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Predictability of Delinquency through Psychosocial and Environmental Variables across Three Generational Status Groups

Margaret Frances Sabia
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Walden University

College of Social and Behavioral Sciences

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Margaret Sabia

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Walden University
2016

Abstract

Predictability of Delinquency through Psychosocial and Environmental Variables across

Three Generational Status Groups

by

Margaret Frances Sabia

MSCJ, Everest University, 2012

BS, University of Connecticut, 2008

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Human Services

Walden University

May 2016

Abstract

Issues such as the rapid growth of the immigrant youth population and delinquency among adolescents generate public safety concerns among the U.S. population. However, delinquency intervention strategies for immigrant youth in the United States remain scant, which is problematic because these youth face acculturative challenges that increase their risk for maladaptive outcomes. This quantitative, cross-sectional study addressed a research gap regarding the differential influence of risk factors in predicting delinquency across 3 generational statuses. The theoretical framework guiding the study consisted of acculturation theory, the immigrant paradox, and differential association theory. Two research questions were evaluated using a stratified random sample of 255 U.S. adolescents from the Second International Self-Reported Delinquency Study Dataset. The bivariate correlation analyses show that delinquency was significantly related to self-control, neighborhood disorganization, and delinquent peers for the total adolescent sample, and family bonding and school climate at the generational status level. The multiple regression analyses show that delinquency was best predicted by self-control for first-generation immigrants, by neighborhood disorganization, school climate, and delinquent peers for second-generation immigrants, and by self-control, family bonding, and delinquent peers for native-born youth. The results demonstrate that immigrant and native-born youth have unique adaptive and developmental processes that impact their delinquency. By increasing knowledge of delinquency risk factors, the study findings may help advocates address public safety concerns, enhance the cultural responsiveness of interventions, and, ultimately, improve youths' behavioral outcomes.

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Dedication

I dedicate this dissertation to my beloved snow kitten. You saved me from extreme darkness in my childhood, and your passing was one of the most devastating experiences of my life. For 18 years, you gave me unparalleled love and genuine happiness. I would not have gotten through the many hardships in my life and trials, like earning my doctoral degree, without you. Thank you for always watching over me, my little angel.

I also want to dedicate this dissertation to anyone who was made to believe they would never achieve anything and that their life has no value. I am here to say that you can overcome any struggles or adversity to make your dreams come true. Never allow anyone to take your dreams away from you, and always remember your life is priceless.

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Chapter 1: Introduction to the Study

Introduction

Immigration is a widely debated topic that is politically and criminologically at the forefront in U.S. society (Merolla, Pantoja, Cargile, & Mora, 2013). Public concerns stem from increases in the immigrant population (Passel, Cohn, & Gonzalez-Barrera, 2013; Tienda & Haskins, 2011) and immigrants' involvement in illegal activities (Hartry, 2012; Merolla et al., 2013). In the United States, society has also witnessed a growth of the first- and second-generation immigrant youth population (Passel, 2011; Perreira & Ornelas, 2011). As of 2014, the first- and second-generation immigrant youth population was 18.7 million (U.S. Census Bureau, 2014a) and is projected to increase to 33 million by 2050 (Passel, 2011; U.S. Census Bureau, 2014a). Moreover, juvenile delinquency remains a pressing matter in the United States with 70% of the 1.1 million juvenile justice involved adolescents being formally sanctioned in 2013 (Furdella & Puzanchera, 2015). The risk of delinquency among immigrant youth, whether foreign born or US-born, is a concern as the acculturation process presents them with a variety of social and cultural adaptive challenges that could potentially increase behavioral issues and delinquent involvement (Dettlaff & Earner, 2012). However, current intervention strategies were designed to address delinquency in general and continue to lag behind calls by researchers to make delinquency interventions more culturally responsive for immigrant youth (Parra Cardona et al., 2012; Roman, Stodolska, Yahner, & Shinew, 2013).

Researchers have empirically delved into factors that contribute to delinquency using relational, non-comparative methods, but further examination of delinquency,

acculturation, and factors related to family, education, peers, neighborhood, and personality among immigrant and nonimmigrant youth are required (Hay, Meldrum, & Piquero, 2013; Trillo & Redondo, 2013; Walther et al., 2012). This study was necessary for expanding practitioners' understanding of delinquency and relevant factors (i.e., family bonding, school climate, delinquent peers, neighborhood disorganization, and self-control) among native-born, first-generation immigrant, and second-generation immigrant (i.e., children of immigrants) populations. In turn, the results may also help practitioners to develop more effective delinquency intervention and prevention strategies that account for acculturation.

In this chapter, I provide a succinct overview of the study. In the background section, I explore the nature and relevance of the study topic. I then discuss the currency of the social problem, the identified research gap, and the purpose of the study. After stating my research questions and hypotheses, I describe the theoretical framework, methodology, and significance of the study. I conclude by summarizing the contents of the chapter.

Background

Issues concerning immigration have existed in the United States since the founding of the nation (Ngai, 2013). The process for granting foreign-born individuals the ability to become U.S. citizens was well established since 1790 (Ngai, 2013). As of 2014, approximately 42 million foreign-born individuals were living in the United States (Colby & Ortma, 2015). The term *foreign-born* refers to any person who was not born in the United States, which includes naturalized citizens, lawful permanent residents,

temporary migrants, humanitarian migrants, and undocumented migrants (Grieco et al., 2012). The term *native-born* refers to all individuals born in the United States as well as individuals born abroad who have at least one parent who is a U.S. citizen (Grieco et al., 2012). According to data collected by the U.S. Census Bureau (2014b), foreign-born individuals made up 13% of the U.S. population of which 6% were naturalized citizens, and 7% were noncitizens. The influx of immigrants into the United States has been a primary concern since the beginning of the 20th century due to perceptions about the negative impact immigrants could have on American society (Bui, 2012).

Part of the issue is the perception that there is a significant relationship between increases in immigration and increases in crime rates (Bersani, 2014b). However, researchers have found high immigrant concentration was associated with low crime rates (Martinez, Stowell, & Lee, 2010; Wadsworth, 2010) and significant reductions in crime (MacDonald et al., 2013). In other cases, immigrant concentration was unrelated to crime rates (Davies & Fagan, 2012) and recidivism (Wright & Rodriguez, 2012). Collectively, these findings demonstrate there is a more complicated explanation for increased crime rates than the volume of individuals immigrating to the United States (Davies & Fagan, 2012; Martinez et al., 2010; Wadsworth, 2010; Wright & Rodriguez, 2012).

On a more basic level, Moehling and Piehl (2014) and Sohoni and Sohoni (2014) concluded the general concern in the United States is that immigrants are perceived to disproportionately engage in criminal or delinquent activities. This perception is compounded by the number of immigrants incarcerated in U.S. prisons, entering the

United States illegally, and engaging in criminal or fraudulent activities (Merolla et al., 2013; Motivans, 2013; Warren & Warren, 2013). According to Brown and Stepler (2015), approximately 11.2 million unauthorized immigrants were in the United States in 2014. In 2010, non-United States citizens, both legal and illegal immigrants, accounted for 26% of the federal prison population and 47% of the suspect population charged in U.S. district court (Motivans, 2013). In 2014, noncitizens accounted for 41.6% of the 69,388 federal offenses committed with most offenses ($n = 19,126$) being immigration related (e.g., unlawful entry, acquiring fraudulent immigration documents; U.S. Sentencing Commission, 2015). All the factors described above intensify the debate associated with immigration, which in turn promotes negative perceptions about immigrants regardless of the individuals' mode of migration to the United States (Merolla et al., 2013). In addition to concerns about crime, are the rapid growth of the immigrant youth population in the United States and the potential for immigrant youth to engage in delinquent behaviors (Tienda & Haskins, 2011).

Societal concerns about illegal immigration, criminal conduct, and immigrants' delinquent involvement generated research on the relationship between crime and immigration (Bui, 2012). Understanding complex phenomena such as delinquency and acculturation requires in-depth examinations of social and environmental variables (Koury & Votruba-Drzal, 2014; Prado & Pantin, 2011; Santisteban, Coatsworth, Briones, Kurtines, & Szapocznik, 2012; Torres, Maia, Verissimo, Fernandes, & Silva, 2012; Umaña-Taylor, Updegraff, & Gonzales-Backen, 2011). Immigrant youth are subjected to unique challenges associated with the acculturation process that increase the potential for

delinquent involvement (Bersani, 2014a, 2014b; Estrada-Martínez et al., 2013). These challenges include cultural and social adaptation, language proficiency, poverty, acculturative stress, intergenerational family conflict, and discrimination (Dettlaff & Earner, 2012). Furthermore, unfamiliarity with the U.S. education system by immigrant parents and children can influence youths' use of available assistance and their academic engagement (Gonzalez, Stein, & Huq, 2013). In turn, youths' academic disengagement increases their potential for problem behaviors (Georgiades, Boyle, & Fife, 2013; Henry, Knight, & Thornberry, 2012) and delinquency (Henry et al., 2012). Additional research is required to understand what psychosocial and environmental factors predict delinquency within three subpopulations based on generational status (Alvarez-Rivera, Nobles, & Lersch, 2014; Bersani, 2014a). Expanding practitioners' breadth of knowledge about delinquency among immigrant youth is essential for developing effective delinquency prevention strategies (Svensson, Burk, Stattin, & Kerr, 2012).

Problem Statement

Despite the negative perceptions held by some of the U.S. public about immigrants, empirical evidence does not fully support the notion of increased rates of crime and delinquency among immigrants (Jennings, Zgoba, Piquero, & Reingle, 2013; Vaughn, Salas-Wright, DeLisi, & Maynard, 2014a). Numerous studies investigating the relationship between crime and immigration have demonstrated lower levels of crime and delinquent involvement for foreign-born individuals compared to native-born individuals (Desmond & Kubrin, 2009; Jennings, Zgoba, et al., 2013; Sellin, 1938). According to Desmond and Kubrin (2009), criminologists have reported lower crime rates for

numerous immigrant groups compared to various native-born groups based on ethnicity. This assertion coincided with Sellin's (1938) seminal research findings that showed native-born individuals in the United States had higher crime rates than immigrants of different nationalities. In addition, Sellin's findings illuminated how crime rates of immigrants' children increased within successive generations, and eventually reflected a crime rate similar to native-born U.S. youth. Correspondingly, recent research by Bui (2009) and Powell, Perreira, and Harris (2010) explored the relationship between crime and immigration. They demonstrated increases in delinquency, crime, and violence rates in relation to Americanization among successive generations of immigrants. In conjunction with prior research on immigration and crime, acculturation was found to be associated with increases in delinquent behavior within subsequent generations of immigrants (Bersani, 2014b; Bui, 2012; Reingle, Jennings, & Maldonado-Molina, 2011).

Although previous researchers' have indicated less problem behavior among first-generation immigrant youth compared to native-born youth, such findings cannot be taken as an absence of problem behavior among immigrant youth (Bersani, Loughran, & Piquero, 2014; Jennings, Zgoba, et al., 2013; Powell et al., 2010). Problem behavior among immigrant youth remains a concern, especially among second-generation or later youth whose frequency of problem behavior is nearly equal to native-born youth (Bersani, 2014a; Reingle et al., 2011). Despite the risk for maladaptive outcomes among immigrant youth, particularly US-born immigrants, several researchers (see Buchanan & Smokowski, 2011; Ceballos & Bratton, 2010; Rothe, Pumariega, & Sabagh, 2011) contend that there are not enough intervention programs for immigrant youth geared

towards preventing delinquency. This lack of culturally sensitive intervention strategies is problematic as immigrant youth face a variety of unique challenges associated with cultural and social adaptation (Dettlaff & Earner, 2012; Landale, Thomas, & Van Hook, 2011). Immigrant youth are confronted with barriers such as acculturative stress, intergenerational family conflict, language proficiency, discrimination, and poverty that can influence their behavioral development (Dettlaff & Earner, 2012; Leong et al., 2013).

Researchers expanded their investigation of the relationship between immigration and crime by examining how the acculturation process and various social and environmental factors contribute to crime and delinquency among immigrant populations (Chithambo, Huey, & Cespedes-Knadle, 2014; Lee & Ahn, 2012; MacDonald et al., 2013; Parsai, Marsiglia, & Kulis, 2010). Identity development among immigrant and nonimmigrant adolescents is dependent upon various factors such as cultural orientation (Knight et al., 2012), familial attachment, educational attachment, and peer influences (Trillo & Redondo, 2013). The acculturation process also impacts adolescents' risk of delinquent engagement based on their degree of acculturative stress and autonomy, and exposure to family cohesion and parental engagement (Estrada-Martínez, Caldwell, Schulz, Diez-Roux, & Pedraza, 2013). Other factors such as perceived discrimination, ethnic identity, self-control, and neighborhood disorganization were also found to be associated with increases in substance use and delinquency among adolescents (Knight et al., 2012; Kulis, Marsiglia, & Nieri, 2009; Moffitt et al., 2011; Ray, Thornton, Frick, Steinberg, & Cauffman, 2015). Given such findings, researchers have demonstrated that acculturation is a prominent factor in the behavioral outcomes of immigrant youth

(Estrada-Martínez et al., 2013; Kennedy & MacNeela, 2014; Schwartz et al., 2013).

However, in order to provide culturally sensitive services for immigrant youth and their families, researchers have emphasized the need for comparative analyses of factors across several domains (e.g., family, peer, school, neighborhood) that may differentially influence delinquency among youth of different levels of acculturation or generational statuses (Alvarez-Rivera et al., 2014; Bersani, 2014a, 2014b; Piquero, Bersani, Loughran, & Fagan, 2014).

Researchers studying immigrant youth in the United States have predominately focused on investigating the effect of acculturation on crime and delinquency (Alvarez-Rivera et al., 2014; Lopez & Miller, 2011; Miller, Barnes, & Hartley, 2011; Murphy, Brecht, Huang, & Herback, 2012), and associations between psychosocial factors and delinquency (Harris-McKoy & Cui, 2013; Hay, Meldrum, & Piquero, 2013; Trillo & Redondo, 2013; Walther et al., 2012). While I found a study by Bersani (2014a) that compared predictor models between second-generation immigrant and native-born subsamples, I did not find any research that compared how familial, social, educational, and individual factors predict delinquent behavior across three generational status groups (i.e., first-generation immigrants, second-generation immigrants, and native-born). Therefore, further research was required to broaden researchers' and practitioners' understanding of how variables such as self-control, family bonding, delinquent peers, school climate, and neighborhood disorganization predict delinquency across three generational status groups (Alvarez-Rivera et al., 2014; Bersani, 2014a; Piquero, Bersani, et al., 2014). In this study, I sought to investigate the above gap in order to address the

documented problem of delinquency among immigrant youth and their native-born peers, and continued lapses in the cultural responsiveness of delinquency interventions for immigrant populations (Bersani, 2014a; Estrada-Martínez et al., 2013; Reingle et al., 2011).

Purpose of Study

The purpose of this quantitative, cross-sectional study was to investigate which variables of a model composed of self-control, family bonding, neighborhood disorganization, school climate, and delinquent peers best predicted delinquency across three generational status groups. The study expanded upon prior research that addressed delinquency in terms of generational differences, acculturation (Bersani, 2014a, 2014b; Bui, 2012; Jennings, Zgoba, et al., 2013; Le & Stockdale, 2011), and psychosocial factors (Harris-McKoy & Cui, 2013; Hay et al., 2013; Trillo & Redondo, 2013; Walther et al., 2012). More specifically, it contributed to the current body of literature by comparing a predictor model for three generational status groups and determining which variables best predict delinquency for each generational status group. In turn, the findings can assist practitioners with developing culturally responsive delinquency prevention and intervention strategies through consideration of prominent factors that differentially contribute to delinquency among native-born, first-generation immigrant, and second-generation immigrant populations.

Research Questions and Hypotheses

The following research questions and hypotheses guided this research:

RQ1: What are the relationships among family bonding, school climate, delinquent peers, neighborhood disorganization, self-control, and delinquency?

H₀1: There are no bivariate relationships between delinquency and family bonding, school climate, delinquent peers, neighborhood disorganization, or self-control for the total adolescent sample.

H₁1: There are bivariate relationships between delinquency and family bonding, school climate, delinquent peers, neighborhood disorganization, or self-control for the total adolescent sample.

H₀2: There are no bivariate relationships between delinquency and family bonding or school climate for the three generational status groups.

H₁2: There are bivariate relationships between delinquency and family bonding or school climate for at least one of the three generational status groups.

RQ2: What variables, if any, for a model consisting of family bonding, school climate, delinquent peers, neighborhood disorganization, and self-control significantly predict delinquency across three generational status groups?

H₀3: In the first-generation immigrant adolescent subpopulation, the proportion of the variance in delinquency explained by family bonding, school climate, delinquent peers, neighborhood disorganization, and self-control is zero.

H₁3: In the first-generation immigrant adolescent subpopulation, the proportion of the variance in delinquency explained by at least one of the independent variables family bonding, school climate, delinquent peers, neighborhood disorganization, and self-control does not equal zero.

H₀4: In the second-generation immigrant adolescent subpopulation, the proportion of the variance in delinquency explained by family bonding, school climate, delinquent peers, neighborhood disorganization, and self-control is zero.

H₁4: In the second-generation immigrant adolescent subpopulation, the proportion of the variance in delinquency explained by at least one of the independent variables family bonding, school climate, delinquent peers, neighborhood disorganization, and self-control does not equal zero.

H₀5a: In the native adolescent subpopulation, the proportion of the variance in delinquency explained by family bonding, school climate, delinquent peers, neighborhood disorganization, and self-control is zero.

H₁5a: In the native adolescent subpopulation, the proportion of the variance in delinquency explained by at least one of the independent variables family bonding, school climate, delinquent peers, neighborhood disorganization, and self-control does not equal zero.

H₀5b: In the native adolescent subpopulation, the proportion of the variance in delinquency explained by family bonding, delinquent peers, and self-control is zero.

H₁5b: In the native adolescent subpopulation, the proportion of the variance in delinquency explained by at least one of the independent variables family bonding, delinquent peers, and self-control does not equal zero.

Theoretical Framework

The theoretical lens for this study included Berry's theory of acculturation (Berry, 1997), the immigrant paradox concept (Sam, Vedder, Ward, & Horenczyk, 2006), and

differential association theory (Akers, 1998; Sutherland, Cressey, & Luckenbill, 1992). Berry's theory of acculturation offers insight into different acculturative attitudes (i.e., assimilation, separation, integration, and marginalization) that establishes individuals' level of identification with their native culture, new culture, or both (Berry, 1997). Acculturation can cause alterations in beliefs, values, and attitudes of immigrant youth compared to their parents, which can result in a greater propensity for intergenerational and intercultural conflict (Sam et al., 2006; Sellin, 1938).

Based on differential association theory, interactions and relationships with family, friends, peers, and other adults, also referred to as *differential associations*, promote social and cultural transmission, which in turn impact youths' behavioral development (Akers, 1998; Church, Jagers, & Taylor, 2012). Differential association theory helps to explain the development and distribution of delinquent and criminal behavior among various groups (Sutherland et al., 1992). Moreover, it explains the mechanisms through which youth learn to engage in delinquent behaviors from others (Akers, 1998).

The immigrant paradox concept reflects immigrants exhibiting better adaptive outcomes while being subjected to poor socioeconomic conditions compared to native-born individuals under similar conditions (van Geel & Vedder, 2011). In relation to youth, immigrant youth exhibit less behavioral problems and engagement in criminal activities compared to nonimmigrant youth (Vaughn et al., 2014a). However, Suárez-Orozco, Rhodes, and Milburn (2009) indicated the positive benefits of the immigrant

paradox diminished among immigrant youth in relation to prolonged residence in the United States and increased Americanization.

The combination of acculturation theory, the immigrant paradox, and differential association theory informed the study by explaining potential pathways to delinquency of immigrant and nonimmigrant youth (Akers, 1998; Berry, 1997; Sam et al., 2006; Sutherland et al., 1992). More specifically, those theories provided a useful context for understanding how familial, social, educational, and individual variables associated with adolescent development and the acculturation process are related to delinquency (Akers, 1998; Berry, 1997; Sam et al., 2006; Sutherland et al., 1992). In Chapter 2, I provide a more expansive explanation of the major theoretical propositions associated with the specified theoretical framework.

Nature of the Study

In this study, I employed a quantitative, cross-sectional research design to evaluate two research questions and related hypotheses. In considering the research problem, purpose, questions, and variables, I selected a cross-sectional design as it allows for assessment of the relationship between a set of independent variables (i.e., family bonding, school climate, delinquent peers, neighborhood disorganization, and self-control) and an outcome variable (i.e., delinquency; Pandis, 2014). In order to answer the first research question, I used bivariate correlation analysis to evaluate the relationship between each potential predictor (i.e., family bonding, school climate, delinquent peers, neighborhood disorganization, and self-control) and delinquency for the total adolescent study sample. I also performed a post hoc analysis of the correlation between

delinquency and the variables family bonding and school climate for the three generational status subpopulations. Then, I used all variables found to have a significant relationship with delinquency from the results of the correlation analyses as predictors in the multiple regression analyses used to evaluate the second research question.

The second research question required three separate hierarchical multiple regression analyses, one for each generational status subpopulation (i.e., first-generation immigrant adolescents, second-generation immigrant adolescents, and native-born adolescents). I also conducted a post hoc analysis of a hierarchical model containing self-control, family bonding, and delinquent peers to predict delinquency for the native-born subpopulation. I performed all statistical analyses using the Second International Self-Reported Delinquency Study dataset (ISRD-2; Enzmann et al., 2015). Information about variable measures is provided in the operational definitions section of Chapter 1 and in more depth in Chapter 3.

Evaluation of Research Question 2 required generational status to be used as a selection variable so that independent multiple regression analyses could be performed for Hypotheses 3, 4, and 5. Generational status is an established variable in the ISRD-2 dataset that is determined based on the respondents' and their parents' birthplace (Enzmann et al., 2015). I employed a stratified random sampling strategy so that there was equal representation of first-generation immigrant adolescents, second-generation immigrant adolescents, and native-born adolescents in the study sample. The required sample size calculated in G*Power using an alpha of .05, a power of .80, an effect size of .18, and five predictor variables was 77 participants (Faul et al., 2009). However, I

purposefully oversampled to 86 participants for each group to ensure I retained adequate power after removal of participants due to outliers or missing data. Therefore, the resulting stratified random sample was a total of 255 students' aged 12 to 16 years old that attended grades seven to nine in the United States from 2006 to 2007. The 255 sample consisted of 83 first-generation immigrant adolescents, 86 second-generation immigrant adolescents, and 86 native-born adolescents, which I used to test both research questions and related hypotheses.

Definitions

In the following section, I provide concise definitions for relevant terms and variables associated with the current study. I operationalize the study variables in this section and provide further description of the independent and dependent variables of the study in Chapter 3.

Terms

Acculturation: Acculturation is a process of cultural change that results when two culturally distinct groups or individuals come into contact (Berry, 1997).

First-generation immigrant: A first-generation immigrant is an individual who was born in a foreign country and migrated to the United States (Bui, 2009).

Foreign-born: The term foreign-born refers to an individual who was not born in the United States, and is a naturalized citizen, lawful permanent resident, temporary migrant, humanitarian migrant, or undocumented migrant (Grieco et al., 2012).

Native-born: Native-born individuals are those born in the United States or abroad with two parents that are U.S. citizens (Bui, 2009).

Second-generation immigrant: A second-generation immigrant is an individual who was born in the United States and has at least one parent that is an immigrant (Bui, 2009).

Status offense: Status offenses are behaviors deemed unlawful when committed by underage persons, which typically refers to individuals 17 years old and under (Office of Juvenile Justice and Delinquency Prevention [OJJDP], 2015, 2014). However, some states set the upper age limit for status offenses at 16 years old (e.g., South Carolina, Texas; OJJDP, 2015). Status offenses are considered to be non-delinquent and noncriminal offenses that encompass actions such as curfew violations, running away, truancy, underage drinking, and incorrigibility (OJJDP, 2014).

Operational Definitions of Variables

Delinquency: Delinquency is defined as a violation of criminal law by youth under 18 years of age (OJJDP, 2015, 2014; Thompson & Bynum, 2010). Matters concerning delinquency fall within the jurisdiction of the juvenile court, which is where the adjudication process occurs to determine whether a juvenile committed the act he or she was charged with or not (OJJDP, 2014). Delinquent acts are drug offenses and crimes against property, persons, or public order committed by juveniles (OJJDP, 2014). The dependent variable, delinquency, is measured using a self-reported delinquency scale, which measures the total number of minor and serious delinquent acts and behaviors committed, and produces scores ranging from 0 (*low delinquency*) to 365 (*high delinquency*; Enzmann et al., 2015).

Delinquent peers: Delinquent peers is operationalized as the delinquent activities of friends in terms of assault, stealing, burglary, and drug use as reported by the study participant (Posick & Rocque, 2015). The independent variable, delinquent peers, is measured using the delinquent peers scale of Enzmann et al.'s (2015) standardized questionnaire. The delinquent peers scale contains 5-items that are summed to produce an overall scale score ranging from 0 (*low peer delinquency*) to 5 (*high peer delinquency*).

Family bonding: Family bonding is the quality of the relationships between adolescents' and their kin according to youths' perceptions of and interactions with their families (Dallos & Vetere, 2012). The independent variable, family bonding, is measured using the family bonding scale of Enzmann et al.'s (2015) standardized questionnaire. The scale consists of 4-items that are averaged and transformed to produce scores ranging from 1 (*low family bonding*) to 100 (*high family bonding*).

Generational status: Generational status refers to the birthplace of an individual and their parents to indicate migration status. In this study, participants were grouped in one of three generational status groups, which were labeled native-born, first-generation immigrant, and second-generation immigrant. Values for generational status were coded in the ISRD-2 as 1 = *1st generation migrant*, 2 = *2nd generation migrant*, and 3 = *native-born* (Enzmann et al., 2015).

Neighborhood disorganization: Neighborhood disorganization is operationalized as youths' attitudes about their neighborhood in terms of criminal activities (e.g., crime, physical violence, drug selling) and infrastructure (e.g., empty buildings, graffiti; Posick

& Rocque, 2015). The independent variable, neighborhood disorganization, is measured using the neighborhood disorganization scale of Enzmann et al.'s (2015) standardized questionnaire. The neighborhood disorganization scale consists of 5-items that are reverse coded, summed, and transformed to produce scores ranging from 1 (*low perception of neighborhood disorganization*) to 100 (*high perception of neighborhood disorganization*).

Self-control: Self-control is the ability to control one's desires, emotions, and behaviors by favoring socially appropriate responses over inappropriate responses (Casey, 2015). Self-control is measured using a modified 12-item version of Grasmick, Tittle, Bursik, and Arneklev's (1993) 24-item Self-Control Scale (Enzmann et al., 2015). The modified version contains 12-items and consists of four subscales: impulsivity, risk taking, self-centeredness, and temperament. Participants' responses to all 12-items are averaged and transformed to produce overall scores ranging from 1 (*low self-control*) to 100 (*high self-control*).

School climate: School climate refers to the overall quality of school life, which includes youths' perceptions of interpersonal relationships with school staff, teachers, and peers, and other factors such as quality of instruction, environmental conditions, and school functioning (Bear, Gaskins, Blank, & Chen, 2011; Leadbeater, Sukhawathanakul, Smith, & Bowen, 2015). The independent variable, school climate, is measured using the school climate scale of Enzmann et al.'s (2015) standardized questionnaire. The scale contains 4-items that are averaged and transformed to produce scores ranging from 1 (*low school connectedness*) to 100 (*high school connectedness*).

Assumptions

The main assumptions of this study involve the use of secondary data and the statistical tests employed. In the study, I used the Second International Self-Reported Delinquency Study dataset (ISR2), which collected self-reported responses from adolescent participants (Enzmann et al., 2015; Marshall & He, 2010). By using secondary data, I must assume that the researchers of the ISR2 followed their specified research procedures, and accurately recorded all data in the dataset. Furthermore, I have to assume participants were willing and able to provide honest and accurate responses for all self-reported measures. In general, self-reports enable participants to directly report on their behaviors, attitudes, and experiences with greater accuracy, particularly when researchers' guarantee confidentiality (Krohn, Thornberry, Gibson, & Baldwin, 2010), which was the case in the ISR2 (Enzmann et al., 2015; Marshall & He, 2010). The second assumption is that all necessary statistical assumptions associated with multiple regression analysis (i.e., normality of residuals, homogeneity of variance, multicollinearity, homogeneity of regression, and no outliers or missing data) would be met. I discuss statistical assumptions in further detail in Chapter 3 and the results of the assumption tests in Chapter 4.

Limitations

The scope of this study was to examine what independent variables (i.e., family bonding, school climate, neighborhood disorganization, delinquent peers, and self-control) best predicted delinquency across three generational status groups (i.e., native-born, first-generation immigrants, and second-generation immigrants) using an

adolescent sample in the United States. The use of a cross-sectional design for this study provided stronger external and ecological validity than experimental designs. However, cross-sectional designs are limited due to weaker internal validity compared to experimental designs (Carlson & Morrison, 2009; Frankfort-Nachmias & Nachmias, 2008). In this regard, the use of a cross-sectional design for the study inhibited claims of causality, which meant I could only determine associations between variables (Omair, 2015; Sedgwick, 2014).

In this study, there could also be limitations in the accuracy of the result interpretations for the family bonding and school climate variables due to low internal consistency reliability of measures. Cronbach's alphas demonstrate how reliable the items of an instrument measure the same construct, whereby higher alpha values are attributed to less measurement error (Tavakol & Dennick, 2011). Acceptable values for alpha can range from .70 to .95 (Tavakol & Dennick, 2011). In the ISRD-2, the standardized instruments used to measure family bonding and school climate had Cronbach's alphas of .60 and .61, respectively (Enzmann et al., 2015). In this case, the low alphas could be an indication of poor interrelatedness between items of the instruments or that the items are measuring multiple constructs beyond the concept of interest. In turn, caution should be used when reviewing the results for the family bonding and school climate variables as other constructs could be contributing to measurement error and confounding the results (Tavakol & Dennick, 2011).

The two primary validity threats associated with the study were selection and generalizability (West & Thoemmes, 2010). Selection is a potential threat to validity in

which participants are selected based on characteristics that predispose them to a certain outcome (West & Thoemmes, 2010). Increasing internal validity related to selection was performed by using a sampling strategy that allows for group participants to be randomly selected (e.g., stratified random sampling; Acharya, Prakash, Saxena, & Nigam, 2013).

Generalizability was another potential threat to validity of this study, particularly regarding interaction of selection and interaction of setting (Creswell, 2013; Polit & Beck, 2010). The U.S. portion of the ISRD-2 used a nationally representative sample of adolescents aged 12 to 16, attending seventh through ninth grade in the United States (Enzmann et al., 2015; Marshall & He, 2010). This limits the generalizability of the research results to populations that are reflective of the sample used for the ISRD-2 study (Polit & Beck, 2010).

Nonparticipation was another limitation that could impact generalizability of (Fisher & Kalbaugh, 2011) and the potential for Type II errors in this study (Ibrahim & Sidani, 2014). Youth and their parents may have been resistant to participating in the ISRD-2 study because the researchers' directly asked about sensitive topics such as juvenile delinquency, victimization, and immigration status. Immigrant participants may not have participated in the ISRD-2 study due to their immigration status, language barriers (i.e., surveys were not provided in non-English languages; Ahrens, Isas, & Viveros, 2011), mistrust of researchers, concerns over privacy and confidentiality (Ulrich et al., 2013), and fear of discrimination (Fisher & Kalbaugh, 2011; Shedlin, Decena, Mangadu, & Martinez, 2011). Therefore, the study findings associated with first-generation immigrants may only be generalizable to English speaking and bilingual

immigrant youth. I provide a more detailed discussion of the barriers to participation in research in Chapter 2.

Lastly, the ISRD-2 study used school-based samples. These samples are typically associated with low levels of delinquency due to the higher risk of delinquent youth dropping out of school. In turn, there can be a lack of representation of delinquency in school-based samples, which can impact analyses of delinquency (Kreager, Rulison, & Moody, 2011; Miller, Barnes, & Hartley, 2011). Therefore, generalizability of the study results is limited and caution should be used when generalizing results to non-school-based samples.

Delimitations and Scope

The study is delimited in terms of the sample. Participation in the study is delimited to adolescents who are students, age 12 to 16, attending grades 7 through 9, English fluent, and living in the United States. The study is further delimited in terms of the sample requiring native-born adolescents, first-generation immigrant adolescents, and second-generation immigrant adolescents. The delimitations mentioned above also impact generalizability of the results (Dedrick et al., 2009). The results obtained from the study are generalizable to immigrant and nonimmigrant youth ages 12 to 16, attending grades 7 through 9, and living in the United States.

Significance

Public administrators and policymakers are under intense pressure to effectively address delinquent and criminal behavior among youth (Calhoun & Pelech, 2010, 2013; Hayes, McGee, & Cerruto, 2011). In 2013, the juvenile justice system reviewed

approximately 1.1 million delinquency cases of which 4,000 cases were waived to adult criminal court, 381,600 cases resulted in probation, 78,700 cases resulted in residential placement, 249,800 cases received other sanctions, and 342,300 cases were dismissed (Furdella & Puzzanchera, 2015). Moreover, 55% of petitioned cases resulted in the adjudication of youth (Furdella & Puzzanchera, 2015). According to Calhoun and Pelech (2010, 2013), the populace perceives harm caused by youth as an increasing problem in North America that is significantly threatening public safety. Correspondingly, Sohoni and Sohoni (2014) and Stowell, Martinez, and Cancino (2012) asserted the general public has also exhibited concerns over the exponential growth of the immigrant youth population and the potential consequences that population growth will have on crime and delinquency. Collectively, public safety concerns, juvenile justice expenditures, and ongoing budgetary constraints have further facilitated criminal justice practitioners' and policymakers' desire to consider more effective ways to address juvenile delinquency (Henggeler & Schoenwald, 2011).

The results of this study are important for immigrant youth, their families, practitioners, and communities because the results expanded upon current knowledge associated with delinquency and acculturation. In this regard, the study allowed for continued response to societal concerns about delinquency via empirical inquiry. In turn, it provided greater insight into delinquency among youth based on generational status and relevant factors related to personality, family, peers, school, and neighborhood environment. Application of the research findings could assist practitioners with developing culturally sensitive intervention strategies that prevent and reduce

delinquency among first- and second-generation immigrants. According to Ceballos and Bratton (2010) and Parra Cardona et al. (2012), development of culturally sensitive and responsive intervention programs positively enhances service delivery and client outcomes. Additionally, the study findings can be applied to aid practitioners with improving the cultural responsiveness of family-based intervention strategies that assist immigrant families as a whole with preventing delinquency among their offspring.

Development of effective interventions that account for adaptive challenges related to the acculturation process would advance delinquency prevention and intervention practices in order to improve immigrant youths' quality of life by promoting positive behavioral adjustment. In turn, the social change implications of the study findings are three-fold. First, the study results advanced current empirical knowledge about the differential impact of psychosocial and environmental factors on delinquency among immigrant and nonimmigrant adolescents. Second, the results offer a foundation for further research into delinquency among the rapidly growing immigrant youth population. Lastly, the study results can be applied to help practitioners advance current prevention and intervention practices to address public safety concerns related to immigrants' criminal and delinquent involvement. In Chapter 5, I provide an in-depth discussion of the recommendations for future research and practice, and the implications for social change.

Summary

Continued growth of the immigrant youth population (Baum & Flores, 2011) and ongoing concerns related to criminal engagement among the immigrant population

necessitates further empirical examinations to help better understand delinquency and acculturation as phenomena and devise more effective strategies to address delinquency (Bui, 2012; Merolla et al., 2013). There are few intervention programs geared towards immigrant youth related to delinquency prevention (Buchanan & Smokowski, 2011; Estrada-Martínez et al., 2013). This lack of appropriate intervention strategies is problematic as immigrant youth face unique adaptive challenges that have an impact on their health and behavioral outcomes (Herrenkohl, Lee, Kosterman, & Hawkins, 2012; Kam, 2011; Landale et al., 2011; Sirin, Ryce, Gupta, & Rogers-Sirin, 2013).

Prior research investigated the relationship between crime and immigration (Davies & Fagan, 2012; Wright & Rodriguez, 2012), and the effect of acculturation on crime and delinquency (Alvarez-Rivera et al., 2014; Lopez & Miller, 2011; Miller et al., 2011; Reingle et al., 2011). This cross-sectional study added to the literature by examining the predictability of delinquency through a set of variables such as family bonding, school climate, delinquent peers, neighborhood disorganization, and self-control for three generational status groups (i.e., native-born, first-generation immigrants, and second-generation immigrants). In the second chapter, I provide an in-depth literature review of concepts relevant to the problem, purpose, hypotheses, and theoretical framework of the study. In Chapter 3, I further describe the research design and methodology, including procedures for sampling, data collection, ethical research, and statistical analyses. In Chapter 4, I report the results of the bivariate correlation and hierarchical multiple regression analyses used to evaluate the research questions and

related hypotheses. In Chapter 5, I provide interpretations for the study findings along with the implications of the study results for future research, practice, and social change.

Chapter 2: Literature Review

Introduction

Immigrant youth, both foreign-born and US-born, face unique adaptive challenges promoted by the acculturation process that can significantly impact their behavioral adjustment and risk for maladaptive outcomes (Dettlaff & Earner, 2012; Landale, Thomas, & Van Hook, 2011; Leong et al., 2013). However, delinquency interventions continue to lag behind calls by researchers to provide more culturally sensitive services for immigrants, which has resulted in a lapse in services for immigrant youth and their families (Buchanan & Smokowski, 2011; Parra Cardona et al., 2012; Rothe et al., 2011; Svensson et al., 2012). In this study, I sought to examine the influence of a set of factors (i.e., family bonding, school climate, delinquent peers, neighborhood disorganization, and self-control) on delinquency across three generational status groups. Through this study, I hoped to increase practitioners' knowledge on the differential influence of factors on delinquency among youth of different generational statuses, so that such knowledge could be used to improve the cultural responsiveness of delinquency interventions.

The intent of this literature review is to provide a multifaceted background of juvenile delinquency among immigrant and nonimmigrant youth and express the need for further research on the topic. I explore the theoretical, historical, and empirical aspects of the study topic in order to convey the relevance of examining how a set of psychosocial and environmental factors are related to and predict delinquency among youth of three generational statuses. I begin the literature review with an explanation of the literature review strategies that I used, followed by a section describing the theoretical framework

of the study. I also discuss the theoretical perspectives associated with child development and delinquent involvement. In the second and third sections of the literature review, I describe historical components associated with immigration and delinquency.

Specifically, in the second section, I describe migration trends and immigration policy spanning from more than 15,000 years ago to the present. Then, I discuss the history of the juvenile justice system from earlier references of child-specific crimes in 2,270 BC to the creation of the juvenile justice system to the current state of juvenile justice.

Empirically, I examine current and seminal research on delinquency and acculturation, and the influence of cultural identity, family, education, peer influence, neighborhood environment, and self-control on those processes. In doing so, I provide justification for the inclusion of each variable in this study. As part of my review of the literature, I also discuss the Second International Self-Reported Delinquency Study (Enzmann et al., 2015) and its use by other researchers (Botchkovar, Marshall, Rocque, & Posick, 2015; Innamorati & Maniglio, 2015; Maniglio & Innamorati, 2014; Posick & Rocque, 2015). In the summary section, I indicate how this study extends current knowledge related to delinquency among immigrant and nonimmigrant adolescents.

Literature Review Strategy

Since the topic of delinquency among immigrant and nonimmigrant adolescents is multidisciplinary, I searched a variety of databases and used various search term combinations while conducting this literature review. I used the resources of Walden University Library and Google Scholar. I examined peer-reviewed and academic literature associated with this study using various databases including Academic Search

Complete, Educational Resource Information Center, Google Scholar, Mental Measurements Yearbook, ProQuest Central, ProQuest Criminal Justice, PsycARTICLES, PsycINFO, PsycTESTS, PubMed, SAGE Premier, SAGE Research Methods, ScienceDirect, Science Journals, and SocINDEX. When searching any of the databases through the Walden University Library, I restricted my search to full-text and peer-reviewed articles in order to find fully accessible and primary sources. Additionally, I crosschecked sources found using Google Scholar in Ulrich's Periodicals Directory to verify the articles were peer-reviewed.

I searched databases using various terms alone or in tandem using “and” as a Boolean. Search terms fell into 13 categories, which are as follows:

- immigration (i.e., *generational status, immigrant paradox, immigrants, immigration, immigration policy, and migration*);
- acculturation (i.e., *acculturation, acculturation status, acculturation theory, and acculturative stress*);
- culture (i.e., *cultural orientation and culture conflict*);
- identity (i.e., *cultural identity, ethnic identity, and identity*);
- family (i.e., *familial attachment, family, and family bonding*);
- school (i.e., *school, school attachment, school climate, school connectedness, and education*);
- youth development (i.e., *adolescent development and child development*);
- juvenile delinquency (i.e., *antisocial behavior, crime, delinquency, juvenile delinquency, problem behavior, and self-control*);

- peers (i.e., *differential association theory*, *delinquent peers*, and *peer influence*);
- research participation (i.e., *barriers to participation in research* and *barriers to recruitment in research*);
- descriptives (i.e., *adolescents*, *youth*, *Hispanic*, *Latino/a*, and *United States*);
- specific policy names (e.g., Emergency Quota Act, Immigration and Nationality Act, Immigration Reform and Control Act of 1986, Naturalization Act of 1906, and SB 1070);
- theories (e.g., age-graded theory, coercion theory, cognitive-developmental stage theory, developmental model of antisocial behavior, ecological systems theory, problem behavior theory, psychosocial theory, social bond theory, social control theory, social learning theory, and sociocultural theory).

In order to obtain a broad overview of the available literature associated with the study topic, I initially did not specify a year range when conducting my searches. This strategy helped me to identify seminal research related to the topic under study. Then I reduced the year range to 2011-2016 in order to identify current literature. Finally, I reviewed reference lists accompanying key articles to identify other relevant studies that would add to the depth and breadth of the literature review. In the following literature review, I describe the theoretical basis of the study, provide a historical overview of immigration and juvenile justice, and provide a comprehensive analysis of empirical literature related to all study variables.

Theoretical Foundation

Examination of the relationship between immigration and crime by researchers has been understood through application of social control and learning theories (Bui, 2009; Parsai, Marsiglia, & Kulis, 2010; Powell, Perreira, & Harris, 2010; Reingle, Jennings, & Maldonado-Molina, 2011), assimilation theories (Bersani, 2014a; Greenman, 2011), and acculturation theories (Le & Stockdale, 2008; Mesch, Turjeman, & Fishman, 2008; Miller, Barnes, & Hartley, 2011; Schwartz, Unger, Zamboanga, & Szapocznik, 2010). Researchers have also assessed crime and delinquency among immigrants through a conceptual lens involving the immigrant paradox concept (Desmond & Kurbin, 2009; Vaughn, Salas-Wright, DeLisi, & Maynard, 2014a). In my study, I used a theoretical framework consisting of Berry's theory of acculturation (Berry, 1997), differential association theory (Akers, 1998; Sutherland, Cressey, & Luckenbill, 1992), and the immigrant paradox concept (Sam, Vedder, Ward, & Horenczyk, 2006). This framework was applied to inform the variables under study (i.e., delinquency, generational status, family bonding, school climate, delinquent peers, neighborhood disorganization, and self-control), which allowed for assessment of the research questions and hypotheses. In the following three subsections, I provide further explanation for why each theory and concept were included in the theoretical framework of this study.

Berry's Theory of Acculturation

The link between immigration and crime has been understood through the application of cultural and acculturation perspectives (Berry, 1997; Sam, Vedder, Ward, & Horenczyk, 2006). The most prominent theory addressing acculturation is John

Berry's theory of acculturation, which encompassed four acculturative attitudes: assimilation, separation, integration, and marginalization (Berry, 1997; Berry, Kim, Minde, & Mok, 1987; Sam & Berry, 2010). According to Sam and Berry (2010), the four acculturative attitudes each reflected a relationship between an individual's acculturation process and how well an individual can adapt. Individuals who engaged in biculturalism by integrating cultural values from the new culture with cultural values from their culture of origin had better adaptive outcomes than those who acculturated via assimilation, separation, or marginalization. Assimilation is when an individual fully adopts the cultural values of a new culture, whereas separation is when individuals select to maintain their original cultural identity from their native culture (Berry, 1997; Sam & Berry, 2010). Marginalization is a state in which an individual does not identify with their culture of origin nor do they identify with the new culture (Berry, 1997; Sam & Berry, 2010).

Essentially, Berry's (1997) model presented two primary concepts immigrants have to consider: the level of cultural identity with their culture of origin, and the level of adopting or rejecting norms from the new culture. In general, Berry's theory of acculturation provides insight into the acculturation process of immigrants (Mesch et al., 2008). More precisely, Chen and Zhong (2013) described how acculturation theories expanded upon theories such as selectivity theory and optimism theory that provided explanations for first-generation immigrants' resilience from engaging in delinquency and crime. They went further to explain that acculturation theory addresses the role of the acculturation process in reducing immigrants' resilience across generations and over

time. In this sense, the protective factors attributed to first-generation immigrants diminishes among second-generation and later immigrants.

In conjunction with the acculturation process, Berry et al. (1987) described the concept of acculturative stress as psychological distress caused by differences between dominant and migrant cultures. Cervantes, Padilla, Napper, and Goldbach (2013) indicated there is an increased risk for acculturative stress when there is a larger discrepancy in culture between the host culture and an immigrant's culture of origin. Berry et al. (1987) conveyed a list of potential consequences associated with acculturative stress, which included identity confusion, marginality, alienation, psychosomatic symptoms, and poor mental health. Moreover, Mesch et al. (2008) asserted acculturative stress could result in a lack of recognition, perceived discrimination, social isolation, and poor psychological adaptation. Various factors, such as a larger society, the acculturation process, and personal characteristics are associated with modifying the relationship between stress and acculturation (Berry, 1997; Berry et al., 1987). Personal characteristics included demographic, social, and psychological characteristics (Berry, 1997; Berry et al., 1987).

Berry (1997) and Berry et al. (1987) found acculturative attitudes were predictors of acculturative stress. Marginalization was associated with the highest degree of acculturative stress. In contrast, integration was associated with the lowest amount of acculturative stress. Similarly, Mesch et al. (2008) demonstrated acculturative stress in marginalized groups increased their risk of violence. Moreover, they showed how remaining attached to an individual's culture of origin resulted in less acculturative stress

and acted as a protective factor against violence. Another dimension of the acculturation process is rapid acculturation, which Mesch et al. (2008) found to be linked to violent behavior. The primary issue is accelerated acculturation of youth promotes conflict with their parents, peers, or both, which in turn can make relationships more distant (Mesch et al., 2008).

Berry's theory of acculturation was developed to help conceptualize acculturation experiences of immigrants using multiple factors (Yoon et al., 2013; Yoon, Langrehr, & Ong, 2011). Therefore, incorporating acculturation theory within the theoretical foundation of this study provided support for including environmental, social, and family variables within statistical assessments of behavioral outcomes such as problem behavior (Schwartz et al., 2013) and delinquency (van Leeuwen, Rodgers, Bui, Pirlot, & Chabrol, 2014).

Immigrant Paradox

Immigrant populations living in poor socioeconomic conditions have exhibited better adaptive outcomes, less behavioral problems, and less engagement in crime and delinquency compared to nonimmigrants (Bui, 2012; Sam, Vedder, Ward, & Horenczyk, 2006; Vaughn et al., 2014a). Sam et al. (2006) referred to this phenomenon as the immigrant paradox. The positive adaptive outcomes of immigrant youth associated with the immigrant paradox were attributed to positive educational attitudes (Greenman, 2013), positive educational adjustment, a sense of family obligation (van Geel & Vedder, 2011), and remaining connected to an individual's culture of origin (Mesch et al., 2008).

As mentioned prior, Mesch et al. (2008) indicated rapid acculturation into American culture increases the potential for immigrants to display delinquent behaviors as a result of acculturative stress. Researchers (Bui, 2012; Sam et al. 2006) asserted the immigrant paradox also proposes that acculturation into the dominant culture negatively affects social, behavioral, and health outcomes of adult and youth immigrants. This included outcomes related to crime and delinquency. Similarly, Suárez-Orozco, Rhodes, and Milburn (2009) described how prolonged residence in the United States contributed to a decline in the positive benefits associated with the immigrant paradox, which was due to acculturation processes and Americanization of immigrant youth. Researchers demonstrated that Americanization is related to increases in crime, delinquency, and violence among immigrants, especially among successive generations of immigrants (Bersani, 2014b; Bui, 2009; Powell et al., 2010; Sampson, Morenoff, & Raudenbush, 2005).

Researchers' investigations of the immigrant paradox emphasized health risk outcomes, such as sexual behavior (Guarini, Marks, Patton, & Coll, 2011; Raffaelli, Kang, & Guarini, 2012; Schwartz et al., 2014) and substance use (Bacio, Mays, & Lau, 2013; Bui, 2013; Salas-Wright, Vaughn, Clark, Terzis, & Córdova, 2014; Schwartz et al., 2014). However, to a lesser extent, researchers investigated behavioral outcomes such as problem behavior (Chun & Mobley, 2014), antisocial behavior (Vaughn et al., 2014a, 2014b), violence (Peguero & Jiang, 2014; Vaughn et al., 2014b), and delinquency (Bui, 2012). The use of the immigrant paradox concept in research offers a framework for assessing differences in behavioral outcomes across groups based on immigrant status,

generational status, and acculturation status (Greenman, 2013; Vaughn et al., 2014a), which was applicable for assessing the research questions and hypotheses of this study. More specifically, it allowed for assessment of differences in predicting delinquency through familial, social, environmental, and individual factors across three generational status groups.

Differential Association Theory

Edwin Sutherland created differential association theory to explain the development of delinquent and criminal behavior, and the distribution of crime rates among various groups (Sutherland, Cressey, & Luckenbill, 1992). Sutherland et al. (1992) presented nine statements that form the primary tenants of differential association theory. Some of the statements have overlapping meaning and can be summed up in three major points: criminal behavior is learned through interactions, learned criminal behaviors includes techniques for committing crime and positive attitudes and beliefs towards criminal behavior, and the nature of associations impact learning criminal and noncriminal behaviors.

Overall, Sutherland et al. (1992) noted differential association theory proposed prolonged exposure to deviant behavior could increase the likelihood of a person engaging in unlawful conduct. As a social learning perspective, Sutherland's theory contends attitudes towards and development of criminal and delinquent behavior are influenced by verbal and nonverbal interactions, and relationships with others, particularly family, friends, and peers. Additionally, the frequency, duration, and intensity of associations play a vital role in the development of criminal and noncriminal

behavior patterns. Moreover, associations during childhood and adolescence, and persistent deviant associations are both crucial in the formation of behavior and definitions of lawful conduct (Sutherland et al., 1992).

Ronald Akers (1998) expanded differential association theory to include an explanation of three primary mechanisms through which youth learn to engage in delinquent behaviors from others. The three mechanisms include imitation of deviant behaviors, reinforcement of deviant behaviors, and adoption of favorable attitudes towards deviance. Essentially, adults and youth can be motivated towards prosocial or antisocial behaviors by positive reinforcement (i.e., rewards) and negative reinforcement (i.e., punishments) through a process called *differential reinforcement* (Burgess & Akers, 1966).

According to Church, Jagers, and Taylor (2012), differential associations with others is a process involving social and cultural transmission that has an impact on children's learned behaviors. Moreover, they indicated differential association theory highlights the importance of considering how factors such as familial cohesion, parental discipline, and neighborhood environment can influence youths' behavioral development. In addition, Chen and Zhong (2013) noted attachment to family and school can indirectly reduce youths' exposure to peer-based criminogenic risks. In this sense, prosocial relationships with family and school commitment can promote negative attitudes towards delinquency and decrease youths' propensity to engage with delinquent peers.

Researchers applied differential association theory to explain variation in deviant behaviors (Zaloznaya, 2012) and the influence of delinquent peer associations on self-

control (Jennings, Higgins, Akers, Khey, & Dobrow, 2013). In addition, Whaley, Hayes, and Smith (2014) applied the theory to investigate how school bonds and peer associations affects adolescent substance use. Furthermore, other researchers used differential association theory to explore how peer associations (Khajehnoori, Ahmadi, & Keshavarzi, 2013; Zhao & Zhu, 2011), family atmosphere, and deviant siblings impact juvenile delinquency (Khajehnoori et al., 2013).

Differential association theory applied to the current study in terms of helping to understand underlying factors involved in the acculturation-delinquency nexus that acculturation theory itself cannot explain (Chen & Zhong, 2013). In this sense, differential association theory added a criminological perspective to the theoretical framework, which further assisted with assessing the predictability of delinquency through various factors. Additionally, the theory considers how school and neighborhood environments (Chen & Zhong, 2013; Church, Jagers, et al., 2012), and associations with family, peers, and teachers can influence youths' learning of prosocial and antisocial behaviors (Akers, 1998; Sutherland et al., 1992). Therefore, incorporation of differential association theory in the theoretical framework of this study also helped to identify relevant factors to include in statistical analyses involving delinquency.

History of Migration and Immigration Policy

Early Migration Patterns and Colonial Times

The United States is commonly referred to as a “nation of immigrants” due to historical migration patterns and colonization (Gabaccia & Zanoni, 2012, p. 203). Long before European colonization of America, migrants from Asia entered Alaska across a

naturally formed land bridge in the region currently called the Bering Strait (Gugliotta, 2013). Archeological findings verified the first migrants into North America occurred more than fourteen to twenty thousand years ago (Gugliotta, 2013). By the 1500s, migrants from Spain and France were establishing settlements in North America (Roth, 2011). The English followed suit in the sixteenth century with the founding of the Virginia Colony in 1607 and the other 12 original colonies between 1620 and 1733 (Roth, 2011). The colonial era, which occurred from 1492 to 1763, gave rise to multiple waves of immigrants who were seeking religious freedom, economic opportunities, or both, and immigrants who were unwillingly brought to America to work as slaves (Roth, 2011).

The First Naturalization Act to the 1890s

In 1790, the first federal naturalization act granting citizenship took effect, which provided a foundation for all succeeding immigration policies in the United States. However, this naturalization process lacked effective federal oversight (Schultz, 2011). Schultz (2011) explained how naturalization legislation changed numerous times between the 1790s to the early 1800s due to ensuing debates over the naturalization process. Major revisions were done through the Naturalization Act of 1802 and its subsequent amendments, which altered residency requirements to five years; instated requirements for registry, statement of intent, and oath of allegiance to the country; provided derived citizenship through husbands and fathers for wives and children, added the requirement of continued residency, and reduced the time frame for naturalization after filing an intention for naturalization.

During the 1820s to the 1850s, there was a significant increase in the number of immigrants. These migrants were predominately from northern and western Europe, poor, and looking to work as laborers in America (Schultz, 2011). By 1865, slaves gained their freedom with the passing of the 13th Amendment and in 1868, the 14th Amendment provided citizenship to slaves (Jaggers, Gabbard, & Jaggers, 2014). In the 1880s, the Chinese Exclusion Act of 1882 became the first policy in the United States to place race and nationality-based restrictions on immigration. In turn, it significantly reduced the number of Chinese immigrants entering the country (Kil, 2012). In 1892, Ellis Island became the first federal immigration station and the principle immigration station from 1892 to 1924 with more than 12 million immigrants being processed (Varricchio, 2011).

Immigration in the 1900s

The passing of the Naturalization Act of 1906 enabled the federal government to gain effective control of the naturalization process (Schultz, 2011), and added the requirement for immigrants to learn English to gain citizenship (Ragsdale, 2013). Later in 1910, Ellis Island was used as a model for the creation of a second immigration station on the West Coast called Angel Island (Ciardiello, 2012). Birn (1997) indicated migrants had medical and psychological examinations when processed through Ellis Island and Angel Island. However, Birn stated other factors such as work capabilities and moral values were considered to determine the permissible entry of an individual into the United States.

Additional legislative changes were made through the Immigration Act of 1917, which added literacy as a requirement for those over the age of 16 to enter the United States (Serviss, 2012) and placed prohibitions on immigration to the United States by individuals from Asia, the Middle East, and the Pacific Islands (Jaggers et al., 2014; Tan, 2013). Even with such restrictions in place, Schultz (2011) noted 23 million immigrants of varying nationalities entered the United States from 1880 to 1920. According to Camarota (2012), by 1920 foreign-born individuals made up 13.2% of the U.S. population. In 1921, the Emergency Quota Act was instated to reduce immigration through a quota system that placed limitations on the number of migrants allowed to enter the United States from each country (Abrams, 2013). During 1924, further constraints were put on the number of migrants allowed to enter the United States and prohibited persons who were ineligible for citizenship from entering (Ragsdale, 2013).

Immigration policy took a dynamic shift during World War II with the formation of global alliances and severe labor shortages (Jaggers et al., 2014). One change occurred in 1940, which afforded wives the ability to apply for citizenship on their own as opposed to getting derived citizenship through husbands' citizenship. This change helped correct ambiguity in the citizenship of women if their husband passed away or the woman was unmarried (Schultz, 2011). During the Great Depression, approximately 1.6 million Mexican immigrants were deported from the United States by 1935 due to American citizens' perceptions that immigrants were an economic strain on the United States. However, the United States' involvement in World War II gave rise to a significant labor shortage (Molina, 2011). As a result, the Bracero program was

developed in 1942 to allow importation of Mexican laborers for agricultural and railroad labor, which ultimately led to approximately 4 million Mexican men being brought into the United States as laborers (Molina, 2011). Although the program expanded in the 1950s, it was later terminated for being an exploitive labor regime and was completely phased out by 1968 (Massey & Pren, 2012b). Park (2013) explained that World War II gave rise to the development of global alliances. One stipulation of the alliance between the United States and China was to dissolve the prohibition on Chinese immigration, which resulted in the passing of the Magnuson Act by Congress. Passed in 1943, the Magnuson Act ended the exclusion of Chinese immigration into the United States in two ways: it enabled a certain number of new Chinese migrants entry into the country and opened up the application for citizenship to Chinese nationals already in the country.

Post World War II immigration policy was altered again in 1952 via the McCarran-Walter Act, also called the Immigration and Nationality Act, in order to reestablish the criteria for migrant entry into the United States (Massey & Pren, 2012b). The McCarran-Walter Act created three classes of immigrants (i.e., skilled workers, average immigrants, and refugees), and eliminated racial and ethnic preferences for immigration. This system still established certain restrictions such as assigning a quota for the average number of immigrants entering the United States and denying communist supporters' entry into the country during the Cold War (Massey & Pren, 2012b). By 1965, the quota system was completely abolished and replaced with a visa allocation system with the amendment of the Immigration and Nationality Act (Jaggers et al., 2014; Johnson, 2013). Under the new system, there were an unlimited allocation of family

reunification visas (Jagers et al., 2014) and an annual allotment of 300,000 visas for new migrants (Johnson, 2013).

The Immigration and Nationality Act of 1965 is significant for several reasons. First, it replaced discriminatory quotas and biased migrant entry procedures with a system that granted visas on a first come basis and prohibited discrimination based on race, ethnicity, and sex (Johnson, 2013). The act also led to a shift in migration patterns in terms of the number and type of migrants entering the country. In 1920 through 1970, there was an incremental decrease in the immigrant population, which coincided with the immigration restrictions and limitations imposed through policy (Camarota, 2012). Immigration was at its lowest during the 1970s with foreign-born individuals accounting for only 4.7% of the U.S. population with the undocumented population consisting of a few thousand immigrants (Camarota, 2012; Massey, 2013). Furthermore, prior to the Immigration and Nationality Act of 1965 immigrants were predominately European (Massey & Pren, 2012b). However, the period after the passing of the act led to increases in the immigrant population by the 1980s in which migrants were predominately Hispanic and Asian (Camarota, 2012; Massey & Pren, 2012b). In the 1980s, the passage of the refugee act, adoption of the 1950s convention, and the instatement of the 1967 protocol on the status of refugees resulted in removal of refugees from the immigration preference system, the creation of a domestic resettlement program for refugees, and an overall reduction in the worldwide immigration cap to 270,000 (Ewing, 2012; Smith, 2012). Second, the Immigration and Nationality Act of 1965 set precedent for other immigration policies into the 1980s and 1990s (Johnson, 2013).

The Immigration Reform and Control Act (IRCA) of 1986 had anti-immigration features that were designed to reduce illegal immigration. Those features included verification of immigration status by employers, prohibitions on recruiting or employing illegal immigrants, penalization of employers for employing undocumented immigrants (Facchini & Steinhardt, 2011; Jones-Correa & De Graauw, 2013), and increases in funding for border enforcement (Ewing, 2012). The pro-immigration provisions of the act led to the implementation of an amnesty program for seasonal workers and illegal immigrants to become legal permanent residents as well as the creation of a guest worker initiative similar to the Bracero program used in the 1940s (Ewing, 2012; Pan, 2012). These programs led to the legalization of approximately 3.5 million illegal immigrants (Escalante, Kostandini, & Mykerezi, 2014).

In contrast to the IRCA of 1986, the Immigration Act of 1990 concentrated on legal immigration in the form of altering the visa allocation system by creating a diversity category, increasing the annual cap for immigration, and establishing a short-term amnesty program for immigrant women and children (Facchini & Steinhardt, 2011). The law also provided an avenue for unauthorized immigrants from countries engaged in armed conflicts or affected by natural disasters to gain a temporary protected status and prevent deportation (Ewing, 2012). Illegal immigration continued to be a problem and source of concern in the United States, which led to the introduction of additional immigration policies (Facchini & Steinhardt, 2011; Jones-Correa & De Graauw, 2013).

The Illegal Immigration Reform and Immigrant Responsibility Act of 1996 primarily targeted illegal immigration across the US-Mexico border by increasing border

patrol, mandating construction of a fence along the border, increasing the ability to deport illegal immigrants, requiring background checks on job applicants' immigration status, and restricting access to benefits for all immigrants (Facchini & Steinhardt, 2011). Additionally, the law required electronic tracking of immigrants (Jones-Correa & De Graauw, 2013), expanded the definition of aggravated felony to include nonviolent offenses, enabled expedited removal of immigrants without formal hearings, and barred unlawful migrants from reentering the United States for three to ten years (Facchini & Steinhardt, 2011). In April of 1996, the Antiterrorism and Effective Death Penalty Act was enacted to expedite the removal of suspected non-U.S. citizen terrorists. In fact, foreign-born individuals could be detained or deported without any knowledge of the evidence against them (Ewing, 2012). Later in the year, the passing of the Illegal Immigration Reform and Responsibility Act (IIRA) established restrictions for legal immigrants and expanded restrictions for unauthorized immigrants from receiving benefits (i.e., social services, food stamps, and social security; Magaña, 2011). Moreover, the act increased the number of illegal immigration enforcement personnel (Magaña, 2011) and penalties for immigrant related offenses (Menjivar & Abrego, 2012).

Immigration Post September 11th to Present

The terrorist attacks on September 11th, 2001 served as a catalyst for anti-terrorism policy in the United States, but it also had significant implications on immigration policy. Fear for national security elicited an immediate response to seal off the country's borders (Magaña, 2013). Although the Patriot Act was passed as an anti-terrorism measure, it also led to increases in funding towards surveillance and provided

the government with the authority to deport or deny entry of migrants into the United States based on group affiliations and suspected engagement or endorsement of terrorism (Massey & Pren, 2012a). In 2002, the Homeland Security Act disbanded the US Immigration and Naturalization Service (INS) and created the Department of Homeland Security (DHS; Magaña, 2013; Mittelstadt, Speaker, Meissner, & Chishti, 2011). The functions of the INS were distributed among the US Customs and Border Protection, the US Citizenship and Immigration Services, and the US Immigration and Customs Enforcement (Mittelstadt et al., 2011). Additional anti-terrorism measures such as the National Security Entry-Exit Registration System and voluntary interview programs were created to register and track noncitizens, particularly foreign-born individuals from the Middle East and Southern Asia (Ewing, 2012).

In 2004, more funding was put towards border enforcement by the National Intelligence Reform and Terrorism Protection Act, which increased the number of detention centers, border patrol agents, and immigration investigators (Massey & Pren, 2012a). In the following year, the Real ID Act was passed to increase verification procedures of driver's licenses to reduce counterfeiting capabilities and verify applicants' legal presence in the United States. The legislation also required all documents to be put through the U.S. DHS's Systematic Alien Verification of Entitlement system for authenticity verification (Newton, 2012). There was strong opposition to the law due to the cost required to fully comply with the REAL ID Act. Although states were not required to comply with the law, some states (e.g., Kentucky) opted to implement portions of the REAL ID Act. In other cases, states chose to pass non-REAL ID laws to

further regulate immigrants and state identification or laws that oppose the REAL ID Act (Newton, 2012). In 2006, the Secure Fence Act further addressed border security by authorizing an expansion of the fence along the Mexico-United States border from 128 kilometers to 1,125 kilometers (Jones, 2011), and provided funding for surveillance technology (i.e., security cameras, satellites, and unmanned drones; Massey & Pren, 2012a). By 2010, the Border Patrol's budget was increased by \$244 million via the Border Security Act, which allowed an additional 3,000 Border Patrol Agents to be hired (Massey & Pren, 2012a).

Immigration Policy reached a turning point in 2010 with the passing of Arizona's Support Our Law Enforcement and Safe Neighborhood Act (SB 1070; Selden, Pace, & Nunn-Gilman, 2011). Zingher (2014) indicated the main purpose of the act was to increase law enforcement efforts of undocumented migrants. During this period, immigration policy in the United States was driven by a national movement promoting *attrition through enforcement* (Michalowski, 2013). In other words, the movement promoted developing policies that would push undocumented immigrants to leave the state or country by making ordinary life difficult. Laws like Arizona's SB 1070 and subsequent clone laws by other states (e.g., Alabama, Indiana, Georgia, South Carolina) decreased life security for undocumented migrants by increasing police scrutiny of, restricting services for, and prohibiting employment of illegal immigrants (Johnson, 2011; Michalowski, 2013).

While opponents of SB 1070 questioned the constitutionality of the law (Selden et al., 2011), the U.S. Supreme court (2012) ruled in *Arizona v. United States* that the

provision authorizing city and state police to ask individuals to prove citizenship or legal residence was constitutional. In contrast, provisions that interfere with federal authority and discretion in the illegal immigrant removal process were found to be unconstitutional. According to Selden et al. (2011), one core issue with SB 1070 is that the wording of the law expressed authorization for law enforcement to engage in racial profiling. Although the law was amended through HB 2162, the idea that SB 1070 condones racial profiling remained ambiguous. Critics still assert law enforcement unfairly target Hispanic minorities due to Arizona's immigration law (Nill, 2011). In 2011, continued emphasis on *attrition through enforcement* led to the proposal of five additional laws that would have further reduced immigrant adults' and children's civic rights and access to social services. However, none of the laws were passed in part due to substantial opposition from the Arizona business community who incurred significant financial losses after the passing of SB 1070 (Michalowski, 2013).

Current State of Immigration Policy and the Impact on Immigrant Youth

The current landscape of immigration policy is one that emphasizes anti-immigration (Ewing, 2012; Orrenius & Zavodny, 2012). Ewing (2012) described how billions of dollars were spent on law enforcement measures to target and reduce unauthorized immigration since the 1980s and yet the undocumented population in the United States still increased. From 1980 to 2010, there was a steep immigrant population increase from 14.1 million to approximately 40 million (Camarota, 2012) with the undocumented immigrant population rising from 4 million to 11.2 million (Passel & Cohn, 2011). Despite the seemingly rapid growth of the immigrant population, Camarota

(2012) reported the number of immigrants living in the United States as of 2010 only made up 12.9% of the population, whereas the immigrant population in the 1900s accounted for 13.6% of the U.S. population.

Another element of the immigration issue is the negative impact anti-immigrant sentiments within the United States have on immigrant families (Ayón & Becerra, 2013; Ayón & Naddy, 2013). In 2010, immigrant adults and children made up approximately one-sixth of the U.S. population (Camarota, 2012). Enforcement of undocumented immigration shifted from being treated as a civil matter to the domain of criminal law (Androff et al., 2011; Furman, Ackerman, Loya, Jones, & Negi, 2012). According to Dreby (2012), the use of workplace raids to capture and detain undocumented workers has left the children of immigrants without one parent, in the care of a relative, or in the care of a stranger. Families are separated with undocumented parents being deported, and their US-born children being left behind. The consequences of separation are many as children are often unaware of their parents' whereabouts and whether their parents are safe. In turn, children can suffer stress, trauma, feelings of abandonment, and depression (Chaudry et al., 2010). In addition, immigrant children face other barriers like family fragmentation (Chaudry et al., 2010), discrimination, and economic insecurity (Androff et al., 2011).

In recognition of the numerous barriers immigrant children and adolescents face, policymakers have made efforts to reform or create immigration policies to assist that vulnerable population (Androff et al., 2011). In the United States, all children have the right to free primary and secondary public education including legal and undocumented

immigrant children (Glenn, 2011). However, Campbell (2011) and Glenn (2011) indicated having an undocumented status limits immigrant youths' access to higher education by making them ineligible for certain types of financial aid and in some cases in-state tuition. For instance, legislation in Arizona has eliminated bilingual education and prohibits undocumented immigrants from receiving in-state tuition and financial aid (Ayón & Naddy, 2013). In contrast, other states such as Maryland and California have passed legislation (e.g., the Maryland Dream Act, the California Dream Act) to provide undocumented immigrant minors with the opportunity to attend college by enabling access to in-state tuition and financial aid if certain criteria are met (e.g., families paid state income taxes and students attended high school in state; Gindling & Mandell, 2012; Morales, Herrera, & Murry, 2011). These acts were designed to provide education relief for immigrant children who had little to no input in their families' decision to migrate to the United States (Barron, 2011).

Immigration policy was also reformed in order to address concerns for immigrant children's welfare (Androff et al., 2011). Economic insecurity and inadequate employment increase the chances of poor health outcomes among immigrant children as they remain uninsured and parents lack the financial resources to seek appropriate medical attention for their children (Pati & Danagouliau, 2008). The former standard conveyed in immigration policy required legal immigrants to reside in the United States for five years before they could seek health assistance through Medicaid or State Children's Health Insurance Programs (Perreira & Ornelas, 2011). In 2009, the passage of the Children's Health Insurance Program Reauthorization Act provided immediate

coverage for immigrant children legally in the United States to be insured under the aforesaid programs. However, the policy does not provide medical coverage for undocumented children (Perreira & Ornelas, 2011). Furthermore, anti-immigration sentiments and policies dissuade immigrant families from seeking assistance even when they are eligible to receive social and health services (Garcia & Keyes, 2012; Menjívar & Abrego, 2012; Seiber, 2013). Undocumented migrants, in particular, avoid contact with authority figures including healthcare practitioners in fear of deportation (Menjívar & Abrego, 2012; Seiber, 2013).

In the United States, immigration policy has historically been driven by fears of what immigrants could do and the negative impact they could have on U.S. society. Currently, there are growing public concerns related to illegal immigration and the impacts of immigration on the labor market and the economy (Orrenius & Zavodny, 2012). Contemporary efforts to decrease migration of specific groups such as those from Mexico are not much unlike prior efforts that sought to control the number of immigrants entering the country or placed restrictions on certain cultural groups from entering the United States (Boehm, 2011). Since federal immigration policy has remained unchanged over the past decade, state governments began to address the public's concerns by regulating immigration (Ewing, 2012; Jagers et al., 2014). However, the effectiveness of state immigration policies is questioned due to the lack of uniformity in their creation and application (Jagers et al., 2014).

In stark contrast, others promote the decriminalization of immigration and reforming immigration policy to be less restricted and emphasize human dignity, health,

and wellbeing (Androff et al., 2011; Ayón, Gurrola, Salas, Androff, & Krysik, 2012). Casas and Cabrera (2011) suggested an increase in advocacy of policies that discourage involuntary separation of families and prioritize keeping children with their families. Presently, the immigration debate continues with pro- and anti-immigration activists calling for the federal government to reform immigration policy, and the development of immigration policies that test the bounds of controlling immigration at the state level (Jagers et al., 2014; Morales et al., 2011).

Barriers to Immigrant and Minority Participation in Research

The growth of the immigrant population led to increased interest by researchers to study social phenomena using immigrant samples. The intended goal of such research is to better understand the link between risk and protective factors and specific health and behavioral outcomes among the immigrant youth and adult populations (Martinez, McClure, Eddy, Ruth, & Hyers, 2012). However, anti-immigration sentiments have affected immigrants' willingness to participate in research in a similar manner to how it influences their willingness to seek social and health services (Garcia & Keyes, 2012; Menjívar & Abrego, 2012; Seiber, 2013). According to Martinez et al. (2012), increased detention of immigrants and public portrayals of immigrants as "criminal" have propagated distrust of researchers (p. 17). Moreover, Martinez et al. went further to assert a researcher's ethnicity and ability to speak immigrants' native language have the potential to impact immigrants' participation in a study.

Immigrants can be dissuaded from participating in a study due to fear of stigma and discrimination (Fisher & Kalbaugh, 2011; George, Duran, & Norris, 2014; Shedlin,

Decena, Mangadu, & Martinez, 2011), their immigration status (e.g., fear of deportation; Ahrens, Isas, & Viveros, 2011; Shedlin et al., 2011), language barriers (Ahrens et al., 2011; George et al., 2014; Thomson & Hoffman-Goetz, 2011), and a lack of cultural sensitivity in the research design (Ahrens et al., 2011). One prominent barrier to getting immigrant children and adults to participate in research is concern over privacy and confidentiality (Ulrich et al., 2013), which could be perpetuated by feelings of fear and mistrust (George et al., 2014; Ulrich et al., 2013). In addition, there is a lack of confidence by immigrants about the real intentions of studies, and the potential for them to be exploited by researchers (Fisher & Kalbaugh, 2011; George et al., 2014). Other factors such as lack of time (Ulrich et al., 2013), schedule conflicts, lack of transportation, inadequate information about a study, and lengthy consent forms can hinder participation and retention of immigrants and minorities in research (George et al., 2014).

Researchers have identified various methods that could assist with improving participation of immigrants and minorities in research (George et al., 2014; Ibrahim & Sidani, 2014; Martinez et al., 2012). Strategies such as collaborating with organizations or school districts (Martinez et al., 2012; Wallace & Bartlett, 2013), face-to-face interactions, referrals through trusted intermediaries (e.g., families, schools, churches, local organizations), use of bilingual or bicultural recruiters (Ibrahim & Sidani, 2014; Martinez et al., 2012), linguistic adaptation of study materials (George et al., 2014), making participation convenient for participants, and offering incentives could be employed to increase study participation (Wallace & Bartlett, 2013). Furthermore,

researchers can increase immigrant and minority participation by providing accurate information about the research purpose, the potential risks and benefits of a study (Renert, Russell-Mayhew, & Arthur, 2013; Wallington et al., 2012), and the researcher's contact information (Martinez et al., 2012). Essentially, it is necessary for researchers to select recruitment and data collection methods that would help them establish a rapport and trust with their participants (Martinez et al., 2012). However, while such strategies help promote participation, they do not eliminate the threat of nonresponse (Fisher & Kalbaugh, 2011; George et al., 2014; Menjivar & Abrego, 2012; Seiber, 2013).

History of the Juvenile Justice System

Early Influences on Juvenile Justice

Historically, references to child-specific criminal offenses date back to 2,270 BC within the Code of Hammurabi (Bernard & Kurlychek, 2010). The earliest distinction between adults and juveniles that emphasized age of responsibility was approximately 2,000 years ago under Roman civil law (Bernard & Kurlychek, 2010). During the fifth century, puberty, which was 12 years old for girls and 14 years old for boys, was designated as the point that youth had the capacity to distinguish right from wrong (Lawrence & Hemmens, 2008). The stipulations of Roman civil law had an influence on English common law, particularly in terms of providing assistance to women and children (Langbein, 2012). This led to the creation of the right to *parens patriae*, which granted the courts the ability to act in place of a child's parents (Brank & Scott, 2012). The *parens patriae* doctrine would later become a crucial component of the American juvenile court system (Brank & Scott, 2012).

Amid the 19th century, an emphasis was placed on the provision of parental supervision and control over children's behaviors (Brank & Scott, 2012). In instances where parents failed to meet supervision and disciplinary expectations, states had the authoritative power to take responsibility for guiding and protecting juveniles in their parents' stead (Brank & Scott, 2012). The evolution of the American criminal justice system reached a significant turning point during the Victorian era (Roth, 2011). Various reform movements took place between 1870 and 1901, which contributed to the reformation of the correctional system, development of police professionalism, and creation of the juvenile court system (Roth, 2011). Prior to 1899, children and adults were subjected to the same criminal and court procedures in most states. In this regard, children were arrested, detained, tried, sentenced, and imprisoned in the same manner as an adult (Roth, 2011).

In the absence of options, youth would be confined for noncriminal and criminal behaviors with adult criminals, some of whom were mentally ill or committed severe crimes (Fox, 1996). The harsh conditions juveniles were subjected to in penitentiaries and jails gave rise to advocacy for juveniles to be imprisoned separately from adult offenders (Krisberg, 2005). In response to advocacy efforts, New York became the first state in 1825 to open a House of Refuge to protect neglected youth and incarcerate delinquent youth (Wagner, 2013). States soon began to build Houses of Refuge and State Reform Schools to house, instruct, and rehabilitate juveniles in order to assist them with social adjustment and becoming productive citizens (Bell, 2011; Wagner, 2013). Those refuge houses and reform schools would later serve as a model for contemporary juvenile

reformatories (Bell, 2011). By 1872, several states (e.g., Massachusetts, New York) implemented laws for juveniles to receive separate trials from those conducted for adults (Roth, 2011). Continued advocacy and concern for the negative impact that neglected and delinquent youth had on society gave rise to the creation of the juvenile court system (Bell, 2011).

Creation of the Juvenile Justice System

In 1899, the first juvenile court was established in Cook County, Illinois (Bell, 2011). The court's authority and jurisdiction over children ages 16 and under who were deemed delinquent, abused, neglected, or dependent was vested by the Illinois Juvenile Court Act of 1899 (Soulier & Scott, 2010). The *parens patriae* doctrine became the basis of the juvenile court system in terms of granting the courts' jurisdiction over juveniles (Brank & Scott, 2012). Additionally, Cauffman and Steinberg (2012) described how the doctrine conferred the philosophy that children were not to be treated as adults when in violation of the law due to their lack of maturity and unawareness for the consequences of their actions. Therefore, while adult offenders were labeled as criminals, youth offenders were designated as delinquents.

The creation of a separate court for juveniles further stressed the differences between adult and youth offenders (Cauffman & Steinberg, 2012). The purpose of the newly created juvenile justice system was to rehabilitate youth rather than punish (Bienstock, 2013; Cauffman & Steinberg, 2012). Concurrent with the development of the juvenile justice system was an emphasis on the causality of juvenile delinquency via familial factors (Brank & Scott, 2012). Delinquency was viewed as a product of family

discord and adults' failure to meet parental obligations (Brank & Scott, 2012). In conjunction with the *parens patriae* doctrine, the *Commonwealth v. Fisher* Supreme Court ruling in 1905 solidified the juvenile court's purpose of taking guardianship over delinquent youth in cases where parents failed to maintain control over youths' behaviors, and addressing youths' behavioral issues through rehabilitation in lieu of punitive actions (*Commonwealth v. Fisher*, 1905). According to Alexander (2011) and the Application of Johnson (1957), juveniles who committed serious criminal acts were still tried in courts as adults and could receive life imprisonment in an adult prison or capital punishment. By 1945, juvenile courts were established in every state, and the practices of the juvenile justice system would remain relatively unchanged until the latter half of the 20th century (Brank & Scott, 2012; Soulier & Scott, 2010).

The Juvenile Justice System from the 1960s to the Present

The juvenile justice system began to evolve further in response to the inadequate legal protections for juveniles (Scott & Steinberg, 2008). Compared to adults, juveniles did not have the same due process protections (Soulier & Scott, 2010). Supreme Court rulings from the 1960s to 1980s afforded juveniles the right to the same due process protections as adults (*Kent v. United States*, 1966), the right to counsel and to question witnesses at hearings, the right to protections against self-incrimination, the right to appellate review (*In re Gault*, 1967), the standard of evidence became "proof beyond reasonable doubt" (*In re Winship*, 1970), and *adjudication* and *trial* became synonymous terms to protect juveniles' double jeopardy rights (*Breed v. Jones*, 1975). The landmark

Supreme Court decisions mentioned above contributed to the evolvement of the juvenile courts to closely resemble the criminal adult courts (Soulier & Scott, 2010).

During the same time frame, Congress passed the Juvenile Prevention and Control Act in 1968 in order to promote the planning and development of community level delinquency prevention programs (Siegel & Welsh, 2013). In 1974, the act was replaced by the Juvenile Justice and Delinquency Prevention Act, which created entities such as the Office of Juvenile Justice and Prevention and the National Institute for Juvenile Justice and Delinquency Prevention (Siegel & Welsh, 2013). From the late 1960s into the 1970s, there were advancements in delinquency prevention, deinstitutionalization of youth, and separation of juvenile offenders from adult offenders (Jones, 2012).

In the 1980s to the beginning of the 1990s, a sharp increase in juvenile crime rates promoted public skepticism about the effectiveness of the rehabilitative model, and intensified perceptions that tougher policies needed to be implemented (Scott & Steinberg, 2008). The new perspective held about juvenile justice was “adult time for adult crime” (Scott & Steinberg, 2008, p. 18), which resulted in legislative alterations designed to get tough on crime (Bishop, 2012). In retrospect, increased rates of crime and violence by juveniles led to decreases in the age limit juveniles could be transferred to criminal court and an increase in the number of offenses for automatic transfer of juveniles to adult criminal courts (Scott & Steinberg, 2008). The viewpoint that juveniles should be treated punitively in a similar manner to adult criminals continued into the 1990s with a reduction in the importance of rehabilitation, an emphasis on public safety,

the promotion of offender accountability, and the incorporation of restorative justice into the juvenile justice system (Sickmund & Snyder, 1999).

During the 21st century, there was a shift in beliefs within the juvenile justice system about how to treat juveniles due to research demonstrating the ineffectiveness of punitive measures that do not provide rehabilitation (Johnson, Lanza-Kaduce, & Woolard, 2011; Lambie & Randell, 2013; Mulvey, 2011). Instead, the focus became striking a balance between punitive measures and rehabilitation (Siegel, 2011). Several Supreme Court rulings reaffirmed the need to consider juveniles' unique status and impose less harsh penalties for youth by forbidding the death penalty for juveniles (*Roper v. Simmons*, 2005), placing limitations on the use of life sentences without parole for youth offenders (*Graham v. Florida*, 2010; *Miller v. Alabama*, 2012), and holding children cannot arbitrarily be punished in the same manner as adults (*Miller v. Alabama*, 2012).

In the last 14 years, an emphasis was placed on minimizing detainment and incarceration of juveniles in preference to utilizing programs and interventions within communities (Mendel, 2011; Stoddard-Dare, Mallett, & Boitel, 2011). The National Juvenile Justice Network and Texas Public Policy Foundation (2013) indicated policy changes from 2001 involving increased availability of alternative sentences, reductions in use of secure detention and confinement facilities, and increases in the role of schools in addressing disciplinary issues without the justice system's involvement helped states reduce the number of youth detained or incarcerated. The number of juveniles detained or confined decreased from 108,802 in 2000 to 66,322 in 2010. Henggeler and

Schoenwald (2011) asserted priorities currently lie in reducing juvenile justice expenditures through the implementation of interventions that are cost-effective and significantly reduce or prevent delinquency.

The Efficacy and Cultural Adaptation of Delinquency Interventions

Juvenile justice and delinquency prevention remain a concern in the United States with more than 1 million adolescents being processed in juvenile courts annually (Furdella & Puzanchera, 2015). Those youth are sent to one of many juvenile justice services and interventions, which includes traditional approaches such as probation, juvenile transfer, surveillance, and residential placement (e.g., incarceration, boot camps, group homes), and treatment programs (e.g., community-based, individual, group; Henggeler & Schoenwald, 2011). However, there is variance in the effectiveness of traditional approaches to delinquency prevention and evidence-based treatment programs (Henggeler & Schoenwald, 2011).

Researchers have performed analyses of juvenile delinquency interventions in relation to behavioral outcomes to determine program effectiveness (Domitrovich et al., 2010; Evans-Chase & Zhou, 2014; Hale & Viner, 2012). In a systematic review of interventions for multiple risk behaviors in adolescents, Hale, Fitzgerald-Yau, and Viner (2014) found the interventions had small effects on preventing or reducing behaviors such as illicit drug use, substance use, risky sexual behaviors, and aggressive behaviors. They also indicated in some cases the effects only emerged after long-term treatment and follow-up. Hale et al. (2014) suggested the use of integrated prevention programs could prove more effective and efficient than using universal or discrete prevention strategies.

This assertion is supported by other researchers who indicated it is not uncommon for adolescents to have a co-occurrence of risky behaviors (Huang, Lanza, Murphy, & Hser, 2012; King, Nguyen, Kosterman, Bailey, & Hawkins, 2012; Wang, Chassin, Eisenberg, & Spinrad, 2015). Additionally, researchers have noted how single-risk interventions can trigger adolescent involvement in other risky behaviors (Hale & Viner, 2012) and be ineffective (Domitrovich et al., 2010). Evans-Chase and Zhou (2014) performed a systematic review of juvenile justice interventions, and found the most effective strategies for reducing recidivism used a therapeutic approach that involved the provision of multiple services and counseling. They also reported that 88% of the 21 therapeutic intervention studies reviewed showed better behavioral outcomes, particularly reductions in recidivism, for the treatment group compared to the control group. Therefore, the use of integrated approaches that account for various problem and risky behaviors could assist with improving the long-term effectiveness of interventions on youths' outcomes (Evans-Chase & Zhou, 2014; Hale et al., 2014).

In regards to evaluations of family-based interventions, researchers have provided evidence for the efficacy of such interventions in preventing and reducing delinquency (Schwalbe, Gearing, MacKenzie, Brewer, & Ibrahim, 2012; Vries, Hoeve, Assink, Stams, & Asscher, 2015). Many delinquency interventions are family-based because the family context has a prominent role in and an enduring influence on youths' development and behavioral outcomes (Estrada-Martínez, Padilla, Caldwell, & Schultz, 2011; Santisteban, Coatsworth, Briones, Kurtines, & Szapocznik, 2012; Véronneau & Dishion, 2010). Since problem behaviors such as substance use, delinquency, risky behaviors, and associations

with delinquent peers tend to be reinforced by familial interactions, family-based interventions focus on changing the patterns of family interactions to discourage and prevent youths' involvement in problematic behaviors (Véronneau & Dishion, 2010). According to Henggeler and Schoenwald (2011), effective delinquency prevention programs are rehabilitative and provide intensive support through youths' natural environment in order to address key risk factors such as family functioning and associations with deviant peers. Vries et al. (2015) found multimodal and behavioral-oriented programs provided in a family context had a better influence on persistent delinquency among youth than individual or group-based programs. Similarly, Schwalbe et al. (2012) reported family treatment significantly reduced recidivism among youth offenders, whereas other strategies including case management, individual treatment, restorative justice, and youth court had no significant effects on recidivism. Conversely, Wilson and Hoge (2013) showed through a meta-analysis that family-based diversion programs used for status and first-time offenders had variability in effectively reducing recidivism, did not significantly reduce recidivism, and were no more effective than the services of the traditional justice system.

While some researchers have provided support for the effectiveness of delinquency interventions (Evans-Chase & Zhou, 2014; Hale et al., 2014; Schwalbe et al., 2012), others have noted discrepancies in the use of such interventions for non-behavioral outcomes and across different genders and cultural groups (Fagan & Lindsey, 2014; Sander, Patall, Amoscato, Fisher, & Funk, 2012; Sawyer, Borduin, & Dopp, 2015). According to Sander et al. (2012), juvenile delinquency interventions were ineffective on

academic outcomes, even for delinquency interventions with an academic component. They partially attributed the ineffectiveness to the use of intervention strategies that lack empirical support for promoting academic outcomes. Fagan and Lindsey (2014) provided evidence about the variable effectiveness of community-based delinquency preventions across genders. They noted some delinquency prevention programs positively affected the delinquent outcomes for only one gender, and in some cases, had harmful effects on one gender. In contrast, Oesterle, Hawkins, Fagan, Abbott, and Catalano (2010) found community-based prevention programs reduced youths' substance use and delinquency equally, regardless of gender. Darnell and Schuler (2015) indicated how researchers have also tested the effectiveness of community-based treatment programs, such as Functional Family Therapy, for juvenile justice aftercare using predominately White samples. In turn, there is insufficient evidence about the effectiveness of interventions when used for ethnic minorities (Castro, Barrera, & Steiker, 2010; Darnell & Schuler, 2015). Overall, the findings discussed regarding the effectiveness of delinquency interventions were mixed, and involved evaluations of interventions on youth in general without examining differences in effectiveness based on ethnicity or among specific subpopulations (Fagan & Lindsey, 2014; Oesterle et al., 2010; Sawyer et al., 2015; Wilson & Hoge, 2013).

When considering the rise in the immigrant youth population (Perreira & Ornelas, 2011; U.S. Census Bureau, 2014a) and growing concerns over public safety among the U.S. population related to juvenile delinquency and immigration (Bui, 2012; Calhoun & Pelech, 2013), researchers have identified a need to find more culturally sensitive and

responsive strategies for working with at-risk ethnic minority and immigrant youth (Buchanan & Smokowski, 2011; Parra Cardona et al., 2012; Svensson et al., 2012). According to Castro et al. (2010), increased diversification of the American population illuminates the importance of developing more culturally responsive and evidence-based interventions. Furthermore, Garcia-Joslin et al. (2015) indicated that practitioners, particularly counselors and psychologists, should develop the knowledge and skills required to provide culturally responsive services for diverse youth populations and their families. In a review of the literature, Castro et al. (2010) found cultural adaptations of interventions via evidence-based practice can be effective, but the effectiveness can vary when applied for use among different subcultural groups. However, they also noted several issues that can hinder the development of culturally responsive interventions. First, the focus in culturally adapting interventions for certain populations are typically guided by frameworks that emphasize the content and strategies of interventions used to assist clients. In turn, there can be an inadequate emphasis on the personnel who have a prominent role in the service delivery within interventions. Secondly, conceptualizing culture for specific subpopulations can be labor intensive, and require high cultural competence, assistance from the target population, and consideration of acculturation. More importantly, culturally adapting interventions for specific subgroups requires an in-depth understanding of various cultural, psychological, social, and environmental factors that can influence behaviors among a population or subpopulation (Castro et al., 2010).

Researchers have a primary role in the development of evidence-based practices as empirical investigations can be used to identify critical factors and concepts that

promote behavioral and health outcomes among various populations (Palinkas & Soydan, 2012; Szapocznik et al., 2015). However, difficulties in recruitment and retention of minority participants, including immigrants, in research and programs have hindered practitioners' ability to develop and culturally adapt interventions that are effective (Wang-Schweig, Kviz, Altfeld, Miller, & Miller, 2014). Various factors such as the content, setting, and delivery approaches of programs contribute to the lack of access to interventions by immigrants, ethnic minorities, and socially disadvantaged groups (Barrera, Castro, & Steiker, 2011; Wang-Schweig et al., 2014). Insufficient understanding about the influences of different cultural factors on educational, health, or behavioral outcomes also present challenges for practitioners in the cultural adaptation of interventions while trying to retain the efficacy of a program (Barrera et al., 2011; Palinkas & Soydan, 2012). Therefore, researchers have suggested that empirical evidence gained through rigorous research should drive advancements and cultural adaptations of interventions (Domenech-Rodríguez, Baumann, & Schwartz, 2011; Szapocznik et al., 2015). Furthermore, Parra Cardona et al. (2012) asserted that practitioners should interpret their research findings through the lens of cultural adaptation as it provides a means for developing effective intervention strategies for immigrants. In doing so, practitioners can consider the unique adaptive challenges faced among culturally different immigrant subpopulations in the development of culturally responsive intervention strategies.

Theoretical Explanations for Child and Adolescent Development

Impact of Heredity and Environment on Development

Social scientists have created various theories to explain stages of human development from infancy to adulthood (Charlesworth, 2013; van Buuren, 2014). Maturationist theorist Arnold Gesell developed a timetable for child development by observing thousands of children for many years and recording their growth and behaviors (Gesell & Amatruda, 1941). According to Gesell and Amatruda (1941), Gesell's milestones of development emphasized a genetic predisposition of child development from infancy to adolescence. Those milestones included a child's cognitive, language, motor, and social development. In addition, Gesell's milestones of development reflect what would be considered a normal trend of development for children at specific ages. The main issue with Gesell's maturation theory is it minimized the importance that environmental factors have on children's development (Curtis, 2011).

Behaviorist theory. In contrast, Yilmaz (2011) noted behaviorist theory focused on how environmental factors influence child development rather than heredity. According to behaviorist Burrhus Frederic Skinner (1938), children can learn to modify their behavior when presented with a reward and punishment system in their environment. Skinner referred to this type of learning as *operant conditioning* in which desired behaviors are reinforced through rewards, whereas undesired behaviors would be punished. Albert Bandura (1977) expanded the concept of learning beyond direct reinforcement to include a social element referred to as *observational learning*. Bandura's social learning theory postulated children learn behavior through observation

and imitation of other people. However, learning through observation does not necessarily lead to changes in children's behavior. First, environmental and intrinsic reinforcement both have an important role in children's learning ability and behavior (Bandura, 1977; Skinner, 1938). Environmental reinforcement refers to external rewards and punishment (Skinner, 1938) whereas intrinsic reinforcement refers to internal rewards, which includes a personal sense of accomplishment, pride, and satisfaction (Bandura, 1977). Secondly, quality of learning depends on a person's degree of attention, ability to retain information, motivation to imitate modeled behaviors, and reproduction of observed behavior (Bandura, 1977).

Ecological systems theory. Uri Bronfenbrenner (1977) advanced child development theory using an ecological theoretical approach. Bronfenbrenner created ecological systems theory to explain the impact that children's heredity and environment have on their growth and development. Neal and Neal (2013) described Bronfenbrenner's ecological systems theory as a theoretical framework that divides a person's environment into four complex ecological systems or levels: microsystem, mesosystem, exosystem, and macrosystem. According to Bronfenbrenner (1994), each level is nested within one another starting with the microsystem, which is the immediate environment (e.g., home, school) where a child is an active participant in his or her interactions and experiences. At the microsystem level, a child's development is impacted by the quality of his or her relationships and interactions with family, caregivers, and peers. The next level is the mesosystem, which involves the interconnection of two or more microsystems. Ideally, two microsystems would work

together and engage in a two-way decision-making process (e.g., parent-teacher conferences, two sets of caretakers) to benefit the developing child. However, microsystems can also have conflicting ideas of what would be best for a child, which can potentially hinder the child's development. The third level, the exosystem includes one or more settings that have an indirect effect on a developing child, but are settings where the child is not an active participant (Bronfenbrenner, 1977; Onwuegbuzie, Collins, & Frels, 2013). Lastly, Bronfenbrenner (1994) described macrosystems as cultural contexts such as society, communities, and cultural groups that indirectly influence child development through cultural norms, customs, and attitudes; societal belief systems, and laws and principles. Overall, Bronfenbrenner's ecological systems theory asserts children's development from childhood to adulthood is influenced by many familial, social, relational, and cultural factors found within their immediate environment, communities, cultural groups, and larger society. Moreover, the theory explains how different social contexts can mutually influence a child's physical, cognitive, identity, and behavioral development (Algood, Harris, & Hong, 2013; Bronfenbrenner, 1994; Neal & Neal, 2013).

Cognitive Development

Cognitive theorists such as Jean Piaget (1971), Lev Vygotsky (1980), and Lawrence Kohlberg (1976) focused on the development of thinking processes as well as the differences in cognitive ability between children and adults (Yilmaz, 2011). According to Piaget (1971), children are active learners that interpret and understand their environment through mental and physical actions. Prior actions by the child or

others will influence his or her future actions. Piaget's (1971) cognitive-developmental stage theory explains the cognitive development of children as a four stage process spanning from infancy to adolescence. The four stages are sensori-motor, preoperational, concrete operational, and formal operations. The first stage, sensori-motor, is when children between the ages of zero and two are just beginning to develop their language skills, thought skills, and motor skills. In turn, children use their motor skills and senses to explore and learn about their world (Piaget, 1971). From age two to seven, Piaget (1971) asserted children enter the pre-operational stage where they become less reliant on physical and sensory exploration. In this regard, children begin to mentally consider their environment from an egocentric perspective. Children at this stage are unable to view situations from another person's perspective. Furthermore, they are unable to understand complex problems as they can only focus on one aspect of a problem. In the concrete operational stage, children age seven to 11 begin to organize the information they learn, understand and follow rules, and engage in problem-solving behaviors of non-abstract concepts. Essentially, children rely on concrete materials and physical cues to problem solve (Piaget, 1971). Children gain the ability to think abstractly and problem solve during the formal operation stage (Piaget, 1971).

The importance of Piaget's theory was the emphasis placed on children as active learners (Yilmaz, 2011). Schlesinger and McMurray (2012) conveyed how criticisms of Piaget's theory of cognitive development stem from the assumption that humans' cognitive development followed a rigid linear progression similar to humans' physical development. However, that assumption failed to consider how external factors could

alter a person's trajectory of cognitive development and promote variance in behavior among individuals. While Piaget (1971) minimized the importance of a child's social environment, both Vygotsky (1980) and Kohlberg (1976) saw social relationships and culture as core components of children's cognitive development.

Sociocultural theory. Similar to Piaget, Vygotsky (1980) felt that children's cognitive development occurred in stages and children were active participants in their learning. Vygotsky described children's conceptual development in four stages. The first stage is thinking in unordered heaps, which is when preschool aged children begin to use problem-solving techniques and learning through trial and error. The second and third stages are when a child begins to think in a complex manner by making connections between objects and gaining the ability to think about abstract concepts. Children achieve a mature level of thinking in the final stage in which they gain the ability to simultaneously consider and account for multiple abstract concepts at one time. In contrast to Piaget's view of children as solitary learners, Vygotsky's sociocultural theory expressed the importance of considering social and cultural influences on children's cognitive and social development (Stafford, 2013). In this case, the emphasis was placed on social interactions, verbal communication, and relationships between a child and their peers, parents, teachers, or other adults. Under a sociocultural theoretical perspective, children are still active learners, but their ability to learn can be enriched and enhanced through the interactive support provided by more knowledgeable adults or peers. This included challenging children beyond their cognitive capabilities (Stafford, 2013).

Moral stage theory. Like Vygotsky, Kohlberg (1976) considered the importance of a child's environment in relation to their cognitive and moral development.

Kohlberg's theory of moral development expanded upon Piaget's research involving cognitive and moral development. According to Kohlberg's (1976) moral stage theory, individuals mature from infancy to adulthood in stages where cognitive development is paralleled by moral development. Kohlberg and Hersh (1977) described the moral stages of Kohlberg's theory, which is made up of three levels with two stages per level. The first level is called the pre-conventional level, which emphasizes an individual approaching moral issues through personal interest. The pre-conventional level encompasses stages one and two of moral development where a child learns obedience through rewards and punishments, and begins to gain awareness and concern for the needs of others. The second level is the conventional level, which involves stages three and four when a child demonstrates the ability to follow established rules, respect authority, fulfill role responsibilities, and develop interpersonal relationships. The last level is the post-conventional level, which signifies a higher level of thinking where a person can consider morality cross-culturally, understand universal ethical principles, and evaluate the morality of laws.

Kohlberg's theory was criticized for focusing on justice, obligatory moral judgments, and humans primarily acting in self-interest, which failed to consider other aspects of morality (Walker, 2004). Thompson (2012) explained how moral development researchers began to focus on concepts relative to a child's moral development such as socialization of moral behaviors, development of moral personality,

and knowledge of values and rights. Nancy Eisenberg (1995) and Martin Hoffman (1996) expanded the scope of morality to include the development of empathy and prosocial behaviors.

Theory of prosocial development. Eisenberg's (1995) theory of prosocial development described levels of prosocial reasoning and sociocognitive skills beginning from infancy to childhood when a child matures from being egocentric to recognizing the needs of others. As the child progresses through childhood into pre-adolescence, they start to care about what others think of them and will engage in activities that will impress others. During adolescence, a child begins to identify with others, and demonstrate feelings of empathy and guilt. Moreover, Eisenberg's (1995) model considered how prosocial development is impacted by affective motivations such as empathy, sympathy, personal distress, and guilt, and other elements such as socialization and personality factors.

Theory of empathy development. Hoffman's (1996) theory of empathy development focused on children's development of empathetic emotion and cognitive sensitivity as well as parents' role in facilitating children's moral internalization. Hoffman described a child's development of empathic distress in five stages beginning with reactive crying in infancy to the last stage where a child has the ability to empathize with the lives and situations of other individuals or an entire group. Similar to Eisenberg (1995), Hoffman's (1996) theory suggests children are initially egocentric in which their empathetic response to another person's distress is to personally feel distressed. Then children transition into a quasi-ego-centric state where they begin to recognize the

distress of others but still lack the ability to fully understand how to offer assistance. By the veridical empathic distress stage, children come closer to recognizing the difference between self and others, which enables them to better understand what others are feeling. By the final stage, children have a greater depth of understanding of others' situations and experiences, and can empathize with individuals and groups.

Personality Development

Another aspect of human development that Erik Erikson (1959) and Sigmund Freud (1962) focused on is personality development. Based on the psychodynamic theoretical approach, Freud (1962) theorized a child's unconscious urges or desires controls his or her behavior. According to Freud's (1962) psychoanalytic theory of child development, the *id*, *ego*, and *superego* represent components of the mind and stages of development. In Freud's model, the *id* is the first stage of development when a child is driven by self-impulses. Then as children transition into the second stage, they begin to learn not all of their desires will be met. By the second stage, referred to as the *ego*, they start to understand what is realistic and possible. The last stage is the *superego*, which is when children learn morals and values, and gain the ability to control selfish urges. Freud's (1962) theory also emphasized the role of parents, particularly mothers, on children's personality development through parental actions meant to control aggressive behaviors. The theory was criticized for attributing negative behavioral development on parental actions and omitting other elements of the child's environment that also have an influence on behaviors and personality development (Clinard & Meier, 2008).

Theories of identity development. Building upon Sigmund Freud's work, Erikson (1959) created a stage theory for human development that focused on identity development across the human lifespan. Erikson's (1959) psychosocial theory emphasized the importance of social interactions on children's personality and identity development. Erikson's theory consists of eight stages, but the first five stages are relevant to the development of individuals from infancy to adolescence, which included trust vs. mistrust, autonomy vs. shame and doubt, initiative vs. guilt, industry vs. inferiority, and identity vs. role confusion.

Erikson (1959) theorized at each stage individuals face a crisis in which environmental factors impact outcomes, including their social and emotional development. In the first stage, the degree of trust and attachment developed between an infant and their caregivers is based on whether the child's needs are consistently met and whether the child is receiving warmth and loving affection or being neglected. In the second stage, toddlers begin to develop control over physical capabilities as well as develop a sense of autonomy by learning to make simple choices that promote self-esteem and confidence. Children continue to develop their self-concept in the initiative versus guilt stage by engaging in new activities and learning through experimentation and stimuli. In the fourth stage, children age 5 to 11 develop self-confidence through social interactions with peers and adults. Children's confidence is promoted and reinforced through the encouragement they receive from parents, caregivers, and teachers. In the fifth stage, adolescents begin to explore their independence and form their personal identity, which helps to strengthen confidence, establish their sense of self, and promote

self-sufficiency. According to Erikson (1959), developing a strong sense of identity leads to positive behavioral adjustment, whereas weak identity can result in maladjustment and hinder emotional maturity into adulthood.

Although Erikson's theory continues to be influential, researchers (e.g., Luyckx, Goossens, Soenens, & Beyers, 2006; Marcia, 1966) modified the theory to be more flexible and account for different modes of identity development. For instance, Marcia's (1966) identity status model presented modes of identity development in which individuals explore different identities before selection, internalize the identities of others, continue to search for alternative identities, or lack commitment to and exploration of identity choices. Similarly, Luyckx et al. (2006) presented a model of identity development that accounted for exploration and commitment as well as the potential for individuals to become stuck in the identity development process. While Erikson viewed development as sequential, Marcia (1966) presented identity development as a pathway-oriented process where adolescents individually develop their identity while interacting with individuals in various social contexts.

Development and Behavioral Adjustment

Children and adolescents undergo various changes as they grow and develop. When transitioning from childhood to adulthood, individuals go through physical, emotional, psychological, cognitive, moral, and social development (Charlesworth, 2013; van Buuren, 2014). This development is promoted by individual, social, and environmental factors that also influence youths' behavioral adjustment and the

possibility for maladaptive outcomes such as juvenile delinquency (Fairchild, Goozen, Calder, & Goodyer, 2013; Kochanska, Kim, Boldt, & Yoon, 2013).

Theoretical Explanations for Juvenile Delinquency

Criminologists, psychologists, and sociologists sought to explain how antisocial, delinquent, and criminal behavior arise among youth and potentially continues into adulthood (Delisi & Vaughn, 2014; Moore, 2011). Jessor (1991) defined problem behavior as socially unacceptable or illegal conduct that requires social control responses. In essence, problem behavior encompasses actions like risk taking, substance use, delinquent behavior, and criminal behavior. Dishion and Patterson (2006) went further to describe the variation in labeling problem behavior from early childhood to adolescence in terms of what victims and adults consider to be the most problematic or adverse during a specific stage of development. In early childhood, problem behaviors such as noncompliance, oppositional behavior, and temper tantrums are of the greatest concern. In middle childhood, the concern lies with overt and covert antisocial behavior and relational aggression. Lastly, in adolescence the primary concerns are substance use, delinquency, high-risk behavior, and sexual behavior. Based on the American Psychiatric Association's (2013) *Diagnostic and Statistical Manual of Mental Disorders*, consistent presentation of the problem behaviors mentioned above are indicative of oppositional defiance disorder during childhood, conduct disorder during adolescence, and antisocial personality disorder in adulthood.

Antisocial behavior is defined as physically or psychologically harmful conduct that harasses, alarms, or distresses others (e.g., caregivers, victims; Orobio de Castro,

Veerman, Koops, Bosch, & Monshouwer, 2002). Antisocial behavior includes conduct such as disobedience, aggression, violence, deviance, and delinquency (Eddy & Reid, 2002; Snyder, Schrepferman, Bullard, McEachern, & Patterson, 2012). Common during adolescence, antisocial behavior was found to peak at age 17 (Moffitt, 1993) and decline as adolescents transition to adulthood (Moffitt, 2006).

As a specific category of antisocial behavior, Dishion and Patterson (2006) explained the differentiation of delinquent behaviors from other forms of antisocial behavior in that they are actions considered illegal by society. According to the Office of Juvenile Justice and Delinquency Prevention (OJJDP, 2014), delinquent acts include drug offenses and crimes against property, persons, or public order committed by juveniles. Similar to Moffitt's (1993, 2006) findings related to antisocial behavior, Gottfredson and Hirschi (1990) presented an age-crime curve, which showed adolescence as a significant period for increases in criminal behavior that peaks around 16 to 18 years of age and rapidly decreases during early adulthood. In addition to basic human development, theorists (e.g., Akers, 1998; Bandura, 1986; Hirschi, 1969; Lombroso, 1876; Patterson, 1982; Sampson & Laub, 1993) have focused on biological, physiological, psychological, and sociological explanations for how problem behavior and juvenile delinquency arises.

Biological Explanations

Early theorists (e.g., Joesph Gall, Charles Goring, Cesare Lombroso) focused on biological explanations for problem behavior, delinquency, and crime (Thompson & Bynum, 2010). Gall's theory of phrenology claimed a person's mental and behavioral characteristics could be determined through skull shape and irregularities (Nogueira de

Almeida, Alho, & Teixeira, 2014). Similar to Gall, Lombroso (1876) measured the shape of prisoners' physical traits, particularly their skulls, jaw bones, and hands. Lombroso concluded there is a *born criminal type* who were biologically predisposed to engage in delinquent and criminal behaviors. However, Goring (1913) tested Lombroso's theory and found no significant differences between offenders and nonoffenders in skull shape and various other physical traits. Therefore, Goring's conclusion was there is no physical criminal type. Researchers expanded their investigations of antisocial, delinquent, and criminal behavior to other biosocial factors such as brain function (Chein, Albert, O'Brien, Uckert, & Steinberg, 2011; Somerville, Hare, & Casey, 2011), and genetics (Kendler, Patrick, Larsson, Gardner, & Lichtenstein, 2013; Tuvblad, Narusyte, Grann, Sarnecki, & Lichtenstein, 2011; Vaske, Boisvert, & Wright, 2012).

Brain function. Galván (2014) noted neurobiological research has helped to differentiate the brain function and capabilities of adolescents, children, and adults as well as helped to explain adolescent behavior. Researchers (e.g., Casey & Caudle, 2013; Galván, 2014) described adolescence as a distinct developmental stage. Compared to children, adolescents have better cognitive, reasoning, and intellectual capabilities, but they still lack the emotional regulation, experience, and independence of adults. During adolescence, individuals are undergoing an adaptive transition from dependence on caregivers to independence and autonomy. Moreover, adolescents' brains are still maturing. Compared to adults, adolescents have less impulse control, rational decision-making (Casey et al., 1997; Steinberg, 2013), and resistance to peer influence (Albert & Steinberg, 2011; Steinberg, 2013), as well as increased susceptibility to emotional and

arousing information (Casey & Caudle, 2013; Somerville et al., 2011). Galván (2013) explained environmental contexts facilitate brain function and development in adolescence, which promotes rewards seeking, emotional reactivity, and risk-sensitivity.

Genetics. Researchers have found comorbidity, genetic, and environmental factors all have a role in externalization of behavior in childhood (Newsome, Boisvert, & Wright, 2014) and the potential development of antisocial behavior in adolescence (McAdams, Rowe, Rijdsdijk, Maughan, & Eley, 2012). Glenn and Raine (2014) explained how prior genetic research used twin and adoption samples to help separate genetic and environmental factors. In turn, this allowed researchers to distinguish genes heritable influences on antisocial behavior from those promoted by environmental factors. In a meta-analysis of 51 twin and adoption studies, Rhee and Waldman (2002) found genetic influences accounted for 41% of the variance in antisocial behavior and environment accounted for 59% of the variance in antisocial behavior. According to Simons, Beach, and Barr (2012), behavioral genetics research indicated genetics accounts for 30% to 50% of the variance for all types of human behavior.

Researchers have identified specific genes (e.g., catechol-*O*-methyltransferase gene, dopamine D4 receptor gene, monoamine oxidase A gene) that increase the risk of antisocial behavior (DeYoung et al., 2010; Fergusson, Boden, Horwood, Miller, & Kennedy, 2011, 2012; Gadow, DeVincent, Olvet, Pisarevskaya, & Hatchwell, 2010). Conversely, Vassos, Collier, and Fazel (2014) conducted a meta-analysis of 185 genetic association studies that used aggression or violent behavior as outcome variables. Their analysis showed no statistically significant associations between aggression and a set of

genetic variants. Vassos et al. (2014) concluded genes should not be used to predict dangerousness, which coincided with Simons et al.'s (2011) assertion that genes alone do not instruct human beings to engage in particular behaviors. Furthermore, Glenn and Raine (2014) and Simons et al. (2012) cautioned against attributing antisocial and aggressive behavior to a single gene, particularly since environmental variables tend to function as the main effect in behavior with genes acting as moderators within associations.

Behavioral genetic researchers, such as Moffitt, Caspi, and Rutter (2006) and Shanahan and Hofer (2011), showed that environment can influence gene expression and subsequently the probability of behaviors. Gene by environment interactions were found to influence prosocial behavior (Bakermans-Kranenburg & van Ijzendoorn, 2011; Knafo, Israel, & Ebstein, 2011), emotion regulation (Belsky & Beaver, 2011), substance use (Brody et al., 2011), aggression (Simons et al., 2011), and delinquency (Åslund et al., 2011). Simons et al. (2012) found interactions between three gene variants (i.e., MAOA, DRD4, and 5-HTT) and community and family factors predicted involvement in criminal behavior. In a study using approximately 3,000 sibling pairs, Beaver (2011) reported increases in heritability estimates for serious and violent delinquency in relation to increased exposure to factors such as delinquent peers, school commitment, alcohol consumption, neuropsychological deficits, and residing in a broken home. In addition, increased exposure to school attachment also increased heritability estimates for serious delinquency. While researchers suggest using genetic information to enhance social scientific explanations of human behavior, environmental factors remain a crucial

component in understanding antisocial, delinquent, and criminal behavior (Glenn & Raine, 2014; Simons et al., 2012).

Psychosocial Explanations

In contrast to biological factors, other researchers (e.g., Bandura, 1986; Hirschi, 1969; Jessor, 1991; Patterson, DeBaryshe, & Ramsey, 1989) highlighted the importance of considering psychosocial risks on adolescents' personal development and social adaptation. Psychosocial explanations of developmental outcomes, such as delinquency, integrate psychological and social theories (Moore, 2011; Steinberg, 2008). According to Jessor's (1991) problem behavior theory, all behavior can be explained by the interaction among societal norms distinguishing problem behavior from conventional behavior, youths' personality, and youths' perceived environment. In Patterson, DeBaryshe, and Ramsey's (1989) developmental model of antisocial behavior, the focus was on familial, social, and educational variables as determinants of conduct problems in early childhood, and potential development of delinquency during late childhood and adolescence.

Jessor (1991) and Patterson et al. (1989) presented similar variables that contribute to the development of problem and antisocial behavior. The following is a list of variables Jessor and Patterson et al. noted as influential to maladjustment and problem behavior: harsh and inconsistent discipline; poor parental involvement, monitoring, and supervision; negative attitudes toward school, poor academic achievement, school dropout, rejection by peer groups, deviant peer influences, and low social cognitive skills. These are variables that derive from and are integrated within various theoretical models involving social learning theories (Akers, 1998; Bandura, 1986; Sutherland & Cressey,

1984), social control theories (Hirschi, 1969; Sampson & Laub, 1993), and coercion theory (Patterson, 1982).

Social learning theories. Social learning theorists (e.g., Akers, 1998; Bandura, 1986; Sutherland & Cressey, 1984) explained the role of socialization, particularly by family, teachers, and peers, in the development of delinquency. Gottfredson and Hirschi's (1990) self-control theory, also referred to as the general theory of crime, argued family had a primary role in youths' socialization and their development of delinquent and criminal behaviors. Social learning theory offered a more holistic approach to explaining behavioral outcomes by suggesting socialization agents extend beyond the family to include peers and other influential adults (e.g., teachers, coaches, mentors; Akers, 1998). The socialization process involves internalization of cultural norms, values, and attitudes; the development of a sense of self, and the shaping of behaviors by internal and external forces (Bandura, 1986).

According to Bandura's (1986) social cognitive theory, involvement in delinquency is influenced by the interaction between criminal judgment competence and psychosocial factors such as guilt and self-efficacy. Children learn and adopt moral beliefs and values within the socialization process, which youth can apply in their everyday lives and to help regulate their conduct. However, Newton and Bussey (2012) indicated youth could become morally disengaged due to low levels of criminal judgment competence, empathetic and academic efficacy, and resistance to peer pressures, which have an indirect and mediational influence on their delinquent involvement. Researchers reported moral disengagement and antisocial conduct, including crime and delinquency,

were found among samples of at-risk adolescents, early adolescents, serious juvenile offenders, college students, and adult offenders (Shulman, Cauffman, Piquero, & Fagan, 2011; Stuewig, Tangney, Heigel, Harty, & McCloskey, 2010). Additionally, moral disengagement was found to have a mediational role in the development of antisocial behavior in a sample of 187 boys ranging in age from 1.5 to 17 years old (Hyde, Shaw, & Moilanen, 2010) and predicted drug use and delinquency within a 336 adolescent sample (Passini, 2012).

According to Akers' (1998) and Sutherland and Cressey's (1984) differential association theories, exposure to deviant attitudes and behaviors modeled by adults and peers increased youths' risk of delinquent behaviors. Association with deviant peers provides opportunities to become involved in delinquent behaviors and encouragement for deviance (Akers 1998; Sutherland & Cressey, 1984; Worthen, 2012). Chapple, Vaske, and Worthen, (2014) and Chen, Drabick, and Burgers (2014) asserted deviant peer affiliations has consistently demonstrated to be a robust predictor of and be significantly related to the development and maintenance of delinquency. Researchers have shown affiliation with deviant peers is associated with behavioral outcomes such as antisocial behavior (Granic & Patterson, 2006), aggression (Patterson, Dishion, & Yoerger, 2000), and delinquency (Megens & Weerman, 2011; Patterson et al., 2000). Furthermore, Jennings, Higgins, et al. (2013) found individuals' self-control decreased, and their delinquent peer associations increased as they aged. While deviant peer affiliations can increase the risk of problem behavior (Dishion & Tipsord, 2011), prosocial interactions with peers can promote positive behavioral and academic outcomes

(Véronneau, Vitaro, Brendgen, Dishion, & Tremblay, 2010). Additionally, Carson (2013) indicated the impact of deviant peer associations on behavior is dependent upon youths' attitudes towards delinquent behaviors. In addition to peer influences, the principles of social learning theory were applied by other theorists to explain how patterns of family interactions (Patterson, 1982) and the quality of social bonds can impact youths' development of conduct problems and involvement in delinquency (Hirschi, 1969; Sampson & Laub, 1993).

Social control theories. Social control theorists (e.g., Hirschi, 1969; Sampson & Laub, 1993) focused on social factors that promote self-control and reduce the risk of delinquent behaviors. One particular social control theory important within criminology is Travis Hirschi's (1969) social bond theory, which contends strong social bonds act as protective factors against problem behavior and delinquency. Based on Hirschi's theoretical framework, quality social bonds with family, peers, and school inhibit delinquent motivations, whereas weak social bonds due to inadequate socialization increase the propensity to engage in delinquency. The four factors that attach individuals to society include attachment to others (e.g., family, peers), commitment to conventional activities (e.g., attending school), involvement in activities (e.g., spending time with family, extracurricular activities), and belief (e.g., moral engagement, law-abidance; Hirschi, 1969; Peterson, Lee, Henninger, & Cubellis, 2014).

Social bond theory has been used as a theoretical framework to evaluate behavioral outcomes, such as problem behavior and delinquency, in relation to the four domains of social bonds (Chui & Chan, 2012; Hardaway, McLoyd, & Wood, 2012; Li &

Lerner, 2011). Researchers have found attachment to parents (Chui & Chan, 2012; Fagan, Van Horn, Hawkins, & Jaki, 2013; Gault-Sherman, 2012; Hoeve et al., 2012) and commitment to school (Hirschfield & Gasper, 2011; Hoffmann, Erickson, & Spence, 2013; Li & Lerner, 2011) were significant and robust predictors of delinquent behavior. In terms of involvement, Jenson and Fraser (2011) explained how participation in extracurricular activities such as arts, sports, tutoring, volunteering, and clubs, promotes resilience against maladjustment among youth. Barber, Stone, and Eccles (2010) and Hardaway et al. (2012) found youth involved in extracurricular activities spent less time with deviant peers and had fewer problem behaviors than youth not participating in extracurricular activities. Furthermore, unsupervised and unstructured activities with friends were associated with greater exposure to community violence (Goldner et al., 2011), and behavioral and academic problems among adolescents, particularly those from low-income households and residing in dangerous neighborhoods (Richards et al., 2004). Hirschi's (1969) social bonding theory was later extended by Sampson and Laub (1993) with their creation of the age-graded theory of informal social control.

Sampson and Laub's (1993) age-graded theory of informal social control explained the role of social bonds and individual differences in deterring delinquent and criminal behavior throughout a person's life course. Sweeten, Piquero, and Steinberg (2013) described the emphasis on the robust relationship between age and crime that helped to explain the development of antisocial and offending behavior throughout the life-course. However, they also established the significance of simultaneously

considering sociological, biological, and psychological changes that occur during childhood through adulthood.

According to Sampson and Laub's (1993) age-graded theory of informal social control, structural factors, such as low socioeconomic status, residential mobility, family disruption, and immigrant status, coupled with individual differences (e.g., temperament, conduct disorder) can affect the development of social ties and the potential for delinquency during childhood and adolescence. Additionally, they explained how adolescents' propensity to engage in juvenile delinquency is influenced by variables including poor family relationships, lack of supervision, harsh discipline, weak attachment to school, poor school performance, and delinquent sibling and peer influences. Moreover, delinquent activities during childhood and adolescence can disrupt informal social bonds to family, peers, and school, which can negatively impact the development of social bonds in adulthood as well as influence continued deviance and criminal behavior as an adult.

Sampson and Laub (1993) tested their theory using Glueck and Glueck's (1968) longitudinal data, which contained data for a sample of at-risk and non-delinquent adolescent boys, who were tracked until they were 70 years of age. Glueck and Glueck's (1968) Unraveling Juvenile Delinquency Project focused on studying the development of juvenile delinquency. In contrast to prior researchers who focused on gang and cultural influences, Glueck and Glueck (1968) concentrated on the role of family and personal characteristics of adolescents on delinquent involvement. Their study compared a sample of 500 delinquent and 500 non-delinquent White males, aged 10 to 17. The Glueck's

collected data pertaining to 402 factors of youths' social, psychological, and biological characteristics including family life (e.g., structure, economic status, parenting strategies), parental criminality and substance use, school performance, educational and occupational ambitions, physique types, health, intelligence (IQ), temperament, and character structure.

The Glueck's (1968) extensive study on delinquency established a set of factors that contribute to delinquency, and led to subsequent research efforts using the data they collected. The Glueck's found many traditional explanations of delinquency such as poor health, feelings of insecurity or anxiety, and neurotic behavior were not significantly different among delinquent and non-delinquent youth. However, they also found various traits that significantly distinguished boys in the delinquent group from the non-delinquent group. Delinquent youth tended to have traits such as a muscular body type; be impulsive, extroverted, aggressive, hostile, stubborn, and adventurous; had more direct and concrete intellectual capacities, and came from homes with poor nurturing and stability. In addition, Glueck and Glueck found a vast majority of the delinquent group in their study engaged in misconduct at school. In turn, they concluded school-based delinquency interventions could serve as a means for preventing juvenile delinquency through in-depth assessments of youths' family background, personality, and psychological state by skilled professionals (e.g., social workers, psychologists, psychiatrists).

Sampson and Laub (1993) tested their age-graded theory of informal social control using Glueck and Glueck's (1968) longitudinal data. As a result, Sampson and

Laub found the relationship among delinquency, cumulative social disadvantage, and personality traits were mediated by social bonds to family, peers, and school.

Furthermore, they showed an increased likelihood of adolescents engaging in criminal behavior when their social bonds were weak.

Coercion theory. Patterson's (1982) coercion theory focused on bidirectional parent-child interactions that influence the social learning process, as well as the potential development and reinforcement of deviant behaviors. Essentially, the coercion process is cyclical in that a child's behavior leads to parental actions, which elicit aversive responses from the child. Over time, the nature of responses by both parent and child escalate to the point where parents resort to increasingly harsh disciplinary practices or fail to respond to the child's behavior. In turn, ineffective parenting practices (e.g., ineffective discipline, poor parental monitoring) reinforce the child's negative behaviors and lead to poor parental control over problem behaviors. In other words, parents' use of ineffective parenting practices eventually conditions their children to ignore them and teaches children problem behavior is acceptable (Patterson, 1982).

Dishion, Véronneau, and Myers (2010) indicated negative parent-child interactions during childhood lead to serious behavioral outcomes, including risky behavior, violence, and substance use in adolescence and adulthood. Coercive interactions were related to conflicts with toddlers (Waller, Gardner, Dishion, Shaw, & Wilson, 2012), and increased noncompliance and oppositional defiant behaviors in young children (Smith, Dishion, et al., 2014). Smith, Dishion, et al. (2014) also found continued coercive interactions into middle childhood were predictive of problem behavior in

school. Researchers have found associations between low levels of positive parenting, such as inconsistent discipline, corporal punishment, and decreased parental involvement, and high levels of antisocial behavior and callous unemotional behavior in youth (Kochanska et al., 2013; Kroneman et al., 2011; Pasalich et al., 2011). Additionally, researchers showed high quality parenting through parental warmth and involvement predicted positive behavioral, socioemotional, and cognitive outcomes during childhood and adolescence (Hawes et al., 2011; Kimonis, Cross, Howard, & Donoghue, 2013).

Risk and Resiliency Factors of Problem Behavior

Collectively, the behavioral theories and models presented in this discussion identified a wide variety of variables that have the potential to prevent or promote antisocial and delinquent behavior among children and adolescents (Akers, 1998; Bandura, 1986; Gottfredson & Hirschi, 1990; Hirschi, 1969; Jessor, 1998; Patterson, 1982; Sampson & Laub, 1993; Sutherland & Cressey, 1984). Jessor (1998, 2014) also established the dynamic between risk factors and resiliency factors in the development of problem behavior. Risk factors included factors that encourage problem behavior and delinquency such as low self-esteem, low expectations of achievement, low school commitment, identity confusion, moral disengagement, deviant peer influences, sensation-seeking, family conflict, low parental support and control, lack of social bonding, and socioeconomic disadvantage (Jenson & Fraser, 2011; Jessor, 1998). Resiliency factors were those that buffered against adolescent problem behavior such as parent-child attachment, supportive family relationships, school commitment and achievement, involvement with prosocial groups and activities, positive peer associations,

religious faith, intolerance of deviance (Jessor, 1998), strong self-efficacy and self-esteem, social competence, and adaptive cognition (Sampson & Laub, 1993).

While the presence of one or more risk factors increases the potential for maladaptive outcomes, Jenson and Fraser (2011) asserted such risks do not guarantee the development of problem behavior. Along with risk factors, youth can have protective factors that help buffer against the risk of negative behavioral outcomes. According to Jessor (1998), the impact of risk factors on problem behavior is low when the influence of protective factors is high. Ultimately, explaining how delinquency arises in adolescents requires consideration of developmental processes from childhood to adolescence, risk and resiliency factors, personal characteristics, and environmental factors that jointly contribute to variations in youths' behavioral outcomes (Bernat, Oakes, Pettingell, & Resnick, 2012; Jessor, 2014).

Crime, Delinquency, and Generational Differences among Immigrants

Research pertaining to immigrants and crime began with studies investigating the relationship between migration and crime. One of the first studies to investigate the relationship between migration and crime was conducted by Sellin (1938), and showed native-born Americans had higher rates of crime compared to immigrants of various nationalities. Another pertinent finding of the study was an increase in crime rates among successive generations of immigrants' offspring, which eventually became more reflective of native-born individuals. Similarly, Butcher and Piehl (1998) conducted a study investigating differences in self-reported crime involvement between immigrants and native-born individuals. They found immigrants were less criminally active

compared to native-born individuals in terms of self-reported crime, having contact with law enforcement, having contact with the criminal justice system, and being formally charged with a crime.

The primary issue with earlier studies was the lack of differentiation among immigrants based on generational status or acculturation status. This lack of differentiation resulted in samples that included the offspring of immigrants or second-generation immigrants either within the immigrant group or within the native-born group (Bersani, 2014b). Lee and Martinez (2009) asserted the importance of considering generational differences because the offspring of immigrants will have American mainstream as a reference whereas their immigrant parents' frame of reference will be their culture of origin. This assertion coincided with the research findings of Bui (2009), Bersani (2014b), and Powell, Perreira, and Harris, 2010, which demonstrated increases in delinquency, crime, and violence rates in relation to Americanization among successive generations of immigrants. Additional support was offered by Sampson, Morenoff, and Raudenbush's (2005) findings, which established socialization into dominant American culture was associated with increased crime rates among successive generations of the offspring of immigrants.

The use of generational status to account for acculturative differences among immigrants has been common practice in research related to immigrants (Bersani, 2014b; Bui, 2009; Le & Stockdale, 2008). In contrast, other researchers have used language acculturation in terms of language preference and usage as a means of differentiating immigrants (Kulis, Marsiglia, & Nieri, 2009; Miller, 2011). This dichotomy is reflected

in Samaniego and Gonzales' (1999) assertion that researchers have frequently used language use and generational status as a means of operationalizing acculturation status.

Acculturation is defined as a process of cultural change that results when two culturally distinct groups or individuals come into contact (Berry, 1997). However, acculturative attitudes or statuses (i.e., assimilation, separation, integration, and marginalization) reflect differences in individuals' acculturation processes and ability to adapt (Sam & Berry, 2010). Generational status and acculturation status have come to be used interchangeably in research investigating immigrants. This synonymous use of those terms is due to generational status and language preference accounting for over 60% of the variance in individual acculturation status (Samaniego & Gonzales, 1999).

Acculturation and Delinquency

Research pertaining to immigrants used acculturation or generational status as an important variable for investigating delinquency (Bersani, 2014b; Bui, 2009; Miller, 2011; Miller, Barnes, & Hartley, 2011; Powell et al., 2010; Reingle, Jennings, & Maldonado-Molina, 2011). Some researchers used acculturative stress as a variable for assessing delinquency as an outcome (Kulis et al., 2009; Mesch et al., 2008). In other cases, the concept of delinquency was used to select other variables that were found to be related to acculturation (Parsai, Marsiglia, & Kulis, 2010). However, in some cases the researchers selected variables that were associated with delinquency in terms of offending (Bersani, 2014a; Jennings, Zgoba, et al., 2013).

Delinquency was investigated through trajectories studies in terms of life course from adolescence to adulthood and utilized generational differences as a main study

variable (Bersani, 2014a, 2014b; Powell et al., 2010). The researchers of those studies utilized existing data from the National Longitudinal Study of Adolescent Health and National Longitudinal Survey of Youth 1997 (Bersani, 2014a, 2014b; Powell et al., 2010). The use of secondary data allowed researchers to perform studies with nationally representative samples consisting of 4,000 to over 20,000 participants (Bersani, 2014a, 2014b; Powell et al., 2010).

The focal point of trajectory studies addressing delinquency pertained to concepts such as the annual frequency of crime involvement (Bersani, 2014b), offending trajectories (Bersani, 2014a), and variations in delinquency (Powell et al., 2010). In a study of delinquency, Powell et al. (2010) found delinquency peaked during adolescence and declined between middle adolescence and early adulthood for both male and female first- and second-generation immigrants. However, in relation to third-plus generation males, delinquency increased from early adolescence and began to decline around early adulthood. In relation to offending, Bersani (2014a, 2014b) indicated no significant differences in delinquency trajectories between second-generation immigrants and native-born individuals. Moreover, first-generation immigrants had lower rates of participation and frequency of offending compared to both second-generation immigrants and native-born individuals. In addition to trajectory studies, other researchers selected to focus on dimensions of delinquency (Bui, 2009; Kulis et al., 2009; Mesch et al., 2008; Miller, 2011; Miller et al., 2011; Reingle et al., 2011).

In a longitudinal study using a nationally representative sample of 12,868 immigrant youth, Bui (2009) investigated contributing factors to variances in

delinquency. In this case, delinquency was examined on three levels: property delinquency, violent delinquency, and substance abuse. Similar to the study results of Bersani (2014b), Bui (2009) found students that were first-generation immigrants had significantly lower levels of delinquency on all three levels compared to their peers within the second-generation immigrant or later group. In addition, Vaughn, Salas-Wright, DeLisi, and Maynard (2014a) found lifetime antisocial behavior for native-born Americans was significantly higher than their immigrant peers regardless of their region of origin (i.e., Asia, Africa, Europe, and Latin America). Furthermore, Alvarez-Rivera, Nobles, and Lersch (2014) found higher levels of acculturation predicted arrests and convictions of misdemeanors and felonies in a sample of Latino immigrant adults aged 17 and older. While Bui (2009) conducted a study investigating multiple dimensions of delinquency, other researchers focused on one form of delinquency such as violent delinquency and substance use (Kulis et al., 2009; Mesch et al., 2008; Miller, 2011; Miller et al., 2011; Reingle et al., 2011).

Despite emphasizing one domain of delinquency, studies pertaining to violence were reflective of the results attained in Bui's (2009) study (Mesch et al., 2008; Reingle et al., 2011). In a study evaluating predictors of serious violence and the effect of generational differences among a Hispanic youth sample, Reingle et al. (2011) found there is a greater risk of violence among U.S. born Hispanic adolescents who are third-generation or beyond. In other studies, researchers indicated an increased risk of violence among immigrant youth as a result of acculturative stress and rapid acculturation (Le & Stockdale, 2008; Mesch et al., 2008). Furthermore, acculturation was found to

have a negative effect on family and school processes, which in turn affect delinquency (Bui, 2009). According to Mesch et al. (2008), the link between rapid acculturation and violent behavior causes increased distance in the relationship between parents and children. The study findings of research on substance abuse contrasts with research addressing violence (Kulis et al., 2009; Miller, 2011; Miller et al., 2011)

Acculturative stress and acculturation were examined within research related to substance use (Kulis et al., 2009; Miller, 2011; Miller et al., 2011). According to Kulis et al. (2009), perceived discrimination was associated with substance abuse, but acculturative stress was not associated with substance abuse in terms of increased amounts and frequency. Miller (2011) similarly explored drug use in relation to acculturation and found drug availability, gang membership, and peer influence on drug use were significantly related to youths' drug use. However, acculturation was the only variable that was not significantly related to minor or major drug use. These findings coincided with the results of Kulis et al. (2009), which also indicated a nonsignificant relationship between acculturation and drug use. In another study involving drug use, Miller et al. (2011) found gang membership was significantly related to drug availability, level of acculturation, level of marginalization, and grades in school. There was further indication that the effects of acculturation were partially mediated by marginalization (Miller et al., 2011). Those findings coincided with the study results of Mesch et al. (2008) in terms of the combination of acculturative stress and marginalization increasing the risk of violence among immigrant youth.

Cultural Identity

Adolescence is a critical period for ethnic and racial identity development among youth (Rivas-Drake et al., 2014). Phinney and Ong (2007) described ethnic identity as an individual's cultural identification and sense of belonging to an ethnic group. Youths' identity development can be fostered by their cultural background and social experiences (Atweh, 2011). In the case of immigrant youth, Schwartz et al. (2014) explained identity development could be impacted by their degree of connectedness and identification to their heritage culture and contact culture. In general, socialization has a prominent role in the transfer of cultural values from adults (e.g., parents, teachers) to youth and between peers (Kennedy & MacNeela, 2014; Knight et al., 2011).

Family processes (e.g., relationships, interactions) assist youth with exploring their cultural group, ethnic identity affirmation, and promotion of prosocial behaviors (Gaylord-Harden, Burrow, & Cunningham, 2012; Neblett, Rivas-Drake, & Umaña-Taylor, 2012; Umaña-Taylor & Guimond, 2012). According to Knight et al. (2011), interactions between mothers and children help to facilitate internalization of cultural values and subsequent ethnic identity development. Similarly, Hernández, Conger, Robins, Bacher, and Widaman (2014) found cultural socialization via parent-child relationships predicted ethnic pride within a sample of Mexican-origin adolescents. Additionally, they found parental warmth strengthened the relationship between cultural socialization and ethnic pride. Socialization also occurs in other environments such as the school setting, which provides immigrant youth with the opportunity to interact with

their peers and internalize American cultural values and traditions (Kennedy & MacNeela, 2014).

Identity development of immigrant youth has added complexity due to the adaptive challenges promoted by the acculturation process (Umaña-Taylor et al., 2014). Umaña-Taylor, Zeiders, and Updegraff (2013) indicated immigrants' migration history in terms of their generational status and age at the point of migration can influence receptivity to ethnic socialization by their family, which in turn, impacts youths' ethnic identity development. Immigrant youths' identity development can be impinged by factors such as cultural orientation (Knight et al., 2012), familial attachment, educational attachment, and peer influences (Trillo & Redondo, 2013). Different social contexts present youth with acculturative stress, family and peer conflicts, delinquent peer influences, and discrimination, which can negatively affect their behavioral outcomes (Estrada-Martínez, Caldwell, Schulz, Diez-Roux, & Pedraza, 2013). Those challenges can negatively influence youths' identity construction (Rivas-Drake et al., 2014; Trillo & Redondo, 2013). Identity construction also requires adolescents to resolve conflicts and develop close ties with others or groups (Crosnoe & Johnson, 2011). As a result, identity confusion or a weak sense of cultural identity can directly or indirectly promote poor academic outcomes, mental health issues, and problem behaviors (Brittian, Umaña-Taylor, et al., 2013; Williams, Anderson, Francois, Hussain, & Tolan, 2014).

Researchers have indicated that identity can influence development and positive adjustment of youth (Neblett et al., 2012; Williams, Tolan, Durkee, Francois, & Anderson, 2012). Williams, Aiyer, Durkee, and Tolan (2013) found ethnic identity

served as a protective factor against stressors such as acculturative stress and discrimination. Moreover, Ai, Aisenberg, Weiss, and Salazar (2014) demonstrated a strong sense of ethnic identity could buffer against mental and physical health issues. Various researchers have established associations between ethnic identity and variables such as self-esteem, depressive symptoms (Leong, Park, & Kalibatseva, 2013; Polanco-Roman & Miranda, 2013; Rogers-Sirin & Gupta, 2012), discrimination (Galliher, Jones, & Dahl, 2011), and prosocial tendencies (Armenta, Knight, Carlo, & Jacobson, 2011). In a school sample of foreign-born and US-born immigrant-origin adolescents, Tummala-Narra and Claudius (2013) found ethnic identity mitigated the positive association between perceived discrimination and depressive symptoms. Congruently, a meta-analysis by Smith and Silva (2011) disclosed improvements in the mental health outcomes of minority youth in the presence of social support and a strong sense of ethnic identity. Additionally, positive feelings towards one's ethnic group were found to be associated with positive academic outcomes (Rivas-Drake, 2011) and psychosocial adjustment (Polanco-Roman & Miranda, 2013). However, in a sample of Mexican immigrant youth, Brown and Chu (2012) found school and teacher characteristics moderated the relationship between perceptions of ethnic identity and academic performance. Furthermore, Knight et al. (2012) and Kulis, Marsiglia, Kopak, Olmsted, and Crossman (2012) established associations between ethnic identity and behavioral outcomes.

Positive youth development is related to ethnic identity, which consequentially helps to reduce internalizing symptoms and externalization of problem and criminal

behaviors (Williams et al., 2014). Ethnic identity is also predictive of youths' ability to thrive and their engagement in risk-taking behaviors (Alvarado & Ricard, 2013). According to Umaña-Taylor, Updegraff, and Gonzalas-Backen (2011), the negative association between cultural stressors (e.g., acculturative stress, discrimination, economic stress) and risky behaviors was reduced when adolescent participants had strong ethnic identity affirmation. In a study comparing juvenile delinquent and non-juvenile delinquent boys, Klimstra et al. (2011) reported non-juvenile delinquent boys displayed a stronger sense of identity than delinquent boys. Furthermore, researchers have indicated a strong sense of identity was associated with lower offending patterns (Knight et al., 2012) and substance use (Leong et al., 2013; Kulis et al., 2012).

Family Bonding

Attachment to family was found to have a significant role in controlling youths' behavior (Bui, 2009). Family cohesion is strongly valued by groups from collectivistic cultures such as Latino and Asian cultures (Leong, Park, & Kalibatseva, 2013). In collectivistic cultures, emphasis is placed on norms, duties, and obligations. In addition, priority is placed on connectedness between individuals and achieving collective goals (Greenfield & Quiroz, 2013). Moreover, there are differences in the strategies employed for coping or addressing problems by individuals that follow individualistic cultural traditions from those who follow collective cultural traditions (Kuo, 2013; Trumbull & Rothstein-Fisch, 2011). In collectivistic cultures, there is an emphasis on cooperation, cohesion, and loyalty among family members as opposed to valuing individualism and autonomy; this is referred to as familism or familismo (Dillon, De La Rosa, Sastre, &

Ibañez, 2013; Martinez, 2013; Ruiz & Ransford, 2012).

Familism exemplifies the importance of maintaining familial bonds, support, and obligations among immediate and extended family members (Smith-Morris, Morales-Campos, Alvarez, & Turner, 2013). Preserving connectedness between family members was associated with positive benefits including decreased rates of psychiatric problems (Ayón, Marsiglia, & Bermudez-Parsai, 2010; Leong et al., 2013) and psychological symptoms (Keeler, Siegel, & Alvaro, 2013; Santiago & Wadsworth, 2011), less behavioral problems (Estrada-Martínez, Padilla, Caldwell, & Schultz, 2011; Santisteban, Coatsworth, Briones, Kurtines, & Szapocznik, 2012), increased social self-efficacy (Leidy, Guerra, & Toro, 2010), and higher levels of school attachment (Stein, Gonzalez, Cupito, Kiang, & Supple, 2013). In addition, Padilla-Walker, Bean, and Hsieh (2011) found associations between family cohesion and outcomes such as positive behavioral adjustment and decreased interactions with deviant peers. In other cases, youths' gender and age affected the degree of protection familism provided from antisocial behaviors (Morcillo et al., 2011). In addition to familism, parental monitoring and attachment also have a vital role in youths' academic achievement (Niemeyer, Wong, & Westerhaus, 2009; Santisteban, Coatsworth, Briones, Kurtines, & Szapocznik, 2012).

Parental monitoring encompasses parents' behavior and knowledge about their children's leisure activities, peer groups, and whereabouts (Racz & McMahon, 2011; Veland, Bru, & Idsøe, 2014). Parental attachment is the degree of connectedness between a parent and child (Main, Hesse, & Hesse, 2011). Researchers demonstrated a link between parental monitoring and a reduction in adolescent behavior problems

(Fosco, Stormshak, Dishion, & Winter, 2012), delinquency (Walther et al., 2012), and substance use (Lac et al., 2011; Nagoshi, Marsiglia, Parsai, & Castro, 2011). Strunin et al. (2013) found a lower likelihood of risky behavior among youth who reported higher perceived parental monitoring compared to youth who reported lower perceived parental monitoring. In addition, Harris-McKoy and Cui (2013) established a lack of parental control during adolescence into young adulthood was positively associated with delinquency. However, age was found to be an important factor in which delinquent behaviors decreased when age increased.

According to Santisteban et al. (2012), parental monitoring was found to mediate the effect between acculturation and problem behaviors, whereas familism had an indirect effect on the association between parenting practices and problem behavior. Similarly, Taylor, Larsen-Rife, Conger, and Widaman (2012) demonstrated an indirect association through the marital relationship between parenting and familistic values. However, Germán, Gonzales, and Dumka (2009) indicated a significant association between familism and increased levels of parental monitoring. Moreover, parental attachment and monitoring were found to lower delinquent behavior among minority youth (Blocklin, Crouter, Updegraff, & McHale, 2011; Henneberger, Durkee, Truong, Atkins, & Tolan, 2013), and positively impact youths' beliefs about antisocial behavior among adolescents (Dane, Kennedy, Spring, Volk, & Marini, 2012). The protective benefits derived from familism by youth can be negatively impacted by acculturation leading to family conflict (Leidy et al., 2010; Leong et al., 2013).

Family conflict can arise among immigrant families due to the contrasting

perspectives, attitudes, and values held by immigrant youth and their parents (Leidy et al., 2010). The conflict results from the strong adherence parents have to their native cultural values and practices while their children are more likely to acculturate into the dominant American culture (Leong et al., 2013). Acculturation into a new culture and the increased potential for parent-child conflicts diminishes the control family has over youths' behavior (Bui, 2009). Samaniego and Gonzales' (1999) findings illuminated the mediational effect of maternal monitoring, inconsistent discipline, and family conflict on the relationship between delinquent behavior and acculturation. Lack of family conflict was found to act as a protective factor against mental health (Leong et al., 2013) and behavioral issues (Desmond & Kurbin, 2009). Furthermore, Bersani (2014a) demonstrated strong correlations between the offending patterns of youth and conflicts within familial, educational, and social domains.

The impact of parent-child conflicts and school difficulties on delinquent behavior were found to vary across first-, second-, and third-generation immigrants (Desmond & Kurbin, 2009). Comparatively, second-generation and third-plus-generation immigrant youth were significantly more likely to report delinquent activities than first-generation immigrant youth (Desmond & Kurbin, 2009). In an analysis using a Hispanic youth sample, Pérez, Jennings, and Gover (2008) conveyed an association between intergenerational conflict and violent behavior. In this case, the intergenerational conflict resulting from differences in cultural values and customs between parents and children was found to increase the likelihood of youth reporting involvement in violence. Higher rates of delinquent involvement among second-generation immigrants were also

associated with an increased likelihood of engaging with deviant peers (DiPietro & McGloin, 2012), as well as having problematic interactions with parents (Bui, 2009; Le & Stockdale, 2008), and issues at school (Bui, 2009). Acculturation can result in increases in parent-child conflicts (Desmond & Kurbin, 2009; Kim, Chen, Wang, Shen, & Orozco-Lapray, 2013), decreased familistic attitudes (Steidel & Contreras, 2003), and reduced educational commitment (Desmond & Kurbin, 2009).

School Connectedness

Immigrant parents tend to have a positive perception of education in which they view access to primary and secondary education in the United States as a means for their children to succeed within American society (Fuligni, 1998). In some cases, the value of education from immigrant parents' perspectives is elevated due to the lack of educational opportunities they had access to in their native countries (Pong & Landale, 2012). Consequently, Chiu, Pong, Mori, and Chow (2012) found immigrant youth have more positive attitudes towards education compared to nonimmigrant youth. On the other hand, immigrant youths' sense of belonging at school was less compared to their nonimmigrant youth counterparts. According to Motti-Stefanidi and Masten (2013), there is a bidirectional relationship between school success and school engagement among immigrant and nonimmigrant youth.

Researchers have also described how the educational success of immigrant youth is an indicator of positive adaptation (Motti-Stefanidi & Masten, 2013) and is related to better psychological and behavioral outcomes (Masten & Cicchetti, 2010). However, educational success among immigrants depends on the degree of education provided

within their culture of origin (Koury & Votruba-Drzal, 2014; Pong & Landale, 2012). There is variance in the length of time education is provided between countries considered to be rich and those considered to be poor (Pong & Landale, 2012). As a result, the academic outcomes of immigrant youth can differ in which some youth have equivalent or superior results compared to native-born youth while others have significantly diminished or below standard results (Crosnoe & Turley, 2011; Pong & Landale, 2012).

Immigrant youth perceive academic success as a way to enhance their employment opportunities, which in turn would allow them to assist their families (Fuligni, 1998). Additionally, children may feel indebted to their parents and a sense of guilt if they fail to do well in school. This sense of obligation is due to the various sacrifices (i.e., professional, personal, and social) immigrant youths' parents make to immigrate to the United States (Pong & Landale, 2012). Despite the sacrifices required (Pong & Landale, 2012), many immigrant parents select to migrate in order to provide their children with better educational, employment, and social opportunities (Fuligni, 1998). Adult immigrants also undergo a loss or devaluation of their professional and educational achievements in which occupational downgrading occurs within the United States among the first-generation immigrant population (Connor & Koenig, 2013; Pong & Landale, 2012).

Immigrant youth may hold the belief that educational attainment will help them secure employment and enable them to better assist their families (Kennedy & MacNeela, 2014). Immigrant youth can have a deep sense of responsibility and indebtedness to their

families, which serves as a motivating factor to excel in school (Kennedy & MacNeela, 2014). Conversely, Suárez-Orozco and Suárez-Orozco's (1995) study of poor Latin American immigrants showed immigrant youth valued education but may place priority in assisting their families. In turn, educational progress can be stunted as youth prioritize their employment or domestic (e.g., helping in the home) obligations (Fuligni, 1998). In other cases, factors such as discrimination, socioeconomic limitations, and limited English proficiency can hinder educational attainment of Hispanic immigrants (Nichols, White, & Price, 2006). Although exposed to a negative school climate, some immigrant youth still excel due to academic self-efficacy, which is the belief an individual is in control of their learning experiences (Suárez-Orozco, Rhodes, & Milburn, 2009). In addition, family involvement provides youth with additional support to promote educational engagement and help them academically achieve (Estell & Perdue, 2013; Niemeyer, Wong, & Westerhaus, 2009; Wang & Eccles, 2012).

Family involvement encompasses actions by parents or guardians such as attending parent-teacher meetings, participation in extracurricular activities, attending PTA meetings, talking with their children about school, and checking their children's homework (LaRocque, Kleiman, & Darling, 2011). Altschul (2011) found the impact of parental involvement differed depending on the context. Even though parental involvement in the home positively influenced academic outcomes, there was no association between youths' educational achievement and parental involvement in a school context. According to Roche, Ghazarian, and Fernandez-Esquer (2012), there is a relation between higher levels of educational attainment and youth reporting stronger

levels of familism. Similarly, Stein et al. (2013) demonstrated familial attachment was associated with higher levels of school attachment. In relation to youths' educational performance, Niemeyer et al. (2009) found a positive relationship between parental monitoring and academic performance, and parental monitoring had a mediational effect on the relationship between familism and academic performance.

Another relevant factor to educational attainment is language fluency (Kim & Díaz, 2013; Roche et al., 2012). Kim and Díaz (2013) found English language fluency was associated with academic adjustment and achievement. Similarly, Roche et al. (2012) demonstrated greater English language proficiency was related to higher educational attainment among second-generation immigrant youth. The school setting provides immigrant youth with an arena to interact with American-born youth (Kennedy & MacNeela, 2014). Interacting on a regular basis with their American peers allows immigrant youth to assimilate into American culture more rapidly than their adult family members. This increased assimilation of immigrant youth is particularly true in relation to learning English (Kennedy & MacNeela, 2014). As a result, immigrant parents tend to rely on their children to act as translators, also referred to as language brokers, within social interactions (Corona et al., 2012; Morales, Yakushko, & Castro, 2012). According to Gonzalez, Stein, and Huq (2013), parents' lack of English fluency and knowledge about the educational system in the United States diminishes their ability to assist their children academically succeed. In turn, some youth seek assistance from school counselors and teachers in order to succeed in school, whereas other immigrant youth may underutilize available aid due to language barriers or perceived discrimination.

Lack of school attachment and engagement by adolescents can result in negative outcomes such as emotional problems (Georgiades, Boyle, & Fife, 2013), dropping out of school, delinquency (Henry, Knight, & Thornberry, 2012), and problem behaviors (Georgiades et al., 2013; Henry et al., 2012). In a predominately African American and Latino sample, Henry et al. (2012) found dropout and serious problem behaviors, such as substance use, serious delinquency, and official offending were robustly related to school disengagement. Researchers also demonstrated positive school bonds and connectedness were associated with decreases in delinquency (Hay, Meldrum, & Piquero, 2013), and acted as a protective factor against violent risk-taking behaviors (Chapman, Buckley, Sheehan, Shochet, & Romaniuk, 2011). Furthermore, Wang, Brinkworth, and Eccles (2013) reported connectedness with teachers and peers were associated with emotional school engagement.

School engagement is a multifaceted construct that was studied based on various dimensions involving behavior, emotion, and cognition (Conner & Pope, 2014; Estell & Perdue, 2013; Li & Lerner, 2011). Behavioral engagement encompasses behaviors associated with academic functioning, such as positive classroom conduct, attending school, completing school assignments, and bringing necessary materials (e.g., textbooks, notebooks, writing tools) to school (Li & Lerner, 2011). Affective or emotional school engagement refers to youths' connection to teachers and peers as well as students' sense of belonging at school (Estell & Perdue, 2013; Li & Lerner, 2011). Lastly, cognitive engagement involves youths' educational motivation, learning strategies, aspirations, and self-efficacy (Chiu et al., 2012).

According to Fall and Roberts (2012), youths' degree of school engagement and academic achievement was predicted by their identification with school and perceptions of control. Moreover, the support they received from teachers and parents predicted youths' self-perceptions about school. In relation to specific dimensions of school engagement, Conner and Pope (2014) found affective, behavioral, and cognitive dimensions of school engagement were negatively associated with externalizing symptoms and internalizing problems. Correspondingly, Li and Lerner (2011) reported a significant association between both forms of engagement and outcomes such as depression, substance use, delinquency, and grade achievement. In this case, youth with low behavioral and emotional engagement reported lower grades and more depression, substance use, and delinquency. Adolescents with decreases in behavioral and emotional school engagement were found to have increases in delinquency and substance abuse (Hirschfield & Gasper, 2011; Wang & Fredricks, 2014). Moreover, Wang and Fredricks (2014) indicated the likelihood of dropping out of school was higher for students who had lower school engagement and exhibited more problem behaviors.

Researchers also found associations between problem behavior and school contexts in terms of school climate (Chen & Vazsonyi, 2013; Wang & Dishion, 2012). School climate is a construct that encompasses several dimensions of the educational environment such as interpersonal relationships, school functioning, quality of instruction, school values, and school environmental conditions (e.g., access to resources, school safety; Bear, Gaskins, Blank, & Chen, 2011; Leadbeater, Sukhawathanakul, Smith, & Bowen, 2015). Researchers found a relationship between positive school

climates and decreases in outcomes among youth including emotional and behavioral risks (Klein, Cornell, & Konold, 2012), problem behavior (Wang & Dishion, 2012), and deviant lifestyles (Zaykowski & Gunter, 2012). Higher levels of school climate were also related with less school violence (Steffgen, Recchia, & Viechtbauer, 2013) and peer victimization (Khoury-Kassabri, 2011).

Other researchers indicated the importance of immigrant status on the influence of school climate (DiPietro, Slocum, & Esbensen 2015; Georgiades et al., 2013). DiPietro, Slocum, and Esbensen (2015) reported the moderating effect of immigrant status on the association between youth violence and school climate. Attending schools with a more delinquent culture and higher levels of school commitment increased immigrant youths' risk of violent involvement, whereas native-born youths' violent involvement was relatively unaffected. Furthermore, Georgiades et al. (2013) demonstrated students' perceptions of belonging, and the immigrant, racial, and ethnic compositions of schools were associated with problem and emotional behaviors.

Peer Influence

Socializing with peers is another important context for youths' development and behavioral adjustment (Brechwald & Prinstein, 2011; Prinstein, Brechwald, & Cohen, 2011). In a review of the literature related to peer contagion influences, Dishion and Tipsord (2011) concluded there is a connection between interactions with peers and increases in aggressive behavior during early to middle childhood. Moreover, interactions with peers throughout adolescence were linked to increases in delinquency, violence, and substance use. Researchers demonstrated the significant impact peer

socialization has on adolescents' behaviors such as delinquency (Burt & Klump, 2013; Meldrum, Miller, & Flexon, 2013; Wikström, Oberwittler, Treiber, & Hardie, 2012), substance use (Knecht, Burk, Weesie, & Steglich, 2011; Rabaglietti, Burk, & Giletta, 2012), and aggression (Powers & Bierman, 2013). Additionally, peer socialization influences outcomes including depressive symptoms (Giletta et al., 2011; Kiuru, Burk, Laursen, Nurmi, & Salmela-Aro, 2012) and social anxiety among adolescents (Van Zalk et al., 2011).

Peers provide youth with a source of emotional and social support and feedback of social norms valued by their social group, which promotes conformity to peers' behavior, extrinsic behavioral reinforcement, and a favorable sense of identity (Brechwald & Prinstein, 2011). However, the influence of peers on adolescents' behavior depends on various factors such as the quality of relationships between peers (Boman, Krohn, Gibson, & Stogner, 2012; Laursen, Hafen, Kerr, & Stattin, 2012), the degree of susceptibility to peer influences (DiPietro & McGloin, 2012; Prinstein et al., 2011) and parental prohibitions on friendships with deviant peers (Keijsers et al., 2012). The context of socialization and friendships are also prominent factors to consider in relation to adolescent behavior and susceptibility to peer influence (Brechwald & Prinstein, 2011; Giletta et al., 2012).

Friendship contexts involve two elements, which are relationship quality and reciprocity within relationships (Giletta et al., 2012). Kennedy and McNeela (2014) identified numerous factors that can affect youths' decisions related to friendship development and peer interactions, including conflicting values between peers,

differences in interests with peers, and bullying experiences. In respect to immigrant youth, the barriers mentioned above facilitated careful consideration of whom they developed friendships with and promoted friendship development with peers who had similar ethnic backgrounds and migration histories. Comparably, Knecht et al. (2011) studied friendship contexts among a sample of 3,041 Dutch youth, which demonstrated adolescents' propensity to nominate friends who had similar ethnic backgrounds and were the same sex. Moreover, the length of time an individual knew their nominated friend contributed to friendship nominations.

Finding commonalities with peers provides youth with a sense of safety and belonging (Kennedy & McNeela, 2014; Knecht et al., 2011). In a sample of Mexican and Mexican-American youth, Mendez, Bauman, and Guillory (2012) found language barriers and perceptions of superiority were two prominent reasons for bullying to occur between immigrant and nonimmigrant youth. Lack of English proficiency resulted in feelings of exclusion, isolation, and embarrassment for immigrant youth. Additionally, perpetuating stereotypes about ethnic groups and incompatible beliefs were barriers that promoted distance and detracted from positive interactions among different cultural groups (Kennedy & McNeela, 2014).

Compared to children and adults, adolescents have heightened susceptibility to peer influences and social stimuli (e.g., social feedback, facial expressions) in part due to maturational processes and neurodevelopment (Albert & Steinberg, 2011; Burnett, Sebastian, Kadosh, & Blakemore, 2011; Pfeifer et al., 2011). Adolescents, whether delinquent or non-delinquent, can be exposed to peer pressure to engage in delinquent

behaviors (Church, Tomek, et al., 2012). Dishion, Spracklen, Andrews, and Patterson (1996) described how youth may form relationships by establishing commonalities with peers through discussion of deviancy and engagement in problem behaviors. In addition, Logis, Rodkin, Gest, and Ahn (2013) found youth prioritized peers popularity rather than their aggressive or prosocial behaviors when selecting friends. However, succumbing to peer pressure is dependent upon their susceptibility to peer influences, which involves factors such as youths' history of deviant behavior, their desire to conform to peers' attitudes and behaviors (Prinstein et al., 2011), and their degree of sensation seeking (Segalowitz et al., 2012). Furthermore, peer stimuli and presence of peers have the potential to influence youths' decision-making processes to engage in activities or behaviors (Albert, Chein, & Steinberg, 2013; Smith, Chein, & Steinberg, 2014; Weigard, Chein, & Steinberg, 2011). Another contributing factor of youths' decision-making process to engage in risky behavior is their foreknowledge of potential outcomes and the probability of those outcomes occurring (Smith, Chein, et al., 2014).

Researchers also identified other factors including identity (Dumas, Ellis, & Wolfe, 2012), temperament (Mrug, Madan, & Windle, 2012), self-worth, and gender that can positively or negatively impact adolescents' susceptibility to peer pressures and influences (Church, Tomek, et al., 2012; Dumas et al., 2012). In regards to identity, Dumas et al. (2012) reported identity commitment and exploration provided resistance to peer pressures and buffered against deviant behaviors and risk-taking behaviors. Temperament was also found to buffer against adolescents' susceptibility to peer deviance when they had higher levels of mood, task orientation, and flexibility (Mrug et

al., 2012). For female adolescents, self-worth was found to decrease the impact of peer influences on delinquency over time (Church, Tomek, et al., 2012), and low flexibility did not increase susceptibility to negative peer influence (Mrug et al., 2012). In contrast, male adolescents had heightened susceptibility to peer influences when self-worth increased (Church, Tomek, et al., 2012) and youth had low flexibility (Mrug et al., 2012).

Susceptibility to peer influence was identified as a strong predictor of risky behavior, problem behavior (Prinstein et al., 2011; Trucco, Colder, & Wieczorek, 2011), and delinquency (Meldrum, Miller, & Flexon, 2013). However, Meldrum et al. (2013) found adolescents' degree of self-control decreased their susceptibility to peer influences. Various researchers also established adolescent drug use was significantly related to gang membership, susceptibility to peer influence (Miller, 2011), and deviant peer influences (Ferguson & Meehan, 2011). Furthermore, Ferguson and Meehan (2011) reported age served as a moderating factor in which there was an amplification in the association between peer influence and substance use as age increased. In a comparative study, DiPietro and McGloin (2012) found a greater susceptibility to deviant peer exposure on violent behavior among immigrant youth when compared with nonimmigrant youth. Additionally, there were no differences among different generational statuses in violence due to socialization with peers. In contrast, Svensson, Burk, Sttatin, and Kerr (2012) reported similarities in the social influence of peers on delinquency for both immigrant and nonimmigrant adolescents.

The quality of friendships between youth and their peers can influence youths' development from childhood to adolescence (Blair et al., 2014; Kamper & Ostrov, 2013).

In fact, Kamper and Ostrov (2013) demonstrated negative friendship quality mediated associations between relational aggression and outcomes such as depressive symptoms and risky behavior. Boman et al. (2012) indicated friendships can be equally or more intense for delinquents as friendships among non-delinquents. Adolescents' association and friendship with deviant peers were found to be related to engaging in antisocial behavior for both males and females (Trillo & Redondo, 2013). Researchers have demonstrated affiliating with deviant peers (Wiesner, Capaldi, & Kim, 2012), and having more delinquent friends increased the likelihood of offending among adolescents (Seddig, 2014; Weerman, 2011). Furthermore, Van Ryzin, Fosco, and Dishion (2012) found substance use during adolescence could be predicted by deviant peer associations among an ethnically diverse sample. In relation to affective reciprocity, Giletta et al. (2012) found the influence of a friend's substance use on adolescents' substance use remained relatively the same for reciprocal relationships and unilateral relationships.

Another dimension of friend influence on adolescent problem behaviors is relative peer acceptance in which less accepted youth who interacted with delinquent peers in stable friendships showed significant increases in problem behaviors (Laursen et al., 2012). Conversely, peer acceptance was found to be uninfluential on problem behaviors when friendships were unstable, and the potential effects of peer acceptance on problem behaviors were reduced when friendships dissolved (Laursen et al., 2012). According to Boman et al. (2012), the intensity of friendships for delinquents and non-delinquents can be influenced by youths' level of self-control. Bowen et al. (2012) found low self-control by both actors of a friendship was associated with low friendship quality. Overall, both

the type and quality of relationships between adolescents and their peers influences their risk of problem behaviors and delinquency (Blair et al., 2014; Bowen et al., 2012; Kamper & Ostrov, 2013; Laursen et al., 2012).

Self-Control

Self-control is an important concept in regards to behavior and criminality (Buker, 2011). Conceptually, self-control is defined as a regulation of behavioral and emotional impulses to engage in socially appropriate responses (Casey, 2015; Duckworth & Kern, 2011). Social control theorists described the promotion of self-control through various social factors to reduce the risk of antisocial behaviors (Gottfredson & Hirschi, 1990, Hirschi, 1969; Sampson & Laub, 1993). Theorists such as Hirschi (1969) and Sampson and Laub (1993) established social bonds as a critical dimension of self-control, problem behavior, and delinquency. Gottfredson and Hirschi's (1990) general theory of crime placed emphasis on criminal behaviors arising due to low self-control, whereas individuals with high self-control would avoid engaging in criminal behaviors. Low self-control was characterized by personality traits such as impulsivity, volatile temper, self-centeredness, risk-seeking, a preference for simple tasks, and an interest in short-term versus long-term gratification or achievement. Essentially, individuals who engage in delinquent and criminal acts tend to favor short-term gratification and neglect the potential long-term consequences of their actions (Gottfredson & Hirschi, 1990). However, Hirschi and Gottfredson (2008) further expressed that self-control should be viewed as an influence on a person's choices in different situations, rather than as an explicit cause of criminality.

Formation of self-control begins during childhood, increases from age four to eight, and then stabilizes (Jennings, Higgins, Akers, Khey, & Dobrow, 2013). Childhood self-control was found to be predictive of positive and negative behaviors during adolescence (Converse, Piccone, & Tocci, 2013). In addition, Rocque, Posick, Marshall, and Piquero (2015) performed a cross-cultural investigation that showed self-control was a robust correlate of a high frequency of offending among adolescents. Researchers have established adolescents' low self-control was significantly related to general deviant behaviors (Vera & Moon, 2013), associated with violent victimization (Gibson, 2012; Zimmerman & Messner, 2013), and a strong predictor of delinquent and criminal behaviors (Meldrum, Miller, & Flexon, 2013; Moffitt et al., 2011). Furthermore, Vettenburg, Brondeel, Gavray, and Pauwels (2013) showed low self-control had an impact on the frequency of violent and property offenses among adolescents.

Gender and ethnicity are other factors researchers investigated as potential influences of self-control on youth offending (Lopez & Miller, 2011; Miller, 2011; Shekarkhar & Gibson, 2011). Botchkovar, Marshall, Rocque, and Posick (2015) and Shekarkhar and Gibson (2011) reported lower self-control for males compared to their female peers. In a study of Latino adolescents, Shekarkhar and Gibson (2011) found low self-control predicted violent and property offenses for males but only predicted violent crimes for female adolescents. Conversely, other studies involving Hispanic adolescent samples showed self-control had a weak, insignificant relationship with criminal and delinquent behaviors (Lopez & Miller, 2011; Miller, 2011). There is conflicting evidence of whether self-control is a useful explanation of criminality across various ethnicities

(Miller, 2011; Shekarkhar & Gibson, 2011). Shekarkhar and Gibson (2011) indicated self-control has cross-cultural applications for explaining crime, whereas Miller (2011) suggested self-control may not be as strong of a predictor for Hispanic youths' delinquent involvement as it is for other ethnic groups.

Another important aspect to discuss are the number of other factors that affect the formation of self-control and the potential for subsequent criminality (Botchkovar et al., 2015; Buker, 2011). According to Buker (2011), social contexts can significantly influence youths' self-control. Moffitt et al. (2011) found an increased likelihood of offending among youth with poor self-control, regardless of social class and IQ. However, the impact of low self-control on offending is greater in economically deprived neighborhoods due to ineffective social controls and increased criminal and delinquent activities (Zimmerman, Botchkovar, Antonaccio, & Hughes, 2015). Similarly, Vera and Moon (2013) found children's level of self-control was significantly affected by community disorder, but not by parental practices.

Various other factors, such as parental socialization and educational processes influence adolescents' self-control (Buker, 2011; Hirschi, 1969; Sampson & Laub, 1993). While Vera and Moon (2013) reported no significant relationship between youths' self-control and parental practices, other researchers found youths' self-control was positively related to their parents' level of self-control (Boutwell & Beaver, 2010) and modestly effected by parenting strategies (Botchkovar et al., 2015). In regards to education, Converse, Piccone, and Tocci (2013) indicated self-control has an indirect effect on educational attainment, with high self-control and engagement in positive behaviors

being predictive of better educational outcomes. Furthermore, youths' moral beliefs influence the dynamic between self-control and offending behaviors (Pauwels, 2012). According to Pauwels (2012), the relationship between self-control and offending was stronger for adolescents with low morality compared to those with high morality.

Low self-control was also found to increase the likelihood of youth acquiring criminal friends (Meldrum, Miller, & Flexon, 2013) and enhancing the effect of delinquent peers on youth offending (Hirtenlehner, Pauwels, & Mesko, 2015; Mobarake, Juhari, Yaacob, & Esmaceli, 2014). In turn, involvement with delinquent peers can undermine youths' ability to exercise self-control (Meldrum & Hay, 2012; Meldrum, Young, & Weerman, 2012). However, high self-control can act as a protective factor against negative peer influences (Hirtenlehner et al., 2015) and offending behaviors (Posick, 2013). Conversely, Yarbrough, Jones, Sullivan, Sellers, and Cochran (2012) found no significant differences in the effects of peers on antisocial behaviors for adolescents with low self-control from those with high self-control. The contrast in the impact of self-control on the relationship between peer influences and antisocial behaviors could be related to other factors that were found to differentially influence self-control such as gender, ethnicity, other socialization processes, and environmental contexts (Buker, 2011; Miller, 2011; Shekarkhar & Gibson, 2011).

Neighborhood Environment

Various neighborhood structural characteristics such as ethnic heterogeneity, poverty, lower-class values, and resident turnover were presented in social disorganization theory as risk factors for adolescents' involvement in delinquency (Shaw

& McKay, 1969; Tompsett, Amrhein, & Hassan, 2014). Shaw and McKay (1969) contended neighborhoods with high delinquency rates tend to have high social disorganization. In turn, it leads to a neighborhood subculture where youth are exposed to and could learn antisocial values and norms. Sampson, Raudenbush, and Earls (1997) expanded upon social disorganization theory with cultural efficacy theory, which presented other factors such as social cohesion and informal social control as influences of crime rates. In this case, Sampson et al. asserted high levels of social cohesion and informal social controls would lead to a collective efficacy among residents that increases the likelihood of them intervening with crime and reduces the likelihood of criminal behaviors.

Researchers demonstrated the protective effect of collective efficacy on adolescents' substance use (Fagan, Wright, & Pinchevsky, 2014) and delinquent involvement (Tompsett et al., 2014). Fagan, Wright, and Pinchevsky (2014) reported a moderating effect of collective efficacy on substance use in which higher levels of collective efficacy in neighborhoods decreased the impact of exposure to violence on youths' substance use. According to Tompsett et al. (2014), neighborhood factors such as collective efficacy and adult prosocial values have a protective effect against delinquent involvement among youth involved with the juvenile justice system. However, the protective effect was stronger in adolescent's home neighborhood compared to when adolescents engaged in delinquency in other neighborhoods. Moreover, adolescents' reported being more likely to engage in delinquency in

neighborhoods where neither they nor their friends lived due to high levels of social cohesion in their home neighborhoods.

Neighborhood-level characteristics were also identified by researchers to be significantly related to outcomes such as antisocial behavior (Sampson et al., 1997) and level of self-control (Vera & Moon, 2013; Zimmerman, Botchkovar, Antonaccio, & Hughes, 2015). Neighborhood risk factors such as low levels of morality (Zimmerman et al., 2015) and high levels of neighborhood concentrated disadvantage were found to increase the influence of adolescents' low self-control on their problem behavior (Gibson, 2012). Additionally, Zimmerman et al. (2015) showed there is a greater influence on self-control due to low levels of morality in a neighborhood compared to the availability of criminal opportunities in a neighborhood. Conversely, Kubrin and Desmond (2015) did not find significant associations between adolescent violence and neighborhood characteristics such as neighborhood disadvantage, racial heterogeneity, and residential mobility.

Neighborhood disorder is another characteristic that influences delinquency (Butcher, Galanek, Kretschmar, & Fannery, 2015; Posick, 2013; Ray, Thornton, Frick, Steinberg, & Cauffman, 2015). In a study using a sample of juvenile justice involved adolescents, Ray et al. (2015) indicated youth with more instances of delinquency and substance abuse also had lower impulse control and lived in disorderly neighborhoods. According to Butcher et al. (2015), youth are at greater risk of exposure to violence in highly disorganized neighborhoods. Furthermore, Posick (2013) identified neighborhood disorganization as a cross-culturally significant risk factor for adolescents' violent

offending behaviors and victimization. Other researchers identified links between neighborhood hazards (e.g., gangs in neighborhood, neighborhood violence) and outcomes such as higher levels of juvenile offending (Wiesner & Rab, 2015; Zimmerman & Messner, 2013), violence exposure (Zimmerman & Messner, 2013), and victimization (Wiesner & Rab, 2015).

Researchers identified neighborhood context as an important variable to consider when investigating the link between acculturation and crime in order to understand how broader social environments impact criminality among first- and second-generation immigrants (Miller & Gibson, 2011; Powell, Perreira, & Harris, 2010). Factors such as concentrated disadvantage (Wolff, Baglivio, Intravia, & Piquero, 2015), immigrant concentration (Burrington, 2015; Wolff et al., 2015), and neighborhood disorganization were found to impact youths' behavior and criminal conduct (Posick, 2013). In a study involving adjudicated adolescents, Bersani, Loughran, and Piquero (2014) reported the probability of first-generation youth having a persistent offending trajectory was close to zero and not affected by neighborhood disadvantage. Comparatively, second-generation adolescents were approximately nine times more likely to be in the persistent offending trajectory when living with no neighborhood disadvantage and 19 times more likely when living in a disadvantaged neighborhood. According to Wolff et al. (2015), the likelihood of juvenile recidivism was greater in relation to neighborhood disadvantage than immigrant concentration, which acted as a protective factor against reoffending.

The association between adolescents' behavioral outcomes (e.g., self-control, delinquency) and their neighborhood environment were also investigated in relation to

parental practices and degree of parental supervision (Burrington, 2015; Vera & Moon, 2013). Vera and Moon (2013) found community disorder had a greater impact on children's self-control compared to parental practices. In contrast, Burrington (2015) reported less parental supervision increased the likelihood of engaging in violence in low-risk neighborhoods among first-generation immigrant youth, and high-risk neighborhoods among second-generation or later immigrant adolescents. In addition, higher levels of immigrant concentration was found to have a protective effect against involvement with violence for first- and second-generation immigrant adolescents regardless of parental supervision level. However, while high immigrant concentration acted as a protective factor for supervised third-generation or later immigrant adolescents from engaging in violence, the less supervised adolescents were at more risk of engaging in violence (Burrington, 2015).

Second International Self-Reported Delinquency Study

The Second International Self-Reported Delinquency Study (ISRD-2) was an extension of the First International Self-Reported Delinquency study (ISRD-1), which was initiated in 1988 to compare criminality and victimization of youth (Enzmann et al., 2010). The researchers of the ISRD-2 conducted the study over a three year period from 2005 to 2007 in 31 countries in Europe, North America, and South America, whereas the ISRD-1 only involved 13, mostly European, countries (Enzmann et al., 2010; Enzmann et al., 2015). In the second study, the researchers collected data pertaining to self-reported delinquency, victimization, neighborhood, family, school, peers, lifestyle, life events, attitudes towards violence, self-control, and social demographics from nationally

representative samples for each participating country (Enzmann et al., 2010; Enzmann et al., 2015). Both ISRD studies were developed to help cross-culturally explain delinquency and victimization patterns. In addition, the data collected from the studies provided a means for researchers to test the cross-cultural generalizability of social and life-style theories (e.g., self-control theory, social control theory, social disorganization theory; Enzmann et al., 2010).

The data collected from the ISRD-2 study enabled researchers to perform a variety of assessments (Enzmann et al., 2010; Enzmann et al., 2015). First, researchers used the ISRD-2 dataset to assess the relationship between social, individual, and environmental variables and outcomes such as alcohol and drug use (Gatti, Soellner, Bräker, Verde, & Rocca, 2015; Maniglio & Innamorati, 2014), self-control (Botchkovar, Marshall, Rocque, & Posick, 2015), antisocial behavior (i.e., delinquency, violence, and substance use; Gatti, Haymoz, & Schadee, 2011), criminal careers (Rocque, Posick, Marshall, & Piquero, 2015), and victimization (Posick, 2013; Posick & Rocque, 2015). In many cases, researchers used the ISRD-2 dataset to focus on cross-cultural comparisons of behavior patterns (Botchkovar et al., 2015; Gatti et al., 2011; Gatti et al., 2015; Posick & Rocque, 2015; Rocque et al., 2015). However, other researchers (e.g., Innamorati & Maniglio, 2015; Maniglio & Innamorati, 2014) have used a subsample involving one country for analyses. Therefore, the ISRD-2 dataset offers versatility in that it can be used for cross-cultural comparisons using multiple countries or comparisons within subpopulations of a single country (Gatti et al., 2015; Innamorati & Maniglio, 2015; Maniglio & Innamorati, 2014; Posick & Rocque, 2015).

Summary

Researchers have consistently demonstrated a connection between delinquency and level of acculturation among immigrant populations (Alvarez-Rivera, Nobles, & Lersch, 2014; Bui, 2009; Miller, 2011; Reingle et al., 2011; Vaughn, Salas-Wright, DeLisi, & Maynard, 2014a). The literature I reviewed showed a reliance on secondary data dating from the 1990s to early 2000s (Bersani, 2014a, 2014b; Bui, 2009; Powell et al., 2010; Reingle et al., 2011). The use of such data is beneficial as researchers are able to conduct cross-sectional or longitudinal examinations of immigrant and nonimmigrant adolescents' in relation to a broad range of social and environmental variables associated with delinquency. Additionally, the data were collected from nationally representative samples, which allows researchers to ensure the generalizability of their study findings (Bersani, 2014a, 2014b; Bui, 2009; Powell et al., 2010; Reingle et al., 2011). Moreover, using secondary data allows researchers to avoid problems with nonresponse of minority and immigrant participants, which can be issues when collecting primary data (Fisher & Kalbaugh, 2011; George et al., 2014; Menjivar & Abrego, 2012; Seiber, 2013).

The review of the literature also showed evaluations of delinquency among adolescents were hindered by statistical analyses that focused on relationships between two variables, had a lack of focus on individual processes, and used non-comparative samples. Those types of research examinations have led to limitations in researchers' understanding of the unique adaptive and developmental processes of immigrant and nonimmigrant adolescents (Alvarez-Rivera et al., 2014; Bersani, 2014a, 2014b; Piquero, Bersani, et al., 2014). In turn, researchers indicated an increased need to focus on a

variety of factors across several domains (i.e., family, peer, school, neighborhood, and individual-processes) that can significantly impact immigrants' ability to adapt and develop (Alvarez-Rivera et al., 2014; Piquero, Bersani, et al., 2014; Powell et al., 2010). Similarly, Bersani (2014a, 2014b) suggested future researchers should focus on comparative analyses of factors (i.e., family, peer, school, and neighborhood) that promote and differentially influence delinquency among first-, second-, and third-generation immigrants.

The primary goal of this quantitative, cross-sectional study was to investigate the predictability of delinquency through familial, social, environmental, and individual factors across three generational status groups in an adolescent sample residing in the United States. The study contributed to the body of literature by comparatively investigating delinquency through a variety of factors including family bonding, delinquent peers, school climate, neighborhood disorganization, and self-control. Furthermore, I evaluated what factors best predict delinquency for each generational status group, whereas prior research only focused on two groups (i.e., native-born and second-generation immigrants; Bersani, 2014a). In conducting this study, I sought to help broaden practitioners' understanding of delinquency and adaptive processes. In turn, I hoped my study findings would assist them with increasing the cultural responsiveness of intervention programs to better serve and address delinquency among the immigrant youth population. In Chapter 3, I describe the research methodology I employed for this study including procedures for sampling, data collection, ethical

research, and statistical analyses. I also provide rationales for the methodological selections for this study in relation to the research gap and questions.

Chapter 3: Research Method

Introduction

The purpose of this quantitative, cross-sectional study was two-fold. First, in the study I sought to establish if delinquency was related to self-control, family bonding, delinquent peers, school climate, and neighborhood disorganization. Secondly, I wanted to determine what variables of a model composed of self-control, family bonding, delinquent peers, school climate, and neighborhood disorganization best predicted delinquency across three generational status groups. The following chapter describes the research methodology that I used for this study. I include discussion of my research questions, hypotheses, overall study design and rationale, sampling strategy and sample size, data collection procedures, instrumentation and operationalization of constructs, data analysis plan, and ethical procedures.

Research Questions and Hypotheses

The following research questions and hypotheses guided this research:

RQ1: What are the relationships among family bonding, school climate, delinquent peers, neighborhood disorganization, self-control, and delinquency?

H_01 : There are no bivariate relationships between delinquency and family bonding, school climate, delinquent peers, neighborhood disorganization, or self-control for the total adolescent sample.

H_11 : There are bivariate relationships between delinquency and family bonding, school climate, delinquent peers, neighborhood disorganization, or self-control for the total adolescent sample.

H₀2: There are no bivariate relationships between delinquency and family bonding or school climate for the three generational status groups.

H₁2: There are bivariate relationships between delinquency and family bonding or school climate for at least one of the three generational status groups.

RQ2: What variables, if any, for a model consisting of family bonding, school climate, delinquent peers, neighborhood disorganization, and self-control significantly predict delinquency across three generational status groups?

H₀3: In the first-generation immigrant adolescent subpopulation, the proportion of the variance in delinquency explained by family bonding, school climate, delinquent peers, neighborhood disorganization, and self-control is zero.

H₁3: In the first-generation immigrant adolescent subpopulation, the proportion of the variance in delinquency explained by at least one of the independent variables family bonding, school climate, delinquent peers, neighborhood disorganization, and self-control does not equal zero.

H₀4: In the second-generation immigrant adolescent subpopulation, the proportion of the variance in delinquency explained by family bonding, school climate, delinquent peers, neighborhood disorganization, and self-control is zero.

H₁4: In the second-generation immigrant adolescent subpopulation, the proportion of the variance in delinquency explained by at least one of the independent variables family bonding, school climate, delinquent peers, neighborhood disorganization, and self-control does not equal zero.

H₀5a: In the native adolescent subpopulation, the proportion of the variance in delinquency explained by family bonding, school climate, delinquent peers, neighborhood disorganization, and self-control is zero.

H₁5a: In the native adolescent subpopulation, the proportion of the variance in delinquency explained by at least one of the independent variables family bonding, school climate, delinquent peers, neighborhood disorganization, and self-control does not equal zero.

H₀5b: In the native adolescent subpopulation, the proportion of the variance in delinquency explained by family bonding, delinquent peers, and self-control is zero.

H₁5b: In the native adolescent subpopulation, the proportion of the variance in delinquency explained by at least one of the independent variables family bonding, delinquent peers, and self-control does not equal zero.

Research Design and Rationale

I tested the research hypotheses using a quantitative, cross-sectional design. The main variables of this cross-sectional study were as follows: the dependent variable was delinquency, and independent variables were family bonding, school climate, delinquent peers, neighborhood disorganization, and self-control. When testing the second research question and related hypotheses, I also used generational status (i.e., native-born, second-generation immigrants, and first-generation immigrants) as a selection variable.

I selected to use a quantitative, cross-sectional design for this study for three reasons. First, I used the Second International Self-Reported Delinquency Study dataset, which is secondary data that was collected in a cross-sectional manner (Enzmann et al.,

2015). By design, researchers conducting cross-sectional studies collect exposure and outcome data from all study participants at a single point in time (Pandis, 2014). Secondly, researchers using a cross-sectional research design do not investigate comparisons between a control group and a treatment or exposure group like experimental designs (Feser, 2013; Jaffee, Strait, & Odgers, 2012). Use of this research design allows a researcher to draw comparisons among different groups, such as generational status, under the same research parameters without any manipulation of the study environment (Williams, 2007). Third, cross-sectional studies enable researchers to evaluate associations between risk factors and outcome variables within a study population (Pandis, 2014). Given the three reasons stated, I selected to employ a cross-sectional research design as it allowed for assessment of both research questions and all related hypotheses. More specifically, using a cross-sectional design for this study allowed me to evaluate associations between a set of potential risk factors and delinquency as an outcome in three subpopulations for comparison purposes.

Population

The population used for this study consisted of the U.S. portion of the ISRD-2 (Enzmann et al., 2015). Data collection for the U.S. portion of the ISRD-2 took place from Fall 2006 to Spring 2007. The overall U.S. student population in 2006 was approximately 20 million youth (Marshall & He, 2010). The ISRD-2 study involved a two-unit sampling strategy using cities as the primary sampling unit and classrooms as a secondary sampling unit. In 2006, there were a total of 3,034 counties, 19,429 municipalities, and 16,504 townships in the United States with a total of 16,200 school

districts, systems, and education service agencies. Of that assessable sample, the institutional review boards of 15 middle schools and high schools in five cities located in four states (i.e., Illinois, Massachusetts, New Hampshire, and Texas) agreed to participate in the ISRD-2 study. There were a total of 4,045 students attending grades seven through nine in those participating schools.

Students' participation in the ISRD-2 study was based on parental informed consent. While the initial school sample consisted of 4,045 students, only 2,571 students and their parents provided informed consent. Therefore, data for the ISRD-2 were collected from 2,571 students, aged 12 to 16 years old attending grades seven to nine in 11 public schools and four private schools. Of the 2,571 students, there were only 2,397 valid responses in reference to generational status in the ISRD-2 dataset, which served as the population of interest for this study. Evaluation of the second research question and related hypotheses involved three subpopulations based on generational status. The size of these subpopulations are as follows: 1,981 adolescents were native-born, 327 adolescents were second-generation immigrants, and 89 adolescents were first-generation immigrants. I used the subpopulations mentioned above to draw the sample for this study.

Sampling Procedures

Sampling Strategy

The sample I used for this study derived from a stratified random sampling strategy, which is a probability sampling strategy that draws a sample from strata (Cochran, 1946). Procedurally, stratified random sampling requires the target population

to be separated into mutually exclusive categories (Acharya, Prakash, Saxena, & Nigam, 2013; Daniel, 2012). Strata are formed by grouping individuals that share similar characteristics within the population being studied (Hagan, 2013). In the case of this study, stratification was conducted using generational status, which resulted in the formation of three strata (i.e., native-born, first-generation immigrants, and second-generation immigrants). Then, I randomly sampled from each stratum to form the necessary study sample groups and attain the appropriate sample size for the study (Acharya et al., 2013; Daniel, 2012).

Rationale for the sampling strategy selection. When selecting an appropriate sampling strategy for the study, I made several considerations based on the research purpose, hypotheses, and selected statistical tests. The sample of the study needed to include three subpopulations, which were identified in the research hypotheses as native-born adolescents, first-generation immigrant adolescents, and second-generation immigrant adolescents. The first consideration was the categorical and mutually exclusive nature of the groups within this study since the evaluation of the second research question required the use of generational status as a selection variable (Frankfort-Nachmias & Nachmias, 2008; Hagan, 2013; Sawyer, 2009). The second consideration was ensuring the representativeness of the sample so I could conduct the required statistical analyses for the study (Acharya et al., 2013; Banerjee & Chaudhury, 2010; Daniel, 2012; Lemm, 2010). The third consideration was to select a sampling strategy that would allow me to obtain a representative sample while minimizing bias (Acharya et al., 2013; Hagan, 2013). Use of a stratified random sampling strategy in this

study enabled the ability to purposefully attain the necessary subpopulations based on generational status while still providing the ability to randomly select participants (Acharya et al., 2013; Daniel, 2012; Hagan, 2013). Based on those considerations, I selected to use a stratified random sampling strategy to ensure equal representation of the three generational status subpopulations in the study sample and allow for meaningful comparisons across strata so I could statistically evaluate both research questions and related hypotheses (Acharya et al., 2013; Daniel, 2012).

Sample Size

I calculated the sample size for this study with G*Power using conventional values for power, alpha, and effect size associated with social science research and the use of an F-test such as multiple regression analysis (Cohen, 1992a, 1992b). The resulting values used to calculate the sample size were .18 for effect size, .05 for alpha, and .80 for power. Cohen (1992b) described using a power of .80 as a convention within scientific research that is typically coupled with an alpha of .05. Similarly, Bushway, Sweeten, and Wilson (2006) also indicated the use of .05 for alpha is typical within social science research related to criminology and criminal justice.

Effect size conventions for multiple regression are .02, .15, and .35, which represent small, medium, and large effect sizes, respectively (Cohen, 1992a). In a review of 74 meta-analyses related to psychological, educational, and behavioral treatment, Lipsey and Wilson (1993) found a .46 mean effect size among nonrandom studies using control or comparison designs. They also reported effect sizes ranging from .17 to .48 with a mean effect size of .33 for studies using delinquency as an outcome variable.

Additionally, studies comparing youth via generational status using self-reported delinquency as an outcome variable had an estimated effect size of .12 (Bui, 2009) and .33 (Bui, 2012). Given the information stated above, I decided to use an effect size of .18 in order to maximize the potential of detecting smaller, statistically significant effects. In general, the values selected for power, alpha, and effect size to calculate the sample size were applicable to the study in terms of the research hypotheses, research purpose, and use of multiple regression analysis.

I calculated the sample size for the study in G*Power by setting the test family to F tests, selecting Linear Multiple Regression as the statistical test, and setting the type of analysis as a priori: compute required sample size (Faul et al., 2009). Then, I set the effect size f to .18, alpha to .05, power to .80, and the number of predictors to five. The calculated sample size via G*Power was 77 participants (Faul et al., 2009). I oversampled to 86 participants for each of the three generational status groups to ensure I retained adequate power after removal of participants due to outliers and missing data.

Since the second research question of the study involved conducting independent multiple regression analyses for three generational status subpopulations, the total sample size for the study was 255 participants. This study sample included 83 first-generation immigrant participants, 86 second-generation immigrant participants, and 86 native-born participants. I used the total sample of 255 participants to evaluate the first research question and perform the necessary bivariate correlation analyses. This sample size was appropriate as the minimum required sample size for bivariate correlation analysis as calculated in G*Power using a medium effect size of .30, a power of .80, and an alpha of

.05 was 84 participants. The calculated sample size was appropriate for the study as it was the product of considering the research purpose, hypotheses, population of interest, selected statistical analyses, and selected sampling strategy.

Data Collection Procedures

Archival data. I obtained the Second International Self-Reported Delinquency Study, 2005-2007 dataset (ISRD-2; Enzmann et al., 2015) through the National Archive of Criminal Justice Data (NACJD) website. The ISRD-2 dataset had no special access restrictions and was freely available. Since the NACJD is partnered with the Inter-University Consortium for Political and Social Research, I needed to agree to their terms of usage that the data would be cited in published work and not redistributed before I downloaded the dataset (see Appendices A and B). No other permissions were required to obtain the dataset.

ISRD-2 recruitment and data collection. The ISRD-2 study conducted by Enzmann et al. (2015) was a cross-cultural investigation of delinquency, criminal victimization, and related correlates among youth. Data for the ISRD-2 were collected in 2005 through 2007 from school-based populations in 31 countries across Europe, North America, and South America. Approximately 2,100 students per country were randomly selected to be in the ISRD-2 study.

Enzmann et al. (2015) employed a stratified multi-stage sampling procedure that involved selection of cities and towns first and then drawing a random sample from classrooms. The selection of cities was purposive based on a set of criteria that included city and town size, demographics, economic factors, and degree of urbanization. In

addition, researchers from each country involved in the ISRD-2 study selected towns and cities that were representative of their country as a whole. The aim was to obtain three subsamples per country, which included a metropolitan area with a population of 500,000 or more, a medium sized city with a population of 80,000 to 120,000, and three rural towns with populations of 10,000 to 75,000 inhabitants. For the second stage, a list of all public, private, vocational, technical, and academic schools was constructed along with a list of all classrooms, grades seven through nine. Then, all three city and town based subsamples were stratified according to grade level, and a proportional sample of 700 students per subsample was randomly selected.

The resulting sample per country of the ISRD-2 consisted of approximately 2,100 students with 700 students from the metropolitan subsample, 700 students from the mid-size city subsample, and 700 from the small town subsample. In some cases, the sample size exceeded or did not meet the intended 2,100 participants per country. The researchers of the ISRD-2 also indicated there was a 65% to 70% response rate for the study. The resulting total sample size of the ISRD-2 study for all 31 countries was 71,400 student participants aged 12 to 16 years old attending grades seven through nine.

The researchers of the ISRD-2 study collected data from the sample above using a standardized ISRD-2 questionnaire that was self-administered by students under the supervision of the researchers and in some cases by teachers. Administration of the questionnaire was predominately in a pencil-and-paper survey format, but a few countries (e.g., Switzerland, Denmark, Finland) used computerized surveys. All students responded to an ISRD-2 questionnaire that consisted of 67 questions, which included

questions related to social demographics, delinquency, victimization, neighborhood, family, school, peers, lifestyle, life events, attitudes towards violence, and self-control.

Sampling procedure. The sample for this study was drawn from the U.S. portion of the ISRD-2 dataset (Enzmann et al., 2015). The United States sample of the ISRD-2 study consisted of 2,571 students attending schools in Illinois, Massachusetts, New Hampshire, and Texas. However, only 2,397 valid responses to generational status were obtained, and therefore, served as the population I used to obtain the sample for this study (Enzmann et al., 2015). The population was stratified according to generational status to form three strata: native-born, first-generation immigrants, and second-generation immigrants. In this study, the minimum required total sample size, as calculated using G*Power (Faul et al., 2009), was 231 participants with 77 participants per each generational status subpopulation. I oversampled to 86 participants per generational status group to retain adequate power after data cleaning procedures. Therefore, I randomly selected 86 participants from each of the three strata (i.e., native-born, first-generation immigrants, and second-generation immigrants) through the Statistical Package for the Social Sciences (SPSS).

After removal and replacement procedures of participants due to missing data and outliers, the resulting sample for this study was a stratified random sample of 255 students aged 12 to 16 attending grades seven through nine in the United States. The 255 participants included 86 native-born adolescents, 83 first-generation immigrant adolescents, and 86 second-generation immigrant adolescents who I randomly selected

from stratified groups based on generational status. I used data from the resulting stratified sample for the statistical analyses of this study.

Instrumentation and Operationalization of Constructs

Dependent Variable

Delinquency measure. Delinquency is a ratio level measure that assesses the total number of self-reported minor and serious delinquent acts and behaviors engaged in by youth over 12 months (Enzmann et al., 2015). In Enzmann et al.'s (2015) standardized questionnaire, the self-reported delinquency scale consisted of 14-items that require respondents to indicate if they engaged in a specific delinquent act in the last 12 months by answering "yes" or "no" and then specify the number of times. Participants' responses to all items were summed to produce an overall delinquency score ranging from 0 (*low delinquency*) to 365 (*high delinquency*). Sample items include "Did you ever damage on purpose something, such as a bus, shelter, a window, a car or a seat in the bus or train" (item 1), "Did you ever snatch a purse, bag, or something else from a person" (item 9), and "Did you ever intentionally beat up someone, or hurt them with a stick or knife so bad that they had to see a doctor" (item 13). The self-reported delinquency scale was tested in adolescent school populations cross-culturally that contained male and female participants of varying ethnicities. According to Junger-Tas et al. (2010), the self-reported delinquency scale of the ISRD-2 is similar to the self-reported delinquency scale used in the National Youth Survey, which was found to have Cronbach's alphas ranging from .91 to .95 (Elliot & Ageton, 1980; Huizinga, Loeber, & Thornberry, 1993; Palmer &

Hollin, 2001), and test-retest reliabilities ranging from .85 to .99 (Huizinga & Elliott, 1986).

Independent Variables

Self-control measure. Self-control is a ratio level measure that is defined as the ability to control one's desires, emotions, and behaviors by favoring socially appropriate responses over inappropriate responses (Casey, 2015). Self-control is a personality trait that is assessed through several domains such as impulsivity, risk seeking, self-centered orientation, and temperament (Gottfredson & Hirschi, 1990). In Enzmann et al.'s (2015) standardized questionnaire, self-control was measured using a modified version of Grasmick, Tittle, Bursik, and Arneklev's (1993) 24-item Self-Control Scale. The modified version contains 12-items and consists of four subscales: impulsivity, risk taking, self-centeredness, and temperament. Each subscale consists of 3-items scored on a 4-point Likert scale ranging from 1 (*disagree fully*) to 4 (*agree fully*). Participants' responses to all 12-items were averaged to obtain a mean score. Then scores were transformed into POMP (Percentage of Maximum Possible) as part of the standardization process of the ISRD-2 (Enzmann et al., 2015).

Transformation of mean scores to POMP were done through SPSS using the following formula: $POMP = [(observed - minimum)/(maximum - minimum)] \times 100$, where observed = *mean score for a single case of a variable*, minimum = *the minimum possible score on the Likert scale of the variable*, and maximum = *the maximum possible score on the Likert scale of the variable* (Cohen, Cohen, Aiken, & West, 1999, p. 323). Once transformed into POMP, the overall scores ranged from 1 (*low self-control*) to 100

(*high self-control*). Sample items include “I act spur of the moment without stopping to think” (impulsivity subscale), “I like to test myself every now and then by doing something a little risky” (risk taking subscale), “I try to look out for myself first, even if it means making things difficult for other people” (self-centeredness subscale), and “I lose my temper pretty easily” (temperament subscale). The school climate scale was tested in adolescent school populations cross-culturally that contained male and female participants of varying ethnicities. The modified self-control scale has a Cronbach's alpha of .83. No test-retest reliability was reported.

Family bonding measure. Family bonding is a ratio level measure that assesses the quality of the relationships between adolescents' and their kin through youths' perceptions of and interactions with their families (Dallos & Vetere, 2012). The family bonding scale of Enzmann et al.'s (2015) standardized questionnaire consists of 4-items. The first two items asked youth about the quality of their relationship with their parents, and are scored on a 4-point Likert scale ranging from 1 (*not at all*) to 4 (*very well*). The third item asked youth about the frequency of their engagement in activities with parents. This item was scored on a 6-point Likert scale ranging from 1 (*almost never*) to 6 (*more than once per week*). The fourth item was scored on an 8-point Likert scale ranging from 1 (*never*) to 8 (*daily*).

As part of the standardization process of the ISRD-2 (Enzmann et al., 2015), scores for each of the four items were transformed into POMP through SPSS using the following formula: $POMP = [(observed - minimum)/(maximum - minimum)] \times 100$, where observed = *mean score for a single case of a variable*, minimum = *the minimum*

possible score on the Likert scale of the variable, and *maximum = the maximum possible score on the Likert scale of the variable* (Cohen et al., 1999, p. 323). This score transformation produced scores for each item ranging from 1 to 100. Then a mean score of the 4-items was obtained, which produced scores ranging from 1 (*low family bonding*) to 100 (*high family bonding*). Sample items include “How do you usually get along with the woman you live with (your mother or stepmother)” (item 1) and “How often do you and your parents (or the adults you live with) do something together, such as going to the movies, going for a walk or hike, visiting relatives, attending a sporting event, and things like that” (item 3)? The family bonding scale was tested in adolescent school populations cross-culturally that contained male and female participants of varying ethnicities. The scale has a Cronbach's alpha of .60. No test-retest reliability was reported.

Neighborhood disorganization measure. The neighborhood disorganization measure is scaled at a ratio level. Neighborhood disorganization was assessed through youths’ attitudes about their neighborhood in terms of criminal activities (e.g., crime, physical violence, drug selling) and infrastructure (e.g., empty buildings, graffiti; Posick & Rocque, 2014). In Enzmann et al.’s (2015) standardized questionnaire, the neighborhood disorganization scale consists of 5-items scored on a 4-point Likert scale ranging from 1 (*fully agree*) to 4 (*fully disagree*). All items were reverse coded, and summed to produce a score. Then scores were transformed into POMP as part of the standardization process of the ISRD-2 (Enzmann et al., 2015).

Transformation of summed scores to POMP were done through SPSS using the following formula: $POMP = [(observed - minimum)/(maximum - minimum)] \times 100$,

where observed = *mean score for a single case of a variable*, minimum = *the minimum possible score on the Likert scale of the variable*, and maximum = *the maximum possible score on the Likert scale of the variable* (Cohen et al., 1999, p. 323). Once transformed into POMP, the overall scores ranged from 1 (*low perception of neighborhood disorganization*) to 100 (*high perception of neighborhood disorganization*). Sample items include “There is a lot of crime in my neighborhood” (item 1) and “There are a lot of empty and abandoned buildings” (item 4). The neighborhood disorganization scale was tested in adolescent, school populations cross-culturally that contained male and female participants of varying ethnicities. Reliability of the scale was a Cronbach's alpha of .82. There was no test-retest reliability reported.

School climate measure. School climate is a ratio level measure that assesses adolescents' degree of connectedness with school, which includes youths' perceptions of relationships with individuals in the school environment (e.g., school staff, teachers, peers) and their attitudes towards school (Black, Grenard, Sussman, & Rohrbach, 2010; Millings, Buck, Montgomery, Spears, & Stallard, 2012; Niehaus, Rudasill, & Rakes, 2012). The school climate scale of Enzmann et al.'s (2015) standardized questionnaire consists of 4-items scored on a 4-point Likert scale ranging from 1 (*not at all true*) to 4 (*very true*). Then a mean score of the 4-items was obtained and transformed into POMP as part of the standardization process of the ISRD-2 (Enzmann et al., 2015).

Transformation of mean scores to POMP were done through SPSS using the following formula: $POMP = [(observed - minimum)/(maximum - minimum)] \times 100$, where observed = *mean score for a single case of a variable*, minimum = *the minimum*

possible score on the Likert scale of the variable, and maximum = *the maximum possible score on the Likert scale of the variable* (Cohen et al., 1999, p. 323). Once transformed into POMP, the overall scores ranged from 1 (*low school connectedness*) to 100 (*high school connectedness*). Sample items include “Teachers do notice when I am doing well and let me know” (item 2) and “I like my school” (item 3). The school climate scale was tested in adolescent school populations cross-culturally that contained male and female participants of varying ethnicities. The scale has a Cronbach's alpha of .61. No test-retest reliability was reported.

Delinquent peers measure. The delinquent peers measure is scaled at a ratio level. Delinquent peers is operationalized as the delinquent activities of friends in terms of assault, stealing, burglary, and drug use as reported by the study participant (Posick & Rocque, 2015). Based on Enzmann et al.'s (2015) standardized questionnaire, the delinquent peers scale is comprised of 5-items that require respondents to indicate if their friends engaged in a specific delinquent act by answering “yes” or “no” for each item. Participants' responses to all items were summed to produce scores ranging from 0 (*low peer delinquency*) to 5 (*high peer delinquency*) and transformed into POMP as part of the standardization process of the ISRD-2 (Enzmann et al., 2015).

Transformation of summed scores to POMP were done through SPSS using the following formula: $POMP = [(observed - minimum)/(maximum - minimum)] \times 100$, where observed = *mean score for a single case of a variable*, minimum = *the minimum possible score on the Likert scale of the variable*, and maximum = *the maximum possible score on the Likert scale of the variable* (Cohen et al., 1999, p. 323). Once transformed

into POMP, the overall scores ranged from 1 (*low peer delinquency*) to 100 (*high peer delinquency*). Sample items include “I have friends who did steal something from a shop or department store” (item 2) and “I have friends who did beat someone up or hurt someone badly with something like a stick or a knife” (item 5). The delinquent peer scale was tested cross-culturally in adolescent school populations consisting of male and female participants of varying ethnicities. The scale has a Cronbach's alpha of .71. No test-retest reliability was reported.

Selection Variable

Generational status measure. Generational status is a nominal level measure that assesses participants' migration status according to the birthplace of the respondent and their parents (Enzmann et al., 2015). Enzmann et al. (2015) grouped participants into one of three generational status groups, which are labeled native-born, first-generation immigrant, and second-generation immigrant. Participants were designated as native-born if they and their parents were born in the United States, if the participant's birthplace was the United States and data for parents' birthplace were missing, or if both parents were born in the United States regardless of the participant's birthplace. Participants were designated as a second-generation immigrant if they were born in the United States, and at least one parent was born in another country. Participants were designated as a first-generation immigrant if they and at least one of their parents were born in another country or if the birthplace for the adolescent participant was missing, and at least one parent was born in another country. Values for generational status were coded as 1 = *1st generation migrant*, 2 = *2nd generation migrant*, and 3 = *native-born*.

Data Analysis Plan

I performed the statistical analyses using IBM SPSS Version 21. The original ISRD-2 dataset contains 695 variables for 31 countries (Enzmann et al., 2015). I created a new dataset labeled “United States Data Only” in order to make the dataset more manageable. The created dataset contained data for the U.S. portion of the ISRD-2 dataset and the variables relevant to this study. The dataset I created included variables related to generational status, delinquency, family bonding, school climate, delinquent peers, neighborhood disorganization, self-control, and demographic information.

Statistical Analyses

In the study, my assessment of the research hypotheses required the use of bivariate correlation analysis and hierarchical multiple regression analysis.

Correlation analysis. I assessed the first two research hypotheses using bivariate correlation analysis. Bivariate correlation analysis is used to determine the degree of association between two variables (Chung et al., 2013; Holtmann et al., 2011). In this study, I used bivariate correlation analysis to establish if delinquency was related to family bonding, school climate, delinquent peers, neighborhood disorganization, and self-control. Since the correlation analyses used ratio level variables, I needed to examine Pearson correlation coefficients, r , which measure the linear association between two study variables, and associated p -values, which determined the significance of the association (Cohen, Cohen, West, & Aiken, 2013; Mukaka, 2012). Pearson correlation coefficients range in value from +1 to -1 with values above 0 demonstrating a positive association, values below 0 means there is a negative association, and a value of 0

indicates no association (Cohen et al., 2013; Mukaka, 2012). Pearson correlation coefficient values closer to +1 or -1 indicate stronger relationships whereas r values closer to 0 represent weaker relationships. I also reviewed relationships for significance, $p \leq .05$, and nonsignificance, $p > .05$ (Cohen et al., 2013). Variables found to be significantly related to delinquency were used as predictors to test Hypotheses 3, 4, and 5.

Multiple regression. I assessed the second research question and the third, fourth, and fifth hypotheses through hierarchical multiple regression analysis to determine what independent variables (i.e., family bonding, school climate, delinquent peers, neighborhood disorganization, and self-control) best predicted the dependent variable, delinquency, for three generational status groups. Hierarchical multiple regression is a statistical test used for estimating the relationship between one dependent variable and two or more independent variables (Uyanık & Güler, 2013), and exploring the contributions of multiple predictors on an outcome (Slinker & Glantz, 2008). Before I performed the multiple regression analyses, there were a set of statistical assumptions that needed to be met (Uyanık & Güler, 2013; Williams, Grajales, & Kurkiewicz, 2013).

The multiple regression analyses conducted for this study required statistical assumptions such as normality, homogeneity of variance, multicollinearity, homogeneity of regression, and no extreme values (outliers) or missing data to be assessed and met (Slinker & Glantz, 2008; Uyanık & Güler, 2013; Williams et al., 2013). First, the use of multiple regression required assessment of the dataset for outliers, which are extreme data points that do not fit the general trend of the dataset and can distort results (Slinker

& Glantz, 2008). I tested for outliers by converting variables to z -scores and looking for values above 3.29 and below -3.29 (Aguinis, Gottfredson, & Joo, 2013; Osborne & Overbay, 2004). Second, multiple regression analyses required the distribution of the residuals to be normally distributed, which is when the plotted data appears as a bell-shaped curve with most cases concentrated around the mean (Alexopoulos, 2010). Normality was tested visually using histograms and P-P plots, and statistically by reviewing kurtosis and skewness values (Alexopoulos, 2010; Uyanık & Güler, 2013).

Another assumption I needed to test was homogeneity of variance. In order for this assumption to be met, the variance of residuals for each predictor variable should be constant, which means they have the same variance (Alexopoulos, 2010). I tested the homogeneity of variance assumption visually with a plot of *ZRESID against *ZPRED. Homogeneity of variance was met if the points on the plot were evenly dispersed around zero. The assumption was violated if the points formed a funnel shape, which indicates heteroscedasticity (Alexopoulos, 2010).

The use of multiple regression in the current study also required testing for multicollinearity, which is when two or more predictors exhibit high correlation (Slinker & Glantz, 2008). Multiple regression requires the absence of multicollinearity meaning predictor variables should not be highly correlated. I tested this assumption by reviewing a correlation matrix, variance inflation factors (VIF), and tolerance values (Field, 2013; Slinker & Glantz, 2008; Uyanık & Güler, 2013). The correlation matrix indicated the multicollinearity assumption was met if the correlations between predictor variables were below .60 and not met if the values were above .60 (Dormann et al., 2013; Field, 2013). I

also assessed for multicollinearity through VIFs in which values below 10 indicated the assumption was met (Field, 2013; Uyanık & Güler, 2013). Lastly, I also reviewed tolerance values in which values below .1 indicated multicollinearity (Field, 2013; Uyanık & Güler, 2013).

The last assumption that I needed to test for multiple regression was the homogeneity of regression assumption, which requires regression coefficients to be homogeneous. This assumption tests if the independent variables help to predict the dependent variable as in the independent variables coefficients are not zero (Alexopoulos, 2010). I evaluated the homogeneity of regression assumption visually by examining a scatterplot of the residuals, and the assumption was met if the fitted line passed through the graph at zero (Alexopoulos, 2010). Once the assumptions were tested and sufficiently met, I conducted the main hierarchical multiple regression analyses for the study. I provide the evaluation and results of all statistical assumption tests in Chapter 4.

I performed the hierarchical multiple regression analyses using generational status as a selection variable, delinquency as the dependent variable, and a set of independent variables (i.e., family bonding, school climate, delinquent peers, neighborhood disorganization, and self-control). By using a selection variable, I was able to conduct three separate multiple regression analyses, one for each generational status group (i.e., native-born, first-generation immigrants, and second-generation immigrants). In SPSS, the multiple regression analyses were run via the linear regression procedure using one continuous dependent variable, five continuous independent variables, and selecting an input method (i.e., enter, stepwise, backward, or forward). In the case of this study, I

employed hierarchical multiple regression analyses via entry method to allow for determination of what independent variables best predicted delinquency for three generational status groups. Furthermore, I was able to control the order the variables were entered into the multiple regression models.

I entered the independent variables self-control, family bonding, neighborhood disorganization, school climate, and delinquent peers into the multiple regression models in that order for all three generational status groups. This order was determined based on the theoretically and empirically supported collection of influences on adolescent behavior described in the extensive literature review in Chapter 2. Based on the literature I reviewed, assessing the development of delinquent behaviors begins at an individual level (e.g., self-control) and branches outward to youths' immediate family environment (e.g., family bonds), their neighborhood environment (e.g., neighborhood disorganization), their school context (e.g., school climate), and their associations with peers (e.g., delinquent peers).

The purpose of the multiple regression analyses in this study were two-fold: to establish if a regression model was a good fit for the data, and to assess the weight or impact of more than two independent variables in predicting the dependent variable, delinquency (Cohen, Cohen, West, & Aiken, 2013; Schneider, Hommel, & Blettner, 2010; Slinker & Glantz, 2008). There were several steps to interpreting the multiple regression results of this study. The first step was determining the fit of a model by examining R-square (R^2) and related F -ratios. R-square conveyed the proportion of variance in the dependent variable that was explained by the independent variables in a

model. The corresponding F -ratios determined if the overall regression model was a good fit for the data (Cohen et al., 2013). The F -ratios were significant if $p \leq .05$, which indicated the independent variables of a regression model significantly predicted the dependent variable. Second, R -square change values (ΔR^2) were reported to show the percent of variance an independent variable had in explaining the dependent variable, which was significant if $p \leq .05$.

The next step was reporting unstandardized (b) and standardized (β) coefficients to demonstrate the impact of an independent variable on the dependent variable when all other independent variables were held constant (Schneider et al., 2010). Negative coefficients meant there was an inverse relationship between an independent variable and the dependent variable, which meant when one variable increased the other decreased (Cohen et al., 2013; Schneider et al., 2010). Positive coefficients meant there was a positive relationship between an independent variable and the dependent variable, which meant both variables increased or decreased together (Cohen et al., 2013; Schneider et al., 2010). Finally, t -values and corresponding significance values were reported to demonstrate the statistical significance of the independent variables. The coefficients (i.e., b , β) were statistically significant if $p \leq .05$ and nonsignificant when $p > .05$.

Ethical Procedures

In this study, I used the Second International Self-Reported Delinquency Study, 2005-2007 dataset (ISR2; Enzmann et al., 2015), which is archival data that is freely accessible through the National Archive of Criminal Justice Data website. Any researcher can get open access to the dataset by agreeing to the terms of usage stated by

the Inter-University Consortium for Political and Social Research. The main terms were for the researcher to cite the dataset in published work and not redistribute the dataset. There were no other permissions required to obtain the dataset. The ISRD-2 dataset is de-identified in order to maintain anonymity of the study participants (Enzmann et al., 2015). I am keeping the dataset for a minimum of 5 years on my password protected computer. I submitted all necessary documentation to Walden University's IRB, and received formal approval on December 15th, 2015 to conduct my study. The IRB approval number for this study is 07-15-15-0348904.

Summary

In the current chapter, I provided a detailed outline of the research design and methodology of this study, which included rationales for methodological selections. I also provided descriptions of study procedures involving archival data obtainment, sampling, statistical analyses, and ethical considerations. For this study, I used a quantitative, cross-sectional research design using a stratified random sample of adolescents residing in the United States in order to evaluate two research questions and related hypotheses. The use of a cross-sectional design coupled with a stratified random sampling strategy for this study allowed me to evaluate associations between a set of risk factors and delinquency as an outcome. Furthermore, it enabled me to compare the bivariate correlation and hierarchical multiple regression results among the three generational status subpopulations, which was essential for answering the postulated research questions and interpreting the results in Chapters 4 and 5. I used SPSS to perform the statistical analyses for this study using data from the ISRD-2 dataset, which

is archival data that has no special permissions for use. In Chapter 4, I describe the data collection procedures in detail including recruitment of the study participants, the creation of a modified dataset, and all data cleaning activities. I also report the demographic characteristics of the study sample and the results for both research questions and related hypotheses along with descriptions of the study findings.

Chapter 4: Results

Introduction

In this quantitative, cross-sectional study, I sought to investigate the relationship between delinquency and a set of factors (i.e., family bonding, school climate, neighborhood disorganization, delinquent peers, and self-control) using an adolescent sample in the United States. I also wanted to examine which of those factors best predicted delinquency across three subpopulations based on generational status (i.e., native-born adolescents, first-generation immigrant adolescents, and second-generation immigrant adolescents). Through this study, I strove to broaden practitioners' knowledge and understanding of delinquency risk factors among youth of different generational statuses in an effort to assist them with enhancing the cultural responsiveness of delinquency intervention strategies and improving youths' behavioral outcomes.

In this chapter, I summarize my data collection and sampling procedures. After describing the demographic characteristics of my study sample, I present the results for my research questions and hypotheses. I discuss the results for each research question in a separate section. In the first subsection, I report the bivariate correlation analysis results to answer the first research question and hypotheses. In the second subsection, I report the findings of the hierarchical multiple regression analyses to answer the second research question and hypotheses three, four, and five in separate sections for each of the three generational status subpopulations (i.e., native-born, first-generation immigrant, and second-generation immigrant). I end the chapter by summarizing the answers to the research questions and hypotheses and transitioning to Chapter 5.

Data Collection

I used data from the ISRD-2 dataset (Enzmann et al., 2015), which is archival data that is freely accessible for researchers to download from the National Archive of Criminal Justice Data (NACJD) website. The only requirement is that a researcher agrees to the terms of usage stated by the Inter-University Consortium for Political and Social Research (ICPSR). Once I received Walden University's IRB approval (#07-15-15-0348904), I went to the NACJD website, searched for the ISRD-2 dataset, selected to download the "Standard Data (Grades 7 to 9 Students)" file, agreed to the ICPSR's terms of usage, and saved the ISRD-2 dataset to my password protected computer.

ISRD-2 Recruitment and Response Rate

In the ISRD-2 study, Enzmann et al. (2015) employed a stratified multistage sampling procedure that involved selecting cities and towns first—the researchers studied school-based populations in 31 countries across Europe, North America, and South America—and then drawing a random sample from classrooms. I describe that sampling strategy in more detail in the data collection section of Chapter 3. Data for the U.S. portion of the ISRD-2 study were collected in 2006 to 2007 from 15 middle schools and high schools in five cities located in four states (Illinois, Massachusetts, New Hampshire, and Texas; Enzmann et al., 2015; Marshall & He, 2010). The researchers of the ISRD-2 study received informed consent from 2,571 students and their parents, and then collected data from that sample. The overall response rate was 63.6% ($N = 2,571$; Marshall & He, 2010). The researchers received 2,397 valid responses in reference to questions about

generational status for the ISRD-2 study, which served as the population I drew my study sample (Enzmann et al., 2015; Marshall & He, 2010).

Stratified Random Sample Procedure

Before performing the stratified random sampling procedure, I first had to remove data for countries other than the United States from the ISRD-2 dataset. I labeled and saved the new dataset as “United States Data Only.” Since the dataset contained over 700 variables, I chose to revise the dataset to only include the descriptive data (e.g., Case IDs, School IDs), item scores for key study variables, variable scores, and demographic data. In doing so, my dataset included data for 165 variables. In order to perform the stratified random sampling strategy through SPSS, I created three separate datasets for each generational status subpopulation (i.e., first-generation immigrants, second-generation immigrants, and native-born). I then took a random sample of 86 participants for each generational status group using the select case function of SPSS. While the calculated sample size in G*Power was 77, I purposefully oversampled in order to retain an adequate sample size to achieve a power of .80 after the removal of outliers or participants with a significant amount of missing data.

After I took a random sample for each generational status group, I reviewed whether any data on the main study variables (i.e., delinquency, delinquent peers, family bonding, school climate, neighborhood disorganization, and self-control) were missing for any participant. If I found that a participant was missing data for any of the study variables, I removed the participant from the sample and I randomly selected a new participant as a replacement. In order to avoid duplication, I then cross-checked the case

ID of a newly selected participant with the already selected participants. In addition, I verified that a newly selected case did not contain missing data before adding the participant to the study sample. I also assessed each generational status dataset for outliers using z -scores, and removed any cases that had z -scores above 3.29 and below -3.29. I maintained a log of the case IDs that I removed from the datasets due to missing data or identification as an outlier. Once I completed the data cleaning procedure, I reconsolidated the three generational status datasets into a total sample dataset, which contained data for first-generation immigrant adolescents, second-generation immigrant adolescents, and native-born adolescents.

The resulting dataset contained a total of 255 adolescents with 83 first-generation immigrant adolescents, 86 second-generation immigrant adolescents, and 86 native-born adolescents. In terms of representativeness, the original sample of the U.S. portion of the ISRD-2 study was considered to be adequately representative of U.S. youth (Enzmann et al., 2015; Marshall & He, 2010). The stratified random sampling procedure I used in this study led to a more equal representation of each generational status group and greater representation of the first- and second-generation immigrant groups than what would be typical for the actual youth population in the United States. First- and second-generation immigrant youth tend to be less represented in the youth population, 4% and 24% respectively, compared to native-born adolescents (72%; U.S. Census Bureau, 2014a). However, analysis of the second research question required all three generational status groups to have equal sample sizes in order to ensure adequate representation of each

group. Therefore, I chose to prioritize ensuring the representativeness and subsequent generalizability of each generational status subpopulation for this study.

Results

Demographic Characteristics

The sample included a total of 255 adolescents residing in the United States of varied demographics (see Table 1). The sample consisted of students attending seventh grade (27.06%), eighth grade (27.06%), and ninth grade (45.88%). Participants ranged in age from 12 to 16, but 96.47% ($n = 246$) of the study participants were in the 12 to 15 years old age group. There were also more male participants (52.16%) compared to female participants (47.84%). In terms of family structure, 67.06% of participants lived with both parents, whereas the remaining participants indicated living alternatively with their father and mother (5.10%), with one parent (13.73%), with a stepparent (8.63%), or other family situation (5.48%). The most prominent language spoken at home by participants was English (65.10%) followed by participants who spoke the language of their country of origin (28.24%).

Table 1

Demographic Characteristics of Study Participants

Characteristic	<i>n</i>	Percent ^a
Grade level		
Grade 7	69	27
Grade 8	69	27
Grade 9	117	46
Age group		
12 to 15 years old	246	96
16+ years old	9	4
Gender		
Female	122	48
Male	133	52
Family structure		
Lives with father and mother	171	67
Alternate living with father and mother	13	5
With one single parent	35	14
With stepparent	22	9
Other	14	5
Language at home		
English	166	65
Language of country of origin	72	28
Other language	15	6
No answer	2	1

Note. $N = 255$

^aPercent values were rounded.

The 255 study sample consisted of 83 (32%) first-generation immigrant adolescents, 86 (34%) second-generation immigrant adolescents, and 86 (34%) native-born adolescents. The adolescent participants of the sample were predominately US-born (67.06%). The majority of foreign-born adolescents immigrated to the United States from Central America (18.43%). The remaining participants immigrated to the United States from Asia (5.88%), Europe (2.35%), South America (1.57%), Northern America (.78%), or other location (5.49%). Most of the adolescents in the sample had two

foreign-born parents (41.18%) or two US-born parents (33.33%). The remaining adolescents had one US-born parent and one foreign-born parent (25.10%). The demographic information for participants associated with the generational status variable, as described above, are displayed in Table 2.

Table 2

Generational Status and Birthplace of Study Participants

Characteristic	<i>n</i>	Percent ^a
Generational status		
First-generation immigrant	83	32
Second-generation immigrant	86	34
Native-born	86	34
Adolescents' birthplace		
Foreign-born	84	33
US-born	171	67
Parents' birthplace		
Both parents are US-born	85	33
Both parents are foreign-born	105	41
One parent US-born, one parent foreign-born	64	25
Parents' birthplace unknown	1	1
Geographic region of adolescents' birthplace		
Europe	6	2
Asia	15	6
Central America	47	18
South America	4	2
Northern America (not United States)	2	1
United States	167	66
Other	14	5

Note. *N* = 255

^aPercent values were rounded.

Research Question 1

The first research question required assessment of the relationships between delinquency and a set of variables including family bonding, school climate, delinquent peers, neighborhood disorganization, and self-control. Therefore, I evaluated the first

research question using bivariate correlation analysis. Table 3 displays the descriptive statistics of the variables used for the bivariate correlation analysis.

Table 3

Descriptive Statistics of the Study Variables for the Total Adolescent Sample

Variable	<i>N</i>	Mean	<i>SD</i>
Family Bonding	255	79.23	18.61
School Climate	255	75.04	21.03
Neighborhood Disorganization	255	19.01	26.36
Self-Control	255	57.69	24.55
Delinquent Peers	255	25.96	28.65
Delinquency	255	.95	3.05

Hypothesis 1. The null hypothesis states there are no bivariate relationships between delinquency and family bonding, school climate, delinquent peers, neighborhood disorganization, or self-control for the total adolescent sample. The alternative hypothesis states there are bivariate relationships between delinquency and family bonding, school climate, delinquent peers, neighborhood disorganization, or self-control for the total adolescent sample.

Hypothesis 1 results. The bivariate correlation analyses demonstrated significant relationships between delinquency and all variables except family bonding, and school climate. According to the analysis, delinquency had a negative linear relationship with self-control, $r(253) = -.267, p < .001$, in which delinquency increased as self-control decreased. Delinquency was also linearly related to neighborhood disorganization, $r(253) = .289, p < .001$, and delinquent peers, $r(253) = .365, p < .001$. The positive relationships indicated an increase in delinquency as either neighborhood disorganization or youths' association with delinquent peers increased. See Appendix C for scatterplots

that show the relationships between self-control, neighborhood disorganization, delinquent peers, family bonding, and school climate with delinquency.

Based on the bivariate correlation analysis results for Hypothesis 1, delinquency was significantly related to self-control, neighborhood disorganization, and delinquent peers for the total sample. Therefore, I rejected the null hypothesis and accepted the alternative hypothesis that there are bivariate relationships between delinquency and family bonding, school climate, delinquent peers, neighborhood disorganization, or self-control for the total adolescent sample. Table 4 displays the results of the bivariate correlation analyses among all study variables for the total adolescent sample.

Table 4

Correlations Among Psychosocial and Environmental Variables with Delinquency

Variable	1	2	3	4	5	6
1. Delinquency	—	-.100	-.071	.289***	-.267***	.365***
2. Family Bonding		—	.193**	-.148*	.327***	-.261***
3. School Climate			—	-.067	.172**	-.045
4. Neighborhood Disorganization				—	-.490***	.350***
5. Self-Control					—	-.423***
6. Delinquent Peers						—

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

Hypothesis 2. I decided to conduct a post hoc analysis of family bonding and school climate to establish if either variable correlated with delinquency for any of the three generational status subpopulations. The null hypothesis states there are no bivariate relationships between delinquency and family bonding or school climate for any of the three generational status subpopulations. The alternative hypothesis states there are bivariate relationships between delinquency and family bonding or school climate for at least one of the three generational status subpopulations.

Hypothesis 2 results. I assessed the second hypothesis through a bivariate correlation analysis of delinquency, family bonding, and school climate. School climate was found to have a negative linear relationship with delinquency for the first-generation immigrant adolescent subpopulation, $r(81) = -.216, p = .05$, in which delinquency increased as school climate decreased. However, there was no significant correlation between delinquency and school climate for the other two subpopulations. Delinquency was also found to have a negative linear relationship with family bonding for the native-born adolescent subpopulation, $r(84) = -.219, p = .04$, in which delinquency increased as family bonding decreased. However, there was no significant correlation between delinquency and family bonding for the first- and second-generation immigrant adolescent subpopulations. See Appendix D for scatterplots that show the relationships of school climate with delinquency for the first-generation immigrant adolescent subpopulation and family bonding with delinquency for the native-born adolescent subpopulation.

Based on the bivariate correlation analysis results for Hypothesis 2, delinquency was significantly correlated with school climate for the first-generation immigrant adolescent subpopulation and family bonding for the native-born adolescent subpopulation. In this case, I rejected the null hypothesis and accepted the alternative hypothesis that there are bivariate relationships between delinquency and family bonding or school climate for at least one of the three generational status subpopulations. Table 5 displays results of the bivariate correlation analyses among the school climate, family bonding, and delinquency variables for each generational status.

Table 5

Bivariate Correlation of Family Bonding and School Climate with Delinquency

Variable	1 st Gen. Immigrants (n = 83)			2 nd Gen. Immigrants (n = 86)			Native-Born (n = 86)		
	1	2	3	1	2	3	1	2	3
1. Delinquency	—	-.073	-.216*	—	-.030	.172	—	-.219*	-.087
2. Family Bonding		—	.233*		—	.206		—	.144
3. School Climate			—			—			—

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

Research Question 2

The second research question and the third, fourth, and fifth hypotheses were assessed through hierarchical multiple regression analyses to determine what independent variables best predicted the dependent variable, delinquency, for three generational status groups. Based on the bivariate correlation analysis results of Research Question 1, I used family bonding, school climate, self-control, neighborhood disorganization, and delinquent peers as predictor variables for the hierarchical multiple regression analyses to evaluate Research Question 2 and Hypotheses 3, 4, and 5.

Hypothesis 3. The null hypothesis states: In the first-generation immigrant adolescent subpopulation, the proportion of the variance in delinquency explained by family bonding, school climate, delinquent peers, neighborhood disorganization, and self-control is zero. The alternative hypothesis states: In the first-generation immigrant adolescent subpopulation, the proportion of the variance in delinquency explained by at least one of the independent variables family bonding, school climate, delinquent peers, neighborhood disorganization, and self-control does not equal zero.

Hypothesis 3 assumption tests. First, I performed a hierarchical multiple regression analysis between delinquency and the predictor variables (i.e., self-control, family bonding, neighborhood disorganization, school climate, and delinquent peers) for the first-generation immigrant subpopulation, so I could assess the required statistical assumptions (i.e., multicollinearity, normality of residuals, homogeneity of variance, and homogeneity of regression). I tested for multicollinearity by reviewing a correlation matrix, variance inflation factors (VIF), and tolerance values. The correlation matrix was examined to identify any correlations that were greater than or equal to .60 (Dormann et al., 2013; Field, 2013). In this case, the correlation matrix indicated no high correlation among the independent variables self-control, family bonding, neighborhood disorganization, school climate, and delinquent peers, which showed the assumption was met (see Table 6).

Table 6

Correlation Matrix Among Predictors for the First-Generation Immigrant Sample

Variable	1	2	3	4	5
1. Self-Control	—	.387***	-.457***	.282**	-.539***
2. Family Bonding		—	.387***	.233**	-.161
3. Neighborhood Disorganization			—	-.332**	.332**
4. School Climate				—	-.044
5. Delinquent Peers					—

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

I also examined VIFs for values above 10 and tolerance values below .1 for multicollinearity. All variables had VIFs below 10, and tolerance values above .1, which verified the multicollinearity assumption was met (see Table 7).

Table 7

First-Generation Immigrant Sample VIF and Tolerance Values for Predictor Variables

Variable	VIF	Tolerance
Model 1		
Self-control	1.00	1.00
Model 2		
Self-control	1.18	.85
Family bonding	1.18	.85
Model 3		
Self-control	1.39	.72
Family bonding	1.20	.84
Neighborhood disorganization	1.28	.78
Model 4		
Self-control	1.41	.71
Family bonding	1.21	.83
Neighborhood disorganization	1.35	.74
School climate	1.17	.86
Model 5		
Self-control	1.83	.55
Family bonding	1.21	.82
Neighborhood disorganization	1.38	.73
School climate	1.20	.84
Delinquent peers	1.47	.68

I reviewed a scatterplot of the standardized residuals and predicted values to assess the homogeneity of variance and homogeneity of regression assumptions. Based on the scatterplot, the standardized predicted values and residuals had a regression slope of zero, which indicated the homogeneity of regression assumption was met. However, the funnel shaped distribution of points indicated there was heteroscedasticity, and that the homogeneity of variance assumption was not met (see Figure 1).

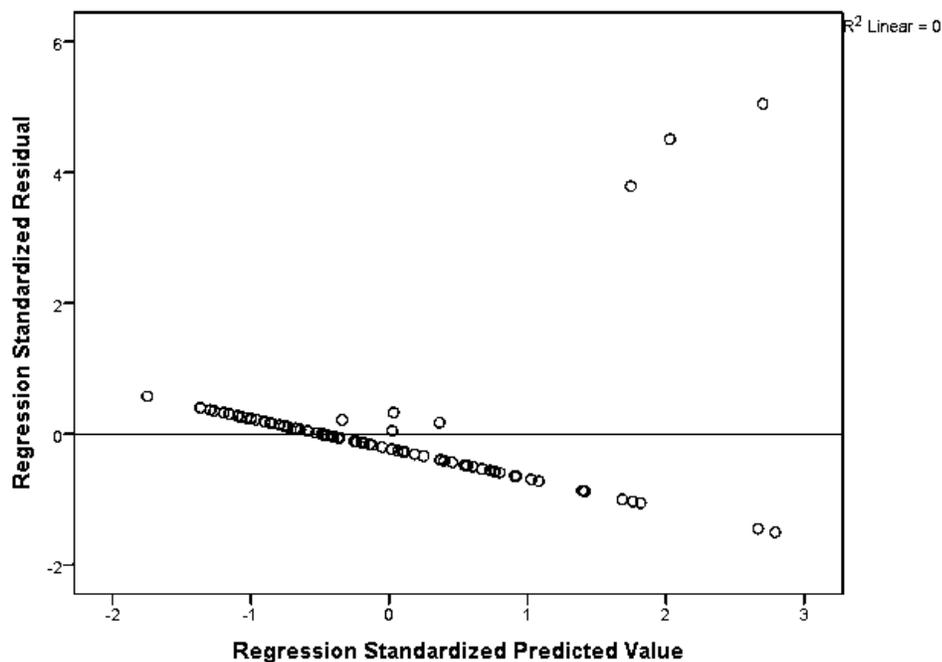


Figure 1. A scatterplot graph of the standardized predicted values and residuals for the first-generation immigrant adolescent sample that shows the regression slope is zero and that there is heteroscedasticity.

I reviewed a histogram and P-P plot to check for normality of residuals, which indicated residuals were not normally distributed (see Figure 2). The kurtosis and skewness values were 16 with a standard error of .52 and 3.59 with a standard error of .26, respectively. The calculated z -score for kurtosis was 30.77 and the z -score for skewness was 13.81. Both z -score values were above a 3.29 threshold and significant at $p < .001$ (Field, 2013; Kim, 2013), which verified the residuals were not normally distributed.

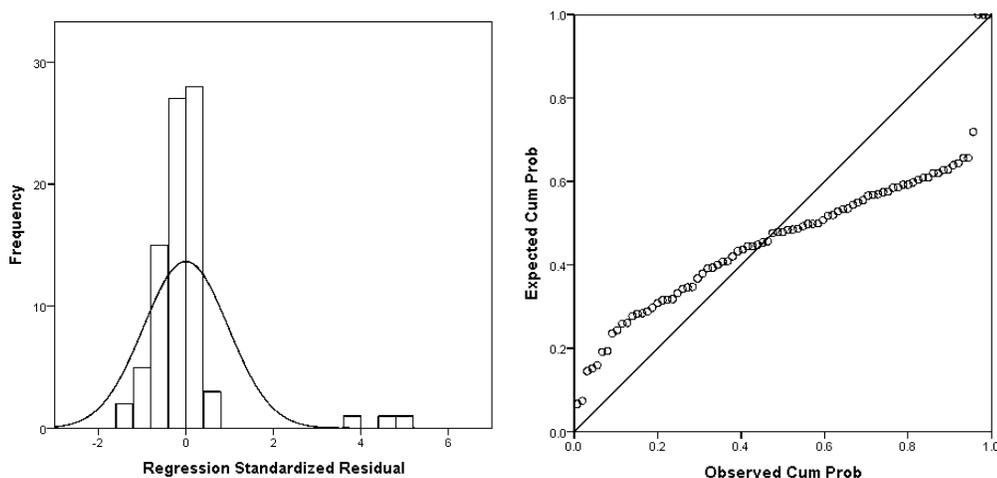


Figure 2. A histogram and P-P plot of residuals for the first-generation immigrant adolescent sample that both demonstrate a violation of the normality assumption.

I tried various transformation techniques (i.e., log, square root, reciprocal, reverse, and two-step) on only the independent variables, only the dependent variable, and both to achieve a normal distribution of the residuals. The two-step transformation provided the best correction for normality of residuals. This transformation is performed by first, ranking cases of a variable by fractional rank through SPSS, which creates a new variable. Then a normalized variable is created through the compute function using the rank variable created in step one, and the mean and standard deviation of the original variable (Templeton, 2011). Once transformed, I performed a hierarchical multiple regression analysis using the transformed dependent variable, delinquency, and then reviewed the histogram and P-P plot of residuals for normality. The distribution of the residuals remained relatively unchanged based on the visual tests (i.e., histogram and P-P plot) compared to using the untransformed delinquency variable (see Figure 3).

However, there were changes in the kurtosis and skewness values, which were 8.26 with

a standard error of .53 and 2.82 with a standard error of .27, respectively. The calculated z -score for kurtosis was 15.58 and the z -score for skewness was 5.32. While improved from the untransformed data, both z -score values were above a 3.29 threshold and significant at $p < .001$ (Field, 2013; Kim, 2013), which verified the residuals were not normally distributed.

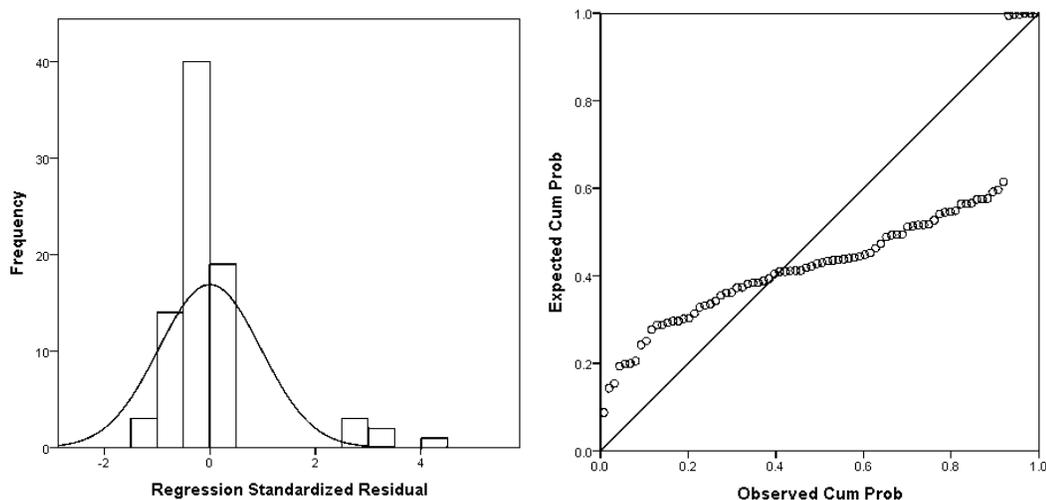


Figure 3. A histogram and a P-P plot of the residuals for the first-generation immigrant adolescent sample based on the transformed delinquency variable. Both graphs demonstrate a violation of the normality assumption.

In a review of the assumption test results, both the normality of residuals and homogeneity of variance assumptions were violated. Multiple regression is robust to violations of the normality assumption when the sample size is greater than 50, as is the case in this study, and when the assumption violation is not severe (Casson & Farmer, 2014; Nimon, 2012). In regards to this study, the histograms, P-P plots, kurtosis values, and skewness values showed significant deviations from normality. According to Osborne and Waters (2002), the relationship and significance test results of a regression

analysis can be distorted when the distribution of residuals is highly skewed or kurtotic. Multiple regression is also robust to violations of the homogeneity of variance assumption, but severe violations can increase the possibility of Type I errors, uninterpretable *t* statistics and F-test results, and inconsistent inferences (Antonakis & Dietz, 2011).

Other researchers (Antonakis & Dietz, 2011; Field, 2013) suggested using the bootstrap function of SPSS for multiple regression analyses in cases when there are violations of the normality of residuals and homogeneity of variance assumptions. Using the bootstrap function re-estimates the standard errors to give more accurate estimates for the sample population of the significance and coefficient values for each predictor in the multiple regression models. Furthermore, performing a multiple regression analysis with bootstrap does not require normality of residuals or homoscedasticity. Therefore, I decided to proceed with my hierarchical multiple regression analysis to test Hypothesis 3 as planned, but I used the transformed delinquency variable and the bootstrap function.

Hypothesis 3 results. Using hierarchical multiple regression via entry method, it was hypothesized that the proportion of the variance in delinquency for the first-generation immigrant adolescent subpopulation explained by family bonding, school climate, delinquent peers, neighborhood disorganization, and self-control is zero. The prediction model contained five predictors (i.e., family bonding, school climate, delinquent peers, neighborhood disorganization, and self-control) that were entered into the regression model one step at a time. The independent variables were entered into the model in a logically established order based on theory and empirical evidence from the

literature I reviewed. See Chapter 3 for more information about the order. The predictors were entered into the model in the following order: self-control, family bonding, neighborhood disorganization, school climate, and delinquent peers. Table 8 provides descriptive statistics for all five predictor variables and the dependent variable, delinquency, for the first-generation immigrant adolescent sample.

Table 8

Descriptive Statistics for the First-Generation Immigrant Adolescent Sample

Variable	<i>n</i>	Mean	<i>SD</i>
Delinquency	82	.98	1.88
Self-Control	82	62.72	24.08
Family Bonding	82	81.14	18.70
Neighborhood Disorganization	82	14.51	21.38
School Climate	82	74.59	22.98
Delinquent Peers	82	17.80	24.14

In the first step of the hierarchical multiple regression, self-control was entered into the model to predict the outcome delinquency. This model was statistically significant, $F(1, 80) = 7.74, p = .007$. Self-control accounted for 8.8% of the variation ($R^2 = .088, p = .007$) in explaining delinquency among first-generation immigrant adolescents. Furthermore, self-control was negatively related to and a significant predictor of delinquency, $b = -.02, t(80) = -2.78, p = .043$. All other variables entered into the multiple regression model from the second to last step were not significant predictors of delinquency for first-generation immigrant adolescents. The overall hierarchical model accounted for 11.7% of the variance in delinquency with self-control being the only significant predictor of delinquency among the first-generation immigrant adolescent sample. See Table 9 for an ANOVA summary table of the hierarchical

regression models and Table 10 for a summary of the hierarchical multiple regression results for predictors.

Table 9

ANOVA for Regression Equations of Psychosocial and Environmental Variables on Delinquency for the First-Generation Immigrant Sample

Source	<i>df</i>	ss	ms	<i>F</i>
Step 1				
Regression	1	25.26	25.26	7.74**
Residual	80	260.94	3.26	
Total	81	286.20		
Step 2				
Regression	2	28.25	14.13	4.33*
Residual	79	257.94	3.27	
Total	81	286.20		
Step 3				
Regression	3	28.54	9.51	2.88*
Residual	78	257.66	3.30	
Total	81	286.20		
Step 4				
Regression	4	32.79	8.20	2.49*
Residual	77	253.41	3.30	
Total	81	286.20		
Step 5				
Regression	5	33.43	6.69	2.01
Residual	76	252.77	3.33	
Total	81	286.20		

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

Table 10

Hierarchical Multiple Regression Analyses Predicting Delinquency Through Psychosocial and Environmental Variables Among First-Generation Immigrant Adolescents

Predictor	<i>B</i>	<i>SE B</i>	β	95% CI	<i>R</i> ²	ΔR^2	<i>F</i> change in <i>R</i> ²
Step 1					.088	.088	7.74**
Self-control	-.023*	.010	-.297*	[-.04, .00]			
Step 2					.099	.010	.92
Self-control	-.020	.009	-.251	[-.04, .00]			
Family bonding	-.011	.013	-.112	[-.04, .01]			
Step 3					.100	.001	.09
Self-control	-.021	.009	-.264	[-.04, .00]			
Family bonding	-.012	.014	-.117	[-.04, .02]			
Neighborhood disorganization	-.003	.016	-.035	[-.03, .04]			
Step 4					.115	.015	1.29
Self-control	-.019	.010	-.247	[-.04, .00]			
Family bonding	-.010	.014	-.103	[-.04, .02]			
Neighborhood disorganization	-.006	.014	-.067	[-.03, .03]			
School climate	-.011	.014	-.132	[-.04, .02]			
Step 5					.117	.002	.19
Self-control	-.017	.014	-.218	[-.04, .01]			
Family bonding	-.011	.015	-.105	[-.04, .02]			
Neighborhood disorganization	-.006	.014	-.074	[-.03, .03]			
School climate	-.011	.014	-.139	[-.04, .02]			
Delinquent peers	.004	.014	.056	[-.02, .03]			

Note. *n* = 82

* *p* < .05, ** *p* < .01, *** *p* < .001

Based on the hierarchical multiple regression results, self-control was the only independent variable that was significantly predictive ($p = .043$) of delinquency, which accounted for 8.8% of the variation in delinquency for the first-generation immigrant adolescent sample. Therefore, I rejected the null hypothesis and accepted the alternative hypothesis that the proportion of the variance in delinquency in the first-generation immigrant adolescent subpopulation explained by at least one of the independent variables family bonding, school climate, delinquent peers, neighborhood disorganization, and self-control does not equal zero.

Hypothesis 4. The null hypothesis states: In the second-generation immigrant adolescent subpopulation, the proportion of the variance in delinquency explained by family bonding, school climate, delinquent peers, neighborhood disorganization, and self-control is zero. The alternative hypothesis states: In the second-generation immigrant adolescent subpopulation, the proportion of the variance in delinquency explained by at least one of the independent variables family bonding, school climate, delinquent peers, neighborhood disorganization, and self-control does not equal zero.

Hypothesis 4 assumption tests. First, I performed a hierarchical multiple regression analysis between delinquency and the predictor variables (i.e., family bonding, school climate, self-control, neighborhood disorganization, and delinquent peers) for the second-generation immigrant subpopulation, so I could assess the required statistical assumptions (i.e., multicollinearity, normality of residuals, homogeneity of variance, and homogeneity of regression). I tested for multicollinearity by reviewing a correlation matrix, variance inflation factors (VIF), and tolerance values. The correlation matrix was examined to identify any correlations that were greater than or equal to .60 (Dormann et al., 2013; Field, 2013). In this case, the correlation matrix indicated no high correlation among the independent variables family bonding, school climate, neighborhood disorganization, self-control, and delinquent peers, which showed the assumption was met (see Table 11).

Table 11

Correlation Matrix Among Predictors for the Second-Generation Immigrant Sample

Variable	1	2	3	4	5
1. Self-Control	—	.244*	-.500***	.057	-.276**
2. Family Bonding		—	-.097	.206*	-.146
3. Neighborhood Disorganization			—	.023	.488***
4. School Climate				—	.107
5. Delinquent Peers					—

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

I also examined VIFs for values above 10 and tolerance values below .1 for multicollinearity. All variables had VIFs below 10, and tolerance values above .1, which verified the multicollinearity assumption was met (see Table 12).

Table 12

Second-Generation Immigrant Sample VIF and Tolerance Values for Predictor Variables

Variable	VIF	Tolerance
Model 1		
Self-control	1.00	1.00
Model 2		
Self-control	1.06	.94
Family bonding	1.06	.94
Model 3		
Self-control	1.41	.71
Family bonding	1.06	.94
Neighborhood disorganization	1.34	.75
Model 4		
Self-control	1.41	.71
Family bonding	1.11	.90
Neighborhood disorganization	1.34	.75
School climate	1.05	.95
Model 5		
Self-control	1.41	.71
Family bonding	1.13	.89
Neighborhood disorganization	1.63	.61
School climate	1.07	.94
Delinquent peers	1.36	.74

I reviewed a scatterplot of the standardized residuals and predicted values to assess the homogeneity of variance and homogeneity of regression assumptions. Based on the scatterplot, the standardized predicted values and residuals had a regression slope of zero, which indicated the homogeneity of regression assumption was met. However, the funnel shaped distribution of points indicated there was heteroscedasticity, and that the homogeneity of variance assumption was not met (see Figure 4).

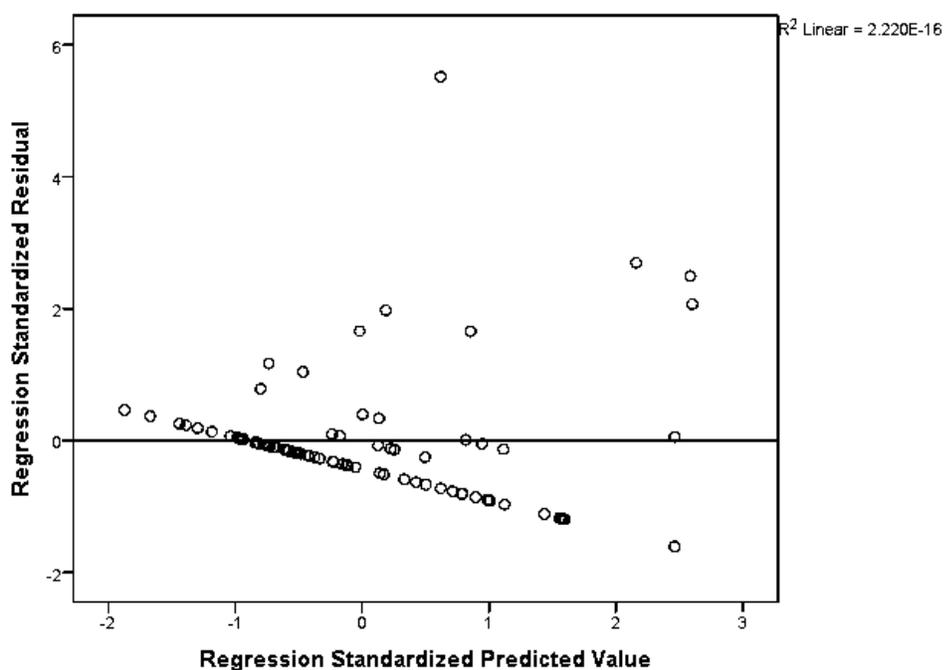


Figure 4. A scatterplot graph of the standardized predicted values and residuals for the second-generation immigrant adolescent sample that shows the regression slope is zero and that there is heteroscedasticity.

I reviewed a histogram and P-P plot to check for normality of residuals, which indicated residuals were not normally distributed (see Figure 5). The kurtosis and skewness values were 12.39 with a standard error of .51 and 2.81 with a standard error of .26, respectively. The calculated z -score for kurtosis was 24.11 and the z -score for

skewness was 10.81. Both z -score values were above a 3.29 threshold and significant at $p < .001$ (Field, 2013; Kim, 2013), which verified the residuals were not normally distributed.

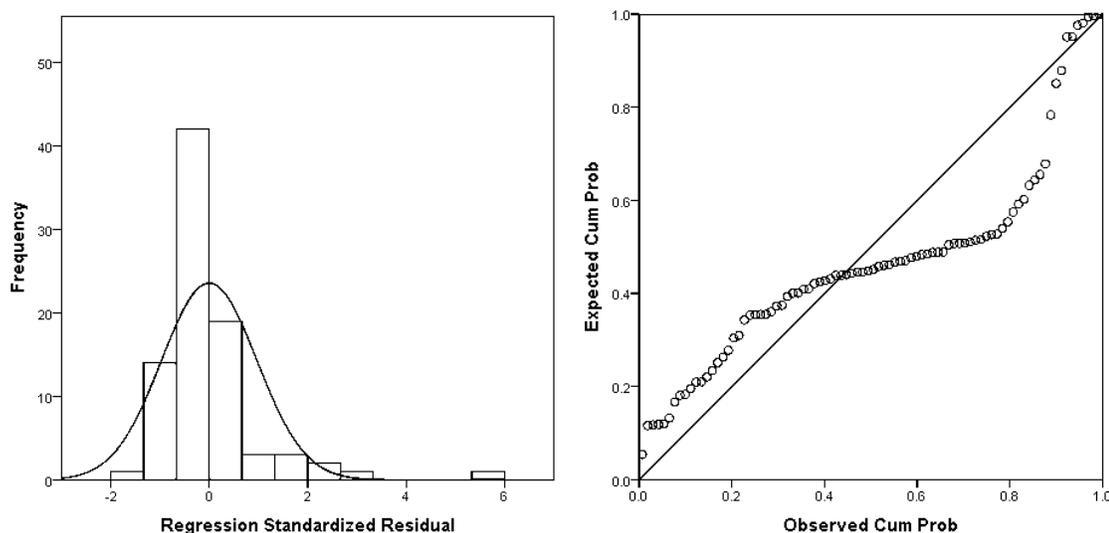


Figure 5. A histogram and a P-P plot of the residuals for the second-generation immigrant adolescent sample that both demonstrate a violation of the normality assumption.

As with the first-generation immigrant sample, I tried the same transformation techniques (i.e., log, square root, reciprocal, reverse, and two-step) on the independent and dependent variables for the second-generation immigrant sample to achieve a normal distribution of the residuals. The two-step transformation provided the best correction for normality of residuals. After performing a hierarchical multiple regression analysis using the transformed dependent variable, delinquency, I reviewed the histogram and P-P plot of residuals for normality. The distribution of the residuals was improved based on the visual tests (i.e., histogram and P-P plot) compared to using the untransformed delinquency variable (see Figure 6). There were also significant changes in the kurtosis

and skewness values, which were .024 with a standard error of .52 and .91 with a standard error of .26, respectively. The calculated z -score for kurtosis was .04 and the z -score for skewness was 3.47. Based on the aforesaid information, the fact that the kurtosis and skewness values were both below 1, that only the skewness z -score was slightly above the 3.29 threshold (Field, 2013; Kim, 2013), and that multiple regression is robust to minor violations of normality (Casson & Farmer, 2014; Nimon, 2012), I concluded the residuals were sufficiently normally distributed.

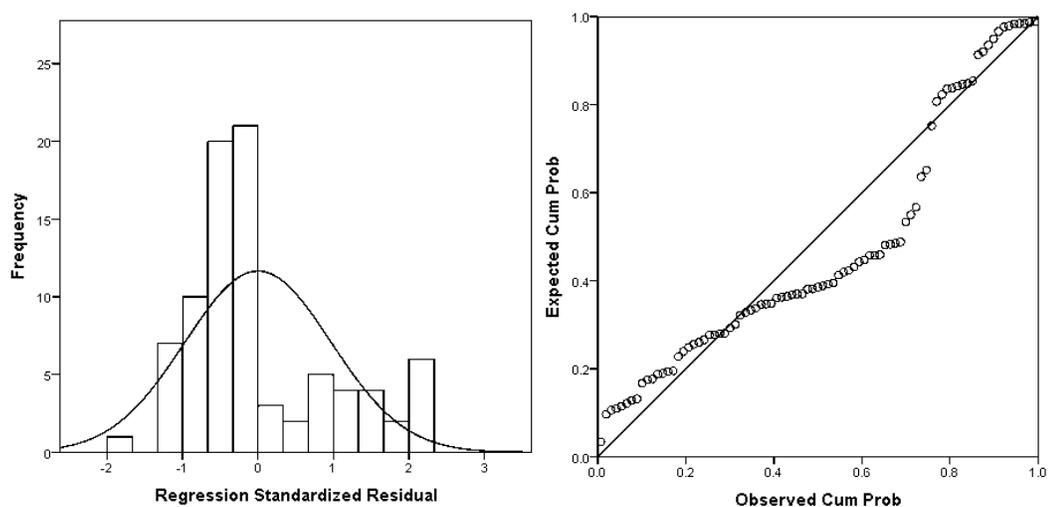


Figure 6. A histogram and a P-P plot of the residuals for the second-generation immigrant adolescent sample based on the transformed delinquency variable. Both graphs demonstrate slight deviations from normality.

In a review of the assumption test results, all assumptions except the homogeneity of variance assumption were met. In accordance with my assessment of Hypothesis 3, I decided to test Hypothesis 4 as planned using the transformed delinquency variable and the bootstrap function for my multiple regression analysis as it does not require homoscedasticity.

Hypothesis 4 results. Using hierarchical multiple regression via entry method, it was hypothesized that the proportion of the variance in delinquency for the second-generation immigrant adolescent subpopulation explained by family bonding, school climate, delinquent peers, neighborhood disorganization, and self-control is zero. The prediction model contained five predictors (i.e., family bonding, school climate, delinquent peers, neighborhood disorganization, and self-control) that were entered into the regression model one step at a time. The independent variables were entered into the model in a logically established order based on theory and empirical evidence from the literature I reviewed. I provide more information about the order in Chapter 3. The predictors were entered into the model in the following order: self-control, family bonding, neighborhood disorganization, school climate, and delinquent peers. Table 13 provides descriptive statistics for all five predictor variables and the dependent variable, delinquency, for the second-generation immigrant adolescent sample.

Table 13

Descriptive Statistics for the Second-Generation Immigrant Adolescent Sample

Variable	<i>n</i>	Mean	<i>SD</i>
Delinquency	85	1.21	1.82
Self-Control	85	53.55	26.29
Family Bonding	85	79.61	19.88
Neighborhood Disorganization	85	25.39	31.09
School Climate	85	75.03	20.23
Delinquent Peers	85	29.41	30.80

The hierarchical multiple regression analysis indicated neighborhood disorganization, school climate, and delinquent peers were predictive of delinquency for the second-generation immigrant subpopulation. In the third step of the hierarchical

multiple regression, neighborhood disorganization was added to the model, which was not statistically significant, $F(3, 81) = 1.87, p = .141$. The addition of neighborhood disorganization resulted in a 5.9% change of the variation ($\Delta R^2 = .059, p = .026$) in explaining delinquency. Furthermore, neighborhood disorganization was positively related to and predictive of delinquency, $b = .016, t(81) = 2.26, p = .026$, and remained predictive of delinquency in the fourth step of the hierarchical multiple regression analysis, $b = .016, t(81) = 2.19, p = .031$. School climate was added to the hierarchical multiple regression model in the fourth step, which resulted in a statistically significant model, $F(4, 80) = 2.62, p = .041$. School climate accounted for a 5.1% change of the variation ($\Delta R^2 = .051, p = .035$) in explaining delinquency. Moreover, school climate was positively related to and predictive of delinquency, $b = .02, t(80) = 2.15, p = .015$.

In the final step of the hierarchical multiple regression, peer delinquency was added to the model, which resulted in a model that was statistically significant, $F(5, 79) = 3.84, p = .004$. The addition of delinquent peers to the model resulted in an 8% change of the variation ($\Delta R^2 = .080, p = .006$) in explaining delinquency. Delinquent peers was positively related to and a significant predictor of delinquency, $b = .02, t(79) = 2.80, p = .030$. The overall hierarchical model accounted for 19.5% of the variation ($R^2 = .195, p = .004$) in explaining delinquency. See Table 14 for an ANOVA summary table of the hierarchical regression models and Table 15 for a summary of the hierarchical multiple regression results for predictors.

Table 14

ANOVA for Regression Equations of Psychosocial and Environmental Variables on Delinquency for the Second-Generation Immigrant Sample

Source	<i>df</i>	ss	ms	<i>F</i>
Step 1				
Regression	1	1.36	1.36	.41
Residual	83	276.60	3.33	
Total	84	277.96		
Step 2				
Regression	2	1.61	.80	.24
Residual	82	276.35	3.37	
Total	84	277.96		
Step 3				
Regression	3	18.03	6.01	1.87
Residual	81	259.93	3.21	
Total	84	277.96		
Step 4				
Regression	4	32.17	8.04	2.62*
Residual	80	245.79	3.07	
Total	84	277.96		
Step 5				
Regression	5	54.31	10.86	3.84**
Residual	79	223.65	2.83	
Total	84	277.96		

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

Table 15

Hierarchical Multiple Regression Analyses Predicting Delinquency Through Psychosocial and Environmental Variables Among Second-Generation Immigrant Adolescents

Predictor	<i>B</i>	<i>SE B</i>	β	95% CI	<i>R</i> ²	ΔR^2	<i>F</i> change in <i>R</i> ²
Step 1					.005	.005	.41
Self-control	-.005	.006	-.070	[-.02, .01]			
Step 2					.006	.001	.07
Self-control	-.004	.006	-.063	[-.02, .01]			
Family bonding	-.003	.011	-.031	[-.03, .02]			
Step 3					.065	.059	5.12*
Self-control	.005	.007	.078	[-.01, .02]			
Family bonding	-.004	.010	-.038	[-.02, .01]			
Neighborhood disorganization	.016*	.008	.280*	[.00, .03]			
Step 4					.116	.051	4.60*
Self-control	.005	.007	.069	[-.01, .02]			
Family bonding	-.008	.010	-.085	[-.03, .01]			
Neighborhood disorganization	.016*	.008	.266*	[-.00, .03]			
School climate	.021*	.008	.231*	[.01, .04]			
Step 5					.195	.080	7.82**
Self-control	.005	.007	.076	[-.01, .02]			
Family bonding	-.004	.009	-.045	[-.02, .01]			
Neighborhood disorganization	.007	.008	.114	[-.01, .02]			
School climate	.017*	.008	.191*	[.00, .03]			
Delinquent peers	.019*	.008	.329*	[.00, .04]			

Note. *n* = 85

* *p* < .05, ** *p* < .01, *** *p* < .001

Based on the hierarchical multiple regression results, the independent variables neighborhood disorganization, school climate, and delinquent peers accounted for 5.9%, 5.1%, and 8% of the variation in delinquency, respectively, and were significantly predictive ($p < .05$) of delinquency in the second-generation immigrant adolescent sample. Therefore, I rejected the null hypothesis and accepted the alternative hypothesis that the proportion of the variance in delinquency in the second-generation immigrant adolescent subpopulation explained by at least one of the independent variables family bonding, school climate, delinquent peers, neighborhood disorganization, and self-control does not equal zero.

Hypothesis 5. The null hypothesis for Hypothesis 5a states: In the native-born adolescent subpopulation, the proportion of the variance in delinquency explained by family bonding, school climate, delinquent peers, neighborhood disorganization, and self-control is zero. The alternative hypothesis states: In the native-born adolescent subpopulation, the proportion of the variance in delinquency explained by at least one of the independent variables family bonding, school climate, delinquent peers, neighborhood disorganization, and self-control does not equal zero. Hypothesis 5b is a secondary analysis that I conducted post hoc. The null hypothesis for Hypothesis 5b states: In the native-born adolescent subpopulation, the proportion of the variance in delinquency explained by family bonding, delinquent peers, and self-control is zero. The alternative hypothesis states: In the native-born adolescent subpopulation, the proportion of the variance in delinquency explained by at least one of the independent variables family bonding, delinquent peers, and self-control does not equal zero.

Hypothesis 5 assumption tests. First, I performed a hierarchical multiple regression analysis between delinquency and the predictor variables (i.e., family bonding, school climate, self-control, neighborhood disorganization, and delinquent peers) for the native-born subpopulation, so I could assess the required statistical assumptions (i.e., multicollinearity, normality of residuals, homogeneity of variance, and homogeneity of regression). I tested for multicollinearity by reviewing a correlation matrix, variance inflation factors (VIF), and tolerance values. The correlation matrix was examined to identify any correlations that were greater than or equal to .60 (Dormann et al., 2013; Field, 2013). In this case, the correlation matrix indicated no high correlation among the

independent variables family bonding, school climate, neighborhood disorganization, self-control, and delinquent peers, which showed the assumption was met (see Table 16).

Table 16

Correlation Matrix Among Predictors for the Native-Born Sample

Variable	1	2	3	4	5
1. Self-Control	—	.368***	-.479***	.189*	-.469***
2. Family Bonding		—	-.115	.144	-.466***
3. Neighborhood Disorganization			—	.070	.163
4. School Climate				—	-.220*
5. Delinquent Peers					—

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

I also examined VIFs for values above 10 and tolerance values below .1 for multicollinearity. All variables had VIFs below 10, and tolerance values above .1, which verified the multicollinearity assumption was met (see Table 17).

Table 17

Native-Born Sample VIF and Tolerance Values for Predictor Variables

Variable	VIF	Tolerance
Model 1		
Self-control	1.00	1.00
Model 2		
Self-control	1.16	.86
Family bonding	1.16	.86
Model 3		
Self-control	1.49	.67
Family bonding	1.16	.86
Neighborhood disorganization	1.31	.77
Model 4		
Self-control	1.56	.64
Family bonding	1.17	.86
Neighborhood disorganization	1.35	.74
School climate	1.08	.93
Model 5		
Self-control	1.74	.58
Family bonding	1.33	.75
Neighborhood disorganization	1.35	.74
School climate	1.10	.91
Delinquent peers	1.50	.67

I reviewed a scatterplot of the standardized residuals and predicted values to assess the homogeneity of variance and homogeneity of regression assumptions. Based on the scatterplot, the standardized predicted values and residuals had a regression slope of zero, which indicated the homogeneity of regression assumption was met. However, the funnel shaped distribution of points indicated there was heteroscedasticity, and that the homogeneity of variance assumption was not met (see Figure 7).

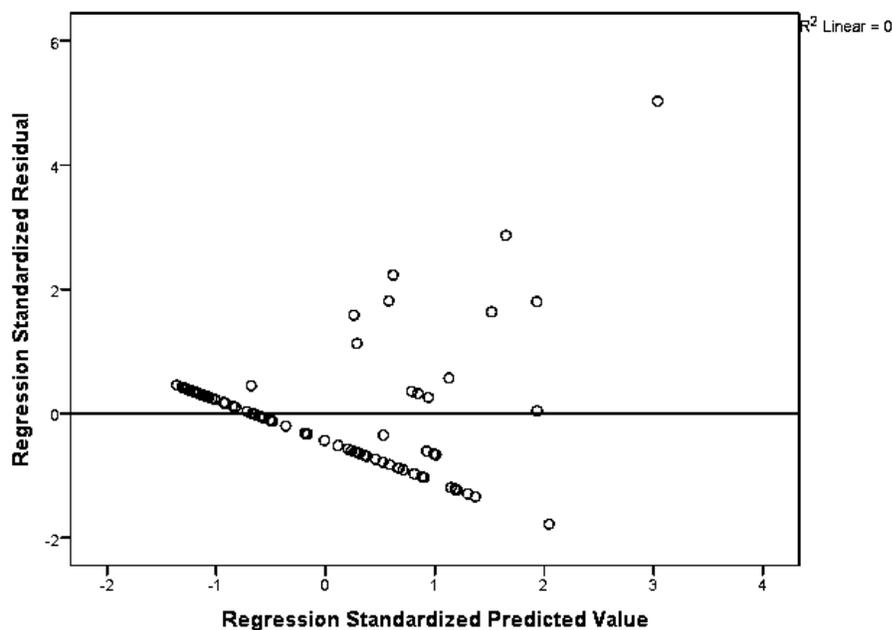


Figure 7. A scatterplot graph of the standardized predicted values and residuals for the native-born adolescent sample that shows the regression slope is zero and that there is heteroscedasticity.

I reviewed a histogram and P-P plot to check for normality of residuals, which indicated residuals were not normally distributed (see Figure 8). The kurtosis and skewness values were 8.28 with a standard error of .51 and 2.07 with a standard error of .26, respectively. The calculated z -score for kurtosis was 16.24 and the z -score for

skewness was 7.96. Both z -score values were above a 3.29 threshold and significant at $p < .001$ (Field, 2013; Kim, 2013), which verified the residuals were not normally distributed.

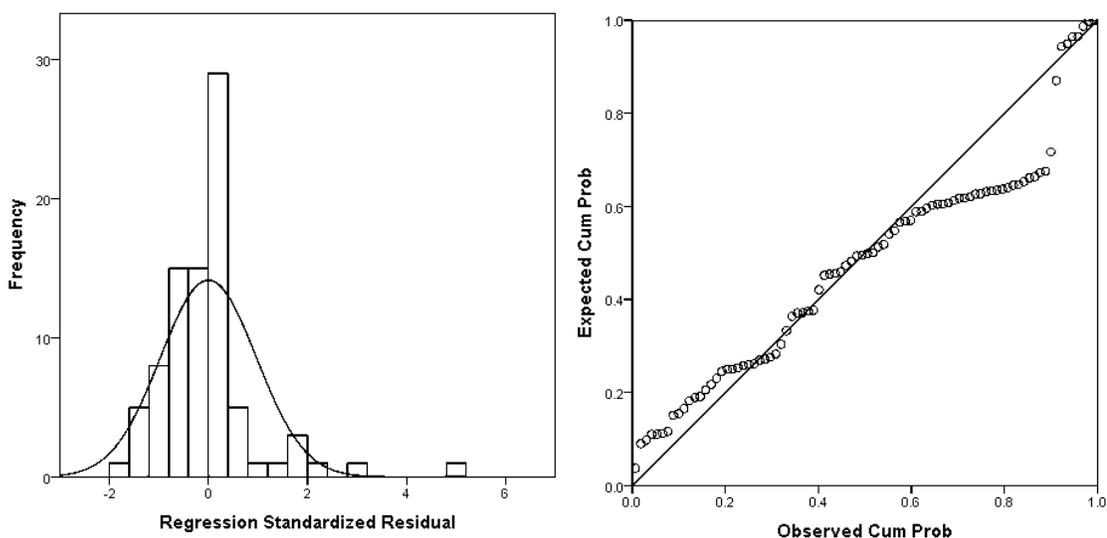


Figure 8. A histogram and a P-P plot of the residuals for the native-born adolescent sample that both demonstrate a violation of the normality assumption.

As with the first- and second-generation immigrant samples, I tried the same transformation techniques (i.e., log, square root, reciprocal, reverse, and two-step) on the independent and dependent variables for the native-born sample to achieve a normal distribution of the residuals. The two-step transformation provided the best correction for normality of residuals. After performing a hierarchical multiple regression analysis using the transformed dependent variable, delinquency, I reviewed the histogram and P-P plot of residuals for normality. The distribution of the residuals was significantly improved based on the visual tests (i.e., histogram and P-P plot) compared to using the untransformed delinquency variable (see Figure 9). There were also significant changes

in the kurtosis and skewness values, which were .84 with a standard error of .52 and .80 with a standard error of .26, respectively. The calculated z -score for kurtosis was 1.62 and the z -score for skewness was 3.08, which were below the 3.29 threshold demonstrating normality of the residuals (Field, 2013; Kim, 2013). Based on the graphical (i.e., histogram, P-P plot) and numeric (i.e., skewness, kurtosis) results, I concluded the normality of residuals assumption was met.

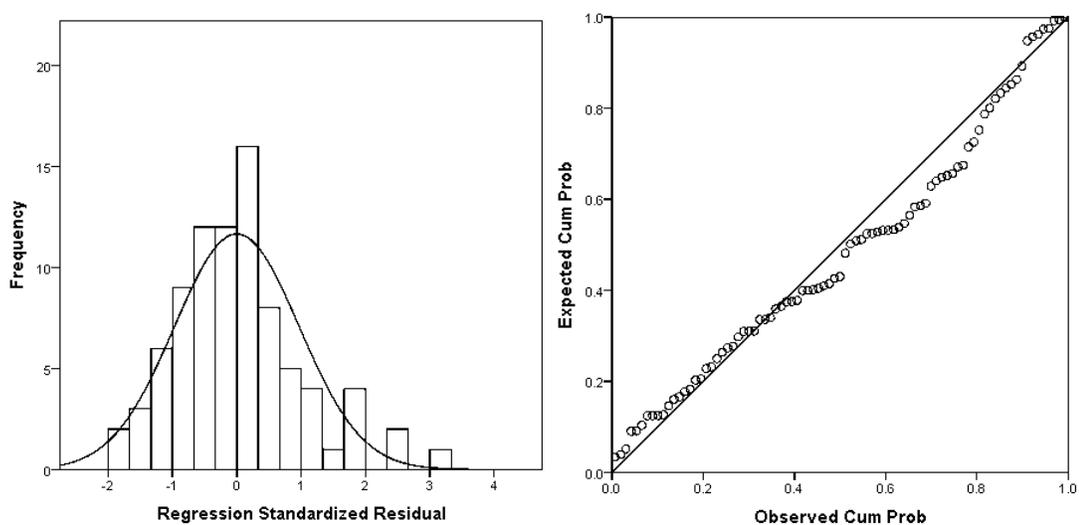


Figure 9. A histogram and a P-P plot of the residuals for the native-born adolescent sample based on the transformed delinquency variable. Both graphs show a relatively normal distribution.

In a review of the assumption test results, all assumptions except the homogeneity of variance assumption were met. In accordance with my assessments of Hypothesis 3 and 4, I decided to test Hypothesis 5 as planned using the transformed delinquency variable and the bootstrap function for my multiple regression analysis as it does not require homoscedasticity.

Hypothesis 5a results. Using hierarchical multiple regression via entry method, it was hypothesized that the proportion of the variance in delinquency for the native-born adolescent subpopulation explained by family bonding, school climate, delinquent peers, neighborhood disorganization, and self-control is zero. The prediction model contained five predictors (i.e., family bonding, school climate, delinquent peers, neighborhood disorganization, and self-control) that were entered into the regression model one step at a time. The independent variables were entered into the model in a logically established order based on theory and empirical evidence from the literature I reviewed. I provide more information about the order in Chapter 3. The predictors were entered into the model in the following order: self-control, family bonding, neighborhood disorganization, school climate, and delinquent peers. Table 16 provides descriptive statistics for all five predictor variables and the dependent variable, delinquency, for the native-born adolescent sample.

Table 18

Descriptive Statistics for the Native-Born Adolescent Sample

Variable	<i>n</i>	Mean	<i>SD</i>
Delinquency	85	1.18	1.78
Self-Control	85	58.18	22.01
Family Bonding	85	76.79	17.36
Neighborhood Disorganization	85	15.29	23.11
School Climate	85	75.39	20.37
Delinquent Peers	85	28.71	28.02

The hierarchical multiple regression analysis indicated self-control, family bonding, and delinquent peers were predictive of delinquency for the native-born subpopulation. In the first step of the hierarchical multiple regression, self-control was

entered into the model to predict the outcome delinquency. This model was statistically significant, $F(1, 83) = 16.09, p < .001$. Self-control accounted for 16.2% of the variation ($R^2 = .162, p < .001$) in explaining delinquency among native-born adolescents. Furthermore, self-control was negatively related to and a significant predictor of delinquency, $b = -.03, t(83) = -4.01, p = .005$. The addition of family bonding to the hierarchical multiple regression at the second step resulted in a statistically significant model, $F(2, 82) = 12.79, p < .001$, that had a 7.5% change of the variation ($\Delta R^2 = .075, p = .006$) in explaining delinquency. Moreover, family bonding was negatively related to and a significant predictor of delinquency, $b = -.03, t(82) = -2.85, p = .020$.

In the final step of the hierarchical multiple regression, the delinquent peers variable was added to the model. This model was statistically significant, $F(5, 79) = 8.04, p < .001$. The addition of delinquent peers to the model resulted in a 7.4% change of the variation ($\Delta R^2 = .074, p = .004$) in explaining delinquency. Moreover, delinquent peers was positively related to and a significant predictor of delinquency among native-born adolescents, $b = .02, t(79) = 2.97, p = .015$. The overall hierarchical model accounted for 33.7% of the variation ($R^2 = .337, p < .001$) in explaining delinquency. See Table 17 for an ANOVA summary table of the hierarchical regression models and Table 18 for a summary of the hierarchical multiple regression results for predictors.

Table 19

ANOVA for Regression Equations of Psychosocial and Environmental Variables on Delinquency for the Native-Born Sample

Source	<i>df</i>	ss	ms	<i>F</i>
Step 1				
Regression	1	43.06	43.06	16.09***
Residual	83	222.17	2.68	
Total	84	265.23		
Step 2				
Regression	2	63.05	31.52	12.79***
Residual	82	202.19	2.47	
Total	84	265.23		
Step 3				
Regression	3	67.38	22.46	9.20***
Residual	81	197.85	2.44	
Total	84	265.23		
Step 4				
Regression	4	69.88	17.47	7.16***
Residual	80	195.35	2.44	
Total	84	265.23		
Step 5				
Regression	5	89.46	17.89	8.04***
Residual	79	175.78	2.23	
Total	84	265.23		

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

Table 20

Hierarchical Multiple Regression Analyses Predicting Delinquency Through Psychosocial and Environmental Variables Among Native-Born Adolescents

Predictor	<i>B</i>	<i>SE B</i>	β	95% CI	<i>R</i> ²	ΔR^2	<i>F</i> change in <i>R</i> ²
Step 1					.162	.162	16.09***
Self-control	-.033**	.007	-.403**	[-.05, -.02]			
Step 2					.238	.075	8.10**
Self-control	-.023**	.007	-.287**	[-.04, -.01]			
Family bonding	-.030*	.013	-.298*	[-.05, -.01]			
Step 3					.254	.016	1.78
Self-control	-.029**	.009	-.356**	[-.05, -.01]			
Family bonding	-.030*	.012	-.293*	[-.05, -.01]			
Neighborhood disorganization	-.011	.010	-.144	[-.03, .01]			
Step 4					.263	.009	1.03
Self-control	-.027*	.009	-.329*	[-.05, -.01]			
Family bonding	-.029*	.013	-.287*	[-.05, .00]			
Neighborhood disorganization	-.010	.010	-.126	[-.03, .01]			
School climate	-.009	.008	-.101	[-.02, .01]			
Step 5					.337	.074	8.80**
Self-control	-.018*	.007	-.218*	[-.03, .00]			
Family bonding	-.016	.012	-.156	[-.04, .01]			
Neighborhood disorganization	-.007	.009	-.090	[-.03, .01]			
School climate	-.005	.008	-.057	[-.02, .01]			
Delinquent peers	.022*	.009	.341*	[.01, .04]			

Note. *n* = 85

* *p* < .05, ** *p* < .01, *** *p* < .001

Based on the hierarchical multiple regression results, the independent variables self-control, family bonding, and delinquent peers accounted for 16.2%, 7.5%, and 7.4% of the variation in delinquency, respectively, and were significantly predictive (*p* < .05) of delinquency in the native-born adolescent sample. Therefore, I rejected the null hypothesis and accepted the alternative hypothesis that the proportion of the variance in delinquency in the native-born adolescent subpopulation explained by at least one of the independent variables family bonding, school climate, delinquent peers, neighborhood disorganization, and self-control does not equal zero.

Hypothesis 5b results. I decided to run a post hoc analysis for the native-born subpopulation using the three variables found to be predictive of delinquency in the results of Hypothesis 5a. Using hierarchical multiple regression via entry method, it was hypothesized that the proportion of the variance in delinquency for the native-born adolescent subpopulation explained by family bonding, delinquent peers, and self-control is zero. The prediction model contained three predictors, including self-control, family bonding, and delinquent peers, which were entered into the regression model one step at a time in that order, respectively. The independent variables were entered into the model in a logically established order based on theory and empirical evidence from the literature I reviewed. I provide more information about the order in Chapter 3.

The hierarchical multiple regression analysis indicated self-control, family bonding, and delinquent peers were predictive of delinquency for the native-born subpopulation. All three steps of the model were statistically significant, $p < .001$. Self-control and family bonding accounted for 16.2% and 7.5% of the variance in delinquency, respectively, which is the same level of variance in delinquency as the hierarchical model with all five predictors. However, the addition of delinquent peers to the model resulted in a greater change of the variance (8.9%) in delinquency compared to the hierarchical model containing all five independent variables (7.4%). The overall hierarchical model accounted for 32.7% of the variation ($R^2 = .327, p < .001$) in explaining delinquency, which was less than the prior hierarchical model that included neighborhood disorganization and school climate (33.7%, $R^2 = .337, p < .001$). See Table

21 for an ANOVA summary table of the hierarchical regression models and Table 22 for a summary of the hierarchical multiple regression results for predictors.

Table 21

ANOVA for Regression Equations of Self-Control, Family Bonding, and Delinquent Peers on Delinquency for the Native-Born Sample

Source	<i>df</i>	ss	ms	<i>F</i>
Step 1				
Regression	1	43.06	43.06	16.09***
Residual	83	222.17	2.68	
Total	84	265.23		
Step 2				
Regression	2	63.05	31.52	12.79***
Residual	82	202.19	2.47	
Total	84	265.23		
Step 3				
Regression	3	86.70	28.90	13.11***
Residual	81	178.53	2.20	
Total	84	265.23		

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

Table 22

Hierarchical Multiple Regression Analyses Predicting Delinquency Through Self-Control, Family Bonding, and Delinquent Peers Among Native-Born Adolescents

Predictor	<i>B</i>	<i>SE B</i>	β	95% CI	R^2	ΔR^2	<i>F</i> change in R^2
Step 1							
Self-Control	-.033**	.008	-.403**	[-.05, -.02]	.162	.162	16.09***
Step 2							
Self-Control	-.023**	.008	-.287**	[-.04, -.01]	.238	.075	8.10**
Family Bonding	-.030*	.011	-.298*	[-.06, -.01]			
Step 3							
Self-Control	-.014	.008	-.178	[-.03, -.01]	.327	.089	10.73**
Family Bonding	-.016	.011	-.153	[-.04, .00]			
Delinquent Peers	.023**	.009	.367**	[.01, .04]			

Note. $n = 85$

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

Based on the hierarchical multiple regression results, the independent variables self-control, family bonding, and delinquent peers accounted for 16.2%, 7.5%, and 8.9% of the variation in delinquency, respectively, and were significantly predictive ($p < .01$) of delinquency in the native-born adolescent sample. Therefore, I rejected the null hypothesis and accepted the alternative hypothesis that the proportion of the variance in delinquency in the native-born adolescent subpopulation explained by at least one of the independent variables family bonding, delinquent peers, and self-control does not equal zero.

Summary

I conducted a quantitative, cross-sectional study of an adolescent sample in the United States using the ISRD-2 dataset to investigate two research questions and six hypotheses. The first research question required investigating the relationships among family bonding, school climate, delinquent peers, neighborhood disorganization, and self-control with delinquency. Bivariate correlation analysis results for Hypothesis 1 and 2, led to the rejection of the null hypotheses and acceptance of the alternative hypotheses. The results showed delinquency was significantly related to self-control, neighborhood disorganization, and delinquent peers for the total sample. Therefore, lower levels of self-control, high levels of neighborhood disorganization, and high association with delinquent peers increased the frequency of delinquency among adolescents in the sample. In addition, I found delinquency was significantly related to family bonding for the native-born adolescent subpopulation and school climate for the first-generation immigrant adolescent subpopulation. In this case, higher levels of family bonding among

native-born youth and higher levels of school climate among first-generation immigrant youth decreased their frequency of delinquency.

I assessed the second research question and the three related hypotheses through hierarchical multiple regression analyses. Assumption test results for all three hypotheses showed violations of the normality of residuals and homogeneity of variance assumptions. Transforming the dependent variable, delinquency, via a two-way transformation procedure sufficiently corrected the normality of the residuals. In addition, use of the bootstrap function in SPSS allowed for the multiple regression analyses to be conducted without the need for homoscedasticity. Therefore, I was able to proceed with the hierarchical multiple regression analyses as planned.

Research Question 2 involved investigating what variables of a model consisting of family bonding, school climate, delinquent peers, neighborhood disorganization, and self-control significantly predicted delinquency across three generational status groups. Based on the hierarchical multiple regression analysis results, I accepted the alternative hypothesis for Hypotheses 3, 4, 5a, and 5b. In the first-generation immigrant adolescent sample, self-control was the only and best predictor of delinquency. In the second-generation immigrant adolescent sample, delinquency was best predicted by environmental variables, such as neighborhood disorganization, school climate, and delinquent peers. In the native-born adolescent sample, a combination of psychosocial and environmental variables, such as self-control, family bonding, and delinquent peers best predicted delinquency. In Chapter 5, I provide a detailed interpretation of the study

findings. I also discuss the limitations of the study, recommendations for future research and practice, and implications for social change.

Chapter 5: Discussion, Conclusions, and Recommendations

Introduction

Immigrant youth and the children of immigrants face many barriers brought on by the acculturation process that can contribute to their risk for maladaptive outcomes including delinquency (Dettlaff & Earner, 2012; Landale et al., 2011; Leong et al., 2013). Despite such risks, there continues to be a deficiency in the cultural responsiveness of delinquency interventions for immigrant youth, which hinders practitioners' ability to effectively assist immigrant youth and their families (Parra Cardona et al., 2012; Rothe et al., 2011; Svensson et al., 2012). Advancements to delinquency interventions are held back by limitations in researchers' understanding of how factors across several domains in adolescents' daily lives uniquely influences immigrant and nonimmigrant youths' potential for delinquent involvement (Alvarez-Rivera et al., 2014; Bersani, 2014a, 2014b; Piquero, Bersani, et al., 2014).

In a review of the literature, I did not find any research that compared how familial, social, educational, and individual factors predict delinquent behavior across three generational status groups (i.e., first-generation immigrants, second-generation immigrants, and native-born) in the United States. Therefore, the purpose of this quantitative, cross-sectional study was to investigate the relationships between delinquency and a set of psychosocial and environmental variables among a sample of adolescents. Furthermore, I sought to examine what variables of a model composed of self-control, family bonding, neighborhood disorganization, school climate, and delinquent peers best predicted delinquency across three generational status groups. In

conducting this study, I sought to assist practitioners with understanding how prominent factors associated with adolescent problem behavior differentially contribute to delinquency among immigrant and nonimmigrant youth. In increasing their knowledge, I hoped to, in turn, address the wider problem of continued lapses in the cultural responsiveness of delinquency interventions for immigrant youth populations (Buchanan & Smokowski, 2011; Rothe et al., 2011; Svensson et al., 2012).

In this study, I evaluated two research questions through bivariate correlation and hierarchical multiple regression analyses using the ISRD-2 dataset. I discussed the statistical analyses and results for both research questions in Chapter 4. In this chapter, I provide in-depth interpretations of the study findings. I also discuss the limitations of the study, recommendations for future research and action, and implications for social change.

Interpretation of Findings

In this section, I interpret my study findings in relation to the theoretical framework of the study. I then interpret the study findings for each study variable based on my review of the literature.

Theoretical Foundation

The theoretical framework for this study consisted of acculturation theory (Berry, 1997), the immigrant paradox (Sam et al., 2006), and differential association theory (Akers, 1998; Sutherland et al., 1992). By using this framework, I was able to identify relevant variables to include in the study, and it offered me a means of explaining potential pathways to delinquency among immigrant and nonimmigrant adolescents

(Akers, 1998; Berry, 1997; Sam et al., 2006; Sutherland et al., 1992). Furthermore, the theoretical framework of this study allows me to interpret the study results from a cultural adaptation and criminal justice lens (Akers, 1998; Berry, 1997; Sam et al., 2006; Sutherland et al., 1992), which will help with providing insights about delinquency that practitioners could use for developing effective intervention strategies for immigrants (Parra Cardona et al., 2012).

In this study, the hierarchical multiple regression analysis results provided insight into what factors served as the best predictors of delinquency for each generational status subpopulation. In the first-generation immigrant adolescent subpopulation, the total model accounted for 11.7% of the variance in delinquency. However, self-control was the only and best predictor of delinquency for the first-generation immigrant adolescent subpopulation. In this case, self-control was negatively related to and accounted for 8.8% of the variation in delinquency. Therefore, low levels of self-control were predictive of delinquent involvement for first-generation immigrants.

Comparatively, delinquency among second-generation immigrant adolescents was best predicted by environmental variables such as neighborhood disorganization, school climate, and delinquent peers, which accounted for 5.9%, 5.1%, and 8% of the variation in delinquency, respectively. The total model accounted for 19.5% of the variance in delinquency for that subpopulation. In this case, high levels of neighborhood disorganization, school climate, and delinquent peers were predictive of delinquent involvement for second-generation immigrant adolescents.

Lastly, the total model for the native-born adolescent subpopulation accounted for 33.7% of the variation in delinquency. The best predictors of delinquency for native-born youth were self-control, family bonding, and delinquent peers. These variables accounted for 16.2%, 7.5%, and 7.4% of the variance in delinquency among the native-born subpopulation, respectively. In this case, low levels of family bonding and self-control, and high levels of association with delinquent peers were predictive of delinquent involvement for native-born youth. Collectively, the results demonstrate the different factors that predict delinquency among the three generational status subpopulations.

Based on the results of this study, second-generation immigrants and native-born youth were susceptible to more psychosocial and environmental factors than their first-generation immigrant peers. These findings offer support for the immigrant paradox and acculturation theory in that first-generation immigrants are at less risk of maladaptive outcomes (e.g., problem behavior, delinquency) compared to their second-generation immigrant and native-born peers when subjected to similar poor socioeconomic conditions (Chen & Zhong, 2013; Sam et al., 2006; van Geel & Vedder, 2011; Vaughn et al., 2014a). In this respect, the study findings confirm prior research about acculturation theory and the immigrant paradox that first-generation immigrants' resilience from engaging in delinquency diminishes across generations (Bersani, 2014a; Bui, 2012; Chen & Zhong, 2013).

Although the resilience of first-generation immigrants against poor outcomes is not well understood (Marks, Ejesei, & García-Coll, 2014; Stevens et al., 2015), individual

processes (e.g., self-control) may help to partially explain their resilience against poor socioeconomic conditions, environmental factors, and outcomes, as indicated in this study. This finding coincides with Berry's (1997) assertion in reference to acculturation theory that personal characteristics (i.e., social and psychological) modify the relationship between stress and acculturation. In turn, those characteristics can contribute to making youth more resilient to poor conditions and at less risk of delinquent outcomes.

Compared to first-generation immigrants, the study results showed second-generation immigrant youth were more susceptible to various factors involving their environment. I found factors such as neighborhood disorganization, school climate, and delinquent peers were related to and predictive of delinquency among the second-generation immigrant group. This finding supports the immigrant paradox and acculturation theory in terms of less resiliency among second-generation and later immigrant youth (Bui, 2012; van Geel & Vedder, 2011; Vaughn et al., 2014a). However, second-generation immigrants' increased risk for delinquency due to various environmental factors could be a result of an intergenerational conflict that is promoted by the acculturation process (Dettlaff & Earner, 2012; Sam et al., 2006). According to acculturation theory and the immigrant paradox, second-generation immigrant youth may be more acculturated into American culture compared to their parents, which can promote a greater propensity for intergenerational conflict due to differences in cultural beliefs, values, and attitudes (Berry, 1997; Sam et al., 2006). As a result, this conflict can increase their susceptibility to environmental factors, and subsequently their risk of

delinquent involvement (Dettlaff & Earner, 2012; Leong, Park, & Kalibatseva, 2013; Pérez, Jennings, & Gover, 2008).

Another explanation for reduced resiliency among second-generation immigrant and native-born adolescents is related to differential association theory. Compared to first-generation immigrant adolescents, I found associations with others, as described in differential association theory, had a vital role in predicting second-generation immigrant and native-born youths' delinquent involvement (Akers, 1998; Sutherland et al., 1992). This finding can be partially explained by Church, Jagers, and Taylor's (2012) assertion that the social and cultural transmission of values, attitudes, and behaviors through differential associations with others (e.g., family, peers) has an impact on children's learned behaviors.

In regards to native-born youth, I found both family bonding and delinquent peer associations were related to and predictive of their delinquent involvement. This finding offers support for differential association theory in terms of the important role socialization via family and peers has on the development of delinquent behaviors among adolescents (Akers, 1998; Sutherland et al., 1992). In this sense, adults and peers expose youth to either prosocial behaviors or attitudes that decrease their risk of delinquency, or antisocial behaviors and attitudes that increase their risk of delinquency (Akers, 1998; Véronneau, Vitaro, Brendgen, Dishion, & Tremblay, 2010). Furthermore, the study findings coincide with prior research that indicated low levels of familial attachment and high levels of association with delinquent peers can promote positive attitudes towards

and subsequent development of delinquency (Chen & Zhong, 2013; Dane, Kennedy, Spring, Volk, & Marini, 2012; Henneberger, Durkee, Truong, Atkins, & Tolan, 2013).

According to the results of this study, association with delinquent peers was a significant predictor of delinquency for native-born and second-generation immigrant youth. The findings support studies of other researchers who reported deviant peer affiliations as a robust predictor of and significantly related to the development and maintenance of delinquency (Chapple, Vaske, & Worthen, 2014; Chen, Drabick, & Burgers, 2014; Megens & Weerman, 2011; Patterson et al., 2000). The study results also confirm the findings of prior researchers that indicated a significant relationship between interactions and socialization with peers and engaging in delinquent behavior during childhood and adolescence (Burt & Klump, 2013; Dishion & Tipsord, 2011; Meldrum, Miller, & Flexon, 2013; Wikström, Oberwittler, Treiber, & Hardie, 2012). The influence of peer associations on native-born and second-generation immigrant adolescents' behavior in this study can be explained by research related to differential association theory that found associations with deviant peers provides opportunities and encouragement for youth to become involved with delinquent behaviors (Dishion & Tipsord, 2011; Worthen, 2012).

Family Bonding

Family bonding is considered to be an important factor for controlling adolescent behavior and reducing their risk of maladaptive outcomes (Bui, 2009; Estrada-Martínez, Padilla, Caldwell, & Schultz, 2011; Santisteban, Coatsworth, Briones, Kurtines, & Szapocznik, 2012). According to social control theorists (e.g., Hirschi, 1969; Sampson &

Laub, 1993), strong family bonds act as a protective factor against problem behavior and delinquent involvement among adolescents. Despite the fact that theorists and researchers suggest an association between delinquency and family variables (e.g., family bonding, family attachment; Chui & Chan, 2012; Estrada-Martínez et al., 2011; Gault-Sherman, 2012), I found family bonding was neither correlated with nor predictive of delinquency for the adolescent sample in this study with one exception.

Bivariate correlation and hierarchical multiple regression analyses at the subpopulation level revealed family bonding was negatively related to and predictive of delinquency for the native-born adolescent subpopulation. In this case, higher levels of family bonding were associated with lower levels of delinquency for the native-born population. These findings confirm the results of researchers who demonstrated family bonds, particularly attachment to parents were significant and robust predictors of delinquent behavior among youth (Chui & Chan, 2012; Fagan, Van Horn, Hawkins, & Jaki, 2013; Gault-Sherman, 2012; Hoeve et al., 2012). In addition, the results of this study are reflective of Patterson's (1982) coercion theory in which there is a bidirectional influence of parent-child interactions on the social learning process that can promote the development and reinforcement of antisocial or prosocial behaviors among youth.

The risk to native-born youth as a result of low family bonds found in this study corresponds to Glueck and Glueck's (1968) 60-year study, which demonstrated delinquent youth tended to come from family environments with poor nurturing and stability. Therefore, lower family bonds place youth at greater risk of delinquency, as seen among the native-born youth sample in this study. Furthermore, the findings of the

current study are consistent with social bond theory and age-graded theory in that youth are at less risk of delinquency when they have high quality relationships and beneficial interactions with family (Hirschi, 1969; Sampson & Laub, 1993). The reduced risk of problem behaviors for native-born youth due to high quality family bonds may be attributed to positive parenting practices, such as increased parental warmth and involvement (Hawes et al., 2011; Kimonis, Cross, Howard, & Donoghue, 2013; Kochanska et al., 2013; Kroneman et al., 2011; Pasalich et al., 2011).

While the findings for the native-born subpopulation in this study were consistent with research and theory pertaining to family bonding, the findings for the first- and second-generation immigrant adolescent subpopulations contrasted with prior research. Compared to native-born adolescents, family bonding was not significantly related to or predictive of delinquency for first- and second-generation immigrant adolescents. This contrasts with the study results of other researchers that suggest family bonding is associated with delinquency for immigrant and nonimmigrant adolescents (Estrada-Martínez, Caldwell, Schulz, Diez-Roux, & Pedraza, 2013). However, a study by Bersani (2014a) supports the absence of a relationship between family bonding and delinquency for second-generation immigrant adolescents. Bersani found family emotional ties and family attachment were not significantly related to delinquency for second-generation immigrant youth.

In this study, family bonding only accounted for .1% of the variation in delinquency for second-generation immigrant youth with environmental contexts (i.e., neighborhood disorganization and school climate) and association with delinquent peers

accounting for 19% of the variation in delinquency. In this case, level of parental control may have a more prominent role in predicting delinquency among second-generation immigrant youth as lack of parental control can increase youths' susceptibility to neighborhood disorder and delinquent peer associations (Cristini, Scacchi, Perkins, Bless, & Vieno, 2015; Harris-McKoy & Cui, 2013; Karriker-Jaffe, Foshee, Ennett, & Suchindran, 2013). Another possible explanation is reduced family control over youths' behavior due to intergenerational conflict promoted by differences in cultural attitudes and values between second-generation immigrant youth and their family (Bui, 2009; Dettlaff & Earner, 2012; Li, 2014; Mesch et al., 2008). In turn, reductions in parental and family control can increase the influence of environmental risks and youths' potential for associations with delinquent peers on second-generation immigrant adolescents' delinquent involvement (Leong et al., 2013; Pérez et al., 2008).

In the case of first-generation immigrants, the lack of an association between family bonding and delinquency, as found in this study, is a unique finding. This finding is inconsistent with prior research that highlights family as a critical factor in the positive development and adaptation of immigrant youth (Dillion, De La Rosa, Sastre, & Ibañez, 2013; Leong et al., 2013; Trillo & Redondo, 2013). In this study, family bonding only accounted for 1% of the variance in delinquency for first-generation immigrant youth with self-control being the only significant predictor in the model. This pattern is similar to Posick's (2013) findings that showed offending was significantly predicted by self-control but not family bonding in a sample of 52,000 students from 30 countries. In this respect, first-generation immigrant youths' level of self-control may have a higher

influence on their delinquent behavior with family acting as a moderating factor. In concurrence with Bersani (2014a), there may be a need to investigate other dimensions of family such as parent-child conflict, family conflict, and family cohesion to better understand the role of family in offending behaviors among first- and second-generation immigrant youth.

School Climate

School climate is a complex construct that is reflective of an adolescent's overall quality of school life, which includes youths' perceptions of interpersonal relationships with school staff, teachers, and peers, and other factors such as quality of instruction, environmental conditions, and school functioning (Bear, Gaskins, Blank, & Chen, 2011; Leadbeater, Sukhawathanakul, Smith, & Bowen, 2015). Researchers demonstrated a relationship between positive school climates and decreases in the risk of problem behavior and delinquent outcomes among adolescents (Klein, Cornell, & Konold, 2012; Wang & Dishion, 2012). Conversely, in this study, I found school climate was neither correlated with nor predictive of delinquency for the adolescent sample. Additional evaluations at the subpopulation level showed no relationships between school climate and delinquency for the native-born sample. However, there were associations for the first- and second-generation immigrant adolescent samples.

Bivariate correlation analysis showed school climate had a significant, negative relationship with delinquency for first-generation immigrant adolescents. In this case, high levels of school climate were associated with low levels of delinquency among first-generation immigrant youth. This result confirms the findings of prior researchers that

demonstrated positive school climates decrease the risk of delinquent outcomes among adolescents (Klein et al., 2012; Wang & Dishion, 2012). While school climate was correlated with delinquency, the hierarchical multiple regression analysis in this study showed school climate was not a significant predictor of delinquency for first-generation immigrant youth. However, school climate did account for 1.5% of the variation in delinquency for that subpopulation. The bivariate and multiple regression results for the first-generation immigrant sample supports segmented assimilation theory, which contends the school context is a contributing factor of immigrant youths' adaptation and behavioral adjustment (DiPietro, Slocum, & Esbensen, 2015; Peguero, Bondy, & Hong, 2014).

The contrasting results of the bivariate correlation and multiple regression analyses suggest that there is another variable that may have contributed to the correlation between school climate and delinquency for first-generation immigrant adolescents, such as self-control. The hierarchical multiple regression results showed self-control accounted for 8% of the variance in delinquency for first-generation immigrants with school climate only accounting for 1.5% of the variation. Perhaps, in addition to immigrant youths' self-control, their attitudes towards education provide an additive benefit against delinquent involvement (Chiu et al., 2012). For instance, researchers have found positive school climate, bonds, and connectedness act as a protective factor against youths' engagement in delinquent behaviors (Chapman, Buckley, Sheehan, Shochet, & Romaniuk, 2011; Hay, Meldrum, & Piquero, 2013; Klein et al., 2012; Wang & Dishion, 2012). In addition, first-generation immigrants with

higher levels of self-control and academic self-efficacy can still excel in their education even in a negative school climate (Suárez-Orozco, Rhodes, & Milburn, 2009). According to Converse, Piccone, and Tocci (2013), immigrant youth with high levels of self-control and engagement in positive behaviors have better educational outcomes. In turn, their academic success can be linked with better adaptive, psychological, and behavioral outcomes regardless of the school climate (Masten & Cicchetti, 2010; Motti-Stefanidi & Masten, 2013). Furthermore, first-generation immigrant adolescents' level of self-control may impact their perceptions of education in which they consider it as a means of securing employment for their benefit and or to assist their family (Kennedy & MacNeela, 2014).

Hierarchical multiple regression analyses revealed school climate was significantly related to and predictive of delinquency for second-generation immigrant adolescents. This finding partially confirms the results of prior research in that there was a significant relationship between school climate and delinquency, but in those studies the relationship was negative (Suárez-Orozco, Rhodes, & Milburn, 2009; Wang & Dishion, 2012; Zaykowski & Gunter, 2012). In contrast, the relationship found in this study was positive, which indicates higher levels of school climate were associated with a greater risk of delinquent involvement. This finding was unexpected as high levels of school climate are typically associated with better educational and behavioral outcomes (Gerard & Booth, 2015; Kõiv, 2014). However, one study by DiPietro et al. (2015) indicated immigrant youths' risk of violent involvement increased when attending schools with high levels of commitment and a delinquent culture. Therefore, the positive

relationship found in this study could be indicative of an underlying mediating, moderating, or interactive effect between variables. For instance, DiPietro et al. (2015) reported immigrant status moderated the association between school climate and youth violence. Furthermore, other aspects of the school context, such as a delinquent culture, levels of school commitment, school social capital, and ethnic compositions of schools were found to be associated with problem behaviors (DiPietro et al., 2015; Dufur, Hoffmann, Braudt, Parcel, & Spence, 2015; Georgiades et al., 2013). As a result, those school contexts or other factors (e.g., parental involvement, delinquent peers) may be impacting the association between school climate and delinquency in this study for all three generational status groups (Estell & Perdue, 2013; Wang & Eccles, 2012).

In regards to the native-born sample, I found school climate accounted for .9% of the variation in delinquency. However, self-control, family bonding, and delinquent peers accounted for a total of 31% of the variation in delinquency for native-born adolescents. This pattern is reminiscent of DiPietro et al.'s (2015) study that showed native-born youths' involvement in violent delinquency was relatively unaffected by school climate and their level of school commitment. Comparatively, native-born youths' sense of belonging at school may have a greater role in their academic success and behavioral outcomes due to their associations with peers (Chen & Zhong, 2013; Chiu et al., 2012).

The lack of a relationship with school climate and self-control accounting for 16% of the variation in delinquency for native-born youth, can in part be explained by prior research that showed self-control serves as a contributing factor to youths' academic and

behavioral outcomes (Converse et al., 2013; Moffitt et al., 2011; Posick, 2013; Rocque, Posick, Marshall, & Piquero, 2015). Furthermore, family involvement is equally important for educational engagement and achievement (Altschul, 2011; Estell & Perdue, 2013; Wang & Eccles, 2012), as it is in relation to youths' behavioral outcomes (Chen & Zhong, 2013; Hawes et al., 2011; Kimonis, Cross, Howard, & Donoghue, 2013; Kochanska et al., 2013; Kroneman et al., 2011; Pasalich et al., 2011). In fact, Dufur, Hoffmann, Braudt, Parcel, and Spence (2015) demonstrated high levels of family capital had a greater influence on delinquency among adolescents than school capital, which is similar to the findings of this study. Therefore, environmental contexts probably serve as a secondary influence on native-born youths' engagement in delinquency with their level of self-control and associations with family and peers providing a greater influence on behavioral outcomes. In turn, higher levels of self-control and quality relationships with family and peers likely provide youth with some resilience against environmental influences such as school climate.

Neighborhood Disorganization

Neighborhood disorganization is a construct that involves the criminal activities (e.g., crime, physical violence, drug selling) and infrastructure (e.g., empty buildings, graffiti) within the environment (Posick & Rocque, 2014). According to social disorganization theorists (Sampson, Randenbush, & Earls, 1997; Shaw & McKay, 1969), neighborhood contexts, such as high crime rates, social cohesion, and informal social controls, have an impact on youths' development of prosocial or antisocial behaviors. Various researchers have identified significant relationships between neighborhood

disorganization and delinquency among adolescent samples (Posick, 2013; Ray, Thornton, Frick, Steinberg, & Cauffman, 2015; Wiesner & Rab, 2015). Correspondingly, the bivariate correlation analysis results of this study showed neighborhood disorganization was positively related to delinquency for the total adolescent sample. Therefore, living in neighborhoods with high disorganization was associated with an increased frequency of delinquency among the adolescent sample. This finding supports social disorganization theory in that neighborhoods with high social disorganization tend to also have high crime rates. In turn, the criminal subculture of the neighborhood exposes youth to delinquent norms and values that they could learn (Shaw & McKay, 1969).

Hierarchical multiple regression results demonstrated neighborhood disorganization was predictive of delinquency but only for the second-generation immigrant subpopulation. Therefore, living in highly disorganized neighborhoods was predictive of increased involvement with delinquent behaviors for second-generation immigrant youth. This finding confirms the study results of Bersani (2014a), which demonstrated environmental risks were the most influential factors on delinquency among second-generation immigrant youth. In this case, neighborhood disorganization may increase second-generation immigrant youths' risk of delinquency due to environmental characteristics such as ineffective social controls, increased crime rates, exposure to community disorder and violence, and associations with delinquent peers (Butcher, Galanek, Kretschmar, & Fannery, 2015; Goldner et al., 2011; Vera & Moon, 2013; Zimmerman, Botchkovar, Antonaccio, & Hughes, 2015).

In this study, association with delinquent peers was also a significant predictor of delinquency for second-generation immigrant adolescents, which could have a mediating or moderating role in the relationship between delinquency and neighborhood disorganization. Various researchers have indicated the presence of increased criminal, delinquent, and gang activities in disorganized neighborhoods (Wiesner & Rab, 2015; Zimmerman & Messner, 2013), which exposes youth to criminal behaviors (Butcher et al., 2015; Miller, 2011). In turn, there is an increased potential for youth to learn antisocial behaviors from adults and peers in their neighborhood environment and become involved with delinquent peers and delinquency (Akers, 1998; Church, Jagers, et al., 2012; Shaw & McKay, 1969; Tompsett, Amrhein, & Hassan, 2014). Therefore, there could be an increased probability of associating with deviant and delinquent peers for second-generation immigrant youth in the study sample due to increased delinquent activities in disorderly neighborhoods (Svensson et al., 2012). Thus, providing youth with more opportunities to associate with delinquent peers and become involved with delinquent activities in their neighborhoods, and potentially, at school (Akers 1998; Sutherland & Cressey, 1984; Wiesner & Rab, 2015; Worthen, 2012; Zimmerman & Messner, 2013).

While neighborhood disorganization was predictive of delinquency for second-generation immigrants, I found it was not predictive of delinquency for first-generation immigrant and native-born adolescents. Although not a significant predictor of delinquency for those two subpopulations, neighborhood disorganization did account for less than 2% of the variation in delinquency for first-generation immigrant youth and

native-born youth. This result can be explained by factors presented in cultural efficacy theory, in which high levels of social cohesion and informal social control in their neighborhoods could be serving to intervene with and reduce criminal behaviors (Sampson, Raudenbush, & Earls, 1997). In turn, neighborhood disorganization is lessened, and residents' collective efficacy serve to promote prosocial behaviors in youth and reduce their delinquent involvement (Fagan, Wright, & Pinchevsky, 2014; Tompsett et al., 2014).

Results for the native-born adolescent sample in this study showed family bonding was predictive of delinquency, whereas neighborhood disorganization was not. This finding partially supports Deutsch, Crockett, Wolff, and Russell's (2012) study in that level of neighborhood risk did not have a significant impact on adolescents' delinquency. However, they also found family processes, such as parental control and maternal support had an impact on youths' delinquency. Given the predictive nature of delinquency through family bonding in this study, neighborhood disorganization may have an indirect influence on native-born youths' behavioral outcomes through their parents' behaviors. For instance, parental supervision in conjunction with family bonding could be responsible for the insignificant relationship between delinquency and neighborhood disorganization, as Burrington (2015) reported higher levels of parental supervision were found to decrease the risk of delinquency for native-born youth living in high-risk neighborhoods. Furthermore, Jocson and McLoyd (2015) indicated parenting processes have a crucial role in youth outcomes when living in disorderly environments (i.e., neighborhood and homes), as such environments can promote parental

psychological distress. As a result, youth may be exposed to lower familial bonds and harsh, inconsistent discipline, which increases their risk of externalizing behaviors (Jocson & McLoyd, 2015).

Another factor that can help explain the association between delinquency and neighborhood disorganization for second-generation immigrants and the absence of a relationship for first-generation immigrants in this study is neighborhood disadvantage. Youth residing in dangerous neighborhoods are more likely to also come from low-income households, which increases their risk of delinquency (Richards et al., 2004). However, there are differences in the impact of neighborhood disadvantage on first- and second-generation immigrant adolescents that correspond to the pattern found for neighborhood disorganization in this study. Therefore, the findings of this study offer some support for Bersani, Loughran, and Piquero's (2014) study, which found second-generation immigrant youths' risk of persistent offending was nine times more likely when living with no neighborhood disadvantage and nearly double that when living in a disadvantaged neighborhood. Furthermore, first-generation immigrants' probability of being persistent offenders was close to zero and not affected by neighborhood disadvantage. Those results correspond with the findings of the current study, which showed second-generation immigrant youth were more susceptible to neighborhood risk factors, whereas first-generation immigrants showed more resilience. As mentioned prior, first-generation immigrants' resiliency to and the increased risk to second-generation immigrants and later when living in poor socioeconomic and environmental

conditions can in part be explained by the immigrant paradox and acculturation theory (Berry, 1997; Bui, 2012; Sam et al., 2006; Vaughn et al., 2014a).

First-generation immigrant youth living in neighborhoods with more immigrant concentration may also be a contributing factor to the lack of influence by neighborhood disorganization on delinquency found in this study. Prior research showed immigrant concentration was negatively related to poor outcomes among youth, whereby higher levels of immigrant concentration acted as a protective factor against problem behavior and delinquency (Burrington, 2015; Desmond & Kubrin, 2009; Posick, 2013; Wolff, Baglivio, Intravia, & Piquero, 2015). In the case of this study, the protective effect of individual-level characteristics (e.g., immigrant status, self-control) and their increased potential for living in neighborhoods with high immigrant concentration could be reducing the influence of neighborhood disorganization for the first-generation immigrant sample (Burrington, 2015; Martinez, Stowell, & Lee, 2010; Zimmerman et al., 2015).

Delinquent Peers

Another important context for youths' development and behavioral adjustment is socialization with peers (Brechwald & Prinstein, 2011; Prinstein, Brechwald, & Cohen, 2011). The influence of peers on adolescent behavior has been well-established theoretically (e.g., social bond theory, differential association theory; Akers, 1998; Sutherland et al., 1992) and empirically (Dishion & Tipsord, 2011; Rabaglietti, Burk, & Giletta, 2012; Wikström et al., 2012). Prior researchers found significant associations between peer socialization (Burt & Klump, 2013; Meldrum, Miller, & Flexon, 2013) and

affiliation with delinquent peers with delinquency among adolescents (Seddig, 2014; Trillo & Redondo, 2013; Wiesner, Capaldi, & Kim, 2012).

The bivariate correlation analysis results for the total adolescent sample in this study affirmed the above mentioned findings of prior researchers. Based on the correlation analysis, I found a positive, significant relationship between delinquent peers and delinquency. This result indicates high levels of association with delinquent peers was correlated with higher levels of delinquency among the adolescent sample. The study results support differential association theory in which persistent interactions and relationships with deviant peers can influence youths' positive attitudes towards and development of delinquent behavior (Akers, 1998; Sutherland et al., 1992). Furthermore, it confirms the findings of researchers that demonstrated adolescents have a heightened susceptibility to peer influences (Albert & Steinberg, 2011; Church, Tomek, et al., 2012; Pfeifer et al., 2011).

The hierarchical multiple regression results of this study showed the delinquent peers variable was predictive of delinquency for only the second-generation immigrant and native-born adolescent subpopulations. Association with delinquent peers accounted for the largest percent (8%) of the variation in delinquency for the second-generation immigrant adolescent subpopulation. This finding confirms the study results of Bersani (2014a), which demonstrated environmental risks, such as delinquent peers, were the most influential factors on second-generation immigrant youths' delinquency. Furthermore, it is consistent with prior research that showed a significant connection between interacting with delinquent peers and higher levels of delinquent involvement

among second-generation immigrant youth (DiPietro & McGloin, 2012). The results of this study also showed neighborhood disorganization was predictive of delinquency for the second-generation immigrant youth subpopulation. Therefore, living in disorderly neighborhoods may increase second-generation immigrant youths' risk of associating with delinquent peers by providing more opportunities to become involved with delinquency or learn antisocial behaviors from peers in their neighborhood environment (Akers 1998; Sutherland & Cressey, 1984; Svensson et al., 2012; Wiesner & Rab, 2015; Worthen, 2012; Zimmerman & Messner, 2013).

The increased impact of peer influences on second-generation immigrant adolescents' delinquency, as shown in this study, may in part be due to intergenerational and intercultural conflict with parents and or peers, which can be promoted by the acculturation process (Bersani, 2014a, 2014b; Dettlaff & Earner, 2012; Estrada-Martínez et al., 2013; Leong et al., 2013; Sam et al., 2006). As a result, it can make relationships with peers and or family become more distant (Mesch et al., 2008), and diminish the control family has over youths' behavior (Bui, 2009). In turn, intergenerational and cultural conflict can have a role in second-generation immigrant youths' increased risk of delinquent peer associations and delinquency found in this study (Bui, 2009; DiPietro & McGloin, 2012; Jenson & Fraser, 2011; Jessor, 1998; Le & Stockdale, 2008).

In regards to the native-born subpopulation, I found associations with delinquent peers accounted for 7.4% of the variation in delinquency, which was similar to the influence of family bonding in predicting delinquency (7.5%). This finding reflects the importance of family and peer socialization on adolescent's development of prosocial and

antisocial behaviors as indicated in differential association theory (Akers, 1998; Sutherland et al., 1992). In this respect, the attitudes and behaviors modeled by adults and peers can influence adolescent's behavior. In turn, associations with delinquent peers can increase youths' risk of delinquency (Seddig, 2014; Van Ryzin, Fosco, & Dishion, 2012; Weerman, 2011; Wiesner, Capaldi, & Kim, 2012), particularly when adolescents have weaker familial attachment (Chen & Zhong, 2013; Dane et al., 2012; Henneberger et al., 2013). In this regard, higher levels of family bonding may serve to offset negative peer influences on an adolescent's behavior through increased parental monitoring (Fosco, Stormshak, Dishion, & Winter, 2012; Walther et al., 2012) and promotion of prosocial behavior (Gaylord-Harden, Burrow, & Cunningham, 2012; Neblett, Rivas-Drake, & Umaña-Taylor, 2012; Umaña-Taylor & Guimond, 2012).

The multiple regression findings for the native-born and second-generation immigrant adolescent subpopulations were consistent with prior research that demonstrated deviant peer affiliations was a robust, significant predictor of delinquency (Chapple, Vaske, & Worthen, 2014; Chen, Drabick, & Burgers, 2014). Furthermore, the study findings are indicative of the results by researchers who reported youth have a heightened susceptibility to peer influences during adolescence (Albert & Steinberg, 2011; Burnett, Sebastian, Kadosh, & Blakemore, 2011; Pfeifer et al., 2011), which can make them more vulnerable to peer pressure whether youth are delinquent or non-delinquent (Church, Tomek, et al., 2012). In turn, affiliation with peers, particularly deviant and delinquent peer associations, can increase youths' delinquent involvement for second-generation immigrant and native-born adolescents, as reported in this study

(Seddig, 2014; Trillo & Redondo, 2013; Van Ryzin et al., 2012; Wiesner et al., 2012; Weerman, 2011).

According to Chapple et al. (2014) and Chen et al. (2014), delinquent peer affiliations has been consistently associated with and a robust predictor of delinquency among adolescents. In contrast with their assertion, the results in this study for the first-generation immigrant adolescent subpopulation indicated associations with delinquent peers was not significantly predictive of delinquency. This finding may be indicative of the barriers found to hinder or limit immigrant youths' association with their peers, particularly nonimmigrant peers, such as language barriers, incompatible beliefs, perpetuating stereotypes, and feelings of exclusion or isolation (Kennedy & McNeela, 2014; Mendez, Bauman, & Guillory, 2012). In turn, first-generation immigrant youth may be more likely to associate with peers with similar ethnic and migration histories as it provides a sense of safety and belonging (Kennedy & McNeela, 2014; Knecht et al., 2011). Additionally, they may be more likely to associate with peers with pre-existing similarities in behaviors whereby youth with low or no delinquent involvement will associate with non-delinquent youth (Svensson et al., 2012). Furthermore, higher-levels of parental control may also have a role in curtailing immigrant adolescents' involvement with delinquent peers, which could explain the low level of variance (.2%) attributed to delinquent peer associations found in this study for first-generation immigrant youth (Cristini, Scacchi, Perkins, Bless, & Vieno, 2015).

In this study, delinquent peers only accounted for .2% of the variance in delinquency for first-generation immigrant adolescents with self-control accounting for

the highest degree of variance (8.8%) in delinquency. The high degree and influence of self-control found in this study on first-generation immigrant adolescents' involvement with delinquency may also act as a protective factor against deviant peer influences. This finding corresponds with research that demonstrated higher levels of self-control decreased youths' susceptibility to peer influences (Meldrum et al., 2013) and acted as a protective factor against negative peer influences (Hirtenlehner, Pauwels, & Mesko, 2015). In addition, the study findings are consistent with research that showed an adolescent's level of self-control can impact their likelihood of having delinquent friends and becoming involved with delinquency (Hirtenlehner et al., 2015; Meldrum et al., 2013; Mobarake, Juhari, Yaacob, & Esmaili, 2014).

Self-Control

Self-control is an important concept with respect to criminality because it serves to regulate adolescents' behavioral and emotional impulses (Buker, 2011; Casey, 2015; Duckworth & Kern, 2011). The bivariate correlation results of this study showed a significant negative relationship between self-control and delinquency for the total adolescent sample. This result indicates lower levels of self-control were related to a higher frequency of delinquency among adolescents in the sample. This finding supports social control theories (e.g., general theory of crime, age-graded theory) in that individuals' level of self-control is a prominent factor in their choice to engage in prosocial or antisocial behaviors (Gottfredson & Hirschi, 1990; Sampson & Laub, 1993). Moreover, the association established in this study confirms the litany of research that demonstrated a link between low self-control and delinquent involvement (Moffitt et al.,

2011; Rocque, Posick, Marshall, & Piquero, 2015; Shekarkhar & Gibson, 2011; Vera & Moon, 2013; Vettenburg, Brondeel, Gavray, & Pauwels, 2013; Zimmerman, Botchkovar, Antonaccio, & Hughes, 2015).

The results of the hierarchical multiple regression analyses in this study showed self-control was only predictive of delinquency for the native-born and first-generation immigrant adolescent subpopulations. In both subpopulations, self-control accounted for the largest percent of the variance in delinquency compared to all other variables entered into the hierarchical multiple regression models. Self-control accounted for 16.2% of the variation in delinquency for native-born adolescents and 8.8% of the variation in delinquency for first-generation immigrant adolescents. These findings support Posick's (2013) study, which examined data from 30 countries of the Second International Self-Reported Delinquency Study and found self-control was the most powerful predictor of offending. This result suggests the current findings may be applicable cross-culturally, but requires further investigation. Likewise, the findings of this study coincide with the results of other researchers that indicated self-control is a strong predictor of delinquent behaviors (Meldrum et al., 2013; Moffitt et al., 2011).

The study results for the native-born adolescent sample indicated family bonding and delinquent peer associations along with self-control were the best predictors of delinquency. This finding demonstrated the importance of family and peer associations in youths' development of delinquency, but it also suggests the potential for such associations to impact self-control. Based on prior research, family bonding has a critical role in youths' behavioral development (Bui, 2009; Estrada-Martínez, Padilla, Caldwell,

& Schultz, 2011; Padilla-Walker, Bean, & Hsieh, 2011; Santisteban, Coatsworth, Briones, Kurtines, & Szapocznik, 2012). However, the findings of other researchers regarding the association between family and self-control were mixed showing no relationship, a positive relationship, or modest relationship (Botchkovar et al., 2015; Boutwell & Beaver, 2010; Vera & Moon, 2013). Furthermore, lower levels of self-control influence youths' friendship development with deviant peers (Meldrum et al., 2013) and enhances the effect of delinquent peers on their delinquent involvement (Hirtenlehner et al., 2015; Mobarake et al., 2014). With both family and peer associations having an impact on native-born youth's behavior in this study, interactions and relationships with others, or rather the modeling of behaviors by others, may influence their self-control along with their delinquency, which is consistent with differential association theory (Akers, 1998; Church, Tomek, et al., 2012; Jennings, Higgins, Akers, Khey, & Dobrow, 2013; Sutherland et al., 1992; Véronneau et al., 2010; Worthen, 2012). As a result, family and peer variables may have an interaction effect with self-control for youths' delinquent outcomes or both variables could serve to moderate or mediate the relationship between self-control and delinquency for native-born youth.

The study results for the first-generation immigrant sample also support Sampson and Laub's (1993) age-graded theory of informal social control in that immigrant status coupled with individual differences, such as level of self-control can influence their potential for delinquency during adolescence. Self-control was the only predictor of delinquency for first-generation immigrant youth in this study with all other variables

contributing less than 2% of the variation in delinquency. In this case, self-control may have a buffering effect against other risk factors associated with family, peers, school, and neighborhood environment for first-generation immigrant youth (Berry, 1997; Buker, 2011; Hirtenlehner et al., 2015). In addition, when considering the first-generation immigrant sample in this study was predominately Hispanic (61.4%), the results disconfirm prior studies involving Hispanic adolescent samples that showed self-control was not significantly predictive or related to delinquent behaviors (Lopez & Miller, 2011; Miller, 2011).

Although self-control is empirically established as a robust predictor of delinquency (Meldrum et al., 2013; Moffitt et al., 2011), it was not predictive of delinquency for the second-generation immigrant sample in this study. In fact, self-control was entered into the hierarchical multiple regression model first and only accounted for .5% of the variation in delinquency for second-generation immigrant adolescents. This finding corresponds with Dipietro and McGloin's (2012) study that showed self-control was a significant predictor of violence for native-born adolescents but not second-generation immigrant adolescents. The lack of a significant relationship could be a result of peer influences or living in disorganized neighborhoods, as both were predictive of delinquency for second-generation immigrant adolescents in this study. Researchers have indicated youth' self-control can be significantly influenced by social contexts (Buker, 2011; Vera & Moon, 2013; Zimmerman et al., 2015) and peer influences (Meldrum & Hay, 2012; Meldrum, Young, & Weerman, 2012). Therefore, social contexts (e.g., school, neighborhood) may have a more prominent role in second-

generation immigrant youths' delinquent behavior due to environmental factors (e.g., community disorder, gangs, neighborhood violence; Vera & Moon, 2013; Wiesner & Rab, 2015; Zimmerman & Messner, 2013) and increased associations with peers (Meldrum et al., 2013). The findings of this study suggest that school and neighborhood contexts could be providing second-generation immigrant youth with increased opportunities to become involved with delinquency through peer associations whether youth are delinquent or non-delinquent (Albert, Chein, & Steinberg, 2013; Church, Tomek, et al., 2012; Smith, Chein, & Steinberg, 2014; Weigard, Chein, & Steinberg, 2011).

Compared to the first-generation immigrant and native-born adolescent group, I found self-control was neither related to nor predictive of delinquency for the second-generation immigrant group. This result can be partially explained by the results of prior researchers that indicated factors such as ethnicity, socialization processes, and environmental contexts differentially impact the influence of self-control on the relationship between peer influences and antisocial behaviors (Buker, 2011; Miller, 2011; Shekarkhar & Gibson, 2011). Based on the results of this study, level of acculturation or generational status may also contribute to differences in the impact of self-control on delinquency through social and environmental factors. In this case, environmental factors, such as neighborhood disorganization, school climate, and delinquent peer associations may reduce or negate the impact of self-control on behavioral outcomes. In turn, environmental factors end up having a more crucial role in second-generation

immigrant adolescents' development than self-control, as demonstrated in this study (Meldrum & Hay, 2012; Meldrum et al., 2012; Vera & Moon, 2013).

Limitations of the Study

Although the study yielded insights into the relational and predictive nature of psychosocial and environmental variables with delinquency, some weaknesses limit generalizability. First, I performed the analyses in this study using the ISRD-2 dataset (Enzmann et al., 2015), which contains data for 31 countries. However, only the U.S. portion of the ISRD-2 was used for the study analyses. Therefore, the generalizability of the research results is limited to adolescents aged 12 to 16, attending seventh through ninth grade in the United States.

Another issue that impacts generalizability in this study is nonparticipation, particularly among immigrant adolescents, which can also effect the potential for Type II errors (Ibrahim & Sidani, 2014). The ISRD-2 study involved data collection pertaining to sensitive topics such as juvenile delinquent involvement, victimization, and immigration status. Furthermore, all study materials, such as study invitations, consent forms, and surveys were only provided in English (Enzmann et al., 2015; Marshall & He, 2010). Therefore, barriers such as the sensitive nature of the study topic, language barriers, immigration status, fear of discrimination, and concerns over privacy and confidentiality were likely contributing factors to nonparticipation and nonresponse in the ISRD-2 study by potential participants, particularly from the first-generation immigrant group (Ahrens, Isas, & Viveros, 2011; Fisher & Kalbaugh, 2011; Shedlin, Decena, Mangadu, & Martinez, 2011; Ulrich et al., 2013). This potential for nonparticipation and

nonresponse means the findings of this study may only be representative of and generalizable to English speaking and bilingual immigrant youth as immigrants with low English proficiency probably choose not to participate in the ISRD-2 study.

Selection was likely a threat to validity for the first-generation immigrant sample as the U.S. portion of the ISRD-2 dataset only contained data for 89 first-generation immigrant adolescents. This constrained the random selection of the stratified random sampling strategy used in this study as 86 participants were randomly selected from a total of 89 first-generation immigrants. Therefore, the sample for first-generation immigrants may be more reflective of a purposive sampling strategy.

In terms of the methodology, the use of a cross-sectional design for this study provided stronger external and ecological validity, but it also has limitations with respect to weaker internal validity (Carlson & Morrison, 2009; Frankfort-Nachmias & Nachmias, 2008). In this regard, the use of a cross-sectional research design for the study inhibited claims of causality, which meant only associations between variables could be determined (Omair, 2015; Sedgwick, 2014). The findings for a few of the variables could be limited by low internal consistency reliability. The standardized instruments used in the ISRD-2 study for family bonding, school climate, and delinquent peers had Cronbach's alphas of .60, .61, and .71, respectively (Enzmann et al., 2015). Cronbach's alphas demonstrate how reliable the items of an instrument measure the same construct, whereby higher alpha values are attributed to less measurement error (Tavakol & Dennick, 2011). According to Tavakol and Dennick (2011), acceptable values for alpha can range from .70 to .95 with low alphas being an indication of poor interrelatedness

between items of an instrument or that the items are measuring multiple constructs beyond the concept of interest. Therefore, the findings for family bonding and school climate, in particular, could be confounded by other constructs contributing to measurement error.

Lastly, the researchers of the ISRD-2 study collected data from school-based samples (Enzmann et al., 2015; Marshall & He, 2010), which typically have low levels of delinquency across the sample. This can be a result of students dropping out of school as students involved with minor and major delinquency are more likely to dropout. In turn, there can be a lack of representation of delinquency among participants in the sample, which can impact analyses of delinquency in school-based samples (Kreager, Rulison, & Moody, 2011; Miller, Barnes, & Hartley, 2011). Therefore, the generalizability of the study results is limited, as study samples involving delinquent or juvenile justice involved youth may produce different results to what was found in this study. Researchers should use caution when generalizing the study results to non-school-based samples.

Recommendations for Future Research

The results of the current study indicate the need for additional research into delinquency and relevant social, psychological, environmental, and individual variables among immigrant and nonimmigrant populations. First, future research should focus on using the ISRD-2 data to conduct a cross-cultural evaluation of the findings from this study to establish if the findings are cross-culturally valid. Secondly, the results of this study indicated a lack of association for family bonding, which was a unique finding, given the plethora of prior research that indicated family has a critical role in youths'

behavioral outcomes (Bui, 2009; Dillon et al., 2013; Estrada-Martínez et al., 2011; Gault-Sherman, 2012; Leong et al., 2013; Santisteban et al., 2012; Trillo & Redondo, 2013). Therefore, I recommend examining other family variables such as family cohesion, conflict, control, and supervision in order to gain insights into the relationship between familial influences and delinquent involvement among immigrant and nonimmigrant populations. In the case of the native-born adolescent subpopulation, family bonding was a significant predictor of delinquency, whereas environmental variables were not. Future researchers should also examine the interaction effects between family and environmental variables, which would provide insights into the dynamic between family and environmental influences on adolescents' delinquent behavior.

Another unexpected finding was the positive relationship between school climate and delinquency for second-generation immigrant youth, as prior researchers indicated high levels of school climate typically have a protective effect against youths' involvement in delinquency (Klein et al., 2012; Wang & Dishion, 2012; Zaykowski & Gunter, 2012). In this case, there is a need for further examination of the impact of school climate on delinquency among youth of varying generational statuses. This includes investigating how other aspects of the school context, such as delinquent culture, levels of school commitment, school social capital, and ethnic compositions of schools, influence youths' behavioral outcomes.

In this study, I identified self-control as a strong predictor of delinquency for two generational status subpopulations. In addition, other researchers (e.g., Piquero, Bersani, Loughran, & Fagan, 2014; Reisig, Wolfe, & Holtfreter, 2011), suggested considering

individual-based processes, such as self-control, in conjunction with crime and immigration among adolescents. Most research pertaining to self-control focused on adolescents in general and had not focused on self-control across different generational statuses (Gibson, 2012; Moffitt et al., 2011; Vettenburg et al., 2013; Zimmerman & Messner, 2013). Therefore, I recommend future research focus on the dynamic between self-control and delinquency to determine if self-control has an interaction effect with family, school, neighborhood, and peer variables across generational status groups. Furthermore, I recommend focusing on self-control as an outcome among immigrant and nonimmigrant samples as this study established self-control as an important precursor to delinquent involvement. Understanding the development of self-control for each generational status group could provide valuable insights about and have beneficial implications for preventing delinquency among the adolescent population.

I also recommend replicating the current study using a non-school-based sample or a sample of delinquent youth. As stated prior, the use of school-based samples leads to some exclusions of delinquent youth whom have dropped out, or became juvenile justice involved (e.g., held in a juvenile detention center or placed in a residential facility; Kreager, Rulison, & Moody, 2011; Miller, Barnes, & Hartley, 2011; Sickmund, Sladky, Kang, & Puzzanchera, 2015). Therefore, focusing on non-school-based samples or juvenile delinquent samples may offer a different or expansive examination of the relationships between delinquency and various individual, social, and environmental factors among adolescents of different generational statuses.

In terms of moving beyond secondary data, there are a few studies that are critical to expanding researchers' and practitioners' knowledge about delinquency among immigrant populations. As indicated prior, the ISRD-2 study was conducted using only English versions of the study materials (e.g., invitation letters, consent forms, surveys), yet the study sample included first-generation immigrants. This is an oversight that is prevalent in delinquency research (e.g., Bersani, 2014a, 2014b; Bui, 2009) as the most widely used Self-Reported Delinquency Questionnaire (SRD) is available in a limited number of languages, which does not include a Spanish version for adolescents (Elliot & Ageton, 1980). The lack of a Spanish version of the SRD is problematic for researchers interested in conducting studies of delinquency using U.S. samples as the largest immigrant group in the United States are Hispanic. Without proper research instruments for non-English fluent immigrants, researchers' ability to fully understand delinquency among the immigrant adolescent population is limited. As a result, immigrant youth and their parents will likely continue to decline participation in studies simply due to a language barrier. In order to advance delinquency research related to immigrant populations, there is a need to develop translated versions of variable instruments that are applicable to specific immigrant subpopulations. In turn, it will lead to better assessment of the acculturation-crime nexus among non-English fluent immigrants.

Secondly, researchers should develop and use more reliable instruments that measure family bonding and school climate. The standardized instruments used to measure family bonding and school climate in the ISRD-2 only consisted of 4-items and had Cronbach's alphas of .60 and .61 (Enzmann et al., 2015). The low internal

consistency of measures makes it difficult to interpret findings as items could be measuring other constructs, which can confound the results (Tavakol & Dennick, 2011). Therefore, future researchers should focus on developing instruments or using already created instruments for constructs that have higher Cronbach's alphas of .80 or more. By doing so, researchers would be able to reduce errors of measurement, and increase the accuracy and interpretability of study results (Tavakol & Dennick, 2011).

Thirdly, in concurrence with Chen and Zhong (2013), I recommend conducting studies that focus on modern day immigrant and nonimmigrant youth to give a better idea of how current social conditions impact youths' development and risk of problem behaviors, such as delinquency. Research concerning delinquency needs to move beyond secondary data that were collected in the 1990s and early 2000s to more current investigations of delinquency among the youth population (Bersani, 2014a, 2014b; Bersani & DiPietro, 2013; Greenman, 2011; Le & Stockdale, 2011; Reingle et al., 2011). The cultural landscape has significantly changed, particularly post 9-11, which gave rise to an anti-immigration sentiment in the United States (Ewing, 2012; Orrenius & Zavodny, 2012). The impact of that shift on immigrants' lifestyle is critical to understanding what factors protect or promote delinquency among first- and second-generation immigrant youth. Therefore, more current research would help advance delinquency prevention practices through considerations of factors that impact youth of today and may not have been an issue in the past.

Lastly, there is a need for future research to focus on first-generation immigrant youth. As with the ISRD-2 dataset, other studies (e.g., Bersani, 2014b; Bersani &

DiPietro, 2013) used small samples of first-generation immigrants, which limits examinations of small effects in analyses. Being able to use a larger sample of first-generation immigrants may provide a clearer understanding of how family, school, neighborhood, peer, and individual variables influence delinquency among immigrants. Furthermore, it may help to uncover and illuminate factors that contribute to the resilience of first-generation immigrant adolescents against maladaptive outcomes.

Recommendations for Action

Per the findings of this study, I have several recommendations for action to address delinquency among adolescents. The findings from the current study demonstrated the importance of considering how prominent factors in youths' everyday lives influence their delinquent involvement. As with gender and ethnicity, adolescents' generational status and level of acculturation need to be considered in the development and implementation of delinquency prevention and intervention strategies. This suggestion coincides with Svensson et al.'s (2012) assertion that planning intervention programs for delinquency requires having knowledge of the social processes that promote behavioral development, particularly with respect to the development of delinquent behaviors. The findings in this study enhanced practitioners' and researchers' knowledge of factors that promote and prevent delinquency, as well as increased their understanding of the dynamic between acculturation and delinquency. Based on my study findings, I recommend considering the unique factors that influence delinquency among youth of different generational statuses for future alterations and development of new programs for delinquency. Application of the research findings in that manner can lead to

improvements in program effectiveness and reductions in delinquency among immigrant and nonimmigrant youth.

Enhancement and development of delinquency intervention strategies for immigrant and nonimmigrant youth should also emphasize other factors beyond family, such as self-control and peer associations, in addressing delinquency among youth. Currently, delinquency is primarily addressed through the use of family-based intervention strategies, because prior researchers indicated the strong influence of family in the development of delinquency (Chen & Zhong, 2013; Estrada-Martínez et al., 2013; Gault-Sherman, 2012; Kimonis, Cross, Howard, & Donoghue, 2013; Prado et al., 2012; Szapocznik, Muir, Duff, Schwartz, & Brown, 2015). However, this study showed other factors such as self-control and delinquent peer associations had a greater impact on the development of delinquency among youth than family bonds. In fact, I found self-control and delinquent peer associations had a critical role in the development of delinquency among the generational status groups in this study. Therefore, I have two recommendations in regards to program development and enhancement. The first coincides with Svensson et al.'s (2012) suggestion that delinquency interventions should focus on preventing and reducing associations with delinquent peers, as such associations can increase youths' potential for delinquent involvement. As a result, reductions in delinquent peer associations can assist with reducing delinquency, particularly among second-generation immigrant and native-born youth, as indicated in this study.

Secondly, I recommend the development and use of intervention strategies that focus on promoting self-control among youth. In this study, self-control was the most

influential variable in predicting delinquency among first-generation immigrant and native-born adolescents. Moreover, prior researchers indicated the benefits of individual capital for preventing criminality and improving outcomes associated with education and employment (Aizer & Doyle, 2015; Piquero, Jennings, Piquero, & Schubert, 2014). Furthermore, individual capital, including high levels of self-control, has the potential to provide youth with resilience against risk factors associated with delinquency (Berry, 1997; Jenson & Fraser, 2011; Sampson & Laub, 1993), as indicated in this study. Therefore, assisting youth to build their individual capital can help them develop prosocial behaviors and prevent delinquent involvement, regardless of their family or environmental situations. In addition, this strategy can be integrated into family-based practices so practitioners' can address adolescent delinquency on two fronts by promoting family bonds and involvement, and helping youth build their individual capital in an effort to reduce delinquency.

I also recommend targeting school- and family-based delinquency prevention programs early on during childhood for youth demonstrating conduct disorders as that can lead to delinquent behaviors during adolescence (American Psychiatric Association, 2013; Dishion & Patterson, 2006; Patterson, DeBaryshe, & Ramsey, 1989). This recommendation coincides with Stoltz et al.'s (2013) assertion that effective interventions for school-aged children may assist in deterring youth from serious problem behaviors during adolescence. The current study demonstrated the impact of self-control and delinquent peer associations on adolescent behavior. More specifically, the study showed how high levels of self-control and less association with delinquent peers deters youth

from engaging in delinquency and promotes prosocial behaviors. Therefore, early intervention during childhood may assist youth with building individual and family capital, developing a preference towards prosocial behaviors, and reducing youths' associations with delinquent peers. As a result, assisting youth to develop beneficial relationships with family and peers, higher levels of self-control, and human capital from childhood may provide them with resilience against maladaptive outcomes and delinquency during adolescence, which can have benefits into adulthood.

Another aspect of improving the effectiveness of delinquency interventions involves cultural sensitivity and responsiveness. The findings of this study demonstrated a need for more emphasis to be placed on the unique circumstances and factors that differentially contribute to delinquency among youth of different generational statuses or acculturation levels. Application of the research findings to enhance cultural competency training for professionals (e.g., educators, counselors, medical professionals, criminal justice personnel) who work with youth is recommended as they are ethically bound to provide culturally competent and sensitive services (Parra Cardona et al., 2012). Furthermore, Castro, Barrera, and Steiker (2010) stressed how cultural adaptation of interventions often focus on the strategies used in interventions for clients and inadequately emphasize the importance of the cultural competency of personnel tasked with delivering the intervention services to clients. Therefore, the results of this study can be integrated into cultural sensitivity training and education to assist practitioners' in working with immigrant populations by allowing them to gain cultural awareness about the differential impact of social, environmental, and individual factors on youths'

development and behavior. This increased awareness would help practitioners better serve adolescent populations and their families, particularly at-risk youth, immigrant youth, and the children of immigrants, as it facilitates trust, retention, and program completion of clients (Ceballos & Bratton, 2010; Parra Cardona et al., 2012). In turn, practitioners would be equipped with the appropriate knowledge for working with youth of different levels of acculturation, which can have positive benefits for youths' behavioral outcomes.

Positive Social Change Implications

The study I conducted produced insightful results that have empirical and practical applications for positive social change related to juvenile delinquency. On the societal and policy level, I was able to contribute to continued responses to societal concerns about delinquency via empirical inquiry. The current study broadened researchers' and practitioners' understanding of delinquency by filling several research gaps involving self-control (Piquero, Bersani, et al., 2014; Reisig et al., 2011), neighborhood variables (Powell et al., 2010), and delinquency across different generational statuses (Alvarez-Rivera et al., 2014; Bersani, 2014a; Piquero, Bersani, et al., 2014). Furthermore, the current study expanded upon theories related to acculturation and differential associations, and offered further insight into the immigrant paradox. Most importantly, I found prominent factors (i.e., family, school, peers, neighborhood, and self-control) associated with adolescent problem behavior differentially contributed to delinquency among youth of different generational statuses. This empirical finding expands researchers' understanding of the acculturation-crime link and the differential

influence of factors on delinquent behaviors, which has practical applications that can lead to significant positive social change in advancing current delinquency prevention practices. Therefore, I intend to disseminate my research findings to important stakeholders such as criminal justice practitioners, educators, counselors, and immigrant youth and their families through publications and presentations. By disseminating my findings, I hope to promote an understanding of the differential influence of psychosocial and environmental factors on delinquency among youth of different generational statuses in an effort to assist in advocating for more culturally responsive interventions for immigrant youth.

The findings from this study also offer assistance to criminal justice practitioners and policymakers with determining more effective ways to address delinquency, especially among the rapidly growing first- and second-generation immigrant populations. Current delinquency interventions were created for adolescents in general, which has resulted in continued lapses in the cultural responsiveness of delinquency intervention strategies for immigrant youth (Buchanan & Smokowski, 2011; Parra Cardona et al., 2012; Rothe et al., 2011; Svensson et al., 2012). Furthermore, most interventions place emphasis on family relationships (Prado et al., 2012; Szapocznik et al., 2015), which overlooks other factors, such as self-control, peer associations, and environment that have a critical role in the development of delinquency, as demonstrated in this study. The findings from this study can be used to advocate for more effective delinquency interventions that incorporate strategies based on the differential

development of delinquency among youth of different generational statuses or levels of acculturation.

Additionally, the study results demonstrate how essential it is to consider youths' level of acculturation in the implementation and development of intervention strategies in the same way that gender and ethnicity are considered important, as acculturation has significant implications on youths' behavioral outcomes. Therefore, application of the findings has positive social change implications in terms of enhancing the specificity of intervention strategies for youth of different generational statuses, which would significantly enhance the cultural responsiveness of current delinquency interventions. In turn, increased cultural responsiveness would positively influence a range of outcomes from service delivery to improvements in client outcomes (e.g., behavioral, educational, psychological, social), as indicated in this study and prior research (Ceballos & Bratton, 2010; Parra Cardona et al., 2012).

I identified several methods that can be used to improve the effectiveness of delinquency interventions, as a result of this study. Program developers can integrate strategies into delinquency prevention and intervention strategies that help promote higher levels of self-control and deter youth from associating with delinquent peers to improve program effectiveness. These strategies can be incorporated into family-based interventions, as well, so that practitioners can assist youth from two fronts by promoting family bonds and involvement, and helping them build individual capital. Both family capital (Dufur et al., 2015) and individual capital were found to reduce delinquent involvement among adolescents (Aizer & Doyle, 2013). Therefore, promotion of both

family capital and individual capital within delinquency interventions can lead to significant enhancements in the effectiveness of delinquency prevention strategies for immigrant and nonimmigrant youth.

Most importantly, the current study showed how youths' individual processes, such as self-control, had a prominent role in the development of delinquency, particularly among first-generation immigrant and native-born youth. Therefore, helping youth build their individual or human capital can have lasting benefits for youth starting with their development of prosocial behaviors to other facets of their lives such as academic achievement and employability. Furthermore, interventions can be targeted early on during childhood to aid youth in their development of individual capital, self-control, and beneficial relationships with family and peers, in order to promote resiliency against delinquency risk factors. Collectively, the goal of improving the cultural responsiveness of delinquency intervention strategies has significant social change implications as it enables practitioners to better assist adolescents, especially at-risk youth, engage in prosocial behaviors, which ultimately helps youth with living a quality, crime-free life as they transition into adulthood.

Another positive social change implication involves the integration of the study findings into cultural competency training and education to benefit practitioners, families, and adolescents. Practitioners' would gain cultural awareness about the differential influence of factors associated with delinquent development among youth of different generational statuses. By having the appropriate knowledge for working with youth of different levels of acculturation, practitioners' would have increased capabilities to

promote trust, retention, and program completion of clients through the provision of culturally competent services for immigrant youth and their families (Ceballos & Bratton, 2010; Parra Cardona et al., 2012). In retrospect, enhancing cultural competency training for practitioners and the cultural responsiveness of delinquency interventions would lead to significant social change as there would be improvements to service delivery for immigrant youth and their families. On a societal and policy level, it would help criminal justice practitioners and policymakers address public safety concerns related to delinquency and immigration by providing more cost-effective interventions that reduce delinquency among immigrant and nonimmigrant youth. Most importantly, implementation of my recommendations for practice would improve youths' outcomes including, but not limited to, better behavioral adjustment, prevention or decreases in delinquency, decreases in the likelihood of adult criminality, and an overall enhancement of youths' quality of life.

Conclusion

Immigration and juvenile delinquency have remained primary concerns for American society throughout the course of U.S. history (Bui, 2012; Ngai, 2013). The first- and second-generation immigrant youth populations continue to grow. As of 2014, the immigrant youth population was 18.7 million, which accounted for one-fourth of the youth population (U.S. Census Bureau, 2014a). By 2050, the first- and second-generation immigrant youth population is projected to increase to approximately 33 million (Passel, 2011; U.S. Census Bureau, 2014a). Moreover, in 2013, 1.1 million of the total adolescent population in the United States were juvenile justice involved with about

70% being formally sanctioned (Furdella & Puzzanhera, 2015). Societal concerns regarding public safety, criminal justice expenditures, and the high cost of social services have led to increased pressure on public administrators and policymakers to effectively address immigration and criminality, particularly among immigrant populations (Calhoun & Pelech, 2010, 2013; Hayes, McGee, & Cerruto, 2011; Henggeler & Schoenwald, 2011).

Additionally, researchers have consistently indicated the need to improve interventions for immigrant youth (Buchanan & Smokowski, 2011; Ceballos & Bratton, 2010; Estrada-Martínez et al., 2013; Parra Cardona et al., 2012; Roman, Stodolska, Yahner, & Shiness, 2013). Yet, the development or enhancement of intervention strategies for immigrant youth has lagged behind the empirical evidence, which has resulted in a continued lapse in services. This is a major oversight when considering the rapid growth of the first- and second-generation immigrant youth populations (Passel, 2011; Perreira & Ornelas, 2011) and continued empirical demonstrations, including in this study, of the essentiality in considering the unique adaptive challenges faced among immigrant and nonimmigrant youth (Herrenkohl, Lee, Kosterman, & Hawkins, 2012; Kam, 2011; Landale et al., 2011; Sirin, Ryce, Gupta, & Rogers-Sirin, 2013). In turn, the continued lapse in services has hindered practitioners' ability to effectively assist immigrant youth and their families (Ceballos & Bratton, 2010; Estrada-Martínez et al., 2013; Parra Cardona et al., 2012).

Future researchers should continue to delve into the differential impact of factors across various domains (e.g., family, school, peers, environment, individual processes) to

extend practitioners' understanding of the unique developmental and adaptive challenges faced by immigrant and nonimmigrant youth. In addition, it is recommended that more assessments of modern day adolescents are conducted through empirical research to improve researchers' and practitioners' understanding of how current social conditions are influencing youths' development. This is particularly true for immigrant youth as there is a current anti-immigration sentiment in the United States that was facilitated by the events on September 11th, 2001 (Ayón & Becerra, 2013; Ayón & Naddy, 2013; Ewing, 2012; Orrenius & Zavodny, 2012). Therefore, there is a need to understand how such social shifts have influenced immigrant youths' development and behavioral outcomes.

The most pertinent findings of this study were the differences in the predictability of delinquency among first-generation immigrant, second-generation immigrant, and native-born adolescents. Thus, the study offers support of increased calls by researchers to improve the cultural responsiveness of delinquency interventions for immigrant youth (Buchanan & Smokowski, 2011; Parra Cardona et al., 2012; Svensson et al., 2012). Furthermore, this study offers a stepping stone for future researchers to assess the unique developmental and adaptive challenges faced by youth of different generational statuses or levels of acculturation. Essentially, the findings of this study can be applied to help practitioners advance current prevention and intervention practices to address public safety concerns related to immigrant crime and delinquent involvement. More importantly, improved cultural responsiveness of delinquency interventions based on empirical evidence, such as those provided in this study, will ultimately assist immigrant

and nonimmigrant youth with improving their quality of life and positive behavioral adjustment.

References

- Abrams, K. (2013). What makes the family special? *University of Chicago Law Review*, 80(1), 7–28. Retrieved from <https://lawreview.uchicago.edu/>
- Acharya, A. S., Prakash, A., Saxena, P., & Nigam, A. (2013). Sampling: Why and how of it? *Indian Journal of Medical Specialties*, 4(2), 330–333.
doi:10.7713/ijms.2013.0032
- Aguinis, H., Gottfredson, R. K., & Joo, H. (2013). Best-practice recommendations for defining, identifying, and handling outliers. *Organizational Research Methods*, 16(2), 270–301. doi:0.1177/1094428112470848
- Ahrens, C. E., Isas, L., & Viveros, M. (2011). Enhancing Latinas' participation in research on sexual assault: Cultural considerations in the design and implementation of research in the Latino community. *Violence Against Women*, 17(2), 177–188. doi:10.1177/1077801210397701
- Ai, A. L., Aisenberg, E., Weiss, S. I., & Salazar, D. (2014). Racial/ethnic identity and subjective physical and mental health of Latino Americans: An asset within? *American Journal of Community Psychology*, 53(1-2), 173–184.
doi:10.1007/s10464-014-9635-5
- Aizer, A., & Doyle, J. J., Jr. (2013). Juvenile incarceration, human capital, and future crime: Evidence from randomly assigned judges. *Quarterly Journal of Economics*, 130(2), 759-803. doi:10.1093/qje/qjv003
- Akers, R. L. (1998). *Social learning and social structure: A general theory of crime and deviance*. Boston, MA: Northeastern University Press.

- Albert, D., & Steinberg, L. (2011). Peer influences on adolescent risk behavior. In M. T. Bardo, D. H. Fishbein, & R. Milich (Eds.), *Inhibitory control and drug abuse prevention: From research to translation* (pp. 211–228). New York, NY: Springer.
- Albert, D., Chein, J., & Steinberg, L. (2013). The teenage brain peer influences on adolescent decision making. *Current Directions in Psychological Science*, *22*(2), 114–120. doi:10.1177/0963721412471347
- Alexander, R., Jr. (2011). Just deserts and life without parole for juveniles: An iniquitous law and policy. *Forum on Public Policy: A Journal of the Oxford Round Table*, *2011*(3), 1–14. Retrieved from <http://forumonpublicpolicy.com>
- Alexopoulos, E. C. (2010). Introduction to multivariate regression analysis. *Hippokratia*, *14*(1), 23–28. Retrieved from <http://www.hippokratia.gr/>
- Algood, C. L., Harris, C., & Hong, J. S. (2013). Parenting success and challenges for families of children with disabilities: An ecological systems analysis. *Journal of Human Behavior in the Social Environment*, *23*(2), 126–136. doi:10.1080/10911359.2012.747408
- Altschul, I. (2011). Parental involvement and the academic achievement of Mexican American youths: What kinds of involvement in youth's education matter most? *Social Work Research*, *35*(3), 159–170. doi:10.1093/swr/35.3.159
- Alvarado, M., & Ricard, R. J. (2013). Developmental assets and ethnic identity as predictors of thriving in Hispanic adolescents. *Hispanic Journal of Behavioral Sciences*, *35*(4), 510–523. doi:10.1177/0739986313499006

- Alvarez-Rivera, L. L., Nobles, M. R., & Lersch, K. M. (2014). Latino immigrant acculturation and crime. *American Journal of Criminal Justice*, *39*(2), 315–330. doi:10.1007/s12103-013-9203-9
- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Washington, DC: Author.
- Androff, D. K., Ayón, C., Becerra, D., Gurrola, M., Salas, L., Krysik, J., ... & Segal, E. (2011). U.S. immigration policy and immigrant children's well-being: The impact of policy shifts. *Journal of Sociology & Social Welfare*, *38*(1), 77–98. Retrieved from <http://wmich.edu/socialwork/journal/>
- Antonakis, J., & Dietz, J. (2011). Looking for validity or testing it? The perils of stepwise regression, extreme-scores analysis, heteroscedasticity, and measurement error. *Personality and Individual Differences*, *50*(3), 409–415. doi:10.1016/j.paid.2010.09.014
- Application of Johnson, 178 F. Supp. 155, (U.S. Dist. NJ, 1957).
- Armenta, B. E., Knight, G. P., Carlo, G., & Jacobson, R. P. (2011). The relation between ethnic group attachment and prosocial tendencies: The mediating role of cultural values. *European Journal of Social Psychology*, *41*(1), 107–115. doi:10.1002/ejsp.742
- Åslund, C., Nordquist, N., Comasco, E., Leppert, J., Oreland, L., & Nilsson, K. W. (2011). Maltreatment, MAOA, and delinquency: Sex differences in gene–environment interaction in a large population-based cohort of adolescents. *Behavior Genetics*, *41*(2), 262–272. doi:10.1007/s10519-010-9356-y

- Atweh, B. (2011). Reflections on social justice, race, ethnicity and identity from an ethical perspective. *Cultural Studies of Science Education*, 6(1), 33–47.
doi:10.1007/s11422-010-9305-3
- Ayón, C., & Becerra, D. (2013). Mexican immigrant families under siege: The impact of anti-immigrant policies, discrimination, and the economic crisis. *Advances in Social Work*, 14(1), 206–228. Retrieved from
<https://journals.iupui.edu/index.php/advancesinsocialwork/index>
- Ayón, C., & Naddy, M. (2013). Latino immigrant families' social support networks: Strengths and limitations during a time of stringent immigration legislation and economic insecurity. *Journal of Community Psychology*, 41(3), 359–377.
doi:10.1002/jcop.21542
- Ayón, C., Gurrola, M., Salas, L. M., Androff, D., & Krysik, J. (2012). Intended and unintended consequences of the employer sanction law on Latino families. *Qualitative Social Work*, 11(6), 587–603. doi:10.1177/1473325011418871
- Ayón, C., Marsiglia, F. F., & Bermudez-Parsai, M. (2010). Latino family mental health: Exploring the role of discrimination and familismo. *Journal of Community Psychology*, 38(6), 742–756. doi:10.1002/jcop.20392
- Bacio, G. A., Mays, V. M., & Lau, A. S. (2013). Drinking initiation and problematic drinking among Latino adolescents: Explanations of the immigrant paradox. *Psychology of Addictive Behaviors*, 27(1), 14–22. doi:10.1037/a0029996
- Bakermans-Kranenburg, M. J., & van Ijzendoorn, M. H. (2011). Differential susceptibility to rearing environment depending on dopamine-related genes: New

evidence and a meta-analysis. *Development and Psychopathology*, 23(1), 39–52.

doi:10.1017/s0954579410000635

Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change.

Psychological Review, 84(2), 191–215. doi:10.1037/0033-295X.84.2.191

Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*.

Englewood Cliffs, NJ: Prentice-Hall.

Banerjee, A., & Chaudhury, S. (2010). Statistics without tears: Populations and samples.

Industrial Psychiatry Journal, 19(1), 60–65. doi:10.4103/0972-6748.77642

Barber, B. L., Stone, M. R., & Eccles, J. S. (2010). Protect, prepare, support, and engage:

The roles of school-based extracurricular activities in students' development. In J.

L. Meece, & J. S. Eccles (Eds.), *Handbook of research on schools, schooling, and human development* (pp. 366–378). New York, NY: Routledge.

Barrera, M., Castro, F. G., & Steiker, L. K. H. (2011). A critical analysis of approaches to

the development of preventive interventions for subcultural groups. *American*

Journal of Community Psychology, 48(3-4), 439–454. doi:10.1007/s10464-010-9422-x

Barron, E. (2011). Development, Relief, and Education for Alien Minors (DREAM) Act.

Harvard Journal on Legislation, 48, 623–633. Retrieved from

<http://www.harvardjol.com/>

Baum, S., & Flores, S. M. (2011). Higher education and children in immigrant families.

Future of Children, 21(1), 171–193. doi:10.1353/foc.2011.0000

- Bear, G. G., Gaskins, C., Blank, J., & Chen, F. F. (2011). Delaware school climate survey—student: Its factor structure, concurrent validity, and reliability. *Journal of School Psychology, 49*(2), 157–174. doi:10.1016/j.jsp.2011.01.001
- Beaver, K. M. (2011). Environmental moderators of genetic influences on adolescent delinquent involvement and victimization. *Journal of Adolescent Research, 26*(1), 84–114. doi:10.1177/0743558410384736
- Bell, S. (2011). Through a foucauldian lens: A genealogy of child abuse. *Journal of Family Violence, 26*(2), 101–108. doi:10.1007/s10896-010-9347-z
- Belsky, J., & Beaver, K. M. (2011). Cumulative-genetic plasticity, parenting and adolescent self-regulation. *Journal of Child Psychology and Psychiatry, 52*(5), 619–626. doi:10.1111/j.1469-7610.2010.02327.x
- Bernard, T. J., & Kurlychek, M. C. (2010). *The cycle of juvenile justice* (2nd ed.). New York, NY: Oxford University Press.
- Bernat, D. H., Oakes, J. M., Pettingell, S. L., & Resnick, M. (2012). Risk and direct protective factors for youth violence: Results from the National Longitudinal Study of Adolescent Health. *American Journal of Preventive Medicine, 43*(2), S57–S66. doi:10.1016/j.amepre.2012.04.023
- Berry, J. W. (1997). Immigration, acculturation, and adaptation. *Applied Psychology: An International Review, 46*(1), 5–34. doi:10.1111/j.1464-0597.1997.tb01087.x
- Berry, J. W., Kim, U., Minde, T., & Mok, D. (1987). Comparative studies of acculturative stress. *International Migration Review, 21*(3), 491–511. doi:10.2307/2546607

- Bersani, B. E. (2014a). A game of catch-up? The offending experience of second-generation immigrants. *Crime & Delinquency*, *60*(1), 60–84.
doi:10.1177/0011128713502406
- Bersani, B. E. (2014b). An examination of first and second generation immigrant offending trajectories. *Justice Quarterly*, *31*(2), 315–343.
doi:10.1080/07418825.2012.659200
- Bersani, B. E., & DiPietro, S. M. (2013). *An examination of the “marriage effect” on desistance from crime among US immigrants*. Washington, DC: National Institute of Justice.
- Bersani, B. E., Loughran, T. A., & Piquero, A. R. (2013). Comparing patterns and predictors of immigrant offending among a sample of adjudicated youth. *Journal of Youth and Adolescence*, *43*(11), 1914–1933. doi:10.1007/s10964-013-0045-z
- Bienstock, B. M. (2013). The Federal Juvenile Delinquency Act. *St. John's Law Review*, *14*(1), 214–221. Retrieved from <http://scholarship.law.stjohns.edu/lawreview/>
- Birn, A. E. (1997). Six seconds per eyelid: The medical inspection of immigrants at Ellis Island, 1892–1914. *Dynamis*, *17*, 281–316. Retrieved from <http://www.revistadynamis.es/en/>
- Bishop, D. M. (2012). Evidence-based practice and juvenile justice. *Criminology & Public Policy*, *11*(3), 483–489. doi:10.1111/j.1745-9133.2012.00824.x
- Black, D. S., Grenard, J. L., Sussman, S., & Rohrbach, L. A. (2010). The influence of school-based natural mentoring relationships on school attachment and

- subsequent adolescent risk behaviors. *Health Education Research*, 25(5), 892–902. doi:10.1093/her/cyq040
- Blair, B. L., Perry, N. B., O'Brien, M., Calkins, S. D., Keane, S. P., & Shanahan, L. (2014). The indirect effects of maternal emotion socialization on friendship quality in middle childhood. *Developmental Psychology*, 50(2), 566–576. doi:10.1037/a0033532
- Blocklin, M. K., Crouter, A. C., Updegraff, K. A., & McHale, S. M. (2011). Sources of parental knowledge in Mexican American families. *Family Relations an Interdisciplinary Journal of Applied Family Studies*, 60(1), 30–44. doi:10.1111/j.1741-3729.2010.00631.x.
- Boehm, D. A. (2011). US-Mexico mixed migration in an age of deportation: An inquiry into the transnational circulation of violence. *Refugee Survey Quarterly*, 30(1), 1–21. doi:10.1093/rsq/hdq042
- Boman, J. H., Krohn, M. D., Gibson, C. L., & Stogner, J. M. (2012). Investigating friendship quality: An exploration of self-control and social control theories' friendship hypotheses. *Journal of Youth and Adolescence*, 41(11), 1526–1540. doi:10.1007/s10964-012-9747-x
- Botchkovar, E., Marshall, I. H., Rocque, M., & Posick, C. (2015). The importance of parenting in the development of self-control in boys and girls: Results from a multinational study of youth. *Journal of Criminal Justice*, 43(2), 133–141. doi:10.1016/j.jcrimjus.2015.02.001

- Boutwell, B. B., & Beaver, K. M. (2010). The intergenerational transmission of low self-control. *Journal of Research in Crime and Delinquency*, 47(2), 174–209.
doi:10.1177/0022427809357715
- Brank, E. M., & Scott, L. (2012). The historical, jurisprudential, and empirical wisdom of parental responsibility laws. *Social Issues & Policy Review*, 6(1), 26–53.
doi:10.1111/j.1751-2409.2011.01034.x
- Brechwald, W. A., & Prinstein, M. J. (2011). Beyond homophily: A decade of advances in understanding peer influence processes. *Journal of Research on Adolescence*, 21(1), 166–179. doi:10.1111/j.1532-7795.2010.00721.x
- Breed v. Jones, 421 U.S. 519 (1975).
- Brittian, A. S., Umaña-Taylor, A. J., Lee, R. M., Zamboanga, B. L., Kim, S. Y., Weisskirch, R. S., ... & Caraway, S. J. (2013). The moderating role of centrality on associations between ethnic identity affirmation and ethnic minority college students' mental health. *Journal of American College Health*, 61(3), 133–140.
doi:10.1080/07448481.2013.773904
- Brody, G. H., Beach, S. R., Chen, Y. F., Obasi, E., Philibert, R. A., Kogan, S. M., & Simons, R. L. (2011). Perceived discrimination, serotonin transporter linked polymorphic region status, and the development of conduct problems. *Development and Psychopathology*, 23(2), 617–627.
doi:10.1017/s0954579411000046
- Bronfenbrenner, U. (1977). Toward an experimental ecology of human development. *American Psychologist*, 32(7), 513–531. doi:10.1037/0003-066X.32.7.513

- Bronfenbrenner, U. (1994). Ecological models of human development. In T. Husen & T. N. Postlethwaite (Eds.), *International encyclopedia of education* (2nd ed., Vol. 3, pp. 1643–1647). Oxford, England: Pergamon Press/Elsevier Science.
- Brown, A., & Stepler, R. (2015). *Statistical portrait of the foreign-born population in the United States, 1960 – 2013*. Retrieved from Pew Research Center Hispanic Trends: <http://www.pewhispanic.org/2015/09/28/statistical-portrait-of-the-foreign-born-population-in-the-united-states-1960-2013-key-charts/>
- Brown, C. S., & Chu, H. (2012). Discrimination, ethnic identity, and academic outcomes of Mexican immigrant children: The importance of school context. *Child Development, 83*(5), 1477–1485. doi:10.1111/j.1467-8624.2012.01786.x
- Buchanan, R. L., & Smokowski, P. R. (2011). Pathways from acculturation stress to negative friend associations among Latino adolescents. *Child and Adolescent Social Work Journal, 28*(5), 375–391. doi:10.1007/s10560-011-0239-8
- Bui, H. N. (2009). Parent—child conflicts, school troubles, and differences in delinquency across immigration generations. *Crime & Delinquency, 55*(3), 412–441. doi:10.1177/0011128707306122
- Bui, H. N. (2012). Immigrant generational status and delinquency in adolescence: Segmented assimilation and racial–ethnic differences. In C. Coll, A. Marks (Eds.), *The immigrant paradox in children and adolescents: Is becoming American a developmental risk?* (pp. 135–158). Washington, DC: American Psychological Association.

- Bui, H. N. (2013). Racial and ethnic differences in the immigrant paradox in substance use. *Journal of Immigrant and Minority Health, 15*(5), 866–881.
doi:10.1007/s10903-012-9670-y
- Buker, H. (2011). Formation of self-control: Gottfredson and Hirschi's general theory of crime and beyond. *Aggression and Violent Behavior, 16*(3), 265–276.
doi:10.1016/j.avb.2011.03.005
- Burgess, R. L., & Akers, R. L. (1966). A differential association-reinforcement theory of criminal behavior. *Social Problems, 14*(2), 128–147.
doi:10.1525/sp.1966.14.2.03a00020
- Burnett, S., Sebastian, C., Kadosh, K. C., & Blakemore, S. J. (2011). The social brain in adolescence: Evidence from functional magnetic resonance imaging and behavioural studies. *Neuroscience and Biobehavioral Reviews, 35*(8), 1654–1664.
doi:10.1016/j.neubiorev.2010.10.011
- Burrington, L. A. (2015). Neighborhood structure, immigrant status, and youth violence assessing the role of parental supervision. *Youth Violence and Juvenile Justice, 3*(4), 367–390. doi:0.1177/1541204014547723
- Burt, S. A., & Klump, K. L. (2013). Delinquent peer affiliation as an etiological moderator of childhood delinquency. *Psychological Medicine, 43*(6), 1269–1278.
doi:10.1017/s0033291712000013
- Bushway, S. D., Sweeten, G., & Wilson, D. B. (2006). Size matters: Standard errors in the application of null hypothesis significance testing in criminology and criminal

justice. *Journal of Experimental Criminology*, 2(1), 1–22. doi:10.1007/s11292-005-5129-7

Butcher, F., Galanek, J. D., Kretschmar, J. M., & Flannery, D. J. (2015). The impact of neighborhood disorganization on neighborhood exposure to violence, trauma symptoms, and social relationships among at-risk youth. *Social Science & Medicine*, 146, 300–306. doi:10.1016/j.socscimed.2015.10.013

Butcher, K. F., & Piehl, A. M. (1998). Cross-city evidence on the relationship between immigration and crime. *Journal of Policy Analysis and Management*, 17(3), 457–493. doi:10.1002/(SICI)1520-6688(199822)17:3<457::AID-PAM4>3.0.CO;2-F

Calhoun, A., & Pelech, W. (2010). Responding to young people responsible for harm: A comparative study of restorative and conventional approaches. *Contemporary Justice Review*, 13(3), 287–306. doi:10.1080/10282580.2010.498238

Calhoun, A., & Pelech, W. (2013). The impact of restorative and conventional responses to harm on victims: A comparative study. *British Journal of Community Justice*, 11(1), 63–68. Retrieved from <http://www.cjp.org.uk/bjcj/>

Camarota, S. A. (2012). *Projecting immigration's impact on the size and age structure of the 21st century American population*. Retrieved from Center for Immigration Studies: <http://cis.org/sites/cis.org/files/camarota-projecting-age-structure.pdf>

Campbell, K. M. (2011). The road to SB 1070: How Arizona became ground zero for the immigrants' rights movement and the continuing struggle for Latino civil rights in America. *Harvard Latino Law Review*, 14, 1–21. Retrieved from <http://harvardllr.com/>

- Carlson, M. D., & Morrison, R. S. (2009). Study design, precision, and validity in observational studies. *Journal of Palliative Medicine, 12*(1), 77–82.
doi:10.1089/jpm.2008.9690
- Carson, D. C. (2013). Perceptions of prosocial and delinquent peer behavior and the effect on delinquent attitudes: A longitudinal study. *Journal of Criminal Justice, 41*(3), 151–161. doi:10.1016/j.jcrimjus.2013.01.005
- Casas, J. M., & Cabrera, A. P. (2011). Latino/a immigration: Actions and outcomes based on perceptions and emotions or facts? *Hispanic Journal of Behavioral Sciences, 33*(3), 283–303. doi:10.1177/0739986311416342
- Casey, B. J. (2015). Beyond simple models of self-control to circuit-based accounts of adolescent behavior. *Annual Review of Psychology, 66*, 295–319.
doi:10.1146/annurev-psych-010814-015156
- Casey, B. J., & Caudle, K. (2013). The teenage brain self control. *Current Directions in Psychological Science, 22*(2), 82–87. doi:10.1177/0963721413480170
- Casey, B., Trainor, R. J., Orendi, J. L., Schubert, A. B., Nystrom, L. E., Giedd, J. N., & ... Rapoport, J. L. (1997). A developmental functional MRI study of prefrontal activation during performance of a Go-No-Go task. *Journal of Cognitive Neuroscience, 9*(6), 835– 847. doi:10.1162/jocn.1997.9.6.835
- Casson, R. J., & Farmer, L. D. (2014). Understanding and checking the assumptions of linear regression: A primer for medical researchers. *Clinical & Experimental Ophthalmology, 42*(6), 590–596. doi:10.1111/ceo.12358

- Castro, F. G., Barrera, M., Jr., & Steiker, L. K. H. (2010). Issues and challenges in the design of culturally adapted evidence-based interventions. *Annual Review of Clinical Psychology, 6*, 213–239. doi:10.1146/annurev-clinpsy-033109-132032
- Cauffman, E., & Steinberg, L. (2012). Emerging findings from research on adolescent development and juvenile justice. *Victims & Offenders, 7*(4), 428–449. doi:10.1080/15564886.2012.713901
- Ceballos, P. L., & Bratton, S. C. (2010). Empowering Latino families: Effects of a culturally responsive intervention for low-income immigrant Latino parents on children's behaviors and parental stress. *Psychology in the Schools, 47*(8), 761–775. doi:0.1002/pits.20502
- Cervantes, R. C., Padilla, A. M., Napper, L. E., & Goldbach, J. T. (2013). Acculturation-related stress and mental health outcomes among three generations of Hispanic adolescents. *Hispanic Journal of Behavioral Sciences, 35*(4), 451–468. doi:10.1177/0739986313500924
- Chapman, R. L., Buckley, L., Sheehan, M. C., Shochet, I. M., & Romaniuk, M. (2011). The impact of school connectedness on violent behavior, transport risk-taking behavior, and associated injuries in adolescence. *Journal of School Psychology, 49*(4), 399–410. doi:10.1016/j.jsp.2011.04.004
- Chapple, C., Vaske, J., & Worthen, M. G. (2014). Gender differences in associations with deviant peer groups: Examining individual, interactional, and compositional factors. *Deviant Behavior, 35*(5), 394–411. doi:10.1080/01639625.2014.855098

- Charlesworth, R. (2013). *Understanding child development*. Independence, KY: Cengage Learning.
- Chaudry, A., Capps, R., Pedroza, J. M., Castaneda, R. M., Santos, R., & Scott, M. (2010). *Facing our future: Children in the aftermath of immigration enforcement*. Washington, DC: The Urban Institute.
- Chein, J., Albert, D., O'Brien, L., Uckert, K., & Steinberg, L. (2011). Peers increase adolescent risk taking by enhancing activity in the brain's reward circuitry. *Developmental Science, 14*(2), F1–F10. doi:10.1111/j.1467-7687.2010.01035.x
- Chen, D., Drabick, D. A., & Burgers, D. E. (2014). A developmental perspective on peer rejection, deviant peer affiliation, and conduct problems among youth. *Child Psychiatry & Human Development, 46*(6), 823–838. doi:10.1007/s10578-014-0522-y
- Chen, P., & Vazsonyi, A. T. (2013). Future orientation, school contexts, and problem behaviors: A multilevel study. *Journal of Youth and Adolescence, 42*(1), 67–81. doi:10.1007/s10964-012-9785-4
- Chen, X., & Zhong, H. (2013). Delinquency and crime among immigrant youth—an integrative review of theoretical explanations. *Laws, 2*(3), 210–232. doi:10.3390/laws2030210
- Chithambo, T. P., Huey, S. J., Jr., & Cespedes-Knadle, Y. (2014). Perceived discrimination and Latino youth adjustment: Examining the role of relinquished control and sociocultural influences. *Journal of Latina/o Psychology, 2*(1), 54–66. doi:10.1037/lat0000012

- Chiu, M. M., Pong, S. L., Mori, I., & Chow, B. W. Y. (2012). Immigrant students' emotional and cognitive engagement at school: A multilevel analysis of students in 41 countries. *Journal of Youth and Adolescence, 41*(11), 1409–1425. doi:10.1007/s10964-012-9763-x
- Chui, W. H., & Chan, H. C. O. (2012). An empirical investigation of social bonds and juvenile delinquency in Hong Kong. *Child Youth Care Forum, 41*(4), 371–386. doi:10.1007/s10566-012-9172-z
- Chun, H., & Mobley, M. (2014). The “immigrant paradox” phenomenon: Assessing problem behaviors and risk factors among immigrant and native adolescents. *Journal of Primary Prevention, 35*(5), 339–356. doi:10.1007/s10935-014-0359-y
- Chung, K., Ebesutani, C., Bang, H., Kim, J., Chorpita, B., Weisz, J., & ... Byun, H. (2013). Parenting stress and child behavior problems among clinic-referred youth: Cross-cultural differences across the US and Korea. *Child Psychiatry and Human Development, 44*(3), 460–468. doi:10.1007/s10578-012-0340-z
- Church II, W. T., Jagers, J. W., & Taylor, J. K. (2012). Neighborhood, poverty, and negative behavior: An examination of differential association and social control theory. *Children and Youth Services Review, 34*(5), 1035–1041. doi:10.1016/j.chilyouth.2012.02.005
- Church II, W. T., Tomek, S., Bolland, K. A., Hooper, L. M., Jagers, J., & Bolland, J. M. (2012). A longitudinal examination of predictors of delinquency: An analysis of data from the Mobile Youth Survey. *Children and Youth Services Review, 34*(12), 2400–2408. doi:10.1016/j.chilyouth.2012.09.007

- Ciardello, A. (2012). Is Angel Island the Ellis Island of the West? Teaching multiple perspective-taking in American immigration history. *Social Studies, 103*(4), 171–176. doi:10.1080/00377996.2011.606436
- Clinard, M., & Meier, R. (2008). *Sociology of deviant behavior*, (13th ed.). Independence, KY: Cengage Learning.
- Cochran, W. G. (1946). Relative accuracy of systematic and stratified random samples for a certain class of populations. *Annals of Mathematical Statistics, 17*(2), 164–177. doi:10.1214/aoms/1177730978
- Cohen, J. (1992a). A power primer. *Psychological Bulletin, 112*(1), 155.
- Cohen, J. (1992b). Statistical power analysis. *Current Directions in Psychological Science, 1*(3), 98–101. doi:10.1111/1467-8721.ep10768783
- Cohen, J., Cohen, P., West, S. G., & Aiken, L. S. (2013). *Applied multiple regression/correlation analysis for the behavioral sciences*. London, England: Routledge.
- Cohen, P., Cohen, J., Aiken, L. S., & West, S. G. (1999). The problem of units and the circumstance for POMP. *Multivariate Behavioral Research, 34*(3), 315–346. doi:10.1207/S15327906MBR3403_2
- Colby, S. L., & Ortman, J. M. (2015). Projections of the size and composition of the US population: 2014 to 2060. Retrieved from US Census Bureau: <https://www.census.gov/content/dam/Census/library/publications/2015/demo/p25-1143.pdf>.
- Commonwealth v. Fisher 213 Pa. 48, 1905.

- Conner, J. & Pope, D. (2014). Student engagement in high-performing schools: Relationships to mental and physical health. *Engaging youth in schools: Evidence-based models to guide future innovations*. New York: NSSE Yearbook by Teachers College Record.
- Connor, P., & Koenig, M. (2013). Bridges and barriers: Religion and immigrant occupational attainment across integration contexts. *International Migration Review*, 47(1), 3–38. doi:10.1111/imre.12012
- Converse, P. D., Piccone, K. A., & Tocci, M. C. (2014). Childhood self-control, adolescent behavior, and career success. *Personality and Individual Differences*, 59, 65–70. doi:10.1016/j.paid.2013.11.007
- Corona, R., Stevens, L., Halfond, R., Shaffer, C., Reid-Quiñones, K., & Gonzalez, T. (2012). A qualitative analysis of what Latino parents and adolescents think and feel about language brokering. *Journal of Child & Family Studies*, 21(5), 788–798. doi:10.1007/s10826-011-9536-2
- Creswell, J. (2013). *Research design: Qualitative, quantitative, and mixed methods approaches* (4th ed.). Thousand Oaks, CA: Sage Publications.
- Cristini, F., Scacchi, L., Perkins, D. D., Bless, K. D., & Vieno, A. (2015). Drug use among immigrant and non-immigrant adolescents: Immigrant paradox, family and peer influences. *Journal of Community & Applied Social Psychology*, 25(6), 531–548. doi:10.1002/casp.2232

- Crosnoe, R., & Johnson, M. K. (2011). Research on adolescence in the twenty-first century. *Annual Review of Sociology, 37*(1), 439–460. doi:10.1146/annurev-soc-081309-150008
- Crosnoe, R., & Turley, R. N. L. (2011). K-12 educational outcomes of immigrant youth. *Future of Children, 21*(1), 129–152. doi:10.1353/foc.2011.0008
- Curtis, S. (2011). “Tangible as Tissue”: Arnold Gesell, infant behavior, and film analysis. *Science in Context, 24*(3), 417–442. doi:10.1017/s0269889711000172
- Dallos, R., & Vetere, A. (2012). Systems theory, family attachments and processes of triangulation: Does the concept of triangulation offer a useful bridge? *Journal of Family Therapy, 34*(2), 117–137. doi:10.1111/j.1467-6427.2011.00554.x
- Dane, A., Kennedy, R., Spring, M., Volk, A., & Marini, Z. (2012). Adolescent beliefs about antisocial behavior: Mediators and moderators of links with parental monitoring and attachment. *International Journal of Emotional Education, 4*(2), 4–26. Retrieved from <http://www.um.edu.mt/edres/ijee>
- Daniel, J. (2012). Choosing the type of probability sampling. In *Sampling essentials: Practical guidelines for making sampling choices*. (pp. 125–175). Thousand Oaks, CA: SAGE Publications, Inc.
- Darnell, A. J., & Schuler, M. S. (2015). Quasi-experimental study of Functional Family Therapy effectiveness for juvenile justice aftercare in a racially and ethnically diverse community sample. *Children and Youth Services Review, 50*, 75–82. doi:10.1016/j.childyouth.2015.01.013

- Davies, G., & Fagan, J. (2012). Crime and enforcement in immigrant neighborhoods: evidence from New York City. *Annals of the American Academy of Political and Social Science*, 641(1), 99–124. doi:10.1177/0002716212438938
- Dedrick, R. F., Ferron, J. M., Hess, M. R., Hogarty, K. Y., Kromrey, J. D., Lang, T. R., Niles, J. D., & Lee, R. S. (2009). Multilevel modeling: A review of methodological issues and applications. *Review of Educational Research*, 79(1), 69–102. doi:10.3102/0034654308325581
- DeLisi, M., & Vaughn, M. G. (2014). Foundation for a temperament-based theory of antisocial behavior and criminal justice system involvement. *Journal of Criminal Justice*, 42(1), 10–25. doi:10.1016/j.jcrimjus.2013.11.001
- Desmond, S. A., & Kubrin, C. E. (2009). The power of place: Immigrant communities and adolescent violence. *Sociological Quarterly*, 50(4), 581–607. doi:10.1111/j.1533-8525.2009.01153.x
- Detlaff, A. J., & Earner, I. (2012). Children of immigrants in the child welfare system: Characteristics, risk, and maltreatment. *Families in Society: The Journal of Contemporary Social Services*, 93(4), 295–303. doi:10.1606/1044-3894.4240
- Deutsch, A., Crockett, L., Wolff, J., & Russell, S. (2012). Parent and peer pathways to adolescent delinquency: Variations by ethnicity and neighborhood context. *Journal of Youth & Adolescence*, 41(8), 1078–1094. doi:10.1007/s10964-012-9754-y
- DeYoung, C. G., Getchell, M., Kuposov, R. A., Yrigollen, C. M., Haeffel, G. J., af Klinteberg, B., ... & Grigorenko, E. L. (2010). Variation in the catechol-O-

methyltransferase Val158Met polymorphism associated with conduct disorder and ADHD symptoms among adolescent male delinquents. *Psychiatric Genetics*, 20(1), 20–24. doi:10.1097/ypg.0b013e32833511e4

Dillon, F. R., De La Rosa, M., Sastre, F., & Ibañez, G. (2013). Alcohol misuse among recent Latino immigrants: The protective role of preimmigration familismo.

Psychology of Addictive Behaviors, 27(4), 956–965. doi:10.1037/a0031091

DiPietro, S. M., & McGloin, J. M. (2012). Differential susceptibility? Immigrant youth and peer influence? *Criminology*, 50(3), 711–742. doi:10.1111/j.1745-

9125.2012.00273.x

DiPietro, S. M., Slocum, L. A., & Esbensen, F. A. (2015). School climate and violence does immigrant status matter? *Youth Violence and Juvenile Justice*, 13(4), 299–

322. doi:0.1177/1541204014547589

Dishion, T. J., & Patterson, G. R. (2006). The development and ecology of antisocial behavior. In D. Cicchetti & D. Cohen (Eds.), *Developmental psychopathology: Risk, disorder, and adaptation* (Rev. ed., Vol. 3, pp. 503–541). New York, NY: Wiley.

Dishion, T. J., & Tipsord, J. M. (2011). Peer contagion in child and adolescent social and emotional development. *Annual Review of Psychology*, 62, 189–214.

doi:10.1146/annurev.psych.093008.100412

Dishion, T. J., Spracklen, K. M., Andrews, D. W., & Patterson, G. R. (1996). Deviancy training in male adolescent friendships. *Behavior Therapy*, 27(3), 373–390.

doi:10.1016/s0005-7894(96)80023-2

- Dishion, T. J., Véronneau, M. H., & Myers, M. W. (2010). Cascading peer dynamics underlying the progression from problem behavior to violence in early to late adolescence. *Development and Psychopathology*, 22(3), 603–619.
doi:10.1017/s0954579410000313
- Domenech Rodríguez, M. M., Baumann, A. A., & Schwartz, A. L. (2011). Cultural adaptation of an evidence based intervention: From theory to practice in a Latino/a community context. *American Journal of Community Psychology*, 47(1-2), 170–186. doi:10.1007/s10464-010-9371-4
- Domitrovich, C. E., Bradshaw, C. P., Greenberg, M. T., Embry, D., Poduska, J. M., & Ialongo, N. S. (2010). Integrated models of school-based prevention: Logic and theory. *Psychology in the Schools*, 47(1), 71–88. doi:10.1002/pits.20452
- Dormann, C. F., Elith, J., Bacher, S., Buchmann, C., Carl, G., Carré, G., ... & Münkemüller, T. (2013). Collinearity: A review of methods to deal with it and a simulation study evaluating their performance. *Ecography*, 36(1), 27-46.
doi:10.1111/j.1600-0587.2012.07348.x
- Dreby, J. (2012). The burden of deportation on children in Mexican immigrant families. *Journal of Marriage and Family*, 74(4), 829–845. doi:10.1111/j.1741-3737.2012.00989.x
- Duckworth, A. L., & Kern, M. L. (2011). A meta-analysis of the convergent validity of self-control measures. *Journal of Research in Personality*, 45(3), 259–268.
doi:10.1016/j.jrp.2011.02.004

- Dufur, M. J., Hoffmann, J. P., Braudt, D. B., Parcel, T. L., & Spence, K. R. (2015). Examining the effects of family and school social capital on delinquent behavior. *Deviant Behavior, 36*(7), 511–526. doi:10.1080/01639625.2014.944069
- Dumas, T. M., Ellis, W. E., & Wolfe, D. A. (2012). Identity development as a buffer of adolescent risk behaviors in the context of peer group pressure and control. *Journal of Adolescence, 35*(4), 917–927. doi:10.1016/j.adolescence.2011.12.012
- Eddy, J. M., & Reid, J. B. (2002). *The antisocial behavior of the adolescent children of incarcerated parents: A developmental perspective*. Washington, DC: American Psychological Association.
- Eisenberg, N. (1995). Prosocial development: A multifaceted model. In W. M. Kurtines & J. L. Gewirtz (Eds.), *Moral development: An introduction* (pp. 401–429). Boston, MA: Allyn and Bacon.
- Elliott, D. S., & Ageton, S. S. (1980). Self-Reported Delinquency Questionnaire. *PsycTests*, doi:10.1037/t20796-000
- Enzmann, D., Marshall, I. H., Killias, M., Junger-Tas, J., Steketee, M., & Gruszczynska, B. (2010). Self-reported youth delinquency in Europe and beyond: First results of the Second International Self-Report Delinquency Study in the context of police and victimization data. *European Journal of Criminology, 7*(2), 159–183. doi:0.1177/1477370809358018
- Enzmann, D., Marshall, I. H., Killias, M., Junger-Tas, J., Steketee, M., & Gruszczynska, B. (2015). *Second International Self-Reported Delinquency Study, 2005-2007*.

ICPSR34658-v2. Ann Arbor, MI: Inter-university Consortium for Political and Social Research [distributor]. <http://doi.org/10.3886/ICPSR34658.v2>

Erikson, E. H. (1959). Identity and the life cycle. *Psychological Issues, 1*, 1–171.

Retrieved from <http://www.apa.org/pubs/databases/psycinfo/index.aspx>

Escalante, C. L., Kostandini, G., & Mykerezi, E. (2014). The decentralization of immigration enforcement and implications for agriculture. *Choices, 29*(1), 1–6.

Retrieved from <http://www.choicesmagazine.org/choices-magazine>

Estell, D. B., & Perdue, N. H. (2013). Social support and behavioral and affective school engagement: The effects of peers, parents, and teachers. *Psychology in the Schools, 50*(4), 325–339. doi:10.1002/pits.21681

Estrada-Martínez, L. M., Caldwell, C. H., Schulz, A. J., Diez-Roux, A. V., & Pedraza, S. (2013). Families, neighborhood socio-demographic factors, and violent behaviors among Latino, White, and Black adolescents. *Youth & Society, 45*(2), 221–242. doi:10.1177/0044118x11411933

Estrada-Martínez, L. M., Padilla, M. B., Caldwell, C. H., & Schulz, A. J. (2011).

Examining the influence of family environments on youth violence: A comparison of Mexican, Puerto Rican, Cuban, non-Latino Black, and non-Latino White adolescents. *Journal of Youth and Adolescence, 40*(8), 1039–1051. doi:10.1007/s10964-010-9624-4

Evans-Chase, M., & Zhou, H. (2014). A systematic review of the juvenile justice intervention literature what it can (and cannot) tell us about what works with

delinquent youth. *Crime & Delinquency*, 60(3), 451–470.

doi:10.1177/0011128712466931

Ewing, W. A. (2012). *Opportunity and exclusion: A brief history of US immigration policy*. Retrieved from American Immigration Council:

http://www.immigrationpolicy.org/sites/default/files/docs/opportunity_exclusion_011312.pdf

Facchini, G., & Steinhardt, M. F. (2011). What drives US immigration policy? Evidence from congressional roll call votes. *Journal of Public Economics*, 95(7), 734–743.

doi:10.1016/j.jpubeco.2011.02.008

Fagan, A. A., & Lindsey, A. M. (2014). Gender differences in the effectiveness of delinquency prevention programs what can be learned from experimental research? *Criminal Justice and Behavior*, 41(9), 1057-1078.

doi:10.1177/0093854814539801

Fagan, A. A., Van Horn, M. L., Hawkins, J. D., & Jaki, T. (2013). Differential effects of parental controls on adolescent substance use: For whom is the family most important? *Journal of Quantitative Criminology*, 29(3), 347–368.

doi:10.1007/s10940-012-9183-9

Fagan, A. A., Wright, E., & Pinchevsky, G. (2014). The protective effects of neighborhood collective efficacy on adolescent substance use and violence following exposure to violence. *Journal of Youth & Adolescence*, 43(9), 1498–

1512. doi:10.1007/s10964-013-0049-8

- Fairchild, G., Goozen, S. H., Calder, A. J., & Goodyer, I. M. (2013). Research review: Evaluating and reformulating the developmental taxonomic theory of antisocial behaviour. *Journal of Child Psychology & Psychiatry*, *54*(9), 924–940. doi:10.1111/jcpp.12102
- Fall, A. M., & Roberts, G. (2012). High school dropouts: Interactions between social context, self-perceptions, school engagement, and student dropout. *Journal of Adolescence*, *35*(4), 787–798. doi:10.1016/j.adolescence.2011.11.004
- Faul, F., Erdfelder, E., Buchner, A., & Lang, A. G. (2009). Statistical power analyses using G*Power 3.1: Tests for correlation and regression analyses. *Behavior Research Methods*, *41*(4), 1149–1160. doi:10.3758/brm.41.4.1149
- Ferguson, C. J., & Meehan, D. C. (2011). With friends like these...: Peer delinquency influences across age cohorts on smoking, alcohol and illegal substance use. *European Psychiatry*, *26*(1), 6–12. doi:10.1016/j.eurpsy.2010.09.002
- Fergusson, D. M., Boden, J. M., Horwood, L. J., Miller, A. L., & Kennedy, M. A. (2011). MAOA, abuse exposure and antisocial behaviour: 30-year longitudinal study. *British Journal of Psychiatry*, *198*(6), 457–463. doi:10.1192/bjp.bp.110.086991
- Fergusson, D. M., Boden, J. M., Horwood, L. J., Miller, A., & Kennedy, M. A. (2012). Moderating role of the MAOA genotype in antisocial behaviour. *British Journal of Psychiatry*, *200*(2), 116–123. doi:10.1192/bjp.bp.111.093328
- Feser, E. (2013). Isserman's impact: Quasi-experimental comparison group designs in regional research. *International Regional Science Review*, *36*(1), 44–68. doi:10.1177/0160017612464051

- Field, A. (2013). *Discovering statistics using IBM SPSS statistics* (4th ed.). London: Sage.
- Fisher, J. A., & Kalbaugh, C. A. (2011). Challenging assumptions about minority participation in US clinical research. *American Journal of Public Health, 101*(12), 2217–2222. doi:10.2105/AJPH.2011.300279
- Fosco, G. M., Stormshak, E. A., Dishion, T. J., & Winter, C. E. (2012). Family relationships and parental monitoring during middle school as predictors of early adolescent problem behavior. *Journal of Clinical Child & Adolescent Psychology, 41*(2), 202–213. doi:10.1080/15374416.2012.651989
- Fox, S. J. (1996). The early history of the court. *Future of Children the Juvenile Court, 6*(3) 29–39. Retrieved from <http://futureofchildren.org/futureofchildren/publications/journals/>
- Frankfort-Nachmias, C., & Nachmias, D. (2008). *Research methods in the social sciences* (7th ed.). New York, NY: Worth.
- Freud, S. (1962). *The ego and the id*. New York, NY: Norton & Company.
- Fuligni, A. J. (1998). The adjustment of children from immigrant families. *Current Directions in Psychological Science, 7*(4), 99–103. doi:10.1111/1467-8721.ep10774731
- Furdella, J., & Puzanchera, C. (2015). *Delinquency cases in juvenile court, 2013*. Retrieved from U.S. Department of Justice, Office of Juvenile Justice and Delinquency Prevention: <http://www.ojjdp.gov/pubs/248899.pdf>

- Furman, R., Ackerman, A. R., Loya, M., Jones, S., & Negi, N. (2012). The criminalization of immigration: Value conflicts for the social work profession. *Journal of Sociology and Social Welfare, 39*(1), 169–185. Retrieved from <http://www.wmich.edu/socialwork/journal/index.htm>
- Gabaccia, D., & Zanoni, E. (2012). Transitions in gender ratios among international migrants, 1820–1930. *Social Science History, 36*(2), 197–221.
doi:10.1215/01455532-1537338
- Gadow, K. D., DeVincent, C. J., Olvet, D. M., Pisarevskaya, V., & Hatchwell, E. (2010). Association of DRD4 polymorphism with severity of oppositional defiant disorder, separation anxiety disorder and repetitive behaviors in children with autism spectrum disorder. *European Journal of Neuroscience, 32*(6), 1058–1065.
doi:10.1111/j.1460-9568.2010.07382.x
- Galliher, R. V., Jones, M. D., & Dahl, A. (2011). Concurrent and longitudinal effects of ethnic identity and experiences of discrimination on psychosocial adjustment of Navajo adolescents. *Developmental Psychology, 47*(2), 509–526.
doi:10.1037/a0021061
- Galván, A. (2013). The teenage brain: Sensitivity to rewards. *Current Directions in Psychological Science, 22*(2), 88–93. doi:10.1177/0963721413480859
- Galván, A. (2014). Insights about adolescent behavior, plasticity, and policy from neuroscience research. *Neuron, 83*(2), 262–265.
doi:10.1016/j.neuron.2014.06.027

- García, A. S., & Keyes, D. G. (2012). *Life as an undocumented immigrant: How restrictive local immigration policies affect daily life*. Retrieved from the Center for American Progress:
http://www.americanprogress.org/issues/2012/03/life_as_undocumented.html.
- Garcia-Joslin, J. J., Carrillo, G. L., Guzman, V., Vega, D., Plotts, C. A., & Lasser, J. (2015). Latino immigration: Preparing school psychologists to meet students' needs. *School Psychology Quarterly*, 1–15. doi:10.1037/spq0000136
- Gatti, U., Haymoz, S., & Schadee, H. (2011). Deviant youth groups in 30 countries: Results from the Second International Self-Report Delinquency Study. *International Criminal Justice Review*, 21(3), 208–224.
doi:10.1177/1057567711418500
- Gatti, U., Soellner, R., Bräker, A. B., Verde, A., & Rocca, G. (2015). Delinquency and alcohol use among adolescents in Europe: The role of cultural contexts. *European Journal of Criminology*, 12(3), 362–377. doi:10.1177/1477370815571945
- Gault-Sherman, M. (2012). It's a two-way street: The bidirectional relationship between parenting and delinquency. *Journal of Youth and Adolescence*, 41(2), 121–145.
doi:10.1007/s10964-011-9656-4
- Gaylord-Harden, N. K., Burrow, A. L., & Cunningham, J. A. (2012). A Cultural-Asset Framework for investigating successful adaptation to stress in African American youth. *Child Development Perspectives*, 6(3), 264–271. doi:10.1111/j.1750-8606.2012.00236.x

- George, S., Duran, N., & Norris, K. (2014). A systematic review of barriers and facilitators to minority research participation among African Americans, Latinos, Asian Americans, and Pacific Islanders. *American Journal of Public Health, 104*(2), e16–31. doi:10.2105/AJPH.2013.301706
- Georgiades, K., Boyle, M. H., & Fife, K. A. (2013). Emotional and behavioral problems among adolescent students: The role of immigrant, racial/ethnic congruence and belongingness in schools. *Journal of Youth and Adolescence, 42*(9), 1473–1492. doi:10.1007/s10964-012-9868-2
- Gerard, J. M., & Booth, M. Z. (2015). Family and school influences on adolescents' adjustment: The moderating role of youth hopefulness and aspirations for the future. *Journal of Adolescence, 44*, 1–16. doi:10.1016/j.adolescence.2015.06.003
- Germán, M., Gonzales, N. A., & Dumka, L. (2009). Familism values as a protective factor for Mexican-origin adolescents exposed to deviant peers. *Journal of Early Adolescence, 29*(1), 16–42. doi:10.1177/0272431608324475
- Gesell, A., & Amatruda, C. S. (1941). *Developmental diagnosis: Normal and abnormal child development*. Oxford, England: Hoeber.
- Gibson, C. L. (2012). An investigation of neighborhood disadvantage, low self-control, and violent victimization among youth. *Youth Violence and Juvenile Justice, 10*(1), 41–63. doi:10.1177/1541204011423767
- Giletta, M., Scholte, R. H., Burk, W. J., Engels, R. C., Larsen, J. K., Prinstein, M. J., & Ciairano, S. (2011). Similarity in depressive symptoms in adolescents' friendship dyads: Selection or socialization? *Developmental Psychology, 47*(6), 1804–1814.

doi:10.1037/a0023872

- Giletta, M., Scholte, R. H., Prinstein, M. J., Engels, R. C., Rabaglietti, E., & Burk, W. J. (2012). Friendship context matters: Examining the domain specificity of alcohol and depression socialization among adolescents. *Journal of Abnormal Child Psychology, 40*(7), 1027–1043. doi:10.1007/s10802-012-9625-8
- Gindling, T. H., & Mandell, M. (2012). Private and government fiscal costs and benefits of the Maryland Dream Act. *Baltimore: Maryland Institute for Policy Analysis & Research*. Retrieved from <http://mipar.umbc.edu/publications/>
- Glenn, E. N. (2011). Constructing citizenship exclusion, subordination, and resistance. *American Sociological Review, 76*(1), 1–24. doi:10.1177/0003122411398443
- Glenn, A. L., & Raine, A. (2014). Neurocriminology: Implications for the punishment, prediction and prevention of criminal behaviour. *Nature Reviews. Neuroscience, 15*(1), 54–63. doi:10.1038/nrn3640
- Glueck, S., and Glueck, E. (1968). *Delinquents and nondelinquents in perspective*. Cambridge, MA: Harvard University Press.
- Goldner, J., Peters, T. L., Richards, M. H., & Pearce, S. (2011). Exposure to community violence and protective and risky contexts among low income urban African American adolescents: A prospective study. *Journal of Youth and Adolescence, 40*(2), 174–186. doi:10.1007/s10964-010-9527-4
- Gonzalez, L. M., Stein, G. L., & Huq, N. (2013). The influence of cultural identity and perceived barriers on college-going beliefs and aspirations of Latino Youth in

emerging immigrant communities. *Hispanic Journal of Behavioral Sciences*, 35(1), 103–120. doi:10.1177/0739986312463002

Goring, C. (1913). *The English Convict*. Montclair, NJ: Patterson Smith.

Gottfredson, M. R., & Hirschi, T. (1990). *A general theory of crime*. Stanford, CA: Stanford University Press.

Graham v. Florida, 560 U.S. 48 (2010)

Granic, I., & Patterson, G. R. (2006). Toward a comprehensive model of antisocial development: A dynamic systems approach. *Psychological Review*, 113(1), 101–131. doi:10.1037/0033-295x.113.1.101

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(1), 5–29. doi:1177/0022427893030001002

Greenfield, P. M., & Quiroz, B. (2013). Context and culture in the socialization and development of personal achievement values: Comparing Latino immigrant families, European American families, and elementary school teachers. *Journal of Applied Developmental Psychology*, 34(2), 108–118. doi:10.1016/j.appdev.2012.11.002

Greenman, E. (2011). Assimilation choices among immigrant families: Does school context matter? *International Migration Review*, 45(1), 29–67. doi:10.1111/j.1747-7379.2010.00828.x

- Greenman, E. (2013). Educational attitudes, school peer context, and the “immigrant paradox” in education. *Social Science Research, 42*(3), 698–714.
doi:10.1016/j.ssresearch.2012.12.014
- Grieco, E. M., Acosta, Y. D., Patricia de la Cruz, G., Gambino, C., Gryn, T., Larsen, L. J., Trevelyan, E. N., & Walters, N. P. (2012). *The foreign-born population in the United States: 2010*. Retrieved from US Census Bureau:
<http://www.census.gov/prod/2012pubs/acs-19.pdf>.
- Guarini, T. E., Marks, A. K., Patton, F., & Coll, C. G. (2011). The immigrant paradox in sexual risk behavior among Latino adolescents: Impact of immigrant generation and gender. *Applied Developmental Science, 15*(4), 201–209.
doi:10.1080/10888691.2011.618100
- Gugliotta, G. (2013). The first Americans. *Smithsonian, 43*(10), 38–47. Retrieved from
<http://www.ebscohost.com/academic>
- Hagan, F. E. (2013). *Research methods in criminal justice and criminology* (9th ed.). Upper Saddle River, NJ: Pearson Education, Inc.
- Hale, D. R., & Viner, R. M. (2012). Policy responses to multiple risk behaviours in adolescents. *Journal of Public Health, 34*(suppl 1), i11–i19.
doi:10.1093/pubmed/fdr112
- Hale, D. R., Fitzgerald-Yau, N., & Viner, R. M. (2014). A systematic review of effective interventions for reducing multiple health risk behaviors in adolescence. *American Journal of Public Health, 104*(5), e19–e41.
doi:10.2105/AJPH.2014.301874

- Hardaway, C. R., McLoyd, V. C., & Wood, D. (2012). Exposure to violence and socioemotional adjustment in low-income youth: An examination of protective factors. *American Journal of Community Psychology, 49*(1-2), 112–126. doi:10.1007/s10464-011-9440-3
- Harris-McKoy, D., & Cui, M. (2013). Parental control, adolescent delinquency, and young adult criminal behavior. *Journal of Child and Family Studies, 22*(6), 836–843. doi:10.1007/s10826-012-9641-x
- Hartry, A. S. (2012). Gendering crimmigration: The intersection of gender, immigration, and the criminal justice system. *Berkeley Journal of Gender, Law & Justice, 27*(1), 1–27. Retrieved from <http://scholarship.law.berkeley.edu/bgj/>
- Hawes, D. J., Dadds, M. R., Frost, A. D., & Hasking, P. A. (2011). Do childhood callous-unemotional traits drive change in parenting practices? *Journal of Clinical Child & Adolescent Psychology, 40*(4), 507–518. doi:10.1080/15374416.2011.581624
- Hay, C., Meldrum, R. C., & Piquero, A. R. (2013). Negative cases in the nexus between self-control, social bonds, and delinquency. *Youth Violence and Juvenile Justice, 11*(1), 3–25. doi:10.1177/1541204012447959
- Hayes, H., McGee, T., & Cerruto, M. (2011). Explaining continuity and change in offending behaviour after a restorative justice conference. *Current Issues in Criminal Justice, 23*(2), 127–143. Retrieved from <http://sydney.edu.au/law/criminology//journal/index.shtml>

- Henggeler, S., & Schoenwald, S. J. (2011). Evidence-based interventions for juvenile offenders and juvenile justice policies that support them. *Social Policy Report*, 25(1), 1–20. doi:10.1037/e639922011-001
- Henneberger, A. K., Durkee, M. I., Truong, N., Atkins, A., & Tolan, P. H. (2013). The longitudinal relationship between peer violence and popularity and delinquency in adolescent boys: Examining effects by family functioning. *Journal of Youth and Adolescence*, 42(11), 1651–1660. doi:10.1007/s10964-012-9859-3
- Henry, K. L., Knight, K. E., & Thornberry, T. P. (2012). School disengagement as a predictor of dropout, delinquency, and problem substance use during adolescence and early adulthood. *Journal of Youth and Adolescence*, 41(2), 156–166. doi:10.1007/s10964-011-9665-3
- Hernández, M. M., Conger, R. D., Robins, R. W., Bacher, K. B., & Widaman, K. F. (2014). Cultural socialization and ethnic pride among Mexican-Origin adolescents during the transition to middle school. *Child Development*, 85(2), 695–708. doi:10.1111/cdev.12167
- Herrenkohl, T. I., Lee, J. O., Kosterman, R., & Hawkins, J. D. (2012). Family influences related to adult substance use and mental health problems: A developmental analysis of child and adolescent predictors. *Journal of Adolescent Health*, 51(2), 129–135. doi:10.1016/j.jadohealth.2011.11.003
- Hirschfield, P. J., & Gasper, J. (2011). The relationship between school engagement and delinquency in late childhood and early adolescence. *Journal of Youth and Adolescence*, 40(1), 3–22. doi:10.1007/s10964-010-9579-5

- Hirschi, T. (1969). *Causes of delinquency*. Berkeley, CA: University of California Press.
- Hirschi, T., & Gottfredson, M. R. (2008). Critiquing the critics: The authors respond. In E. Goode (Ed.), *Out of control: Assessing the general theory of crime* (pp. 217–231). Stanford, CA: Stanford University Press.
- Hirtenlehner, H., Pauwels, L., & Mesko, G. (2015). Is the criminogenic effect of exposure to peer delinquency dependent on the ability to exercise self-control? Results from three countries. *Journal of Criminal Justice*, *43*(6), 532-543. doi:10.1016/j.jcrimjus.2015.05.006
- Hoeve, M., Stams, G. J. J., Van Der Put, C. E., Dubas, J. S., van der Laan, P. H., & Gerris, J. R. (2012). A meta-analysis of attachment to parents and delinquency. *Journal of Abnormal Child Psychology*, *40*(5), 771–785. doi:10.1007/s10802-011-9608-1
- Hoffman, M. L. (1996). Empathy and moral development. *Annual Report of Educational Psychology in Japan*, *35*(0), 157–162. doi:10.5926/arepj1962.35.0_157
- Hoffmann, J. P., Erickson, L. D., & Spence, K. R. (2013). Modeling the association between academic achievement and delinquency: An application of interactional theory. *Criminology*, *51*(3), 629–660. doi:10.1111/1745-9125.12014
- Holtmann, M., Buchmann, A. F., Esser, G., Schmidt, M. H., Banaschewski, T., & Laucht, M. (2011). The child behavior checklist-dysregulation profile predicts substance use, suicidality, and functional impairment: A longitudinal analysis. *Journal of Child Psychology and Psychiatry*, *52*(2), 139–147. doi:10.1111/1745-9125.12014

- Huang, D. Y., Lanza, H. I., Murphy, D. A., & Hser, Y. I. (2012). Parallel development of risk behaviors in adolescence: Potential pathways to co-occurrence. *International Journal of Behavioral Development, 36*(4), 247–257.
doi:10.1177/0165025412442870
- Huizinga, D., & Elliott, D. S. (1986). Reassessing the reliability and validity of self-report delinquency measures. *Journal of Quantitative Criminology, 2*(4), 293–327. doi:10.1007/BF01064258
- Huizinga, D., Loeber, R., & Thornberry, T. P. (1993). Longitudinal study of delinquency, drug use, sexual activity, and pregnancy among children and youth in three cities. *Public Health Reports, 108*(Suppl 1), 90–96. Retrieved from <http://www.ncbi.nlm.nih.gov/pmc/journals/333/>
- Hyde, L. W., Shaw, D. S., & Moilanen, K. L. (2010). Developmental precursors of moral disengagement and the role of moral disengagement in the development of antisocial behavior. *Journal of Abnormal Child Psychology, 38*(2), 197–209.
doi:10.1007/s10802-009-9358-5
- Ibrahim, S., & Sidani, S. (2014). Strategies to recruit minority persons: A systematic review. *Journal of Immigrant and Minority Health, 16*(5), 882–888.
doi:10.1007/s10903-013-9783-y
- In re Gault, 387 U.S. 1 (1967).
- In re Winship, 397 U.S. 358(1970).
- Innamorati, M., & Maniglio, R. (2015). Psychosocial correlates of alcohol use and heavy episodic drinking among Italian adolescents: Data from the Second International

- Self-Reported Delinquency Study. *American Journal on Addictions*, 24(6), 507–514. doi:10.1111/ajad.12239
- Jaffee, S. R., Strait, L. B., & Odgers, C. L. (2012). From correlates to causes: Can quasi-experimental studies and statistical innovations bring us closer to identifying the causes of antisocial behavior? *Psychological Bulletin*, 138(2), 272–295. doi:10.1037/a0026020
- Jagers, J., Gabbard, W. J., & Jagers, S. J. (2014). The devolution of US immigration policy: An examination of the history and future of immigration policy. *Journal of Policy Practice*, 13(1), 3–15. doi:10.1080/15588742.2013.855695
- Jennings, W. G., Higgins, G. E., Akers, R. L., Khey, D. N., & Dobrow, J. (2013). Examining the influence of delinquent peer association on the stability of self-control in late childhood and early adolescence: Toward an integrated theoretical model. *Deviant Behavior*, 34(5), 407–422. doi:10.1080/01639625.2012.735903
- Jennings, W. G., Zgoba, K. M., Piquero, A. R., & Reingle, J. M. (2013). Offending trajectories among native-born and foreign-born Hispanics to late middle age. *Sociological Inquiry*, 83(4), 622–647. doi:10.1111/soin.12017
- Jenson, J. M., & Fraser, M. W. (2011). *Social policy for children and families: A risk and resilience perspective*. Thousand Oaks, CA: Sage
- Jessor, R. (1991). Risk behavior in adolescence: A psychosocial framework for understanding and action. *Journal of Adolescent Health*, 12(8), 597–605. doi:10.1016/1054-139x(91)90007-k

- Jessor, R. (2014). Problem behavior theory: A half-century of research on adolescent behavior and development. In J. Brooks-Gunn, R. M. Lerner, A. C. Petersen, & R. K. Silbereisen (Eds.), *The developmental science of adolescence: History through autobiography*. New York, NY: Psychology Press.
- Jocson, R. M., & McLoyd, V. C. (2015). Neighborhood and housing disorder, parenting, and youth adjustment in low-income urban families. *American Journal of Community Psychology, 55*(3-4), 304–313. doi:10.1007/s10464-015-9710-6.
- Johnson, K. R. (2011). Sweet home Alabama? Immigration and civil rights in the “new” South. *Stanford Law Review Online, 64*, 22–28. Retrieved from <http://www.stanfordlawreview.org/online>
- Johnson, K., Lanza-Kaduce, L., & Woolard, J. (2011). Disregarding graduated treatment: Why transfer aggravates recidivism. *Crime & Delinquency, 57*(5), 756–777. doi:10.1177/0011128708328867
- Johnson, K. R. (2013). The beginning of the end: The Immigration Act of 1965 and the emergence of modern US/Mexico border enforcement. *Immigration & Nationality Review (Forthcoming)*. Retrieved from http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2362478
- Jones, E. N. (2012). Disproportionate representation of minority youth in the juvenile justice system: A lack of clarity and too much disparity among states "addressing" the issue. *UC Davis Journal of Juvenile Law & Policy, 16*(1), 155–202. Retrieved from <http://jjlp.law.ucdavis.edu/archives/>

- Jones, R. (2011). Border security, 9/11 and the enclosure of civilisation. *Geographical Journal*, 177(3), 213–217. doi:10.1111/j.1475-4959.2011.00416.x
- Jones-Correa, M., & De Graauw, E. (2013). Looking back to see ahead: Unanticipated changes in immigration from 1986 to the present and their implications for American politics today. *Annual Review of Political Science*, 16(1), 209–230. doi:10.1146/annurev-polisci-051211-164644
- Junger-Tas, J., Haan Marshall, I., Enzmann, D., Killins, M., Steketee, M., & Gruszczynska, B. (2010). *Juvenile delinquency in Europe and beyond*. New York, NY: Springer.
- Kam, J. A. (2011). The effects of language brokering frequency and feelings on Mexican-heritage youth's mental health and risky behaviors. *Journal of Communication*, 61(3), 455–475. doi:10.1111/j.1460-2466.2011.01552.x
- Kamper, K. E., & Ostrov, J. M. (2013). Relational aggression in middle childhood predicting adolescent social-psychological adjustment: The role of friendship quality. *Journal of Clinical Child & Adolescent Psychology*, 42(6), 855–862. doi:10.1080/15374416.2013.844595
- Karriker-Jaffe, K. J., Foshee, V. A., Ennett, S. T., & Suchindran, C. (2013). Associations of neighborhood and family factors with trajectories of physical and social aggression during adolescence. *Journal of Youth and Adolescence*, 42(6), 861–877. doi:10.1007/s10964-012-9832-1

- Keeler, A. R., Siegel, J. T., & Alvaro, E. M. (2013). Depression and help seeking among Mexican–Americans: The mediating role of familism. *Journal of Immigrant and Minority Health, 16*(6), 1225–1231. doi:10.1007/s10903-013-9824-6
- Keijsers, L., Branje, S., Hawk, S. T., Schwartz, S. J., Frijns, T., Koot, H. M., ... & Meeus, W. (2012). Forbidden friends as forbidden fruit: Parental supervision of friendships, contact with deviant peers, and adolescent delinquency. *Child Development, 83*(2), 651–666. doi:10.1111/j.1467-8624.2011.01701.x
- Kendler, K. S., Patrick, C. J., Larsson, H., Gardner, C. O., & Lichtenstein, P. (2013). Genetic and environmental risk factors in males for self-report externalizing traits in mid-adolescence and criminal behavior through young adulthood. *Psychological Medicine, 43*(10), 2161–2168. doi:10.1017/s003329171300007x
- Kennedy, L. A., & MacNeela, P. (2014). Adolescent acculturation experiences: A meta-ethnography of qualitative research. *International Journal of Intercultural Relations, 40*, 126-140. doi:10.1016/j.ijintrel.2013.11.003
- Kent v. United States, 383 U.S. 541 (1966).
- Khajehnoori, B., Ahmadi, H., & Keshavarzi, S. (2013). Investigating related factors to teenagers' delinquency of shiraz according to social control and differential association theories. *International Journal of Management and Humanity Sciences, 2*(2), 142–151. Retrieved from <http://ijmhsjournal.com/>
- Khoury-Kassabri, M. (2011). Student victimization by peers in elementary schools: Individual, teacher-class, and school-level predictors. *Child Abuse & Neglect, 35*(4), 273–282. doi:10.1016/j.chiabu.2011.01.004

- Kil, S. (2012). Fearing yellow, imagining white: Media analysis of the Chinese Exclusion Act of 1882. *Social Identities, 18*(6), 663–677.
doi:10.1080/13504630.2012.708995
- Kim, E., & Díaz., J. (2013). Access to higher education for immigrant students. *ASHE Higher Education Report, 38*(6), 47–60. doi: 10.1002/aehe.20006
- Kim, H. Y. (2013). Statistical notes for clinical researchers: Assessing normal distribution (2) using skewness and kurtosis. *Restorative Dentistry & Endodontics, 38*(1), 52–54. doi:10.5395/rde.2013.38.1.52
- Kim, S. Y., Chen, Q., Wang, Y., Shen, Y., & Orozco-Lapray, D. (2013). Longitudinal linkages among parent–child acculturation discrepancy, parenting, parent–child sense of alienation, and adolescent adjustment in Chinese immigrant families. *Developmental Psychology, 49*(5), 900–912. doi:10.1037/a0029169
- Kimonis, E. R., Cross, B., Howard, A., & Donoghue, K. (2013). Maternal care, maltreatment and callous-unemotional traits among urban male juvenile offenders. *Journal of Youth and Adolescence, 42*(2), 165–177.
doi:10.1007/s10964-012-9820-5
- King, K. M., Nguyen, H. V., Kosterman, R., Bailey, J. A., & Hawkins, J. D. (2012). Co-occurrence of sexual risk behaviors and substance use across emerging adulthood: Evidence for state-and trait-level associations. *Addiction, 107*(7), 1288–1296. doi:10.1111/j.1360-0443.2012.03792.x
- Kiuru, N., Burk, W. J., Laursen, B., Nurmi, J. E., & Salmela-Aro, K. (2012). Is depression contagious? A test of alternative peer socialization mechanisms of

depressive symptoms in adolescent peer networks. *Journal of Adolescent Health*, 50(3), 250–255. doi:10.1016/j.jadohealth.2011.06.013

- Klein, J., Cornell, D., & Konold, T. (2012). Relationships between bullying, school climate, and student risk behaviors. *School Psychology Quarterly*, 27(3), 154–169. doi:0.1037/a0029350
- Klimstra, T. A., Crocetti, E., Hale, W. W., Kolman, A. I., Fortanier, E., & Meeus, W. H. (2011). Identity formation in juvenile delinquents and clinically referred youth. *European Review of Applied Psychology*, 61(3), 123–130. doi:10.1016/j.erap.2011.05.002
- Knafo, A., Israel, S., & Ebstein, R. P. (2011). Heritability of children's prosocial behavior and differential susceptibility to parenting by variation in the dopamine receptor D4 gene. *Development and Psychopathology*, 23(1), 53–67. doi:10.1017/S0954579410000647.
- Knecht, A. B., Burk, W. J., Weesie, J., & Steglich, C. (2011). Friendship and alcohol use in early adolescence: A multilevel social network approach. *Journal of Research on Adolescence*, 21(2), 475–487. doi:10.1111/j.1532-7795.2010.00685.x
- Knight, G. P., Berkel, C., Umaña-Taylor, A. J., Gonzales, N. A., Ettekal, I., Jaconis, M., & Boyd, B. M. (2011). The familial socialization of culturally related values in Mexican American families. *Journal of Marriage and Family*, 73(5), 913–925. doi:10.1111/j.1741-3737.2011.00856.x
- Knight, G. P., Losoya, S. H., Cho, Y. I., Chassin, L., Williams, J. L., & Cota-Robles, S. (2012). Ethnic identity and offending trajectories among Mexican American

juvenile offenders: Gang membership and psychosocial maturity. *Journal of Research on Adolescence*, 22(4), 782–796. doi:10.1111/j.1532-7795.2012.00819.x

Kochanska, G., Kim, S., Boldt, L. J., & Yoon, J. E. (2013). Children's callous-unemotional traits moderate links between their positive relationships with parents at preschool age and externalizing behavior problems at early school age. *Journal of Child Psychology and Psychiatry*, 54(11), 1251–1260. doi:10.1111/jcpp.12084

Kohlberg, L. (1976). Moral stages and moralization: The cognitive-developmental approach. In T. Lickona (Eds.), *Moral Development and Behavior: Theory, Research, and Social Issues* (pp. 31–53). New York, NY: Holt, Rinehart and Winston.

Kohlberg, L., & Hersh, R. H. (1977). Moral development: A review of the theory. *Theory into Practice*, 16(2), 53–59. doi:10.1080/00405847709542675

Kõiv, K. (2014). Comparison and connections between school climate, school safety and adolescents' antisocial behavior across three types of schools. *Social Education/Socialinis Ugdymas*, 38(2), 160–170. doi:10.15823/su.2014.13

Koury, A. S., & Votruba-Drzal, E. (2014). School readiness of children from immigrant families: Contributions of region of origin, home, and childcare. *Journal of Educational Psychology*, 106(1), 268–288. doi:10.1037/a0034374

Kreager, D. A., Rulison, K., & Moody, J. (2011). Delinquency and the structure of adolescent peer groups. *Criminology*, 49(1), 95–127. doi:10.1111/j.1745-9125.2010.00219.x

- Krisberg, B. (2005). *Juvenile justice: Redeeming our children*. Thousand Oaks, CA: Sage Publications, Inc.
- Krohn, M. D., Thornberry, T. P., Gibson, C. L., & Baldwin, J. M. (2010). The development and impact of self-report measures of crime and delinquency. *Journal of Quantitative Criminology*, 26(4), 509–525. doi:10.1007/s10940-010-9119-1
- Kroneman, L. M., Hipwell, A. E., Loeber, R., Koot, H. M., & Pardini, D. A. (2011). Contextual risk factors as predictors of disruptive behavior disorder trajectories in girls: The moderating effect of callous-unemotional features. *Journal of Child Psychology and Psychiatry*, 52(2), 167–175. doi:10.1111/j.1469-7610.2010.02300.x
- Kubrin, C. E., & Desmond, S. A. (2015). The power of place revisited why immigrant communities have lower levels of adolescent violence. *Youth Violence and Juvenile Justice*, 13(4) 345–366. doi:10.1177/1541204014547590
- Kulis, S., Marsiglia, F. F., & Nieri, T. (2009). Perceived ethnic discrimination versus acculturation stress: Influences on substance use among Latino youth in the Southwest. *Journal of Health and Social Behavior*, 50(4), 443–459. doi:10.1177/002214650905000405
- Kulis, S., Marsiglia, F. F., Kopak, A. M., Olmsted, M. E., & Crossman, A. (2012). Ethnic identity and substance use among Mexican-heritage preadolescents: Moderator effects of gender and time in the United States. *Journal of Early Adolescence*, 32(2) 165–199. doi:10.1177/0272431610384484

- Kuo, B. C. H. (2013). Collectivism and coping: Current theories, evidence, and measurements of collective coping. *International Journal of Psychology, 48*(3), 374–388. doi:10.1080/00207594.2011.640681
- Lac, A., Unger, J. B., Basáñez, T., Ritt-Olson, A., Soto, D. W., & Baezconde-Garbanati, L. (2011). Marijuana use among Latino adolescents: Gender differences in protective familial factors. *Substance Use & Misuse, 46*(5), 644–655. doi:10.3109/10826084.2010.528121
- Lambie, I., & Randell, I. (2013). The impact of incarceration on juvenile offenders. *Clinical Psychology Review, 33*(3), 448–459. doi:10.1016/j.cpr.2013.01.007
- Landale, N. S., Thomas, K. J. A., & Van Hook, J. (2011). The living arrangements of children of immigrants. *Future of Children, 21*(1), 43–70. doi:10.1353/foc.2011.0003
- Langbein, J. H. (2012). The disappearance of civil trial in the United States. *Yale Law Journal, 122*(3) 522–572. Retrieved from <http://www.yalelawjournal.org/>
- LaRocque, M., Kleiman, I., & Darling, S. M. (2011). Parental involvement: The missing link in school achievement. *Preventing School Failure, 55*(3), 115–122. doi:10.1080/10459880903472876
- Laursen, B., Hafen, C. A., Kerr, M., & Stattin, H. (2012). Friend influence over adolescent problem behaviors as a function of relative peer acceptance: To be liked is to be emulated. *Journal of Abnormal Psychology, 121*(1), 88–94. doi:10.1037/a0024707

- Lawrence, R., & Hemmens, C. (2008). *Juvenile justice: A text/reader*. Thousand Oaks, CA: SAGE Publications, Inc.
- Le, T. N., & Stockdale, G. (2008). Acculturative dissonance, ethnic identity, and youth violence. *Cultural Diversity & Ethnic Minority Psychology, 14*(1), 1–9.
doi:10.1037/1099-9809.14.1.1
- Le, T. N., & Stockdale, G. (2011). The influence of school demographic factors and perceived student discrimination on delinquency trajectory in adolescence. *Journal of Adolescent Health, 49*(4), 407–413.
doi:10.1016/j.jadohealth.2011.02.003
- Leadbeater, B., Sukhawathanakul, P., Smith, D., & Bowen, F. (2015). Reciprocal associations between interpersonal and values dimensions of school climate and peer victimization in elementary school children. *Journal of Clinical Child & Adolescent Psychology, 44*(3), 480–493. doi:10.1080/15374416.2013.873985
- Lee, D. L., & Ahn, S. (2012). Discrimination against Latina/os: A meta-analysis of individual-level resources and outcomes. *Counseling Psychologist, 40*(1), 28–65.
doi:10.1177/0011000011403326
- Lee, M. T., & Martinez, R. (2009). Immigration reduces crime: An emerging scholarly consensus. *Sociology of Crime Law and Deviance, 13*, 3–16. doi:10.1108/s1521-6136(2009)0000013004
- 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, 24*(3), 252–260. doi:10.1037/a0019407

- Lemm, K. (2010). Stratified sampling. In Neil J. Salkind (Ed.), *Encyclopedia of Research Design*. (pp. 1452–1455). Thousand Oaks, CA: SAGE Publications, Inc.
- Leong, F., Park, Y. S., & Kalibatseva, Z. (2013). Disentangling immigrant status in mental health: Psychological protective and risk factors among Latino and Asian American immigrants. *American Journal of Orthopsychiatry*, *83*(2pt3), 361–371. doi:10.1111/ajop.12020
- Li, Y., & Lerner, R. M. (2011). Trajectories of school engagement during adolescence: Implications for grades, depression, delinquency, and substance use. *Developmental Psychology*, *47*(1), 233–247. doi:10.1037/a0021307
- Lipsey, M. W., & Wilson, D. B. (1993). The efficacy of psychological, educational, and behavioral treatment: Confirmation from meta-analysis. *American Psychologist*, *48*(12), 1181–1209. doi:10.1037/0003-066X.48.12.1181
- Logis, H. A., Rodkin, P. C., Gest, S. D., & Ahn, H. J. (2013). Popularity as an organizing factor of preadolescent friendship networks: Beyond prosocial and aggressive behavior. *Journal of Research on Adolescence*, *23*(3), 413–423. doi:10.1111/jora.12033
- Lombroso, C. (1876). *Criminal man*. New York, NY: G.P. Putnam's Sons.
- Lopez, K. M., & Miller, H. V. (2011). Ethnicity, acculturation, and offending: Findings from a sample of Hispanic adolescents. *Open Family Studies Journal*, *4*(1), 27–37. doi:10.2174/1874922401104010027
- Luyckx, K., Goossens, L., Soenens, B., & Beyers, W. (2006). Unpacking commitment and exploration: Preliminary validation of an integrative model of late adolescent

identity formation. *Journal of Adolescence*, 29(3), 361–378.

doi:10.1016/j.adolescence.2005.03.008

MacDonald, J. M., Hipp, J. R., & Gill, C. (2013). The effects of immigrant concentration on changes in neighborhood crime rates. *Journal of Quantitative Criminology*, 29(2), 191–215. doi:10.1007/s10940-012-9176-8

Magaña, L. (2011). Fear of calling the police: Regulation and resistance around immigration enforcement activities. In J. Schiele (ed.), *Social welfare policy: Regulation and resistance among people of color* (pp. 255–270). Thousand Oaks, CA: Sage Press. doi:10.4135/9781452275185.n12

Magaña, L. (2013). SB 1070 and negative social constructions of Latino immigrants in Arizona. *Aztlán: A Journal of Chicano Studies*, 38(2), 151–162. Retrieved from <http://aztlanjournal.metapress.com/app/home/main.asp>

Main, M., Hesse, E., & Hesse, S. (2011). Attachment theory and research: Overview with suggested applications to child custody. *Family Court Review*, 49(3), 426–463. doi:10.1111/j.1744-1617.2011.01383.x

Maniglio, R., & Innamorati, M. (2014). Psychosocial correlates of adolescent cannabis use: data from the Italian subsample of the Second International Self-Reported Delinquency Study. *Journal of Addictive Diseases*, 33(3), 210–220. doi:10.1080/10550887.2014.950023

Marcia, J. E. (1966). Development and validation of ego-identity status. *Journal of Personality and Social Psychology*, 3(5), 551-558. doi:10.1037/h0023281

- Marks, A. K., Ejesi, K., & García Coll, C. (2014). Understanding the US immigrant paradox in childhood and adolescence. *Child Development Perspectives*, 8(2), 59–64. doi:10.1111/cdep.1207
- Marshall, I. H., & He, N. (2010). Chapter 10 USA. In *Josine Junger-Tas et al. (eds.), Juvenile Delinquency in Europe and Beyond*. (pp. 139–157). New York, NY: Springer. doi:10.1007/978-0-387-95982-5_10
- Martinez, C. J., McClure, H. H., Eddy, J. M., Ruth, B., & Hyers, M. J. (2012). Recruitment and retention of Latino immigrant families in prevention research. *Prevention Science: The Official Journal of the Society for Prevention Research*, 13(1), 15–26. doi:10.1007/s11121-011-0239-0
- Martinez, M. A. (2013). (Re) considering the role familismo plays in Latina/o high school students' college choices. *High School Journal*, 97(1), 21–40. doi:10.1353/hsj.2013.0019
- Martinez, R., Stowell, J. I., & Lee, M. T. (2010). Immigration and crime in an era of transformation: A longitudinal analysis of homicides in San Diego neighborhoods, 1980–2000. *Criminology*, 48(3), 797–829. doi:10.1111/j.1745-9125.2010.00202.x
- Massey, D. S. (2013). America's immigration policy fiasco: Learning from past mistakes. *Daedalus*, 142(3), 5-15. doi:10.1162/DAED_a_00215
- Massey, D. S., & Pren, K. A. (2012a). Origins of the new Latino underclass. *Race and Social Problems*, 4(1), 5–17. doi:10.1007/s12552-012-9066-6

- Massey, D. S., & Pren, K. A. (2012b). Unintended consequences of US immigration policy: Explaining the post-1965 surge from Latin America. *Population and Development Review*, 38(1), 1–29. doi:10.1111/j.1728-4457.2012.00470.x
- Masten, A. S., & Cicchetti, D. (2010). Developmental cascades. *Development and Psychopathology*, 22(03), 491–495. doi:10.1017/S0954579410000222
- McAdams, T., Rowe, R., Rijdsdijk, F., Maughan, B., & Eley, T. C. (2012). The covariation of antisocial behavior and substance use in adolescence: A behavioral genetic perspective. *Journal of Research on Adolescence*, 22(1), 100–112. doi:10.1111/j.1532-7795.2011.00758.x
- Megens, K. C., & Weerman, F. M. (2011). The social transmission of delinquency: Effects of peer attitudes and behavior revisited. *Journal of Research in Crime and Delinquency*, 49(3), 420–443. doi:10.1177/0022427811408432
- Meldrum, R. C., & Hay, C. (2012). Do peers matter in the development of self-control? Evidence from a longitudinal study of youth. *Journal of Youth and Adolescence*, 41(6), 691–703. doi:10.1007/s10964-011-9692-0
- Meldrum, R. C., Miller, H. V., & Flexon, J. L. (2013). Susceptibility to peer influence, self-control, and delinquency susceptibility to peer influence, self-control, and delinquency. *Sociological Inquiry*, 83(1), 106–129. doi:10.1111/j.1475-682x.2012.00434.x
- Meldrum, R. C., Young, J. T., & Weerman, F. M. (2012). Changes in self-control during adolescence: Investigating the influence of the adolescent peer network. *Journal of Criminal Justice*, 40(6), 452–462. doi:10.1016/j.jcrimjus.2012.07.002

- Mendel, R. A. (2011). *No place for kids: The case for reducing juvenile incarceration*. Baltimore, MD: The Annie E. Casey Foundation.
- Mendez, J. J., Bauman, S., & Guillory, R. M. (2012). Bullying of Mexican immigrant students by Mexican American students: An examination of intracultural bullying. *Hispanic Journal of Behavioral Sciences, 34*(2), 279–304.
doi:10.1177/0739986311435970
- Menjívar, C., & Abrego, L. (2012). Legal violence: Immigration law and the lives of Central American immigrants. *American Journal of Sociology, 117*(5), 1380–1421. doi:10.1086/663575
- Merolla, J. L., Pantoja, A. D., Cargile, I. A., & Mora, J. (2013). From coverage to action the immigration debate and its effects on participation. *Political Research Quarterly, 66*(2), 322–335. doi:10.1177/1065912912443313
- Mesch, G. S., Turjeman, H., & Fishman, G. (2008). Social identity and violence among immigrant adolescents. *New Directions for Youth Development, 119*, 129–150. doi:10.1002/yd.277
- Michalowski, R. (2013). Ethnic cleansing American style: SB 1070, nativism and the contradictions of neo-liberal globalization. *Journal of Crime and Justice, 36*(2), 171–193. doi:10.1080/0735648x.2012.752253
- Miller, H. V. (2011). Acculturation, social context, and drug use: Findings from a sample of Hispanic adolescents. *American Journal of Criminal Justice, 36*(2), 93–105. doi:10.1007/s12103-010-9086-y

- Miller, H. V., & Gibson, C. L. (2011). Neighborhoods, acculturation, crime, and victimization among Hispanics: The cross-fertilization of the sociologies of immigration and crime. *Journal of Contemporary Criminal Justice*, 27(1), 4–17. doi:10.1177/1043986210396206
- Miller, H. V., Barnes, J. C., & Hartley, R. D. (2011). Reconsidering Hispanic gang membership and acculturation in a multivariate context. *Crime & Delinquency*, 57(3), 331–355. doi:10.1177/0011128709348460
- Miller v. Alabama, 567 US (2012)
- Millings, A., Buck, R., Montgomery, A., Spears, M., & Stallard, P. (2012). School connectedness, peer attachment, and self-esteem as predictors of adolescent depression. *Journal of Adolescence*, 35(4), 1061–1067. doi:10.1016/j.adolescence.2012.02.015
- Mittelstadt, M., Speaker, B., Meissner, D., & Chishti, M. (2011). Through the prism of national security: Major immigration policy and program changes in the decade since 9/11. *Migration Policy Institute*, 2, 1–17. Retrieved from www.migrationinformation.org
- Mobarake, R. K., Juhari, R., Yaacob, S. N., & Esmaeili, N. S. (2014). The moderating role of self-control in the relationship between peer affiliation and adolescents antisocial behavior in Tehran, Iran. *Asian Social Science*, 10(9), 71–81. doi:10.5539/ass.v10n9p71

- Moehling, C., & Piehl, A. (2014). Immigrant assimilation into US prisons, 1900-1930. *Journal of Population Economics*, 27(1), 173–200. doi:10.1007/s00148-013-0476-6
- Moffitt, T. E. (1993). Adolescence-limited and life-course-persistent antisocial behavior: A developmental taxonomy. *Psychological Review*, 100(4), 674–701. doi:10.1037/0033-295x.100.4.674
- Moffitt, T. E. (2006). Life-course-persistent and adolescent-limited antisocial behavior. In D. Cicchetti & D. J. Cohen (Eds.), *Developmental psychopathology: Risk, disorder, and adaptation* (Vol. 3, pp. 570–598). New York, NY: Wiley
- Moffitt, T. E., Arseneault, L., Belsky, D., Dickson, N., Hancox, R. J., Harrington, H., ... & Caspi, A. (2011). A gradient of childhood self-control predicts health, wealth, and public safety. *Proceedings of the National Academy of Sciences*, 108(7), 2693–2698. doi:10.1073/pnas.1010076108
- Moffitt, T. E., Caspi, A., & Rutter, M. (2006). Measured gene-environment interactions in psychopathology concepts, research strategies, and implications for research, intervention, and public understanding of genetics. *Perspectives on Psychological Science*, 1(1), 5–27. doi:10.1111/j.1745-6916.2006.00002.x
- Molina, N. (2011). Borders, laborers, and racialized medicalization Mexican immigration and US public health practices in the 20th century. *American Journal of Public Health*, 101(6), 1024–1031. doi:10.2105/ajph.2010.300056

- Moore, M. (2011). Psychological theories of crime and delinquency. *Journal of Human Behavior in the Social Environment, 21*(3), 226–239.
doi:10.1080/10911359.2011.564552
- Morales, A., Herrera, S., & Murry, K. (2011). Navigating the waves of social and political capriciousness: Inspiring perspectives from DREAM-eligible immigrant students. *Journal of Hispanic Higher Education, 10*(3), 266–283.
doi:10.1177/1538192708330232
- Morales, A., Yakushko, O. F., & Castro, A. J. (2012). Language brokering among Mexican-immigrant families in the Midwest a multiple case study. *Counseling Psychologist, 40*(4), 520–553. doi:10.1177/0011000011417312
- Morcillo, C., Duarte, C. S., Shen, S., Blanco, C., Canino, G., & Bird, H. R. (2011). Parental familism and antisocial behaviors: Development, gender, and potential mechanisms. *Journal of the American Academy of Child & Adolescent Psychiatry, 50*(5), 471–479. doi:10.1016/j.jaac.2011.01.014
- Motivans, M. (2013). *Federal justice statistics, 2010*. Retrieved from the Bureau of Justice Statistics: <http://www.bjs.gov/content/pub/pdf/fjs10.pdf>
- Motti-Stefanidi, F., & Masten, A. S. (2013). School success and school engagement of immigrant children and adolescents: A risk and resilience developmental perspective. *European Psychologist, 18*(2), 126–135. doi:10.1027/1016-9040/a000139

- Mrug, S., Madan, A., & Windle, M. (2012). Temperament alters susceptibility to negative peer influence in early adolescence. *Journal of Abnormal Child Psychology, 40*(2), 201–209. doi:10.1007/s10802-011-9550-2
- Mukaka, M. M. (2012). A guide to appropriate use of correlation coefficient in medical research. *Malawi Medical Journal, 24*(3), 69–71. Retrieved from <http://www.ajol.info/index.php/mmj>
- Mulvey, E. P. (2011). *Highlights from pathways to desistance: A longitudinal study of serious adolescent offenders*. Washington, DC: Office of Juvenile Justice and Delinquency Prevention, US Department of Justice.
- Murphy, D. A., Brecht, M. L., Huang, D., & Herbeck, D. M. (2012). Trajectories of delinquency from age 14 to 23 in the National Longitudinal Survey of Youth sample. *International Journal of Adolescence and Youth, 17*(1), 47–62. doi:10.1080/02673843.2011.649401
- Nagoshi, J. L., Marsiglia, F. F., Parsai, M., & 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 United States. *Journal of Community Psychology, 39*(5), 520–533. doi:10.1002/jcop.20449
- National Juvenile Justice Network, & Texas Public Policy Foundation (2013). *Comeback states: Reducing youth incarceration in the United States*. Retrieved from http://www.njjn.org/uploads/digital-library/Comeback-States-Report_FINAL.pdf

- Neal, J. W., & Neal, Z. P. (2013). Nested or networked? Future directions for ecological systems theory. *Social Development, 22*(4), 722–737. doi:10.1111/sode.12018
- Neblett, E. W., Rivas-Drake, D., & Umaña-Taylor, A. J. (2012). The promise of racial and ethnic protective factors in promoting ethnic minority youth development. *Child Development Perspectives, 6*(3), 295–303. doi:10.1111/j.1750-8606.2012.00239.x
- Newsome, J., Boisvert, D., & Wright, J. P. (2014). Genetic and environmental influences on the co-occurrence of early academic achievement and externalizing behavior. *Journal of Criminal Justice, 42*(1), 45–53. doi:10.1016/j.jcrimjus.2013.12.002
- Newton, L. (2012). Policy innovation or vertical integration? A view of immigration federalism from the states. *Law & Policy, 34*(2), 113–137. doi:10.1111/j.1467-9930.2011.00360.x
- Newton, N. C., & Bussey, K. (2012). The age of reason: An examination of psychosocial factors involved in delinquent behaviour. *Legal and Criminological Psychology, 17*(1), 75–88. doi: 10.1111/j.2044-8333.2010.02004.x
- Ngai, M. M. (2013). Oscar Handlin and immigration policy reform in the 1950s and 1960s. *Journal of American Ethnic History, 32*(3), 62–67. doi:10.5406/jamerethnhist.32.3.0062
- Nichols, J. D., White, J. J., & Price, M. (2006). Beliefs of intelligence, knowledge acquisition, and motivational orientation: A comparative analysis of Hispanic/Latino and Anglo youth. *Multicultural Perspectives, 8*(4), 39–48. doi:10.1207/s15327892mcp0804_7

- Niehaus, K., Rudasill, K. M., & Rakes, C. R. (2012). A longitudinal study of school connectedness and academic outcomes across sixth grade. *Journal of School Psychology, 50*(4), 443–460. doi:10.1016/j.jsp.2012.03.002
- Niemeyer, A. E., Wong, M. M., & Westerhaus, K. J. (2009). Parental involvement, familismo, and academic performance in Hispanic and Caucasian adolescents. *North American Journal of Psychology, 11*(3), 613–631. Retrieved from <http://najp.us/>
- Nil, A. (2011). Latinos and S.B. 1070: Demonization, dehumanization, and disenfranchisement. *Harvard Latino Law Review, 14*, 35–66. Retrieved from <http://harvardllr.com/>
- Nimon, K. F. (2012). Statistical assumptions of substantive analyses across the general linear model: A mini-review. *Frontiers in Psychology, 3*, 1–5. doi:10.3389/fpsyg.2012.00322
- Nogueira de Almeida, A., Alho, E. J., & Teixeira, M. J. (2014). Models of functional cerebral localization at the dawning of modern neurosurgery. *World Neurosurgery, 81*(2), 436–440. doi:10.1016/j.wneu.2013.01.033
- Oesterle, S., Hawkins, J. D., Fagan, A. A., Abbott, R. D., & Catalano, R. F. (2010). Testing the universality of the effects of the Communities That Care prevention system for preventing adolescent drug use and delinquency. *Prevention Science, 11*(4), 411–423. doi:10.1007/s11121-010-0178-1

- Office of Juvenile Justice and Delinquency Prevention. (2015). *Jurisdictional boundaries*. Retrieved from http://www.ojjdp.gov/ojstatbb/structure_process/qa04102.asp?qaDate=2012
- Office of Juvenile Justice and Delinquency Prevention. (2014). *Glossary*. Retrieved from <http://www.ojjdp.gov/ojstatbb/glossary.html>
- Omar, A. (2015). Selecting the appropriate study design for your research: Descriptive study designs. *Journal of Health Specialties*, 3(3), 153–156. doi:10.4103/1658-600X.159892
- Onwuegbuzie, A. J., Collins, K. M., & Frels, R. K. (2013). Foreword: Using Bronfenbrenner's ecological systems theory to frame quantitative, qualitative, and mixed research. *International Journal of Multiple Research Approaches*, 7(1), 2–8. doi:10.5172/mra.2013.7.1.2
- Orobio de Castro, B., Veerman, J. W., Koops, W., Bosch, J. D., & Monshouwer, H. J. (2002). Hostile attribution of intent and aggressive behavior: A meta-analysis. *Child Development*, 73(3), 916–934. doi:10.1111/1467-8624.00447
- Orrenius, P. M., & Zavodny, M. (2012). The economics of US immigration policy. *Journal of Policy Analysis and Management*, 31(4), 948–956. doi:10.1002/pam.21653
- Osborne, J., & Waters, E. (2002). Four assumptions of multiple regression that researchers should always test. *Practical Assessment, Research & Evaluation*, 8(2), 1–9. Retrieved from <http://PAREonline.net/getvn.asp?v=8&n=2>

- Osborne, J. W., & Overbay, A. (2004). The power of outliers (and why researchers should always check for them). *Practical Assessment, Research & Evaluation*, 9(6), 1–12. Retrieved from <http://pareonline.net/>
- 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(10), 2034–2042. doi:10.1016/j.chilyouth.2011.05.034
- Palinkas, L. A., & Soydan, H. (2012). *Translation and implementation of evidence-based practice*. New York, NY: Oxford University Press.
- Palmer, E. J., & Hollin, C. R. (2001). Self-reported delinquency in persistent young offenders. *Pakistan Journal of Psychological Research*, 16(3-4), 67–83. Retrieved from <http://www.pjprnip.edu.pk/pjpr/index.php/pjpr/index>
- Pan, Y. (2012). The impact of legal status on immigrants' earnings and human capital: Evidence from the IRCA 1986. *Journal of Labor Research*, 33(2), 119–142. doi:10.1007/s12122-012-9134-0
- Pandis, N. (2014). Cross-sectional studies. *American Journal of Orthodontics and Dentofacial Orthopedics*, 146(1), 127–129. doi:10.1016/j.ajodo.2014.05.005
- Park, M. (2013). Asian American masculinity eclipsed: A legal and historical perspective of emasculation through US immigration practices. *Modern American*, 8(1), 3–17. Retrieved from <http://www.wcl.american.edu/modernamerican/>
- Parra Cardona, J. R., Domenech-Rodriguez, M., Forgatch, M., Sullivan, C., Bybee, D., Holtrop, K., Escobar-Chew, A. R., ... & Bernal, G. (2012). Culturally adapting an

evidence-based parenting intervention for Latino immigrants: The need to integrate fidelity and cultural relevance. *Family Process*, 51(1), 56–72.

doi:10.1111/j.1545-5300.2012.01386.x

Parsai, M., Marsiglia, F. F., & Kulis, S. (2010). Parental monitoring, religious involvement and drug use among Latino and non-Latino youth in the Southwestern United States. *British Journal of Social Work*, 40(1), 100–114.

doi:10.1093/bjsw/bcn100

Pasalich, D. S., Dadds, M. R., Hawes, D. J., & Brennan, J. (2011). Do callous-unemotional traits moderate the relative importance of parental coercion versus warmth in child conduct problems? An observational study. *Journal of Child Psychology and Psychiatry*, 52(12), 1308–1315. doi:10.1111/j.1469-

7610.2011.02435.x

Passel, J. S. (2011). Demography of immigrant youth: Past, present, and future. *Future of Children*, 21(1), 19–41. doi:10.1353/foc.2011.0001

Passel, J. S., Cohn, D., and Gonzalez-Barrera, A. (2013). *Population decline of unauthorized immigrants stalls, may have reversed*. Retrieved from Pew Research Center Hispanic Trends: <http://www.pewhispanic.org/2013/09/23/population-decline-of-unauthorized-immigrants-stalls-may-have-reversed/>

Passini, S. (2012). The delinquency–drug relationship: The influence of social reputation and moral disengagement. *Addictive Behaviors*, 37(4), 577–579.

doi:10.1016/j.addbeh.2012.01.012

- Pati, S., & Danagouliau, S. (2008). Immigrant children's reliance on public health insurance in the wake of immigration reform. *American Journal of Public Health, 98*(11), 2004–2010. doi: 10.2105/AJPH.2007.125773
- Patterson, G. R. (1982). *Coercive family processes*. Eugene, OR: Castalia.
- Patterson, G. R., DeBaryshe, B. D., & Ramsey, E. (1989). A developmental perspective on antisocial behavior. *American Psychologist, 44*(2), 329–335.
doi:10.1037/0003-066X.44.2.329
- Patterson, G. R., Dishion, T. J., & Yoerger, K. (2000). Adolescent growth in new forms of problem behavior: Macro-and micro-peer dynamics. *Prevention Science, 1*(1), 3–13. Retrieved from <http://search.proquest.com/>
- Pauwels, Lieven. (2012). How similar is the interaction between low self-control and deviant moral beliefs in the explanation of adolescent offending? An inquiry in sub groups by gender and immigrant background. In A. S. Fruili & L. D. Veneto (Eds.), *Psychology of morality* (pp. 1–12). New York, NY: Nova Publishers.
- Peguero, A. A., & Jiang, X. (2014). Social control across immigrant generations: Adolescent violence at school and examining the immigrant paradox. *Journal of Criminal Justice, 42*(3), 276–287. doi:10.1016/j.jcrimjus.2014.01.003
- Peguero, A. A., Bondy, J. M., & Hong, J. S. (2014). Social bonds across immigrant generations bonding to school and examining the relevance of assimilation. *Youth & Society, 1*–22. doi:0044118X1456033
- Pérez, D. M., Jennings, W. G., & Gover, A. R. (2008). Specifying general strain theory: An ethnically relevant approach. *Deviant Behavior, 29*(6), 544–578.

doi:10.1080/01639620701839385

Perreira, K. M., & Ornelas, I. J. (2011). The physical and psychological well-being of immigrant children. *Future of Children, 21*(1), 195–218.

doi:10.1353/foc.2011.0002

Peterson, B. E., Lee, D., Henninger, A. M., & Cubellis, M. A. (2014). Social bonds, juvenile delinquency, and Korean adolescents intra-and inter-individual implications of Hirschi's social bonds theory using panel data. *Crime & Delinquency, 1*–27. doi:10.1177/0011128714542505

Pfeifer, J. H., Masten, C. L., Moore III, W. E., Oswald, T. M., Mazziotta, J. C., Iacoboni, M., & Dapretto, M. (2011). Entering adolescence: Resistance to peer influence, risky behavior, and neural changes in emotion reactivity. *Neuron, 69*(5), 1029–1036. doi:10.1016/j.neuron.2011.02.019

Phinney, J. S., & Ong, A. D. (2007). Conceptualization and measurement of ethnic identity: Current status and future directions. *Journal of Counseling Psychology, 54*(3), 271–281. doi:10.1037/0022-0167.54.3.271

Piaget, J. (1971). The theory of stages in cognitive development. In D. R. Green, M. P. Ford, & G. B. Flamer (Eds.), *Measurement and Piaget* (pp. 1–111). New York: McGraw-Hill.

Piquero, A. R., Bersani, B. E., Loughran, T. A., & Fagan, J. (2014). Longitudinal patterns of legal socialization in first-generation immigrants, second-generation immigrants, and native-born serious youthful offenders. *Crime & Delinquency, 1*–23. doi:10.1177/0011128714545830.

- Piquero, A. R., Jennings, W. G., Piquero, N. L., & Schubert, C. A. (2014). Human but not social capital is better able to distinguish between offending trajectories in a sample of serious adolescent Hispanic offenders. *Journal of Criminal Justice*, 42(4), 366-373. doi:10.1016/j.jcrimjus.2014.05.002
- Polanco-Roman, L., & Miranda, R. (2013). Culturally related stress, hopelessness, and vulnerability to depressive symptoms and suicidal ideation in emerging adulthood. *Behavior Therapy*, 44(1), 75–87. doi:10.1016/j.beth.2012.07.002
- Polit, D. F., & Beck, C. T. (2010). Generalization in quantitative and qualitative research: Myths and strategies. *International Journal of Nursing Studies*, 47(11), 1451–1458. doi:10.1016/j.ijnurstu.2010.06.004
- Pong, S., & Landale, N. S. (2012). Academic achievement of legal immigrants' children: The roles of parents' pre- and postmigration characteristics in origin-group differences. *Child Development*, 83(5), 1543–1559. doi:10.1111/j.1467-8624.2012.01790.x
- Posick, C. (2013). The overlap between offending and victimization among adolescents results from the second international self-report delinquency study. *Journal of Contemporary Criminal Justice*, 29(1), 106–124. doi:0.1177/1043986212471250
- Posick, C., & Rocque, M. (2015). Family matters: A cross-national examination of family bonding and victimization. *European Journal of Criminology*, 12(1), 51–69. doi:10.1177/1477370814538777

- Powell, D., Perreira, K. M., & Harris, K. M. (2010). Trajectories of delinquency from adolescence to adulthood. *Youth & Society, 41*(4), 475–502.
doi:10.1177/0044118x09338503
- Powers, C. J., & Bierman, K. L. (2013). The multifaceted impact of peer relations on aggressive–disruptive behavior in early elementary school. *Developmental Psychology, 49*(6), 1174–1186. doi:10.1037/a0028400
- Prado, G., & Pantin, H. (2011). Reducing substance use and HIV health disparities among Hispanic youth in the USA: The Familias Unidas program of research. *Intervencion Psicosocial, 20*(1), 63–73. doi:10.5093/in2011v20n1a6
- Prado, G., Cordova, D., Huang, S., Estrada, Y., Rosen, A., Bacio, G. A., ... & Villamar, J. (2012). The efficacy of Familias Unidas on drug and alcohol outcomes for Hispanic delinquent youth: Main effects and interaction effects by parental stress and social support. *Drug and Alcohol Dependence, 125*, S18–S25.
doi:10.1016/j.drugalcdep.2012.06.011
- Prinstein, M. J., Brechwald, W. A., & Cohen, G. L. (2011). Susceptibility to peer influence: Using a performance-based measure to identify adolescent males at heightened risk for deviant peer socialization. *Developmental Psychology, 47*(4), 1167–1172. doi:10.1037/a0023274
- Rabaglietti, E., Burk, W. J., & Giletta, M. (2012). Regulatory self-efficacy as a moderator of peer socialization relating to Italian adolescents' alcohol intoxication. *Social Development, 21*(3), 522–536. doi:10.1111/j.1467-9507.2011.00637.x

- Racz, S. J., & McMahon, R. J. (2011). The relationship between parental knowledge and monitoring and child and adolescent conduct problems: A 10-year update. *Clinical Child and Family Psychology Review, 14*(4), 377–398.
doi:10.1007/s10567-011-0099-y
- Raffaelli, M., Kang, H., & Guarini, T. (2012). Exploring the immigrant paradox in adolescent sexuality: An ecological perspective. In C. Garcia Coll & A. K. Marks (Eds.), *The immigrant paradox in children and adolescents: Is becoming American a developmental risk?* (pp. 109–134). Washington, DC: American Psychological Association.
- Ragsdale, S. (2013). Immigrants in the United States of America. *Advances in Historical Studies, 2*(3), 167–174. doi:10.4236/ahs.2013.23021
- Ray, J. V., Thornton, L. C., Frick, P. J., Steinberg, L., & Cauffman, E. (2015). Impulse control and callous-unemotional traits distinguish patterns of delinquency and substance use in justice involved adolescents: Examining the moderating role of neighborhood context. *Journal of Abnormal Child Psychology, 1*–13.
doi:10.1007/s10802-015-0057-0
- Reingle, J. M., Jennings, W. G., & Maldonado-Molina, M. M. (2011). Generational differences in serious physical violence among Hispanic adolescents results from a nationally representative, longitudinal study. *Race and Justice, 1*(3), 277–291.
doi:10.1177/2153368711409061

- Reisig, M. D., Wolfe, S. E., & Holtfreter, K. (2011). Legal cynicism, legitimacy, and criminal offending: The nonconfounding effect of low self-control. *Criminal Justice and Behavior, 38*(12), 1265–1279. doi:10.1177/0093854811424707
- Renert, H., Russell-Mayhew, S., & Arthur, N. (2013). Recruiting ethnically diverse participants into qualitative health research: Lessons learned. *Qualitative Report, 18*(12), 1–13. Retrieved from <http://www.nova.edu/ssss/QR/aindex.html>
- Rhee, S. H., & Waldman, I. D. (2002). Genetic and environmental influences on antisocial behavior: A meta-analysis of twin and adoption studies. *Psychological Bulletin, 128*(3), 490–529. doi:10.1037/0033-2909.128.3.490
- Richards, M. H., Larson, R., Miller, B. V., Luo, Z., Sims, B., Parrella, D. P., & McCauley, C. (2004). Risky and protective contexts and exposure to violence in urban African American young adolescents. *Journal of Clinical Child and Adolescent Psychology, 33*(1), 138–148. doi:10.1207/s15374424jccp3301_13
- Rivas-Drake, D. (2011). Public ethnic regard and academic adjustment among Latino adolescents. *Journal of Research on Adolescence, 21*(3), 537–544. doi:10.1111/j.1532-7795.2010.00700.x
- Rivas-Drake, D., Seaton, E. K., Markstrom, C., Quintana, S., Syed, M., Lee, R. M., ... & Yip, T. (2014). Ethnic and racial identity in adolescence: Implications for psychosocial, academic, and health outcomes. *Child Development, 85*(1), 40–57. doi:10.1111/cdev.12200
- Roche, K., Ghazarian, S., & Fernandez-Esquer, M. (2012). Unpacking acculturation: Cultural orientations and educational attainment among Mexican-Origin Youth.

Journal of Youth & Adolescence, 41(7), 920–931. doi:10.1007/s10964-011-9725-8

Rocque, M., Posick, C., Marshall, I. H., & Piquero, A. R. (2015). A comparative, cross-cultural criminal career analysis. *European Journal of Criminology*, 12(4), 400–419. doi:10.1177/1477370815579951

Rogers-Sirin, L., & Gupta, T. (2012). Cultural identity and mental health: Differing trajectories among Asian and Latino youth. *Journal of Counseling Psychology*, 59(4), 555–566. doi:10.1037/a0029329

Roman, C. G., Stodolska, M., Yahner, J., & Shinew, K. (2013). Pathways to outdoor recreation, physical activity, and delinquency among urban Latino adolescents. *Annals of Behavioral Medicine*, 45(1), 151–161. doi:10.1007/s12160-012-9418-x

Roper v. Simmons, 125 S.Ct. 1183, 1200 (2005)

Roth, M. P. (2011). *Crime and punishment: A history of the criminal justice system* (2nd ed.). Belmont, CA: Wadsworth Publishing.

Rothe, E. M., Pumariega, A. J., & Sabagh, D. (2011). Identity and acculturation in immigrant and second generation adolescents. *Adolescent Psychiatry*, 1(1), 72–81. doi:10.2174/2210676611101010072

Ruiz, M., & Ransford, H. (2012). Latino elders reframing familismo: Implications for health and caregiving support. *Journal of Cultural Diversity*, 19(2), 50–57.

Retrieved from <http://www.ebscohost.com/academic>

Salas-Wright, C. P., Vaughn, M. G., Clark, T. T., Terzis, L. D., & Córdova, D. (2014). Substance use disorders among first-and second-generation immigrant adults in

- the United States: Evidence of an immigrant paradox? *Journal of Studies on Alcohol and Drugs*, 75(6), 958–967. doi:10.15288/jsad.2014.75.958
- Sam, D. L., & Berry, J. W. (2010). Acculturation when individuals and groups of different cultural backgrounds meet. *Perspectives on Psychological Science*, 5(4), 472–481. doi:10.1177/1745691610373075
- Sam, D. L., Vedder, P., Ward, C., & Horenczyk, G. (2006). Psychological and sociocultural adaptation of immigrant youth. In *Immigrant youth in cultural transition: Acculturation, identity, and adaptation across national contexts* (pp. 117–142). Mahwah, NJ: Lawrence Erlbaum Associates.
- Samaniego, R. Y., & Gonzales, N. A. (1999). Multiple mediators of the effects of acculturation status on delinquency for Mexican American adolescents. *American Journal of Community Psychology*, 27(2), 189–210. doi:10.1023/a:1022883601126
- Sampson, R., & Laub, J. (1993). *Crime in the making: Pathways and turning points through life*. Cambridge, MA: Harvard University Press.
- Sampson, R. J., Morenoff, J. D., & Raudenbush, S. (2005). Social anatomy of racial and ethnic disparities in violence. *Journal Information*, 95(2), 224–232. doi:10.2105/ajph.2004.037705
- Sampson, R. J., Raudenbush, S. W., & Earls, F. (1997). Neighborhoods and violent crime: A multilevel study of collective efficacy. *Science*, 277(5328), 918–924. doi:10.1126/science.277.5328.918
- Sander, J. B., Patall, E. A., Amoscato, L. A., Fisher, A. L., & Funk, C. (2012). A meta-

analysis of the effect of juvenile delinquency interventions on academic outcomes. *Children and Youth Services Review*, 34(9), 1695–1708.

doi:10.1016/j.chilyouth.2012.04.005

Santiago, C. D., & Wadsworth, M. E. (2011). Family and cultural influences on low-income Latino children's adjustment. *Journal of Clinical Child & Adolescent Psychology*, 40(2), 332–337. doi:10.1080/15374416.2011.546038

Santisteban, D. A., Coatsworth, J., Briones, E., Kurtines, W., & Szapocznik, J. (2012). Beyond acculturation: An investigation of the relationship of familism and parenting to behavior problems in Hispanic youth. *Family Process*, 51(4), 470–482. doi:10.1111/j.1545-5300.2012.01414.x

Sawyer, A. M., Borduin, C. M., & Dopp, A. R. (2015). Long-term effects of prevention and treatment on youth antisocial behavior: A meta-analysis. *Clinical Psychology Review*, 42, 130–144. doi:10.1016/j.cpr.2015.06.009

Sawyer, S. F. (2009). Analysis of variance: The fundamental concepts. *Journal of Manual & Manipulative Therapy*, 17(2), 27E–38E. doi:10.1179/jmt.2009.17.2.27e

Schlesinger, M., & McMurray, B. (2012). The past, present, and future of computational models of cognitive development. *Cognitive Development*, 27(4), 326–348. doi:10.1016/j.cogdev.2012.07.002

Schneider, A., Hommel, G., & Blettner, M. (2010). Linear regression analysis: Part 14 of a series on evaluation of scientific publications. *Deutsches Ärzteblatt International*, 107(44), 776–782. doi:10.3238/arztebl.2010.0776

- Schultz, R. (2011). "Allegiance and land go together": Automatic naturalization and the changing nature of immigration in nineteenth-century America. *American Nineteenth Century History*, 12(2), 149–176. doi:10.1080/14664658.2011.594649
- Schwalbe, C. S., Gearing, R. E., MacKenzie, M. J., Brewer, K. B., & Ibrahim, R. (2012). A meta-analysis of experimental studies of diversion programs for juvenile offenders. *Clinical Psychology Review*, 32(1), 26–33.
doi:10.1016/j.cpr.2011.10.002
- Schwartz, S. J., Des Rosiers, S., Huang, S., Zamboanga, B. L., Unger, J. B., Knight, G. P., ... & Szapocznik, J. (2013). Developmental trajectories of acculturation in Hispanic adolescents: Associations with family functioning and adolescent risk behavior. *Child Development*, 84(4), 1355–1372. doi:10.1111/cdev.12047
- Schwartz, S. J., Unger, J. B., Des Rosiers, S. E., Lorenzo-Blanco, E. I., Zamboanga, B. L., Huang, S., ... & Szapocznik, J. (2014). Domains of acculturation and their effects on substance use and sexual behavior in recent Hispanic immigrant adolescents. *Prevention Science*, 15(3), 385–396. doi:10.1007/s11121-013-0419-1
- Schwartz, S. J., Unger, J. B., Zamboanga, B. L., & Szapocznik, J. (2010). Rethinking the concept of acculturation: Implications for theory and research. *American Psychologist*, 65(4), 237–251. doi:10.1037/a0019330
- Scott, E. S., & Steinberg, L. (2008). Adolescent development and the regulation of youth crime. *Future of Children*, 18(2), 15–33. doi:10.1353/foc.0.0011
- Seddig, D. (2014). Peer group association, the acceptance of norms and violent behaviour: A longitudinal analysis of reciprocal effects. *European Journal of*

Criminology, 11(3), 319–339. doi:10.1177/1477370813496704

Sedgwick, P. (2014). Cross sectional studies: Advantages and disadvantages. *BMJ*, 348, 1–2. doi:10.1136/bmj.g2276

Segalowitz, S. J., Santesso, D. L., Willoughby, T., Reker, D. L., Campbell, K., Chalmers, H., & Rose-Krasnor, L. (2012). Adolescent peer interaction and trait surgency weaken medial prefrontal cortex responses to failure. *Social Cognitive and Affective Neuroscience*, 7(1), 115–124. doi:10.1093/scan/nsq090

Seiber, E. E. (2013). Which states enroll their Medicaid-eligible, citizen children with immigrant parents? *Health Services Research*, 48(2pt1), 519–538. doi:10.1111/j.1475-6773.2012.01467.x

Selden, D. A., Pace, J. A., & Nunn-Gilman, N. (2011). Placing S.B. 1070 and racial profiling into context, and what S.B. 1070 reveals about the legislative process in Arizona. *Arizona State Law Journal*, 43(1), 523–561. Retrieved from <http://www.ebscohost.com/academic>

Sellin, T. (1938). Culture conflict and crime. *American Journal of Sociology*, 44(1), 97–103. doi:10.1086/217919

Serviss, T. (2012). A history of New York state literacy test assessment: Historicizing calls to localism in writing assessment. *Assessing Writing*, 17(4), 208–227. doi:10.1016/j.asw.2012.05.001

Shanahan, M. J., & Hofer, S. M. (2011). Molecular genetics, aging, and well-being: Sensitive period, accumulation, and pathway models. In R. H. Binstock & L. K.

- George (eds.). *Handbook of aging and the social sciences* (pp. 135–147). New York, NY: Elsevier.
- Shaw, H. D., & McKay, C. R. (1969). *Juvenile delinquency and urban areas* (Revised). Chicago, IL: University Of Chicago Press.
- Shedlin, M., Decena, C., Mangadu, T., & Martinez, A. (2011). Research participant recruitment in Hispanic communities: Lessons learned. *Journal of Immigrant & Minority Health, 13*(2), 352–360. doi:10.1007/s10903-009-9292-1
- Shekarkhar, Z., & Gibson, C. L. (2011). Gender, self-control, and offending behaviors among Latino youth. *Journal of Contemporary Criminal Justice, 27*(1), 63–80. doi:10.1177/1043986211402224
- Shulman, E. P., Cauffman, E., Piquero, A. R., & Fagan, J. (2011). Moral disengagement among serious juvenile offenders: A longitudinal study of the relations between morally disengaged attitudes and offending. *Developmental Psychology, 47*(6), 1619–1632. doi:10.1037/a0025404
- Sickmund, M., & Snyder, H. N. (1999). *Juvenile offenders and victims: 1999 national report*. Washington, DC: Office of Juvenile Justice and Delinquency Prevention.
- Sickmund, M., Sladky, T.J., Kang, W., & Puzzanchera, C. (2015). Easy access to the census of juveniles in residential placement. Retrieved from <http://www.ojjdp.gov/ojstatbb/ezacjrp/>
- Siegel, D. M. (2011). The Supreme Court and the sentencing of juveniles in the United States: Reaffirming the distinctiveness of youth. *Child and Adolescent Psychiatric Clinics of North America, 20*(3), 431–445. doi:10.1016/j.chc.2011.03.011

- Siegel, L., & Welsh, B. (2013). *Juvenile delinquency: The core*. Stamford, CT: Cengage Learning.
- Simons, R. L., Beach, S. R., & Barr, A. B. (2012). Differential susceptibility to context: A promising model of the interplay of genes and the social environment. *Advances in Group Processes, 29*, 139–163. doi:10.1108/S0882-6145(2012)0000029008
- Simons, R. L., Lei, M. K., Beach, S. R., Brody, G. H., Philibert, R. A., & Gibbons, F. X. (2011). Social environmental variation, plasticity genes, and aggression: Evidence for the differential susceptibility hypothesis. *American Sociological Review, 76*(6), 833–912. doi: 10.1177/0003122411427580
- Sirin, S. R., Ryce, P., Gupta, T., & Rogers-Sirin, L. (2013). The role of acculturative stress on mental health symptoms for immigrant adolescents: A longitudinal investigation. *Developmental Psychology, 49*(4), 736–748. doi:10.1037/a0028398
- Skinner, B. F. (1938). *The behavior of organisms: An experimental analysis*. New York, NY: Appleton-Century.
- Slinker, B. K., & Glantz, S. A. (2008). Multiple linear regression accounting for multiple simultaneous determinants of a continuous dependent variable. *Circulation, 117*(13), 1732–1737. doi:10.1161/CIRCULATIONAHA.106.654376
- Smith, A. R., Chein, J., & Steinberg, L. (2014). Peers increase adolescent risk taking even when the probabilities of negative outcomes are known. *Developmental Psychology, 50*(5), 1564–1568. doi:10.1037/a0035696
- Smith, J. D., Dishion, T. J., Shaw, D. S., Wilson, M. N., Winter, C. C., & Patterson, G. R. (2014). Coercive family process and early-onset conduct problems from age 2 to

school entry. *Development and Psychopathology*, 26(4pt1), 917–932.

doi:10.1017/s0954579414000169

Smith, P. (2012). Suffering in silence: Asylum law and the concealment of political opinion as a form of persecution. *Connecticut Law Review*, 44(3), 1021–1056. Retrieved from <http://connecticutlawreview.org/>

Smith, T. B., & Silva, L. (2011). Ethnic identity and personal well-being of people of color: A meta-analysis. *Journal of Counseling Psychology*, 58(1), 42–60.

doi:10.1037/a0021528

Smith-Morris, C., Morales-Campos, D., Alvarez, E. A. C., & Turner, M. (2013). An anthropology of familismo: On narratives and description of Mexican/immigrants. *Hispanic Journal of Behavioral Sciences*, 35(1), 35–60.

doi:10.1177/0739986312459508

Snyder, J. J., Schrepferman, L. P., Bullard, L., McEachern, A. D., & Patterson, G. R. (2012). Covert antisocial behavior, peer deviancy training, parenting processes, and sex differences in the development of antisocial behavior during childhood. *Development and Psychopathology*, 24(3), 1117–1138.

doi:10.1017/S0954579412000570

Sohoni, D., & Sohoni, T. W. (2014). Perceptions of immigrant criminality: Crime and social boundaries. *Sociological Quarterly*, 55(1), 49–71. doi:10.1111/tsq.12039

Somerville, L. H., Hare, T., & Casey, B. J. (2011). Frontostriatal maturation predicts cognitive control failure to appetitive cues in adolescents. *Journal of Cognitive Neuroscience*, 23(9), 2123–2134. doi:10.1162/jocn.2010.21572

- Soulier, M. F., & Scott, C. L. (2010). Juveniles in court. *Harvard Review of Psychiatry*, *18*(6), 317–325. doi:10.3109/10673229.2010.527518
- Stafford, C. A. (2013). What's on your mind? How private speech mediates cognition during initial non-primary language learning. *Applied Linguistics*, *34*(2), 151–172. doi: 10.1093/applin/ams039
- Steffgen, G., Recchia, S., & Viechtbauer, W. (2013). The link between school climate and violence in school: A meta-analytic review. *Aggression and Violent Behavior*, *18*(2), 300–309. doi:10.1016/j.avb.2012.12.001
- Steidel, A. G. L., & Contreras, J. M. (2003). A new familism scale for use with Latino populations. *Hispanic Journal of Behavioral Sciences*, *25*(3), 312–330. doi:10.1177/0739986303256912
- Stein, G. L., Gonzalez, L.M., Cupito, A.M., Kiang, L., & Supple, A.J. (2013). The protective role of familism in the lives of Latino adolescents. *Journal of Family Issues*, *36*(10), 1255–1273. doi:10.1177/0192513x13502480
- Steinberg, L. (2008). *Adolescence*, (8th ed.). New York, NY: McGraw-Hill.
- Steinberg, L. (2013). The influence of neuroscience on US Supreme Court decisions about adolescents' criminal culpability. *Nature Reviews Neuroscience*, *14*(7), 513–518. doi:10.1038/nrn3509
- Stevens, G. W., Walsh, S. D., Huijts, T., Maes, M., Madsen, K. R., Cavallo, F., & Molcho, M. (2015). An internationally comparative study of immigration and adolescent emotional and behavioral problems: Effects of generation and gender.

Journal of Adolescent Health, 57(6), 587–594.

doi:10.1016/j.jadohealth.2015.07.001

Stoddard-Dare, P., Mallett, C. A., & Boitel, C. (2011). Association between mental health disorders and juveniles' detention for a personal crime. *Child & Adolescent*

Mental Health, 16(4), 208–213. doi:10.1111/j.1475-3588.2011.00599.x

Stoltz, S., van Londen, M., Deković, M., de Castro, B. O., Prinzie, P., & Lochman, J. E.

(2013). Effectiveness of an individual school-based intervention for children with aggressive behaviour: A randomized controlled trial. *Behavioural and Cognitive*

Psychotherapy, 41(05), 525-548. doi:10.1177/0165025412450525

Stowell, J. I., Martinez, R., Jr., & Cancino, J. M. (2012). Latino crime and Latinos in the criminal justice system: Trends, policy implications, and future research

initiatives. *Race and Social Problems*, 4(1), 31–40. doi:10.1007/s12552-012-9067-5

Strunin, L., Díaz Martínez, A., Díaz-Martínez, L. R., Heeren, T., Kuranz, S., Winter, M.,

... & Solís-Torres, C. (2013). Parental monitoring and alcohol use among Mexican students. *Addictive Behaviors*, 38(10), 2601–2606.

doi:10.1016/j.addbeh.2013.06.011

Stuewig, J., Tangney, J. P., Heigel, C., Harty, L., & McCloskey, L. (2010). Shaming,

blaming, and maiming: Functional links among the moral emotions,

externalization of blame, and aggression. *Journal of Research in Personality*,

44(1), 91–102. doi:10.1016/j.jrp.2009.12.005

Suárez-Orozco, C., Rhodes, J., & Milburn, M. (2009). Unraveling the immigrant paradox

academic engagement and disengagement among recently arrived immigrant youth. *Youth & Society*, 41(2), 151–185. doi:10.1177/0044118x09333647

Suárez-Orozco, C. & Suárez-Orozco, M. M. (1995). *Transformations: Immigration, family life, and achievement motivation among Latino adolescents*. Stanford, CA: Stanford University Press.

Supreme Court of The United States. (2012). *Arizona et al. V. United States. Slip Opinion*. Retrieved from <http://www.supremecourt.gov/opinions/11pdf/11-182b5e1.pdf>.

Sutherland, E. H., & Cressey, D. R. (1984). Differential association theory. In: D.H., Kelly (Ed.), *Deviant behavior*, (2nd ed., pp. 125–131). New York, NY: St. Martins Press.

Sutherland, E. H., Cressey, D. R., & Luckenbill, D. F. (1992). *Principles of criminology*, (11th ed.). Dix Hills, NY: General Hall.

Svensson, Y., Burk, W. J., Stattin, H., & Kerr, M. (2012). Peer selection and influence of delinquent behavior of immigrant and nonimmigrant youths: Does context matter? *International Journal of Behavioral Development*, 36(3), 178–185. doi:10.1177/0165025411434652

Sweeten, G., Piquero, A. R., & Steinberg, L. (2013). Age and the explanation of crime, revisited. *Journal of Youth and Adolescence*, 42(6), 921–938. doi:10.1007/s10964-013-9926-4

Szapocznik, J., Muir, J. A., Duff, J. H., Schwartz, S. J., & Brown, C. H. (2015). Brief strategic family therapy: Implementing evidence-based models in community

settings. *Psychotherapy Research*, 25(1), 121–133.

doi:10.1080/10503307.2013.856044

Tan, J. Y. (2013). Asian American Catholics: Diversity within diversity. *New Theology Review*, 18(2), 36–47. Retrieved from <http://newtheologyreview.com>

Tavakol, M., & Dennick, R. (2011). Making sense of Cronbach's alpha. *International Journal of Medical Education*, 2, 53–55. doi:10.5116/ijme.4dfb.8dfd

Taylor, Z. E., Larsen-Rife, D., Conger, R. D., & Widaman, K. F. (2012). Familism, interparental conflict, and parenting in Mexican-Origin Families: A cultural–contextual framework. *Journal of Marriage and Family*, 74(2), 312–327.

doi:10.1111/j.1741-3737.2012.00958.x

Templeton, G. F. (2011). A Two-Step Approach for transforming continuous variables to normal: Implications and recommendations for IS research. *Communications of the Association for Information Systems*, 28(1), 41–58. Retrieved from <http://aisel.aisnet.org/cais/>

Thompson, R. A. (2012). Whither the preconventional child? Toward a life-span moral development theory. *Child Development Perspectives*, 6(4), 423–429.

doi:10.1111/j.1750-8606.2012.00245.x

Thompson, W. E., & Bynum, J. E. (2010). *Juvenile delinquency: A sociological approach*. (8th ed.). Boston, MA: Pearson Education, Inc.

Thomson, M. D., & Hoffman-Goetz, L. (2011). Challenges of recruiting ESL immigrants into cancer education studies: Reflections from practice notes. *Journal of Cancer*

Education: The Official Journal of the American Association for Cancer

Education, 26(1), 170–174. doi:10.1007/s13187-010-0132-8

Tienda, M., & Haskins, R. (2011). Immigrant children: Introducing the issue. *Future of*

Children, 21(1), 3–18. doi:10.1353/foc.2011.0010

Tompsett, C. J., Amrhein, K. E., & Hassan, S. (2014). Travel beyond the home

neighborhood for delinquent behaviors: Moderation of home neighborhood influences. *Journal of Adolescence*, 37(4), 325–333.

doi:10.1016/j.adolescence.2014.02.001

Torres, N., Maia, J., Veríssimo, M., Fernandes, M., & Silva, F. (2012). Attachment

security representations in institutionalized children and children living with their families: Links to problem behaviour. *Clinical Psychology & Psychotherapy*,

19(1), 25–36. doi:10.1002/cpp.739

Trillo, V. M., & Redondo, L. M. (2013). The role of gender identity in adolescents'

antisocial behavior. *Psicothema*, 25(4), 507–513. doi:10.7334/psicothema2013.8

Trucco, E. M., Colder, C. R., & Wieczorek, W. F. (2011). Vulnerability to peer influence:

A moderated mediation study of early adolescent alcohol use initiation. *Addictive*

Behaviors, 36(7), 729–736. doi:10.1016/j.addbeh.2011.02.008

Trumbull, E., & Rothstein-Fisch, C. (2011). The intersection of culture and achievement

motivation. *School Community Journal*, 21(2), 25–53. Retrieved from

<http://www.schoolcommunitynetwork.org/scj.aspx>

Tummala-Narra, P., & Claudius, M. (2013). Perceived discrimination and depressive

symptoms among immigrant-origin adolescents. *Cultural Diversity and Ethnic*

Minority Psychology, 19(3), 257–269. doi:10.1037/a0032960

- Tuvblad, C., Narusyte, J., Grann, M., Sarnecki, J., & Lichtenstein, P. (2011). The genetic and environmental etiology of antisocial behavior from childhood to emerging adulthood. *Behavior Genetics*, 41(5), 629–640. doi:10.1007/s10519-011-9463-4
- Ulrich, A., Thompson, B., Livaudais, J. C., Espinoza, N., Cordova, A., & Coronado, G. D. (2013). Issues in biomedical research: What do Hispanics think? *American Journal of Health Behavior*, 37(1), 80–85. doi:10.5993/AJHB.37.1.9
- Umaña-Taylor, A. J., & Guimond, A. B. (2012). A longitudinal examination of parenting behaviors and perceived discrimination predicting Latino adolescents' ethnic identity. *Journal of Latina/O Psychology*, 1(S), 14–35. doi:10.1037/2168-1678.1.S.14
- Umaña-Taylor, A. J., Quintana, S. M., Lee, R. M., Cross, W. E., Rivas-Drake, D., Schwartz, S. J., ... & Seaton, E. (2014). Ethnic and racial identity during adolescence and into young adulthood: An integrated conceptualization. *Child Development*, 85(1), 21–39. doi:10.1111/cdev.12196
- Umaña-Taylor, A. J., Updegraff, K. A., & Gonzales-Backen, M. A. (2011). Mexican-origin adolescent mothers' stressors and psychosocial functioning: Examining ethnic identity affirmation and familism as moderators. *Journal of Youth and Adolescence*, 40(2), 140–157. doi:10.1007/s10964-010-9511-z
- Umaña-Taylor, A. J., Zeiders, K. H., & Updegraff, K. A. (2013). Family ethnic socialization and ethnic identity: A family-driven, youth-driven, or reciprocal process? *Journal of Family Psychology*, 27(1), 137–146. doi:10.1037/a0031105

- U.S. Census Bureau. (2014a). Age and nativity of own children under 18 years in families and subfamilies by number and nativity of parents' universe: Own children under 18 years in families and subfamilies [Data]. *2010-2014 American Community Survey 5-Year Estimates*. Retrieved from http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS_14_5YR_B05009&prodType=table
- U.S. Census Bureau. (2014b). Selected characteristics of the native and foreign-born populations [Data]. *2010-2014 American Community Survey 5-Year Estimates*. Retrieved from http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS_14_5YR_S0501&prodType=table
- U.S. Sentencing Commission. (2015). *U.S. Sentencing Commission preliminary quarterly data report, USSCFY15*. Retrieved from http://www.ussc.gov/sites/default/files/pdf/research-and-publications/federal-sentencing-statistics/quarterly-sentencing-updates/USSC-2015_4th_Quarterly_Report.pdf
- Uyanık, G. K., & Güler, N. (2013). A study on multiple linear regression analysis. *Procedia-Social and Behavioral Sciences*, *106*, 234–240. doi:10.1016/j.sbspro.2013.12.027
- van Buuren, S. (2014). Growth charts of human development. *Statistical Methods in Medical Research*, *23*(4), 346–368. doi:10.1177/0962280212473300

- van Geel, M., & Vedder, P. (2011). The role of family obligations and school adjustment in explaining the immigrant paradox. *Journal of Youth and Adolescence*, *40*(2), 187–196. doi:10.1007/s10964-009-9468-y
- van Leeuwen, N., Rodgers, R. F., Bui, E., Pirlot, G., & Chabrol, H. (2014). Relations between acculturation orientations and antisocial behavior in adolescents and young adults from immigrant families. *International Journal of Culture and Mental Health*, *7*(1), 68–82. doi:10.1080/17542863.2012.699534
- Van Ryzin, M. J., Fosco, G. M., & Dishion, T. J. (2012). Family and peer predictors of substance use from early adolescence to early adulthood: An 11-year prospective analysis. *Addictive Behaviors*, *37*(12), 1314–1324. doi:10.1016/j.addbeh.2012.06.020
- Van Zalk, N., Van Zalk, M. H. W., & Kerr, M. (2011). Socialization of social anxiety in adolescent crowds. *Journal of Abnormal Child Psychology*, *39*(8), 1239–1249. doi:10.1007/s10802-011-9533-3
- Varricchio, M. (2011). Golden door voices: Towards a critique of the Ellis Island oral history project. *Oral History Forum*, *31*, 1–28. Retrieved from <http://www.oralhistoryforum.ca/index.php/ohf/index>
- Vaske, J., Boisvert, D., & Wright, J. P. (2012). Genetic and environmental contributions to the relationship between violent victimization and criminal behavior. *Journal of Interpersonal Violence*, *27*(16), 3213–3235. doi:10.1177/0886260512441254
- Vassos, E., Collier, D. A., & Fazel, S. (2014). Systematic meta-analyses and field synopsis of genetic association studies of violence and aggression. *Molecular*

Psychiatry, 19(4), 471–477. doi:10.1038/mp.2013.31

Vaughn, M. G., Salas-Wright, C. P., DeLisi, M., & Maynard, B. R. (2014a). The immigrant paradox: Immigrants are less antisocial than native-born Americans.

Social Psychiatry and Psychiatric Epidemiology, 49(7), 1129–1137.

doi:10.1007/s00127-013-0799-3

Vaughn, M. G., Salas-Wright, C. P., Maynard, B. R., Qian, Z., Terzis, L., Kusow, A. M., & DeLisi, M. (2014b). Criminal epidemiology and the immigrant paradox:

Intergenerational discontinuity in violence and antisocial behavior among immigrants. *Journal of Criminal Justice*, 42(6), 483–490.

doi:10.1016/j.jcrimjus.2014.09.004

Veland, J., Bru, E., & Idsøe, T. (2014). Perceived socio-economic status and social inclusion in school: Parental monitoring and support as mediators. *Emotional and*

Behavioural Difficulties, 20(2), 173–188. doi:10.1080/13632752.2014.931018

Vera, E. P., & Moon, B. (2013). An empirical test of low self-control theory among Hispanic youth. *Youth Violence and Juvenile Justice*, 11(1), 79–93.

doi:10.1177/1541204012441628

Véronneau, M. H., & Dishion, T. J. (2010). Predicting change in early adolescent problem behavior in the middle school years: A mesosystemic perspective on parenting and peer experiences. *Journal of Abnormal Child Psychology*, 38(8),

1125–1137. doi:10.1007/s10802-010-9431-0

Veronneau, M. H., Vitaro, F., Dishion, T. J., Brendgen, M., & Tremblay, R. E. (2010).

Transactional analysis of the reciprocal links between peer experiences and

academic achievement from middle childhood to early adolescence.

Developmental Psychology, 46(4), 773–790. doi:10.1037/a0019816

Vettenburg, N., Brondeel, R., Gavray, C., & Pauwels, L. J. (2013). Societal vulnerability and adolescent offending: The role of violent values, self-control and troublesome youth group involvement. *European Journal of Criminology*, 10(4), 444–461. doi:10.1177/1477370812470777

Vries, S. L., Hoeve, M., Assink, M., Stams, G. J. J., & Asscher, J. J. (2015). Practitioner review: Effective ingredients of prevention programs for youth at risk of persistent juvenile delinquency—recommendations for clinical practice. *Journal of Child Psychology and Psychiatry*, 56(2), 108–121. doi:10.1111/jcpp.12320

Vygotsky, L. S. (1980). *Mind in society: The development of higher psychological processes*. Cambridge, MA: Harvard university press.

Wadsworth, T. (2010). Is immigration responsible for the crime drop? An assessment of the influence of immigration on changes in violent crime between 1990 and 2000. *Social Science Quarterly*, 91(2), 531–553. doi:10.1111/j.1540-6237.2010.00706.x

Wagner, B. (2013). The black child-savers: Racial democracy and juvenile justice. *Journal of American History*, 100(1), 180–181. doi:10.1093/jahist/jat033

Walker, L. J. (2004). Progress and prospects in the psychology of moral development. *Merrill-Palmer Quarterly*, 50(4), 546–557. doi:10.1353/mpq.2004.0038

Wallace, D. C., & Bartlett, R. (2013). Recruitment and retention of African American and Hispanic girls and women in research. *Public Health Nursing*, 30(2), 159–166. doi:10.1111/phn.12014

- Waller, R., Gardner, F., Dishion, T. J., Shaw, D. S., & Wilson, M. N. (2012). Validity of a brief measure of parental affective attitudes in high-risk preschoolers. *Journal of Abnormal Child Psychology, 40*(6), 945–955. doi:10.1007/s10802-012-9621-z
- Wallington, S. F., Luta, G., Noone, A. M., Caicedo, L., Lopez-Class, M., Sheppard, V., ... & Mandelblatt, J. (2012). Assessing the awareness of and willingness to participate in cancer clinical trials among immigrant Latinos. *Journal of Community Health, 37*(2), 335–343. doi:10.1007/s10900-011-9450-y
- Walther, C. A., Cheong, J., Molina, B. S., Pelham, W. E., Jr., Wymbs, B. T., Belendiuk, K. A., & Pedersen, S. L. (2012). Substance use and delinquency among adolescents with childhood ADHD: The protective role of parenting. *Psychology of Addictive Behaviors, 26*(3), 585–598. doi:10.1037/a0026818
- Wang, F. L., Chassin, L., Eisenberg, N., & Spinrad, T. L. (2015). Effortful control predicts adolescent antisocial-aggressive behaviors and depressive symptoms: Co-occurrence and moderation by impulsivity. *Child Development, 86*(6), 1812–1829. doi:10.1111/cdev.12406
- Wang, M. T., Brinkworth, M., & Eccles, J. (2013). Moderating effects of teacher-student relationship in adolescent trajectories of emotional and behavioral adjustment. *Developmental Psychology, 49*(4), 690–705. doi:10.1037/a0027916
- Wang, M. T., & Dishion, T. J. (2012). The trajectories of adolescents' perceptions of school climate, deviant peer affiliation, and behavioral problems during the middle school years. *Journal of Research on Adolescence, 22*(1), 40–53. doi:10.1111/j.1532-7795.2011.00763.x

- Wang, M. T., & Eccles, J. S. (2012). Social support matters: Longitudinal effects of social support on three dimensions of school engagement from middle to high school. *Child Development, 83*(3), 877–895. doi:10.1111/j.1467-8624.2012.01745.x
- Wang, M. T., & Fredricks, J. A. (2014). The reciprocal links between school engagement, youth problem behaviors, and school dropout during adolescence. *Child Development, 85*(2), 722–737. doi:10.1111/cdev.12138
- Wang-Schweig, M., Kviz, F. J., Altfeld, S. J., Miller, A. M., & Miller, B. A. (2014). Building a conceptual framework to culturally adapt health promotion and prevention programs at the deep structural level. *Health Promotion Practice, 15*(4), 575–584. doi:10.1177/1524839913518176
- Warren, R., & Warren, J. R. (2013). Unauthorized immigration to the United States: Annual estimates and components of change, by state, 1990 to 2010. *International Migration Review, 47*(2), 296–329. doi:10.1111/imre.12022
- Weerman, F. M. (2011). Delinquent peers in context: A longitudinal network analysis of selection and influence effects. *Criminology, 49*(1), 253–286. doi:10.1111/j.1745-9125.2010.00223.x
- Weigard, A., Chein, J., & Steinberg, L. (2011, May). *Influence of anonymous peers on risk-taking behavior in adolescents*. Paper presented at the 11th Annual Stanford Undergraduate Psychology Conference, Stanford, CA
- West, S. G., & Thoemmes, F. (2010). Campbell's and Rubin's perspectives on causal inference. *Psychological Methods, 15*(1), 18–37. doi:10.1037/a0015917

- Whaley, R. B., Hayes, R., & Smith, J. M. (2014). Differential reactions to school bonds, peers, and victimization in the case of adolescent substance use the moderating effect of sex. *Crime & Delinquency*, 1–23. doi:10.1177/0011128714541195
- Wiesner, M., & Rab, S. (2015). Self-control and lifestyles: Associations to juvenile offending, violent victimization, and witnessing violence. *Victims & Offenders*, 10(2), 214–237. doi:10.1080/15564886.2014.94152
- Wiesner, M., Capaldi, D. M., & Kim, H. K. (2012). General versus specific predictors of male arrest trajectories: A test of the Moffitt and Patterson theories. *Journal of Youth and Adolescence*, 41(2), 217–228. doi:10.1007/s10964-011-9683-1
- Wikström, P. O. H., Oberwittler, D., Treiber, K., & Hardie, B. (2012). *Breaking rules: The social and situational dynamics of young people's urban crime*. Oxford, UK: Oxford University Press.
- Williams, C. B., (2007). Research methods. *Journal of Business & Economic Research*. 5(3), 65–72. Retrieved from <http://www.cluteinstitute.com>
- Williams, J. L., Aiyer, S. M., Durkee, M. I., & Tolan, P. H. (2013). The protective role of ethnic identity for urban adolescent males facing multiple stressors. *Journal of Youth and Adolescence*, 43(10), 1728–1741. doi:10.1007/s10964-013-0071-x
- Williams, J. L., Anderson, R. E., Francois, A. G., Hussain, S., & Tolan, P. H. (2014). Ethnic identity and positive youth development in adolescent males: A culturally integrated approach. *Applied Developmental Science*, 18(2), 110–122. doi:10.1080/10888691.2014.894871

- Williams, J. L., Tolan, P. H., Durkee, M. I., Francois, A. G., & Anderson, R. E. (2012). Integrating racial and ethnic identity research into developmental understanding of adolescents. *Child Development Perspectives*, 6(3), 304–311.
doi:10.1111/j.1750-8606.2012.00235.x
- Williams, M. N., Grajales, C. A. G., & Kurkiewicz, D. (2013). Assumptions of multiple regression: Correcting two misconceptions. *Practical Assessment, Research & Evaluation*, 18(11), 1–14. Retrieved from <http://pareonline.net/>
- Wolff, K. T., Baglivio, M. T., Intravia, J., & Piquero, A. R. (2015). The protective impact of immigrant concentration on juvenile recidivism: A statewide analysis of youth offenders. *Journal of Criminal Justice*, 43(6), 522–531.
doi:10.1016/j.jcrimjus.2015.05.004
- Worthen, M. G. F. (2012). Gender differences in delinquent involvement: An exploration of the interactive effects of friend bonding and friend delinquency. *Sociological Focus*, 45(2), 103–124. doi:10.1080/00380237.2012.657107
- Wright, K. A., & Rodriguez, N. (2012). A closer look at the paradox: Examining immigration and youth reoffending in Arizona. *Justice Quarterly*, 31(5), 882–904.
doi:10.1080/07418825.2012.700057
- Yarbrough, A., Jones, S., Sullivan, C., Sellers, C., & Cochran, J. (2012). Social learning and self-control assessing the moderating potential of criminal propensity. *International Journal of Offender Therapy and Comparative Criminology*, 56(2), 191–202. doi:10.1177/0306624X10396041

- Yilmaz, K. (2011). The cognitive perspective on learning: Its theoretical underpinnings and implications for classroom practices. *Clearing House: A Journal of Educational Strategies, Issues and Ideas*, 84(5), 204–212.
10.1080/00098655.2011.568989
- Yoon, E., Chang, C. T., Kim, S., Clawson, A., Cleary, S. E., Hansen, M., ... & Gomes, A. M. (2013). A meta-analysis of acculturation/enculturation and mental health. *Journal of Counseling Psychology*, 60(1), 15–30. doi:10.1037/a0030652
- Yoon, E., Langrehr, K., & Ong, L. Z. (2011). Content analysis of acculturation research in counseling and counseling psychology: A 22-year review. *Journal of Counseling Psychology*, 58(1), 83–96. doi:10.1037/a0021128
- Zaloznaya, M. (2012). Organizational cultures as agents of differential association: Explaining the variation in bribery practices in Ukrainian universities. *Crime, Law & Social Change*, 58(3), 295–320. doi:10.1007/s10611-012-9386-x
- Zaykowski, H., & Gunter, W. (2012). Youth victimization school climate or deviant lifestyles? *Journal of Interpersonal Violence*, 27(3), 431–452.
doi:10.1177/0886260511421678
- Zhao, J., & Zhu, P. Y. (2011). Empirical research on the correlation between differential association and juvenile delinquency. *Journal of Huazhong University of Science and Technology (Social Science Edition)*, 2(9), 45–50. Retrieved from <http://www.oriprobe.com/journals/hzkjdxsb-shkxb.html>
- Zimmerman, G. M., & Messner, S. F. (2013). Individual, family background, and contextual explanations of racial and ethnic disparities in youths' exposure to

violence. *American Journal of Public Health*, 103(3), 435–442.

doi:10.2105/AJPH.2012.300931

Zimmerman, G. M., Botchkovar, E. V., Antonaccio, O., & Hughes, L. A. (2015). Low self-control in “bad” neighborhoods: Assessing the role of context on the relationship between self-control and crime. *Justice Quarterly*, 32(1), 56–84.

doi:10.1080/07418825.2012.737472

Zingher, J. N. (2014). The ideological and electoral determinants of laws targeting undocumented migrants in the US states. *State Politics & Policy Quarterly*, 14(1), 90–117. doi:10.1177/1532440014524212

Appendix A: Permission to Use ISRD-2 Dataset

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Second International Self-Reported Delinquency Study, 2005-2007 (ICPSR 34658)

Alternate Title: ISRD-2

Principal Investigator(s): Enzmann, Dirk, University of Hamburg (Germany); H. Marshall, Ineke, Northeastern University (United States); Killias, Martin, University of Zurich (Switzerland); Junger-Tas, Josine, University of Utrecht (Netherlands); Steketee, Majone, Verwey-Jonker Institute (Netherlands); Gruszczynska, Beata, Warsaw University (Poland)

Summary:

The Second International Self-Report Delinquency Study (ISRD-2) was a large international collaborative study of delinquency and victimization of 12 to 15 year-old students in seventh, eighth, and ninth grade classrooms. The study was a school-based study that drew on random samples from either city level or national level. In general, the cross-national description of the prevalence and incidence of delinquent behavior allowed for the assessment of national crime rates by comparison with the crime rates of other countries. The study was conduc... ([more info](#))

Access Notes

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Dataset(s)

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Appendix C: Hypothesis 1 Scatterplots of Variable Correlations with Delinquency

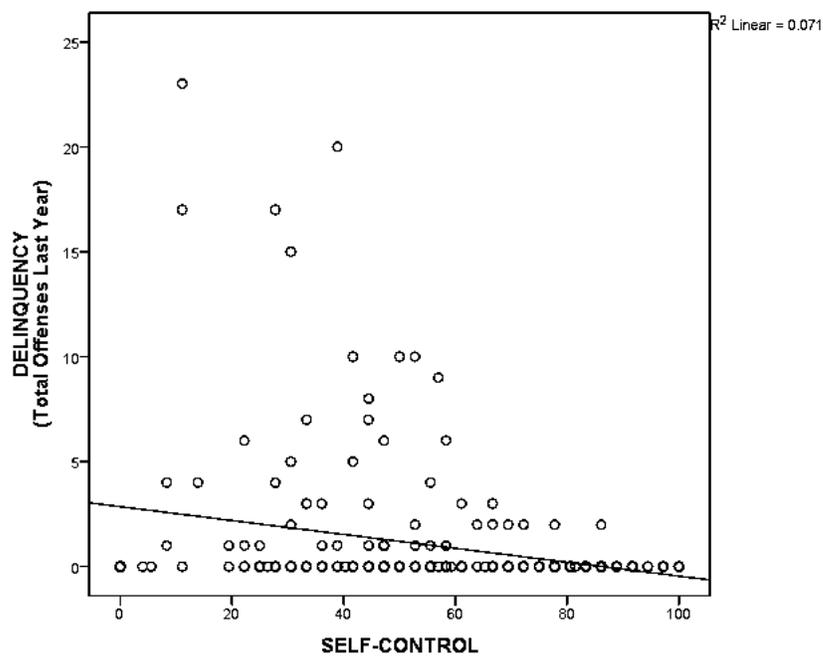


Figure C1. A scatterplot graph showing the correlation between delinquency and self-control among the total adolescent sample.

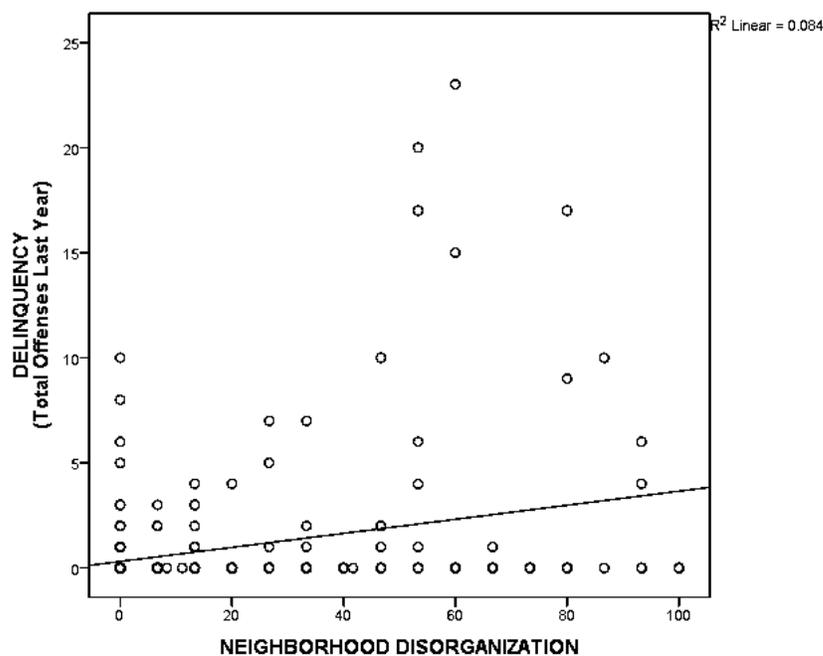


Figure C2. A scatterplot graph showing the correlation between delinquency and neighborhood disorganization among the total adolescent sample.

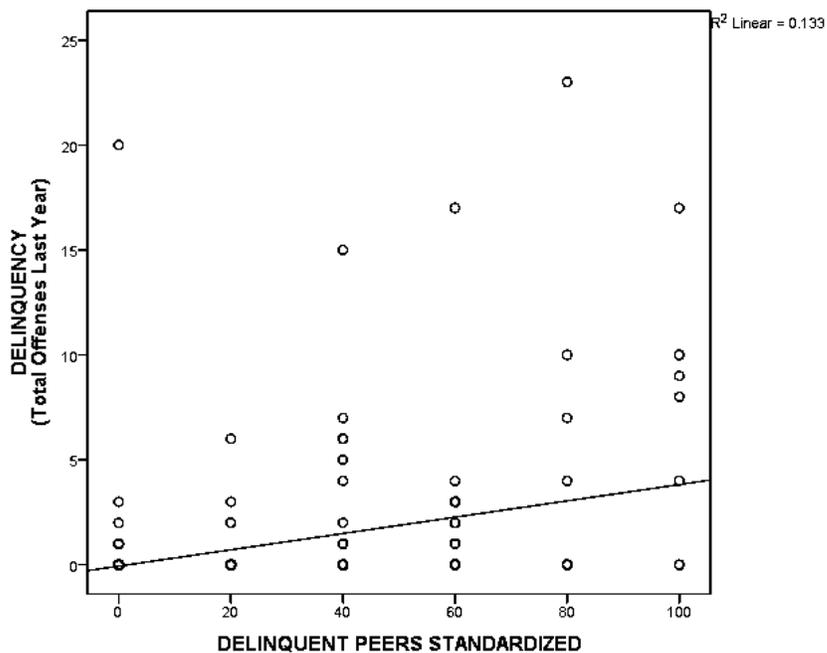


Figure C3. A scatterplot graph showing the correlation between delinquency and delinquent peers among the total adolescent sample.

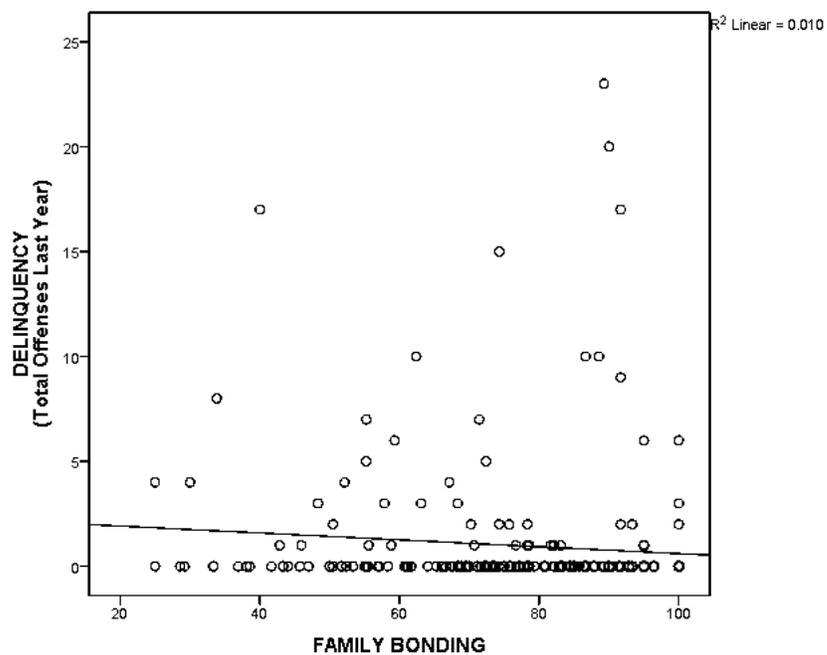


Figure C4. A scatterplot graph showing the weak, insignificant correlation between delinquency and family bonding among the total adolescent sample.

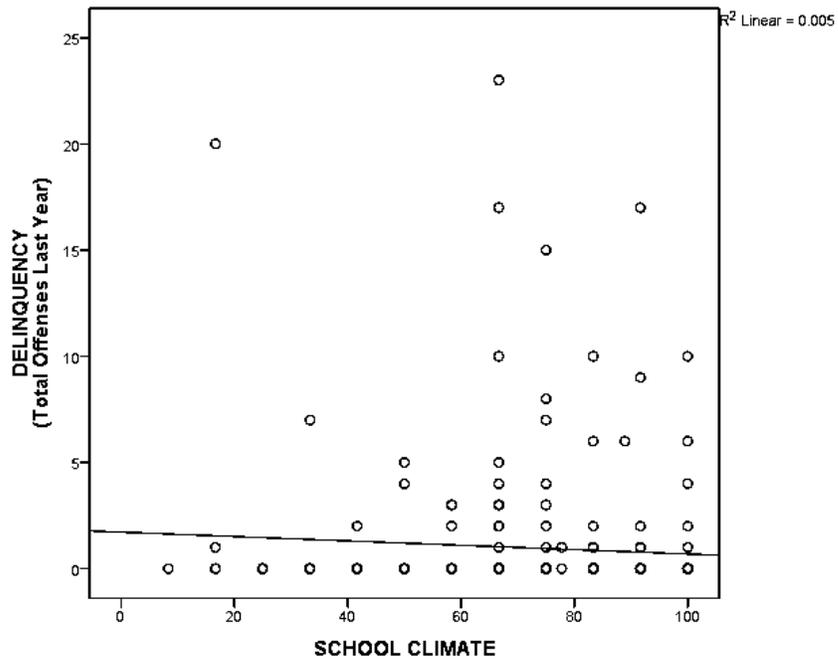


Figure C5. A scatterplot graph showing the insignificant correlation between delinquency and school climate among the total adolescent sample.

Appendix D: Hypothesis 2 Scatterplots of Variable Correlations with Delinquency

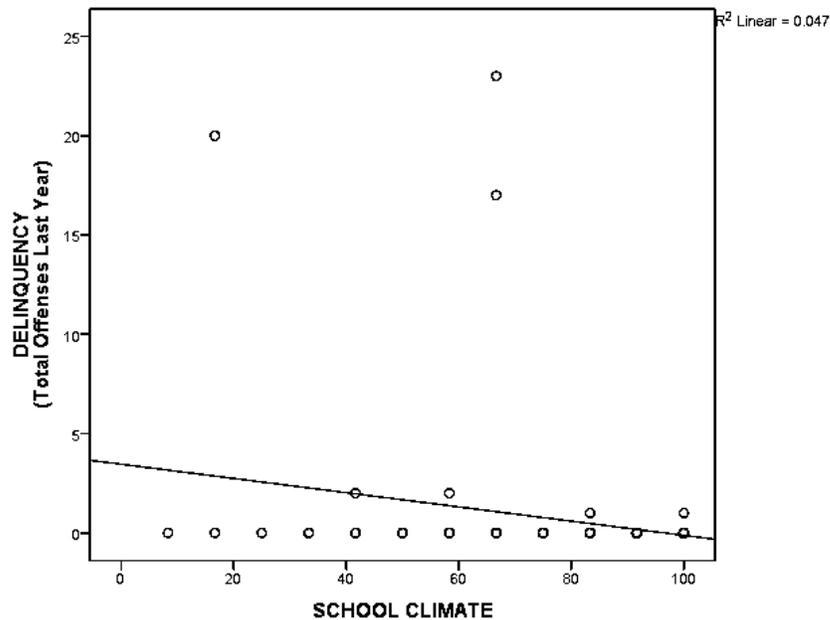


Figure D1. A scatterplot graph showing the correlation between delinquency and school climate among the first-generation immigrant adolescent subpopulation.

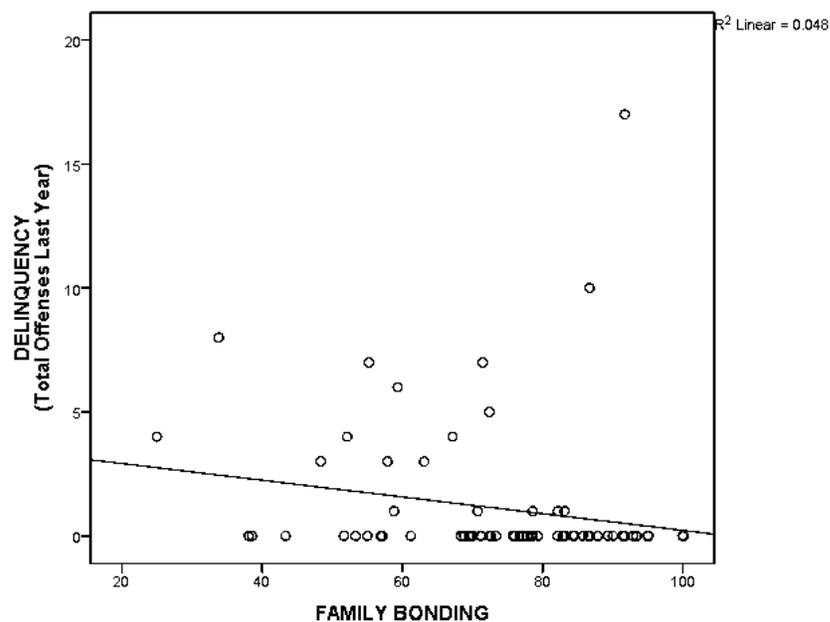


Figure D2. A scatterplot graph showing the correlation between delinquency and family bonding among the native-born adolescent subpopulation.