an inverse relationship between parental warmth and behavior problems.

METHOD

Sample and Procedures

We used data from a cross-sectional sample of adolescents and their mothers from the Santiago Longitudinal Study (SLS). The SLS is a study of adolescents and their parents from low- to mid-SES municipalities in southern parts of Santiago, Chile, conducted between 2007 and 2010, with funding from the National Institute on Drug Abuse. Participants for this collaborative study between institutions in the United States and Chile were recruited from a community sample of families who had participated in an earlier study of nutrition (Lozoff et al., 2003). In a period of approximately a year and a half, a total of 787 pairs of adolescents and their mothers (or mother figures such as grandmothers or aunts who were the main caregivers of the adolescent participant) independently completed the surveys on the adolescent, which assessed a wide range of individual, peer, family, school, and neighborhood topics. Each survey was administered in a private room at the University of Chile's Institute for Nutrition and Food Technology (INTA) and took approximately 2 hours to complete. Most participants read the questions themselves, but the interviewer, a clinical psychologist, read the questions to some participants who asked for assistance. To thank individuals for participating in the study, adolescents received two movie tickets and the mother a scarf; each gift was valued at roughly US\$20 dollars.

To adequately capture the level of intimate partner physical aggression against mothers or mother figures in households, the analytic sample for the present study was limited to 619 adolescents who lived with both mother and father (or the mother's intimate partner). The analysis sample was further limited to 593 adolescent-mother pairs with complete data on all the variables included in the study. No statistical differences were found between the full sample ($n=787$) and the analytic sample ($n=593$) on any study variables using independent samples t tests, which suggests that our

inclusion criteria did not introduce selection bias to the existing sample.

The mean age of the analytic sample was 14.2 years, with a range of 11.9 to 17.8 years ($SD = 1.5$). The sample was almost evenly divided between male (51.9%) and female (48.1%) adolescents.

Measures

The questionnaires used standardized measures that were translated into Spanish and then back-translated into English. The translation and back-translation were compared by a bilingual team of investigators to develop the final Spanish version of study measures. Further, Spanish versions of the questionnaires were then pilot tested, reliability and validity were analyzed, and minor revisions to questions were made before commencing the study.

Emotional and Behavioral Problems. The dependent variables were the eight subscale symptoms of the Youth Self Report (YSR; Achenbach & Rescorla, 2001). The YSR is a standardized measure that includes adolescent self-reports of emotional and behavioral problems. Each of the eight subscales is the sum of items that ask adolescents to describe their behavior during the previous 6 months on a 3-point scale with response options of *not true* (0), *somewhat or sometimes true* (1), and *very true or often true* (2). An example item for each of the eight YSR subscale symptoms are the following: "I cry a lot" (Anxious-Depressed; 13 items, $\alpha = .74$), "There is very little that I enjoy" (Withdrawn-Depressed; 8 items, $\alpha = .67$), "I feel overtired without good reason" (Somatic Complaints; 10 items, $\alpha = .68$), "I don't get along with other kids" (Social Problems; 11 items, $\alpha = .61$), "I deliberately try to hurt or kill myself" (Thought Problems; 12 items, $\alpha = .61$), "I have trouble concentrating or paying attention" (Attention Problems; 9 items, $\alpha = .64$), "I drink alcohol without my parents' approval" (Delinquent Behaviors; 15 items, $\alpha = .69$), and "I destroy things belonging to others" (Aggressive Behaviors; 17 items, $\alpha = .81$).

Intimate Partner Physical Aggression. The level of intimate partner physical aggression represented one domain of adolescent exposure to violence that was measured to assess the observational learning of violence and distress among

adolescents. Mothers responded to six items ($\alpha = 0.82$) concerning their spouse or partner's physical aggression; the items were a subset of the original Conflict Tactic Scales (Straus, 1979), one of the most widely used instruments of intimate partner violence. The mother was asked to indicate how often her spouse or partner did each of the following in the context of a heated disagreement with her in the previous year: (a) threw something (but not at her) or smashed something; (b) threatened to hit or throw something at her; (c) threw something at her; (d) pushed, grabbed, or shoved her; (e) hit (or tried to hit) her but not with an object; and (f) hit (or tried to hit) her with something hard. Response options for each item were *never* (0); *once in the past year* (1); *2 or 3 times in the past year* (2); *often, but less than once a month* (3); *about once a month* (4); and *more than once a month* (5).

Corporal Punishment. Parental corporal punishment indicated violence toward adolescents that may both legitimize violence and increase stress. Adolescents reported on both parents' use of corporal punishment, which was assessed with a question from the Study of Early Child Care and Youth Development (SECCYD; National Institute of Child Health and Human Development, 2008). Specifically, the following question was asked to adolescents twice, once each for the mother and father: "How often does your mother/father strike or hit you with her/his hands or an object?" Response options were *never* (1), *sometimes* (2), *often* (3), and *always* (4). Consistent with the focus of this study that examined the risk of parent to child violence rather than differentiating the influences of each parent's use of violence toward the adolescent, the mean score of each respondent's answers for mother and father was used to represent overall parental use of corporal punishment.

Community Violence. Adolescent perceptions and exposure concerning community violence were measured with an item from the National Survey of American Life (Program for Research on Black Americans, 2001). Specifically, adolescents were asked, "How often are there problems with muggings, burglaries, assaults or anything else like that in your neighborhood?" Response options were *never* (1), *hardly ever* (2), *not too often* (3), *fairly often* (4), and *very often* (5). This item was viewed as a valid

measure of actual levels of community violence because multiple studies have reported that self-reported measures on exposure to community violence were highly correlated with official crime reports (Attar, Guerra, & Tolan, 1994; Guerra, Rowell Huesmann, & Spindler, 2003).

Warmth of Parents. Adolescent reports of mother's warmth ($\alpha = .92$) and father's warmth ($\alpha = .93$) were based on nine items from a 17-item scale used in the SECCYD to measure the quality of the relationship of adolescents with their mother and father (National Institute of Child Health and Human Development, 2008). Example items include, "When you and your mother/father spend time talking or doing things together, how often does she/he let you know she/he really cares about you?" and "How often does she/he act supportive and understanding toward you?" Response options were *never* (1), *sometimes* (2), *often* (3), and *always* (4). The mean response for mother and father's warmth was used to indicate the overall level of parental warmth.

Demographic Characteristics. Demographic variables included in the analyses were adolescent self-reported gender and age and SES reported by the mother. Gender was a dichotomous variable (1 = *male*, 2 = *female*). Age was a continuous variable that measured adolescent age in years at the time of the survey. The SES measure used in this study is a *z*-scored composite of mother's and father's completed years of education, the level of prestige of the occupation of the parent whose occupation had the higher social status, and family income as reported by the mother.

Analytical Strategy

Descriptive statistics and correlations between study variables are presented in Table 1. Results from multilevel analyses are presented in Table 2. Given that a motivating interest for this study is the co-occurrence of multiple forms of violence, bivariate analyses were used first to examine the degree to which different types of violence were correlated. Then, to account for the neighborhood clustering of families, who resided in 24 communities (*comunas*) across the Santiago metropolitan area, multilevel models (Raudenbush & Bryk, 2002)

were employed. In accordance with standard practice in multilevel modeling, these models employed a randomly varying intercept term to account for the clustering of observations inside neighborhoods.

The initial analyses examined multilevel models that included Level 1 information on individual youth as well as Level 2 variables at the neighborhood level that were computed by taking the mean of individual responses on parental use of corporal punishment and intimate partner physical aggression. A likelihood-ratio test of the multilevel models with Level 2 information indicated that the Level 2 predictors did not improve the fit of the models when compared to models without Level 2 predictors. As a result, we used multilevel models that allowed the intercepts of the models to vary by neighborhood (*comuna*) without Level 2 variables.

RESULTS

Descriptive Statistics

Among the 20% ($n = 119$) of mothers who reported experiencing intimate partner physical aggression over the previous year, 60% experienced the aggression once, 29% experienced it two or three times, 6% experienced it "often, but less than once a month," and 6% indicated that they had experienced physical aggression from their intimate partners once per month or more over the previous year. The majority of adolescents (77%) reported that their parents "never" used corporal punishment, 14% indicated that they experienced it "sometimes," and 9% did so "often" or "always." The mean exposure to community violence in this sample was 2.84, which indicates that, on average, adolescents witnessed violence in their community "not too often." Adolescents reported mean parental warmth of 3.13, which corresponds to the response category "often" ($SD = 0.65$). Table 1 provides descriptive statistics for each emotional and behavior symptom.

Correlation of Types of Violence

Community violence and parental use of corporal punishment were statistically correlated ($r = .11$, $p < .01$), which indicates that higher levels of one type of violence were associated with higher levels of the other, but this correlation was substantively small. Neither

Table 1. Means, Standard Deviations, Ranges, and Correlations for All Variables (N = 593)

Variables	M	SD	Range	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
1. Intimate partner physical aggression	0.22	0.64	0-5	-															
2. Corporal punishment	1.17	0.37	1-33.5	-0.01	-														
3. Community violence	2.84	1.13	1-5	.03	.11*	-													
4. Warmth of parent	3.13	0.65	1.1-4	-0.13*	-0.18*	-0.02	-												
5. Youth age	14.20	1.45	11.9-17.8	-0.03	-0.09*	.11*	-0.25*	-											
6. Youth gender	0.52	-	1-2	.02	.01	.02	.04	-0.02	-										
7. Socioeconomic status	0.24	1.00	-3.41-4.36	-0.18*	.00	.01	.05	.06	.03	-									
8. Anxious-depressed	5.84	3.71	0-22	.04	.08	.14*	.14*	-0.01	.26*	-0.08	-								
9. Withdrawn-depressed	4.15	2.69	0-14	.04	.09*	.04	-0.27*	.11*	.13*	-0.12*	.56*	-							
10. Somatic complaints	3.11	2.50	0-14	.03	.07	.14*	-0.13*	.09*	.19*	-0.14*	.44*	.37*	-						
11. Social problems	3.96	2.60	0-13	.04	.09*	.12*	-0.22*	.03	.09*	-0.06	.60*	.54*	.41*	-					
12. Thought problems	2.49	2.30	0-16	.04	.13*	.14*	-0.09*	.04	.04	-0.02	.46*	.37*	.39*	.40*	-				
13. Attention problems	5.61	3.00	0-15	.11*	.10*	.04	-0.19*	.07	.07	-0.05	.48*	.39*	.33*	.49*	.41*	-			
14. Delinquent behaviors	4.88	3.27	0-22	.09*	.17*	.17*	-0.26*	.11*	-0.12*	-0.04	.28*	.21*	.25*	.34*	.32*	.41*	-		
15. Aggressive behaviors	7.91	4.87	0-24	.10*	.15*	.12*	-0.28*	.11*	.05	-0.02	.51*	.39*	.42*	.51*	.45*	.61*	.60*	-	

*p < .05 (or lower).

community violence nor corporal punishment was statistically correlated with intimate partner physical aggression, which suggests that higher levels of intimate partner physical aggression were not associated with higher forms of other types of violence. Table 1 includes a correlation matrix of all variables.

Multilevel Models

Table 2 presents results of the multilevel models. Youth exposure to intimate partner physical aggression had a positive statistical association with the YSR Attention subscale ($B = 0.39, p = .049$) after controlling for the effects of corporal punishment, community violence, warmth of parents, and demographic characteristics. Parental use of corporal punishment was statistically related to increases in thought problems ($B = 0.66, p = .009$), delinquent behaviors ($B = 1.10, p = .004$), and aggressive behaviors ($B = 1.35, p = .023$), net of the other variables in the study. Community violence was positively associated with all YSR subscales except for the Withdrawn-Depressed and Attention Problems subscales. Conversely, warmth of parent was associated with lower levels of emotional and behavioral problems on all YSR subscales except Thought Problems. Age was not statistically associated with the YSR problem subscales, but gender was statistically associated with a number of emotional and behavior problems. Specifically, girls tended to score higher on the Anxious-Depressed, Withdrawn-Depressed, Somatic Complaints, and Social Problems subscales, and boys tended to score higher on the Delinquent Behaviors subscale. Socio-economic status was inversely associated with the Anxious-Depressed, Withdrawn-Depressed, and Somatic Complaints subscales. Finally, an examination of standardized coefficients (available upon request) indicates that among the three different types of violence in the models, exposure to intimate partner physical aggression was the least influential predictor of the YSR subscale symptoms. One exception was the Attention Problems subscale, in which intimate partner physical aggression was the strongest predictor, followed by corporal punishment and community violence.

DISCUSSION

Grounded in a theoretical framework that integrates ecological systems theory, social learning

Table 2. Parameter Estimates for Multilevel Models (N = 593)

	Anxious-Depressed			Withdrawn-Depressed			Somatic Complaints			Social Problems			Thought Problems			Attention Problems			Delinquent Behaviors			Aggressive Behaviors					
	B	SE	p	B	SE	p	B	SE	p	B	SE	p	B	SE	p	B	SE	p	B	SE	p	B	SE	p			
<i>Exposure to Violence</i>																											
Intimate partner physical aggression	0.01	0.23	.935	-0.08	0.17	.679	-0.05	0.16	.824	-0.02	0.17	.881	0.09	0.15	.510	0.39	0.19	.049	0.26	0.20	.219	0.53	0.31	.084			
Corporal punishment	0.34	0.40	.313	0.39	0.29	.146	0.30	0.27	.277	0.24	0.28	.428	0.66	0.25	.009	0.57	0.33	.088	1.10	0.35	.004	1.35	0.52	.023			
Community violence	0.48	0.13	<.001	0.06	0.09	.881	0.30	0.09	.001	0.26	0.09	.001	0.27	0.08	.006	0.07	0.11	.531	0.38	0.11	<.001	0.44	0.17	.001			
<i>Positive Parenting</i>																											
Warmth of parents	-0.71	0.24	.004	-0.97	0.17	<.001	-0.33	0.16	.050	-0.85	0.17	<.001	-0.22	0.15	.187	-0.72	0.20	<.001	-1.10	0.20	<.001	-1.74	0.31	<.001			
<i>Demographics</i>																											
Youth age	-0.13	0.11	.221	0.10	0.08	.159	0.11	0.07	.199	-0.06	0.08	.301	0.03	0.07	.794	0.08	0.09	.625	0.10	0.09	.693	0.16	0.14	.634			
Youth gender	1.96	0.29	<.001	0.68	0.21	.001	0.94	0.20	<.001	0.44	0.21	.021	0.14	0.19	.390	0.39	0.24	.072	-0.91	0.25	<.001	0.41	0.38	.163			
Socioeconomic status	-0.11	0.06	.047	-0.12	0.04	.002	-0.14	0.04	<.001	-0.06	0.04	.368	-0.01	0.04	.970	-0.04	0.05	.676	-0.03	0.05	.811	-0.01	0.07	.527			
Constant	5.23	2.03	.009	4.14	1.49	.005	0.02	1.40	.975	5.79	1.46	<.001	1.02	1.33	.399	5.23	1.70	.003	5.81	1.79	.001	7.57	2.68	.006			
Log-likelihood	-1582			-1395			-1353			-1385			-1322			-1476			-1501			-1746					
χ^2	78.48			70.63			62.33			46.94			25.59			35.69			88.13			71.11					

Note: Each model had 24 groups and 7 degrees of freedom.

theory, and stress theory, we employed multilevel models to explore the simultaneous associations among multiple forms of family and community violence and a comprehensive array of behavioral and emotional problems among adolescents, as well as the potentially protective role of parental warmth on behavioral and emotional problems, with a sample of mother-adolescent pairs in Santiago, Chile. Consistent with prior literature and the study hypotheses, we found adverse behavioral and emotional outcomes among adolescents exposed to intimate partner physical aggression, parental corporal punishment, and community violence. As expected, parental warmth was inversely associated with adolescent emotional and behavioral problems, which suggests that positive and supportive parenting plays a protective role even for adolescents exposed to family and community violence. The findings provide a broader understanding of the eight subscale symptoms of the Youth Self Report that are affected by family and community risks, and do so with a sample of adolescents and parents from an understudied cultural context.

Correlation of Different Forms of Violence

Contrary to our hypothesis that parental corporal punishment, intimate partner physical aggression, and community violence would be related, only small and practically meaningless correlations were found among these different forms of violence, which suggests that they are not all part of a single unitary construct of ecological- and family-level violence. Notably, however, the different forms of violence appear to exert similar effects on adolescents. For example, increases in each of the three forms of violence were associated with higher levels of youth aggression. Similarly, other behavior problems were often linked to multiple forms of violence.

Exposure to Community Violence

Consistent with the study hypotheses guided by the tenets of social learning theory and stress theory, exposure to community violence was positively associated with most YSR subscales, even when also taking into account the effects of adolescent demographics and positive parenting. These findings demonstrate a substantial link between witnessing community violence

and both internalizing and externalizing problems in adolescents (Guerra et al., 2003; Turner et al., 2006), and in doing so, both advance the limited literature base on the linkage between violence and mental health within the socio-cultural contexts of Latin America, and lend considerable support for stress theory. Adolescents who are exposed to community violence may become more vulnerable to experiencing anxious-depressed symptoms (e.g., fear and nervousness), somatic complaints (e.g., have nightmares), and thought problems (e.g., having trouble sleeping), mainly because of the distress and threat associated with observing violent acts (Cummings & Davies, 2002). These findings also inform practice by pointing to the specific aspects of mental health that are affected by community violence. Replication of the current models is warranted in future research to further test the role of community violence on a range of adolescent behavior problems.

Notably, Withdrawn-Depression and Attention Problems were the two YSR subscales that did not yield a positive association with exposure to community violence. This finding is consistent with prior studies in which the link between witnessing violence and problematic outcomes such as lower mental health has not been as strong as the link between being the victim of violence and mental disorders (Farrell & Bruce, 1997; Pastore, Fisher, & Friedman, 1996). The absence of meaningful associations between community violence and the Withdrawn-Depression and Attention Problems subscales should not come as a surprise given the limited theoretical bases regarding pathways through which the deleterious influence of violence may manifest in child mental health (Gershoff, 2002; Mulvaney & Mebert, 2007). Indeed, although numerous studies have found a positive relationship between exposure to community violence and externalizing behavior, there is a paucity of empirical support for the associations between community violence and mental health disorders because fewer studies have examined this relationship (for exceptions, see Kennedy et al., 2010; Xue, Leventhal, Brooks-Gunn, & Earls, 2005).

Exposure to Family Violence

An important finding of this study is that exposure to each of the three forms of family and

community violence was meaningfully associated with adolescent aggression. This demonstrates the unique and independent relationships of intimate partner physical aggression, corporal punishment, community violence, and aggressive behavior within a Latin American country in which violence toward women and children may sometimes be perceived as integral to preserving patriarchal family values (McWhirter, 1999). Stated differently, the current analyses identified adolescent exposure to violence as a risk factor for aggression even in a sociocultural context that may be more permissive of family violence. However, unlike exposure to community violence that yielded meaningful associations to most internalizing and externalizing problems measured by the YSR, intimate partner physical aggression and corporal punishment were not related to internalizing symptoms (i.e., anxious-depression, withdrawn-depression, and somatic complaints). The association between exposure to violence and externalizing behavior problems complements social learning theory (Bandura, 1973). That is, adolescents who experience or witness family violence are inadvertently socialized to think that violence is a legitimate form of resolving conflict, which may in turn increase the likelihood of adolescents becoming violent themselves (Stith et al., 2000).

Furthermore, the positive relationship between family violence and aggression found in this study adds empirical evidence to research that implicates parental corporal punishment and intimate partner violence as key risk factors for undesirable behavior (Gershoff, 2002; Kitzmann et al., 2003). However, contrary to our hypothesis, which was grounded in stress theory, neither type of family violence predicted internalizing problems. A possible explanation for intimate partner physical aggression not being meaningfully associated with internalizing symptoms is the reliance on mothers' self-report to assess adolescent exposure to intimate partner's physical aggression. That is, despite the presence of this type of violence, adolescents may not have observed the violent incidents against their mothers and thus were not directly affected by them. This methodological limitation may also explain the weak relationships between intimate partner's physical aggression and most YSR subscale symptoms in comparison to the relative strength of corporal punishment and community violence as predictors of outcomes.

Although we did not find a relationship between family violence and internalizing problems, it is notable that both types of family violence were statistically related to attention problems, and that corporal punishment also predicted thought problems. In light of prior research that identifies attention and thought problems as potential risk factors for neurodevelopmental disorders (Becker & McCloskey, 2002), these results point to a need to consider problematic outcomes among adolescents affected by family violence, which have received relatively limited attention in prior research in comparison to externalizing and internalizing symptoms.

Parental Warmth as a Protective Factor

As expected, parental warmth was inversely associated with most problem behaviors, except for thought problems, even when taking into account adolescent exposure to violence and demographics. This finding is consistent with previous research that identified the protective role of parental warmth in adolescent development (Hardaway et al., 2012; Harper et al., 2006). Nonetheless, the associations between exposure to family and community violence and adolescent behavior problems, even in the context of a positive parent-child relationship, underscore the importance of a comprehensive intervention that promotes a violence-free family and community environment as well as supportive and warm parenting for positive adolescent outcomes.

Differences by Gender and Family SES

Gender differences in adolescent problem behavior have been clearly demonstrated in prior research (Hankin, Mermelstein, & Roesch, 2007; Rose & Rudolph, 2006). As such, although gender was included as a covariate in the investigation of the relationship between exposure to violence and adolescent outcomes, it is worthwhile to discuss the gendered findings. Our findings were consistent with existing literature in which girls have tended to score higher on internalizing problems than boys, especially during adolescence (Achenbach & Rescorla, 2001; Keenan & Shaw, 1997). Specifically, our findings suggest that girls are more likely to display problems associated with being withdrawn-depressed and/or

anxious-depressed, and with more somatic complaints and social problems than boys. Some studies have suggested that this difference may be due to the process of socialization, such that internalizing behavior is viewed as normative behavior in girls and parents encourage girls to develop internalizing behaviors rather than externalizing behaviors (Keenan & Shaw, 1997; Zahn-Waxler, 1993). Others indicate that girls experience more stressors, especially interpersonal stressors, which are associated with more internalizing disorders (Hankin et al., 2007; Rose & Rudolph, 2006). In terms of the externalizing problems, boys scored statistically higher on delinquent behaviors, which also supports previous arguments on gender differences with regard to externalizing behavior problems (Kim et al., 1999; Zahn-Waxler, 1993).

Furthermore, our findings suggest that adolescents in low-SES families are more vulnerable to all three subscale symptoms in the YSR internalizing scale: anxious-depressed, withdrawn-depressed, and somatic complaints. These results lend further support to prior research that identified low family SES as a substantial risk factor for adverse developmental outcomes, including mental health problems among adolescents (Reiss, 2013; Van Voorhees et al., 2008).

Collectively, these findings speak to the need for a closer examination of the individual and family processes through which exposure to violence affects internalizing symptoms in female adolescents and among adolescents who are in disadvantaged socioeconomic conditions to inform the development of more targeted prevention and intervention initiatives (Margolin & Gordis, 2000).

Limitations

Results of this study should be interpreted cautiously in consideration of several study limitations. First, causal and temporal relationships of the main variables of interest cannot be determined because of the cross-sectional design of this study (Sampson et al., 2002). Further, the reciprocal nature of the parent and child relationship has been frequently discussed in previous literature (Gershoff, Lansford, Sexton, Davis-Kean, & Sameroff, 2012), and it is not within the scope of this study to confirm the direction of the associations between exposure to violence and adverse adolescent outcomes.

Second, measures used in this study may not capture the full extent of violence in the family and community. For example, intimate partner physical aggression was reported only by mothers (or mother figures) and focused only on male-to-female aggression, but research indicates that at least half of the cases in intimate partner physical aggression include both male- and female-initiated aggression (Straus, 2011). Thus, information on intimate partner physical aggression that does not capture both parents as perpetrators may fail to depict the full picture of family violence (Slep & O'Leary, 2005). Third, the current analysis was based on a sample of families from low- to mid-SES communities in southern parts of Santiago, Chile, which may limit the generalizability of the findings to mid- to low-income families in urban Latin American settings. Fourth, self-reports of adolescents and parents on the level of family and community violence may be subject to social desirability bias. Also, the cultural emphasis on patriarchy and parental authority in Latino culture may have led participants to underreport their victimization in the family. For a more objective and comprehensive description of violence in the everyday lives of adolescents, utilizing multiple sources of information, including official data from national census agencies and police departments, may provide a more complete assessment of exposure to violence (Curry, Latkin, & Davey-Rothwell, 2008). Finally, reliabilities for several of the YSR subscales in this study were lower than desired. For example, reliability for the Social Problems and Thought Problems subscales was .61, and it was .64 for the Attention Problems subscale. An important direction for future research is to fine-tune the YSR to have higher reliability in Latin American contexts. Notwithstanding these limitations, consistent with prior theoretical and empirical research, results of this multilevel study identified multiple forms of family and community violence among Chilean adolescents as risk factors for a broad range of problem behaviors.

Implications for Practice and Policy

Findings of this study have several important implications for programs that serve adolescents, families, and communities in cross-cultural contexts, particularly in disadvantaged urban settings with widespread rates of violent incidents in the family and community. First,

results suggest that exposure to violence in multiple social contexts may have separate yet simultaneous relationships with a range of emotional and behavioral problems among adolescents even after controlling for the supportiveness of the parent-child relationship. Thus, the reciprocal and ecological patterns of violence in the family and community contexts found in this study as well as in prior literature (Mrug et al., 2008) need to be considered in all aspects of neighborhood-level policy changes and family-level interventions that aim to reduce violence. To be specific, a multilevel framework (Trickett & Beehler, 2013) that concurrently considers the effects of multiple types of family and community violence on child psychopathology is warranted in practice. A shortcoming in existing programs, however, is that many commonly used interventions with families who experience domestic violence do not consider neighborhood-level problems despite these children's high rates of exposure to community violence (Finkelhor et al., 2013). Therefore, clinicians working with adolescents who are victims or witnesses of violence should assess multiple forms of co-occurring violence exposure that adolescents may have experienced in both their families and their neighborhoods.

Our findings provide support for the potential buffering effect of parental warmth on psychosocial problems among adolescents, and conversely, they emphasize parental corporal punishment as an important risk factor in adolescent behavior. In view of these findings, encouraging positive and healthy parent-child relationships may be a critical point of intervention for programs that serve victimized adolescents and their families. Improving supportive family environments may be particularly important for adolescents and families in violent neighborhoods and in cultural contexts that are permissive of interpersonal violence within the family (Fontes, 2002). For example, moving to a lower-crime neighborhood or leaving an abusive partner may not be feasible options for at-risk families, but nurturing parental warmth and positive parenting practices can be a worthwhile goal of intervention with all at-risk families. Therefore, family-life education and parent education should emphasize the protective role of parental warmth for reducing a range of negative child outcomes. Additionally, the relationship between corporal punishment and a number of adverse behavioral outcomes (Gershoff, 2002;

Grogan-Kaylor, 2005; Ma et al., 2012) needs to be clearly conveyed to parents, and alternative disciplinary strategies to corporal punishment, such as reasonable deprivation of privileges, need to be encouraged. Consistent with the ecological and multilevel perspectives, family-life education programs need to address the broader contextual influences of cultural and social norms that have permitted violence against women and children when delivered in this and similar cultures (McWhirter, 1999; Wright & Fagan, 2013). For example, public education is warranted, particularly among Latin American populations, to discourage social acceptance of family violence and promote individual rights.

Finally, in support of prior research that found considerable co-occurrence between several psychological and physiological disorders (Reynolds et al., 2001; Saunders, 2003), practitioners need to be aware of the simultaneous yet unique impacts of different types of violence on adolescent maladjustment. Our findings suggest that adolescents who were exposed to family and community violence should be assessed for a comprehensive array of emotional and behavioral issues, including less commonly examined behavior symptoms such as somatic complaints, thought problems, and attention problems (Achenbach & Rescorla, 2001). Particular attention should be paid to mental and neurocognitive disorders such as attention and thought problems, which research has identified as potential risks for more serious mental health issues and academic difficulties (Perkins & Graham-Bermann, 2012).

CONCLUSION

Our examination of multiple levels of violence that surround Latin American adolescents and their mothers expands the focus of current literature for understanding patterns of violence and adolescent outcomes. Consistent with the study hypotheses, results identified simultaneous and unique associations between family and community violence and wide-ranging adolescent behavior problems, and identified parental warmth as a protective factor in these associations. Findings of this study lend support to literature identifying violence as a key risk for adolescent behavior problems. Of particular importance is the need for practitioners to attend to aggression when working with adolescents who were victims or witnesses of family and

community violence. Furthermore, this study contributes to existing literature on neighborhood effects by providing a greater understanding of the relationship of community violence and adolescent development. Finally, these findings warrant replication in future research to better understand the harmful effects of violence on adolescent in multiple social contexts.

NOTES

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REFERENCES

- Achenbach, T. M., & Rescorla, L. A. (2001). *Child Behavior Checklist: Youth Self-Report for ages 11–18 (YSR 11–18); Manual for the ASEBA school-age forms and profiles*. Burlington, VT: Department of Psychiatry, University of Vermont.
- Attar, B. K., Guerra, N. G., & Tolan, P. H. (1994). Neighborhood disadvantage, stressful life events and adjustments in urban elementary-school children. *Journal of Clinical Child Psychology, 23*, 391–400. doi: 10.1207/s15374424jccp2304_5
- Bandura, A. (1973). *Aggression: A social learning analysis*. Englewood Cliffs, NJ: Prentice Hall.
- Becker, K. B., & McCloskey, L. A. (2002). Attention and conduct problems in children exposed to family violence. *American Journal of Orthopsychiatry, 72*, 83–91. doi: 10.1037/0002-9432.72.1.83
- Bronfenbrenner, U. (2005). *Making human beings human: Bioecological perspectives on human development*. Thousand Oaks, CA: Sage.
- Buka, S. L., Stichick, T. L., Birdthistle, I., & Earls, F. J. (2001). Youth exposure to violence: Prevalence, risks, and consequences. *American Journal of Orthopsychiatry, 71*, 298–310. doi: 10.1037/0002-9432.71.3.298
- Ceballos, R., Ramirez, C., Castillo, M., Caballero, G. A., & Lozoff, B. (2004). Domestic violence and women's mental health in Chile. *Psychology of Women Quarterly, 28*, 298–308. doi: 10.1111/j.1471-6402.2004.00147.x
- Cruz, J. M. (2000). Violencia, democracia, y cultura política [Violence, democracy, and cultural politics]. *Nueva Sociedad, 167*, 132–146.
- Cummings, E. M., & Davies, P. T. (2002). Effects of marital conflict on children: Recent advances and emerging themes in process-oriented research. *Journal of Child Psychology and Psychiatry, 43*, 31–63. doi: 10.1111/1469-7610.00003

- Curry, A., Latkin, C., & Davey-Rothwell, M. (2008). Pathways to depression: The impact of neighborhood violent crime on inner-city residents in Baltimore, Maryland, USA. *Social Science & Medicine*, *67*, 23–30. doi: 10.1016/j.socscimed.2008.03.007
- Fantuzzo, J., Boruch, R., Beriama, A., Atkins, M., & Marcus, S. (1997). Domestic violence and children: Prevalence and risk in five major U.S. cities. *Journal of the American Academy of Child & Adolescent Psychiatry*, *36*, 116–122. doi: 10.1097/00004583-199701000-00025
- Farrell, A. D., & Bruce, S. E. (1997). Impact of exposure to community violence on violent behavior and emotional distress among urban adolescents. *Journal of Clinical Child Psychology*, *26*, 2–14. doi: 10.1207/s15374424jccp2601_1
- Finkelhor, D., Turner, H. A., Shattuck, A., & Hamby, S. L. (2013). Violence, crime, and abuse exposure in a national sample of children and youth: An update. *JAMA Pediatrics*, *167*, 614–621. doi: 10.1001/jamapediatrics.2013.42
- Fontes, L. A. (2002). Child discipline and physical abuse in immigrant Latino families: Reducing violence and misunderstandings. *Journal of Counseling & Development*, *80*, 31–40. doi: 10.1002/j.1556-6678.2002.tb00163.x
- Foster, H., & Brooks-Gunn, J. (2009). Toward a stress process model of children's exposure to physical family and community violence. *Clinical Child and Family Psychology Review*, *12*, 71–94. doi: 10.1007/s10567-009-0049-0
- Gershoff, E. T. (2002). Corporal punishment by parents and associated child behaviors and experiences: A meta-analytic and theoretical review. *Psychological Bulletin*, *128*, 539–579. doi: 10.1037/0033-2909.128.4.539
- Gershoff, E. T., Lansford, J. E., Sexton, H. R., Davis-Kean, P., & Sameroff, A. J. (2012). Longitudinal links between spanking and children's externalizing behaviors in a national sample of White, Black, Hispanic, and Asian American families. *Child Development*, *83*, 838–843. doi: 10.1111/j.1467-8624.2011.01732.x
- Grogan-Kaylor, A. (2005). Corporal punishment and the growth trajectory of children's antisocial behavior. *Child Maltreatment*, *10*, 283–292. doi: 10.1177/1077559505277803
- Guerra, N. G., Rowell Huesmann, L., & Spindler, A. (2003). Community violence exposure, social cognition, and aggression among urban elementary school children. *Child Development*, *74*, 1561–1576. doi: 10.1111/1467-8624.00623
- Hankin, B. L., Mermelstein, R., & Roesch, L. (2007). Sex differences in adolescent depression: Stress exposure and reactivity models. *Child Development*, *78*, 279–295. doi: 10.1111/j.1467-8624.2007.00997.x
- Hardaway, C. R., McLoyd, V. C., & Wood, D. (2012). Exposure to violence and socioemotional adjustment in low-income youth: An examination of protective factors. *American Journal of Community Psychology*, *49*, 112–126. doi: 10.1007/s10464-011-9440-3
- Harper, F. W., Brown, A. M., Arias, I., & Brody, G. (2006). Corporal punishment and kids: How do parent support and gender influence child adjustment? *Journal of Family Violence*, *21*, 197–207. doi: 10.1007/s10896-006-9018-2
- Hassan, F., Sadowski, L. S., Bangdiwala, S. I., Vizcarra, B., Ramiro, L., De Paula, C. S., ... Mitra, M. K. (2004). Physical intimate partner violence in Chile, Egypt, India and the Philippines. *Injury Control and Safety Promotion*, *11*, 111–116. doi: 10.1080/15660970412331292333
- Hughes, H. M., Humphrey, N. N., & Weaver, T. L. (2005). Advances in violence and trauma toward comprehensive ecological models. *Journal of Interpersonal Violence*, *20*, 31–38. doi: 10.1177/0886260504268116
- Keenan, K., & Shaw, D. (1997). Developmental and social influences on young girls' early problem behavior. *Psychological Bulletin*, *121*, 95–113. doi: 10.1037/0033-2909.121.1.95
- Kennedy, A. C., Bybee, D., Sullivan, C. M., & Greeson, M. (2010). The impact of family and community violence on children's depression trajectories: Examining the interactions of violence exposure, family social support, and gender. *Journal of Family Psychology*, *24*, 197–207. doi: 10.1037/a0018787
- Kim, J. E., Hetherington, E. M., & Reiss, D. (1999). Associations among family relationships, antisocial peers, and adolescents' externalizing behaviors: Gender and family type differences. *Child Development*, *70*, 1209–1230. doi: 10.1111/1467-8624.00088
- Kitzmann, K. M., Gaylord, N. K., Holt, A. R., & Kenny, E. D. (2003). Child witnesses to domestic violence: A meta-analytic review. *Journal of Consulting and Clinical Psychology*, *71*, 339–352. doi: 10.1037/0022-006x.71.2.339
- Krug, E. G., Dahlberg, L. L., Mercy, J. A., Zwi, A. B., & Lozano, R. (2002). *World report on violence and health*. Geneva, Switzerland: World Health Organization.
- Long, J. F., Monoi, S., Harper, B., Knoblauch, D., & Murphy, P. K. (2007). Academic motivation and achievement among urban adolescents. *Urban Education*, *42*, 196–222. doi: 10.1177/0042085907300447
- Lozoff, B., De Andraca, I., Castillo, M., Smith, J. B., Walter, T., & Pino, P. (2003). Behavioral and developmental effects of preventing iron-deficiency anemia in healthy full-term infants. *Pediatrics*, *112*, 846–854.
- Ma, J., Han, Y., Grogan-Kaylor, A., Delva, J., & Castillo, M. (2012). Corporal punishment and youth externalizing behavior in Santiago,

- Chile. *Child Abuse & Neglect*, 36, 481–490. doi: 10.1016/j.chiabu.2012.03.006
- Margolin, G., & Gordis, E. B. (2000). The effects of family and community violence on children. *Annual Review of Psychology*, 51, 445–479. doi: 10.1146/annurev.psych.51.1.445
- Margolin, G., & Gordis, E. B. (2004). Children's exposure to violence in the family and community. *Current Directions in Psychological Science*, 13, 152–155. doi: 10.1111/j.0963-7214.2004.00296.x
- McWhirter, P. T. (1999). La violencia privada: Domestic violence in Chile. *American Psychologist*, 54, 37–40. doi: 10.1037//0003-066x.54.1.37
- Mrug, S., Loosier, P. S., & Windle, M. (2008). Violence exposure across multiple contexts: Individual and joint effects on adjustment. *American Journal of Orthopsychiatry*, 78, 70–84. doi: 10.1037/0002-9432.78.1.70
- Mulvaney, M. K., & Mebert, C. J. (2007). Parental corporal punishment predicts behavior problems in early childhood. *Journal of Family Psychology*, 21, 389–397. doi: 10.1037/0893-3200.21.3.389
- National Institute of Child Health and Human Development. (2008). *NICHD study of early child care and youth development: Phase IV instrument documentation*. Bethesda, MD: Author.
- Oviedo, E., & Rodríguez, A. (1999). Santiago, una ciudad con temor [Santiago, a fear-stricken city]. *Revista Panamericana de Salud Pública [Pan-American Journal of Public Health]*, 5, 278–285. doi: 10.1590/s1020-49891999000400011
- Pastore, D. R., Fisher, M., & Friedman, S. B. (1996). Violence and mental health problems among urban high school students. *Journal of Adolescent Health*, 18, 320–324. doi: 10.1016/1054-139x(95)00063-x
- Peckins, M. K., Dockray, S., Eckenrode, J. L., Heaton, J., & Susman, E. J. (2012). The longitudinal impact of exposure to violence on cortisol reactivity in adolescents. *Journal of Adolescent Health*, 51, 366–372. doi: 10.1016/j.jadohealth.2012.01.005
- Perkins, S., & Graham-Bermann, S. (2012). Violence exposure and the development of school-related functioning: Mental health, neurocognition, and learning. *Aggression and Violent Behavior*, 17, 89–98. doi: 10.1016/j.avb.2011.10.001
- Pinheiro, P. S. (2006). *World report on violence against children*. Geneva, Switzerland: UN Secretary-General's Study on Violence Against Children.
- Program for Research on Black Americans. (2001). *The National Survey of American Life: Coping with stress in the 21st century, adolescent interview*. Ann Arbor, MI: Institute for Social Research, University of Michigan.
- Raudenbush, S. W., & Bryk, A. S. (2002). *Hierarchical linear models* (2nd ed.). Thousand Oaks, CA: Sage.
- Reiss, F. (2013). Socioeconomic inequalities and mental health problems in children and adolescents: A systematic review. *Social Science & Medicine*, 90, 24–31. doi: 10.1016/j.socscimed.2013.04.026
- Reynolds, L. K., O'Koon, J. H., Papademetriou, E., Szczygiel, S., & Grant, K. E. (2001). Stress and somatic complaints in low-income urban adolescents. *Journal of Youth and Adolescence*, 30, 499–514. doi: 10.1023/A:1010401417828
- Rose, A. J., & Rudolph, K. D. (2006). A review of sex differences in peer relationship processes: Potential trade-offs for the emotional and behavioral development of girls and boys. *Psychological Bulletin*, 132, 98. doi: 10.1037/0033-2909.132.1.98
- Sampson, R. J., Morenoff, J. D., & Gannon-Rowley, T. (2002). Assessing “neighborhood effects”: Social processes and new directions in research. *Annual Review of Sociology*, 28, 443–478. doi: 10.1146/annurev.soc.28.110601.141114
- Saunders, B. E. (2003). Understanding children exposed to violence toward an integration of overlapping fields. *Journal of Interpersonal Violence*, 18, 356–376. doi: 10.1177/0886260502250840
- Slep, A. M. S., & O'Leary, S. G. (2005). Parent and partner violence in families with young children: Rates, patterns, and connections. *Journal of Consulting and Clinical Psychology*, 73, 435. doi: 10.1037/0022-006x.73.3.435
- Stith, S. M., Rosen, K. H., Middleton, K. A., Busch, A. L., Lundeberg, K., & Carlton, R. P. (2000). The intergenerational transmission of spouse abuse: A meta-analysis. *Journal of Marriage and Family*, 62, 640–654. doi: 10.1111/j.1741-3737.2000.00640.x
- Straus, M. A. (1979). Measuring intrafamily conflict and violence: The Conflict Tactics (CT) Scales. *Journal of Marriage and the Family*, 41, 75–88. doi: 10.2307/351733
- Straus, M. A. (2011). Gender symmetry and mutuality in perpetration of clinical-level partner violence: Empirical evidence and implications for prevention and treatment. *Aggression and Violent Behavior*, 16, 279–288. doi: 10.1016/j.avb.2011.04.010
- Taylor, C. A., Lee, S. J., Guterman, N. B., & Rice, J. C. (2010). Use of spanking for 3-year-old children and associated intimate partner aggression or violence. *Pediatrics*, 126, 415–424. doi: 10.1542/peds.2010-0314
- Trickett, E. J., & Beehler, S. (2013). The ecology of multilevel interventions to reduce social inequalities in health. *American Behavioral Scientist*, 5, 1227–1246. doi: 10.1177/0002764213487342
- Turner, H. A., Finkelhor, D., & Ormrod, R. (2006). The effect of lifetime victimization on the

- mental health of children and adolescents. *Social Science & Medicine*, *62*, 13–27. doi: 10.1016/j.socscimed.2005.05.030
- Van Voorhees, B. W., Paunesku, D., Kuwabara, S. A., Basu, A., Gollan, J., Hankin, B. L., ... Reinecke, M. (2008). Protective and vulnerability factors predicting new-onset depressive episode in a representative of U.S. adolescents. *Journal of Adolescent Health*, *42*, 605–616. doi: 10.1016/j.jadohealth.2007.11.135
- Vargas, N. A., López, D., Pérez, P., Zúñiga, P., Toro, G., & Ciocca, P. (1995). Parental attitude and practice regarding physical punishment of school children in Santiago de Chile. *Child Abuse & Neglect*, *19*, 1077–1082. doi: 10.1016/0145-2134(95)00069-k
- Wright, E. M., & Fagan, A. A. (2013). The cycle of violence in context: Exploring the moderating roles of neighborhood disadvantage and cultural norms. *Criminology*, *51*, 217–249. doi: 10.1111/1745-9125.12003
- Xue, Y., Leventhal, T., Brooks-Gunn, J., & Earls, F. J. (2005). Neighborhood residence and mental health problems of 5- to 11-year-olds. *Archives of General Psychiatry*, *62*, 554–563. doi: 10.1001/archpsyc.62.5.554
- Zahn-Waxler, C. (1993). Warriors and worriers: Gender and psychopathology. *Development and Psychopathology*, *5*, 79–89. doi: 10.1017/s0954579400004272
- Zlotnick, C., Johnson, J., Kohn, R., Vicente, B., Rioseco, P., & Saldivia, S. (2006). Epidemiology of trauma, post-traumatic stress disorder (PTSD) and co-morbid disorders in Chile. *Psychological Medicine*, *36*, 1523–1533. doi: 10.1017/s0033291706008282