

# Youth Violence and Juvenile Justice

<http://yvj.sagepub.com/>

---

## **An Empirical Test of Low Self-Control Theory Among Hispanic Youth**

Eliseo Vera and byongook moon

*Youth Violence and Juvenile Justice* published online 17 July 2012

DOI: 10.1177/1541204012441628

The online version of this article can be found at:

<http://yvj.sagepub.com/content/early/2012/04/05/1541204012441628>

---

Published by:



<http://www.sagepublications.com>

On behalf of:



Academy of Criminal Justice Sciences

**Additional services and information for *Youth Violence and Juvenile Justice* can be found at:**

**Email Alerts:** <http://yvj.sagepub.com/cgi/alerts>

**Subscriptions:** <http://yvj.sagepub.com/subscriptions>

**Reprints:** <http://www.sagepub.com/journalsReprints.nav>


**Permissions:** <http://www.sagepub.com/journalsPermissions.nav>

>> OnlineFirst Version of Record - Jul 17, 2012

What is This?

---

# An Empirical Test of Low Self-Control Theory Among Hispanic Youth

Youth Violence and Juvenile Justice  
00(0) 1-15  
© The Author(s) 2012  
Reprints and permission:  
sagepub.com/journalsPermissions.nav  
DOI: 10.1177/1541204012441628  
<http://yvj.sagepub.com>  


Eliseo Vera<sup>1</sup> and Byongook Moon<sup>2</sup>

## Abstract

This study, using a sample of 277 Hispanic youth, examines the generality of Gottfredson and Hirschi's general theory of crime in explaining the etiology of delinquency among Hispanic juveniles, especially focusing on the relationships among parental practices, low self-control, and deviant behaviors. The results indicate that low self-control is significantly related to general deviant behaviors, consistent with the theory's prediction. However, the findings show that the theoretically informed measures of parental practices are not significantly related to child levels of self-control. Instead, individual's perception toward levels of community disorder has a significant effect on child levels of self-control. Theoretical implications as well as limitations of the findings are discussed.

## Keywords

low self-control, parental practice, delinquency, Hispanic youth

## Introduction

A general theory of crime (GTC) developed by Gottfredson and Hirschi (1990) has garnered considerable academic attention and has been tested in a significant number of studies (i.e., Burt, Simons, & Simons, 2006; Cretacci, 2008; Hay & Forrest, 2006; Miller, Jennings, Alvarez-Rivera, & Lanza-Kaduce, 2009; Perrone, Sullivan, Pratt, & Margaryan, 2004; Pratt, Turner, & Piquero, 2004; Turner, Piquero, & Pratt, 2005). Gottfredson and Hirschi (1990) argue that low self-control is the primary cause of crime and analogous behaviors, and parental socialization is a main source of the development of self-control. Parents/guardians play an important role as a socialization agent with the development of self-control of their children by effectively monitoring their children's behaviors and punishing delinquent behaviors.

Numerous empirical studies have been conducted to test the theory's key propositions and overall findings are supportive of the theory's main prediction that low self-control is a significant predictor

---

<sup>1</sup> Bexar County Juvenile Probation Department, San Antonio, TX, USA

<sup>2</sup> Department of Criminal Justice, University of Texas, San Antonio, San Antonio, TX, USA

## Corresponding Author:

Byongook Moon, Department of Criminal Justice, University of Texas, San Antonio, 501 W. Durango Blvd., San Antonio, TX 78207, USA

Email: [byongook.moon@utsa.edu](mailto:byongook.moon@utsa.edu)

of various types of deviant and analogous behaviors (i.e., Arneklev, Harold, Tittle, & Bursik, 1993; Baron, 2003; Burt et al., 2006; Burton, Cullen, Evan, Alarid, & Dunaway, 1998; Cretacci, 2008; DeLisi & Vaughn, 2008; Evans, Cullen, Burton, Dunaway, & Benson, 1997; Forde & Kennedy, 1997; Grasmick, Tittle, Bursik, & Arneklev, 1993; Hay, 2001; Hope & Chapple, 2005; Nakhaie, Silverman, & LaGrange, 2000; Paternoster & Brame, 1998; Polakowski, 1994; Pratt & Cullen, 2000; Unnever, Cullen, & Pratt, 2003; Vazsonyi, Belliston, Van Loh, & Clifford Wittekind, 2004; Vazsonyi, Pickering, Junger, & Hessing, 2001). These empirical findings show that youth with low self-control are more likely to engage in deviant behaviors. Regarding the relationships among parental practices, low self-control, and delinquency, some research (i.e., Finkenauer, Engels, & Baumeister, 2005; Gibbs, Giever, & Martin, 1998; Hay, 2001; Hay & Forrest, 2006) indicates that youth whose parents monitor and supervise their activities are more likely to report higher levels of self-control. However, other studies found that low self-control fails to fully mediate the relationship between parental child-rearing practices and deviant behaviors (i.e., Burt et al., 2006; Finkenauer et al., 2005; Hay, 2001; Latimore, Tittle, & Grasmick, 2006; Miller et al., 2009; Perrone et al., 2004).

Although research has supported GTC's key propositions, further research on the etiology of self-control and the theory's generality in explaining crime across different cultural settings is necessary. Relatively limited research has examined whether parental practice is the primary source of child development of self-control and findings are mixed. Second, Gottfredson and Hirschi (1990, p. 177) argue that the GTC is a "culture-free theory of crime," suggesting that criminality transcends national and cultural boundaries. Initial findings from limited studies with diverse samples (i.e., Canadian and Japanese adolescents) provide supportive evidence of the GTC's generality in explaining delinquency outside the context of the United States (see Baron, 2003; Forde & Kennedy, 1997; Henry, Caspi, Moffitt, & Silva, 1996; Vazsonyi et al., 2004; Vazsonyi et al., 2001). However, few empirical studies (see Shekarkhar & Gibson, 2011) have been conducted to examine the theory's applicability in explaining the etiology of crime among Hispanic adolescents in the United States. The failure to extensively test the GST's applicability to Hispanic youth, especially considering the substantial and growing proportion of Hispanic population in the United States, represents a substantial gap in the literature.

The current study, using a sample of 277 Hispanic youth in the United States, attempts to address these limitations. First, we examine whether key dimensions of parental practice are significant predictors of low self-control among Hispanic adolescents. Two key dimensions of effective parental practices—parental monitoring and parental recognition of deviant behavior—articulated by Gottfredson and Hirschi are measured in the current study. Second, we test whether low self-control mediates the relationship between parental practice and delinquency and whether it has a significant effect on deviant behaviors.

## Literature Review

### *Low Self-control and Delinquency*

Gottfredson and Hirschi (1990, pp. 89–90) argue that individuals with low self-control are more likely to seek immediate gratification, develop a concrete here and now orientation, and prefer easy and simple tasks producing immediate gratification of desires. Also, these individuals have the propensity to be involved in risky and physically active behaviors. Finally, people with low self-control are more likely to be self-centered, become indifferent or insensitive to others' needs and/or sufferings, and have minimal tolerance for frustration and resolve conflicts by using violent verbal and physical aggression.

Numerous studies have been conducted to examine whether low self-control is significantly related to delinquency (i.e., Arneklev et al., 1993; Baron, 2003; Grasmick et al., 1993; Vazsonyi

et al., 2001, 2004). For example, Arneklev, Harold, Tittle, and Bursik (1993), using a sample of 394 adults, found that low self-control is significantly related to imprudent behaviors such as gambling and drinking. Grasmick, Tittle, Bursik, and Arneklev (1993) examined the applicability of low self-control theory in explaining criminal behaviors and found that low self-control is a significant predictor of violent behavior and fraud. Baron (2003), using a sample of Canadian street youth, found that low self-control is a predictor of various types of criminal behaviors such as violent crime, property crime, and illegal drug use. A study by Vazsonyi, Belliston, Van Loh, and Clifford Wittekind (2004) indicates that low self-control has a significant effect on vandalism, drug use, theft, assault, and school misconduct. Conner, Stein, & Longshore (2009), using a sample of 317 adolescent male offenders, found that a dimension of risk taking is related to property and violent crimes, while volatile temper is a significant predictor of violent crime and illegal drug use. Overall, these findings are supportive of the main proposition of the theory that low self-control is the key predictor of criminal and delinquent behaviors.

### *Parenting and Self-control*

Gottfredson and Hirschi (1990) suggest that parental socialization is the major source for the development of self-control since parents are able to monitor/supervise their child's behavior, recognize delinquent or maladaptive behavior, and punish such behavior when it occurs. A child who is monitored effectively by parents is more likely to develop high self-control because she or he is less likely to be exposed to negative environments and less likely to engage in delinquent and criminal behaviors. Recognition of deviant behavior by parents also has a significant effect on the development of self-control. Parents who recognize and are aware of signs of their child's low self-control (i.e., smoking, extensive television viewing, use of physical force, and truancy) are more likely to prohibit smoking, the use of physical force, and truancy (Gottfredson & Hirschi, 1990, p. 99). Another key element of effective parenting practice is the proper punishment of deviant behaviors by parents. A child whose parents use proper punishment when she or he commits deviant behavior is more likely to develop high self-control. Gottfredson and Hirschi (1990, p. 100) argue that the most effective punishment is the explicit disapproval of unwanted behavior, which is not too harsh or too lenient. Overall, these three elements of a parenting practice have a significant effect on a child's self-control, which in turn affects deviant and criminal behaviors.

A growing body of empirical research (see Boutwell & Beaver, 2010; Finkenauer et al., 2005; Hay, 2001; Nofziger, 2008; Perrone et al., 2004; Pratt et al., 2004; Turner et al., 2005) has examined the relationship between parenting and self-control and overall results indicate that parental practice is related to child levels of self-control. For example, Hay (2001) found parental monitoring and the combined measurement of parental monitoring and discipline are significantly and negatively related to low self-control. In addition to the three key aspects of effective parenting articulated by Gottfredson and Hirschi (1990), he further examined the effects of four dimensions of authoritative parenting on the level of self-control (for more information about the concept of authoritative parenting, see Hay, 2001). The findings also show that fair discipline and nonphysical discipline have significant effects on low self-control. Pratt, Turner, and Piquero (2004) found that three key dimensions of effective parental socialization (parental supervision, monitoring, and discipline) are significant predictors of youth's levels of self-control. Nofziger (2008), using data from the National Longitudinal Survey of Youth (NLSY), examined whether maternal self-control is significantly related to child levels of self-control and found that mothers with low self-control are less likely to supervise and punish their children effectively. A recent study by Boutwell and Beaver (2010) also examined the relationship between parental and child self-control. The results indicate that maternal/parental self-control has a significant positive effect on youth's self-control, consistent with the theory's prediction.

Other studies (see Beaver et al., 2009; Beaver & Wright, 2005; Gibson, Sullivan, Jones, & Piquero, 2010; Pratt et al., 2004; Teasdale & Silver, 2009; Turner et al., 2005) investigated the theory's other main hypothesis that parental practice is the only primary source of the development of child self-control. The results indicate that biological/genetic components or school/neighborhoods are significant predictors of the development of self-control, contrary to Gottfredson and Hirschi's prediction. Turner, Piquero, and Pratt (2005) examined whether parental practices and school/neighborhood socialization are significant predictors of the development of self-control among youth in the United States and found the latter to be significantly related to youth's self-control net of parental effects. Using a sample of twin children derived from the Early Childhood Longitudinal Study, Beaver and Wright (2005) found that parental involvement is weakly related to child low self-control. Instead, anoxia (oxygen starvation), a birth complication, is found to have the strongest effect on low self-control over time. Beaver et al. (2009) examined relative effects of environmental factors (i.e., maternal disengagement, maternal attachment/involvement, parental permissiveness) and genetic factors on the development of self-control. Interestingly, the results show that the development of self-control is heavily influenced by genetic factors. Consistent with Wright and Beaver (2005), environmental factors had no significant effect on low self-control.

A few studies (see Gibbs et al., 1998; Hay, 2001; Perrone et al., 2004; Polakowski, 1994) have examined the mediating effect of low self-control on the relationship between parental practices and deviant behaviors and the findings were mixed. For example, several studies (see Gibbs et al., 1998; Hope & Chapple, 2005; Polakowski, 1994) found that self-control has a significant mediating effect on the relationship between parental socialization and deviant behaviors. However, other studies (see Burt et al., 2006; Finkenauer et al., 2005; Hay, 2001; Miller et al., 2009; Perrone et al., 2004) indicate that low self-control has no or a partial mediating effect on the relationship between parental practices and delinquency. For example, Perrone, Sullivan, Pratt, and Margaryan (2004), using a nationally representative sample of youth, found that parental efficacy continues to exert a significant effect on delinquency, even after controlling the effect of low self-control in the final model.

### *GTC and Culture*

Gottfredson and Hirschi (1990) claim that the GTC is culture-free theory in that ineffective parental practice is a primary cause of low self-control, which in turn leads to delinquent behaviors across different cultures and countries. Several empirical studies with diverse samples from outside the United States were conducted to test the theory's generality. For example, Baron (2003), using a sample of 400 Canadian street youth, examined whether low self-control is significantly related to crime/illegal drug use. The findings indicate that low self-control is a significant predictor of criminal behaviors. Vazsonyi et al. (2004) examined whether the relationship between low self-control and delinquency is similar in culturally different contexts by using a sample of 335 Japanese adolescents and 1,285 U.S. adolescents. The findings show that low self-control is a significant predictor of various delinquent behaviors across two groups, supportive of the theory's generality in explaining causes of crime across different cultures. Limited studies (see Miller et al., 2009; Shekarkhar & Gibson, 2011) examined the generality of the GTC among Hispanic youth. Miller, Jennings, Alvarez-Rivera, and Lanza-Kaduce (2009), using a sample of 183 Hispanic adolescents in Puerto Rico, examined a relationship among maternal attachment, low self-control, and deviant behaviors. The findings show that maternal attachment is negatively related to low self-control and low self-control is a significant predictor of deviant behaviors. With a sample of 739 Latino youth from the Project on Human Development in Chicago Neighborhoods, Shekarkhar and Gibson (2011) found that parental variables (i.e., parental warmth, parental hostility, parental supervision) have no statistically significant influence on violent or property deviant behaviors. Consistent with prior research, the findings indicate that Latino youth with low self-control are more likely to engage in various types

of deviant behaviors. In sum, this small number of empirical studies provide initial support for the theory's generality in explaining deviant behaviors among adolescents across different cultures.

Unfortunately, no empirical research measured key dimensions of parental practices set forth by Gottfredson and Hirschi (1990) and examined their effects on the development of self-control among Hispanic youth in the United States. Consistent with Gottfredson and Hirschi's (1990) prediction, cultural studies (Allen, Svetaz, Hardeman, & Resnick, 2008; Desmond & Lopez Turley, 2009; Escovar & Lazarus, 1982) indicate that Hispanic parents play a key role in their child's socialization process. Strong family ties, interdependence among extended family members, and respect for parental authority are highly emphasized in Hispanic culture (Allen et al., 2008). Several prior studies (see Desmond & Lopez Turley, 2009; Escovar & Lazarus, 1982) indicate that Hispanic youth have intimate relationship with their mother and maintain strong attachment to their family members. This cultural emphasis on strong family ties and respect for parental authority may suggest that parental practices are the primary source of the development of self-control among Hispanic youth. Based on the theory and extant empirical findings, we predict that parental practice is a significant predictor of child levels of self-control and low self-control is significantly related to delinquency among Hispanic adolescents.

## Methodology

### Sample

The data used for the current study were collected from a sample of 296 juveniles in two junior high schools in the southwestern United States. The schools were located in a relatively impoverished neighborhood with a majority of Hispanic population. After receiving the school district's approval to conduct the research in 2008, parents/legal guardians of 620 sixth and seventh graders were informed about the purpose and procedures of the research. Approximately 1 week later, 360 signed parental consent forms were returned to the schools and students whose parents allowed them to participate in the study were asked to voluntarily participate in completing questionnaires. As an incentive to compensate and encourage voluntary participation, students were given two pens once the questionnaire was completed. Questionnaires were distributed to students in classrooms and a school cafeteria and students were given 30 min to complete the questionnaire. Of those students who were allowed to participate in the research by their parents/guardians, 320 youth voluntarily participated in the study. However, 24 collected questionnaires were incomplete and were removed from the current analyses. Among the students in the sample, 57% ( $N = 168$ ) were female and 43% ( $N = 128$ ) were male. Consistent with the school district's racial/ethnic composition, almost all of the students (94%) in the sample were Hispanic. As such, the current study only includes the Hispanic students ( $N = 277$ ) for analysis in order to assess and understand the generalizability of low self-control theory in explaining the etiology of deviant behavior among Hispanic juveniles.

### Independent Variables

**Low self-control.** Twenty-four items developed by Grasmick et al. (1993) are used to measure the level of respondents' self-control (see Appendix B for all the items used to create independent and dependent variables). These items are frequently used in prior studies and have been found to be both reliable and valid (see Arneklev, Grasmick, & Bursik, 1999; Longshore, Turner, & Stein, 1996; Piquero & Rosay, 1998; Piquero & Tibbetts, 1996). They measure the extent of respondents' impulsiveness, preference for simple tasks, risk seeking, preference for physical activities, self-centeredness, and volatile temper delineated by Gottfredson and Hirschi (1990). The response options of each item ranged from 1 for *strongly disagree* to 4 for *strongly agree*. In the present research, these 24 items are combined to create a low self-control index (Cronbach's  $\alpha = .90$ ) and is coded so that a higher score indicates lower levels of self-control (see Table 1).

**Table 1.** Descriptive Statistics of Key Variables (N = 277)

Variables	Mean	SD	Minimum	Maximum
<b>Control variables</b>				
Gender (Male = 1)	0.43	0.50	0.00	1.00
Parental income	2.64	1.87	1.00	8.00
Family structure (intact family = 1)	0.48	0.50	0.00	1.00
Neighborhood disorder	2.71	3.29	0.00	12.00
<b>Independent variables</b>				
Low self-control	46.99	13.47	24.00	86.00
Parental recognition of deviant behavior	5.78	2.11	2.00	8.00
Parental monitoring	8.77	3.03	3.00	12.00
<b>Dependent variable</b>				
General deviance	2.69	6.83	0.00	49.00

**Effective parental practices (Parental monitoring and recognition of deviant behavior).** Parental monitoring and recognition of deviant behavior, which are two of three key aspects of effective parental practices articulated by Gottfredson and Hirschi (1990), are measured and included in the analyses. Parental monitoring is created by summing three items, partially adopted from Hay (2001). These items were "My parents are familiar with all or most of my close friends," "My parents know where I am when I am away from home," and "My parents know who I am with when I am away from home." The response options for each item range from 1 (*strongly disagree*) to 4 (*strongly agree*) and the index (Cronbach's  $\alpha = .85$ ) is coded so that a higher value indicates higher levels of parental supervision.

Parental recognition of deviant behavior is created by summing two items, measuring whether parents/legal guardians recognized when their kids engaged in deviant behaviors. These items are "My parents usually know if I commit deviant behaviors" and "My parents usually recognize when I am in trouble." The scale (Cronbach's  $\alpha = .84$ ) is coded so that a higher score indicates parents' higher recognition of deviant behaviors.

### **Dependent Variable: General Deviance**

A composite general delinquent behavior index (Cronbach's  $\alpha = .94$ ) is created by combining 14 types of delinquent behaviors typically used in criminological studies. Respondents in the sample were asked to report how often they engaged in delinquent behaviors during the past year. Examples of these delinquent behaviors are "drinking alcohol," "smoking," "running away from home," "joining a gang," "fighting in a group with others," "hitting or threatened to hit fellow students at school," "stealing or tried to steal something not belonging to them," and "breaking or tried to break into a building or vehicle to steal something or just to look around." The response options for each item range from 0 (*never*) to 4 (*10 or more times*). It is coded so that a higher score of the scale indicates higher levels of general deviant behavior during the previous year.

### **Control Variables**

Several demographic and sociological factors (i.e., gender, parental income, and family structure) are used as control variables in the current study, since these factors are known to have significant effects on deviant behavior (see Baron, 2003; Burt et al., 2006; Feldman & Weinberger, 1994; Hope, Grasmick, & Pointon, 2003; Meldrum, 2008; Miller et al., 2009; Tittle & Paternoster, 2000). Gender is a dichotomous variable (*male* = 1 and *female* = 0) and parental income is a continuous variable. Family

**Table 2.** OLS Regression of Low Self-Control on Parental Practices and Control Variables ( $N = 277$ )

	Model 1	Model 2
Gender (male = 1)	-1.26 (1.50)	-1.22 (1.53)
Parental income	0.47 (0.40)	0.48 (0.40)
Family structure (intact family = 1)	-4.80** (1.50)	-4.80** (1.51)
Neighborhood disorder	1.44*** (0.23)	1.43*** (0.23)
Parental recognition of deviant behavior		-0.47 (0.55)
Parental monitoring		0.17 (0.39)
Constant	44.72*** (1.69)	45.86*** (2.89)
$R^2$	0.18	0.18

Note. Standard errors in parentheses.

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

structure is also used as a control variable as previous studies (Feldman & Weinberger, 1994; Hope et al., 2003; Meldrum, 2008; Miller et al., 2009) indicate the importance of family structure on parental practices and youth's delinquent behaviors. It is dichotomized as a dummy variable, coding *intact family* (living with both biological parents) as 1 and *broken family* (divorced, separated, remarried) as 0.

Finally, the present study includes youth's perception toward neighborhood disorder as a control variable since prior research (see Paternoster & Mazerolle, 1994; Pratt et al., 2004; Teasdale & Silver, 2009) has shown that neighborhood factors are significantly related to youth's level of self-control and deviant behavior. Neighborhood disorder is created by combining six items, measuring respondents' perceptions toward the degree of vandalism, abandoned houses, burglaries, run-down and poorly kept buildings, and assaults and muggings within respondents' neighborhoods. Response options range from 0 (*not a problem*), 1 (*somewhat of a problem*), and 2 (*big problem*) and the scale (Cronbach's  $\alpha = .90$ ) is coded so that a higher value indicates higher levels of neighborhood disorder.

## Results

A series of ordinary least squares (OLS) regression analyses were performed to examine factors related to low self-control (see Table 2). Two models were constructed to test the distinct effects of control variables, parental recognition of deviant behavior, parental monitoring, and all theoretical relevant variables on low self-control. We checked any potential problems for multicollinearity among independent variables; examination of the variance inflation factor (VIF) and condition index values shows no significant problem of multicollinearity in the models. First, a base model (Model 1) that includes the control variables of gender, parental income, family structure, and neighborhood disorder was estimated. The results indicate that family structure and neighborhood disorder are significantly related to low self-control. Individuals from intact families are more likely to report higher levels of self-control, consistent with the theory's expectation. Also, the results show that youth living in disorderly neighborhoods are more likely to report lower levels of self-control. Parental recognition of deviant behavior and parental monitoring (Model 2) are added to the baseline model to examine the effect of parental practices on youth's levels of self-control. Contrary to several previous findings (Finkenauer et al., 2005; Gibbs et al., 1998; Hay, 2001; Hay & Forrest, 2006), the results indicate that neither parental monitoring nor parental recognition of deviant behavior is significantly related to low self-control, after controlling the effects of control variables. We also examined the cumulative effect of both parental monitoring and parental recognition of deviance on youth's levels of self-control since Gottfredson and Hirschi (1990) did not specify whether key elements of parental practices have independent or cumulative effects on child levels of self-control (Hay, 2001). Further analyses indicate that the results are almost identical with those presented in the current study. Family



**Table 3.** Negative Binomial Regression Models of Deviant Behaviors ( $N = 277$ )

	Model 1	Model 2
Gender (Male = 1)	-0.33 (0.33)	-0.15 (0.29)
Parental income	0.19 * (0.08)	0.15 * (0.08)
Family structure (Intact family = 1)	-0.65 * (0.30)	-0.32 (0.28)
Neighborhood disorder	0.08 (0.05)	-0.05 (0.05)
Parental recognition of deviant behavior	-0.21* (0.09)	-0.12 (0.09)
Parental monitoring	-0.11 (0.06)	-0.20 *** (0.06)
Low self-control		0.07 *** (0.01)
Constant	2.55 *** (0.56)	2.55 *** (0.56)
Nagelkerke $R^2$	0.03	0.07

Note. Standard errors in parentheses.

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

structure and neighborhood disorder continue to exert significant effects on low self-control in the final model. Furthermore, an examination of  $R^2$  values in two models indicates that parental practice variables provide little added explanation to a final model.

Next, a series of negative binomial regression analyses are conducted to examine relative effects of parental practice elements and low self-control on delinquency. OLS regression is not a suitable method of estimation since an examination of the distribution of a general deviant behavior index indicates that a majority of the youth in the sample reported no engagement in deviant behaviors. Also, the distribution of delinquent behaviors is skewed in the positive direction, violating OLS's key assumptions such as homogeneity of residual variance (Osgood, Finken, & McMorris, 2002). Therefore, negative binomial regressions were used to examine the relationships between theoretically relevant factors and deviance (see Table 3).

The results in Model 1 indicate that parental income, family structure, and parental recognition of deviant behavior are significantly related to general deviant behaviors. Consistent with several prior studies (McCarthy, Gersten, & Langner, 1982; Rankin, 1983; Rebellon, 2002), the current study indicates that youth from intact families report less involvement in delinquency. The results also show that youth whose parents recognized their children's deviant behaviors or monitor their children's whereabouts, activities, and associates are less likely to commit deviant behaviors. Interestingly, the results show that youth from higher income families are more likely to commit deviance. In the full model (Model 2), low self-control is added to the basic model. As expected, the findings indicate that low self-control is significantly and positively related to general deviant behaviors. Youth with low self-control are more likely to report involvement in delinquency. However, parental monitoring has a significant effect on delinquent behaviors, while parental recognition of deviant behavior is no longer significantly related to delinquency after the inclusion of low self-control to the final model.

## Discussion

An extensive body of research with diverse populations and research methods has tested Gottfredson and Hirschi's GTC and generated empirical results which are generally supportive of key propositions of the theory. However, no research to date has tested the applicability of low self-control theory on a sample of Hispanic youth in the United States. The current study is an attempt to fill the void by analyzing data derived from a sample of 277 Hispanic youth in the southwestern United States by examining the relationships among parental practices, low self-control, and delinquency.

Surprisingly, the results indicate that parental recognition of deviant behaviors and parental monitoring are not significantly related to youth's levels of self-control. These findings are unexpected, considering that strong family relationships and attachments are emphasized in Hispanic culture, and

several prior studies (see Gibson et al., 2010; Pratt et al., 2004) have found a significant relationship between parental practices and self-control. Also, it is important to indicate that neighborhood disorder is significantly and positively related to low self-control in the current study. Hispanic youth who reported an extensive problem in their neighborhood are more likely to report lower levels of self-control. Overall, these results suggest that adverse neighborhood conditions play a significant role in influencing the development of self-control among Hispanic adolescents, contrary to the theory's prediction. The present study's findings of no effects of parental practices on self-control and of significant neighborhood influence on self-control might be because the sample was drawn from an impoverished and disadvantaged neighborhood where approximately 94% of students in the school district are eligible for free or reduced-price lunch and a large number of immigrants reside. Prior research (see Allen et al., 2008; Coatsworth, Pantin, and Szapocznik, 2002) indicate that immigrant Hispanic parents are more likely to face major life challenges such as poverty, loss of social support network, and language barrier. Hispanic parents with limited English proficiency rely on their children for communication and are socially isolated, which may undermine parental authority and capacity for controlling and supervising their children (Allen et al., 2008; Miranda, Bilot, Peluso, Berman, & Van Meek, 2006). Without proper parental control and supervision, it may be that Hispanic youth residing in a disadvantaged neighborhood are more susceptible to the effects of neighborhood conditions as found in the current study. This finding is consistent with prior empirical research (Pratt et al., 2004, p. 234) which found that neighborhood context is a significant predictor of self-control and that minority children are less likely than racial majority children to be supervised by their parents in adverse neighborhood environments. These empirical findings may cast doubt on the narrowly defined parental practices/self-control relationship and suggest the necessity of expanding the theoretical frameworks underlying sources of self-control, especially among Hispanic children growing up in high-risk neighborhoods.

Though it is designed to contribute to the extant literature, the current study has several limitations that must be noted. First, the present study used a convenience sample of Hispanic youth in one school district. Therefore, we should be cautious in generalizing the current findings beyond this sample to the larger Hispanic population. Second, causal relationships among parental practices, low self-control, and delinquent behaviors could not be fully examined because of the use of the cross-sectional data. Also, we were not able to examine reciprocal effects of child antisocial/problem behaviors and parental practices; not only do parental practices contribute to the development of child self-control, but also a child's problem behaviors likely influence parental practices which in turn affect child self-control. A study by Huh, Tristan, Wade, and Stice (2006), using a longitudinal sample of 496 adolescent girls, examined reciprocal relations between parenting and children's problem behavior and found that child antisocial behavior is a significant predictor of future decreases in parental control. To better capture a sequence of parental practice, child self-control, and deviance, longitudinal research is necessary. Third, attitudinal measures of low self-control employed in the current study are often criticized for failing to properly measure the concept of low self-control (see Longshore et al., 1996; Piquero & Bouffard, 2007). Moreover, Hirschi (2004) redefined and expanded the concept of self-control and emphasized the importance of measuring situation-based self-control. Empirical research by Piquero and Bouffard (2007) indicates that Hirschi's redefined self-control measure is a better predictor of both drunk driving and sexual coercion than the Grasmick et al. scale. Additional research is required to measure situation-based self-control and its effect on deviant behaviors among Hispanic youth. Fourth, parental punishment, one of three key dimensions of parental practices set out in the theory, was not measured. It may be that omission of parental punishment contributes to weakness of the test of low self-control theory as prior research (see Grasmick et al., 1993) indicates a significant relationship between parental punishment and low self-control. Future research with more comprehensive and broader measures of parental practice (including authoritative parental styles) is necessary to establish whether causal relationships among parenting, self-control, and delinquency exist; prior research indicates that

Goffredson and Hirschi's notion of effective parenting may be restricted. Fifth, recent research (see Boutwell & Beaver, 2010; Miller et al., 2009) has examined the effects of maternal and paternal practices on youth's levels of self-control and found the differential and distinctive impact of maternal and paternal parental styles on child levels of self-control. For example, Boutwell and Beaver (2010) found that maternal involvement is significantly related to child levels of self-control, while paternal involvement is not a significant predictor of low self-control. A study by Miller et al. (2009) also showed that maternal attachment is a significant predictor of both low self-control and deviant behaviors in the expected direction. However, paternal attachment is not significantly related to deviant behaviors. These findings may suggest the necessity of separately examining the effect of maternal and paternal parental practices on the development of self-control to fully understand causal relationships among parental practice, low self-control, and delinquency. Sixth, several studies (see Hay, 2001) indicate the necessity of expanding the narrow concepts of effective parental practice set out in the theory. Hay (2001) investigated the effects of broader dimensions of authoritative parental practices (parental acceptance/involvement, psychological autonomy, fair discipline, and nonphysical discipline) on youth's self-control and found that fair discipline and nonphysical parental discipline are significant predictors of levels of self-control. Due to the data limitations, the current study was not able to examine the effects of broader dimensions of authoritative parenting on levels of self-control among Hispanic youth. Further research with comprehensive measurements of effective parental practices is necessary to illuminate the relationship between parental practices and self-control.

Overall, our findings advance the empirical development of low self-control theory, providing partial support for the generalizability and applicability of the theory in explaining delinquency among Hispanic adolescents. More research with diverse samples is necessary to further assess a parental socialization/self-control relationship in culturally diverse settings. It is also crucial to conduct more empirical research exploring additional sources of self-control such as community/school and genetic factors. In recent years, a small but growing number of studies (see Beaver & Wright, 2005; Boutwell & Beaver, 2010; Pratt et al., 2004; Teasdale & Silver, 2009; Turner et al., 2005) suggest that genetic factors and societal institutions (community/school) greatly influence children's development of self-control, challenging Gottfredson and Hirschi's (1990) argument that genetic factors and school exert no significant influence on levels of self-control. These findings suggest that parental practices as the primary single cause of self-control articulated by the low self-control theory need reconsideration and empirical testing. We argue that more research is necessary to better understand whether genetic factors and social institutions are important sources of the development of self-control and whether these external and genetic factors interact with parenting in developing children's self-control.

## Appendix A

**Table A1.** Correlation Matrix Among Major Independent, Dependent, and Control Variables (N = 277)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
(1)	1							
(2)	.04	1						
(3)	-.01	.11	1					
(4)	-.00	.03	-.12*	1				
(5)	-.07	.04	-.00	-.03	1			
(6)	-.17**	.03	-.01	-.00	.76***	1		
(7)	-.06	.05	-.21***	.38***	-.05	-.01	1	
(8)	-.04	.09	-.06	.14*	-.22***	-.19**	.35***	1

Note. (1) Male, (2) Parental income, (3) Family structure, (4) Neighborhood disorder, (5) Parental recognition of deviant behavior, (6) Parental monitoring, (7) Low self-control, (8) General deviance.

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

## Appendix B

**Table B1.** Scales Used in the Analysis

Indexes	Items
Low self-control ( $\alpha = .90$ )	<ol style="list-style-type: none"> <li>1. I often act on the spur of the moment without stopping to think</li> <li>2. I don't devote much thought and effort to preparing for the future</li> <li>3. I often do whatever brings me pleasure here and now, even at the cost of some distant goal</li> <li>4. I'm more concerned with what happens to me in the short run than in the long run</li> <li>5. I frequently try to avoid projects that I know will be difficult</li> <li>6. When things get complicated or difficult, I tend to quit or withdraw</li> <li>7. The things in life that are easiest to do bring me the most pleasure</li> <li>8. I dislike really hard tasks that stretch my abilities to limit</li> <li>9. I like to test myself every now and then by doing something a little risky</li> <li>10. Sometimes I will take a risk just for the fun of it</li> <li>11. I sometimes find it exciting to do things for which I might get in trouble</li> <li>12. Excitement and adventure are more important to me than security</li> <li>13. If I had a choice, I would almost always rather do something physical than something mental</li> <li>14. I almost always feel better when I am on the move than when I am sitting and thinking</li> <li>15. I like to get out and do things more than I like to read or contemplate ideas</li> <li>16. I seem to have more energy and a greater need for activity than most other people of my age</li> <li>17. I try to look out for myself first, even if it means making things difficult for other people</li> <li>18. I'm not very sympathetic to other people when they are having problems</li> <li>19. If things I do upset people, it is their problem not mine</li> <li>20. I will try you get the things I want even when I know it's causing problems for other people</li> <li>21. I lose my temper easily</li> <li>22. Often, when I am angry at people I feel more like hurting them than talking to them about why I am angry</li> <li>23. When I am really angry, other people better stay away from me</li> <li>24. When I have a serious disagreement with someone, it is usually hard for me to talk calmly about it without getting upset</li> </ol>
Parental monitoring ( $\alpha = .85$ )	<ol style="list-style-type: none"> <li>1. My parents are familiar with all or most of my close friends</li> <li>2. My parents know where I am when I am away from home</li> <li>3. My parents know who I am with when I am away from home</li> </ol>
Parental recognition of deviant behaviors ( $\alpha = .84$ )	<ol style="list-style-type: none"> <li>1. My parents usually know if (when) I commit deviant behavior</li> <li>2. My parents usually recognize when I am in trouble</li> </ol>

(continued)

Table B1 (continued)

Indexes	Items
Youth's perception toward neighborhood disorder ( $\alpha = .90$ )	<ol style="list-style-type: none"> <li>1. Vandalism (i.e., building and personal belongings broken)</li> <li>2. Winos and junkies</li> <li>3. Abandoned houses</li> <li>4. Burglaries and thefts</li> <li>5. Run-down and poorly kept buildings</li> <li>6. Assaults and muggings</li> </ol>
General deviance ( $\alpha = .94$ )	<ol style="list-style-type: none"> <li>1. Stealing or tried to steal something not belonged to them</li> <li>2. Fighting in a group with others</li> <li>3. Running away from home</li> <li>4. Drinking alcohol</li> <li>5. Smoking</li> <li>6. Joining a gang</li> <li>7. Skipping classes without an excuse</li> <li>8. Hitting or threatened to hit fellow students at school</li> <li>9. Using force or strong-arm methods to get money or things from other students</li> <li>10. Using force or strong-arm methods to get money or things from other people, not students</li> <li>11. Stealing or tried to steal something at school</li> <li>12. Breaking or tried to break into a building or vehicle to steal something or just to look around</li> <li>13. Damaging, destroyed, marked up, or tagged somebody else's property on purpose</li> <li>14. Throwing objects such as rocks or bottles at people</li> </ol>

### Declaration of Conflicting Interests

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

### Funding

The author(s) disclosed the receipt of the following financial support for the research, authorship, and/or publication of this article: This research was supported by grant from the University of Texas, San Antonio.

### References

- Allen, M., Svetaz, M. V., Hardeman, R., & Resnick, M. D. (2008). *What research tells us about Latino parenting practices and their relationship to youth sexual behavior*. Washington, DC: The National Campaign to Prevent Teen and Unplanned Pregnancy.
- Arneklev, B. J., Grasmick, H. G., & Bursik, R. J. (1999). Evaluating the dimensionality and invariance of "low self-control". *Journal of Quantitative Criminology, 15*, 307-331.
- Arneklev, B. J., Harold, G. G., Tittle, C. R., & Bursik, R. J. (1993). Low self-control and imprudent behavior. *Journal of Quantitative Criminology, 9*, 225-247.
- Baron, S. W. (2003). Self-control, social consequences, and criminal behavior: Street youth and the general theory of crime. *Journal of Research in Crime and Delinquency, 40*, 403-425.
- Beaver, K. M., Shutt, E. J., Boutwell, B. B., Ratchford, M., Roberts, K., & Barnes, J. C. (2009). Genetic and environmental influences on levels of self-control and delinquent peer affiliation. *Criminal Justice and Behavior, 36*, 41-60.

- Beaver, K. M., & Wright, J. P. (2005). Evaluating the effects of birth complications on low self-control in a sample of twins. *International Journal of Offender Therapy and Comparative Criminology*, *49*, 450-471.
- Boutwell, B. B., & Beaver, K. M. (2010). The intergenerational transmission of low self-control. *Journal of Research in Crime and Delinquency*, *47*, 174-209.
- Burt, C. H., Simons, R. L., & Simons, L. G. (2006). A longitudinal test of the effects of parenting and the stability of self-control: Negative evidence for the general theory of crime. *Criminology*, *44*, 353-396.
- Burton, V. S., Cullen, F. T., Evan, T. D., Alarid, L. F., & Dunaway, R. G. (1998). Gender, self-control, and crime. *Journal of Research in Crime and Delinquency*, *35*, 123-147.
- 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.
- Conner, B. T., Stein, J. A., & Longshore, D. (2009). Examining self-control as a multidimensional predictor of crime and drug use in adolescents with criminal histories. *The Journal of Behavioral Health Services and Research*, *36*, 137-149.
- Cretacci, M. A. (2008). A general test of self-control theory: Has its importance been exaggerated? *International Journal of Offender Therapy and Comparative Criminology*, *52*, 538-553.
- DeLisi, M., & Vaughn, M. G. (2008). The Gottfredson-Hirschi critiques revisited: Reconciling self-control theory, criminal careers, and career criminals. *International Journal of Offender Therapy and Comparative Criminology*, *52*, 520-537.
- Desmond, M., & Lopez Turley, R. N. (2009). The role of familism in explaining the Hispanic-White college application gap. *Social Problems*, *56*, 311-334.
- Escovar, P. L., & Lazarus, P. J. (1982). Cross-cultural-rearing practices: Implications for school psychologists. *School Psychology International*, *3*, 143-148.
- Evans, T. D., Cullen, F. T., Burton, V. S., Dunaway, R. G., & Benson, M. L. (1997). The social consequences of self-control: Testing the general theory of crime. *Criminology*, *35*, 475-504.
- Feldman, S. S., & Weinberger, D. A. (1994). Self-restraint as a mediator of family influences on boy's delinquent behavior: A longitudinal study. *Child Development*, *65*, 195-211.
- Finkenauer, C., Engels, R. C., & Baumeister, R. F. (2005). Parenting behaviour and adolescent behavioural and emotional problems: The role of self-control. *International Journal of Behavioral Development*, *29*, 58-69.
- Forde, D. R., & Kennedy, L. W. (1997). Risky lifestyles, routine activities, and the general theory of crime. *Justice Quarterly*, *14*, 265-294.
- Gibbs, J. J., Giever, D., & Martin, J. (1998). Parental management and self-control: An empirical test of Gottfredson and Hirschi's general theory. *Journal of Research in Crime and Delinquency*, *35*, 40-70.
- Gibson, C. L., Sullivan, C. J., Jones, S., & Piquero, A. R. (2010). "Does it take a village?" Assessing neighborhood influences on children's self-control. *Journal of Research in Crime and Delinquency*, *47*, 31-62.
- Gottfredson, M. R., & Hirschi, T. (1990). *A general theory of crime*. Stanford, CA: Stanford University Press.
- Grasmick, H. G., Tittle, C. R., Bursik, R. J., & Arneklev, B. J. (1993). Testing the core empirical implications of Gottfredson and Hirschi's general theory of crime. *Journal of Research in Crime and Delinquency*, *30*, 5-29.
- Hay, C. (2001). Parenting, self-control, and delinquency: A test of self-control theory. *Criminology*, *39*, 707-736.
- Hay, C., & Forrest, W. (2006). The development of self-control: Examining self-control theory's stability thesis. *Criminology*, *44*, 739-774.
- Henry, B., Caspi, A., Moffitt, T. E., & Silva, P. A. (1996). Temperamental and familial predictors of violent and nonviolent criminal convictions: Age 3 to 18. *Developmental Psychology*, *32*, 614-623.
- Hirschi, T. (2004). Self-control and crime. In R. F. Baumeister & K. D. Vohs (Eds.), *Handbook of self-regulation: Research, theory and applications* (pp. 537-552). New York, NY: Guilford Press.
- Hope, T. L., & Chapple, C. L. (2005). Maternal characteristics, parenting, and adolescent sexual behavior: The role of self-control. *Deviant Behavior*, *26*, 25-45.

- Hope, T. L., Grasmick, H. G., & Pointon, L. J. (2003). The family in Gottfredson and Hirschi's general theory of crime: Structure, parenting, and self-control. *Sociological Focus, 36*, 291-311.
- Huh, D., Tristan, J., Wade, E., & Stice, E. (2006). Does problem behavior elicit poor parenting?: A prospective study of adolescent girls. *Journal of Adolescent Research, 21*, 185-204.
- Latimore, T. L., Tittle, C. R., & Grasmick, H. G. (2006). Childrearing, self-control, and crime: Additional evidence. *Sociological Inquiry, 76*, 343-371.
- Longshore, D., Turner, S., & Stein, J. A. (1996). Self-control in a criminal sample: An examination of construct validity. *Criminology, 34*, 209-228.
- McCarthy, E. D., Gersten, J. C., & Langner, T. S. (1982). The behavioral effects of father absence of children and their mothers. *Social Behavior and Personality, 10*, 11-23.
- Meldrum, R. C. (2008). Beyond parenting: An examination of the etiology of self-control. *Journal of Criminal Justice, 36*, 244-251.
- Miller, H. V., Jennings, W. G., Alvarez-Rivera, L. L., & Lanza-Kaduce, L. (2009). Self-control, attachment, and deviance among Hispanic adolescents. *Journal of Criminal Justice, 37*, 77-84.
- Miranda, A. O., Bilot, J. M., Peluso, P. R., Berman, K., & Van Meek, L. G. (2006). Latino families: The relevance of the connection among acculturation, family dynamics, and health for family counseling research and practice. *The Family Journal, 14*, 268-273.
- Nakhaie, M. R., Silverman, R. A., & LaGrange, T. C. (2000). Self-control and social control: An examination of gender, ethnicity, class and delinquency. *Canadian Journal of Sociology, 25*, 35-59.
- Nofziger, S. (2008). The "cause" of low self-control: The influence of maternal self-control. *Journal of Research in Crime and Delinquency, 45*, 191-224.
- Osgood, W. D., Finken, L. L., & McMorris, B. J. (2002). Analyzing multiple-item measures of crime and deviance II: Tobit regression analysis of transformed scores. *Journal of Quantitative Criminology, 18*, 319-347.
- Paternoster, R., & Brame, R. (1998). The structural similarity of processes generating criminal and analogous behaviors. *Criminology, 36*, 663-670.
- Paternoster, R., & Mazerolle, P. (1994). General strain theory and delinquency: A replication and extension. *Journal of Research in Crime and Delinquency, 31*, 235-263.
- Perrone, D., Sullivan, C. J., Pratt, T. C., & Margaryan, S. (2004). Parental efficacy, self-control, and delinquency: A test of general theory of crime on a nationally representative sample of youth. *International Journal of Offender Therapy and Comparative Criminology, 48*, 298-312.
- Piquero, A. R., & Bouffard, J. (2007). Something old, something new: A preliminary investigation of Hirschi's redefined self-control. *Justice Quarterly, 24*, 1-27.
- Piquero, A. R., & Rosay, A. B. (1998). The reliability and validity of Grasmick et al.'s self-control scale: A comment on Longshore et al. *Criminology, 36*, 157-173.
- Piquero, A. R., & Tibbetts, S. (1996). Specifying the direct and indirect effects of low self-control and situational factors in offenders' decision making: Toward a more complete model of rational offending. *Justice Quarterly, 13*, 481-510.
- Polakowski, M. (1994). Linking self- and social control with deviance: Illuminating the structure underlying a general theory of crime and its relation to deviant activity. *Journal of Quantitative Criminology, 10*, 41-78.
- Pratt, T. C., & Cullen, F. T. (2000). The empirical status of Gottfredson and Hirschi's general theory of crime: A meta-analysis. *Criminology, 38*, 931-964.
- Pratt, T. C., Turner, M. G., & Piquero, A. R. (2004). Parental socialization and community context: A longitudinal analysis of the structural sources of low self-control. *Journal of Research in Crime and Delinquency, 41*, 219-243.
- Rankin, J. H. (1983). The family context of delinquency. *Social Problems, 30*, 466-479.
- Rebellion, C. J. (2002). Reconsidering the broken homes/delinquency relationship and exploring its mediating mechanisms. *Criminology, 40*, 103-136.
- Shekarkhar, Z., & Gibson, C. L. (2011). Gender, self-control, and offending behaviors among Latino youth. *Journal of Contemporary Criminal Justice, 27*, 63-80.

- Teasdale, B., & Silver, E. (2009). Neighborhoods and self-control: Toward an expanded view of socialization. *Social Problems, 56*, 205-222.
- Tittle, C. R., & Paternoster, R. (2000). *Social deviance and crime: An organizational and theoretical approach*. Los Angeles, CA: Roxbury.
- Turner, M. G., Piquero, A. R., & Pratt, T. C. (2005). The school context as a source of self-control. *Journal of Criminal Justice, 33*, 327-339.
- Unnever, J. D., Cullen, F. T., & Pratt, T. C. (2003). Parental management, ADHD, and delinquent involvement: Reassessing Gottfredson and Hirschi's general theory. *Justice Quarterly, 20*, 471-500.
- Vazsonyi, A. T., Belliston, L. M., Van Loh, T. D., & Clifford Wittekind, J. E. (2004). Extending the general theory of crime to "the East": Low self-control in Japanese late adolescents. *Journal of Quantitative Criminology, 20*, 189-216.
- Vazsonyi, A. T., Pickering, L. E., Junger, M., & Hessing, D. (2001). An empirical test of a general theory of crime: A four-nation comparative study of self-control and the prediction of deviance. *Journal of Research in Crime and Delinquency, 38*, 91-131.
- Wright, J. P., & Beaver, K. M. (2005). Do parents matter in creating self-control in their children? A genetically informed test of Gottfredson and Hirschi's theory of low self-control. *Criminology, 43*, 1169-1202.