

EXAMINING THE RELATIONSHIP BETWEEN EXPOSURE TO VIOLENCE AND
DELINQUENT BEHAVIORS ACROSS
DIFFERENT IMMIGRANT GENERATIONS

by

Meng Ru Shih



APPROVED BY SUPERVISORY COMMITTEE:

Alex R. Piquero, Chair

Bruce A. Jacobs

Nicole Leeper Piquero

Andrew P. Wheeler

Copyright 2019

Meng Ru Shih

All Rights Reserved

For my parents,

(給我的父母親，)

my grandmother,

(給我的外婆，)

my aunt,

(給我的阿姨，)

my brothers, and for my fiancé,

(給我的哥哥弟弟，和我的未婚夫)

Thank you for your love – and everything.

(感謝你們的愛與支持。)

And for my dear friend UE,

although you are no longer with us, I will always remember you and thank you for your support.

EXAMINING THE RELATIONSHIP BETWEEN EXPOSURE TO VIOLENCE AND
DELINQUENT BEHAVIORS ACROSS
DIFFERENT IMMIGRANT GENERATIONS

by

MENG RU SHIH, MA

DISSERTATION

Presented to the Faculty of
The University of Texas at Dallas
in Partial Fulfillment
of the Requirements
for the Degree of

DOCTOR OF PHILOSOPHY IN
CRIMINOLOGY

THE UNIVERSITY OF TEXAS AT DALLAS

August 2019

ACKNOWLEDGMENTS

I would like to thank many people on the journey to a PhD degree. First, I want to say thank you to my dissertation committee. Sincere thanks to my dissertation chair, Dr. Alex Piquero. Thank you for being a wonderful academic advisor. I appreciate all of your feedback and advice to me for my research and career. You have the ability to empower my research interests every time when I discuss my ideas with you. Thank you to Dr. Wheeler for being so available every time when I have questions, and thanks for your support from the beginning. I enjoyed every conversation that we had. Thank you to Dr. Nicole Piquero for your encouragement throughout my dissertation work. Thank you to Dr. Jacobs for listening to me and giving me insight, thought, and advice for the comprehensive exam, dissertation, and my career decisions. Also, I want to thank Dr. Boots for your kindness and cheers whenever I needed them.

Moreover, I want to express my deep appreciation to Dr. Nicholas Lovrich, Dr. Linus Lin, Dr. Jin-Chung Chen, and Dr. Lily Hsieh. I met all of you when I studied for my master's degree in Taiwan. I appreciate all of your support, encouragement, and advice while I pursued my PhD degree in the United States. Especially to Dr. Lovrich, you always watch out for me and gave me endless support on this PhD journey. I am so lucky to have all these great academic models alongside me while I studied for my PhD!

Extreme thanks to my parents for your love from the beginning. I knew that it was hard for you to let your daughter leave you and study in the United States. I appreciate your belief in me, your love, and your support. Particularly, to my mom, you always listen to me when I am confused;

you always guide me when I feel lost; and you are always happy for me when I have good success. I love you. I also need to say thank you to my grandma and my aunt for your unlimited encouragement. And, to my brothers, thank you for your company and your cheers for me. Thank you to my family.

Furthermore, I want to thank my great Criminology cohort, Jennifer, Amny, Yeondae, Chidike, Zach, Wendy, Bola, Sungil, Haneul, Richard, Jordan, Mike, Sara, Vrishali, Chelsey, Dragana, and Stephanie. Special thanks to Jennifer, Yeondae, Chidike, Amny, and Zach for your company and cheers to each other these four years. Also, thank you Rita and Katherine for your administrative work assisting the program. Among the staff at UTD, I especially appreciate Ms. Frankie Branham for giving me the opportunity to teach fitness classes in Group X where I learned how to maintain a healthy lifestyle in the PhD life.

I want to thank my dear friends Juchi, River, Vera, Longfung, Mie, UE, Janeen, and Viktor. Especially, to UE and Viktor, although both of you are not here with us, I will remember you forever. To my friend Juchi, I appreciate your company these four years very much.

Lastly, I need to thank my fiancé, Jeff Senita. Thank you for listening to me, helping me, and giving me so much delightful time during my PhD study. I especially appreciate your time and advice while I worked on the dissertation. Thank you and love you!

Thank you and cheers to you all!

June 2019

EXAMINING THE RELATIONSHIP BETWEEN EXPOSURE TO VIOLENCE AND
DELINQUENT BEHAVIORS ACROSS
DIFFERENT IMMIGRANT GENERATIONS

Meng Ru Shih, PhD
The University of Texas at Dallas, 2019

Supervising Professor: Alex R. Piquero, PhD

Contrary to popular rhetoric, several immigration studies have shown that the relationship between immigration and crime is null or negative. Within this strand of research, first-generation immigrants exhibit significantly lower crime rates than their comparisons. However, recent studies have also found that crime rates began to rise in second- and second-plus generation immigrants. The mechanism contributing to changes in crime rates across generations remains largely unknown. This study posits that exposure to violence (ETV) is one potential risk factor related to the increase in crime and delinquency among immigrant youth, particularly in second-generation immigrant youth. The current study used data from the Pathways to Desistance Study to examine this relationship. Two types of ETV are examined: direct ETV and witness ETV. At baseline, first-generation youth had lower direct and indirect ETV than their peers, whereas second-generation youth reported the highest direct ETV. The associations between ETVs and deviant outcomes are positive, and neighborhood conditions mediate this relationship. Moreover, ethnic identity could be a protective factor for immigrant youth.

Collectively, the results support that ETVs are the risk factors contributing to delinquency among immigrant youth. Future research directions and policy implications are addressed.

TABLE OF CONTENTS

ACKNOWLEDGMENTS	v
ABSTRACT.....	vii
LIST OF FIGURES	xi
LIST OF TABLES	xii
CHAPTER 1 INTRODUCTION	1
1.1 Research Background	1
1.2 Exposure to Violence	3
1.3 Research Goals.....	4
1.4 Contributions of This Study	4
1.5 Brief Outline of the Dissertation.....	6
CHAPTER 2 LITERATURE REVIEW	7
2.1 Immigration and Crime.....	7
2.2 Risk Factors Increasing Crime among Second-Generation Immigrants.....	11
2.3 Conceptual Framework – Segmented Assimilation Theory	17
2.4 Research Hypotheses	23
CHAPTER 3 METHODOLOGY	27
3.1 Data	27
3.2 Independent Variables.....	29
3.3 Control Variables	33
3.4 Dependent Variables	34
3.5 Analytic Strategies	36
CHAPTER 4 RESULTS	42
4.1 Descriptive Statistics Results	42
4.2 Results of Testing Hypotheses	44
4.3 Random Effect at the Individual Level.....	58
4.4 Predictive Margins of ETVs across Generations	58

CHAPTER 5 DISCUSSION	62
5.1 Main Findings	63
5.2 Theoretical Interpretation.....	71
5.3 Limitations and Future Directions	73
5.4 Policy Implications	76
REFERENCES	79
BIOGRAPHICAL SKETCH	92
CURRICULUM VITAE	

LIST OF FIGURES

Figure 1. Means of ETV across Immigrant Generations	45
Figure 2. Means of W-ETV across Immigrant Generations	46
Figure 3. Marginal Effects of D-ETV on SRO across Immigrant Generations	59
Figure 4. Marginal Effects of W-ETV on Substance Use across Immigrant Generations.....	60

LIST OF TABLES

Table 1. Descriptive Statistics of Variables at Baseline	42
Table 2. Descriptive Statistics of Numerical Variables	43
Table 3. Marginal D-ETV across Immigrant Generations	44
Table 4. Marginal W-ETV across Immigrant Generations	46
Table 5. ANOVA tests of ETVs and Immigrant Generations	46
Table 6. Logistic Regression Models for D-ETV & W-ETV at Baseline	47
Table 7. Multilevel Logistic Model for Lagged D-ETV Effects on SRO	48
Table 8. Multilevel Logistic Model for Lagged W-ETV Effects on Substance Use.....	49
Table 9. Multilevel Logistic Model for Lagged D-ETV, NC, & EI Effects on SRO	51
Table 10. Multilevel Logistic Model for Lagged W-ETV, NC, & EI Effects on Substance Use...	53
Table 11. Multilevel Logistic Model for SRO-Full Model	55
Table 12. Multilevel Logistic Model for Substance Use-Full Model	57

CHAPTER 1

INTRODUCTION

Contrary to public and some political opinion, immigration is not associated with crime but can actually suppress it. This is especially true among first-generation immigrants who report significantly lower crime and delinquency rates than the second-generation and native-born groups. While this summary statement characterizes much of the prior work on immigration and crime, studies have also found that the low-crime phenomena disappeared in the second-generation of immigration. The second-generation group begins to show more violent and deviant behaviors compared to the first-generation group. What could be the risk factor increasing the propensity of committing delinquent behaviors among immigrant youth? The current study seeks to answer the question and identify risk factors that may explain the differences in delinquent outcomes across immigrant generations.

1.1 Research Background

In 2016, the United States (US) has roughly forty-three million foreign-born people, representing approximately thirteen percent of the US population (US Census, 2010; Pew Research, 2018). Accordingly, thirty-three percent of all youth in the US will have at least one immigrant parent within 20 years (US Census, 2010). Not surprisingly, immigration policy has captured the interest of politicians (Eagly, 2013; Inda, 2013). Instead of investigating the factors which are contributing to crime rates in U.S. urban cities, politicians and policymakers tend to make immigrants a scapegoat for violent crime and gang activities occurring in cities (Inda & Dowling, 2013). The media also influences the public's belief that immigrants are prone to

committing crimes (Valentino, Brader, & Jardinna, 2013). U.S. immigration policy has become much harsher to immigrants from specific regions of the world (Hartman, Newman, & Bell, 2014).

In contradiction to the public view that there is a relationship between immigration and crime (Pickett, 2016), current empirical studies have provided little evidence to support the association between immigrants and crime rates (Ousey & Kubrin, 2014; Stowell, Messner, Mcgeever, & Raffalovich, 2009). Moreover, the results of immigration studies indicated that an increase in immigrants is associated with a null or negative effect in crime, and this relationship is consistent in aggregate-level research (Ferraro, 2016; MacDonald, Hipp, & Gill, 2013), in individual-level research (Bersani, Loughran, & Piquero, 2014; Morenoff & Astor, 2006), and in meta-analysis (Ousey & Kubrin, 2018). Yet, immigration studies also find that crime rates in the second immigrant generation began “catching-up” with crime rates of the native-born American population which consistently presents the higher crime involvement than immigrant groups (Bersani, 2014).

Bersani’s (2014) study hypothesized that a “regression to the mean” of crime rates exists with people who are born and socialized in the U.S. as the second immigrant generation. The crime rates among the second or third immigrant generations became relatively higher than first immigrant generation groups, and the assimilation level is significantly related to delinquency in second-generation groups (Bersani et al., 2014). Research on immigration gradually examines mechanisms underwriting the divergence of deviance rates across immigrant generations. Some variables such as levels of assimilation, types of routine activities, likelihood of victimization, and levels of legal socialization have been found to vary across immigration generations (Bersani

et al., 2014; Jackson, Browning, Krivo, Kwan, & Washington, 2016, Peguero, 2013; Piquero, Bersani, Loughran, & Fagan, 2016). These investigations notwithstanding, few of them make the connection between immigrant generations and crime/delinquency differences (MacDonald & Saunders, 2012). Therefore, the risk factors contributing to changes in crime rates across immigrant generations remains mostly unknown (MacDonald & Saunders, 2012).

1.2 Exposure to Violence

One mechanism may serve an explanation for the discrepancies of crime across immigrant generations. Most immigrants tend to initially reside in inner cities areas characterized by higher social disorder and crime rates (Shaw & McKay, 1942). Yet, a recent study found that the level of exposure to violence of adolescents is higher in non-immigration households than in immigration households in the same disadvantaged neighborhoods (MacDonald & Saunders, 2012). Meanwhile, research on violence exposure has indicated that adolescents who experience violence at an early age are more likely to report several adverse outcomes (Hardaway, Larkby, & Cornelius, 2014; Mrug, Madan, & Windle, 2016). Would the levels of exposure to violence possibly influence youths' violent behavior differently between immigrant generations? Or more specifically, does a higher magnitude of exposure to violence play a role by contributing to the higher crime/delinquency among the second or second-plus generation youth than first immigrant generation youth? Moreover, can different forms of exposure to violence result in different delinquent outcomes among immigrants?

1.3 Research Goals

Is exposure to violence a risk factor that leads to more delinquent outcomes in second-generation than in first-generation? Can this risk factor explain the different crime rates across generations? What effects of different types of exposure to violence on delinquent behaviors among immigrant youth? To answer these questions, this dissertation reviews the research of the segmented assimilation theory and the body of literature on exposure to violence and its impacts on behaviors. After reviewing the literature, the current study proposed that the levels of exposure to violence vary between immigrant generations, which is believed to differentially affect the levels of delinquent behavior among immigrant youth. Moreover, the current study also seeks to examine the effects of direct and secondary exposure to violence on adolescents' delinquent behaviors, and whether the results have distinctive patterns between different generations.

This study uses data from the Pathways to Desistance Study, a longitudinal study containing self-reported offending and experience of exposure to violence in communities on 1,354 adolescents as they transition to young adulthood (age 14-17 at baseline). The current study applies ANOVA and logistic regression models to examine the variance of exposure to violence across different immigrant generations at the baseline, and uses multilevel regression models to capture the effects of exposure to violence on the propensity of offending among immigrant youth across different generations.

1.4 Contributions of This Study

Although many prior works have shown a relationship between immigrants and lower crime

rates, few studies have addressed the mechanisms contributing to lower crime rates in the first generation and increased crime or delinquency rates among the second and third generation groups. This study examined the empirical works of exposure to violence among immigrants (MacDonald & Saunders, 2012; Peguero, 2008, 2013) and the studies of association between exposure to violence and delinquency (Ebesutani, Kim, & Young, 2014; Haynie, Petts, Maimon, & Piquero, 2009; Zimmerman & Kushner, 2017) for explaining the mechanism contributing to distinct crime patterns across immigration generations. The current study posits that first generation immigrants experience less exposure to violence compared to other generations, whereas the second-generation and native-born experience higher exposure to violence than the first generation. The present study compares the delinquent outcomes between generations and the connections that these outcomes have with levels of exposure to violence. The levels of exposure to violence may be one reason for the different levels of offending across generations. Moreover, the current study also categorizes exposure to violence into the direct type and secondary type to examine the different effects on delinquent behaviors among immigrant generations to extend the literature of immigration as well as the exposure to violence field.

Besides the contribution to an extension of immigration research, the other potential contribution is highlighting a possible pathway to reduce the propensity of crime and victimization for future immigrant generations. This study especially targets adjudicated adolescents and investigates the relationship between levels of exposure to violence and their generational differences. If exposure to violence is a risk factor relating to increases in crime in the second-generation, then a crime prevention program for immigrants that aims to

reduce/prevent exposure to violence among immigrant adolescents can benefit immigrant communities by reducing their lower propensity toward crime.

1.5 Brief Outline of the Dissertation

The following chapters and related content are briefly introduced here. Chapter 2 reviews the relevant literature across three topics. The first topic is immigration and crime research. The second topic is research about the relationship between exposure to violence and delinquent outcomes including the effects of different types of exposure to violence. The third topic is segmented assimilation theory and the relevant studies. The eight hypotheses are proposed at the end of Chapter 2. Chapter 3 introduces the methodology of this research including the data and analytic strategies for testing proposed hypotheses. Chapter 4 illustrates the analysis results. Chapter 5 summarizes the findings and offers conclusions emerging from this research. Policy recommendations and directions for future immigration research are also addressed in the conclusion section.

CHAPTER 2

LITERATURE REVIEW

“When Mexico sends its people, they're not sending their best...They're sending people that have lots of problems, and they're bringing those problems with us. They're bringing drugs. They're bringing crime. They're rapists...” President Donald Trump (June 16, 2015)

2.1 Immigration and Crime

In the United States history, new arrivals—especially from Mexico and Central America—are viewed by some as wrongdoers and bring troubles into the country; therefore, the U.S. government usually treats newly arrived migrations with criminal-like procedures and regulations (Chacón, 2012; Schriro, 2017; Macías-Rojas, 2018). The targets changed from Asians (Lee, 1999), Haitians (Dastyari & Effeney, 2012), to current Muslims and Mexican migration groups (Chacón, 2012; Scribner, 2017; Young, 2017). García Hernández (2013) used the term “Crimmigration” to describe that politicians who tend to apply criminal laws and procedures to undesirable immigration groups. Several immigration policies such as Travel Ban (Barrow, 2018), Detention policy (Schriro, 2017; Medrano, 2018), Deportation Act (Macías-Rojas, 2018; King and Obinna, 2018), and 287(g) Act (Decker, Lewis, Provine, & Varsanyi, 2009; Koper, Guterbock, Woods, Taylor, and Carter, 2013) are increasingly applied to current immigrants. Some politicians believe that immigrants are prone to crime thereby removing them with any approaches or treat them as criminals. The public, on the other hand, perceives a negative image of immigrants from certain countries after receiving an increase in related news from the media (Pickett, 2016; Valentino et al., 2013). Notably, recent media has influenced

public opinion on Latino immigrants with more damaging reports about Latino immigrants which have resulted in anxiety and opposition among Whites (Valentino et al., 2013).

The long-standing social disorganization theory seemingly served as a philosophy for the association between crime and immigration in neighborhoods, and has been extensively tested (Bursik, 1988; Lin, 1999; Sampson, Raudenbush, & Earls, 1997; Sampson & Groves, 1989; Shaw & McKay, 1942). However, substantial studies have shown that immigration does not “disorganize” cities in the United States but contribute positively toward revitalization in impoverished areas (Davies & Fagan, 2012; Ferraro, 2016; Kubrin & Ishizawa, 2012; Kubrin & Weitzer, 2003; Lee, Martinez, & Rosenfeld, 2001; Lee & Martinez, 2002; Lee & Martinez, 2009; Sampson, Morenoff, & Raudenbush., 2005; Sampson, 2008).

Recent immigration studies, contrary to politicians’ and the public’s view, have showed little evidence to support that immigration and crime are correlated either in aggregate- or individual- level studies (Ferraro, 2016; Kremer, Sutton, & Kremer, 2018; Lee, Martinez, & Rosenfeld, 2001; Lee & Martinez, 2002; MacDonald, Hipp, & Gill, 2013; Nielsen, Lee, & Martinez, 2005; Ousey & Kubrin, 2014; Stowell et al., 2009). In the aggregate-level immigration studies, cities with more significant increases in foreign-born experienced greater declines in crime rates, while metropolitan areas with gains in concentrations of immigrants showed a decrease in violent crime rates after controlling for other variables (Kubrin & Ousey, 2009; Ferraro, 2016; Stowell et al., 2009). Although the decreasing effects are contingent and varied by types of crime, generally, immigration research has shown that U.S cities with increases in immigration are associated with reductions in rates of crime and delinquency (Ousey & Kubrin, 2014; McDonald et al., 2013).

Concerning individual-level studies, Kremer et al. (2018) observed that immigrant adolescents report significantly lower rates of externalizing behavior than native-born Americans, whereas Katz, Fox, and White (2011) showed that even illegal immigrants had a lower likelihood of substance use than U.S. citizens. Moreover, to answer the concern of an under-reported crime rate among immigrants (Simmons, Alvord, & Elizabeth, 2018), one study specified that there were non-significant differences between self-reported data and official records among immigration and non-immigration groups (Bersani & Piquero, 2017).

A recent meta-analysis study systematically examined the immigration-crime relationship from immigration crime research in the 1994 to 2014 time period (Ousey & Kubrin, 2018). The review of fifty-one studies indicated that the association between immigration and crime is null or negative. Among studies showing significant nonzero negative results, the value of the estimate is close to zero which suggests that the correlation between immigration and crime is very weak. These findings are consistent and not in conflict with prior literature reviewing studies (Lee & Martinez, 2009; Martinez & Lee, 2000). Notably, in Lee and Martinez's (2009) review of studies with distinct types of methodology, they concluded that immigration does not increase crime in general but suppresses violent crime in disadvantaged areas. Their immigration revitalization perspective suggested that new arrival of immigrants may contribute to decreases in crime rates due to immigrants bringing strong family relationships with them (Lee & Martinez, 2009; Zhou, 1997). The term "immigrant paradox" describes the inner city areas with heavy numbers of immigrants showing better health outcomes (Scribner, 1996; Wadsworth, 2010), relatively lower crime rates (Davies & Fagan, 2012; Kubrin & Ishizawa, 2012;

MacDonald et al., 2013), and relatively less substance use (Bui, 2013) than other disadvantaged areas without migrants.

2.1.1 Catch-up to the “Crime Rate” – Impacts of Immigrant Generations

However, recent studies have found that the low crime phenomenon among immigrants gradually attenuates with the increase of time in the United States (Bersani, 2014). More specifically, among different immigrant generations, first-generation immigrants report the lowest crime/delinquency, whereas second-generation immigrants began to “catch up” to the crime/delinquency rates with native-born Americans (Bersani et al., 2014; Bersani, 2014a; Bersani, 2014b; Morenoff & Astor, 2006). Morenoff and Astor’s (2006) study utilized longitudinal data for testing the relationship between adolescent violence and generation differences in the city of Chicago. They found that first-generation youth are less likely to engage in all types of violent behavior than their peers, whereas third-generation youth report the highest involvement in most types of violence. Moreover, the findings also indicated that first-generation households significantly serve as a protective factor for adolescents in the high disadvantaged neighborhoods (Morenoff & Astor, 2006). Similarly, Bersani et al.’s (2014) study, with longitudinal data on adjudicated adolescents, also showed that second-plus generation youth are more likely to persist in offending than first-generation youth.

The catching-up effect also emerged for other delinquent behaviors such as marijuana use, smoking, and substance use (Cavanagh, 2007; Hamilton, Danielson, Mann, & Paglia-Boak, 2012; Kopak, 2013; Peña, Wyman, Brown, Matthieu, Olivares, Hartel, & Zayas, 2008). Cavanagh’s (2007) study examined drinking and binge drinking behaviors among Mexican

youth across generations. The study found that first-generation youth are significantly less likely to be involved in drinking and binge drinking compared to third-plus generation Mexican American youth. However, the difference is not significant between second- and second-plus generation youth. Even more, Peña et al. (2008) found that second-generation youth were two times more likely to attempt suicide than foreign-born youth (i.e., first-generation). Moreover, the changes were not only among delinquent behaviors but also the levels of legal socialization between generations. A study showed that second- and second-plus immigrant generations might respect the law less than the first-generation. Piquero, Bersani, Loughran, and Fagan's (2016) study found that first-generation youth reported more positive attitudes toward the law, less cynical attitudes toward the legal system, and more social costs of committing crime than second-generation and native-born.

Overall, although newly arrived immigrants evince low crime rates and delinquent rates (MacDonald & Saunders, 2012; Morenoff & Astor, 2006), adverse outcomes began to surge up among immigrants with the increase of time in the United States (Morenoff & Astor, 2006; Stansfield, 2012).

2.2 Risk Factors Increasing Crime among Second-Generation Immigrants

After reviewing current immigration research, recent studies report that immigrant households seem to serve as a protective factor for keeping first-generation youth away from delinquent behaviors (Curry, Morales, Zavala, & Hernandez, 2018; Wolff, Baglivio, Intravia, & Piquero, 2015). If there is a protective factor of preventing immigrant youth from deviance, there should be risk factors increasing deviant behaviors among immigrant youth, especially in

second- and second-plus generation groups. The risk factors of contributing different crime rates across generations largely remain under assessment (MacDonald & Saunders, 2012). However, one possible risk factor can be revealed from prior studies. Rosenthal and Wilson's (2006) research indicated that Jamaican immigrants living in a U.S. urban city have statistically higher levels of exposure to community violence than Jamaicans living in Jamaica. They also pointed out that Jamaicans experienced more distress in U.S. urban cities than those living in their hometown. Although some immigration research also showed that some migrant populations came from places with high disorder (Spencer & Le, 2006), the experience of exposure to violence as harmful to adolescents in U.S. urban cities have been recognized as a serious problem in the United States (Mercy, Krug, Dahlberg, & Zwi, 2003; Rennison, 2002; Gummelt, 2018).

Understanding violence in U.S. urban cities across different generations of immigrant groups is important for policy matters. Most migrant populations choose the cheaper housing area and areas with more job opportunities when they freshly arrived in the U.S (Alba, Logan, & Bellair, 1994). These housing and work opportunities mostly are located in inner cities in the U.S. (Shaw & McKay, 1942; Davies & Fagan, 2012), which may also have higher physical disorder, social disorder, or both (Raudenbush & Sampson, 1999; Leventhal & Brooks-Gunn, 2000; Skogan, 1990; Steenbeek & Hipp, 2011). Studies have shown that youth experience high levels of violence in U.S. urban areas and negative influences (Gaylord-Harden, Dickson, & Pierre, 2016; Scherzer & Pinderhughes, 2002; Zona & Milan, 2011). The high violence among adolescents is not only a severe public health problem (Mercy et al., 2003) but also a possible risk factor of increasing an immigrant youth's delinquent behavior.

Accordingly, the current study proposes that Exposure to Violence is a risk factor contributing to different crime rates across generations, especially among second- and second-plus generation youth. The concept of exposure to violence has a more inclusive definition of victimization that comprises various types of victim experiences (Finkelhor, Turner, Ormrod, Hamby, & Kracke, 2009).

If the exposure to violence is the risk factor affecting different delinquent rates across generations, the levels of exposure to violence also should vary between immigrant generations. In a school-context study, Peguero's (2008) investigated the different victimization experience across generations. The study indicated that third-generation immigrant students were more likely to be victimized at school than their first- and second- generation peers, whereas first-generation immigrant students were significantly less likely to be victimized at school compared to their peers. MacDonald and Saunders (2012) compared the levels of exposure to violence between youths in households with foreign-born parents (first- or second-generation) and youths with native-born parents (second-plus generation). The study results showed that exposure to violence in communities among immigrant youth is significantly lower than non-immigrant youth residing in similar disadvantaged neighborhoods. Could exposure to violence explain the increasing propensity to violence/delinquency in second-generation immigrants? This is a question of critical concern in the current study. The next sections reviews the literature of exposure to violence which shows the possible consequences of violence exposure on adolescents.

2.2.1 Exposure to Violence (ETV) and Delinquent Outcomes

The exposure to violence that the current study focuses on is the violence experienced by

adolescents in and around their surroundings. This is the violence that teenagers might experience when they interact with their peers and engage in activities in their neighborhoods (Zimmerman & Kushner, 2017). Studies have found that children can experience many negative outcomes of exposure to violence such as anxiety (Gaylord-Harden, Cunningham, & Zelencik, 2011), suicidal ideation (Vermeiren, Ruchkin, Leckman, Deboutte, & Schwab-Stone, 2002), externalizing behavior problems (Mrug et al., 2016), and poor academic performance (Hardaway et al., 2014). Moreover, studies of exposure to violence (ETV) have shown a connection between delinquent behaviors and exposed violence (Aiyer, Heinze, Miller, Stoddard, & Zimmerman, 2014; Gaylord-Harden et al., 2016; Mrug et al., 2016). Gaylord-Harden et al.'s (2016) latent class analysis pointed out that a high ETV group showed the lowest levels of depressive symptoms, which suggests a desensitization outcome of violence in the high ETV group. Aiyer et al.'s (2014) study also supports the desensitization argument by finding that the cumulative ETV could decrease cortisol response among adolescents. Mrug et al. (2016) documented the long-term effects of ETV on children which suggests that high levels of ETV at age 11 affects more externalizing problems at age 13 and predicts more violent behavior at age 18 (Mrug et al., 2016). The emotional desensitization to violence in early adolescence contributes to more serious deviance in late adolescence (Gaylord-Harden et al., 2016; Mrug et al., 2016).

Moreover, measuring victimization of ETV implies the connection between a risky lifestyle and delinquency. Lauritsen, Sampson, and Laub (1991) examined delinquent adolescents and their victimization rates. The study results indicated that delinquents are four times more likely to experience victimization than non-delinquents, and the increased involvement in delinquent lifestyles explains the largest variance in victimization among adolescents (Lauritsen et al.,

1991). Youths who have a risky lifestyle may also experience violence in a greater magnitude. Therefore, measuring the levels of ETV can suggest the types of life experience as well as the degrees of victimization in the daily lives among immigrant youth.

Recent studies consistently find an association between ETV and delinquent behaviors among adolescents such as substance use (Joseph, Augustyn, Cabral, & Frank, 2006; Zimmerman & Kushner, 2017), aggressive behaviors (Ebesutani et al., 2014), and several precocious role behaviors (Haynie, Petts, Maimon, & Piquero, 2009). In Haynie et al.'s (2009) precocious behaviors study, they specified that ETV is associated with higher risks of several delinquent outcomes such as running away from home, dropping out of school, having a child, and contact with the criminal justice system. The results showed that direct ETV has greater influence than secondary ETV or witness of ETV effects on delinquent behaviors (Haynie et al., 2009).

2.2.2 Direct ETV vs. Witness of ETV

The different types of ETV might also affect adolescents' behavior differently (Scarpa, 2001; Haynie et al., 2009; Gaylord-Harden et al., 2011). Direct ETV experience includes being a victim of property crime or physical victimization, while secondary ETV is referred to witnessing others' victimization (Buka, Stichick, Birdthistle, & Earls, 2001; Zimmerman, 2015; Zimmerman, Messner, & Rees, 2014). Haynie et al.'s (2009) study indicated that direct ETV had a more significant influence on delinquent behaviors in later adolescence than secondary ETV. However, secondary ETV is also important since a significant proportion of adolescents residing in American cities reported that they had experiences of witnessing violence (Margolin & Gordis, 2000; Purugganan, Stein, Silver, & Benensen, 2000; Scarpa, 2001). Although the

extensive literature has shown the adverse outcomes of ETV on adolescents, limited studies have investigated levels of ETV across different immigration generations, and fewer studies explored the impacts of different types of ETV on behaviors among immigrant adolescents. Therefore, with the proposal that exposure to violence contributes to different crime rates across generations, the current study also suggests that different types of ETV may affect different deviant behaviors among immigrant youth. More specifically, this study examines the following two hypotheses.

The first hypothesis is that direct ETV will have an impact on offending behaviors such as beating up someone, shooting at someone, or shoplifting. According to the prior literature, the experience of direct ETV may decrease the fear of committing offenses (i.e., desensitization of violence), especially among male adolescents (Aiyer et al., 2014; Gaylord-Harden et al., 2016); and increase the possibility of involving in offensive behaviors without hesitation (Aiyer et al., 2014; Ebesutani et al., 2014; Gaylord-Harden et al., 2011). Thus, a juvenile who experienced higher levels of ETV might commit more aggressive actions, which may also imply the greater levels of self-reported offending (SRO).

The second hypothesis is that secondary ETV or witness of ETV will lead to a greater impact on substance use behaviors. According to prior ETV research, few studies differentiated the types of victimization experience and the impacts on negative outcomes (Buka et al., 2001; Zimmerman, 2015; Zimmerman et al., 2014). The experience of secondary ETV should be examined separately since the witness experience may have a distinct influence on delinquent outcomes compared to direct ETV (Buka et al., 2001; Zimmerman, & Kushner, 2017). The experience of secondary ETV may increase stress and depressive symptoms (Buka et al., 2001;

Fowler, Tompsett, Braciszewski, Jacques-Tiura, & Baltes, 2009; Gaylord-Harden et al., 2011; Mohammad, Shapiro, Wainwright, & Carter, 2015), and these signs are highly related to substance use behaviors (Kilpatrick, Acierno, Saunders, Resnick, Best, & Schnurr, 2000; Kilpatrick, Ruggiero, Acierno, Saunders, Resnick, & Best, 2003; Pinchevsky, Wright, & Fagan, 2013; Zimmerman & Kushner, 2017). As a result, an immigrant juvenile who experienced high levels of secondary ETV could have a greater possibility of using a substance for coping the stress.

2.3 Conceptual Framework – Segmented Assimilation Theory

The current study is informed by the extant work on segmented assimilation theory (Portes & Zhou, 1993), which offers a theoretical framework for describing the process of acculturation among migrants. The classic assimilation theory posits that assimilation is a natural process that immigrant minorities gradually adopt the mainstream culture and eventually abandon their ethnic origins (Park & Burgess, 1924). Different from the classic assimilation, segmented assimilation theory offers a new perspective to understand diverse strategies that children of contemporary immigrants adapted to integrate into the U.S. society. Segmented assimilation theory argues that classic assimilation theory overly simplifies the acculturation process and neglects the possible different directions of assimilation (Portes & Zhou, 1993). Portes and Zhou (1993) examined several immigrant communities in the United States and the patterns of assimilation among these groups. They suggested that U.S. society consists of segregated and unequal segments which may result in three assimilation patterns depending on the circumstances and social capital that a co-ethnic community can provide to their offspring.

The first form is the time-honored upward mobility pattern describing the acculturation and economic integration into the mainstream of the middle-class in the United States (Zhou, 1997). The second type is the downward mobility pattern indicating the possibility of acculturating and integrating subcultures into the underclass in the United States (Portes & Zhou, 1993). The third form is economic integration into middle-class America with lagged acculturation and a deliberate preservation of the immigrant community's traditional cultures (Zhou, 1997). Moreover, segmented assimilation theory illustrated what sorts of the condition is related to either a downward or upward acculturation.

The instance of the downward assimilation type is the Haitian community in Florida in Portes and Zhou's (1993) study. They also pointed out that a downward direction of assimilation may occur when a recent immigrant generation lacks supports from the co-ethnic community (e.g., co-ethnic groups live in poverty or in a low socio-economic position), and resides in an inner-city area with an unwelcoming subculture. On the other hand, if the recent generation receives strong co-ethnic support and lives in a community with normal middle-class American cultural values (even it may include common discrimination views), then the immigrant youth are more likely to experience an upward assimilation direction, such as the example of the Punjabi community in California (Portes & Zhou, 1993). More importantly, the theory also describes the importance of ethnic identity for immigrant groups residing in U.S. urban cities. Immigrant youth who lack ethnic identity to their co-ethnics are more likely to assimilate the norms and values of inner-city subcultures (Portes & Zhou, 1993; Raudenbush, Johnson, & Sampson, 2003). On the other hand, immigrant adolescents who maintain a strong attachment to the values and strong solidarity of their co-ethnic community are more likely to resist being

involved in delinquency within disadvantaged neighborhoods (Portes & Zhou, 1993; Rumbaut, 1997). In short, according to segmented assimilation theory, the directions of assimilation largely depends on two factors: the neighborhood condition that immigrants reside in and the ethnic identity of co-ethnic groups that immigrants are attached to.

As a result, the current study also proposes that neighborhood condition and ethnic identity can affect the assimilation (and offending) patterns among immigrant youth as segmented assimilation theory suggested. Among the three assimilation patterns, the current study focuses on the downward mobility pattern and analyzes the components contributing to downward assimilation among immigrant youth (Haller, Portes, Lynch, Alba, Kasinitz, & Waters, 2011). According to segmented assimilation theory, immigrant youth who adhere less to their ethnic group and reside in communities with the higher disorder are more likely to engage in delinquent behaviors. Adolescents who are strongly attached to their ethnic tradition are less likely to be involved in criminal activities in the same disadvantaged neighborhood because the strong family and co-ethnics attachment can buffer them from the risky environment (Xie & Greenman, 2005).

The current study proceeds from the segmented assimilation statement and the component of ETV to hypothesize that the amount of violence an immigrant youth experiences plays a risk between neighborhood conditions and their delinquent acts. Moreover, the levels of adherence to the ethnic group might be attenuated by the amount of time in the United States. In other words, in the same disadvantaged neighborhood, immigrant youth who had a higher level of attachment to the co-ethnic group (i.e., first-generation youth) may be less likely to be influenced by the disadvantaged environment than the immigrant youth who had lower levels of ethnic identity

(i.e., second- & second-plus-generation youth). The immigrant youth who experience more negative impacts (i.e., ETV) from their neighborhoods may be more likely to report delinquent behaviors as the ETV literature suggested (Gaylord-Harden et al., 2011; Vermeiren et al., 2002; Mrug et al., 2016; Hardaway et al., 2014; Margolin & Gordis, 2000; Purugganan et al., 2000; Scarpa, 2001).

The following context elaborates on the effects of neighborhood condition and ethnicity identity on the assimilation levels and on the results of delinquent outcomes among immigrant adolescents.

2.3.1 Variables that affect Assimilation – Neighborhood Conditions

Studies have shown that the levels of assimilation vary across generations and influence adolescents' behaviors (Alvarez-Rivera, Nobles, & Lersch, 2014; Frazer, Rubens, Johnson-Motoyama, & Dipierro, 2017; Haller et al., 2011; Stansfield, 2012; Cavanagh, 2007; Nagasawa, Qian, & Wong, 2001; Unger et al., 2000). The impact of neighborhood conditions on assimilation is importantly explored within the immigration context. The disadvantaged neighborhood impact on crime rates has been long recognized in the literature (Shaw & McKay, 1942; Leventhal & Brooks-Gunn, 2000), and the influence on juvenile's delinquent outcomes has been examined (Moffitt, 1993). Studying the effects of disadvantaged neighborhood on changes in delinquent outcomes among different immigrant generations is an important consideration given the findings of prior research. Bersani, Loughran, and Piquero's (2014) study utilized longitudinal data from the Pathways to Desistance study and indicated that adolescents who reside in disadvantaged neighborhoods and with high levels of assimilation had more significant risk for persistent offending, especially among second-generation youth

(Bersani et al., 2014). Morenoff and Astor (2006) also tested the segmented assimilation theory with data from Chicago adolescents. The findings documented that neighborhood disadvantage was significantly associated with higher levels of violence among third-generation youth. While it was not significantly related to violence in the second-generation group, first-generation youth reported significantly lower rates of violence in a risky environment when compared to other generations (Morenoff & Astor, 2006). The study results supported the hypothesis that second-plus generation youth may have higher assimilation with their environment and will report greater violent behaviors than first-generation.

However, Xie and Greenman (2011) found mixed outcomes in their study testing hypotheses derived from the segmented assimilation theory. Their results showed that immigrant adolescents living in non-disadvantaged neighborhoods and with high levels of assimilation reported the more elevated risk of problem behavior, although the education performance and psychological wellbeing were also positively correlated to the assimilation level. According to the results, they suggested that it is more important to focus on the differential processes of assimilation among immigrants—especially for those who were living in the disadvantaged neighborhoods as they may adopt different strategies to refrain from assimilating to their environment (Bersani et al., 2014). The strategy or the factor of resisting from assimilation among immigrant families is regarded as the attachment to the co-ethnic group, ethnicity identity, in the current study.

2.3.2 Variables that affect Assimilation – Ethnicity Identification

Studies have found that levels of ethnic identity have influence on juveniles' delinquent attitudes (Arbona, Jackson, McCoy, & Blakely, 1999), legal cynicism (Lee, Steinberg, Piquero,

& Knight, 2011), and delinquent behaviors (Bowman Heads, Glover, Castillo, Blozis, & Kim, 2018; Marcell, 1994; Shrake & Rhee, 2004). Generally, a higher degree of ethnic identity is associated with a lower level of delinquent outcomes among adolescents (Bowman Heads et al., 2018; Mossakowski, 2003; Williams, Aiyer, Durkee, & Tolan, 2014). However, few studies have examined the changes in levels of ethnic identity and the impact on juveniles' behaviors across different immigrant generations. Rumbaut's (1994) study examined levels of ethnic identity between immigrant generations. Results showed that youths with foreign-born parents (i.e., first-generation) reported a significantly higher level of ethnic identity than youths with native-born parents (i.e., second- and second-plus generation). The author also indicated that second-generation adolescents might face possible conflicts between their ethnical recognition and U.S. culture through their acculturation process.

Several studies also found a correlation between levels of ethnic identity and delinquent behavior in immigration. Wong's (1999) study of Chinese immigrant youth indicated that juveniles who had greater adherence to Chinese culture reported lower delinquency compared to the low adherence group. Similarly, Bersani et al.'s (2014) study pointed out that second-generation showed lower levels of ethnic identity than the first-generation group. However, Bersani et al. also found that the likelihood of persistent crime is more related to disadvantaged neighborhoods and less related to levels of ethnic identity among the second-generation group. The effects and changes of ethnic identity on delinquent outcomes across immigrant generations mostly remain unknown (Van Ngo, Calhoun, Worthington, Pynch, & Este, 2017), therefore, requiring further research focus.

2.4 Research Hypotheses

According to the literature review and research questions, the current study examines eight hypotheses.

H1: The direct ETV (D-ETV) effects are varied across immigrant generations while first-generation youth should experience the lowest D-ETV compared to the other two groups.

Exposure to violence has been found as a severe issue in U.S. urban cities which have a more concentrated immigrant population (Davies & Fagan, 2012; Rosenthal & Wilson 2006; Mercy et al., 2003). Prior studies have found that first-generation youth reported significantly less violence experience than youth from households with native-born parents (MacDonald & Saunders, 2012). A factor contributing to the less violent behavior in first-generation than in second-generation and native-born groups (Morenoff & Astor, 2006) could be related to the lower level of D-ETV in the first-generation group. This study first examined the levels of D-ETV between generations for testing the first hypothesis.

H2: The witness of ETV (W-ETV) effects are varied across immigrant generations while first-generation youth should experience the lowest W-ETV compared to other two groups.

Similar to the first hypothesis, studies have shown that first-generation youth exhibited less violence experience than youth from households with native-born parents (MacDonald & Saunders, 2012). However, the prior study did not examine the effects of different ETV on delinquent outcomes. Moreover, studies have shown that first-generation immigrant youth reported significantly fewer substance use behavior than second-generation and native-born youth (Cavanagh, 2007; Hamilton et al., 2012; Kopak, 2013; Peña et al., 2008). Thus, this study

assumed that a factor contributing to less substance use among first-generation youth could be associated with a lower level of W-ETV in the first-generation. This study examined the levels of W-ETV between generations for testing the second hypothesis.

H3: The increase in D-ETV will affect an increase in self-reported offending (SRO).

According to prior ETV research, the experience of D-ETV may decrease the fear of committing offenses among adolescents (Aiyer et al., 2014; Gaylord-Harden et al., 2016), and increase the possibility of being involved in offensive behaviors without hesitation (Aiyer et al., 2014; Ebesutani et al., 2014; Gaylord-Harden et al., 2011). Therefore, the current study examined the effects of increasing D-ETV on SRO among immigrant youth for testing the third hypothesis.

H4: The increase in W-ETV will affect an increase in substance use/abuse.

Few studies differentiated the types of victimization experience and the impact on negative outcomes (Buka et al., 2001; Zimmerman, 2015; Zimmerman et al., 2014). The experience of W-ETV may increase stress and depressive symptoms (Buka et al., 2001; Fowler et al., 2009; Gaylord-Harden et al., 2011; Mohammad et al., 2015), and these signs are highly related to substance use behaviors (Kilpatrick et al., 2000; Kilpatrick et al., 2003; Pinchevsky et al., 2013; Zimmerman & Kushner, 2017). The current study examined the effects of increases in W-ETV on SRO among immigrant youth for testing the fourth hypothesis.

H5: Neighborhood conditions will mediate the effects of D-ETV on SRO, and an increase in ethnicity identity will exhibit negative effects on SRO.

According to segmented assimilation theory, both neighborhood conditions and ethnicity identity may affect the levels of assimilation to the surrounding environment among immigrant youth (Portes & Zhou, 1993; Xie & Greenman, 2005). Also, studies have shown that the levels of assimilation and delinquency are related among immigrant youth (Alvarez-Rivera et al., 2014; Bersani et al., 2014; Frazer et al., 2017; Haller et al., 2011; Stansfield, 2012). The effects of D-ETV on SRO might be mediated by the levels of disorder in communities, whereas ethnicity identity might serve a protective factor in preventing immigrant youth from negative outcomes. The current study examined the changes in the coefficient of D-ETV by adding the neighborhood condition variable and ethnicity identity variable separately to test the fifth hypothesis.

H6: Neighborhood conditions will mediate the effect of W-ETV on substance use/abuse, and an increase in ethnicity identity will exhibit negative effects on substance use/abuse.

Similar to the fifth hypothesis, the effects of W-ETV on substance use might be mediated by the level of disorder in communities, whereas ethnicity identity might serve as a protective factor in preventing immigrant youth from substance use. The current study examined the changes in the coefficient of W-ETV by adding the neighborhood conditions and ethnicity identity variables separately to test the sixth hypothesis.

H7: First-generation youth who experience D-ETV will report relatively lower SRO than second-generation youth and native-born youth.

Immigration studies have suggested that immigrant status serves as a protective factor for keeping first-generation immigrant youth away from delinquent acts (Curry et al., 2018; Wolff et al., 2018; Morenoff & Astor, 2006), but delinquency rates are increased in second-generation and native-born youth. The levels of D-ETV across generations could be a risk factor contributing to variances in SRO across generations. The current study examined the effects of interaction between D-ETV and immigrant generations on the predictive likelihood of SRO across generations to test the seventh hypothesis.

H8: First-generation youth who experience W-ETV will show relatively lower substance use/abuse than second-generation youth and native-born youth.

Similar to the seventh hypothesis, the levels of W-ETV across generations could be a risk factor of the variability in substance use across generations. The current study examined the effects of interaction between W-ETV and immigrant generation on predictive likelihoods of substance use across generations to test the eighth hypothesis.

CHAPTER 3

METHODOLOGY

3.1 Data

This study uses data from the Pathways to Desistance Study in order to examine the relationship between ETV and delinquency across immigration generations. The Pathways to Desistance study is a multi-site study that follows 1,354 serious juvenile offenders from adolescence to young adulthood (age 14-17 at baseline) in two cities: Philadelphia, PA and Phoenix, AZ. The assessments contain adolescents' psychological development, behavior, social relationships, mental health, and experiences in the juvenile or criminal justice system. Regular interviews were used to complete this seven-year follow-up study after their involvement in court for a felony level offense (Mulvey & Schubert, 2012).

The ultimate goals of the Pathways study were to improve decision-making by court and social service personnel and to clarify policy debates about alternative treatments for serious adolescent offenders (Schubert & Mulvey, 2014). To be sure, the Pathways data have been used to study various issues within the immigration/crime relationship (Bersani et al., 2013; Piquero et al., 2016) and the effects of exposure to violence on adolescents' behaviors (Davis, Dumas, Berey, Merrin, Cimpian, & Roberts, 2017; Monahan, King, Shulman, Cauffman, & Chassin, 2015). However, the current study differs from these previous Pathways-based immigration studies or the exposure to violence studies as it combines both topics and explores the mechanism – exposure to violence – across different immigrant generations and their offending behavior. Furthermore, the current study separately analyzes the effects of direct exposure (D-

ETV) to violence and secondary exposure (W-ETV) to violence on two types of delinquent outcomes – self-reported offending and illegal drug use across different immigrant generations.

3.1.1 Data Collection

In the process of choosing data collection sites, the research investigators examined extensive information of the juvenile justice system in the potential sites for maximum comparability and representative ability of the data at each research site (Schubert, Mulvey, Steinberg, Cauffman, Losoya, Hecker, Chassin, & Knight, 2004). The Philadelphia and Phoenix juvenile justice systems were selected for the research locations. Both sites were able to provide a large enough sample size for the research project, a diverse enough sample to represent the offender population in each site, and could support the data collection for the longitudinal research design (Schubert et al., 2004).

The enrollment of the research participants was approximately twenty-six months, from November 2000 to January 2003. Individuals were enrolled if they fulfilled the following criteria: (1) age was between 14 to 17 years old at the time of their committing offense; (2) found guilty of a serious offense; and (3) obtained parents' consent and participant's assent at the time of enrollment. About eighty percent of the qualified youth that the research team approached agreed to participate in the study at the enrollment stage and that resulted in an enrolled sample size of n=1,354 initially (Schubert et al., 2004; *Pathways to Desistance*. Retrieved from <http://www.pathwaysstudy.pitt.edu>).

The Pathways study began the baseline interview from November, 2000 to March, 2003 and conducted follow-up interviews at 6, 12, 18, 24, 30, 36, 48, 60, 72, and 84 months after the baseline interview. The last follow-up interview was completed in March 2010. Approximately,

every participant received eleven interviews in a seven-year period. Since maintaining the retention rate is challenging in a longitudinal research design, the research team managed to track and stay in contact with participants by using different strategies such as designating a “tracker” or obtaining information from every possible network (Schubert et al., 2004).

Therefore, the Pathways study reported an 84% - 93% retention rate at each follow-up interview time point and completed at least ten out of eleven interviews for 80% of total participants (Mulvey, Schubert, & Piquero, 2014). For a seven-year longitudinal research design, the retention rates are high and suitable for analyzing any factors’ effects changing over time.

3.2 Independent Variables

According to the research questions and the literature review, this study selected four variables as independent variables: immigration generation status, exposure to violence, neighborhood conditions, and ethnicity identity.

3.2.1 Immigration Generation Status

The Pathways to Desistance Study contains information about birthplace(s) of adolescents’ biological parents. According to prior immigration studies (Pew Research Center, 2013) and prior Pathways studies using the same dataset (Piquero et al., 2016), the current study categorized the generations by recognizing the birthplaces of adolescents and adolescents’ bio-parents. First-generation youth is defined as adolescents born outside of the United States with both foreign-born parents. Second-generation youth is defined as adolescents born in the United States and have at least one foreign-born parent. The native-born group refers to youth born in the United States with both native-born parents.

For any missing data values, this study will describe the following missing value approach. If adolescents who were born in the United States reported a missing value for one of their parent's birthplaces and reported the other as foreign-born, the individual is categorized into second-generation group. If adolescents who were born in the U.S. reported a missing value for either parents and reported the other as native-born, this study classified the individual as a missing value ($n = 63$) because it is difficult to identify whether the juvenile belonged to the second-generation or the native-born. In this study, four cases were also classified as missing values as they reported that they were foreign-born but with both native-born parents, and this made them not belonging to any groups according to the definitions noted above. The total number of missing value in this study is $n = 67$.

Furthermore, this study specifically focuses on the male adolescents instead of females for two reasons. First, the Pathways study had a smaller sample size of female adolescents (and it also represents the population in the juvenile justice system). Therefore, the female sample cannot provide enough cases for each immigrant generation group, whereas the male sample has a sufficient number of cases in each generation group. Second, male samples also showed higher rates of completion in the entire follow-up study. As a result, this study selected male cases into the analysis process.

Based on the definitions for immigration generations and the missing value approach, and the exclusively male data, the classification results in $n = 70$ first-generation youth, $n = 184$ second-generation youth, and $n = 856$ native-born generation youth. The abbreviation of immigrant generation variable is denoted as IG in the subsequent content.

3.2.2 Exposure to Violence (ETV)

The Exposure to Violence Inventory (Selner-O'Hagan, Kindlon, Buka, Raudenbush, & Earls, 1998) was modified for collecting both direct violence– victim experience (six items) and secondary violence– witness experience (seven items) among adolescents who participated. The questions for measuring direct ETV include: “Ever been chased thought could be hurt?” “Ever been raped or sexually attacked?” “Ever been shot at?” “Ever in situation where frightened?” “Ever been attacked with a weapon?” and “Ever been beat?” Interviewers entered 1 = yes and 0 = no as the juvenile’s responses. The abbreviation of direct ETV is D-ETV in the subsequent content.

The assessments for secondary ETV measure the witness of exposure to violence. Questions asked include “Ever seen anyone chased thought could be hurt?” “Ever seen anyone else get beaten up?” “Ever seen someone attacked with a weapon?” “Ever seen someone killed from violence?” “Ever seen someone else get shot and hit?” “Ever seen someone else being raped?” and “Ever seen anyone close to you try kill self?” The abbreviation of witness of ETV is W-ETV in the subsequent content.

The accessible data reported the cumulative counts of each type of ETV for individuals rather than individual’s experience for each item. Therefore, the current study utilizes the counts of D-ETV and W-ETV in each wave to measure the levels of ETV among individuals. Thus, the minimum value for both types of ETV is 0, whereas the maximum value is six for D-ETV and seven for W-ETV. The mean of D-ETV is 1.64 (SD=1.47), and the mean of the W-ETV is 3.85 (SD=1.93) in male adolescents at baseline. Both types of ETV decreased over time. In the last

follow-up interview, the mean of D-ETV is 0.17 (SD=0.57) whereas the mean of W-ETV is 0.96 (SD=1.42).

3.2.3 Neighborhood Conditions (NC)

According to segmented assimilation theory, neighborhood conditions affect the chances of ETV in the community. Disadvantaged neighborhoods may contribute to the downward assimilation and unsupervised activities among immigrant youth. The measure for neighborhood conditions assesses the environment surrounding the adolescent's home (Raudenbush & Sampson, 1999). The current study measured neighborhood conditions by combining the physical disorder of the neighborhood (e.g., “cigarettes on the street or in the gutters,” “graffiti or tags”) and the social disorder of the neighborhood (e.g., “adults fighting or arguing loudly,” “people using needles or syringes to take drugs”). A total of 21 items were measured on a 4-point Likert scale ranging from “Never” to “Often” with assigned continuous values from 1 to 4. Higher values of this variable indicate a greater degree of disorder within the community while lower values imply a lesser degree of disorder surrounding the adolescent’s home.

This measurement captures the total disorder of the neighborhood. However, because the juveniles in this sample moved to different locations frequently, the perceived disorder of their environment also changed by waves. Since the assessment differs by an individual’s perception and waves, the current study regards this measure as a neighborhood condition variable but also as an individual-level variable in the model. The abbreviation of neighborhood condition is NC in the subsequent content.

3.2.4 Ethnicity Identity (EI)

The other measure might affect immigrant youth’s assimilation level is ethnic identity

(Portes & Zhou, 1993). The stronger or higher ethnic identity could prevent immigrant adolescents from a downward direction of assimilation and committing less delinquency (Arbona et al., 1999; Lee et al., 2011; Shrake & Rhee, 2004; Xie & Greenman, 2005). Thus, a higher value of a participant's ethnic identity may be related to less delinquent outcomes, whereas a lower value of a participant's ethnic identity may be associated with more delinquency.

The Multigroup Measure of Ethnic Identity is a measurement for the mean of the 12 items assessing an individual's overall ethnic identity by two concepts – affirmation & belonging; and identity achievement (Phinney, 1992). Items asked about feelings of affirmation and belonging of the individual's ethnic group through questions such as “I am happy that I am a member of the group I belong to,” “I feel a strong attachment towards my own ethnic group,” and “I feel good about my cultural or ethnic background.” Items asked about identity achievement via questions such as “I have spent time trying to find out more about my ethnic group such as its history, traditions, and customs,” or “I am active in organizations or social groups that include mostly members of my own ethnic group.” A total of 12 items were measured on a 4-point Likert scale ranging from “Strongly Agree” to “Strongly Disagree” with assigned continuous value from 1 to 4. Higher scores indicate a greater ethnic identity of the participant. The abbreviation of ethnic identity is EI in the subsequent content.

3.3 Control Variables

Two variables Age and Race are selected as the control variables for the analytical control in the current study.

3.3.1 Age

Studies have shown that the peak of delinquent behaviors is in mid-adolescence and begins to decrease when age increases (Hirschi & Gottfredson, 1983; Steffensmeier & Harer, 1999). The current study measures age to estimate the decrease in delinquent outcomes but also to compare the impact of different ETVs on delinquent outcomes. At the baseline, the range of age is from 14 years old to 19 years old, whereas in the last follow-up interview the range is from 20 years old to 26 years old.

3.3.2 Race/Ethnicity

The current study also selected the individual's race/ethnicity as a control variable and were classified into four groups: White (19%), Black (42%), Hispanic (34%), and Other (4%).

3.4 Dependent Variables

As noted earlier, D-ETV might increase the probability of committing offenses (Gaylord-Harden et al., 2011), whereas W-ETV might increase the likelihood of involving substance use (Zimmerman & Kushner, 2017). Therefore, this research used two variables as the dependent variables: Self-Reported Offending and Substance Use/Abuse.

3.4.1 Self-Reported Offending (SRO)

Self-Reported Offending (Huizinga, Esbensen, & Weiher, 1991) measures adolescents' accounts of involvement in antisocial and illegal activities. The self-reported offending originally is composed of 24-items. However, only 22 of the 24-items were measured at baseline and the follow-up interviews. Moreover, two of the 22-items were masked for confidential purposes. As a result, the current study selected a total of 20-items for assessing self-reported offending

among juveniles. In the baseline interview, the questions asked individuals if they ever committed a certain delinquent behavior, whereas the items asked individuals if they committed the delinquent behavior in the recall period in the follow-up interviews. The questions include property crime such as shoplifting, and a stealing car or motorcycle. Questions also measure violent crime, such as shooting someone and robbery with a weapon. Items ask about gang activities, such as joining a fight as part of a gang. Although this group of questions contains the activity of selling drugs, the self-reported offending scale does not comprise substance use behaviors.

The current study created a new variety score to estimate self-reported offending by accumulating the items of which participants' response was "yes" to each of the delinquency behaviors. Thus, the range of the variety score for self-reported offending is from 0 to 20 for all individuals in entire study (11 waves). Higher scores indicate a greater variety of offenses an individual committed. The abbreviation of self-reported offending is SRO in the subsequent content.

3.4.2 Substance Use/Abuse

The Substance Use/Abuse Inventory (Chassin, Rogosch, & Barrera, 1991) assesses the adolescents' use of illegal drugs and alcohol over the recall period. The current study selected the items which asked about the types of drug that the participant used in the recall period and counted the numbers of endorsed items (total nine items). Thus, the scale range for measuring the juvenile's substance use/abuse is from 0 to 9. The higher scores refer to more types of drugs an individual used in the recall period.

3.5 Analytic Strategies

Several strategies for data management were conducted before data analysis. The approach of dealing with missing data for each individuals' immigrant generation was aforementioned under the independent variable section. For other variables, the current study coded the value as a missing value according to the codebook of the Pathways to Desistance study at the baseline. The variables SRO, D-ETV, and W-ETV had fewer percentages of missing values (6%-17%) than variables NC and EI (7%-40%) in all follow-up points. The main reason for the particularly high missing value in NC is that if a participant was locked up at the recall period, this measure was skipped in the interview. According to this instruction, the missing value was especially high in the second wave and decreased in the later follow-up interviews. Otherwise, 86 cases were counted as missing values in all follow-up interviews as they were in an institution in the entire study. Since the missing data issues are inherent in the original dataset, the current study decided to follow the missing value instruction and not to estimate missing values in analyses.

A multicollinearity test was used for all independent variables to examine the possible collinearity problems in the regression model. The results indicated that the independent variables have low correlations to each other. The mean of the variance inflation factor (VIF) test for the variable set SRO, D-ETV, NC, EI, Immigrant Status, Age, and Race is 2.07 while the mean of the VIF test for variable set Substance Use, W-ETV, NC, EI, Immigrant Status, Age, and Race is 2.08. Both VIF values are less than 10, indicating the low collinear relations across variables. Therefore, the study has less concerns about a multi-collinearity issue in later regression models.

3.5.1 Analysis of Variance (ANOVA)

This study employed several analytic strategies for testing the research hypotheses. The direct exposure to violence (D-ETV) and witness of exposure to violence (W-ETV) are separately examined in different immigrant groups for testing H1 and H2. The analysis of variance (ANOVA) is used to assess whether the means of D-ETV and W-ETV are varied across immigrant groups. Moreover, the NC variable is tested to ensure its effects on D-ETV and W-ETV at baseline. Since both ETVs outcomes follow the binomial distribution with a fixed trial, the logistic regression model is used to obtain the probability of an individual experience at different levels of ETVs when the NC is high.

3.5.2 Mixed Effects Logistic Regression Model

The study uses the mixed effects logistic regression model to examine hypothesis H3 to H8. The mixed effects logistic regression is appropriate to model binary outcome variables following a binomial distribution, in which the log odds of the outcomes are modeled as a linear combination of the explanatory variables when the data are clustered. In the current dataset, each individual is a cluster containing eleven observations. In other words, the repeated observations over time (level 1) nested within individuals (level 2). The regression model can be constructed as follows:

$$y_{tj} = \beta_{0j} + \beta_{1j}x_{1tj} + e_{tj} \quad (1)$$

$$\beta_{0j} = \gamma_{00} + \mu_{0j} \quad (2)$$

$$\beta_{1j} = \gamma_{10} \quad (3)$$

Where, the outcome variable y for the individual outcomes at time t nested in person j is affected by both overall mean β_{0j} , variable x_1 with slope β_{1j} and within group residual e_{tj} . The second

equation of β_{0j} represents the overall mean γ_{00} and random effect μ_{0j} . The term μ_{0j} is a between group random effect indicating that each group has a mean differs from the overall mean. Equation (3) refers to the slope of variable x_1 containing fixed effect value γ_{10} .

Thus, by combining equation (2) and (3), we obtain equation (4).

$$y_{tj} = \gamma_{00} + \gamma_{10} + \mu_{0j} + e_{tj} \quad (4)$$

In equation (4), response variable y_{tj} contains fixed effects ($\gamma_{00} + \gamma_{10}$) and random effects ($\mu_{0j} + e_{tj}$) in the model. The use of a mixed effects logistic regression model can capture the random effect between groups (between participants) while the fixed effect of each variable are measured in the model. There are two advantages of estimating the random effects in the model. First, the random term estimates the unobserved effects across individuals on the dependent variable in the model (Greene, 2008). Second, the influence of the time invariant variables such as immigrant generation and race/ethnicity can be measured in the mixed effects model since the random effect is assumed to be uncorrelated with independent variables.

3.5.3 Lag Identification of D-ETV & W-ETV Effects

The current study utilized the approach of lag identification to attend to possible endogeneity problems that result from exogenous variables (Steele, 2008). This approach is similar to the prior study that used measures of D-ETV in the past to estimate the current adolescents' delinquent outcomes (Wright et al., 2013). Thus, the study utilized the ETVs measured in the prior wave ($t - 1$) to predict the SRO and Substance Use counts in the current wave (t). For testing H3, the study denoted the variables to equation (4) and obtained equation (5).

$$SRO_{tj} = \gamma_{00} + \gamma_{10}(Imigrant\ Generation_j) + \gamma_{11}(DETV_{(t-1)j}) + \gamma_{12}(AGE_{tj}) + \gamma_{13}(Race_j) + \mu_{oj} + e_{tj} \quad (5)$$

Where, the opportunity of committing the counts of SRO at time t is explained by an individual's immigrant generation, the D-ETV he experienced at time $(t - 1)$, age, race, and random effects between individuals.

For testing H4, the study denoted the variables to equation (4) and obtained equation (6).

$$Substance\ Use_{tj} = \gamma_{00} + \gamma_{10}(Imigrant\ Generation_j) + \gamma_{11}(WETV_{(t-1)j}) + \gamma_{12}(AGE_{tj}) + \gamma_{13}(Race_{(j)}) + \mu_{oj} + e_{tj} \quad (6)$$

Where, the opportunity of committing the counts of Substance Use at time t is explained by an individual's immigrant generation, the W-ETV he experienced at time $(t - 1)$, age, race and random effects between individuals.

3.5.4 Lag Identification of NC Effects

According to segmented assimilation theory, the levels of disorder in a neighborhood affect the probability of experiencing violence and victimization in immigrant populations (Bersani et al., 2014; Morenoff & Astor, 2006). The NC variable measured the levels of total disorder surrounding participants' residential environment. Thus, the study should measure the NC variable directly contributing to the possibility of D-ETV and W-ETV, which means both NC and ETVs should be measured at the same wave. Moreover, for the same sake of using the lagged D-ETV and W-ETV to reduce the endogeneity problems (Steele, 2008), the lagged identification of NC is used to assess the disorder level of the environment that a participant perceived at the last interview. However, segment assimilation theory also argues that the degrees of acculturation varies across immigrant generations (Portes & Zhou, 1993). This is

especially the case among second-generation and native-born groups who are believed to have a greater degree of assimilation to their environment than first-generation youth, and it may be related to the less time and effort that they devoted to their co-ethnic groups. The EI variable is measured to assess the degree of commitment to the participant's ethnic activities.

The current study utilized the NC measured in the prior wave ($t - 1$) and EI at time ($t - 1$) to predict the SRO & Substance Use counts in the current wave (t). Moreover, NC may mediate the effects of ETVs and present a positive relationship to SRO. For testing H5, the study denoted the variables to equation (5) and obtained equation (7).

$$SRO_{tj} = \gamma_{00} + \gamma_{10}(Imigrant\ Generation_j) + \gamma_{11}(DETV_{(t-1)j}) \\ + \gamma_{12}(AGE_{tj}) + \gamma_{13}(Race_j) + \gamma_{14}(NC_{(t-1)j}) + \gamma_{15}(EI_{(t-1)j}) + \mu_{oj} + e_{tj} \quad (7)$$

Where, the opportunity of committing the SRO at time t is explained by an individual's immigrant generation, the experienced D-ETV at time ($t - 1$), the perceived NC at time ($t - 1$), EI ($t - 1$), age, race, and random effects between individuals. For testing H6, the study denoted the variables to equation (6) and obtained equation (8).

$$Substance\ Use_{tj} = \gamma_{00} + \gamma_{10}(Imigrant\ Generation_j) + \gamma_{11}(WETV_{(t-1)j}) \\ + \gamma_{12}(AGE_{tj}) + \gamma_{13}(Race_j) + \gamma_{14}(NC_{(t-1)j}) + \gamma_{15}(EI_{(t-1)j}) + \mu_{oj} + e_{ij} \quad (8)$$

Where, the opportunity of committing the counts of Substance Use is explained by an individual's immigrant generation, the W-ETV he experienced at time ($t - 1$), the perceived NC at time ($t - 1$), EI at time ($t - 1$), age, race, and random effects between individuals.

3.5.5 Interaction of ETVs and Immigrant Generation Status

According to prior immigration research, first-generation families serve as a buffering effect for adolescents which was a protective factor from violence in a high social disorder

neighborhood (Morenoff & Astor, 2006). Thus, the current study examined the interaction effects between ETVs and immigrant generation status on delinquent outcomes for testing H7 and H8. For testing H7, the study denoted the variables to equation (7) and obtained equation (9).

$$\begin{aligned} SRO_{tj} = & \gamma_{00} + \gamma_{10}(Imigrant\ Generation_j) + \gamma_{11}(DETV_{(t-1)j}) \\ & + \gamma_{12}(AGE_{tj}) + \gamma_{13}(Race_j) + \gamma_{14}(NC_{(t-1)j}) + \gamma_{15}(EI_{(t-1)j}) \\ & + \gamma_{16}(DETV_{(t-1)j} * Imigrant\ Generation_j) + \mu_{oj} + e_{tj} \quad (9) \end{aligned}$$

Where, the opportunity of committing the SRO at time t is explained by an individual's immigrant generation; the experienced D-ETV at time $(t - 1)$; the perceived NC at time $(t - 1)$; the EI $(t - 1)$; the interaction between D-ETV at time $(t - 1)$ the individual's immigrant generation, age, race, and random effects between individuals. For testing H8, the study denoted the variables to equation (8) and obtained equation (10).

$$\begin{aligned} Substance\ Use_{tj} = & \gamma_{00} + \gamma_{10}(Imigrant\ Generation_j) + \gamma_{11}(WETV_{(t-1)j}) \\ & + \gamma_{12}(AGE_{tj}) + \gamma_{13}(Race_j) + \gamma_{14}(NC_{(t-1)j}) + \gamma_{15}(EI_{(t-1)j}) \\ & + \gamma_{16}(WETV_{(t-1)j} * Imigrant\ Generation_j) + \mu_{oj} + e_{ij} \quad (10) \end{aligned}$$

Where, the opportunity of committing the counts of Substance Use is explained by an individual's immigrant generation, the experienced W-ETV at time $(t - 1)$, the perceived NC at time $(t - 1)$, the EI at time $(t - 1)$, the interaction between W-ETV at time $(t - 1)$ and the individual's immigrant generation age, race, and random effects between individuals.

The current study performed above analytic strategies using Stata, SE-14.1.

CHAPTER 4

RESULTS

The current study examined the effects of direct exposure to violence (D-ETV) on self-reported offending (SRO) and the effects of witness of exposure to violence (W-ETV) on substance use across different immigrant generations (IG). Also included in the analyses are measures for neighborhood conditions (NC) and ethnicity identity (EI). This chapter presents the analysis results of testing eight hypotheses.

4.1 Descriptive Statistics Results

Descriptive statistics Table 1 displays the variables at baseline. For the IG variable,

Table 1. Descriptive Statistics of Variables at Baseline

	obs.	%	Mean
Immigration generation			
First-generation	70	6%	
Second-generation	184	17%	
Native-born	856	77%	
Race/Ethnicity			
White	225	19%	
Black	493	42%	
Hispanic	398	34%	
Other	54	4%	
D-ETV	1,167		1.64
W-ETV	1,167		3.85
NC	1,168		2.35
EI	1,165		2.77
SRO	1,167		4.64
Substance Use	1,166		1.15

the majority of the adolescents are native-born (77%) whereas the second-generation and first-generation are 17% and 6% of the sample, respectively. Most adolescents reported their ethnicity as Black (42%) and Hispanic (34%), while 19% of the sample selected White. The mean values of D-ETV and W-ETV are 1.64 and 3.85, indicating that the sample had higher frequencies of witness of violence than direct victimization experience at baseline. The average values of variable NC and EI are 2.35 and 2.77. Also, the mean value of dependent variable SRO showed that the juveniles reported an average of 4.64 counts of self-reported offenses, while the mean of Substance Use is 1.15 at baseline.

Table 2 listed three different standard deviations for numerical independent and dependent variables to show the changes within individuals and between groups in the study: the overall standard deviation; the between standard deviation; and the within standard deviation.

Table 2. Descriptive Statistics of Numerical Variables

Variable Names	Overall mean	Overall Sd.	Between obs. Sd.	Within obs. Sd.
D-ETV	.35	.85	.40	.77
W-ETV	1.29	1.73	1.02	1.46
Neighborhood Condition (NC)	2.30	.80	.64	.51
Ethnic Identity (EI)	2.78	.51	.35	.37
SRO	1.76	2.79	1.70	2.24
Substance Use/Abuse	.66	1.13	.68	.91

In Table 2, both D-ETV and W-ETV show that the standard deviations of within observations are larger than between observations, indicating that ETVs changed overtime. On the other hand, the NC variable indicates that the differences between individuals are greater than within individuals, meaning that adolescents resided in different communities and

experienced different levels of disorder in the long-term. Moreover, the results of EI did not show pronounced differences between and within adolescents. Both dependent variables show that within observation changes are higher than between observations. At first glance, descriptive statistics illustrated that most variables vary over time and suggest that the use of lagged explanatory variables is an appropriate strategy.

4.2 Results of Testing Hypotheses

H1: The D-ETV effects are varied across IG while first-generation youth should experience the lowest D-ETV compared to the other two groups.

The mean values of D-ETV across immigrant generation (IG) are displayed in Table 3 and the result of the ANOVA test is listed in Table 5. The mean of D-ETV is relatively lower in the first-generation group than the other two groups, whereas second-generation adolescents reported the highest level of D-ETV at the baseline (Figure 1). However, the ANOVA test showed that the differences between groups are not significant at $\alpha = .05$ level but at $\alpha = .10$ level in the first interview. Although first-generation youth experienced fewer D-ETV, the study failed to reject the null hypothesis that there are no differences across IG with the data at baseline.

Table 3. Marginal D-ETV across Immigrant Generations

Immigrant Generations	D-ETV	SD.	Frequency
First-Generation	1.46	1.40	70
Second-Generation	1.84	1.50	183
Native-Born	1.61	1.45	854

Yet, according to the descriptive statistic results (Table 2), the observations are varied within individuals over time. Thus, the ANOVA results of the first wave may not represent the results of the follow-up interviews.

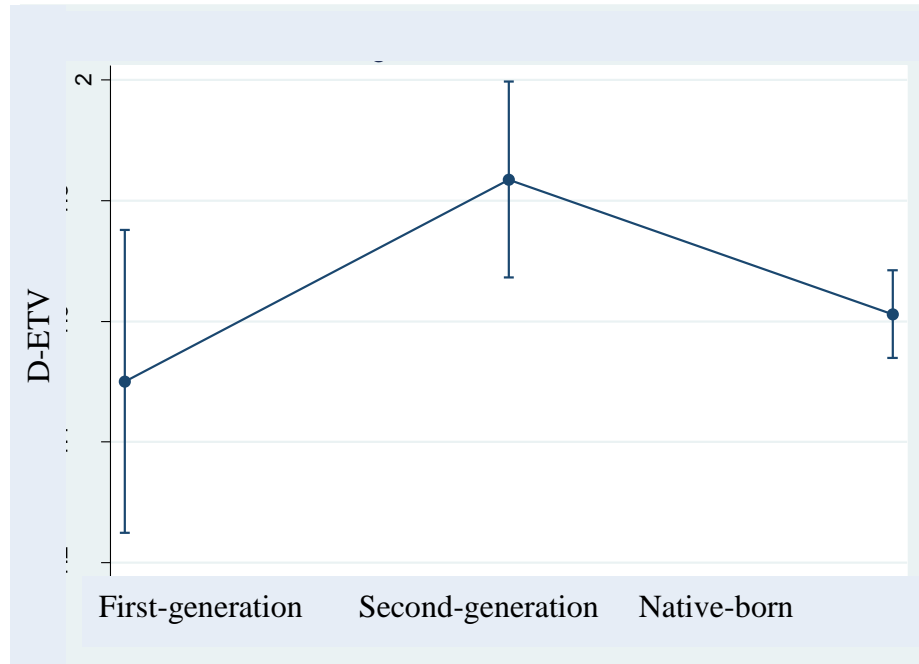


Figure 1. Means of ETV across Immigrant Generations

H2: The W-ETV effects are varied across IG while first-generation youth should experience the lowest W-ETV compared to the other two groups.

The mean values of W-ETV among IG are displayed in Table 4, and the result of the ANOVA test is listed in Table 5. Again, first-generation adolescents reported relatively lower W-ETV compared to other groups, whereas second-generation and native-born youth reported similar levels of W-ETV at the baseline (see Figure 2).

Table 4. Marginal W-ETV across Immigrant Generations

Immigrant Generation	W-ETV	SD.	Frequency
First-Generation	3.14	2.12	70
Second-Generation	3.89	1.99	183
Native-Born	3.89	1.88	854

Moreover, the ANOVA results (Table 5) showed that the differences across IG are significant at $\alpha = 0.005$ level. Thus, the study rejected the null hypothesis and supported the hypothesis that the level of W-ETV is significantly lower in the first-generation group.

Table 5. ANOVA tests of ETVs and Immigrant Generations

	F-values	Prob>F
D-ETV & IG	2.43	0.08
W-ETV & IG	5.04	0.006

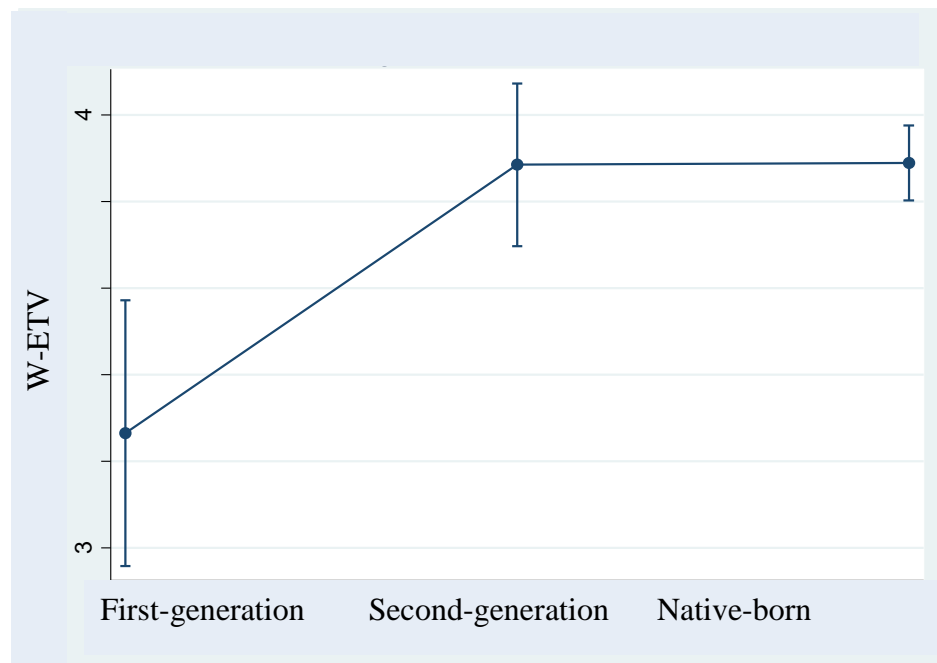


Figure 2. Means of W-ETV across Immigrant Generations

In addition to the ANOVA test, a logistic regression model is employed to regress variables IG and NC on D-ETV and W-ETV at baseline (Table 6). In Table 6, second-generation youth reported significantly higher levels of D-ETV and W-ETV compared to the first-generation group, whereas native-born youth showed significantly higher levels of ETV only in the W-ETV model than first-generation youth. The NC variable also showed a positive and significant relationship with D-ETV and W-ETV at the baseline. To be precise, the more disorder the adolescents perceived in their community, the greater they were to experience violence and witness violence. The results support the view that different levels of social and physical disorder affect the chance of ETVs among juveniles. After confirming the positive association between NC and ETVs, the study next examines the mediator effects of NC in hypotheses five and six.

Table 6. Logistic Regression Models for D-ETV & W-ETV at Baseline

	D-ETV model	W-ETV model
First-generation	(reference-group)	(reference-group)
Second-generation	.28(.03)	.37(.00)
Native-born	.09(.41)	.37(.00)
NC	.33(.00)	.52(.00)

H3: The increase in D-ETV will increase SRO.

Table 7 displays the multilevel logistic regression model for lagged D-ETV effects on SRO. The values of each coefficient, standard error (SE), p-value, and odds ratio are listed for each indicator. The current study chose to interpret the coefficient values for all the following analyses results due to the feature of random intercept in the multilevel model. If the interpretation of multilevel logistic model explains the odds ratio of the variable, the assumption

would be that holding all other variables constant including the random effect. That is, either the random effects between individuals are the same or the analysis results only apply to the same individual. Therefore, this study gives the interpretation with coefficient estimate values with the consideration of random effects between individuals and lists the odds ratio as references for readers (Breslow & Clayton, 1993; Steele, 2008).

Table 7. Multilevel Logistic Model for Lagged D-ETV Effects on SRO

	Coef.	SE	p-value	OR
Lagged D-ETV	.15	.01	.000	1.17
Age	-.06	.004	.000	.95
First-generation	(reference)	(reference)	(reference)	(reference)
Second- generation	.58	.18	.002	1.78
Native-born	.47	.18	.010	1.60
White	(reference)	(reference)	(reference)	(reference)
Black	-.43	.10	.000	.66
Hispanic	-.25	.11	.021	.81
Other	-.21	.19	.296	.88
Random intercepts	SD=1.19	.03		
Number of obs.= 9,568		Number of groups= 1,094		

In Table 7, the lagged D-ETV showed a significantly positive result at $\alpha = .001$. For the lagged D-ETV, every unit increase in D-ETV is associated with a .15 unit increase in the expected log odds of SRO. The significant result allows the study to reject the null hypothesis and have more confidence to support H3. The indicator IG also showed positive association between the recent generation and SRO. A second-generation youth is expected to have a .58 higher log odds of SRO than a first-generation youth, whereas the native-born youth is expected to have a .47 greater log odds of SRO than a first-generation youth. This result indicates that

recent immigrants reported a higher number of SRO than the first-generation, which is consistent with prior research (Bersani et al., 2014; Bersani, 2014a; Bersani, 2014b; Morenoff & Astor, 2006).

Other control variables also showed significant results. For Age, an increase in Age is associated with a decrease in SRO. For Race, adolescents who are Black or Hispanic are expected to have significantly lower log odds of reporting SRO than adolescents who are White. The random intercept of the multilevel logistic regression model is 1.19 and falls within 95% confidence interval.

H4: The increase in W-ETV will increase substance use.

Table 8. Multilevel Logistic Model for Lagged W-ETV Effects on Substance Use

	Coef.	SE	p-value	OR
Lagged W-ETV	.07	.01	.000	1.07
Age	.03	.192	.000	1.02
First-generation	(reference)	(reference)	(reference)	(reference)
Second- generation	.83	.19	.000	2.30
Native-born	.65	.19	.001	1.92
White	(reference)	(reference)	(reference)	(reference)
Black	-.80	.10	.000	.45
Hispanic	-.58	.12	.000	.56
Other	-.65	.20	.002	.52
Random intercepts	SD=1.12	.04		
Number of obs.= 9,565		Number of groups= 1,094		

Table 8 displays the multilevel logistic regression model for lagged W-ETV effects on Substance Use. The lagged W-ETV showed a significantly positive value at $\alpha = .001$. For the

lagged W-ETV, every unit increase in W-ETV is associated with a .07 unit increase in the expected log odds of Substance Use. The result, therefore, supports H4 that an increase in W-ETV increases an adolescents' substance use and confirm prior research showing an association between witness of violence and substance use (Kilpatrick et al., 2000; Kilpatrick et al., 2003; Pinchevsky et al., 2013; Zimmerman & Kushner, 2017). The variable IG still presents a positive association between recent generations and their substance use/abuse. A second-generation youth is expected to have .83 higher log odds of Substance Use than a first-generation youth, whereas a native-born youth is expected to have .65 greater log odds of Substance Use than a first-generation youth.

In contrast to the Age result in the prior model, the increase in age is associated with an increase in the expected log odds of Substance Use. This result could be explained with patterns of age-crime curves that differ in crime types (Laub & Sampson, 2003, p.258). For Race, adolescents who are Black, Hispanic, or Other are expected to have significantly lower log odds of Substance Use than adolescents who are White. The random intercept of the multilevel logistic model is 1.12 and falls within a 95% confidence interval.

H5: NC will mediate the effects of D-ETV on SRO, and an increase in EI will express negative effects on SRO.

Table 9 displays the multilevel logistic regression model for adding variables NC and EI into the previous model of lagged D-ETV effects on SRO to examine whether the effect of D-ETV was mediated by the NC. The lagged D-ETV maintained a significantly positive result at $\alpha=.001$ meaning that every unit increase in D-ETV results in an increase in the expected log odds

of SRO. However, the coefficient value of D-ETV changed from .15 to .12 when introducing the NC variable into the model. Lagged NC showed a strongly positive association with SRO, which indicates that a unit increase in NC is associated with a .15 increase in log odds of SRO.

Table 9. Multilevel Logistic Model for Lagged D-ETV, NC, & EI Effects on SRO

	Coef.	SE	p-value	OR
Lagged D-ETV	.12	.01	.000	1.13
Age	-.04	.006	.005	.95
First-generation	(reference)	(reference)	(reference)	(reference)
Second- generation	.54	.19	.005	1.72
Native-born	.42	.19	.026	1.53
Lagged NC	.15	.02	.000	1.17
Lagged EI	-.10	.03	.001	.91
Race-White	(reference)	(reference)	(reference)	(reference)
Race-Black	-.42	.11	.000	.65
Race-Hispanic	-.16	.13	.226	.85
Race-Other	-.04	.21	.816	.95
Random intercepts	SD=1.21	.03		
Number of obs.= 6,772		Number of groups= 1,091		

The adolescents who perceived higher disorder surrounding them are more likely to commit delinquent behaviors than the ones who experience less disorder in the community. On the other hand, the indicator EI showed a significant negative relationship between SRO at $\alpha=.001$ ¹. Every unit increase in EI could have a .10 decrease in the expected log odds of SRO. The mediator

¹ In a separate test, mean values of EI in first-generation, second-generation, and native-born groups are respectively 2.965, 2.915, and 2.737. A between-groups ANOVA on the mean values of EI showed a significant group difference ($F=136$, $p<.001$).

effect of NC and the negative effect of EI both are as hypothesized. The significant results reject the null hypothesis and thereby support H5.

After introducing the variables NC and EI to the model, indicator IG still showed a positive association between the recent generation and SRO. Compared to the first-generation, second-generation youth and native-born youth had a higher log odds of SRO. Other control variables showed the similar directions of relationship between SRO and maintained significant results. For Age, an increase in Age is associated with a decrease in SRO. For Race, adolescents who are Black are expected to have significantly lower log odds of SRO than adolescents who are White. The random intercept of the multilevel logistic model is 1.21 and falls within a 95% confidence interval.

H6: NC will mediate the effects of W-ETV on substance use/abuse, and an increase in EI will exhibit negative effects on substance use/abuse.

Table 10 displays the multilevel logistic regression model after adding variables NC and EI into the previous model of lagged W-ETV effects on Substance Use to test whether the effect of W-ETV was mediated by NC. The lagged W-ETV maintained a significantly positive effect on Substance Use at $\alpha=.001$. The positive relation indicates that every unit increase in W-ETV is associated with an increase in the expected log odds of Substance Use. Moreover, the coefficient of W-ETV dropped from .07 to .05 by introducing the NC variable. Lagged NC effects showed a significantly positive association with Substance Use. The positive relation indicates that a unit increase in NC is associated with a .15 increase in expected Substance Use. That also means that

adolescents who perceived higher disorder surrounding them are more likely to use or abuse substances than adolescents who experience less disorder in the community.

Table 10. Multilevel Logistic Model for Lagged W-ETV, NC, & EI Effects on Substance Use

	Coef.	SE	p-value	OR
Lagged W-ETV	.05	.01	.000	1.05
Age	.05	.008	.000	1.05
IG first-generation	(reference)	(reference)	(reference)	(reference)
Second- generation	.68	.19	.000	1.97
Native-born	.47	.19	.012	1.61
Lagged NC	.15	.03	.000	1.16
Lagged EI	-.13	.04	.002	.87
Race-White	(reference)	(reference)	(reference)	(reference)
Race-Black	-.89	.11	.000	.41
Race-Hispanic	-.58	.12	.000	.56
Race-Other	-.56	.21	.007	.57
Random intercepts	SD=1.05	.04		
Number of obs.= 6,770		Number of groups= 1,090		

Furthermore, the indicator EI showed a significantly negative relationship between Substance Use at $\alpha=.05$ level. The result implies every unit increase in EI could have a .13 decrease in expected log odds of Substance Use. The mediator effect of NC and the negative effect of EI are in the same directions as hypothesized. These results reject the null hypothesis and support H6.

Variable IG still showed a positive association between the recent generations and Substance Use when introducing the variables NC and EI. Compared to the first-generation

group, second-generation youth and native-born had a relatively higher possibility of reporting substance use, and log odds are .68 & .47, respectively.

Other control variables showed similar directions and significant results as the previous W-ETV effect on Substance Use model in H4. For Age, an increase in Age is associated with an increase in Substance Use. For Race, adolescents who are Black, Hispanic, and Other are expected to have significantly lower log odds of Substance Use than adolescents who are White. The random intercept at the individual level has an SD of 1.05 and standard error .04.

H7: First-generation youth who experience D-ETV will report lower SRO than second-generation youth and native-born youth who experience D-ETV.

The full model of predicting SRO among adolescents is displayed in Table 11. The model introduces the interaction between IG and D-ETV to examine whether the IG effects sustain the same pattern of results as in previous models. Most predictors retained the same direction and level of significance on SRO in Table 11. The lagged D-ETV coefficient is improved from .12 to .22 after adding the interaction term. The result might be due to the “pure” effect of lagged D-ETV without estimating the interaction effect. Lagged NC maintained a positive effect on SRO, whereas the lagged EI retained the negative effect on SRO. Both results are significant at $\alpha=.001$, and both coefficient values are not affected by the interaction term. For IG, the results continue to show a positive relationship between the recent generation and SRO, and the coefficients are improved after introducing the interaction term. Other control variables such as Age and Race showed the similar directions of relationship between SRO and maintained significant results as the previous model.

Table 11. Multilevel Logistic Model for SRO-Full Model

	Coef.	SE	p-value	OR
Lagged D-ETV	.22	.05	.000	1.25
Age	-.04	.006	.000	.96
First-generation	(reference)	(reference)	(reference)	(reference)
Second- generation	.62	.20	.002	1.85
Native-born	.52	.20	.007	1.68
Lagged NC	.15	.02	.000	1.16
Lagged EI	-.10	.03	.001	.91
Race-White	(reference)	(reference)	(reference)	(reference)
Race-Black	-.42	.11	.000	.65
Race-Hispanic	-.15	.13	.234	.85
Race-Other	-.05	.21	.816	.95
IG*Lagged D-ETV	(reference)	(reference)	(reference)	(reference)
First-generation				
IG*Lagged D-ETV	-.082	.06	.136	.92
Second- generation				
IG*Lagged D-ETV	-.117	.05	.025	.88
Native-born				
Random intercepts	SD=1.21	.03		
Number of obs.= 6,772		Number of groups= 1,091		

The interaction term between IG and D-ETV, however, showed unexpected results. Both second-generation and native-born groups showed the negative coefficient compared to the first-generation individuals. The negative outcomes indicate that youth who are second-generation and experience D-ETV are expected to have lower log odds of SRO than first-generation youth who experience D-ETV although the result is non-significant. On the other hand, the youth who are native-born with reporting D-ETV are also expected to have lower likelihood of committing

SRO than first-generation individuals that also report D-ETV, and it is significant at $\alpha=.05$ level. These outcomes may suggest that the first-generation individuals are much more vulnerable to D-ETV than the recent generation groups while the native-born group may have higher resistance to the violence they experienced. As a result, the study failed to find the evidence to support H7 and found the inverse results of the interaction effects. The random intercept at the individual level is with a SD of 1.21 and a SE of .03.

H8: First-generation youth who experience W-ETV will show lower substance use than second-generation youth and native-born youth who experience W-ETV.

Table 12 presents the full model predicting Substance Use. The model introduces an interaction between IG and W-ETV to examine whether the IG effects sustain the same pattern of results as the former model for H6. As hypothesized, most predictors retained the same direction and significant results of Substance Use as shown in Table 12. The lagged W-ETV effects are improved from .05 to .12 after introducing the interaction term. The reason could be due to estimating the “pure” effect of lagged W-ETV after introducing the interaction effect in the model. Lagged NC continued to show a positive effect on Substance Use, whereas the lagged EI retained the negative effect on Substance Use. Both results are significant at $\alpha=.001$ level, and estimation of the interaction term did not affect both coefficient values. For IG, the results continue to show a positive relationship between the recent generation and Substance Use, and the coefficients are improved after calculating the interaction term. To be precise, the log odds of Substance Use increases from .68 to .83 in the second-generation group while the improvement is from .47 to .58 in the native-born group. Other control variables such as Age and Race showed

the similar directions of relationship between Substance Use and sustained significant results as the previous model showed.

Table 12. Multilevel Logistic Model for Substance Use-Full Model

	Coef.	SE	p-value	OR
Lagged W-ETV	.12	.05	.014	1.12
Age	.05	.008	.000	1.05
First-generation	(reference)	(reference)	(reference)	(reference)
Second- generation	.83	.21	.000	2.29
Native-born	.58	.20	.005	1.78
Lagged NC	.15	.03	.000	1.16
Lagged EI	-.13	.04	.002	.87
Race-White	(reference)	(reference)	(reference)	(reference)
Race-Black	-.89	.11	.000	.41
Race-Hispanic	-.58	.12	.000	.56
Race-Other	-.56	.21	.006	.57
IG*Lagged D-ETV	(reference)	(reference)	(reference)	(reference)
First-generation				
IG*Lagged D-ETV	-.088	.05	.088	.92
Second- generation				
IG*Lagged D-ETV	-.059	.05	.212	.94
Native-born				
Random intercepts	SD=1.05	.04		
Number of obs.= 6,770		Number of groups= 1,090		

Table 12 also presents unexpected outcomes of the interaction term between IG and W-ETV. Similar to the results in the full model of SRO, the second-generation and native-born groups showed negative coefficients compared to the first-generation individuals. The negative outcomes indicate that youth who are in the second-generation and native-born groups whose

experience of W-ETV are expected to have a lower log odds of Substance Use than first-generation youth who experience W-ETV although the results are non-significant. Accordingly, these outcomes suggest that the first-generation individuals are more susceptible to W-ETV than the recent generation groups. Thus, the results fail to find the evidence to support H8 but discovered the inverse effects of the interaction between IG and W-ETV. The random intercept at the individual level is with a SD of 1.05 and a SE of .04.

4.3 Random Effect at the Individual Level

The multilevel logistic regression models allow the study to estimate not only the fixed effects of explanatory variables described above but also the random intercept for assessing variances at the individual level. In the Pathways study, the longitudinal research design measured individuals repeatedly which produced a cluster for each individual. It is anticipated that differences across entities have non-zero estimates to influence on the response variables SRO and Substance Use. According to the analyses results that have been shown above, the random effect estimates at the individual level are with a SD of range from 1.05 to 1.21. This represents the estimated standard deviation in the intercept in the multilevel models. These results imply that individual variances strongly affect their probability of involvement in delinquent behaviors.

4.4 Predictive Margins of ETVs across Generations

Figure 3 and 4 present the marginal effects of ETVs effects on delinquent outcomes across

different generations. In both figures, a blue line represents the first-generation, a green line represents native-born youth, and a red line represents the second-generation; the horizontal-axis denotes the counts of ETVs, and the vertical-axis is the log odds scale to represent the likelihood of reporting delinquent behavior. In Figure 3, the linearized marginal effects indicate that a unit increase in D-ETV results in a coefficient unit increase in the SRO regardless of the levels of other predictors (i.e., holding other variables constantly). The line of predictive margins for the first-generation is relatively sharper than other two groups, while the line for the second-generation is softer. The sharp trend for the first-generation group suggests that adolescents who are first-generation and experience a higher level of D-ETV (i.e., the level of D-ETV is greater than 5) may have a higher likelihood of committing SRO than individuals who are the second-generation.

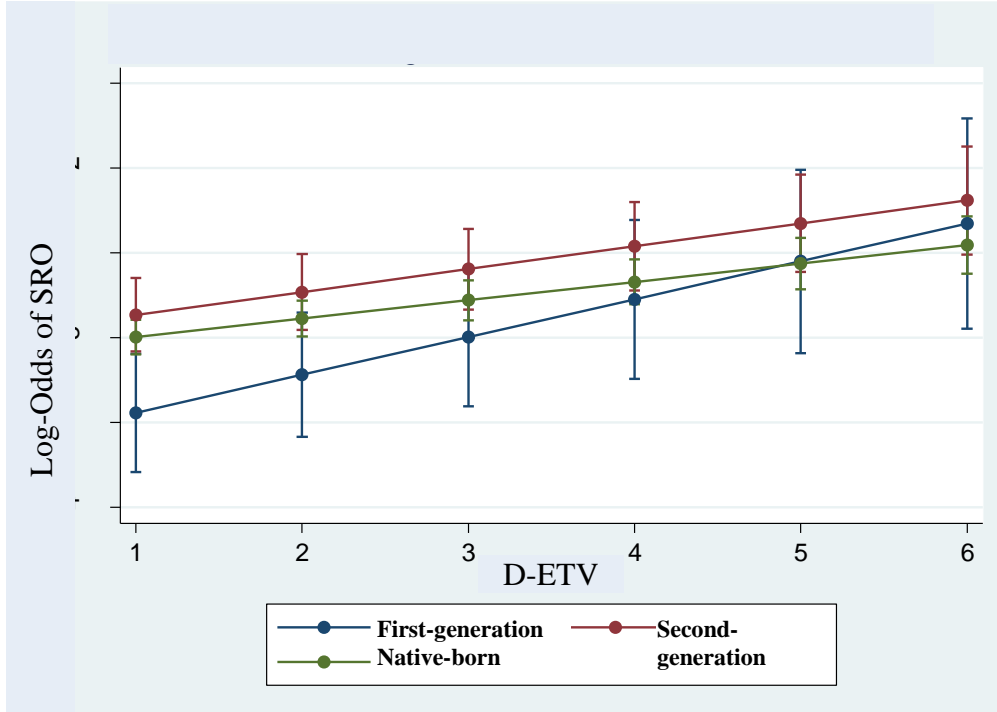


Figure 3. Marginal Effects of D-ETV on SRO across IGs

On the other hand, the predictive marginal SRO for second-generation youth is the highest among three groups, while first-generation youth had the lowest likelihood of reporting SRO. These findings respond to the results from testing H1 (i.e., first-generation youth had the lowest ETV and second-generation youth had the highest ETV.)

However, although second-generation and native-born youth reported greater SRO than first-generation youth when they encountered low counts of D-ETV, their propensity of committing SRO increased slower than first-generation youth. Altogether, first-generation youth may report less SRO than recent immigrants when all three groups had lower levels of D-ETV. However, the phenomenon of low crime propensity vanished in the first-generation group when they are exposed to high levels of D-ETV.

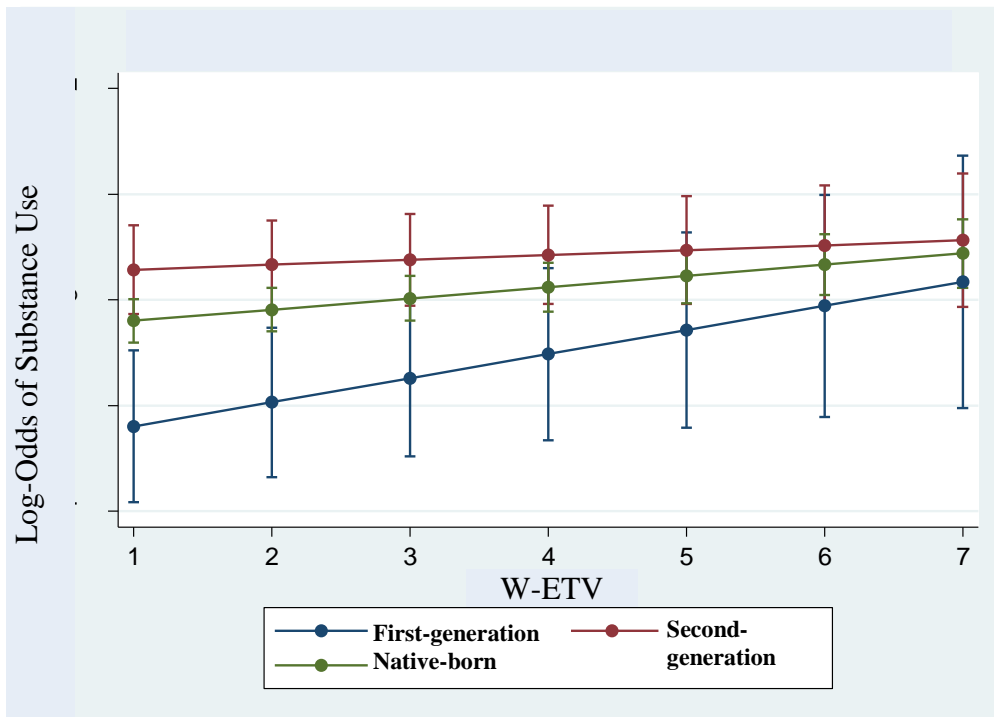


Figure 4. Marginal Effects of W-ETV on Substance Use across IGs

In Figure 4, the linearized marginal effects demonstrate that a unit increase in W-ETV results in a coefficient unit increase in the Substance Use regardless of the levels of other predictors (i.e., holding other variables constantly). The trends of predicting marginal effects of W-ETV on Substance Use across IGs are comparable to the results in Figure 3.

As Figure 4 presents, predictive SRO for second-generation youth is the highest again compared to the other two groups, native-born youth reported the medium level of SRO, and first-generation youth represented the lowest prediction of SRO among the three. However, the first-generation group showed a steeper upward tilt to the line of marginal effects than the other two groups, while the second-generation and native-born groups presented a gentler slope to the line of marginal effects. Again, the steep slope for the first-generation group implies that the greater levels of W-ETV a first-generation youth experienced in the past, then also a higher propensity of using substances may occur. Although Figure 4 showed that the likelihood of Substance Use in the first-generation is still less than other two groups when having the highest levels of W-ETV, the distance between groups were largely reduced. This “catching up” effect also illustrates the interaction term in the full model for testing H8. On the other hand, although second-generation and native-born consistently reported higher likelihood of Substance Use than first-generation through all levels of W-ETV, the propensity of Substance Use increased slower than first-generation youth. Overall, first-generation youth report less Substance Use than recent immigrants when all three groups had the same levels of W-ETV. However, the phenomenon of low propensity of using substance decreased in the first-generation group with the increase in levels of W-ETV.

CHAPTER 5

DISCUSSION

Contrary to public and some political opinion, immigration is not associated with crime but has actually been found to suppress it (Ferraro, 2016; Kremer et al., 2018; Martinez & Rosendelf, 2001; Lee & Martinez, 2002; MacDonald et al., 2013; Nielsen et al., 2005; Ousey & Kubrin, 2014; Ousey & Kubrin, 2018; Stowell et al., 2009), especially, among first-generation immigrants. However, immigration research has also found that these trends disappear among second-generation immigrants both in crime rates (Bersani et al., 2014; Bersani, 2014a; Bersani, 2014b; Morenoff & Astor, 2006) and other types of delinquency (Cavanagh, 2007; Hamilton et al., 2012; Kopak, 2013; Peña et al., 2008). Bersani (2014) described this phenomenon as the “catching-up” or “regression to the mean” effects on crimes among second-generation immigrants. There are several factors that could account for the increase in crime observed among second-generation immigrants such as assimilation levels (Bersani et al., 2014) and levels of legal socialization (Piquero et al., 2016). However, the current study suggests that the potential candidate is the exposure to violence (ETV) that second-generation immigrants experience and witness in their neighborhoods—which oftentimes are characterized by high disorder and high crime (Aiyer et al., 2014; Buka et al., 2001; Gaylord-Harden et al., 2016; Mrug et al., 2016; Zimmerman, & Kushner, 2017).

Research on violent subcultures in inner-city neighborhoods has found evidence of higher attitudes associated with the street code in disadvantaged neighborhoods (Anderson, 1999; Matsueda, Drakulich, & Kubrin, 2006). Anderson (1999) pointed out that fighting is one of the ways to obtain respect in the violent subculture that encapsulates distressed neighborhoods,

therefore experiencing violence of some sort is likely to be a common event for juveniles living in (especially) poor inner-city areas. On the other hand, MacDonald and Saunders's (2012) study revealed that first-generation youth had significantly less ETV than second- and second-plus generation youth in the same disadvantaged neighborhoods. This may suggest that different types and different levels of ETV relate in unique ways regarding adoption of street codes attitudes in a disordered community among immigrant youth.

The current study was designed to measure the effects of exposure to violence on juvenile delinquency across immigrant generations using the Pathways to Desistance Study data (Schubert & Mulvey, 2014). These data include a sample of serious adolescent offenders and contain immigrant generations' status information, self-reported offending, and experience of ETV. Furthermore, this research differentiated ETV into the direct experience (i.e., D-ETV) and witness experience (i.e., W-ETV) and assessed the effects on juveniles' offending. Finally, alluding to segmented assimilation theory (Portes & Zhou, 1993), the current study also tests the impact of neighborhood conditions and ethnic identity which are believed to have an influence on exposure to violence thereby having an impact on immigrant youth behavior. Collectively, these aspects of the current study offer an important set of extensions to the existing research in both immigration/crime and exposure to violence.

5.1 Main Findings

The first hypothesis (H1) predicted that D-ETV effects are varied across immigrant generations, while first-generation youth should experience the lowest D-ETV compared to the other two groups. This hypothesis was observed but it was not statistically significant at baseline.

The logistic regression model showed that first-generation youth reported significantly less D-ETV than second-generation youth, whereas the differences of D-ETV were not statistically significant between first-generation and native-born youth. Second-generation youth, as predicted, showed the highest D-ETV among the three generation groups while the first-generation group presented the lowest D-ETV. This result shows that second-generation youth not only catch up to the crime rate with the native-born group but also experience more D-ETV than their comparison groups. Prior studies offer some insight for these results. In the same disadvantaged neighborhoods, first-generation households serve as a protective buffer to keep their youth away from being involved with violent activities in their surrounding environment whereas household with native-born parents do not (MacDonald & Saunders, 2012). Moreover, first-generation youth may engage in more co-ethnic activities which can also provide more social capital resources for their needs (Portes & Zhou, 1993). On the other hand, however, second-generation youth might begin to acculturate to the neighborhoods they reside in because the needs of being involved in co-ethnic activities no longer exist. Therefore, if there is a high level of disorder in their communities, second-generation youth may be more likely to experience more D-ETV in the assimilation process.

The second hypothesis (H2) predicted that W-ETV effects are varied across immigrant generations, while first-generation youth should experience the lowest W-ETV. This hypothesis received support at baseline. The W-ETV significantly vary across immigrant generations. The logistic regression results revealed that first-generation youth reported significantly less W-ETV compared to second-generation and native-born youth. Different from the results of hypothesis one, W-ETV was similar for both second-generation and native-born youth implying that

second-generation youth catch up to W-ETV rates with native-born youth in the current sample. Similar to the explanation for H1 results, second-generation youth are more likely to witness violence in the disadvantaged communities when they begin to participate in more street activities and have less involvement in co-ethnic activities in the process of assimilation.

The third hypothesis (H3) posited that the increase in D-ETV would increase self-reported offending (SRO). The analysis results support this hypothesis. The increase in D-ETV at an earlier time was positively related to the SRO at present as the research predicted. This is similar to the findings in prior studies that experience of victimization (i.e., D-ETV) is associated with more precocious behaviors (e.g., running away from home) and more violent behavior at a later time because experience of D-ETV creates emotional desensitization to violence (Ebesutani, Kim, & Young, 2014; Gaylord-Harden et al., 2016; Haynie et al., 2009; Mrug et al., 2016).

Moreover, multilevel regression results also uncovered other significant findings. In this serious juvenile offender sample, both second-generation and native-born youth reported significantly higher SRO than first-generation youth. This result is consistent with prior research that recent immigrant generations are more likely to engage in delinquent activities than first-generation immigrants (Bersani et al., 2014; Bersani, 2014a; Bersani, 2014b; Morenoff & Astor, 2006). Additionally, referring to the H1 results, the higher levels of SRO among second-generation and native-born groups could be due to their high levels of D-ETV.

Furthermore, results also indicated that an increase in age showed a significantly negative association with SRO. This result is consistent with prior research findings that the majority of adolescents gradually desist in their delinquent acts when they reach their early adulthood (Hirschi & Gottfredson, 1983; Steffensmeier & Harer, 1999).

The fourth hypothesis (H4) posited that the increase in W-ETV would increase substance use. This hypothesis also received support. The increase in W-ETV at an earlier time was positively associated with substance use at present as the study hypothesized. Although the different effects between direct and witness ETV are rarely examined in the existing literature, the positive relationship between W-ETV and substance use can be found in several studies (Kilpatrick et al., 2000; Kilpatrick et al., 2003; Pinchevsky et al., 2013; Zimmerman & Kushner, 2017). Studies have found that negative mental outcomes serve as a connection between W-ETV and substance use (Buka et al., 2001; Fowler et al., 2009; Gaylord-Harden et al., 2011; Mohammad et al., 2015). This is not too surprising because serious juvenile offenders tend to have more negative psychological symptoms because they might have more opportunities to experience W-ETV.

Other significant results are also revealed in the multilevel regression model. Similar to findings in prior studies, second-generation and native-born youth are significantly more likely to use substances than first-generation youth (Cavanagh, 2007; Peña et al., 2008). The greater reports of substance use in second-generation and native-born than in first-generation youth might be due to the high levels of W-ETV in second- and second-plus immigrant generations, as shown in the H2 results. Furthermore, age showed a positive association with substance use. Although this result seems to be different from most age-crime curve studies (Hirschi & Gottfredson, 1983; Steffensmeier & Harer, 1999), Laub and Sampson's (2003) perspective of modeling change in crime can explain this positive relationship. Laub and Sampson (2003) suggested that both predatory crime and alcohol/drug crime rates decline by age, but alcohol/drug offenses rates begin to decline at a significantly later age than predatory crime

(Laub & Sampson, 2003, p.258). Their data showed that the relationship between age and substance use is positively related between age 19 to age 31 and declines afterward. The sample in the current study was collected when the adolescents were from 14-19 years old to 20-26 years old, which is the time period where substance use starts to begin and continue into early adulthood, especially among serious juvenile offenders.

Hypothesis five (H5) proposed that neighborhood conditions would mediate the effects of D-ETV on SRO, and an increase in ethnic identity would exhibit negative effects on SRO. This hypothesis was supported. An increase in neighborhood disorder is positively related to SRO, while the effects of D-ETV on SRO were still significant but declined. On the other hand, juveniles who had a higher level of ethnic identity reported significantly less SRO as research has shown. Segmented assimilation theory can help to provide some insight into these results. As the theory suggests, a highly disordered community might result in downward assimilation for immigrant youth (Portes & Zhou, 1993). This implies that an adolescent residing in a high disorder neighborhood is more likely to experience D-ETV, thereby being an influence on his or her behaviors. However, living in a disordered neighborhood is not equal to experiencing a high level of D-ETV for all immigrant youth. For example, MacDonald and Saunders's (2012) study documented that a foreign-born-parent's household (i.e., first-generation) is a protective factor of keeping youth away from committing offenses in disadvantaged neighborhoods, whereas the native-born-parent's household (second & second-plus generations) does not. The same reason might be applied to experiencing D-ETV among immigrant youth. Segmented assimilation theory, therefore, also argues that immigrant youth who attach more to their ethnic groups are less likely to assimilate to the subculture from their disordered communities, thereby

experiencing less D-ETV. Collectively, youth who experienced D-ETV are more likely to report SRO, and neighborhood conditions mediated this relationship. Moreover, ethnic identity can be regarded as a protective factor of lessening SRO in this sample of serious juvenile offenders.

The sixth hypothesis (H6) proposed that neighborhood conditions would mediate the effects of W-ETV on substance use, and an increase in ethnic identity would exhibit negative effects of substance use. This hypothesis also received support. Results uncovered that an increase in neighborhood disorder is positively related to substance use while the effects of W-ETV on substance use were still significant but lessened. On the other hand, juveniles who had a higher level of ethnic identity reported significantly less substance use as hypothesized. Segmented assimilation theory offers some explanation of the results. An adolescent residing in a highly disordered neighborhood would witness more violent events, thereby increasing their mental stress and substance use (Buka et al., 2001; Fowler et al., 2009; Gaylord-Harden et al., 2011; Mohammad et al., 2015; Zimmerman & Kushner, 2017). Thus, the chance of immigrant youth experiencing W-ETV is influenced by the neighborhood that they reside in. Additionally, an immigrant youth's attachment to co-ethnic activities could serve as a protective factor of substance use. A youth who devotes more time to his/her ethnic groups might have less time to be involved in street activities. Therefore, they may have fewer opportunities to experience W-ETV than those who assimilate more to the street subculture in their neighborhoods. As a result, youth who experience W-ETV are more likely to report substance use, and the neighborhood conditions mediated this relationship. Moreover, ethnic identity also serves as the protective factor of lessening substance use in this sample of serious juvenile offenders.

Hypothesis seven and eight examined whether ETV is a risk factor for increasing the risk of delinquency among immigrant youth and contribute to the distinct delinquency rates across immigrant generations? Hypothesis seven (H7) posited that under the same degree of D-ETV, first-generation youth would report lower SRO than second-generation and native-born youth. This hypothesis received mixed support. Results of interaction between immigrant generation status and D-ETV are twofold. First, when the levels of D-ETV were low to medium, first-generation youth reported the lowest SRO, whereas second-generation youth reported the highest SRO. This result is in the same direction as the research predicted and mirrored the levels of D-ETV that each generation experienced at H1. It also implies that first-generation households could protect immigrant youth away from committing offenses when youth experience low-medium levels of D-ETV. However, the second part of the finding showed unexpected results. When the levels of D-ETV were high, first-generation youth presented a greater likelihood of SRO than the native-born group and caught up with the SRO rates in second-generation. Although second-generation youth had the highest SRO rates, first-generation households no longer served as a protective factor for their youth when youth experience a more significant amount of D-ETV. Consequently, these results indicated that the D-ETV serves as a risk factor for increasing the likelihood of offending among immigrant youth. Notably, a high amount of D-ETV seriously increases the likelihood of SRO in first-generation youth, whereas second-generation youth remains the highest in SRO at any given degree of D-ETV.

Hypothesis eight (H8) posited that under the same degree of W-ETV, first-generation youth would report fewer substance use behaviors than second-generation and native-born youth. This hypothesis was supported but requires a more in-depth discussion. At first glance, the predictive

margins of interaction between immigrant generation status and W-ETV showed expected outcomes. First-generation youth exhibited the least substance use among the three generation groups at all levels of W-ETV.

However, two unexpected outcomes also emerged. First, second-generation youth presented the highest substance use rates among the three groups, while the native-born group had the second highest level of involvement. This result is inconsistent with the results of H2. According to H2, because second-generation and native-born youth experienced a similar degree of W-ETV, they should report the same or similar levels of substance use in the final model. The inconsistent results imply the influential interaction effects between generation status and W-ETV. That means, when a youth is second-generation, s/he might be more likely to use the substance for coping with stress than a native-born youth under the same level of W-ETV.

The other unpredicted result is the sharp slope of the substance use rate among first-generation youth. Although first-generation youth reported the lowest substance use rates, every unit increase in W-ETV could increase the likelihood of substance use much more among first-generation youth than in other groups. Altogether, these results presented that W-ETV serves as a risk factor increasing the probabilities of using substance among immigrant youth. Especially, second-generation youth are at a high risk of using substance when they experience any level of W-ETV since they might be more impressionable to W-ETV compared to other generations. Moreover, a high amount of W-ETV could seriously increase the likelihood of substance use in first-generation youth.

5.2 Theoretical Interpretation

Berry's (2005) acculturation framework and Agnew's (1992) General Strain Theory could provide useful explanations of the results, especially hypotheses seven and eight. Berry classified four strategies that immigrant groups attempt to acculturate into the dominant culture with (i.e., assimilation, separation, integration, and marginalization). Berry defined assimilation as "when individuals do not wish to maintain their cultural identity and seek daily interaction with other cultures, the assimilation strategy is defined" (Berry, 2005, p.705). Moreover, because assimilation strategy requires an individual to use "the most behavioral changes," it also potentially increases the risk of "acculturative stress." (Berry, 2005, p.707, see also Frazer et al., 2017). According to Berry, when an individual experiences deeper changes such as changing cultural identity, cultural conflicts may result in acculturative stress which is manifested by uncertainty, anxiety, and depression (Berry, 2005, p.702; see also Frazer et al., 2017).

On the other hand, in order to connect possible delinquency and strain that results from the acculturative stress, the current study drew valid perspectives from general strain theory (Agnew, 1992, 2001). Agnew (2001) articulated that several situations might create types of strain strongly related to delinquency. Three of the conditions might be related to the current study: "criminal victimization," "experiences with prejudice and discrimination based on ascribed characteristics," and "abusive peer relations" (Agnew, 2001, p.346). In the acculturation process, when an immigrant youth adapts assimilation strategy, s/he would engage in more peer activities or street events in their communities. This type of immigrant youth could face more prejudiced and discriminatory situations base on their immigrant status or encounter more peer pressures. In addition, they might experience more victimization through their street activities. All these

situations could generate strain or acculturative stress among immigrant youth and produce negative emotions conducive to offending and substance use.

With Berry's acculturative stress perspective and Agnew's general strain theory, the results of the current research could be interpreted in the following manner. An immigrant youth who adapted assimilation strategy (abandoned ethnic cultural values and only pursued host-cultural values) as the method of acculturation might have more opportunities of experiencing stressful situations. Particularly, the second-generation of immigrant youth are more likely to adapt the assimilation strategy. Second-generation youth would begin to assimilate more dominant cultural values since they were born and raised in the U.S. However, at least one or both of their parents are foreign-born, which may imply that they want their children to preserve their ethnic identity and traditions. Therefore, while second-generation youth increase their activities with peers and within their communities, they would encounter more cultural conflicts and acculturative stress. They could also experience more D-ETV and W-ETV in a neighborhood with high levels of disorder due to the increase of their activities on the street. Once the unjust stress of being victimized from D-ETV and W-ETV (Agnew, 2001) combines with the acculturative stress (Berry, 2005), second-generation youth are in an extremely high-risk condition of engaging in both types of delinquency – SRO and substance use (Agnew, 2001).

With the same logic, the results of a sharp slope of SRO and substance rates in first-generation could be interpreted. However, first-generation youth have different characteristics than second-generation youth. First-generation youth may still retain their ethnic identity and traditions as they may involve more co-ethnic activities and fewer street events. That means that, although first-generation youth may still experience acculturative stress, it is not as strong as

second-generation youth may encounter (Mossakowski, 2003). Moreover, support from the family and co-ethnic groups could protect first-generation youth from distressful situations, thereby having less motivation to commit delinquency. For first-generation youth, the most strain might occur when they experience violence, both D-ETV and W-ETV, in a community with a high level of disorder. Experiencing direct and secondary violence could create strain among first-generation youth as they did not have a similar experience in the past or in their hometown. Thus, the victimization strain could increase the likelihood of committing vengeful behaviors and involving substance use in first-generation youth (Agnew, 1992).

5.3 Limitations and Future Directions

Several limitations of the current study need to be mentioned. The first limitation is the generalizability of the result due to the sample employed. The Pathways data consists of serious juvenile offenders from two jurisdictions: Maricopa County, Arizona and Philadelphia County, Pennsylvania. Moreover, this study only selected male adolescents for analysis. Because of the sample and the research restrictions, generalizing the results to the general population (non-offender) or different jurisdictions requires caution. The second limitation is the use of self-reported offending data. Although self-reported offending data could measure the delinquency that was not caught by law enforcement, it might be involved with validity and reliability issues (Jacobs, 1999; Piquero et al., 2002). Juveniles might conceal or forget past criminal behavior in interviews, especially, the questions asked of them to recollect their offending in the past six months, which is not a short period. However, despite the limitations associated with self-reported data, it remains one of the strongest methods for collecting crime data from offending

populations for several reasons. First, official data may represent the disproportional concentration of law enforcement in immigrant communities thereby affecting disproportionate police contact for misdemeanor offenses among immigrant youth (i.e., first- or second-generation) (Davies & Fagan, 2012; Roberts, 2011). Second, in Jacobs's qualitative study work, he demonstrated that although study participants may "refuse to cooperate or may give less than reliable answers," interviewing active offenders could provide more detailed information on their offending behaviors than official data (Jacobs, 1999, p.7-11). The researchers of the Pathways to Desistance Study have documented that trained interviewers conducted interviews in a setting that participants felt comfortable in and most interviews were not institutional settings (Schubert et al., 2004). Therefore, the use of self-reported offending data among immigrant youth should be an appropriate measurement strategy for this study's research purposes.

The third limitation is the nature of the data. There are two concerns here: one is the missing data, and the other one is the cumulative value of ETV scale. Because the sample is comprised of serious juvenile offenders, and 86 of them were in facilities through all of the follow-up periods, variables such as measures of neighborhood conditions and ETVs were not available.

Fortunately, the remaining sample size was still large enough for the analysis procedure. The concern about the cumulated counts of both D-ETV and W-ETV is a limitation but also a future direction for more investigation. Due to the cumulative value, this study merely measured the levels of ETVs without specific details for each victimization experience. If future studies could access the responses of individual victimization experience, the analysis could determine which victimization experience might be the most prevalent or the most relevant to deviant acts among this youth.

The fourth limitation is the analytic limitation. In the multilevel logistic regression models, the random intercept values suggest that the between-individual differences are significant. This implies that in order to predict SRO and substance use among this sample, other variables should be considered into the model for estimating more variance at the individual level. Individual-level variables such as religion, education level, and routine activities are valuable to include for future research.

Four main directions are suggested here for future studies on immigration research. First, understanding the differences in ethnic identity across immigrant generations is imperative. Determining whether the ethnic identity serves as a protective factor of preventing delinquency among immigrant youth, especially when they experience ETV within their neighborhoods. Second, investigating the interaction between assimilation levels and neighborhood conditions among different generations is important. As segmented assimilation theory and acculturation frameworks argue, second-generation youth might have higher assimilation levels than first-generation youth; therefore, they assimilate to the surrounding cultural values more so than first-generation. The levels of disorder in their communities play a crucial role by affecting immigrant youth behavior toward either a downward trend or upward assimilation. Third, the current study referred to general strain theory to interpret the stressful situations among first- and second-generation youth. Assessing the nature and type of strain—and then the youth's reaction to them—across immigrant generations would be helpful in unpacking the association between generational status and delinquency. Lastly, as mentioned above, to investigate the effects of individual victimization experience on delinquency could be an advantage to the research on immigration and exposure to violence.

5.4 Policy Implications

With respect to crime control, current immigration policy tends to treat newly arrived migrants with harsh regulations (Chacón, 2012; King & Obinna, 2018; Schriro, 2017; Macías-Rojas, 2018) despite the null or negative relationship between immigrants and crime (Ferraro, 2016; Kremer et al., 2018; Martinez & Rosendelf, 2001; Lee & Martinez, 2002; MacDonald et al., 2013; Nielsen et al., 2005; Ousey & Kubrin, 2014; Stowell et al., 2009). However, immigration research has also found that second-generation youth report significantly higher criminal behavior than first-generation youth (Bersani et al., 2014; Bersani, 2014a; Bersani, 2014b; Morenoff & Astor, 2006). This might suggest that seeking suitable crime prevention policies for immigrant youth is imperative. Instead of implementing punitive regulations, the results of the current study suggest three directions for immigration policy.

The first recommendation is for first-generation youth. According to the results, the first generation of immigrant youth reports significantly lower delinquency rates than their peers, even when they experience ETV within neighborhoods. However, when first-generation youth experience the high amount of ETV, the cumulate victimization experience might generate stressful situations for first-generation youth, thereby increasing the chance of engaging in deviant acts. Accordingly, a crime prevention policy that aims to prevent crime by reducing the opportunities of ETV in neighborhoods and providing counseling services for youth experiencing ETV could significantly reduce the likelihood of SRO and substance use among first-generation youth.

The second suggestion is provided for second-generation youth. The study results showed that the second-generation report the highest ETV, SRO, and substance use among all three

generation groups. Second-generation youth have the greatest danger of being a delinquent than their peers because they adapt more assimilation strategies in the acculturation process. Both cultural conflicts and victimization experience could produce multiple stress situations in the second-generation group. Several solutions are recommended for crime prevention programs focusing on second-generation youth: maintaining an ethnic identity, reducing ETV in communities, and counseling services. Results showed that ethnic identity could be a protective factor for preventing immigrant youth from deviant behaviors. Reducing violent activities in neighborhoods and providing treatment for victims could decrease strain conditions in second-generation youth. Thus, crime prevention programs applying the above solutions could help second-generation youth against the high risk of committing delinquency.

The third policy implication is for native-born immigrant youth. Although most of the current study results focus on first- and second-generations, the native-born group requires different policy recommendations as well. Unlike first- and second-generation immigrant youth, native-born youth's deviant behaviors are less related to ETV levels. The increases in ETV slightly increases the likelihood of delinquency in native-born youth. Native-born youth might experience less strain of experiencing victimization and less cultural conflicts than their immigrant peers. This implies that crime prevention strategies should be designed for the potential different needs among the native-born group. Programs using social learning behavior elements or family counseling services might reduce delinquency risk among native-born youth.

The last policy recommendation is suggested for the general immigrant population. At the macro-level, the study results would support the view that immigrants should not be marginalized to one specific section of the community, particularly distressed neighborhoods.

The study results showed that although first-generation youth showed less delinquency in a disadvantaged neighborhood, they responded to rapid increases in the likelihood of committing delinquency once they are exposed to violence in their community. Moreover, second-generation youth are in the highest risk of reporting delinquency when they experience violence in their surrounding environment. If related agencies could relocate immigrant populations to a less violent area or areas with a lower level of disorder, immigrants might maintain low crime rates in the long-term.

In conclusion, different immigrant generations present distinct crime patterns. The current study explored one potential risk factor for the observed higher crime rates among second-generation youth and contributing to different crime trends across generations. The risk factor explored in the current study, exposure to violence, could help understand the changes in crime rates across immigrant generations. Moreover, the effects of exposure to violence on delinquency were found to vary across generational status. Especially, immigrant adolescents are relatively more vulnerable to ETV than native-born adolescents. Neighborhood conditions are crucial to immigrants that are in the assimilation process. Ethnic identity could be a protective factor in preventing crime for immigrant youth. Acculturation is a dynamic process. Investing in more prevention programs for immigrant youth could produce a long-term effect on crime prevention rather than implementing a harsh policy. Protecting immigrant adolescents from violence could keep low crime rates in immigrant communities from generation to generation, thereby benefiting society more generally.

REFERENCES

- Agnew, R. (1992). "Foundation for a General Strain Theory of Crime and Delinquency." *Criminology* 30(1), 47–88.
- Agnew, R. (2001). Building on the Foundation of General Strain Theory: Specifying the Types of Strain Most Likely to Lead to Crime and Delinquency. *Journal of Research in Crime and Delinquency*, 38(4), 319–361.
- Aiyer, S. M., Heinze, J. E., Miller, A. L., Stoddard, S. A., & Zimmerman, M. A. (2014). Exposure to Violence Predicting Cortisol Response During Adolescence and Early Adulthood: Understanding Moderating Factors. *Journal of Youth and Adolescence*, 43(7), 1066-1079.
- Alba, R. D., J. R. Logan, & P. E. Bellair (1994). Living with crime: The implications of racial/ethnic differences in suburban location. *Social Forces*, 73(2): 395-434.
- Alvarez-Rivera, L., Nobles, M. R., & Lersch, K. M. (2014). Latino immigrant acculturation and crime. *American Journal of Criminal Justice: AJCJ*, 39(2), 315-330.
- Anderson, E. (1999). *Code of the street: decency, violence, and the moral life of the inner city*. New York: W.W Norton.
- Arbona, C., Jackson, R. H., McCoy, A., & Blakely, C. (1999). Ethnic Identity as a Predictor of Attitudes of Adolescents toward Fighting. *The Journal of Early Adolescence*, 19(3), 323–340.
- Barrow, J. L. (2018). Trump's travel ban: Lawful but ill-advised. *Harvard Journal of Law and Public Policy*, 41(2), 691-717.
- Berry, J. W. (2005). Acculturation: Living Successfully in Two Cultures. *International Journal of Intercultural Relations*, 29(6), 697–712.
- Bersani, B. E. (2014). A game of catch-up? The offending experience of second-generation immigrants. *Crime & Delinquency*, 60(1), 60-84.
- Bersani, B. E. (2014). An examination of first and second generation immigrant offending trajectories. *Justice Quarterly: JQ*, 31(2), 315.
- Bersani, B. E., & Piquero, A. R. (2017). Examining systematic crime reporting bias across three immigrant generations: Prevalence, trends, and divergence in self-reported and official reported arrests. *Journal of Quantitative Criminology*, 33(4), 835-857.

- Bersani, B. E., Loughran, T. A., & Piquero, A. R. (2014). Comparing patterns and predictors of immigrant offending among a sample of adjudicated youth. *Journal of Youth and Adolescence*, 43(11), 1914-1933.
- Bowman Heads, A. M., Glover, A. M., Castillo, L. G., Blozis, S., & Kim, S. Y. (2018). Dimensions of ethnic identity as protective factors for substance use and sexual risk behaviors in African American college students. *Journal of American College Health*, 66(3), 178-186.
- Breslow, N. E., & D. G. Clayton (1993). Approximate Inference in Generalized Linear Mixed Models, *Journal of the American Statistical Association*, 88:421, 9-25.
- Bui, H. N. (2013). Racial and ethnic differences in the immigrant paradox in substance use. *Journal of Immigrant and Minority Health*, 15(5), 866-81.
- Buka, S. L., Stichick, T. L., Birdthistle, I., & Earls, F. J. (2001). Youth exposure to violence: Prevalence, risks, and consequences. *American Journal of Orthopsychiatry*, 71(3), 298-310.
- Bursik, R. J. (1988). Social Disorganization and Theories of Crime and Delinquency: Problems and Prospects. *Criminology*, 26 (4), 519-551.
- Cavanagh, S. E. (2007). Peers, drinking, and the assimilation of Mexican American youth. *Sociological Perspectives*, 50(3), 393-416.
- Chacón, J. (2012). OVERCRIMINALIZING IMMIGRATION. *The Journal of Criminal Law and Criminology*, 102(3), 613–652.
- Chassin, L., Rogosch, F., & Barrera, M. (1991). Substance use and symptomatology among adolescent children of alcoholics. *Journal of Abnormal Psychology*, 100(4), 449-463.
- Curry, T. R., Morales, M. C., Zavala, E., & Hernandez, J. L. (2018). Why is family violence lower among Mexican immigrants? The protective features of Mexican culture. *Journal of Family Violence*, 33(3), 171-184.
- Dastyari, A., & Effeney, L. (2012). Immigration detention in Guantanamo Bay (not going anywhere anytime soon). *Shima: the international journal of research into island cultures*, 6(2), 49 - 65.
- 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, 99-124.

- Davis, J., Dumas, T., Berey, B., Merrin, G., Cimpian, J., & Roberts, B. (2017). Effect of Victimization on Impulse Control and Binge Drinking among Serious Juvenile Offenders from Adolescence to Young Adulthood. (Clinical report). *Journal of Youth and Adolescence*, 46(7), 1515–1532.
- Decker, S., Lewis, P., Provine, D., & Varsanyi, M., (2009), On the frontier of local law enforcement: local police and federal immigration law, in William F. MacDonald (ed.) *Immigration, Crime and Justice (Sociology of Crime, Law and Deviance, Volume 13)* Emerald Group Publishing Limited, 261 – 276.
- Eagly, I. V. (2013). Criminal justice for noncitizens: an analysis of variation in local enforcement. *NY University Law Rev* 88:1126–1223.
- Ebesutani, C., Kim, E., & Young, J. (2014). The Role of Violence Exposure and Negative Affect in Understanding Child and Adolescent Aggression. *Child Psychiatry and Human Development*, 45(6), 736-745.
- Ferraro, V. (2016). Immigration and crime in the new destinations, 2000-2007: A test of the disorganizing effect of migration. *Journal of Quantitative Criminology*, 32(1), 23-45.
- Finkelhor, D., Turner, H., Ormrod, R., Hamby, S., & Kracke, K. (2009). *National Survey of Children's Exposure to Violence. Juvenile Justice Bulletin*. Washington, D.C.]: Distributed by ERIC Clearinghouse.
- Frazer, A. L., Rubens, S., Johnson-motoyama, M., Dipierro, M., & Fite, P. J. (2017). Acculturation dissonance, acculturation strategy, depressive symptoms, and delinquency in Latina/o adolescents. *Child & Youth Care Forum*, 46(1), 19-33.
- Gaylord-harden, N. K., Cunningham, J. A., & Zelencik, B. (2011). Effects of Exposure to Community Violence on Internalizing Symptoms: Does Desensitization to Violence Occur in African American Youth? *Journal of Abnormal Child Psychology*, 39(5), 711-719.
- Gaylord-Harden, N. K., Dickson, D., & Pierre, C. (2016). Profiles of Community Violence Exposure among African American Youth: An Examination of Desensitization to Violence Using Latent Class Analysis. *Journal of Interpersonal Violence*, 31(11), 2077.
- Greene, W. H. (2008). *Econometric analysis*. 6th ed., Upper Saddle River, N.J.: Prentice Hall.
- Gummelt, G. (2018). "Violence is everywhere!" An analysis of children's narratives on violence. *Child & Youth Services*, 39(1), 54-74.

- Haller, W., Portes, A., Lynch, S. M., Alba, R., Kasinitz, P., & Waters, M. C. (2011). Dreams fulfilled, dreams shattered: Determinants of segmented assimilation in the second Generation/The kids are (mostly) alright: Second-generation assimilation: Comments on Haller, Portes and Lynch/on the dangers of rosy lenses: Reply to Alba, Kasinitz and Waters. *Social Forces*, 89(3), 733-773,775-781.
- Hamilton, H. A., Danielson, A. M., Mann, R. E., & Paglia-Boak, A. (2012). The roles of family, peer, school, and attitudinal factors in cannabis use across immigrant generations of youth. *Journal of Drug Issues*, 42(1), 46-58.
- Hardaway, C. R., Larkby, C. A., & Cornelius, M. D. (2014). Socioemotional Adjustment as a Mediator of the Association between Exposure to Community Violence and Academic Performance in Low-Income Adolescents. *Psychology of Violence*, 4(3), 281-293.
- Hartman, T. K., Newman, B. J., & Bell, C. S. (2014). Decoding prejudice toward Hispanics: group cues and public reactions to threatening immigrant behavior. *Political Behavior* 36:143–163.
- Haynie, D. L., Petts, R. J., Maimon, D., & Piquero, A. R. (2009). Exposure to Violence in Adolescence and Precocious Role Exits. *Journal of Youth and Adolescence*, 38(3), 269-286.
- Hernández, C. (2013). Creating Crimmigration. *Brigham Young University Law Review*, 2013(6), 1457–1515.
- Hirschi, T., & Gottfredson, M. (1993). Age and the Explanation of Crime. *American Journal of Sociology*, 99, 522-584.
- Huizinga, D., Esbensen, F., & Weiher, A. (1991). Are there multiple paths to delinquency? *Journal of Criminal Law and Criminology*, 82, 83-118.
- Inda, J. X. (2013). Subject to deportation: IRCA, “criminal aliens”, and the policing of immigration. *Migration Studies*, 1:292–310.
- Inda, J. X., & Dowling, J. A. (2013). Introduction: governing migrant illegality. In: Dowling JA, Inda JX (eds) *Governing immigration through crime: a reader*. Stanford University Press, Stanford.
- Jacobs, B. (1999). *Dealing crack : the social world of streetcorner selling*. Boston: Northeastern University Press.
- Jackson, A., Browning, C., Krivo, L., Kwan, M., & Washington, H. (2016). The Role of Immigrant Concentration within and beyond Residential Neighborhoods in Adolescent Alcohol Use. *Journal of Youth and Adolescence*, 45(1), 17–34.

- Joseph, N. P., Augustyn, M., Cabral, H., & Frank, D. A. (2006). Preadolescents' Report of Exposure to Violence: Association with Friends' and Own Substance Use. *Journal of Adolescent Health, 38*(6), 669-674.
- Kilpatrick, D. G., Acierno, R., Saunders, B., Resnick, H. S., Best, C. L., & Schnurr, P. P. (2000). Risk factors for adolescent substance abuse and dependence: data from a national sample. *Journal of Consulting and Clinical Psychology, 68*(1), 19-30.
- Kilpatrick, D., Ruggiero, K. J., Acierno, R., Saunders, B., Resnick, H., & Best, C. L. (2003). Violence and risk of PTSD, major depression, substance abuse/dependence and comorbidity: Results from the National Survey of Adolescents. *Journal of Consulting and Clinical Psychology, 71*(4), 692-700.
- King, R. D., & Obinna, D. N. (2018). Violent crime and immigrant removals: Reasons and determinants of immigrant deportations, 1908-1986. *Migration Letters, 15*(2), 239-254.
- Kopak, A. M. (2013). The relative importance of immigrant generation for Mexican Americans alcohol and tobacco use from adolescence to early adulthood. *Journal of Immigrant and Minority Health, 15*(3), 569-76.
- Koper, C. S., Guterbock, T. M., Woods, D. J., Taylor, B., & Carter, T. J. (2013). The effects of local immigration enforcement on crime and disorder: A case study of Prince William County, Virginia. *Criminology & Public Policy, 12*(2), 239-276.
- Kremer, T. R., Sutton, K., & Kremer, K. P. (2018). Immigrant youth have significantly lower rates of externalizing behavior than native-born Americans: Differences by region of birth. *Journal of Immigrant and Minority Health, 1-7*.
- Kubrin, C. E., & Ishizawa, H. (2012). Why some immigrant neighborhoods are safer than others: Divergent findings from Los Angeles and Chicago. *The Annals of the American Academy of Political and Social Science, 641*(1), 148-173.
- Kubrin, C. E., & Weitzer, R. (2003). New directions in social disorganization theory. *Journal of Research in Crime and Delinquency, 40*(4), 374-402.
- Kubrin, C.E., & Ousey, G. C., (2009), Immigration and homicide in urban America: what's the connection?, in William F. McDonald (ed.) *Immigration, Crime and Justice (Sociology of Crime, Law and Deviance, Volume 13)* Emerald Group Publishing Limited, 17-32.
- Laub, J. & Robert J. S. (2003). *Shared Beginnings, Divergent Lives: Delinquent Boys to Age 70*. Cambridge, MA: Harvard University Press.
- Lauritsen, J. L., Sampson, R. J., & Laub, J. H. (1991). The Link between Offending and Victimization among Adolescents. *Criminology, 29*(2), 265-292.

- Lee, E. (1999). Immigrants and immigration law: A state of the field assessment. *Journal of American Ethnic History*, 18(4), 85-114.
- Lee, J., Steinberg, L., Piquero, A., & Knight, G. (2011). Identity-Linked Perceptions of the Police among African American Juvenile Offenders: A Developmental Perspective. *Journal of Youth and Adolescence*, 40(1), 23–37.
- Lee, M., & Martinez, R. (2002). Social disorganization revisited: mapping the recent immigration and black homicide relationship in northern Miami. *Sociological Focus*, 35(4), 363–380.
- Lee, M., Martinez, R., & Rosenfeld, R. (2001). Does Immigration Increase Homicide? Negative Evidence from Three Border Cities. *The Sociological Quarterly*, 42(4), 559–580.
- Leventhal, T., & Brooks-Gunn, J. (2000). The neighborhoods they live in: The effects of neighborhood residence on child and adolescent outcomes. *Psychological Bulletin*, 126(2), 309–337.
- Lin, N. (1999). Building a network theory of social capital. *Connections*, 1, 28–51.
- 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.
- 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.
- MacDonald, J., & Saunders, J. (2012). Are immigrant youth less violent? Specifying the reasons and mechanisms. *Annals of the American Academy of Political and Social Science*, 641, 125.
- Macías-Rojas, P. (2018). Immigration and the war on crime: Law and order politics and the illegal immigration reform and immigrant responsibility act of 1996. *Journal on Migration and Human Security*, 6(1).
- Macías-Rojas, P. (2018). The prison and the border: An ethnography of shifting border security logics. *Qualitative Sociology*, 41(2), 221-242.
- Marcell, A. (1994). Understanding Ethnicity, Identity Formation, and Risk Behavior among Adolescents of Mexican Descent. *Journal of School Health*, 64(8), 323–327.
- Margolin, G., & Gordis, E. (2000). The Effects of Family and Community Violence on Children. *Annual Review of Psychology*, 51(1), 445–479.

- Martinez, R., & Lee, M., (2000). On immigration and crime. In: G. LaFree (Ed.), *Criminal Justice 2000: The changing nature of crime* (Vol. 1, pp. 485-524). Washington, DC: National Institution of Justice.
- Matsueda, R, Drakulich, K., & Kubrin, C. 2006. Race and neighborhood codes of the street. In R.D. Peterson, L.J. Krivo, and J. Hagan (Eds.) *The Many Colors of Crime: Inequalities of Race, Ethnicity, and Crime in America*. New York University Press.
- Matthew T. Lee, R. (2009). Immigration reduces crime: an emerging scholarly consensus. In *Sociology of Crime Law and Deviance* (Vol. 13, pp. 3–16). Emerald Group Publishing Limited.
- Medrano, M. P. (2018). Not Yet Gone, and Not Yet Forgotten: The Reasonableness Of Continued Mandatory Detention Of Noncitizens Without A Bond Hearing. *Journal of Criminal Law & Criminology*, 108(3), 597-637.
- Mercy, J. A., Krug, E. G., Dahlberg, L. L., & Zwi, A. B. (2003). Violence and health: The united states in a global perspective. *American Journal of Public Health*, 93(2), 256-61.
- Moffitt, T. E. (1993). Adolescence-limited and life-course-persistent antisocial behavior: A developmental taxonomy. *Psychological Review*, 100(4), 674-701.
- Monahan, K., King, K., Shulman, E., Cauffman, E., & Chassin, L. (2015). The effects of violence exposure on the development of impulse control and future orientation across adolescence and early adulthood: Time-specific and generalized effects in a sample of juvenile offenders. *Development and Psychopathology*, 27(4 Pt 1), 1267–1283.
- Morenoff, J. D., & Astor, A. (2006). *Immigrant assimilation and crime: Generational differences in youth violence in Chicago*. In Immigration and crime: Race, ethnicity, and violence, eds. Ramiro Martinez Jr. and Abel Valenzuela Jr., 36-63. New York, NY: New York University.
- Mossakowski, K. N. (2003). Coping with perceived discrimination: Does ethnic identity protect mental health? *Journal of Health and Social Behavior*, 44(3), 318-31.
- Mrug, S., Madan, A., & Windle, M. (2016). Emotional Desensitization to Violence Contributes to Adolescents' Violent Behavior. *Journal of Abnormal Child Psychology*, 44(1), 75-86.
- Mulvey, E. P., & Schubert, C. A. (2012). Some Initial Findings and Policy Implications of the Pathways to Desistance Study. *Victim Offender*, 7(4), 407-427.
- Mulvey, E.P., Schubert, C.A., & Piquero, A.R. (2014). Pathways to desistance: Final technical report. Washington, DC: National Institute of Justice.

- Nagasawa, R., Qian, Z., & Wong, P. (2001). Theory of segmented assimilation and the adoption of marijuana use and delinquent behavior by Asian pacific youth. *The Sociological Quarterly*, 42(3), 351-372.
- Nielsen, A., Lee, M., & Martinez, R. (2005). Integrating race, place and motive in social disorganization theory: lessons from a comparison of black and Latino homicide types in two immigrant destination cities. *Criminology*, 43(3), 837-872.
- Ousey, G. C., & Kubrin, C. E. (2014). Immigration and the changing nature of homicide in US cities, 1980-2010. *Journal of Quantitative Criminology*, 30(3), 453-483.
- Ousey, G. C., & Kubrin, C. E. (2018). Immigration and Crime: Assessing a Contentious Issue. *Annual Review of Criminology*, 1(1), 63-84.
- Park, R. E., & Burgess, E. W. (1924). *Introduction to the Science of Sociology*. Chicago: University of Chicago Press.
- Peguerro, A. A. (2008). Is immigrant status relevant in school violence research? An analysis with Latino students. *Journal of School Health*, 78(7), 397-404.
- Peguerro, A. A. (2013). An adolescent victimization immigrant paradox? School-based routines, lifestyles, and victimization across immigration generations. *Journal of Youth and Adolescence*, 42(11), 1759-73.
- Peña, J., B., Wyman, P. A., Brown, C. H., Matthieu, M. M., Olivares, T. E., Hartel, D., & Zayas, L. H. (2008). Immigration generation status and its association with suicide attempts, substance use, and depressive symptoms among Latino adolescents in the USA. *Prevention Science*, 9(4), 299-310.
- Pew Research Center. (2013). *Second-generation Americans: A portrait of the adult children of immigrants*. Washington, DC.
- Pew Research Center. (2018). *Key Findings about U.S. Immigrants*. Washington, D.C. Retrieved from: <https://www.pewresearch.org/fact-tank/2018/11/30/key-findings-about-u-s-immigrants/>.
- Phinney, J. S. (1992). The multiple ethnic identity measure. *Journal of Adolescent Research*, 7(2), 156-176.
- Pickett, J. (2016). On the Social Foundations for Crimmigration: Latino Threat and Support for Expanded Police Powers. *Journal of Quantitative Criminology*, 32(1), 103-132.
- Pinchevsky, G. M., Wright, E. M., & Fagan, A. A. (2013). Gender differences in the effects of exposure to violence on adolescent substance use. *Violence and Victims*, 28(1), 122-144.

- Piquero, A. R., Bersani, B. E., Loughran, T. A., & Fagan, J. (2016). Longitudinal patterns of legal socialization in first-generation immigrants, second-generation immigrants, and native-born serious youthful offenders. *Crime and Delinquency*, 62(11), 1403-1425.
- Piquero, A. R., Macintosh, R., & Hickman, M. (2002). The Validity of a Self-reported Delinquency Scale: Comparisons across Gender, Age, Race, and Place of Residence. *Sociological Methods & Research*, 30(4), 492–529.
- Portes, A., & Zhou, M. (1993). The New Second Generation: Segmented Assimilation and Its Variants. *Annals of the American Academy of Political and Social Science*, 530:74–96.
- Purugganan, O., Stein, R., Silver, E., & Benensen, B. (2000). Exposure to violence among urban school-aged children: Is it only on television? *Pediatrics*, 106, 949–954.
- Raudenbush, S. W., & R. J. Sampson. (1999). “Econometrics”: Toward A Science of Assessing Ecological Settings, with Application to the Systematic Social Observation of Neighborhoods. *Sociological Methodology*, 29: 1-41.
- Raudenbush, S. W., Johnson, C., and Sampson, R. J. (2003). A Multivariate, Multilevel Rasch Model for Self-Reported Criminal Behavior. *Sociological Methodology* 33, 169-211.
- Rennison, C. (2002). *Criminal victimization, 2001: Changes 2000-01 with trends 1993-2001* United States Bureau of Justice Statistics Clearinghouse.
- Roberts J. (2011). Why misdemeanors matter: defining effective advocacy in the lower criminal courts. *UC Davis Law Rev* 45:277–372.
- Rosenthal, B. S., & Wilson, C. W. (2006). Adolescents' psychological response to the experience of community interpersonal violence: a cross-national and a cross-cultural comparison. *Adolescence*, 41(163), 417-33.
- Rumbaut, R. G. (1994). The crucible within: Ethnic identity, self-esteem, and segmented assimilation among children of immigrants. *The International Migration Review*, 28(4), 748-94.
- Rumbaut, R. G. (1997). Assimilation and Its Discontents: Between Rhetoric and Reality. *International Migration Review* 31, 923-960.
- Sampson, R. (2008). Rethinking crime and immigration. *Contexts*, 7, 28-33.
- Sampson, R. J., & Groves, W. B. (1989). Community Structure and Crime: testing social disorganization theory. *American Journal of Sociology*, 94, 744-802.
- Sampson, R. J., Raudenbush, S. W., & Earls, F. (1997). Neighborhoods and Violent Crime. *Science*, 277, 918-924.

- Sampson, R., Morenoff, J., & Raudenbush, S. (2005). Social anatomy of racial and ethnic disparities in violence. *The American Journal of Public Health, 95*(2), 224–232.
- Scarpa, A. (2001). Community Violence in a Young Adult Sample: Lifetime Prevalence and Socio-Emotional Effects. *Journal of Interpersonal Violence, 16*, 36–53.
- Scherzer, T., & Pinderhughes, H. L. (2002). Violence and gender: Reports from an urban high school. *Violence and Victims, 17*(1), 57–72.
- Schriro, D. (2017). Weeping in the Playtime of Others: The Obama Administration’s Failed Reform of ICE Family Detention Practices. *Journal on Migration and Human Security, 5*(2), 452–480.
- Schubert, C. A., Mulvey, E. P., Steinberg, L., Cauffman, E., Losoya, S., Hecker, T., & Knight, G. P. (2004). Operational Lessons from the Pathways to Desistance Project. *Youth Violence and Juvenile Justice, 2*(3), 237–255.
- Selner-Ohagan, M., Kindlon, D., Buka, S., Raudenbush, S., & Earls, F. (1998). Assessing exposure to violence in urban youth. *Journal of child Psychology and Psychiatry and allied Disciplines, 39*(2), 215–224.
- Shaw, C. R., & McKay, H. D. (1942). *Juvenile delinquency and urban areas*. Chicago, IL, US: University of Chicago Press.
- Shrake, E. K., & Rhee, S. (2004). Ethnic Identity as a Predictor of Problem Behaviors among Korean American Adolescents. *Adolescence, 39*(155), 601–22.
- Simmons, W. P., Alvord, D., & Elizabeth, S. V. (2018). Immigration Enforcement, the Racialization of Legal Status, and Perceptions of the Police. *Du Bois Review, 15*(1), 107–128.
- Skogan, W. G. (1990). *Disorder and decline: Crime and the spiral of decay in American neighborhoods*. Berkeley: University of California Press.
- Spencer, J. H., & Le, T. N. (2006). Parent refugee status, immigration stressors, and Southeast Asian youth violence. *Journal of Immigrant and Minority Health, 8*(4), 359–68.
- Stansfield, R. (2012). A multilevel analysis of Hispanic youth, exposure to the United States, and retail theft. *Race and Social Problems, 4*(2), 121–132.
- Steele, F. (2008) Multilevel models for longitudinal data. *Journal of the Royal Statistical Society: series A (statistics in society), 171* (1). pp. 5–19.
- Steenbeek, W., & Hipp, J. R. (2011). A Longitudinal Test of Social Disorganization Theory: Feedback Effects among Cohesion, Social Control, and Disorder. *Criminology, 49*(3), 833–871.

- Steffensmeier, D., & Harer, M. D. (1999). Making Sense of Recent US Crime Trends, 1980 to 1996/1998: Age composition effects and other explanations. *Journal of Research in Crime and Delinquency*, 36, 235-274.
- Stowell, J. I., Messner, S. F., Mcgeever, K. F., & Raffalovich, L. E. (2009). Immigration and the recent violent crime drop in the United States: A pooled, cross-sectional time-series analysis of metropolitan areas. *Criminology*, 47(3), 889-928.
- Unger, J. B., Cruz, T. B., Rohrbach, L. A., Ribisl, K. M., Baezconde-Garbanati, L., Chen, X., Trinidad, D. R., & Johnson, C. A. (2000). English language use as a risk factor for smoking initiation among Hispanic and Asian American adolescents: Evidence for mediation by tobacco-related beliefs and social norms. *Health Psychology*, 19(5), 403–410.
- United States Census Bureau. (2010). Current population survey. Washington, DC: U.S. Census Bureau, Population Division.
- Valentino, N. A., Brader, T., & Jardina, A. E. (2013). Immigration opposition among US whites: general ethnocentrism or media priming of attitudes toward Latinos? *Political Psychology*, 34:149–166.
- Van Ngo, H., Calhoun, A., Worthington, C., Pyrch, T., & Este, D. (2017). The Unravelling of Identities and Belonging: Criminal Gang Involvement of Youth from Immigrant Families. *Journal of International Migration and Integration*, 18(1), 63-84.
- Vermeiren, R., Ruchkin, V., Leckman, P. E., Deboutte, D., & Schwab-Stone, M. (2002). Exposure to violence and suicide risk in adolescents: A community study. *Journal of Abnormal Child Psychology*, 30(5), 529-537.
- Williams, J. L., Aiyer, S. M., Durkee, M. I., & Tolan, P. H. (2014). The Protective Role of Ethnic Identity for Urban Adolescent Males Facing Multiple Stressors. *Journal of Youth and Adolescence*, 43(10), 1728-41.
- 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.
- Wong, S. K. (1999). Acculturation, peer relations, and delinquent behavior of Chinese-Canadian youth. *Adolescence*, 34(133), 107-19.
- Xie, Y., & Greenman, E. (2005). *Segmented Assimilation Theory: A reformulation and Empirical Test*. Population Studies Center Research Report. University of Michigan.
- Xie, Y., & Greenman, E. (2011). The social context of assimilation: Testing implications of segmented assimilation theory”. *Social Science Research*, 40(40), 965–984.

- Young, J. G. (2017). Making America 1920 again? Nativism and US immigration, past and present. *Journal on Migration and Human Security*, 5(1), 217-235.
- Zhou, Min. (1997). Growing up American: The challenge confronting immigrant children and children immigrants. *Annual Review of Sociology* 23:63-95.
- Zimmerman, G. M. (2015). Do age effects on youth secondary exposure to violence vary across social context? *Justice Quarterly: JQ*, 32(2), 193-222.
- Zimmerman, G. M., & Kushner, M. (2017). Examining the Contemporaneous, Short-Term, and Long-Term Effects of Secondary Exposure to Violence on Adolescent Substance Use. *Journal of Youth and Adolescence*, 46(9), 1933-1952.
- Zimmerman, G. M., Messner, S. F., & Rees, C. (2014). Incorporating unstructured socializing into the study of secondary exposure to community violence: Etiological and empirical implications. *Journal of Interpersonal Violence*, 29(10), 1802.
- Zona, K., & Milan, S. (2011). Gender differences in the longitudinal impact of exposure to violence on mental health in urban youth. *Journal of Youth and Adolescence*, 40(12), 1674-90.

BIOGRAPHICAL SKETCH

Meng Ru Shih is a PhD candidate in the Criminology program at The University of Texas at Dallas (UTD) in the School of Economic, Political, and Policy Sciences. Meng Ru is originally from Taiwan and has studied the Doctor of Philosophy in Criminology at UTD since 2015. She earned her Master of Arts in Criminology at National Taipei University in 2012 and her Bachelor of Arts in Sociology at Soochow University in 2007. She was a volunteer counselor serving in a juvenile detention center from 2010 to 2012. She also participated in several research projects from 2010 to 2014 such as Campus Anti-Bullying Project, Soft Drugs Policy Evaluation, and Restorative Justice Mediator Training Project. Her research interests focus on juvenile delinquency, juvenile substance use, inmate victimization, and immigration research. Her specialty is in both quantitative and qualitative research methods in social science studies. Meng Ru also used to be a sponsored motorbike rider and joined several races in Taiwan and one international race in Japan. She is also a yoga instructor and received the “Group Exercise Instructor of the Year” award at UTD in 2017. Camping and hiking are her new outdoor hobbies.

CURRICULUM VITAE

Meng Ru (Lily) Shih

The University of Texas at Dallas
Criminology & Criminal Justice Program
800 W. Campbell Road, GR 2.510
Richardson, TX. 75080
Email: Mengru.Shih@utdallas.edu

Education

2015 – Present: **DOCTORAL CANDIDATE**, Criminology, The University of Texas at Dallas
(Degree Expected Spring 2019).

Dissertation: *Examining the Relationship between Exposure to Violence and Delinquent Behaviors across Different Immigrant Generations* (Prospectus Defense in May 2019)

Dissertation Committee: Alex R. Piquero (Chair), Bruce A. Jacobs, Nicole Leeper Piquero, Andrew P. Wheeler.

2010 – 2012: **MASTERS OF ARTS**, Graduate School of Criminology, National Taipei University. Taipei, Taiwan.

Master Thesis: *The Life-Course and Termination Factors for Female Adolescent Drug Abusers in a Juvenile Reformatory in Taiwan*. National Taipei University.

2003 – 2007: **BACHELOR OF ARTS**, Department of Sociology, Soochow University. Taipei, Taiwan.

Research Interests

Juvenile delinquency; life-course criminology; quantitative research methods; substance abuse and rehabilitation; corrections and reentry; restorative justice; immigration policy.

Research Experience

2010-2014: **RESEARCH ASSISTANT**, National Taipei University, Taiwan.

I was a research assistant while I studied for my Master's degree in Criminology.

The research projects included:

2014: **RESTORATIVE JUSTICE MEDIATOR TRAINING PROJECT** (PI: Dr. Susyan Jou) National Taipei University.

Duty: Program development.

2013: **SOFT DRUGS POLICY EVALUATION** (Taiwan National Development Council funding). (PI: Dr. Chuen-Jim Sheu) National Taipei University.

Duty: Project development, cases interview, qualitative analysis, and data analysis.

2012-2013: **CAMPUS ANTI-BULLYING CONFERENCE** (Taiwan Ministry of Education funding). (PI: Dr. Susyan Jou) National Taipei University.

Duty: Organization of restorative justice training in conflict mediation for school personnel; principal trainer.

2011-2012: **CAMPUS ANTI-BULLYING PROJECT** (Taiwan Ministry of Education funding). (PI: Dr. Charles Hou and Dr. Susyan Jou) National Taipei University.

Duty: Field observation, data analysis, report development, and preparation.

2011: **INTIMATES VIOLENCE REPORTS FOLLOW-UP STUDY** (Taiwan Ministry of Justice funding). (PI: Dr. Lanying Huang and Dr. Yushen Lin) National Taipei University.

Duty: Field interview, data analysis, report development, and received interviewer training.

Publication

Meng Ru Shih. "Examining the Fear of Victimization among Taiwanese Inmates." (Under Review)

Technical Reports

Sheu, C.J.; Tsai, T.M.; Cheng, Y.S.; Lai, Y.L.; Yang, J. H.; Lin, Q. H.; **Shih, M. R.** (2015)
Level-3 and Level-4 Soft Drugs Policy Evaluation and Prevention Study. *National Development Council*, Taipei City. (Chinese)

Lin, Yusheng & **Shih, Meng-Ru** (2012). Over Response? Slow Response? The Initial Findings of Campus Bullying Report System. *Crime Prevention and Innovation Technology through Academic Perspective Council*. Central Police University, Taipei City. (Chinese)

Works in Progress

- Meng Ru Shih “Violent Crime and Divorce Rate in Texas – Error Correction Model Application.”
- Meng Ru Shih “‘I know how to stop using drugs!’ An Exploratory Study of Drug Use Trajectories among Adolescent Females in Taiwan.”

Conference Presentations

- Meng Ru Shih. 2018. **How Does Divorce Rate Influence Murder Rate – Error Correction Model Application.** Paper presented at 2018 American Society of Criminology Conference, Atlanta, GA.
- Meng Ru Shih. 2017. **“I Know How to Stop Using Drugs!” An Exploratory Study of Drug Use Course for Adolescent Females in Taiwan.** Paper presented at 2017 American Society of Criminology Conference, Philadelphia, PA.
- Meng Ru Shih. 2017. **Prisoners’ Fear in a Chinese Society: Personal Characteristics, Locations, and Fear of Victimization.** Paper presented at 2017 American Society of Criminology Conference, Philadelphia, PA.
- Meng Ru Shih. 2016. **Fear in Prisons.** Paper presented at 2016 American Society of Criminology Conference, New Orleans, LA.
- Meng Ru Shih. 2014. **The Life-Course and Termination Factors for Female Adolescent Drug Abusers in Juvenile Reformatory.** Paper presented at 2014 American Society of

Criminology Conference San Francisco, CA.

- Meng Ru Shih. 2013. **Why Nobody Likes Me: Bullying Cases Study**. Paper presented at 2013 American Society of Criminology Conference Atlanta, GA.
- Meng Ru Shih. 2012. **Road out of Hell: The Course and Termination Factors for Female Adolescent Drug Abusers**. Paper presented at 2012 Asian Criminological Society Conference in Seoul, South Korea.

Teaching Experience

Spring 2019: **INSTRUCTOR** of “Theories of Justice,” University of Texas at Dallas.

Fall 2018: **INSTRUCTOR** of “Methods of Quantitative Analysis in the Social and Policy Sciences,” University of Texas at Dallas.

Spring 2018: **GUEST LECTURER** of “Community-Based Programs for Juveniles” in the course “Youth Crime and Justice,” University of Texas at Dallas

Spring 2018: **TEACHING ASSISTANT** of “Youth Crime and Justice” and “Advanced Criminal Justice,” University of Texas at Dallas.

Fall 2017: **TEACHING ASSISTANT** of “Descriptive and Inferential Statistics,” University of Texas at Dallas

Dec 28/2017: **GUEST LECTURER**. “The Evidence-Based Study: Family, Peers, and School Based Crime Prevention Programs,” National Taipei University, Taipei, Taiwan.

Teaching Awards

2019: **Nomination of President's Teaching Excellence Award**

Teaching Interests

Undergraduate Level:

- Quantitative methods in Social Science Research
- Introduction to Criminology
- Ethics in Criminal Justice
- Criminology Theories
- Drug Crime

- Immigration and Crime

Graduate Level:

- Research Methods
- Inferential Statistics
- Multilevel Modeling
- Data Management
- Restorative Justice
- Evidence-Based Crime Policy
- Comparative Criminology

Professional Experience

2015-2017: **GROUP FITNESS INSTRUCTOR**, University of Texas at Dallas.

2013: **RESTORATIVE JUSTICE MEDIATOR** in Taipei Court, Taiwan.

2010-2012: **VOLUNTEER CONSULTANT**, Taipei Juvenile Detention House, Taiwan.

2006-2007: **VICE DIRECTOR** of Graduate Student Association, Soochow University, Taiwan.

2005-2006: **MINISTER** of Academic Department in Student Association, Soochow University, Taiwan.

Training and Certificates

2016-2018: Adult and Child CPR/AED, American Red Cross.

2016: International Teaching Assistant Effectiveness Course, offered by ELS Education Services.

2016: Advanced-High Level Proficiency Certificate from the American Council on the Teaching of Foreign Languages.

2013-2014: Restorative Justice Mediator Training Course, National Taipei University, Taiwan.

2010: Suicide Prevention Training for counseled detained juveniles, Taipei Juvenile Detention House, Taiwan.

Software

Microsoft Word, Excel, PowerPoint; SPSS, R, Stata

Honors

2017: Group Exercise Instructor of the Year Award in 2017.

2012: Phi Tau Phi Scholastic Honor Society of The Republic of China (Taiwan).

2011: National Taipei University Graduate School Fellowship Recipient.

Employment and Internship

2011 Summer: **CORRECTIONAL OFFICER**, Taoyuan Women's Prison, Agency of Correction, Ministry of Justice, Taiwan. (Internship for field research credits in Criminology)

2007-2010: **EXECUTIVE SECRETARY**, Chang Gung University, Graduate Institute of Biomedical Sciences, Taiwan.

Duty: Full-time position in the Chang Gung University and responsible to the Department Head of the Department of Biomedical Science for approximately 300 graduate students and faculty.

Service

2017-2018: Social Coordinator, Criminology Graduate Student Association, the University of Texas at Dallas.

2017: Community Service Event at Jonathan's Place in Texas (an emergency shelter providing services for children and youths). Date: October 28.

2015: Volunteer, International English Camp for Japanese children, Tokyo, Japan. Dates: April 25-26.

Professional Affiliations

Association of Chinese Criminology and Criminal Justice (ACCCJ)

Academy of Criminal Justice Sciences (ACJS)

Last updated: March 12, 2019