Impact of Structural and Individual Level Traits on Delinquent and Criminal Behavior:

Building a Testable Multilevel Model

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<u>Abstract</u>

How is it possible that two people in different households with similar upbringings can have two very different life outcomes, one positive and the other negative? This paper seeks to shed light on the sociocultural and individual level characteristics that affect one's potential towards delinquent and criminal behavior. First, hypotheses are derived from research at different levels of analysis to create a multilevel model. This model will go beyond two existing models: Sampson and Laub's Dynamic Theoretical Model of Criminality Over the Life Course, which is primarily focused on the structural level, and Catalano and Hawkins' Social Developmental Model of Antisocial Behavior, which is aimed at the individual level. Second, an extensive literature review studies the sociocultural and individual characteristics that play a role in delinquency and criminality outlined in the model. A range of ages, locations and circumstances are examined to gauge the effect these factors have in different scenarios. Lastly, future research into the model, the area of study, areas to be explored in the model, and changes to public policy needed to begin confronting the issues highlighted in this body of work will be discussed. This work is intended to provide the building blocks of a comprehensive multilevel model of delinquent and criminal behavior that is useful for making changes in public policies related to the processing and treatment of those caught up delinquent and criminal lifestyles.

Introduction

The fundamental understanding of criminality has vastly changed from the days of demonic possession and the archaic Lombrosian theory of born criminals. Since it is both multidisciplinary and inclusive, the field of Criminology has broadened our horizons and allowed for theories grounded in science and empirical data to dominate the discussions on why individuals commit criminal acts. It is still true, though, that much of the research today focuses on the socioeconomic factors behind criminality. While financial incentives can explain why many crimes are committed in the twenty-first century, they cannot explain everything. So then, what else can explain why an average person would descend into a criminal or deviant lifestyle? The answer may lie in the sociocultural factors of our everyday lives that are sometimes not as well researched as socioeconomics.

I grew up in rural Glocester, Rhode Island, fifteen minutes away from the Connecticut border, and lived the typical modern rural life: I attended small schools with small classes, played with my friends in the middle of nowhere for hours with nothing more than sticks, and occasionally stuck my nose into places it did not belong. I was not an aggressive or rowdy child by any means, in fact I was very shy, but I had my fair share of fights and disruptive moments. The same could be said for a friend of mine, who for anonymity reasons I will refer to as Carl. Carl led a very similar life to mine and lived in similar circumstances: his family was lower-

middle to middle class, his parents had their share of arguments, and he was not overly social, though we shared the same friend group for all of middle school and most of high school. The only meaningful difference between us was that I was more academically inclined, whereas Carl worked better with his hands. On a few occasions we toed the line of delinquency outside of school, and in some instances crossed that line without running into trouble with the law. As high school continued, we drifted apart as our lives got busier in drastically different ways: mine with academic events and extracurricular sports, and his with parties and alcohol. The last I had heard from mutual friends, Carl still lives in Northwestern Rhode Island, working a job that pays minimal wages, drinking more and using drugs on occasion. My old high school friends still hang out with him but have started to drift away as Carl uses more alcohol and drugs. How is it that Carl and I could lead two similar lives, with similar social circumstances, and yet I am attending college and drink seldom, while Carl works a dead end job spending most of his money on his next drink or hit?

This paper will examine a multitude of sociocultural factors at the structural level, as well as individual level characteristics, that may play a role in an individual's potentiality towards crime and delinquent behavior, and work towards laying a foundation for both future research and the practical applications in society. Much of the research examined in this paper will focus on teens and young adults, though other age groups will be present. First, a multilevel model of the researched structural and individual characteristics will be discussed and go beyond two previous models on the subject of criminality: Sampson and Laub's Dynamic Theoretical Model of Criminality Over the Life Course, which is primarily focused at the structural level, and Catalano and Hawkins' Social Developmental Model of Antisocial Behavior, which is primarily focused at the individual level. A literature review will assess some prior research on the

characteristics present in the model. Lastly, future research into the model, the area of study, areas to be explored in the model, and changes to public policy to begin confronting the issues highlighted in this body of work will be discussed.

Significance of Multilevel Modeling

Before I begin discussing the models present in this work, let me briefly touch upon why multilevel models are important, and why they offer a better analytical value than single level models. Multilevel models are, by their name, models that examine a phenomenon through more than one level of analysis. This is important, because in reality there are oftentimes several levels to social relationships that can interact with each other and effect outcomes of interest. Given that matters of criminological interest are often involved in more than one sphere of social factors and interests, multilevel models make it easier to examine criminological research questions of varying fields (Johnson, 2010). There are a few different types of multilevel models that are used in criminology, though for the purpose of this work the model developed is a general multilevel model examining individual level and structural level characteristics.

There is sound theoretical and statistical reasonings for using multilevel models as opposed to traditional regression models. For one, as previously stated, the social spheres we live in are inherently multileveled, with a variety of different factors affecting them. If we examine the issue of criminality through multiple levels of analysis to accommodate for this, the results we find will better explain the factors and characteristics that drive some individuals to crime, as well as how society will react to that behavior; doing otherwise, meaning examining influence through only one level of analysis, will offer a simple, incomplete view of the situation (Johnson, 2010). Using multiple levels can also provide a more robust statistical analysis of data collected. Not only are the significance tests performed on these models more accurate than standard regression models, but they also account for changes in the data at different hierarchical levels, such as the degrees of freedom, as well as provide accurate and easy tests for other values of interest, such as cross-level interactions or moderating effects (Johnson, 2010). Below I offer the multilevel model of delinquent and criminal involvement developed in this project and follow with the two previous related multilevel models most referenced in criminology.

Testable Multilevel Model Developed in this Thesis (JG)

Individual and Structural Le 1.1 Personality Traits	vel Characteristics	Structural Level Theories	Individual Level Theories	Violations of the Law	
			individual Level Theories	VIOIduons of the Law	
		2.1			
Personality Traits		2.1	3.1		
		Social Learning			
		Theories	Trauma Theories		
- Self-esteem					
- Depression	1.3				
- Anxiety					
- Self-derogation	Structural Level	2.2	3.2	4.1	
- Fearfulness/Nerve - Aggressiveness	Characteristics			Engagement in	
- Aggressiveness - Role		Social Control	Risk/Fear/Stigma	Delinquent and	
Ambiguity/Conflict		Theories	Theories	Criminal Behavior	
- Internal Attitudes					
Integral Emotions	- Street Code				
- Decision- Making - Schemas	- Peer Groups				
- Overall Personality	- Peer Pressure		3.3		
- Guilt	- Peer Delinquency -Legitimacy of Deviance	2.3	5.5		
Self-control	- Peer/Familial Attitudes		Self-Esteem		
- Future Expectations	- Past Trauma	Strain Theories	Theories		
	- Gang				
1.2	Activity/Affiliation - Prior				
Social	Offending/Conviction				
Circumstances	- Prior Delinquent				
	Behavior				
	- Community	2.4			
	- Migration	Social Development			
Educational	-Public Policy -Imprisonment	Model			
Attainment	Conditions	INIOUCI			
Free and Reduced	-Disciplinary Actions				
unch					
Family Drganization/Support					
- Sexual Proclivity					
Weapon Carrying					
Age Cohort					
Socioeconomic Status					
Employment Status					
Neighborhood					
Deter	minants			Outcomes	
Deter					

This work is not the first to examine the issue of criminality and its relation to social factors. Many criminologists look to Sampson and Laub's Developmental Model highlighted in their book "Pathways and Turning Points" as one of the first and one of the most comprehensive models of delinquency and criminality over the life course (1997; 244-245, see Appendix B). Three years after they released their book another duo released what appears to be an advancement of Sampson and Laub's work. Catalano and Hawkins developed what they titled

"The Social Developmental Model", focused on the development of anti-social behavior through life (1996; see Appendix C). Catalano and Hawkins created five versions of their model to explain an individual's movement toward anti-social behavior at different stages of life, while Sampson and Laub consolidated theirs into one model; for the sake of simplicity, only the general model of anti-social behavior development created by Catalano and Hawkins will be examined.

At first glance, both models seem very similar. If anything, Catalano and Hawkins seem to have based their developmental model off the work from Sampson and Laub: both models show the development of their behaviors over the life course, both models consider a range of social, economic and personal variables that can contribute to their behaviors of interest, and both briefly touch upon individual level characteristics that can contribute as well. This final point is where I intend to draw comparisons between the two models presented and the model I created; but to preface this comparison let us first look at each model, with an interest in the psychological characteristics that are examined in the two models for a baseline.

Let us start by examining the Dynamic Theoretical Model of Criminality over the Life Course by Sampson and Laub. First and foremost, as its name would suggest, the Dynamic Theoretical Model of Criminality over the Life-Course is a longitudinal model of criminal behavior, broken up incrementally from childhood to middle adulthood. The model lays out the contributing factors that push one to lead a criminal lifestyle, divided based on the areas in which they effect the individual. While some individual level characteristics are examined, Sampson and Laub's model primarily focuses on structural level characteristics pertaining to an individual's life that could lead to negative outcomes.

In the early years of the individual's life, a multitude of negative "structural background factors" are considered as early stressors, such as having a low socioeconomic status early in life, parental deviance, and levels of family disruption to name a few. These structural background factors are considered alongside "individual difference constructs", namely if the individual had a difficult temperament as a child, if they threw persistent tantrums or displayed any early conduct disorders. These individual difference constructs are some of the early individual level indicators that play a role in delinquent and criminal behavior later in life and are some of the only individual level characteristics examined in the model.

As the person progress from childhood to adolescence, these two clusters of factors begin to interact with other social influences in the life of a teenager that may have a negative effect. The first cluster, identified as "social control processes" consists of familial factors, such as a lack of supervision or parental rejection, and school factors, namely weak attendance, and poor performance. The second cluster, labeled "delinquent influences" consists of peer delinquent attachment and sibling delinquent attachment. This cluster of delinquent influences is arguably the last cluster of individual characteristics considered in Sampson and Laub's model, as attachment to others believes and actions are as much individual level as they are structural level. Social control processes and delinquent influences are both influenced by the background factors and individual differences of the individual, and in turn lead to juvenile outcomes of delinquency and ultimately incarceration leading into the transition to young adulthood. From there, the individual experiences an intersection between their crime and deviance and their lack of social bonds, such as having a weak attachment to the labour force or weak marriages, each exacerbating the other. This pattern continues from their transition into young adulthood well into the transition into middle adulthood

The Social Developmental Model of Antisocial Behavior from Catalano and Hawkins has a more overt presence of individual level characteristics than the Dynamic Theoretical Model. In the general model, and in the more age specific models, there is an emphasis on perceptions and beliefs of actions and attitudes belonging to those around the individual, whether they be prosocial or antisocial influences. The individual weighs these influences with the opportunities to conduct the corresponding behaviors, their active involvement and interaction in activities and people, and the perceived rewards for engaging said activities. Then, there is an attachment and commitment to either prosocial or antisocial people, ideas and activities, belief in the values behind those ideas, and lastly comes the expression or the lack thereof of antisocial behavior.

The Social Developmental Model begins by considering the individual's position in the social structure at multiple levels, namely race, socioeconomic status, age and gender. These social structure factors were linked with both perceptions for prosocial and antisocial opportunities for involvement. Additionally, Catalano and Hawkins identified what they labeled "external constraints" and "individual constitutional factors" which contributed to varying factors; external constraints were a factor in perception of rewards for prosocial and antisocial interactions and involvement, individual constitutional factors contributed to the perceived rewards of prosocial behavior, and both contributed to the skills for interaction or involvement. As previously stated, the model continues in a very linear trend from this point onward, linking the perceptions on either end of the model to the involvement in those activities or behaviors, the perception for rewards for said activities and behaviors, and ultimately leading to an individual's attachment to and belief in prosocial or antisocial values.

Here, in the Social Developmental Model of Antisocial Behavior, the emphasis is on individual level characteristics, such as perceptions, beliefs, values, and the actions we take

based on them, unlike in the Dynamic Theoretical Model where the emphasis is on structural level characteristics, such as social and economic factors. While each model is extensively detailed specifically towards the authors' primary disciplinary fields, neither model fully addresses the reality of the situation: that crime does not occur in a vacuum filled with only individual or structural influences, but rather with a combination of both. It was with this in mind that I conducted an extensive literature review both to gain a better understanding of the topic and to create a comprehensive model that links the two fields, providing a platform for future research.

My comprehensive model, presented in figure 1 above (and in Appendix A), provides a "Multilevel Model Linking Individual and Structural Level Characteristics, Explanatory Theories and Engagement in Delinquent and Criminal Behavior". It combines concepts and findings from fifteen different studies on individual and structural level characteristics to better frame the issues that help precipitate participation in delinquent and criminal behavior. The remainder of this section will explain my model in more detail and the literature review that follows examines the research articles that provided a basis for it. Because structural characteristics have greater predictive power in forecasting levels of crime and delinquency, the criminology literature contains fewer analyses of individual traits as determinants of delinquent or criminal involvement as my selection of articles reflects.

To begin explaining my model, let me first explain how the information that formed it was gathered. After deciding in my topic of choice, I went about operationally defining the concepts that I was interested in and the variables that I would search for in those concepts. Initially, the two overarching concepts were defined as sociocultural and psychological factors,

but this was later redefined as "structural level characteristics" and "individual level characteristics" to allow for a broader examination of factors, with sociocultural factors remaining an interest at the structural level. The term sociocultural was chosen as it can fully encompass the immediate social circumstances of the individual, was well as the broader issues and factors that can affect them at further ecological levels. Initial factors of interest were Public Policy and Self-Esteem, as prior research in my college career had highlighted these areas as related to delinquency or criminality, with more defined as they presented themselves in all research examined, including research not utilized. This resulted in three structural level characteristics and three individual level characteristics: Public Policy, Victim Targeting and Peer Pressure were defined at the structural level, while Self-Esteem, Childhood Experiences and Fear were defined at the individual level. Then began the process of collecting research articles and studies related to these factors to build the groundwork for the model. At the completion of research, nine articles were analyzed for structural level characteristics, divided up into two for Public Policy, four for Victim Targeting and three for Peer Pressure; six articles were analyzed for individual level characteristics, divided up three for Self-Esteem, one for Childhood Experiences and two for Fear. In determining if an article would be used, abstracts of each article were read first, followed by a more thorough reading of the work if it seemed related to topic of the thesis. Then, a decision was made as to whether the article would be used or rejected after weighing its relation to the factors and central concepts examined, its overall effectiveness in relaying information related to said factors and concepts and if the data supported the link between the factors of interest and criminality or delinquency.

The information inside these articles was compiled based on the hypotheses and areas explored in their respective concepts, including the variables defined and collected in each study,

grouped up by characteristic or theory (rather than by author), and were later moved and clustered to correspond to their location in the model. (See Appendix D.) With this list of areas explored and tested hypotheses defined. I went about creating the model in a way that would best represent the data and variables collected. First, the criminologically relevant characteristics of a person's individual personality and makeup as well as the structural level characteristics in which they find themselves are considered and divided into three defined categories: Personality Traits, Social Circumstances and Structural Characteristics, labeled 1.1, 1.2 and 1.3 in Appendix D and the model shown in Figure 1, respectively. Personality Traits encompassed both internal perceptual differences, such as future expectations of life and internal attitudes, while also covering individual level conditions that can affect people, such as their self-esteem and depression levels, their integral emotions, and their level of self-control. Social Circumstances included variables in individuals' social lives that could have varying levels of incentive towards delinquency and criminality, such as past or present weapon carrying, educational attainment, age cohort and level of family organization and support. The effect of these individual level characteristics might be exacerbated by the structural characteristics in which one finds oneself, such as their affiliation or activity with a gang, the attitudes of their peers or family, and the degree to which deviance is legitimized in their life.

From there, the ways in which social circumstances impact individual behavior are viewed through several Structural Level Theories identified in the literature, namely the Social Learning Theories (2.1), Social Control Theories (2.2), Strain Theories (2.3) and the Social Developmental Model (2.4). The impact of individual makeup and personality are examined through three sets of Individual Level Theories: Trauma Theories (3.1), Risk/Fear/Stigma Theories (3.2) and Self-Esteem Theories (3.3). Under this framework, the structural and

individual level influences on people are both examined to determine the likelihood they will engage in Delinquent and Criminal Behavior (4.1). This dual analysis through structural and individual level theories makes up for the lack of dual representation in the Sampson and Laub and Catalano and Hawkins models, thus building a more comprehensive model for understanding how people travel paths toward delinquency and crime.

Hypotheses explored in developing this model are listed in Appendix D. I will not mention every hypothesis or area examined in the works that make up this paper, but rather show a small highlight reel of each Set. Set 1 corresponds to the first cluster of individual and structural characteristics that can affect an individual's probability of engaging in delinquent and criminal behavior. Specifically identified here are the Personality Traits and Social Circumstance of the individual, which constitute the Individual Level Characteristics, and the Structural Level Characteristics of further ecological levels around the individual. The articles and studies examined highlighted numerous characteristics of interest, but undoubtedly left some out. Among those considered for the Personality Traits were several psychological markers of the individual, such as their self-esteem or depression levels, markers of their personality like aggressiveness, as well as some cognitive functions, such as the decision-making schemas they used. The Social Circumstances consisted of behaviors, such as the involvement as a victim or initiator of unwanted sex, as well as immediate outside influences, such as their socioeconomic status, their age cohort, or the structure of their family unit. The Structural Level Characteristics include variables beyond the immediate ecological levels of the individual in both the past and the present, such as past trauma they encountered, the migration of the family unit or their current peer groups and the delinquency of said peer groups.

Set 2 relates to the Structural Level Theories, the second cluster of variables in the model that look to analyze the characteristics of the individual through the lens of several structural level sociological theories. The first of these theory clusters is derived from Social Learning Theories is illustrated by the six hypotheses in Set 2.1 that were derived from Younts (2008) on endorsement of deviant behavior in test-taking based on status and peer relations. Younts believed that the status of the endorser would be of particular importance in deciding to follow their example of cheating. Specifically, the individual would be more likely to enact deviance if the carrier, meaning the endorser, is perceived as being of a higher status than of a lower status and if their peers endorsed the deviance rather than others. Additionally, Younts predicted a weakening of status effects due to peer effects, that status and peer endorsement would have carry-over effects to different "generations" of participants, and that status effects would still be lowered by peer effects even in the generational view just mentioned (Younts, 2008). Other hypotheses by different researchers in this Set dealt with different subject matters, but all related to Social Learning Theories, with the same applying to the other theories outlined in Set 2.

Set 3 corresponds to the Individual Level Theories that were outlined in some of the works examined. These theories dealt with individual level characteristics that could play a role in delinquent and criminal behavior. As an example, Set 3.2 deals with hypotheses related to Risk, Fear, and Stigma Theories that were identified in several works, such as Barnum and Solomon's 2019 study on situational characteristics and integral emotions. The first four hypotheses in Set 3.2 are the hypotheses tested by Barnum and Solomon as to how individuals would act when bumped into in a crowded bar: that situational and background characteristics would be associated with levels of integral anger and/or fear, that integral anger would be positively associated with intentions to act aggressively and fear positively associated with

behaving passively, with the inverse holding true in both scenarios, that integral anger and fear would moderate the effects of evaluations of risk, costs and benefits, with anger lowering risks and costs and raising benefits, with the inverse for fear, and that integral anger and fear would be mediated by the perceptions of risk, costs and benefits, so that higher levels of anger would associated with decreased perception of risk and costs and increased benefits, while the inverse would be true for fear (Barnum & Solomon, 2019). While Barnum and Solomon dealt primarily with anger and fear, other authors and works examined explored other areas related to emotions, namely what was operationally defined as nerve, and the stigma associated with certain types of actions.

Lastly, Set 4 is the culmination of the individual and structural level characteristics as to what the prevalence of delinquent and criminal behavior is in the individual's life. Essentially, the previous Sets act as a risk-assessment of sorts, evaluating the individual level and structural level characteristics of an individual through theoretical lenses to predict the likelihood that the individual will partake in delinquent or criminal behavior. While it may not provide a definitive answer, nor does it include every possible characteristic or use every available theory, this framework goes beyond current existing models to examine multiple levels of social influences that can contribute to the problem. This section has briefly touched upon the work that created the current model, but a more in-depth look is needed to fully understand it. The following section will go into each of the articles used to create the model to provide a concise, thorough review of the literature and research used to create the model.

Literature Review

For the sake of simplicity this literature review is divided into two parts: the first covering the structural level characteristics and the second covering the individual level characteristics. The order of discussion of structural level characteristics will begin first with the articles and studies on Public Policy, Victimization Targeting, and Peer Pressure. The individual level characteristics includes focus on literature examining Self-Esteem, Childhood Experiences, and Fear.

Structural Level Characteristics

Public Policy. Public policy drives what can and cannot be done in a society, and often sets social norms and expectations of behavior. However, can we go too far with public policy and inadvertently create more problems for ourselves? Since the 1980's, despite a decreasing crime rate, the incarceration rate has increased explosively. Many point to the highly punitive laws passed during this time that both criminalized more minor behaviors and expanded the penalties on other actions. Due to these changes, one would expect to see a difference in the level of criminal activity and punitive measures as the years passed. Shen and associates (2020) examined the cohort differences in these prison terms and predicted the effect of the resulting accumulated criminal records on continuing these cohorts. Focusing on North Carolina, Shen and associates (2020) collected data from the North Carolina Department of Public Safety on 450,000 criminal offenders from 1972 to 2016; the data collected included comprehensive demographic, sentencing and corrections information of both state imprisonment and probation. Divided into five age cohorts, data on the offenders showed a striking result. Normally, data on criminal history would show a spike in the early twenties followed by a decline. However, the data collected by Shen and associates showed that the cohorts in their early twenties during the punitive wave of the 80's and 90's experienced the initial spike, then a second spike in their

thirties, either due to the federal punitive measures or North Carolina's punitive laws. Additionally, the data showed that the cohorts who reached young adulthood during the punitive wave were more likely to have higher rates of incarceration throughout their lifetimes than their younger cohorts; despite a disproportionate incarceration rate of Black youths during the punitive wave, this effect was seen with both Black and White youths. This would suggest that the chances of receiving a criminal sentence later in life is contingent on there being earlier convictions (Shen et al., 2020).

Solitary confinement and other forms of disciplinary segregation have been a longstanding staple of correction institutions for dealing with unruly and at times dangerous inmates, or to protect an inmate from other inmates. But, just as with the increasingly punitive measures of the 80's and 90's, it seems that the continued usage of solitary may have been causing more problems than fixing. Wildeman and Anderson (2020) examined the use of disciplinary segregation in Danish prisons, curious about the aftereffects it would have on prisoners after release. For their data, Wildeman and Anderson used two sources: registry data, for a wide variety of information such as employment and demographics, and data pertaining to the imprisonment of all Danes who started their imprisonment in 2006 and ended it by 2013; the second form of data included information such as where each prisoner spent their days and if they ever received infractions or not (2020). Additionally, several dependent variables were identified, namely if the subjects were convicted of another crime up to three years after release and if they were able to find employment afterwards, as well an explanatory variable, if the inmates faced confinement or other disciplinary actions, as well as accounting for control variables such as age, gender and prior arrests. After statistical and matched difference-indifferences analysis, Wildeman and Anderson came to two clear-cut conclusions: those who

experienced disciplinary segregation in Danish prisons had a higher percentage of risk at being convicted again when compared to those who did not, and those who were disciplined with confinement saw less participation in the labor market after release. Wildeman and Anderson (2020) do say that there may be issues with the internal and external validity of their study, though despite these concerns they are confident in their findings for the Danish prison system.

Victim Targeting. In a longitudinal study of over 8,000 American youths in middle and high school, Turanovic (2019) explored the potential link between adolescent violent victimization and negative outcomes later in life. Initially, over 20,000 participants were recruited through the National Longitudinal Study of Adolescent and Adult Health, or Add Health, but that number decreased after three waves of data collection and missing data that disgualified some participants (Turanovic, 2019). Participants were asked if in the past year they were violently victimized in past year, such as if someone had "jumped" them or if a gun or knife was pulled on them, as well as questions about their behavior on six outcomes such as drug use, depression, poor school performance, future violent victimization, and violent and property offending. Additionally, over 50 covariates were matched for the participants to account for personal characteristics, including self-reported and parent reported data, as well as information from the school districts and information pertaining to the neighborhood (Turanovic, 2019). Preliminary unmatched analysis showed that adolescent violent victimization had a strong association with all six early adulthood outcomes, however this was cut down to violent offending, subsequent victimization and poor school performance after matching. When examining heterogeneous effects of victimization, Turanovic found an interesting result: those who had the least risk of being victimized experienced the largest impact in early adulthood on violent offending, further victimization and the four other outcomes compared to those who had

a moderate risk and those with the highest risk (2019). Essentially, those who did not experience violence in their daily lives had the greatest chances of following a negative pathway upon experiencing violence.

While they occur less than "ordinary" violent crime, war and genocide can generate the same negative pathways that more common means of violent victimization. In a study of 55 Bosnian male refugees and nationals, DiPietro (2019) examined the effects the Bosnian war and genocide had on their life pathways. Specifically, DiPietro was interested in those who became violent repeatably, highlighting the interaction between the social change due to war and the personal, subjective experiences of the survivors (2019). Participants were selected in St. Louis, Missouri by means of word of mouth, social media and an eventual snowball referral effect among participants. The criteria for participants started out very generally, with the only major requirement being that they were a Bosnian-Herzegovinian national who was in childhood during the war. Eventually, these criteria were specified more narrowly to be able to apply the data to theoretical category development on violent and nonviolent pathways children can take as a result of war (DiPietro, 2019). Participants were interviewed in private, both in the St. Louis and Sarajevo, regarding their experiences during the war, their familial and social dynamics, and their experiences with violence and incarceration. Data from the interviews was synthesized, coded accordingly, and analyzed for themes in the perceptions of traumas, relationships, life histories and other categories, and then compared between participants with violent pathways and nonviolent pathways. 17 of the 55 participants had described committing violence in their past, while some were in fact incarcerated at the time of their interview due in part to their experiences with violence (DiPietro, 2019). Data from interviews showed first and foremost that the violent participants did not experience more violence than the nonviolent participants.

Rather, DiPietro describes the mental schemes that most of these men formed in justifying their behavior. These men drew on their experiences of persecution, victimization and exile as justification for their violent behavior. Additionally, a lack of family support after the war, a changing of the perception of masculinity due the violence of war, and social disorganization in the aftermath of the war helped push these men onto a violent pathway (DiPietro, 2019).

We often think in black and white terms when it comes to sex, it being either consensual or rape. However, Goodman and associates conducted a study with college students to determine the extent of and the reasons for participating in unwanted consensual sex, or UCS for short; UCS is defined as sex freely consented to that is not wanted. Of interest to the researchers was the extent to which childhood victimization was related to UCS, as well as how cognitive schemas held by the subjects would mediate this relation (Goodman et al., 2019). Using a sample of 866 college students from a mid-size Midwestern University, Goodman and associates asked via a survey questions on a multitude of variables, including more serious forms of childhood victimization and violence, the cognitive schemas they used to interpret themselves and others, if they were sexually active or had been sexually active, and the frequency to which they engaged in UCS in the last year; other demographic information was also collected. Two different surveys were created for the study, one for male participants and one for female participants, given that some of the items of interest to Goodman and associates were related to gender norms (2019). Ultimately, data from 587 participants was usable, which yielded interesting results after analysis. On its face, the data showed that forty-three percent of participants, 252 to be exact, engaged in UCS at least once in the last year, with females reporting higher frequencies than males. Additionally, those with higher reported levels of childhood victimizations showed a modest, but statistically significant association with higher rates of UCS (Goodman et al., 2019).

But, it is not that simple. Further analysis of the other variables showed that there was a mediating step in this process: negative cognitive schemas. Mediation and regression analyses showed that negative schemas, such as disconnection and rejection, influenced the rates of UCS among the participants more directly than childhood victimization. More specifically, the rates of childhood victimization influence the presence and frequency of negative schemas, which then influences the rate of UCS among participants (Goodman, 2019). Though not directly responsible, childhood victimization can affect the rates of UCS, and by extension adult sexual behavior in general, by serving as an aggravator for negative cognitive schemes.

Childhood sexual abuse, or CSA for short, has a long list of research that shows a multitude of consequences, both short and long term, for the victims in terms of life outcomes, behavioral and emotional issues ((Anda et al., 2006; Daray et al., 2016; Fortenbaugh et al., 2017). However, what has not been examined as much are the effects it has on delinquency and violence during adolescence. In a study of data collected from the Longitudinal Studies of Child Abuse and Neglect, Kozak and associates looked to supplement the existing research on the effect of CSA from the reports of the victims themselves. Kozak and associates used three theoretical models to guide their research and develop a fuller framework for understanding the effects of CSA: The Developmental Trauma Theory, which looks at the neurobiological development changes as a result of abuse or trauma, the Problem-Behavior Theory, a sociopsychological framework that examines problem behaviors, and the Traumagenic Dynamics Model, which offers a model of how trauma effects the psyche of children in both the short and long term (Kozak, 2019). A total of 813 participants' data from face to face interviews was used in the analysis, 368 males and 445 females. Of interest to Kozak and associates were the histories of sexual abuse, if any, the rate of delinquent and violent behavior in the last year, as well as

other demographic and control variables (2019). The data from multivariate analyses showed troubling results. At first glance, 6 percent of the females and 1.6 percent of the males interviewed were victims of CSA, while 24 percent of both engaged in delinquent and violent behavior. When variables were regressed together, controlling for gender and race, it was found that those who experienced CSA were 1.7 times more likely to take part in violent and delinquent behavior than those who did not experience CSA. Consistent with previous research on gender and violence, there was a statistically significant difference between gender and violent and violent and delinquent behavior, with females .52 times less likely than males to engage in those behaviors (Kozak, 2019). This violent acting out can come from a number of areas: perhaps the child feels like they can get a break from the powerlessness from CSA by acting out, or maybe they act out as a form of control in their otherwise disorganized life.

Peer Pressure. Peer pressure can influence any age group, though prior research (Fishbein & Perez, 2000) has shown teens and young adults seem to be affected to a higher degree. In a study conducted by Fishbein and Perez (2000) about drug use and delinquency, six neighborhoods in the Washington/Baltimore areas were surveyed due to their status as "high risk" environments, drawing 567 children aged 10 to 17 who had been referred by their, school, parents, or the juvenile courts. Of interest to the researchers was what motivated children to commit different offenses, such as their peer groups, which fell under the category of immediate social variables, their commitment to school and their personal attitudes about fighting, the police, etc. Interestingly, Fishbein and Perez found that the immediate social variables of the children best predicted instances of property crimes and drug sales, while personal attitudes were better for predicting personal crimes and drug usage (2000). They posited that their data suggests deviance of a material or monetary nature is largely influenced by the significant relationships

children have and how they interact with them; in other words, children look to those around them to see how to act.

College age young adults also look to their peers for signs on how to act. In an experiment by Younts, 217 male underclassmen, aged 18 to 20, at a large midwestern university participated in a Contrast Sensitivity task, determining if an image they viewed shortly had more black or white areas in it (2008). Prior to taking the test, participants took a fictional perceptual ability task, which marked all of them as average, and received instruction from a trainer who would brief them on strategies for taking the task. This trainer was a confederate who either did or did not endorse cheating on the task, despite a warning by the university policy not to. The social status of the confederate was manipulated as well, having either been a student who took the pre-test, a grad student who scored above average or a high-school student who scored below average (Younts, 2008). Data showed that endorsement of cheating and the status of the trainer both produced main effects on cheating. High status trainers had more participants cheat during their tests than low status trainers, while endorsement across the board showed an increase in cheating (Younts, 2008).

The effects of peer pressure are not a phenomenon solely in the United States. A crosscultural study conducted by Kobayashi and associates aimed at seeing if attitude transference acted differently in the United States and Japan, hypothesizing that both parental and peer attitudes will have an effect, with parental effects in Japan being lower (2011). Previous studies of this nature had used different samples at different times, with different instructions, limiting the data. In order to combat this, Kobayashi and associates selected two universities of comparable size, one in each country, selected similarly sized sample groups and used the same questionnaire about attitudes towards deviance with both groups, all within the same month. The questionnaire distributed asked participants to measure their and their peers' attitudes towards deviant behavior, including self-reported acts of deviant behavior, on a scale of 1 to 5 (Kobayashi et al., 2011). Most of the data was consistent with previous studies: in both the United States and Japan, parental and peer attitudes have significant correlations with a respondent's attitude, with peer attitudes having more of an effect. In turn, these attitudes affected whether the respondent would commit the deviant behavior in question. Interestingly though, when peer attitudes are controlled, Japanese respondents showed an inverse relationship with parental attitudes. The more their parents disapproved of the behavior, the more likely they were to engage in the behavior. Kobayashi and associates (2011) noted that while these results are problematic for the attitude transference hypothesis, theirs is not the first study to find these results and suggests future research on the matter.

Individual Level Characteristics

Self-Esteem. Self-esteem can be a major causal factor behind a person's actions. Often, our need for self-worth can drive us to engage in behavior to be accepted and seem "cool" or can make us more susceptible to outside influence and peer pressure to engage in these behaviors. Adolescents are especially receptive to this outside influence, particularly because their self-esteem can be very low during puberty. In a longitudinal study by Zimmerman (1996), children in six Michigan school districts were asked to fill out questionnaires regarding underage drinking and alcohol misuse, self-esteem, peer pressure and their tolerance for deviant behavior. The questionnaires were administered one time starting in sixth grade, then following them through seventh, eighth and tenth grade. Based on their self-esteem evaluations, students were put into one of four groups: rising, moderate, steadily decreasing and consistently low. Data showed that those in the two lower self-esteem groups were more easily influenced by peer pressure, while

those in the two higher self-esteem groups experienced the least increase in susceptibility to peer pressure. Over time, the two lower self-esteem groups would have the highest instances of alcohol use, misuse and tolerance for deviant behavior when compared to the two high self-esteem groups, likely due to the increased peer pressure influence (Zimmerman, 1996).

Adults can feel the pressures from self-esteem just as children. In a study of deviance, self-esteem and workplace contingent self-esteem, Ferris and associates (2009) examined 123 adult-aged workers over a period of six months via three online surveys. Of interest was the contingency effect workplace self-esteem had on both individual self-esteem and deviant behavior; previous research and theories on self-esteem and workplace deviance have both shown inconsistencies in the effects found, as well as what Ferris and associated believed to be an incomplete construct of what self-esteem is, lacking contingent self-esteem measures. Based on their new measures and prior research, Ferris and associates (2009) devised three hypotheses: there will be a stronger negative relation between self-esteem and workplace deviance in those with low contingent self-esteem, those with low self-esteem will have a stronger relation between role ambiguity and workplace deviance, and that those with low self-esteem will have a stronger relation between role conflict and workplace deviance; the last two hypotheses symbolize a three-way interaction effect between self-esteem, workplace contingent self-esteem, and role ambiguity and conflict respectively. Data from the online surveys provided mixed results, but it began to provide some knowledge on how self-esteem and workplace deviance interact. Firstly, data showed that high levels of contingent self-esteem helped mitigate the effect between self-esteem and workplace deviance, supporting their first hypothesis. When examining the three-way interactions, Ferris and associates found no significant interaction for role ambiguity but a significant interaction for role conflict, failing the second and providing some

support for the third hypothesis (Ferris et al., 2009). In short, Ferris and associates theorized that when one's self esteem is low and relies on their job performance for validation, they are less likely to perform deviant acts that can threaten their means of validation. However, the mixed results of both their work and previous works on the subject matter warrant further research and replication.

Childhood Experiences. Our experiences as a child can largely shape how we are as adults. It is common for youths to experience negative self-emotions and feelings like depression, anxiety, and self-derogation, which may lead them to committing deviant acts. However, can our neighborhood moderate how likely we are to follow through with deviance, and if so, can our expectations of our future mediate the effect of our negative self-emotions? Pals and Kaplan (2013) explored this very concept, using data from a longitudinal study of half of the seventh graders randomly selected in the Houston, Texas Independent School District in 1971. Up to five subsequent interviews were conducted after in initial round, and a supplementary set of interviews were conducted by another study using the children of the original respondents between 1994 and 2000. A total of 7,519 respondents of the secondgeneration study were interviewed initially, with 1,629 interviewed for the third and final wave (Pals & Kaplan, 2013). The respondents were asked yes or no questions about their participation in deviant behavior in the last year, ranging from getting angry and breaking thing, to getting into fights and stealing. Additionally, negative self-feelings, operationalized as anxiety, depression, and self-derogation, were scored on three separate scales of dichotomous indicator variables. Expectations of the future were evaluated with a dichotomous index about work opportunities and educational expectations, which were coded depending on how respondents answered. Lastly, neighborhood disadvantage was measured by five different problems, such as high

unemployment, presence of junkies and abandoned houses; control variables were also observed, such as race, gender, and economic problems as an adolescent (Pals & Kaplan, 2013). Analysis showed a continuity of deviance in adulthood from adolescence where present. Pals and Kaplan found that the effect of adolescent negative self-feelings on deviance was varied by the amount of neighborhood disadvantage, showing an effect only in neighborhoods with one economic problem, typically identified as the middle-class neighborhoods, providing support for the middle-class measuring rod hypothesis and not the general strain theory. Further analysis showed that expectations of work and school held by the participants mediated the relation between adolescent negative self-feelings and adult deviance; essentially, in the middle-class neighborhoods that observed the effect of their economic problem, if the children had low expectations of their future, their negative self-feelings had a slightly higher effect on their adulthood deviance.

Fear. Fear is both a rational and irrational emotion, one that can either save our lives or lead us to decisions that change us forever, for better or worse. But exactly how much can fear govern our actions? Interested in our fight or flight responses, Barnum and Solomon (2019) used data on 804 adults in the United States to gauge the effects anger and fear have on the rational choice considerations we make, specifically with the intent to commit assault. Participants were recruited for an online survey via Amazon's Mechanical Turk, or MTurk, during which they answered questions regarding their integral emotions pertaining to a hypothetical bar-fight outlined in the survey, as well as questions that were meant to gauge their self-control, aggressive tendencies and decision making; integral emotions refer to emotions felt as a result of a decision or action (Barnum & Solomon, 2019). In a 2 x 2 factorial design, participants were randomly assigned and presented with a vignette featuring either a male or female antagonist,

who either physically or verbally tried to start a fight with them in a bar setting after spilling their drink on the participant. After reading this scenario, participants were immediately asked to rate on a scale of one to seven on how much they agreed they would feel four integral emotional responses: angry, irritated, frightened and fear. Additionally, participants gave a percentage chance of how likely they would be to engage in six actions against the antagonist: pushing, punching, yelling, leaving, ignoring, or seeking help (Barnum & Solomon, 2019). Analysis of the data showed that there was a significant positive association between integral anger and aggressive behavior, as well as a significant positive association between integral fear and passive actions; the inverse of these relationships also showed significant associations. Essentially, integral anger leads to aggressive behavior, while integral fear leads to inhibitory behavior. Additionally, data on the decision making for the perceived aftermath of the confrontation showed that increases in anger seemed to decrease the level of risk and increase the level of reward associated with assaulting the antagonist, while higher levels of fear appeared to decrease the perceived reward and increase the risks associated with committing the assault (Barnum & Solomon, 2019). These findings add to a growing body of research on how our emotional experiences influence our decision-making processes, as well as how we can possibly predict the events that will occur as a result.

One does not necessarily need to perform an action as a direct result of fear for it to be governing their actions. It is a common belief that acting tough in the face of danger, even if there is personal risk and the person feels fear, can reduce victimization. However, this claim is not supported by criminological literature and research. Melde and associates (2020), however, posit that the idea of nerve, the ability for someone to remain fearless despite high personal risks in dangerous situations, is often overlooked during the discussions about avoid victimization,

particularly among young offenders, and has a role to play in both later violent offending and violent victimization. Melde and associates formed two hypotheses based on prior research on the concept of nerve: that nerve is positively associated with later violent offending, and that nerve would have a nonlinear relationship with later victimization; those who report low levels of nerve with have low rates of victimization, and those with higher rates will have gradually lower rates (Melde et al., 2020). To gather data on young offenders, Melde and associates (2020) used three waves of panel data from the Gang Resistance Education and Training (G.R.E.A.T.) program, recruiting over 3,000 initial participants. However, after six waves of surveys there was a drop in the completion rate, with wave six yielding a completion rate of 71.9 percent. Participants were asked a multitude of questions regarding fear of victimization, perceived risk of victimization, the number of incidents of violent victimization and violent offending, as well as other controls and variables regarding individual differences; fear of victimization and perceived risk were both scaled one to five for a multitude of questions (Melde et al., 2020). After analysis, Melde and associates found that nerve is strongly associated with later violent offending and was a positive predictor of later violent offending, lending support to their first hypothesis. With regards to later violent victimization, the results were more mixed. While the relationship between nerve and later violent victimization was nonlinear, the analysis showed that the relationship was U-shaped. Rather than showing a progressive decrease in later violent victimization as levels of nerve increase, the data showed that those with low levels and high levels of nerve experienced similar levels of later violent victimization, while those with more moderate levels showed the least amount (Melde et al., 2020).

In the past century, our society has evolved significantly in terms of technology and science, so much so that it has become a safer world. As our world became more interconnected

and we became less willing to attempt risky behavior, a new morality system was developed that equates risk and irresponsibility, creating a fear of stigma. In order to determine how much this fear of stigma mitigates risk taking behavior, Newby and DeCamp (2015) used data from the 2010 College Risk Behaviors Study at the University of Delaware to assess the degree of risk avoidance; other potential inhibitors, namely the risk of punishment, guilt, harm to self and harm to others, were also tested. In total, data from 1,297 participants was used (Newby & DeCamp, 2015). Students were split between two vignettes: considering driving while intoxicated and cheating on an exam. Participants were asked a series of questions about the vignette itself, such as how likely 0-100 they would be to do it, list up to seven bad things that could happen as a result, and to rate how important those results are to them in consideration. Answers were coded into different five categories, namely fear of stigma, fear of punishment, fear of guilt, fear of self-harm and fear of harming others (Newby & DeCamp, 2015). After analysis of each variable and category, Newby and Decamp found similar results between both vignettes. Rarely was stigma a top concern, but it was more likely to be added as a concern the more concerns were listed. Additionally, after analyzing the weights given to the students' responses, stigma was usually given a lower weight than other variables in consideration of importance. After creating a predictive model for both vignettes, Newby and DeCamp found that stigma had little to no correlation for both vignettes, with other variables having more correlative power for different vignettes; guilt had a correlation for cheating, while harm to others showed a correlation and guilt presented compelling evidence to not immediately dismiss it (2015). In short, while fear of stigma was present, the influence it has in mitigating risk-taking behavior is relatively nominal, while others such as fear of harming others and guilt have more compelling evidence.

<u>The Future</u>

The comprehensive model proposed in this thesis focuses on the potentiality towards delinquency and crime, combining structural and individual level characteristics, and the understanding of the theories behind them, to better understand why some people turn towards delinquency and crime. The goal of this work is to use this knowledge of delinquency and criminality to not only act as a building block for the advancement of the research, but to also help inform law enforcement and social services as to what can lead to criminality and how to potentially stop it before it happens. The following sections will be aimed at thoroughly explaining the next steps in the research, including areas and hypotheses that were not explored in the current model, the practical implications for counseling and intervention services, to combat delinquency when it is in its infancy in children and adolescents, and the public policy implications for the future of policing, the criminal justice system, and domestic policy, to help curb both crime and its sources in society.

Theory and Research. This paper is intended to not only shed new light on delinquency and criminality, but to also serve as the groundwork for future studies and works on the subject. As such, this work lays out the relationship between variables clarifying where they have been tested and where they remain to be examined. It is my hope that other researchers will build upon it where they see fit. This work has informed me on not just what has been studied, but what else can be studied based upon the limitations of past examinations. This section will touch briefly upon where this work specifically can be built upon to enhance its probative value on factors that contribute to delinquency and criminality, then highlight the areas and hypotheses that can and should be explored by future researchers based upon the research compiled and formatted in Appendix E.

This thesis focuses on clarifying the structural and individual level characteristics that contribute to the probability of engagement in delinquent and criminal behavior. However, the probative value of this work would be greatly improved if the studies and research collected were examined quantitatively, focusing more on coding and analyzing the data collected for statistically significant differences among the variables of interest. To this end, future research should first begin with a meta-analysis of this work and the studies that compose it. A metaanalysis of this work would serve two purposes here. First, by quantifying the research gathered, actual numerical values could be calculated, and weights assigned for the variables and characteristics examined. This allows for an empirical examination of the characteristics outlined in the model as to whether or not they seem to have a definitive correlation with delinquent and criminal behavior; having statistical backing would allow for the model presented to be changed accordingly as to what characteristics and explanatory theories have a statistical basis and can improve upon the groundwork laid here.

Secondly, having quantitative data can inform future researchers as to what areas to focus on next and how to expand the scope of research. As an example, let's hypothetically say that a meta-analysis of the studies presented found that while characteristics and variables related to Public Policy showed statistically significant differences in engagement in delinquent and criminal behavior, Peer Pressure showed weak correlations and no statistically significant differences among the characteristics examined. These findings would draw several conclusions, namely that the characteristics examined in Public Policy warrant more investigation and potentially policy-based actions to begin addressing the problems, but also that the characteristics identified in Peer Pressure might need to be operationally defined differently, or new characteristics need to be examined all together. The absence of statistical correlations can

be just as telling as correlations themselves. If the characteristics examined show no impact on delinquency and criminality, it might just mean that those characteristics might not apply in the setting of their studies, or that other characteristics will need to be researched. Either way, the findings of a meta-analysis of this work's research could go a long way in informing the future of the field where to continue onto.

Until a meta-analysis can be performed, the hypotheses and areas to be tested/explored described in Appendix E can provide enough details to inform the future of this body of research; rather than examine every characteristic that could be improved upon, the remainder of this section will examine a few hypotheses or areas that could be focused on to expand the existing research in this work. Let us begin by examining the area of public policy first, specifically regarding the study conducted by Shen and associates in 2020. Shen and associates were examining the cohort effects surrounding the punitive waves the United States experienced during the 1980's and 1990's, specifically in North Carolina, finding that cohorts who were in their early twenties during that time had higher rates of incarceration later in life when compared to younger cohorts (Shen et al., 2020). While their study was comprehensive and uncovered several factors that contributed to the cohort effects of criminal punishments that were seen in North Carolina during the 80's and 90's, it was limited in the sense that it only concerned itself with the cohort effects and crime-punishment patterns in North Carolina. The authors realized that a study dealing with this subject matter may have a hard time generalizing its results to other regions, which is why they suggested that other researchers should examine how cohort effects are created by a crime-punishment wave in other criminal justice systems.

Shen and associates concerned themselves with North Carolina during the 1980's and 90's, but there is a good possibility that the factors that contributed to the cohort effects seen in

North Carolina may not have been present in other states, or that those factors were mitigated due to another phenomenon. Though there was a federal initiative to be tough on crime, each state essentially has its own criminal justice system due to the state and local policies regarding crime and the makeup of their court systems. The cohort effects seen in North Carolina may not have been present in Oregon or Maine for any number of mitigating variables, or it could be that cohort effects were present but for different reasons. If we are to better understand what can create crime-punishment waves, the study design employed by Shen and associates should be replicated in other states to see what factors were at play at the state and local level. This examination should not be confined to just the United States. Though the concept of being "tough on crime" seems like an inherently American ideal, we are not the only nation who has experienced harsh crime-punishment periods. Other countries would benefit from this research as, though it may need to be refined to account for judicial and cultural differences between countries.

Let us turn to the concept of victim targeting, specifically Turanovic's 2018 article regarding violent victimization in childhood and its consequences later in life. Turanovic was concerned about four types of violent victimization and what effect being exposed to those types of violence would have leading into young adulthood. After matching for other covariates, Turanovic found that all four measures of victimization, being shot, being stabbed, getting jumped by someone, or simply having someone pull a gun or a knife on them, showed a strong association with violent offending later in life, subsequent victimization, and poor school performance (2019). While Turanovic's definitions for violent victimization cover a wide array of potential scenarios, they leave out other key areas of violent victimization that could lead to similar outcomes. Turanovic addresses this point in her discussion section, acknowledging that

her study was focused on common forms of street violence (2019). Other forms of violent victimization, such as sexual assault or intimate partner violence, while not the focus of this study, should still be examined to gauge their effect on the growing adolescent mind and body. Further research may very well show that there is something inherently different from these types of sexually or intimately motivated crimes than common street crime, which elicits different outcomes for victims. These differences in data can then be used to better inform counseling and intervention strategies to mitigate the negative effects of different types of victimization.

One final study I wish to reexamine is Barnum and Solomon's 2019 study regarding fight or flight mechanisms in response to a hypothetical barroom altercation. Of interest to Barnum and Solomon were the integral emotions, in the moment emotions that an individual feels in response to a perceived threat, in this case someone spilling your drink, then in some occasions yelling at you or even pushing you, and what effect they seem to have on the person's actions in response to the altercation. They found that there were significant associations between certain emotions and certain actions: integral anger was associated with aggressive actions and the perceptions of rewards for taking said actions, while integral fear was associated with more passive actions and the risks associated with taking more aggressive actions (Barnum & Solomon, 2019). Though their study design found interesting correlations between integral emotions and aggressive actions, Barnum and Solomon concede that their methodology should be improved upon in later works in the field of integral emotions, as their data collection was completed entirely in survey format. Two suggestions that they offer for more realistic results are some type of simulation, which I take it to mean an in-person simulation with confederates, or the use of technology such as virtual reality. While an in-person simulation in a real bar would

provide the most realistic results possible, it would also put the confederates and any outside the study parameters in danger of harm if an unknowing participant were to begin attacking aggressively or violently in response to actions from the confederate. In contrast, the use of virtual reality devices could provide a near realistic experience for the participant, while minimizing the danger to others and still proving a more accurate reading of an experience than simply reading a hypothetical scenario.

Counseling and Intervention. Direct inferences can be drawn from the characteristics examined in this work as to how we can begin combatting some of the negative influences towards delinquency and criminality, primarily children and young teenagers. Several structural and individual level characteristics have been shown to affect a variety of behaviors, leading me to believe that if we are able to mitigate the impact of these characteristics on the individual, so too will the probability of engaging in delinquent and criminal behavior be mitigated. This section will look to explore counseling and interventions strategies that we can use to minimize the effect of negative characteristics in children and teenagers. Two effective programs will be highlighted, as well as areas in the collected research that can better inform the strategies highlighted and potential strategies in the future.

Let us begin by looking at the first program of interest: Children with Problematic Sexual Behavior-Cognitive Behavioral Therapy, or PSB-CBT for short. PSB-CBT is a short term, outpatient group therapy program that is aimed at minimizing problematic sexual behavior is children twelve and younger (Jaycox, 2020). The program consists of cognitive-behavioral therapy, psychoeducation, and other supportive services to both the child enrolled in the program, as well as their families, to not only curb the problem behaviors, but to also improve relations in the family unit; PSB-CBT has several intermediate goals as well, such as

strengthening parent-management skills, improving parent-child interactions, and lowering the child's internalization and externalization of behavior (Jaycox, 2020).

The program usually involves anywhere between 12 and 27 sessions with the child, lasting between an hour and an hour and a half. These sessions provide feedback to both the child and the family as to how to deal with the inappropriate sexual behavior of the child, as well as to develop strategies for parenting and following the new behavior rules. Sessions are held on a weekly basis, with one group for the caregivers and a separate, parallel group for the children, with combined sessions throughout (Jaycox, 2020). For the best results possible, participants are encouraged to take active participation in the program and attend regularly, while also completing "homework" outside of active sessions. Families are allowed to enter the program at any time, and the standard time for graduation for most children is four to six months. Though only one study has been conducted on the effectiveness of PSB-CBT, it has been found effective in reducing problematic sexual behaviors in children and later sexually based offenses when compared to groups who did not display problematic sexual behaviors (Jaycox, 2020).

Past sexual or physical abuse can trigger sexual acting out in young children and can present in a multitude of ways as the child grows, as Kozak et al. (2019) and Goodman et al. (2019) show. Kozak and associates in their study regarding childhood sexual abuse and later life outcomes, had found that victims of CSA were 1.7 times more likely to engage in violent or delinquent behavior than those who did experience CSA (2019). Goodman and associates found that those with higher levels of childhood victimizations, be it physical or sexual abuse, reported higher levels of unwanted consensual sex in college (2019). Issues like these often stem from unresolved complications of the victimization, such as an inability to process what had happened or internalizing the behavior and later externalizing it as a way of coping. The participants in the

aforementioned study using PSB-CBT were referred to a mental health clinic for their sexual behavior problems; though it is not explicitly mentioned, it is possible that some of these cases were the result of unresolved trauma from past abuse. While PSB-CBT is effective at combatting inappropriate sexual behavior and teaching children the right behavior to follow, it may be better served to expand the scope of the therapy to address any underlying issues resulting from past abuse as well. Teaching children the appropriate behavior may reduce the instances of negative behavior, but without treating the underlying complications there is always the chance that a relapse in behavior can occur.

The second program of interest is the Cognitive Behavioral Intervention for Trauma in Schools, also known as CBITS. The goal of CBITS is to reduce posttraumatic stress disorder, or PTSD, related symptoms in school children, aged 10 to 15, who had been exposed to high levels of violence or trauma. Additionally, CBITS looks to increase the resilience of the child to help mitigate further trauma related symptoms, as well as improving their peer and parental support (Bonner, 2020). The theoretical grounding of CBITS lie in the cognitive-behavioral theories surrounding anxiety and trauma; trauma creates an impairment in the individual, which then leads health and behavioral issues like PTSD and violent behavior. This then increases the risk of subsequent traumatic events and stressors, which exacerbate the health and behavioral issues, resulting in a catch twenty-two cycle of trauma and negative outcomes (Bonner, 2020).

CBITS uses group sessions and cognitive-behavioral therapy skills to reduce negative and maladaptive cognitions, to reduce anxiety through both relaxation training and behavior therapy, and to help the child process their traumatic experiences. In groups of five to eight students and lasting for one class period, children are lead through a ten-session curriculum that has them confront their trauma, introduces CBT to help process and move past the trauma, and

teaches them social problem-solving skills to help mitigate future trauma (Bonner, 2020). Additionally, between the second and sixth sessions, individual sessions are held with the children to explore imaginal exposure therapy, the results of which can then be used in the group sessions. The results of two studies, one randomized controlled study and one quasi experimental study, found that students who underwent CBITS showed few PTSD symptoms and fewer depressive symptoms when compared to a control group; the randomized controlled study also found that while psychosocial dysfunction was also lowered in students who underwent CBITS, there were no statistically significant differences in school conduct between the experimental and control groups (Bonner, 2020).

The trauma one endures in childhood can sometimes act as a precursor for their later behavior, depending on their life circumstances following the trauma. DiPietro interviewed survivors of the Bosnian war who were children at time, regarding their experience during the war, their life circumstances and family dynamic afterwards, and if they had any instances of violence or incarceration in their later life. It was found that while violent and nonviolent participants did not experience a difference in the level of violence during the war, those with violent life outcomes adopted different mental schemas that allowed them to justify their actions; these schemas were likely born out of a lack of family support and the lack of a father figure after the war, the social disorganization after the war, and a change in the perception of what it means to be a man due to the violence seen (DiPietro, 2019). Though there is strong and compelling evidence that CBITS can help mitigate the effects of trauma on children, it is my belief that the program can reach further. Many of the individuals interviewed by DiPietro committed their offenses later in their lives as adults, likely unable to get the help they needed as a child. While a program targeted to children can help prevent future problems from arising,

there remains the individuals who are adults that still need help processing their trauma. CBITS could be modified for these older individuals, be it in the therapy techniques or the format of the program schedule, to fit more to the adult psyche. If we are able to mitigate the dysfunction felt by these adults in the same manner we are able to for children, their chances of reoffending could likely be reduced with the absence of their psychological stressors.

Public Policy and Policing Public policy decisions can have a large impact on both what is considered criminal and how police must enforce the law. As we have seen in this thesis and other research, however, the actions we define as criminal and the penalties that we impose can sometimes create more harm than good in the long run. Petty criminal acts clog up our prison systems, while the disciplinary measures we enact lead to high levels of recidivism when the "goals" of imprisonment are thought to be restitution and rehabilitation. If we wish to lower the levels of crime and recidivism in the United States, then we need to begin taking steps to change our criminal justice system. This final section will explore two effective programs in the area of public policy, probation and schooling, that may help lower instances of recidivism and trouble behaviors. Alongside these programs, I will also discuss some ways in which public policy could be changed, as suggested by the existing research and the areas of research that have yet to be explored.

Researchers in Oklahoma City began using a program titled Reduced Probation Caseload in Evidence-Based Setting in an effort to lower the recidivism rate among their high-risk probationers. As the name would suggest, the primary mechanism by which researchers hope to lower recidivism rates is with the caseloads of the parole officers involved. Specifically, those parole officers that work with the high-risk probationers would have their caseloads minimized to allow for more direct monitoring and scrutiny of the probationers (Hines, 2020). Additionally, evidence-based tools and risk assessment techniques will be employed alongside a treatment regiment to ensure commitment to the treatment and to maximize its effectiveness. Since the program is designed for high-risk probationers, it can be employed in any community or geographic setting (Hines, 2020).

Prior research has shown that just reducing caseloads has no effect on recidivism rates, so the treatment involved, and the evidence-based practices used are essential to the success of the program overall. Prerequisites to the program have probations departments implement a list of practices: using risk assessments, separating caseloads by the nature of the crime, concentrating treatment on the assessed risks of the probationers, consider the use of responsivity programs, and to use comprehensive case management at the individual level (Hines, 2020). Probation officers must be trained to spot risks that the probationers are facing to determine how much supervision each probationer needs. From there, the high-risk offenders can then be placed on these reduced probation caseloads under a risk-needs-responsivity framework, or RNR. The three core principles of the RNR model target each of the factors that make-up the model: it has the level of services match the appraised risk of the probationer, it targets the needs of the offenders that can contribute to reoffending, and it takes into account the learning style of the offender in determining the best intervention course. Thus far one study has been conducted examining the Oklahoma City program, finding that while the treatment group exhibited higher rates of revocation than the control group, they also showed roughly a thirty percent lower recidivism rate than the control group after a year and a half follow up (Hines, 2020).

The risk of reimprisonment lies not solely with what happens after a prisoner leaves incarceration, but also what occurs during their stay in prison. Recalling the work of Wildeman and Anderson regarding the Danish prison system and disciplinary segregation, they had found

that those who had been punished with solitary confinement were at a statistically significant higher risk of reoffending when they were released. While these results may have trouble generalizing to other nations, if they hold true for other industrialized nations then we need to reexamine offending from another angle (Wildeman & Anderson, 2020). If the disciplinary system that we use in prison will just end up creating more criminals, that defeats the purpose of having a prison; it will just be a revolving door of the same individuals in and out of prison, creating a never-ending cycle. To break this cycle, more research has to be conducted and other alternatives have to be explored. Wildeman and Anderson suggested that their study should be replicated in other countries to see if the effects remained the same, as well as conducting psychological research into how mental health declines coupled with solitary confinement affect post-release outcomes (2020). Some have considered the abolition of solitary confine altogether, while other have suggested replacing it with a quasi-solitary confinement in an isolated wing with other trouble inmates. Whatever the decision, the current status quo is not helping to stop inmate recidivism. A change needs to happen if we are to have a chance at breaking the cycle of incarceration.

Problem behaviors often manifest at a young age, leading some researchers to develop the Behavioral, Emotional, and Social Training: Competent Learners Achieving School Success, or BEST in CLASS. BEST in CLASS is a classroom-based intervention program that teachers can use to improve the behavior of young school children that have shown signs of having emotional and behavioral disorders, or EBDs. The goal of BEST in CLASS is to both reduce these chronic behavioral problems, as well as improve the interactions between the problem children and their teachers. The intended participants are children aged three to five who attend early childhood programs, while also showing signs of EBDs (Conroy, 2020).

BEST in CLASS has three core components: workshop, manual and practice-based coaching. First, teachers workshop for six hours to prepare them for leading the program, then are given a manual summarizing the training they received that goes along with the 14 weeks of practice-based coaching. The practice-based coaching consist of a coach spending two hours a week with the teacher to both help in the implementation in the form of technical assistance, as well as to provide feedback on how effective the treatment seems to be working (Conroy, 2020). The treatment itself consists of the teacher using specific instructional practices that can help mitigate the problematic behavior and to improve their bond with those students, promoting social and behavioral competence in the children. These practices include, but are not limited to, instituting rules and making sure the children understand them, using behavior-specific praise when good behavior is shown, and verbally reminding the children before they conduct tasks to stop problematic behaviors. Three studies conducted on the effectiveness of the BEST in CLASS program found that those children who participated in the program showed a significant reduction in externalizing problematic behaviors than those in the control group (Conroy, 2020).

It may be that child engagement programs such as BEST in CLASS that utilize teachers or counselors may be better alternatives than programs headed by police officers. There is a growing body of research that suggests that just being in contact with the police can increase the instances of delinquency in younger people. Wiley and Esbensen conducted a study of nearly 3,000 sixth and seventh grade students whose district offered the police led G.R.E.A.T program, an anti-gang program taught in school, and randomly assigned them to either the G.R.E.A.T program or a control program (2020). They found that those who were previously arrested had a statistically significant difference when compared to those who had no contact with the police in terms of delinquency and commitment to deviant peers. Even those who had simply been

questioned by the police had a significant, albeit smaller, effect on engagement in delinquency and associating with delinquent peers than those who had no contact (Wiley & Esbensen, 2020). These results pay credence to labeling theory, that even being in contact briefly with the police can create or reinforce negative and delinquent self-identities in children. By instead using counselors or other trained professionals in community engagement and schooling programs, it is possible that we can minimize this labeling effect on developing children, which in turn could lower the rates of delinquency among school age children.

Conclusion The goal of this work was to examine the individual and structural level characteristics that can contribute to negative life outcomes, like delinquency and criminality, and to suggest ways in which we can mitigate their impact. To this end, two different models of delinquency were analyzed: Sampson and Laub's Developmental Model highlighted in their book "Pathways and Turning Points", and Catalano and Hawkins' Social Developmental Model. While both models are extensive in their own rights, they were ultimately unsatisfactory in achieving the goal this work; Sampson and Laub's model focused almost solely on structural level characteristics, while Catalano and Hawkins' model primarily dealt with individual level characteristics. A review of the relevant literature revealed that both levels need to be addressed to combat delinquency and criminality, so a new model was created to rectify this discrepancy. This model was based on the hypotheses and areas explored in the relevant literature, with the knowledge that it could be expanded upon with suggestions from the relevant research and from other sources.

This thesis is intended to be the building blocks for an expansion of the research on the interactions between individual and structural level characteristics, and their effect on an individual's gravitation to delinquency and criminality. To this end, I have suggested that a meta-

analysis of this thesis would greatly improve both its probative value on the subject as an individual work and would better direct the future of the field on where to continue next. Testing the model created here with empirical data will enhance its accuracy and utility. From there, researchers could use the correlations created to direct the future of the research. Depending on the strengths of said correlations, characteristics could be further researched, or researched less in the case of weak correlations, with more empirical testing conducted with different scenarios or definitions of characteristics. The hypotheses and areas to be explored in Appendix E would benefit from this meta-analysis as well, as empirical evidence in support of certain characteristics would heighten the importance of testing hypotheses related to them, many of which are provided in Appendix E from the literature itself.

Police officers have to enforce the laws as they are written. They do not get a choice in the matter, no matter who the offender may be or what their life has been like: a fellow cop who was caught stealing to help pay for his kid's school, a troubled teenager who was caught tagging an underpass to kill time and now has to spend the night in jail, or a man beating his girlfriend because that's what his father taught him to do. We incarcerate millions of people in this country for a variety of crimes, from meaningless petty crimes to the worst violent offenses. We keep treating crime like it is an unknown phenomenon, that we do not know what can drive a person to commit these acts. The truth is we do know what can lead a person to delinquency and criminality, at least in part. We have pieces of the puzzle scattered across the dining room table, and all we have to do is connect them. We, as humans, are products of both our nature and our nurture, a constant tug of war between the inside and the outside; our individual level characteristics pull us one way, and the structural level outside characteristics pull us the other. But, these two sides don't just oppose each other, they can interact and exacerbate each other. By

examining the interactions between these two levels, we can be better informed as to how to minimize the impact of these characteristics, and just maybe we can keep some people from every going down a life of crime.

Appendix A.

Figure 1: Multilevel Model Linking Individual and Structural Level Characteristics, Explanatory

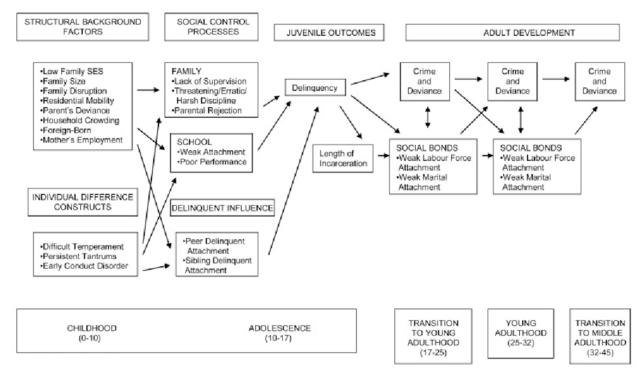
Theories and Engagement in Delinquent and Criminal Behavior (Jason Gieck)

re 1: Multilevel Mo	del Linking Indivi	dual an	d Structural	Level Chara	icteristics, E	xplanatory The	eories and	Engager	nent in Delinqi	uent and Criminal Beha
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	vercharacteristics		Structural Lev	ermeones		individual Level Theo	lies		violations of the Law	
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			In	eories		Trauma Theories				
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- Depression	1.3									
- Anxiety										
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- Role				l Control		Risk/Fear/Stigma			Delinquent and	
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- Internal Attitudes				H					-	
- Integral Emotions	- Street Code								_	
- Decision- Making	- Peer Groups									
- Schemas	- Peer Pressure				Г		_			
- Overall Personality - Guilt	- Peer Delinquency		2.3			3.3				
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- Future Expectations	- Peer/Familial Attit - Past Trauma	udes	Gturi.	Theories		Self-Esteem				
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1.2	- Prior									
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	- Community		2.4							
	- Migration -Public Policy			evelopment						
- Educational	-Imprisonment Conditions		Model							
Attainment										
- Free and Reduced	-Disciplinary Actions	.		-						
Lunch				-						
-Family										
Organization/Support - Sexual Proclivity										
- Weapon Carrying										
- Age Cohort										
- Socioeconomic Status										
- Employment Status										
- Neighborhood										
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Appendix **B**

Sampson and Laub's Dynamic Theoretical Model of Criminality over the Life Course

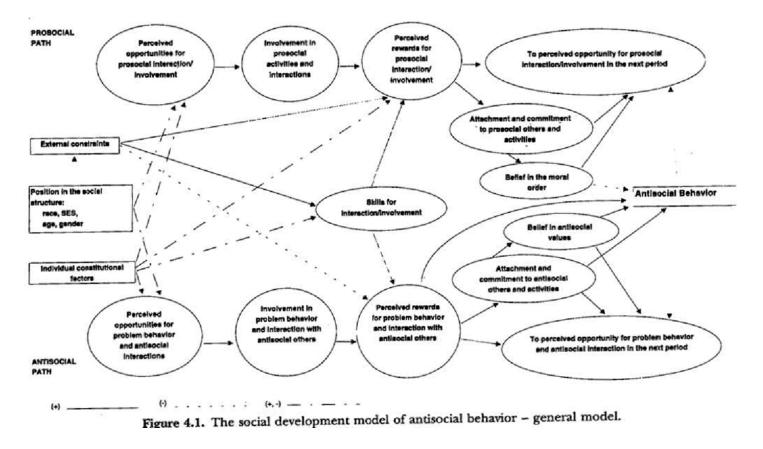
Figure 3: A Dynamic Theoretical Model of Criminality Over the Life-Course



Source: Sampson and Lamb (1993), pp. 244-5.

Source: Sampson, Robert J., and John H. Laub. *Crime in the Making: Pathways and Turning Points through Life*. Harvard Univ. Press, 1997.

Appendix C



Hawkins and Catalano Social Development Model of Antisocial Behavior

Source: Catalano, R., and J. Hawkins. "The Social Development Model: A Theory of Antisocial Behavior." *Semantic Scholar*, Semantic Scholar, 1 Jan. 1996, www.semanticscholar.org/paper/The-social-development-model:-A-theory-of-behavior.-Catalano-Hawkins/933a89207d84dace4d8bb10430fdd78cd40a3d2c.

Appendix D

Hypotheses and areas tested/explored

Set #1 Individual and Structural Level Characteristics

- 1.1 Personality Traits
 - A. The Personality Traits of the individual contributes to the probability of engagement in delinquent and criminal behavior.
- 1.2 Social Circumstances
 - A. The Social Circumstances of the individual contributes to the probability of engagement in delinquent and criminal behavior.
- 1.3 Structural Characteristics
 - A. The Structural Level Characteristics of the situation contributes to the probability of engagement in delinquent and criminal behavior.

Set #2 Structural Level Theories

2.1 Social Control Theories

- A. The focal actor will be more likely to enact deviance if the carrier is higher status than if the carrier is lower status.
- B. The focal actor will be more likely to enact deviance if peers endorse deviance than if others do not endorse it.
- C. The effect of the carrier's status on the likelihood that the focal actor will enact deviance will be weaker if peers endorse deviance than if they do not.
- D. The likelihood and generational uniformity of culturally transmitted deviance will be greater if the (original) carrier is higher status than if the carrier is lower status.
- E. The likelihood and generational uniformity of culturally transmitted deviance will be greater if peers endorse deviance than if they do not.
- F. The effect of the carrier's status on the likelihood and generational uniformity of culturally transmitted deviance will be weaker if peers endorse deviance than if they do not.
- G. Both parental and peer attitudes will have an effect on one's own attitudes and one's behavior, that in college age populations peer effects will be stronger than parental effects, and that one's own attitudes will mediate some of the effects of both parental and peer attitudes. The roles of parents,' peers,' and individual's attitudes in that process will vary by cultural context.
- H. Parental attitudes toward deviance will have a weaker effect on a person's own attitudes toward deviance among Japanese than among American youth. It is expected that the effects of peers' attitudes on a person's attitudes would be stronger in Japan than in the United States and that the mediating effects of one's own attitudes on the relationship between peers' and parents' attitudes on one's deviant behavior would be weaker among Japanese than among Americans.

- I. Under what conditions will deviance become legitimate within a group and therefore expected of self and other group members?
- J. How do status and endorsement affect the likelihood that individuals will enact and then transmit deviance to a new generation of group members?

2.2 Social Control Theories

- A. Do cohorts that came of age during the 1980s and 1990s crime–punishment wave have elevated incarceration rates throughout their life, or is the stability in high incarceration rates primarily a long-term period effect?
- B. What role does the accumulation of criminal history, in conjunction with policies that prioritize criminal records in assigning sentences, play in driving cohort effects?
- C. What are the long-term consequences of placement in restrictive housing in prison?

2.3 Strain Theories

- A. The effect of adolescent negative self-feelings on general deviance in young adulthood is moderated by adolescent neighborhood context.
- B. Adolescent negative self-feelings increase general deviance in most disadvantaged neighborhoods but not in affluent and in middle status neighborhoods.
- C. Adolescent negative self-feelings increase general deviance in middle status neighborhoods and not in most affluent or most disadvantaged neighborhoods.

2.4 Social Developmental Model

- A. Which subset of self reported variables (personality, attitude, immediate social, and community contextual factors) possess the greatest predictive value with respect to reports of property crimes, person crimes, drug use and drug sales?
- B. Which individual variables best predict deviant measures?
- C. Do individual variables differentially predict deviance measures in males and females?
- D. Do individual variables differentially predict deviance measures in various racial/ethnic groups?

Set # 3 Individual Level Theories

3.1 Trauma Theories

- A. Cumulative Disadvantage Hypothesis: youth with the highest risks of victimization should be most likely to suffer from its consequences.
- B. Disadvantage Saturation Hypothesis: high-risk youth should be least likely to suffer from the long-term consequences of adolescent victimization.
- C. Those who have experienced CSA will have a greater likelihood of engaging in violent and delinquent behavior than those who have not experienced CSA.
- D. To what degree is childhood victimization related to unwanted consensual sex?
- E. To what degree do negative cognitive schemas mediate the relation between childhood victimization and engagement in unwanted consensual sex?
- F. How do young men exposed to war and genocide narrate their experiences?
- G. How do these cognitive schemas figure into their constructions of identity, masculinity, and violence over the life course?

- H. What are the domains of risk and resilience in the men's life histories that differentiate violent and nonviolent men, and how do they vary across postwar contexts?
- 3.2 Risk/Fear/Stigma Theories
 - A. Situational characteristics will be associated with reported levels of integral anger and fear. Background characteristics will be associated with reported levels of integral anger or fear.
 - B. Integral anger will be positively associated with intentions to behave aggressively. Integral anger will be negatively associated with intentions to behave passively. Integral fear will be positively associated with intentions to behave passively. Integral fear will be negatively associated with intentions to behave aggressively.
 - C. Integral anger will moderate the effect of deliberative evaluations of risks, costs, and benefits on intentions to commit assault, such that increased anger will reduce the effect of risks and costs and increase the effect of benefits. Integral fear will moderate the effect of deliberative evaluations of risks, costs, and benefits on intentions to commit assault, such that increased fear will increase the effect of risks and costs and decrease the effect of benefits.
 - D. The effect of integral anger on intentions to commit assault will be mediated by situational perceptions of risks, costs, and benefits, such that increased anger will be associated with decreased perceptions of risks and costs and increased perceptions of benefits. The effect of integral fear on intentions to commit assault will be mediated by situational perceptions of risks, costs, and benefits, such that increased fear will be associated with increased perceptions of risk and costs and decreased perceptions of benefits.
 - E. Nerve is positively associated with later violent offending.
 - F. The association between nerve and later violent victimization is nonlinear: a) Those who report low nerve will experience low levels of violent victimization. b) Those who report high levels of nerve will report a progressively lower rate of violent victimization.
 - G. If stigma is considered before performing an act, is it influential? How does the effect of stigma compare to fear of punishment, guilt, self-harm and the potential harm to others?

3.3 Self-Esteem Theories

- A. The negative relation between self-esteem level and workplace deviance is stronger when workplace contingent self-esteem is low.
- B. There will be a three-way interaction among workplace-contingent self-esteem, selfesteem level, and role ambiguity in the prediction of workplace deviance, such that the relation between ambiguity and workplace deviance will be strongest for those whose self-esteem is low and is not contingent on workplace competence.
- C. There will be a three-way interaction among workplace-contingent self-esteem, selfesteem level, and role conflict in the prediction of workplace deviance, such that the relation between conflict and workplace deviance will be strongest for those whose selfesteem is low and is not contingent on workplace competence.
- D. Youth with high levels of self-esteem will be less susceptible to peer pressure over time than youth with low or decreasing levels of self-esteem.
- E. Better school grades will be associated with higher levels of self-esteem.

F. Alcohol use, alcohol misuse, and tolerance for deviance will be greatest among those youth with trajectories that indicate decreasing self-esteem.

Set #4 Violations of the Law

- 4.1 Engagement in Delinquent and Criminal Behavior
 - A. The prevalence of delinquent and criminal behavior.

Appendix E

Hypotheses and areas yet to be tested/explored

Public Policy

Shen

- 1. Further investigation into the behavioral mechanisms behind large cohort designs, which will require longitudinal measures of criminal behavior.
- 2. Examine whether crime–punishment wave cohorts are more likely to be arrested conditional on offending or convicted conditional on arrest over the life course.
- 3. Examine how cohort effects are created by a crime-punishment wave in other criminal justice systems.
- 4. Examine the extent to which elevated incarceration rates over the life course for crime– punishment wave cohorts is a result of higher criminal propensity, as well as the extent to which it is the result of where their past records put them in the formal hierarchy of threat and culpability.

Wildeman

- **1.** Given that the study was conducted in Denmark, the ability to generalize the data is highly limited.
- 2. Future research should look for exogenous variation in the risk of confinement by exploiting cross-facility or cross-guard variation in the risk of placement.
- **3.** An examination of the degree to which declines in mental health due to solitary confinement affect poor post-release outcomes.

Prior Victimization

Turanovic

- 1. Future studies should collect data that can capture more detailed information on youths' subjective experiences with victimization, as well as the situational features of violence that are rarely captured in large-scale longitudinal surveys, like the victim-offender relationship.
- 2. New research should examine heterogeneity in the consequences of childhood victimization to determine whether similar patterns emerge.
- 3. More types of violent victimization should be examined, such as sexual assault or intimate partner violence.

DiPietro

1. Future studies should look closer at the age of exposure to war, to look at potential effect of biological changes.

- **2.** Examining the effects of war on women versus men would do well to expand the literature.
- **3.** Examining how themes such as reconciliation, healing and forgiveness affect violent offenders who are trying to desist who have gone through traumatic life experiences.

Goodman

- **1.** Larger samples should be taken for a more diverse demographic generalization of the data.
- 2. Further variables should be explored and conceptualized to gain more understanding on what may influence engagement in unwanted consensual sex.
- **3.** Broader conceptualizations schemas for unwanted consensual sex should be developed and examined.
- **4.** A more varied sample of victimization types should be explored to see if specific types of victimizations yield varying degrees of unwanted consensual sex.
- 5. Varying degrees of partner types should be examined for a similar effect in number 4.

Kozak

- 1. More research should be conducted to observe the exposure-response relationship between childhood sexual abuse and violent and delinquent behavior to see if different levels of CSA can affect violent and delinquent behavior.
- **2.** Further forms of victimization should be examined to gauge the effects of polyvictimization on children.
- **3.** Replication with a larger sample size should be attempted.

Peer Pressure

Fishbein

1. Further research into the etiological factors of drug use and delinquency, focusing on temperament, biological and physiologic processes.

Younts

- 1. The endorsement of deviant behavior seems to have a legitimizing effect on behavior. Further research should see if this effect carries over to other types of offenses and behaviors.
- **2.** Future studies should examine the extent to which the endorsement of deviant behavior leads to the enactment and transmission of deviant behavior in a natural setting.

Kobayashi

- 1. Replication of the study to see if the results can be shown again.
- **2.** Variation of age in replica studies can show if the differences between Japan and America hold true outside of college students.
- 3. A broader variety of deviant behaviors could show different results in future studies.

- **4.** Considering disciplinary practices could lead to an explanation for some of the results found in the present study, though they would need to be added to new studies on the subject.
- **5.** More measures should be considered when examining the results through social learning theory.

Self-Esteem

Zimmerman

1. A larger sample size should be taken when replicating this study to offset attrition effects that may have skewed the data.

Ferris

- 1. Workplace-contingent self-esteem as a variable may help to explain self-esteem research in other areas, such as being a moderating variable.
- 2. Further research should be done to examine the extent to which workplace-contingent self-esteem may worsen reactions than better them.
- **3.** Future research should seek to replicate the results of reducing workplace deviance and see if workplace-contingent self-esteem always works as a moderator.

Pals

- 1. Future studies should seek to get more direct measures of strain theory than the ones used in this study.
- 2. Further studies should investigate whether engaging in deviance in middle status neighborhoods alleviates negative self-feelings.
- 3. Further analysis is needed to clear up discrepancies in the data regarding the continuity of deviance in low- and high-class neighborhoods, but not middle-class neighborhoods.

Fear

Barnum

- 1. Future research should work to integrate developmental dual-system models with situational explanations to elucidate how age-graded processes shape decisions across the life course.
- 2. Researchers should consider the use of more advanced methodological approaches when attempting to replicate and elaborate on the current study, such as simulations or virtual reality.
- 3. Further integral emotions should also be examined for their effects, such as regret.

Melde

- 1. Rather than having one operationalization of "nerve", future research should examine the current operationalization and should try to create newer conceptualizations of it.
- 2. Future research should examine how personality may interact with local social contexts in ways relevant to the development of nerve.

3. Other emotional reactions/strategies should be examined to determine what effect they have on the development of nerve.

Newby

1. Future research should try to create less open-ended conceptualizations of what stigma entails.

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