

# Familias: Preparando la Nueva Generación: A Randomized Control Trial Testing the Effects on Positive Parenting Practices

Research on Social Work Practice  
2014, Vol. 24(3) 310-320  
© The Author(s) 2013  
Reprints and permission:  
sagepub.com/journalsPermissions.nav  
DOI: 10.1177/1049731513498828  
rsw.sagepub.com  


Flavio F. Marsiglia<sup>1,2</sup>, Lela Rankin Williams<sup>1</sup>,  
Stephanie L. Ayers<sup>2</sup>, and Jaime M. Booth<sup>1</sup>

## Abstract

**Objectives:** This article reports the effects of a culturally grounded parenting intervention to strengthen positive parenting practices. **Method:** The intervention was designed and tested with primarily Mexican origin parents in a large urban setting of the southwestern United States using an ecodevelopmental approach. Parents ( $N = 393$ ) were randomly assigned three treatment conditions: (1) a parenting and youth intervention, (2) a youth only intervention, or (3) a control group. A measurement model for positive parenting was first evaluated using confirmatory factor analysis, followed by structural equation modeling to estimate the effects of the intervention on positive parenting (i.e., baseline to follow-up). **Results:** As hypothesized, parents in the intervention group reported higher rates of positive parenting compared to parents in youth-only condition. **Conclusion:** The results are promising and add to growing evidence that interventions tailored to the cultural characteristics and environments of parents and their children can strengthen positive parenting.

## Keywords

positive parenting, Latinos, substance use preventions, randomized control trial

## Introduction

Ecodevelopmental framework posits that youth are influenced by multiple aspects of their ecological system (i.e., family, peer, culture) as they move through developmental tasks (Coatsworth, Pantin, & Szapocznik, 2002). This framework suggests that addressing the family system in the context of the larger social structure including culture is crucial to promoting positive youth development and decreasing rates of problem behaviors (Hemovich, Lac, & Crano, 2011). The use of parenting interventions may be especially important among Latinos due to the central role of the family across the life span (German, Gonzales, & Dumka, 2009), and the impact of acculturation on family functioning (Coatsworth et al., 2002). More specifically, a relationship has been established between the use of positive parenting practices in Latino families and lower levels of substance use among youth (Prado et al., 2007). This article examines the impact of participating in *Familias: Preparando la Nueva Generación* (Families: Preparing the New Generation; FPNG), a companion parenting intervention to the culturally grounded youth substance abuse prevention model program, *keepin' it REAL (kiR)*, on strengthening positive parenting strategies.

## Positive Parenting as a Protective Factor

Family plays a critical role in mediating the risks youth may experience in other domains of their life (e.g., in their neighborhood, at

school, with peers; Fletcher, Glen, & Mekos, 2000). Starting in the 1960s, parenting training became recognized as an integral component of treatment for childhood behavioral issues (Webster-Stratton & Hooven, 1998), and more recently, parenting programs are being incorporated into the repertoire of prevention programming. The majority of parenting programs are based on behavioral and social learning theories that hypothesize that parents are the primary socializing agent of their youth and that youth behaviors are attained and maintained through feedback mechanisms (Bandura, 1977). Youth learn behaviors that meet their needs for belonging, attention, power, and love. When positive behaviors do not garner these results maladaptive behaviors, such as substance use or delinquency, arise and are maintained as an alternative strategy. Within this conceptualization, both positive and negative behavior change occurs when desired feedback loops are interrupted and a new behavior learned.

<sup>1</sup> School of Social Work, Arizona State University, Phoenix, AZ, USA

<sup>2</sup> Southwest Interdisciplinary Research Center, Arizona State University, Phoenix, AZ, USA

## Corresponding Author:

Jaime M. Booth, School of Social Work, Arizona State University, 411 N. Central Ave., Phoenix, AZ 85004, USA.

Email: jmbooth2@asu.edu

Based on this theory, positive parenting techniques are taught to reinforce desired behavior, by offering praise, reward, affection, or privileges, and a system of consequences and withdrawal are demonstrated to deter negative behavior (Chu, Farruggia, Sanders, & Ralph, 2012). An authoritative parenting style, characterized by high levels of monitoring and supervision coupled with warmth, acceptance, and nurturance, is associated with better youth outcomes across a wide range of factors including substance use (Moore, Rothwell, & Segrott, 2010). Although most studies have included both items in a single construct, it has been argued that aspects of authoritative parenting should be tested separately to better understand their independent effects on youth outcomes (Gray & Steinberg, 1999). Williams and Steinberg (2011) demonstrated the distinct effect of these two aspects of authoritative parenting in a longitudinal study that controlled for bidirectional effects (34% urban Latino youth) and found that positive parenting predicted positive outcomes among youth whereas parental monitoring did not.

Positive parenting is associated with a decrease in adolescent problem behaviors as well as increases in psychosocial maturity and academic orientation (Barber, Stolz, Olsen, Collins, & Burchinal, 2005; Smetana, Campinone-Barr, & Metzger, 2006; Williams & Steinberg, 2011). More specifically, warmth, support, and expression of positive emotions in the parent-child relationship are related to lower levels of externalizing behaviors (Caspi et al., 2004; Chronis et al., 2007; Eisenberg et al., 2005) and abstinence from alcohol and other drugs (Coombs & Landsverk, 1988; Hawkins, Catalano, & Miller, 1992). Some have argued that positive parenting creates an environment where social skills can be practiced, increasing student's academic achievement and competence with peers (Davidson & Cardemil, 2009; Leidy, Guerra, & Toro, 2010).

These relationships appear to hold true for Latino youth. Among a sample of Latino immigrant youth, positive parenting practices were related to higher reported self-esteem, social problem solving, and social self-efficacy (Leidy et al., 2010). In a study testing the treatment effects of a parenting program among Latinos in Miami, increases in positive parenting mediated the relationship found between participating in the program and decreases in substance use (Prado et al., 2007).

### ***Family Risk Factors for Negative Outcomes Among Latino Youth***

In the United States, Latino families face a variety of stressors that may impact positive parenting practices. Levels of acculturation and immigration affect family dynamics and parenting styles in unique ways. Acculturation is an individual's process of incorporating the norms and values of the dominant culture into his or her existing cultural frame; typically traditional cultural norms and values of his or her country of origin (Sam & Berry, 2010). A mismatch in rates of acculturation between Latino youth and their parents creates stressors and interrupts healthy communication patterns in the family (Martinez, 2006; Santisteban et al., 1997; Szapocznik & Kurtines, 1993). Immigrant youth acculturate faster than their parents for two reasons: (1) their developmental

stage is more adaptable and (2) the school environment facilitates the acculturation process (De la Rosa, Vega, & Radisch, 2000). Although the parent may maintain authority in the home, the child's ability to more efficiently navigate life outside of the home, through increased mastery of both languages and cultures, may challenge the parent's role as the more competent guide (Szapocznik, Robbins, Mitrani, Santisteban, & Williams, 2002). As youth begin to adopt American norms that emphasize the importance of individualism, such as freedom and choice, they may experience increased conflict with their parents whose values typically continue to emphasize collective responsibility. In these situations, parents frequently believe that youth are rejecting their native culture, and youth may see their parents as domineering and controlling (Coatsworth et al., 2002). These dynamics highlight an area of risk unique to the Latino population that may be addressed in parenting interventions.

Although these factors indicate risks of poor parenting and negative outcomes for Latino youth, the presence of positive parenting may protect Latino youth from demonstrating negative outcomes (Masten et al., 1988). Latino culture's central value of familismo, which includes loyalty, reciprocity, and a strong commitment to family, may be particularly important when fostering resilience among Latino youth (Davidson & Cardemil, 2009; Leidy et al., 2010). In Latino families specifically, family cohesion, a key concept within familismo, has been linked to better adjustment in youth, decreased interaction with deviant peers, and subsequently, decreased problem behaviors (Leidy et al., 2010; Padilla-Walker, Bean, & Hsieh, 2011); conversely, the deterioration of cultural norms like familismo, increases youths' risk of initiating risky behaviors such as substance use (Castro, Stein, & Bentler, 2009). Teaching parenting skills within the context of familismo enhances cultural norms that function as protective factors and foster resiliency among Latino youth (Leidy et al., 2010).

### ***Adding a Parenting Component to *kiR****

One prominent example of a culturally grounded parenting intervention is *Familias Unidas* (Pantin et al., 2003). This prevention intervention was designed for Latino families with children between the ages of 12 and 17, and focuses on increasing effective parenting skills through participatory exercises and group discussion. *Familias Unidas* exposes parents to their child's life outside of the home (e.g., peers, school), addresses factors that disrupt the relationship between parents and youth, and increases support among parents in Latino communities. Brief strategic family therapy (Santisteban et al., 2003; Santisteban et al., 1997) was developed to prevent, reduce, and treat, a wide variety of problem behaviors among Latino youth. Founded on family systems theory, this intervention is administered one on one with families to improve overall family functioning (Dishion & Andrews, 1995; Santisteban & Szapocznik, 1994). Although both of these interventions have been designed and tested with Latino families and target adolescent behaviors, neither includes separate but parallel manualized substance abuse prevention programs for both parents and youth in a school setting.

To address this gap, FPNG was designed as a complimentary intervention to be implemented in addition to kiR, a culturally grounded school-based substance use prevention intervention. While the overall goal of the larger study was to test if adding a parenting intervention, FPNG, would strengthen or boost the effects of the already efficacious kiR, this study, specifically, tests the hypothesis that parents who participate in FPNG will report greater increase in their use of positive parenting practices when compared to parents who did not participate in the parenting intervention but whose youth receive kiR.

## Method

### Interventions

The FPNG curriculum is a new culturally grounded parenting intervention developed and tested by researchers in the southwest in close partnership with Mexican origin parents. Community-based participatory research methodology was used to develop the FPNG curriculum (see Parsai, Castro, Marsiglia, Harthun, & Valdez, 2011). The intervention, guided by ecodevelopmental framework, (Coatsworth et al., 2002; Pantin, Schwartz, Sullivan, Prado, & Szapocznik, 2004; Szapocznik & Coatsworth, 1999), supports strengthening family functioning as a means to preventing adolescent substance use (Coatsworth et al., 2002; Perrino, Gonzalez-Soldevilla, Pantin, & Szapocznik, 2000; Szapocznik & Coatsworth, 1999). The ecodevelopmental framework informed the selection of the family as a site of intervention, the curriculum's emphasis on the parent-child relationship (the microsystem), the use of parent-to-parent support (the mesosystem), as well as the incorporation of Latino cultural norms and values (macrosystem). The overall goals of the FPNG curriculum are 3-fold: (1) to empower parents to assist their adolescent in using the Refuse, Explain, Avoid, and Leave (REAL) strategies to resist drugs and alcohol; (2) to build and strengthen family functioning in order to promote prosocial youth behavior, particularly through positive parenting practices; and (3) to increase the family's problem solving and communication skills.

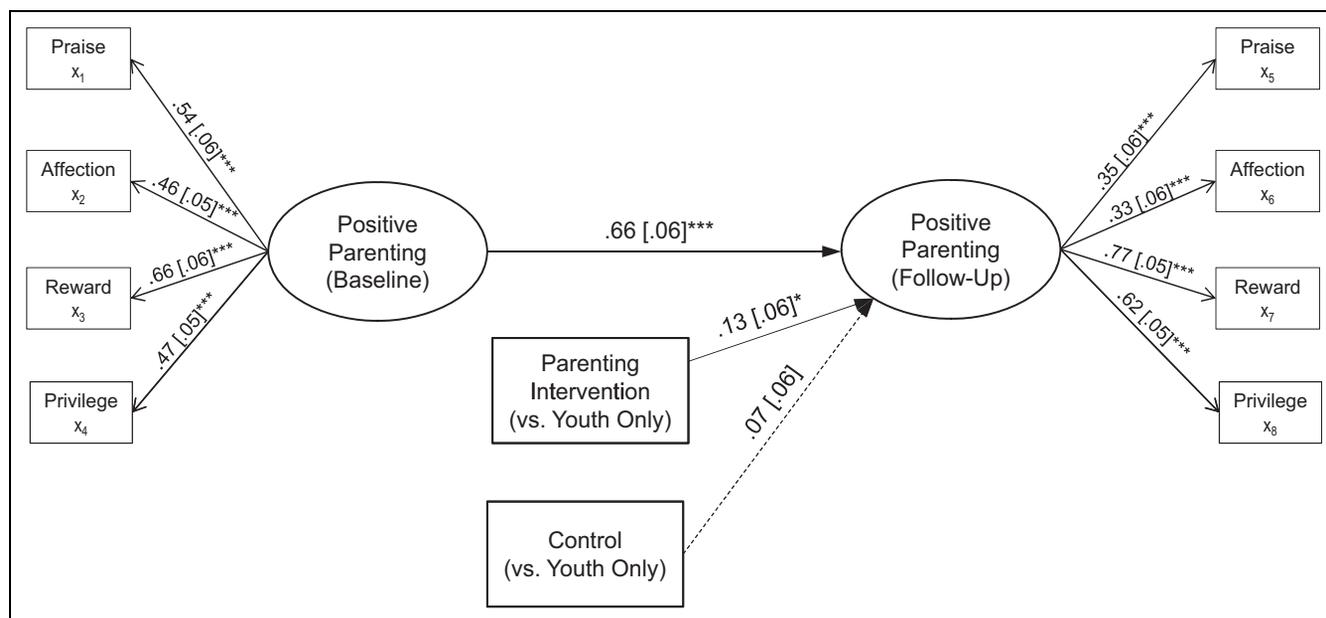
FPNG was delivered over an 8-week period (one lesson per week) to parents at the school their youth attended. Trained bilingual facilitators delivered the manualized curriculum in either English-only or Spanish-only groups. Because this curriculum was designed for Latino parents, the majority of groups occurred in Spanish only. Typically, groups occurred in the early evening or on the weekend and had an average attendance of six of the eight lessons. The 2.5-hr long sessions covered: (1) the role of parents; (2) the adolescent's world; (3) techniques for effective communication; (4) effective management of a child's behavior; and (5) talking to teens about risky behavior (Parsai et al., 2011). While several dimensions of parenting were targeted and measured, this article addresses the impact of FPNG, the parent component designed to supplement the Substance Abuse and Mental Health Services Administration model program, kiR, on strengthening positive parenting practices.

kiR is a culturally based, evidence-based substance use prevention program for youth designed to (a) increase drug resistance

skills; (b) promote antisubstance use norms and attitudes; and (c) develop effective decision making and communication skills for resisting drugs and alcohol (Marsiglia & Hecht, 2005). Delivered in regular school classrooms by teachers, the curriculum teaches drug resistance strategies through the acronym REAL—Refuse, Explain, Avoid, and Leave—through a 10-lesson, 10-week manualized curriculum that includes lessons on Options and Choices (Lesson 1), Risks (Lesson 2), Values (Lesson 8), Feelings (Lesson 9), and Support Networks (Lesson 10; see Gosin, Marsiglia, & Hecht, 2003). In addition, kiR aims to build personal and cultural strengths and communication and life skills. The curriculum (Marsiglia & Hecht, 2005) is also designed to provide youth opportunities to participate in culturally relevant activities that allow them to discuss how and why their cultural values are important to them. kiR was originally developed and tested by the same researchers. It is publicly available and can be purchased through ETR Associates, <http://www.etr.org/home>.

### Study Design

The data used to examine positive parenting practices come from a longitudinal study of two cohorts of parents and youth followed over 2 years and is in compliance with institutional review board requirements (HS # 0707001990), and participants were informed about possible deleterious effects including emotional discomfort. It should also be noted that there were no reports made to the researchers or the institutional review board of any unintended effects or harms resulting from the intervention. The methodology for this study is described in detail below and illustrated in Figure 1. Because kiR is delivered in classrooms by teachers, the study was randomized at the school level. All schools agreed to participate in the study prior to being assigned to a treatment or control condition. Using an  $\alpha$  of .05 and a projected sample size of 406, a power analysis revealed that nine schools (three per condition) were needed to detect small-to-moderate effect sizes (ESs) across the three conditions with 80% power; therefore, nine schools were asked to participate. Block randomization was used due to possible variations in school size and ethnic composition on study outcomes. Using a three-block randomization procedure, the inclusion criteria for schools was based on the percentage of Latino students in the school (all schools had to have a Latino population greater than 70% during the 2007–2008 school year). Schools were assigned into three equal blocks, with Block 1 having the schools with the highest percentage Latino and Block 3 having the lowest percentage Latino. Within each block, (a) schools were ranked in numerical order according to the random number assignment using Statistical Package for the Social Sciences (SPSS) and (b) schools in each block were assigned into one of the three conditions: (1) the parent and youth condition—(PY)—in which parents received FPNG and their youth received kiR; (2) the youth-only condition—(Y)—in which youth received kiR, but parents did not receive FPNG; and (3) the control condition—(C)—in which neither parents nor youth received any curriculum.



**Figure 1.** Structural equation model of the parenting intervention (vs. youth only) and the control condition (vs. youth only) on positive parenting (standardized coefficients;  $N = 393$ ).

Once schools were block randomized, an unconditional model in Mplus was conducted to examine the intraclass correlations (ICCs) within schools. The unconditional model indicated nonsignificant ICCs demonstrating that individuals within schools were not more related to each other than they were to individual in other schools. Descriptive characteristics (gender, age, Mexican heritage, free or reduced lunch) were assessed for youth across schools and conditions, age emerged as the only significant difference (see Table 1). Additionally, analyses of variance (ANOVAs) and  $t$ -tests were performed on youth substance use at baseline. Of the seven outcomes tested, the only significant difference was in 30-day cigarette use between youth in the Y condition and youth in the C condition.

### Consenting Procedures

The eligible sample, all seventh-grade students and their parent/parents, was drawn from two cohorts of parents and youth during either the 2009–2010 or 2010–2011 school years. The only exclusion criterion was that parents must have a child in seventh grade in a participating school. The recruitment period for both cohorts occurred at the beginning of the fall semester during August and September. The interventions typically began in October of the school year and ran for 8 weeks. It should be noted that while all parent groups completed the eight sessions, due to school holidays or federal holidays (such as Thanksgiving), some groups completed the eight sessions in as many as 10 weeks rather than the desired 8 weeks.

Informed parental consent was obtained by trained study personnel. Parents could choose one of three options: (1) to consent both parent and youth; (2) to consent only youth; and (3) to not consent either parent or youth. Because this randomized control trial (RCT) is randomized at the school level and

not the individual level, parents were advised of their treatment condition before informed consent was obtained and could choose not to participate in the study. However, all participating individuals remained in their randomized condition, and throughout the course of the study, all schools remained faithful to their randomized condition. Thus, if parents chose to consent both the parent and the youth, they both received their randomized treatment according to the school that the youth attended. In the case of schools randomized into the PY condition, consenting parents received FPNG and consenting youth receive kiR; however, for schools randomized into the Y condition, consenting parents simply completed surveys, while the consenting youth received kiR. In those schools randomized into the C condition, consenting parents and consenting youth simply completed surveys. Because participation was voluntary, there were differing consenting rates. For youth, the overall consent rate was 76%, but varied slightly by condition: (a) PY condition = 77%; (b) Y condition = 78%; (c) C condition = 74%. For parents, the overall consent rate was 79% and also varied by condition: (a) PY condition = 75%; (b) Y condition = 81%; (c) C condition = 79%.

### Attrition

This study uses parent data from  $W1$ -baselining and  $W2$ -immediate post from both cohorts. The attrition rates for parents between  $W1$  and  $W2$  vary between conditions (see Figure 1) with the PY condition having the highest attrition (23%). Parent attrition was mostly due to the inability to locate the parent at the time of the immediate post. School liaisons informed the research team this was through parents' movement between the United States and Mexico as well as movement outside of the southwestern city to other U.S. cities having potentially

**Table 1.** Descriptive Characteristics of Seventh-Grade Youth of Parent Participants Across Schools and Conditions (N = 393).

School	Control (C)				Youth Only (Y)				Parent + Youth Intervention (PY)			
	5	6	8	Total	3	4	7	Total	1	2	9	Total
Gender (M) N (%)	17 (33)	26 (46)	16 (62)	59 (44)	23 (51)	31 (54)	19 (61)	73 (55)	15 (54)	36 (60)	14 (54)	65 (57)
Age M (SD)	12.45 (.64) <sup>a</sup>	12.25 (.47)	12.19 (.40)	12.32 (.54)	12.13 (.41)	12.14 (.44)	12.16 (.45)	12.14 (.43)	12.32 (.55)	12.10 (.35)	12.00 (.40)	12.13 (.43)
Mexican heritage, N (%)	46 (89)	51 (90)	22 (88)	119 (89)	40 (89)	57 (98)	30 (97)	127 (95)	22 (79)	57 (93)	23 (92)	102 (89)
Free or reduced lunch, N (%)	47 (92)	55 (98)	25 (100)	127 (96)	44 (98)	52 (91)	26 (87)	122 (92)	28 (100)	59 (98)	23 (88)	110 (96)
N (%)	55	58	26	139 (35)	46	59	31	136 (35)	28	63	27	118 (30)
Total												

<sup>a</sup>Post hoc comparisons revealed that students at School 5 were significantly older than students at Schools 2, 3, 4, and 9. No other significant differences were found across schools or across conditions.

more jobs and more relaxed immigration policies. In addition, and particularly for the PY parents, due to strict immigration legislation passed during implementation of the curriculum, parents had to show valid identification to gain entrance into the school where FPNG was held. Parents also reported due to this legislation being fearful of participating in any organized group. This directly impacted parents' willingness to attend the remainder of the FPNG curriculum. To determine if those lost to attrition potentially biased the results, Little's Missing Completely at Random (MCAR) test (1988) using SPSS v. 18 was performed on those who completed the FPNG intervention versus those lost to attrition. The most parsimonious MCAR test is presented and only examines positive parenting practices at Time 1 and Time 2. This MCAR test resulted in a  $\chi^2 = 51.81$  ( $df = 44$ ;  $p = .20$ ). These nonsignificant results indicate that the data are missing at random (e.g., no significant pattern exists to the missing data in those lost to attrition at Time 2).

### Surveys

In the present study, we examine changes in positive parenting practices as influenced by the FPNG curriculum. Therefore, the analytic sample includes only parent data. While parenting groups occurred at different times, all parents received their baseline survey at the beginning of Lesson 1 (Week 1)—before the intervention, and received the immediate post at the end of Lesson 8 (Week 8). All surveys, available in English or Spanish, were administered by trained research staff. The vast majority of parents, 93%, completed the surveys in Spanish. The parent surveys included questions on parenting practices, parenting self-efficacy, parent-child communication, and sociodemographic characteristics. At the completion of each survey, parents received an incentive of US\$30 for each survey packet completed.

### Sample

The analytic sample size for this study includes 393 parents with an attrition rate between baseline and the posttest assessment of only 8%. The parent sample was, on average, 38.5 years old, female (82.8%), had completed some high school but did not have a diploma (34.7%), and either married (57.7%) or cohabitating (18.7%). Predominantly of Latino ethnicity, (64.8% Mexican or Mexican American; 25.2% another Latino ethnicity), over half of the respondents spoke only Spanish (53.5%) compared to only 3.5% who spoke only English.

### Measures

**Positive Parenting.** Positive parenting was measured at both Wave 1 and Wave 2. Four distinct questions derived from the Tolan, Gorman-Smith, and Henry (2000) positive parenting practices scale were used to develop the latent construct positive parenting practices for this study: "When your child(ren) has done something that you like or approve of, do you . . ." (1) Say something nice

**Table 2.** Descriptive Statistics of the Four Indicator Variables for Positive Parenting at Wave 1 and Wave 2.

Indicator Variables		M	SD
X <sub>1</sub>	Say something nice: W1	2.81	.41
X <sub>2</sub>	Affection: W1	2.77	.47
X <sub>3</sub>	Reward: W1	2.37	.59
X <sub>4</sub>	Special privilege: W1	2.25	.62
X <sub>5</sub>	Say something nice: W2	2.81	.40
X <sub>6</sub>	Affection: W2	2.81	.41
X <sub>7</sub>	Reward: W2	2.31	.60
X <sub>8</sub>	Special privilege: W2	2.30	.61

about it; praise or give approval? (2) Give him or her a hug, pat on the back, or a kiss for it? (3) Give him or her some reward for it, like a present, extra money, or something special to eat? and (4) Give him or her a special privilege such as staying up late, or doing some special activity? All questions were measured on a 3-point Likert-type scale ranging from (1) *almost never* to (3) *often* (see Table 2).

**Treatment Conditions.** There were three randomly assigned treatment conditions in this study: (1) PY; (2) Y; and (3) C. In the PY group, parents received the parenting curriculum, FPNG, and youth received the youth-centered substance use prevention program, kiR. In the Y group, youth received kiR, while parents did not receive any curriculum. In the C group, neither parents nor youth received any curriculum. For this study, the Y group serves as the comparison (reference) group in order to test the effectiveness of the parent component above and beyond the effectiveness of the youth intervention.

### Plan of Analysis

Prior to data collection, a power analysis was conducted using a small-to-medium ES for our targeted outcome variables. We used single contrasts between two intervention conditions to estimate the total and final size required of the parent sample. An assumption of 5% attrition at each successive posttest observation was made. We then calculated power for an effective sample size that adjusted for school clustering effects with an assumed modest ICC of .02, as previously found in the kiR school-based youth intervention. Using an estimated final sample size of 406 parents after attrition (an average of 135 parents per condition, 45 parents per school), we estimated power for a repeated measures ANOVA with two observations across time for tests of a three-group design. Assuming clustering effects,  $\alpha = .05$ , and an ES = .24 (a small-to-moderate ES using Cohen's conventional criteria; Cohen, 1988), our estimated final parent sample size of 271 resulted in 80% power to detect an Intervention  $\times$  Time effect.

Analyses were conducted using Mplus (Muthén & Muthén, 1998–2010) with full information maximum likelihood (FIML) parameter estimates with standard errors and a mean-adjusted chi-square ( $\chi^2$ ) test statistic that are robust to nonnormality. FIML allows for incomplete data across the variables. That

**Table 3.** A Correlation Matrix of the Four Indicator Variables for Positive Parenting at Wave 1 and Wave 2 and the Two Treatment Condition Variables (PY vs. Y and C vs. Y).

		X <sub>1</sub>	X <sub>2</sub>	X <sub>3</sub>	X <sub>4</sub>	X <sub>5</sub>	X <sub>6</sub>	X <sub>7</sub>	X <sub>8</sub>
X <sub>1</sub>	Say something nice: W1								
X <sub>2</sub>	Affection: W1	.38***							
X <sub>3</sub>	Reward: W1	.17**	.27***						
X <sub>4</sub>	Special privilege: W1	.20***	.17**	.37***					
X <sub>5</sub>	Say something nice: W2	.41***	.36***	.11*	.10 <sup>+</sup>				
X <sub>6</sub>	Affection: W2	.26***	.52***	.17**	.07	.50***			
X <sub>7</sub>	Reward: W2	.23***	.22***	.32***	.27***	.29***	.25***		
X <sub>8</sub>	Special privilege: W2	.19***	.21***	.29***	.42***	.15**	.18**	.49***	
PY	Parent + Youth Condition	-.02	-.08	-.03	.02	-.01	.00	.02	.06
C	Control Condition	-.01	.04	-.05	-.05	.00	-.04	.03	-.06

\* $p < .10$ , \*\* $p < .05$ , \*\*\* $p < .01$ , \*\*\*\* $p < .001$

is, Mplus estimates each parameter directly using the data that are available in one step. Also, unlike other programs, no cases are deleted due to missingness. In the present study, all 393 observations were retained. A measurement model for positive parenting was first evaluated to establish a simple measurement structure using confirmatory factor analysis. Then, we used structural equation modeling (SEM) to estimate the effects of the intervention on positive parenting (i.e., from *W1* to *W2*). Manifest items at *W1* were allowed to correlate with the same item at *W2*. Correlation matrices of the observed variables are presented in Table 3.

## Results

There is a potential for misprecision in our results if we do not account for the nonindependence of observations. Our sampling design was structured such that families were nested within schools. However, after calculating the ICC (.0003) and the design effect (1.0071) for positive parenting and for condition ( $\sigma^2 = 0$ ), we felt confident in proceeding with traditional statistical analyses without accounting for clustering or the nonindependence of observations. After conducting simulation studies, Muthén and Satorra (1995) recommended that standard approaches be applied when there is a design effect of less than 2.0. In addition, the stability over time of nontargeted family practices was examined to ensure that any changes were the effect of receiving FPNG. Using paired *t*-tests by treatment condition, three variables were examined for stability over time—(1) My family does not let me be myself; (2) It is very easy for me to express all my true feelings to my child; and (3) Do you talk with your child about how he or she is doing at school? Paired *t*-tests by treatment condition indicate no significant changes over time from baseline to immediate post for the PY group, Y group, or C group (results available upon request). These *t*-tests point toward the confidence of the results of the study.

Several model fit tests were used to evaluate the statistical significance of the measurement and structural models: the model  $\chi^2$ , the comparative fit index (CFI), the Tucker–Lewis index (TLI), and the root mean square error of approximation (RMSEA). The  $\chi^2$  tests the null hypothesis that the model fits the analyzed covariance matrix, therefore a poor-fitting model

is indicated by a significant  $\chi^2(p < .05)$ . CFI and TLI model estimates greater than .90 indicate a good fit (Bentler, 1990; Bentler & Bonnett, 1980; Julian, McKenry, Gavazzi, & Law, 1999), estimates greater than .96 indicate a very good fit (Yu, 2002). RMSEA model estimates less than .05 indicate a good fit (Browne & Cudek, 1993; Yu, 2002).

Using the four indicator variables (i.e., praise, affection, reward, and privilege), the model fit indices for the measurement model were acceptable according to these criteria,  $\chi^2(1) = .81$ ,  $p = .37$ , model fit: RMSEA = .00, CFI = 1.00, TLI = 1.01. We then used SEM to estimate the effects of the intervention on positive parenting (i.e., baseline to follow-up). As hypothesized, we found that parents in the PY group reported higher rates of positive parenting at the follow-up (*W2*) compared to parents in the Y group,  $\beta = .13$ ,  $p < .05$  (see Figure 1 and Table 4 for complete results), controlling for positive parenting at baseline (*W1*). Parents in the C group were not significantly different than parents in the Y group at follow-up (*W2*),  $\beta = .07$ ,  $p > .05$ , controlling for positive parenting at baseline (*W1*). Practical significance was assessed by the proportion of variance the model accounted for in positive parenting at follow-up. The full model accounted for 44.3% of the variance, the model without intervention effects accounted for 41.8% of the variance ( $SE = .08$ ), resulting in an intervention effect that is consistent with a small effect (2.5%).

## Discussion and Applications to Practice

The findings support the study's main hypothesis that a culturally specific parenting intervention can produce the desired effect of strengthening positive parenting practices. The results support previous research regarding parenting programs in general (Webster-Stratton & Hooven, 1998) and contribute new knowledge about Latino parents, the majority of which were Mexican origin, parenting. One of the innovative contributions of this study is that it took place in a large urban setting of the southwest United States, was designed in partnership with parents and followed an ecodevelopmental approach including lessons about the youth's world in addition to parenting practices (Coatsworth et al., 2002). Context or place plays a prominent role in the intervention

**Table 4.** Unstandardized, Standardized, and Significance Levels for Positive Parenting Model ( $N = 393$ ).

Parameter Estimate	Indicator Variables	Unstandardized B (SE)	Standardized $\beta$	$p$
<b>Measurement model estimates</b>				
Positive parenting baseline (W1) $\rightarrow$	$X_1$	1.00	.54 (.06)	NA
	$X_2$	.97 (.17)	.46 (.05)	.00
	$X_3$	1.76 (.29)	.66 (.06)	.00
	$X_4$	1.31 (.26)	.47 (.05)	.00
Positive parenting follow-up (W2) $\rightarrow$	$X_5$	1.00	.35 (.06)	NA
	$X_6$	1.00 (.20)	.33 (.06)	.00
	$X_7$	3.40 (.65)	.77 (.05)	.00
	$X_8$	2.76 (.56)	.62 (.05)	.00
<b>Structural model</b>				
Positive parenting baseline $\rightarrow$ follow-up		.40 (.10)	.66 (.06)	.00
Parenting intervention (vs. youth-only) $\rightarrow$ follow-up		.04 (.02)	.13 (.06)	.04
Control (vs. youth-only) $\rightarrow$ follow-up		.02 (.02)	.07 (.06)	.23
Residual for positive parenting follow-up		.01 (.00)	.56 (.08)	.00

Note.  $\chi^2(27) = 39.51$ ,  $p = .06$ , model fit: root mean square error of approximation (RMSEA) = .03, comparative fit index (CFI) = .98, Tucker–Lewis index (TLI) = .96,  $R^2 = .443$  ( $SE = .08$ ).

model as well with parents bringing their experiences to the intervention design process as well as the group content as it was being delivered. The results indicate that parenting interventions designed to take into account the environment of the families, including culture of origin and its cultural assets, can lead to a significant strengthening of positive parenting practices. Because the findings come from a longitudinal study with a large sample in an RCT, the positive results reported by the parents in the experimental group can be interpreted with a certain level of confidence. The results are promising and add to the growing evidence that interventions tailored to the cultural characteristics and environments of families can strengthen positive parenting (Davidson & Cardemil, 2009) which in turn can have important effects on the substance use attitudes and behaviors of their children (Leidy et al., 2010).

These results shine additional light on possible intervention pathways to address the unique stressors that immigrant parents and children experience as part of their acculturation trajectories (Garcia-Coll, Meyer, & Brillion, 1995; Leidy et al., 2010; Martinez, 2006; Pantin et al., 2003; Straus, 2010). More specifically, these findings highlight the importance of applying bicultural/bilingual approaches when implementing interventions with and for immigrant parents and their children (Nagoshi, Marsiglia, Parsai, & Castro, 2011). The FPNG intervention demonstrates that teaching positive parenting skills is most beneficial when it is the result of a balanced synthesis of pre- and postmigration positive parenting skills. The findings indicated that participating parents arrived to the first FPNG session with a knapsack already filled with positive parenting skills with 41.8% of Wave 2 positive parenting being accounted for at Wave 1. The intervention appears to have provided the appropriate nonjudgmental environment for existing parenting skills to be validated, recalibrated, and shared with other parents so that they could be effectively applied in the new environment at the same time that new skills are acquired and rehearsed.

The findings of this study have the limitation of being drawn from a study conducted in one specific urban center in the United

States–Mexico border region; it included families living in predominantly Mexican and low socioeconomic status neighborhoods of the center city. In the case of Mexican immigrant communities, more multisite studies are needed in order to support the development and testing of parenting interventions that can be national in scope. Qualitative studies are also needed in order to capture the narratives of the parents and the way in which they describe positive parenting processes and the challenges they face as they attempt to apply them in their new environments. Such information will inform the refinement of existing parenting interventions and help interventions achieve higher levels of efficacy. Additionally, the positive effect of the parenting program may be due to a selection effect rather than the intervention itself. Because the parental control group received no treatment rather than an alternative parenting group those who were attracted to and retained in the treatment group may have been more likely to increase their positive parenting behaviors over time regardless of the intervention. This is less likely due to the low rate of attrition across all the three conditions but does not eliminate the possibility of a selection effect. It should also be noted that at the beginning of the study, the researchers determined that all parents, regardless of language, would be eligible for inclusion in the study. However, due to the exclusion criteria at the school level (all schools had to have a Latino population >70% during the 2007–2008 school year), the majority of parents preferred to receive FPNG in Spanish. Regardless in which the language FPNG was delivered, all parents were able to choose the language of forms and surveys, with 93%, completing the forms and surveys in Spanish. While FPNG was linguistically adapted, there are not enough English-speaking parents in this sample to statistically determine if FPNG is as effective when delivered in English compared to delivery in Spanish.

Future research should investigate the efficacy of FPNG in an English-only sample. Another possible limitation is that parents were advised of their treatment condition before informed consent was obtained and could choose not to participate, possibly resulting in differing consent rates across conditions. This could

be due to level of interest of parents willing to participate in a youth-only intervention compared to participating in a parent-based intervention or receiving nothing and may impact the results—only motivated parents attended the parenting workshops. However, as stated previously, an unconditional model in Mplus was conducted to examine the ICCs between schools and indicated nonsignificant ICCs between schools. Finally, we were limited by parental self-reports behaviors which may differ from actual parenting behavior. Parents may have learned to positively respond to changes in behaviors as a result of the intervention.

Despite the described limitations, the current findings provide a strong validation for culturally specific family-centered interventions that can enhance and complement school-based substance abuse prevention efforts with Mexican American youth. In line with the ecodevelopmental framework, this study lends support to the inclusion of parenting components to school-based prevention efforts in social work practice. This study presents findings on a promising culturally grounded prevention intervention, which adds to the professions repertoire of evidence-based practices (EBP) that have been shown to be effective with the Latino population. This contribution is significant because it addresses a need for culturally relevant manualized substance abuse prevention interventions for Latino youth and their parents, offering a solution to the ongoing struggle between fidelity and fit. Providing social work practitioners with cultural relevant EBP is crucial to implementing effective services to diverse populations and insuring the cultural competent application of the highest standard for evidence.

These findings also have policy implications. They provide evidence for the implementation of parenting interventions that integrate positive parenting skills rooted in the families' culture of origin. More research is needed in order to identify more precisely the existing positive parenting skills associated with specific cultural groups. In order to avoid simplistic generalizations, more information is needed about the rich array of existing parenting skills and how parents change and adapt to new environments and respond to influences such as acculturation. A combination of qualitative and quantitative methodologies is needed in order to identify potential emerging parenting style typologies and the reasons why parents use certain skills and not others over time and throughout the acculturation continuum. This type of studies can advance much needed knowledge about which skills work, in what contexts and situations.

### Authors' Note

The content is solely the responsibility of the authors and does not necessarily represent the official views of the NIMHD or the NIH.

### Declaration of Conflicting Interests

The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

### Funding

The authors disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: This

research was supported by funding from the National Institutes of Health/National Institute on Minority Health and Health Disparities (NIMHD/NIH), award P20 MD002316 (F. Marsiglia, P.I.).

### References

- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review*, *84*, 191–215.
- Barber, B. K., Stolz, H. E., Olsen, J. A., Collins, W. A., & Burchinal, M. (2005). Parental support, psychological control, and behavioral control: Assessing relevance across time, culture, and method. *Monographs of the Society for Research in Child Development*, *70*, 1–151.
- Bentler, P. M. (1990). Comparative fit indexes in structural models. *Psychological Bulletin*, *107*, 238–246.
- Bentler, P. M., & Bonett, D. G. (1980). Significance tests and goodness of fit in the analysis of covariance structures. *Psychological Bulletin*, *88*, 588–606.
- Browne, M. W., & Cudek, R. (1993). Alternative ways of assessing model fit. In K. A. Bollen & J. S. Long (Eds.), *Testing structural equation models* (pp. 136–162). Newbury, CA: Sage.
- Caspi, A., Moffitt, T. E., Morgan, J., Rutter, M., Taylor, A., Arseneault, L., & Polo-Tomas, M. (2004). Maternal expressed emotion predicts boys' antisocial behavior problems: Using monozygotic-twin differences to identify environmental effects on behavioral development. *Developmental Psychology*, *40*, 149–161.
- Castro, F. G., Stein, J. A., & Bentler, P. M. (2009). Ethnic pride, traditional family values, and acculturation in early cigarette and alcohol use among Latino adolescents. *The Journal of Primary Prevention*, *30*, 265–292.
- Chronis, A. M., Lahey, B. B., Pelham, Jr, W. E., Williams, S. H., Baumann, B. L., Kipp, H., & Rathouz, P. J. (2007). Maternal depression and early positive parenting predict future conduct problems in young children with attention-deficit/hyperactivity disorder. *Developmental Psychology*, *43*, 70–82.
- Chu, J. T. W., Farruggia, S. P., Sanders, M. R., & Ralph, A. (2012). Towards a public health approach to parenting programs for parents of adolescents. *Journal of Public Health*, *34*, i41–i47.
- Coatsworth, J. D., Pantin, H., & Szapocznik, J. (2002). Familias Unidas: A family-centered ecodevelopmental intervention to reduce risk for problem behavior among Hispanic adolescents. *Clinical Child and Family Psychology Review*, *5*, 113–132.
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences*. Hillsdale, NJ: Lawrence Erlbaum.
- Coombs, R., & Landsverk, J. (1988). Parenting styles and substance use during childhood and adolescence. *Journal of Marriage and the Family*, *50*, 473–482.
- Davidson, T. M., & Cardemil, E. V. (2009). Parent-child communication and parental involvement in Latino adolescents. *The Journal of Early Adolescence*, *29*, 99–121.
- De La Rosa, M., Vega, R., & Radisch, M. A. (2000). The role of acculturation in the substance abuse behavior of African American and Latino adolescents: Advances, issues, and recommendations. *Journal of Psychoactive Drugs*, *32*, 33–42.
- Dishion, T., & Andrews, D. (1995). Preventing escalation in problem behaviors with high-risk young adolescents: Immediate and 1-year-outcomes: Prediction and prevention of child and adolescent

- antisocial behavior. *Journal of Consulting and Clinical Psychology*, 63, 538–548.
- Eisenberg, N., Zhou, Q., Spinrad, T. L., Valiente, C., Fabes, R. A., & Liew, J. (2005). Relations among positive parenting, children's effortful control, and externalizing problems: A three-wave longitudinal study. *Child Development*, 76, 1055–1071.
- Fletcher, A. C., Glen, Jr, H., & Mekos, D. (2000). Parental influences on adolescent involvement in community activities. *Journal of Research on Adolescence*, 10, 29–48.
- Garcia-Coll, C. T., Meyer, E. C., & Brillion, L. (1995). Ethnic and minority parenting. In M. Bornstein (Ed.), *Handbook of parenting (Vol. 2): Biology and ecology of parenting* (pp. 189–209). Hillsdale, NJ: Lawrence Erlbaum.
- German, M., Gonzales, N. A., & Dumka, L. (2009). Familism values as a protective factor for Mexican-origin adolescents exposed to deviant peers. *The Journal of Early Adolescence*, 29, 16–42.
- Gosin, M., Marsiglia, F. F., & Hecht, M. L. (2003). Keepin'it REAL: A drug resistance curriculum tailored to the strengths and needs of pre-adolescents of the southwest. *Journal of Drug Education*, 33, 119–142.
- Gray, M. R., & Steinberg, L. (1999). Unpacking authoritative parenting: Reassessing a multidimensional construct. *Journal of Marriage and the Family*, 61, 574–587.
- Hawkins, J. D., Catalano, R. F., & Miller, J. Y. (1992). Risk and protective factors for alcohol and other drug problems in adolescence and early adulthood: Implications for substance abuse prevention: Implications for substance abuse prevention. *Psychological Bulletin*, 112, 64–105. doi:10.1037/0033-2909.112.1.64
- Hemovich, V., Lac, A., & Crano, W. D. (2011). Understanding early-onset drug and alcohol outcomes among youth: The role of family structure, social factors, and interpersonal perceptions of use. *Psychology, Health & Medicine*, 16, 249–267.
- Julian, T. W., McKenry, P. C., Gavazzi, S. M., & Law, J. C. (1999). Test of family of origin structural model of male verbal and physical aggression. *Journal of Family Issues*, 20, 397–423.
- Leidy, M. S., Guerra, N. G., & Toro, R. I. (2010). Positive parenting, family cohesion, and child social competence among immigrant Latino families. *Journal of Family Psychology*, 1, 252–260. doi:10.1037/a0019407
- Little, R. J. (1998). A Test of Missing Completely at Random for Multivariate Data with Missing Values. *Journal of the American Statistical Association*, *Journal of Family Psychology*, 83, 1198–1202.
- Marsiglia, F. F., & Hecht, M. L. (2005). *Keepin'it REAL: An evidence-based program*. Santa Cruz, CA: ETR.
- Martinez, C. R. (2006). Effects of differential family acculturation on Latino adolescent substance use. *Family Relations*, 55, 306–317.
- Masten, A. S., Garmezy, N., Tellegen, A., Pellegrini, D. S., Larkin, K., & Larsen, A. (1988). Competence and stress in school children: The moderating effects of individual and family qualities. *Journal of Child Psychology and Psychiatry*, 29, 745–764.
- Moore, G. F., Rothwell, H., & Segrott, J. (2010). An exploratory study of the relationship between parental attitudes and behaviour and young people's consumption of alcohol. *Substance Abuse Treatment, Prevention, and Policy*, 5, 2–4. doi:10.1186/1747-597X-5-6
- Muthén, B. O., & Satorra, A. (1995). Complex sample data in structural equation modeling. *Sociological Methodology*, 25, 267–316.
- Muthén, L. K., & Muthén, B. O. (1998–2010). *Mplus user's guide* (6th ed.). Los Angeles, CA: Author.
- Nagoshi, J., Marsiglia, F. F., Parsai, M. B., & Castro, F. G. (2011). The moderating effects of ethnic identification on the relationship between parental monitoring and substance use in Mexican heritage adolescents in the Southwest US. *Journal of Community Psychology*, 39, 520–533.
- Padilla-Walker, L. M., Bean, R. A., & Hsieh, A. L. (2011). The role of parenting and personal characteristics on deviant peer association among European American and Latino adolescents. *Children and Youth Services Review*, 33, 2034–2042. doi:10.1016/j.childyouth.2011.05.034
- Pantin, H., Coatsworth, J. D., Feaster, D. J., Newman, F. L., Briones, E., Prado, G., . . . Szapocznik, J. (2003). Familias Unidas: The efficacy of an intervention to promote parental investment in Hispanic immigrant families. *Prevention Science*, 4, 189–201.
- Pantin, H., Schwartz, S. J., Sullivan, S., Prado, G., & Szapocznik, J. (2004). Ecocodevelopmental HIV prevention programs for hispanic adolescents. *American Journal of Orthopsychiatry*, 74, 545–558.
- Parsai, M. B., Castro, F. G., Marsiglia, F. F., Harthun, M. L., & Valdez, H. (2011). Using community based participatory research to create a culturally grounded intervention for parents and youth to prevent risky behaviors. *Prevention Science: The Official Journal of the Society for Prevention Research*, 12, 34–47. doi:10.1007/s11121-010-0188-z
- Perrino, T., González-Soldevilla, A., Pantin, H., & Szapocznik, J. (2000). The role of families in adolescent HIV prevention: A review. *Clinical Child and Family Psychology Review*, 3, 81–96.
- Prado, G., Pantin, H., Briones, E., Schwartz, S. J., Feaster, D., Huang, S., . . . Szapocznik, J. (2007). A randomized controlled trial of a parent-centered intervention in preventing substance use and HIV risk behaviors in Hispanic adolescents. *Journal of Consulting and Clinical Psychology*, 75, 914–926.
- Sam, D. L., & Berry, J. W. (2010). Acculturation when individuals and groups of different cultural backgrounds meet. *Perspectives on Psychological Science*, 5, 472–481.
- Santisteban, D. A., Coatsworth, J. D., Perez-Vidal, A., Kurtines, W. M., Schwartz, S. J., LaPerriere, A., & Szapocznik, J. (2003). Efficacy of brief strategic family therapy in modifying Hispanic adolescent behavior problems and substance use. *Journal of Family Psychology*, 17, 121–133.
- Santisteban, D. A., Coatsworth, J. D., Perez-Vidal, A., Mitrani, V., Jean-Gilles, M., & Szapocznik, J. (1997). Brief structural/strategic family therapy with African American and Hispanic high-risk youth. *Journal of Community Psychology*, 25, 453–471.
- Santisteban, D. A., & Szapocznik, J. (1994). Bridging theory, research and practice to more successfully engage substance abusing youth and their families into therapy. *Journal of Child & Adolescent Substance Abuse*, 3, 9–24.
- Santisteban, D. A., Szapocznik, J., Perez-Vidal, A., Kurtines, W. M., Murray, E. J., & LaPerriere, A. (1996). Efficacy of intervention for engaging youth and families into treatment and some variables that may contribute to differential effectiveness. *Journal of Family Psychology*, 10, 35–44.
- Smetana, J. G., Campione-Barr, N., & Metzger, A. (2006). Adolescent development in interpersonal and societal contexts. *Annual Review of Psychology*, 57, 255–284.

- Straus, M. A. (2010). Prevalence, societal causes, and trends in corporal punishment by parents in world perspective. *Law and Contemporary Problems*, 73, 1–30.
- Szapocznik, J., & Kurtines, W. M. (1993). Family psychology and cultural diversity: Opportunities for theory, research, and application. *American Psychologist*, 48, 400–407.
- Szapocznik, J., Robbins, M., Mitriani, V., Santisteban, D., & Williams, R. (2002). Brief strategic family therapy with behavior problem Hispanic youth. In F. Kaslow (Ed.), *Comprehensive handbook of psychotherapy* (pp. 85–109). New York, NY: John Wiley.
- Szapocznik, J. A. S., & Coatsworth, J. D. (1999). An Eco-developmental framework for organizing the influences on drug abuse: A developmental model of risk and protection. In M. D. Glantz & C. R. Hartel, (Eds.), *Drug abuse: Origins & interventions* (pp. 331–366). Washington, DC: American Psychological Association.
- Tolan, P. H., Gorman-Smith, D., & Henry, D. B. (2000). *Chicago youth development study parenting practices measure: Instructions for scaling technical report*. Chicago, IL: Families and Communities Research Group, Institute for Juvenile Research, Department of Psychiatry, The University of Illinois at Chicago.
- Webster-Stratton, C., & Hooven, C. (1998). Parent training for child conduct problems. In T. Ollendick (Ed.), *Comprehensive clinical psychology* (pp. 186–219). Oxford, England: Elsevier Science.
- Williams, L. R., & Steinberg, L. (2011). Reciprocal relations between parenting and adjustment in a sample of juvenile offenders. *Child Development*, 82, 633–645.
- Yu, C. (2002). *Evaluating cutoff criteria of model fit indices for latent variable models with binary and continuous outcomes* (Unpublished Doctor of Philosophy in Education). University of California, Los Angeles.