

4-16-2024

Influence of Maternal Abandonment, High-Crime Neighborhoods, and Experienced Abuse on Aggressive Assaultive Behavior

Michael David Austin Flood
Walden University

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Walden University

College of Psychology and Community Services

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Michael David Austin Flood

has been found to be complete and satisfactory in all respects,
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Walden University
2023

Abstract

Influence of Maternal Abandonment, High Crime Neighborhoods, and Experienced on
Abuse Assaultive Behavior

by

Michael David Austin Flood

MS, Walden University, 2019

MA, Lancaster Bible College, 2005

BA, Washington Bible College, 1998

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Clinical Psychology

Walden University

November 2023

Abstract

Assault crimes committed by men in the United States need to be empirically studied if a significant reduction in assault crimes is to occur. The purpose of this non-experimental quantitative study was to examine the relationship between the reported experience of abuse, growing up in a high crime neighborhood (HCN), and maternal abandonment with regards to individuals incarcerated for crimes that are operationally classified in this study as Aggressive Assaultive Behavior (AAB).

The framework that grounded this study was based on Bronfenbrenner's ecology of human development and Beck's perspective on framing, which guided the focus on how an individual frames an experience resulting in a thought or behavioral response (i.e., AAB) is influenced by an ecology of experiences. Data was mined from a classification center within the northeastern region of the United States. Using a binary logistic regression, coupled with a step-wise regression the null hypothesis was rejected. However, there was a significant difference when combining the experience of abuse with living in an HCN ($p=.009$). The results reflect an agreement with the grounded theory, but not with a representation of the original Hypothesis anticipated. The recommendation is to investigate AAB as a phenomenological study to better understand the individual as an individual rather than as a statistic.

This study may be used to facilitate a new therapeutic model aimed at conceptualizing AAB, in an effort to improve recidivist rates of men convicted of violent crimes. *Key Words:* assaultive, abandonment, abuse, criminal behavior, high crime neighborhood, anger management programs.

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Dedication

I dedicate this work to the millions of victims who experienced violence of any degree or from any source. The fear of physical trauma or death etched into our memories can be overwhelmingly debilitating. For past, present, or future victims of violence I sincerely hope this work contributes in some way toward the reduction of violence in this country.

Acknowledgments

This dissertation could not have been completed without the invaluable assistance of three key people. It is with a grateful heart that I extend my gratitude to Dr. Cameron John. His guidance was treasured as he assisted me in developing the model used for this study. Dr. John's knowledge in the use of statistical tools provided the necessary insight to interpret and analyze data gathered for this study. Equally significant was the guided assistance of Dr. Kristen Beyer. Dr. Beyer contributed significantly in helping me frame this dissertation in a manner that is grammatically acceptable and skillfully communicated.

The most precious and significant assistance was from Dr. Patricia Flood, my wonderful wife. Her patience, loving assistance, and graciousness are reflective of the heart I fell in love with thirty years ago. Dr. Patricia Flood took up additional responsibilities without complaint so that I could have the freedom to investigate and write this dissertation.

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Chapter 1: Introduction to the Study

During a Presidential Town Hall on March 13 2016, Senator Bernie Sanders stated:

We are tired, by the way, of seeing more people in jail in America than any other country on Earth. I promise you that addressing this issue of real criminal justice reform and ending institutional racism will be at the very top of my list of priorities. (CNN Press Room, 2016)

Reform of the criminal justice system is not limited to effective policing, or a fair and balanced judicial system, but includes the housing and treatment within the correctional arm of criminal justice. Throughout the United States there has been a move in the correctional system to reduce recidivism by moving away from a surveillance control based corrections system to a treatment based system (Byrne & Taxman, 2005). As an example, the state of Pennsylvania enacted Act 81 of 2008, creating the Recidivism Risk Reduction Incentive (RRRI) (Bucklen & Russell, 2012). The primary thrust of the RRRI has been directed at improving the recidivist rates of nonviolent offenders (Bucklen & Russell, 2012, p. 3). Since 2006 the Pennsylvania Department of Corrections (PDOC) has implemented tailored criminogenic assessment tools and refined treatment programs in an attempt to reduce recidivism of men convicted of violent crimes, but the reduction in recidivism within this group has not experienced a statistically significant reduction (Zajac & Bucklen, 2004, p. 2). Although recidivist rates of men convicted of violent crimes are not as high as nonviolent crimes, they are costlier in terms of physical and emotional distress (Cohen & Miller, 1998; Dolan, et al., 2005). Additionally, they present a financial burden, considering long-term incarceration periods.

State correctional facilities in Pennsylvania have relied on cognitive behavioral therapy (CBT) programs to treat men convicted of violent crimes (Zajac & Bucklen, 2004), which in this study refers to aggravated assault, robbery, and murder. At this point it should be noted that throughout this study the use of the term violent crime does not include violent crimes that are sexual in nature. The focus will be on crimes of violence such as, aggravated assault, robbery, and murder. Considering the minimal effect CBT has on the recidivist rate of men incarcerated for violent crimes, perhaps a new approach is necessary. This will require a better understanding of the mediating variables among men convicted of violent crimes. Understanding that a conviction for a violent crime incorporates some facet of aggressive assaultive behavior (AAB), I investigated specific variables that are suspected in mediating aspects of a violent crime. This study may be used to facilitate a new therapeutic model aimed at conceptualizing AAB, which may be necessary in an ongoing effort to improve recidivist rates of men convicted of violent crimes through improved programming.

Major Sections of Chapter 1

The beginning of Chapter 1 offers an introduction into this study, providing background on the efforts in a correctional system coupled with a note on results of past efforts to reduce AAB as it relates to the state prisons efforts. This is followed with thoughts from myself suggesting that an attempt to produce even better results can impact society both in terms of reducing emotional trauma as well as reduced potential financial burden in addressing AAB.

The chapter also includes a problem statement, followed by the nature of the study to give context to the subject matter coupled with the population group this study

purports to investigate. Further, to help the reader better understand how AAB is operationalized in this study definitions of terms are provided. Those potential limitations or delimitations are followed with a brief discussion about the significance of the study in terms of how it can impact society. The significance of this study describes the efficacy of attempts to reduce recidivist rates of AAB.

A theoretical framework is essential in providing evidence of tested theories that provide a foundation for this study. The framework here is founded on an ecology system brought forth by Bronfenbrenner (1977). I discuss how an ecology system is supported by researchers like Ainsworth and Bowlby (1991), along with Anderson (2001) and Beck (1999) who suggest that familial influences on behavior significantly contribute to the ecology of human development. And I look at studies that investigate the impact of environmental influences on behavior.

The framework is followed with a concise statement reflecting the research question. Next the nature of the study is described in an effort to give context to the subject matter coupled with the population group this study purports to investigate. Knowing the population this study investigates requires some understanding of how data is gathered with respects to ethical guidelines when working with a vulnerable population.

The significance of this study describes the efficacy of attempts to reduce recidivist rates of AAB. To help the reader better understand how AAB is operationalized in this study a definition of terms is provided. In this section, not only is AAB defined but all terms and variables significant to understanding the results of this study are defined within this section.

The very nature of research lends itself to the understanding that there are potential limitations or delimitations that may potentially impact internal validity of a study. Therefore, the inclusion of potential constructs that can sway internal validity is necessary. Those potential limitations or delimitations are followed with a brief discussion about the significance of the study in terms of how it can impact society.

Background

Throughout the United States there has been the observation that the correctional system would reduce recidivism by moving from a surveillance and control-based corrections system toward a treatment-based system (Byrne & Taxman, 2005). In agreement, the state of Pennsylvania enacted Act 81 of 2008, creating the Recidivism Risk Reduction Incentive (RRRI), which has been directed at improving the rates of recidivism among nonviolent offenders (Bucklen & Russell, 2012). Since 2006 the PDOC has implemented specialized criminogenic assessment tools and refined treatment programs to reduce recidivism of men convicted of violent crimes, but the reduction in recidivism within this group has not experienced a statistically significant reduction (Zajac & Bucklen, 2004, p. 2). Although recidivist rates of men convicted of violent crimes are not as high as nonviolent crimes, they are costlier in terms of physical and emotional distress among their victims (Cohen & Miller, 1998; Dolan, et al., 2005). Additionally, they present a financial burden in light of long-term incarceration periods.

A review of literature identifies a number of factors associated with AAB: impairment of the frontal lobe (Anderson & Bushman, 2002; Pincus, 2001); physiology (Grimes et al., 2007; Jacobs et al., 2006; Nomura et al., 2006); environmental stressors (Nijman, 2002), (d) externalized dimensions of psychopathology (Maltó, et al., 2007);

familial influences on behavior (Ainsworth & Bowlby, 1991; Beck, 1999); or experienced abuse which precipitates abusive behavior toward others (Robertson & Burton, 2010). Some of the factors noted overlap and have been used to understand the forces contributing to AAB with the more prominent probabilities identified in literature as environmental stressors, familial influences on behavior, and experienced abuse. However, contributing factors of AAB are often studied in a singular fashion (e.g., head trauma, learned, physiology, socioeconomic influences) and little has been written regarding the co-occurrence and interaction of multiple variables on AAB.

This study was conducted to expand understanding by investigating the co-occurrences of specific variables that are discussed in the research question. The variables studied included the combined variables of experienced maternal abandonment, living in a high crime neighborhood (HCN), and experienced abuse in the history of men convicted of AAB. The rationale for inclusion of this third variable is that there is a significant contribution to literature citing abuse as a risk factor to aggression (Kazdin, 1985; Patterson et al., 1991). Additionally, this variable is included to determine the strength of this study's hypothesis that the combined effect of males experiencing maternal abandonment during the developmental years while living in a HCN is predominant in men identified as possessing AAB characteristics. A binary logistic regression was used to determine the relative importance and potential interaction of each predictor on the dependent variable.

Statement of the Problem

Throughout the United States there has been the observation that the correctional system would reduce recidivism by moving from a surveillance and control-based corrections system towards a treatment based system (Byrne & Taxman, 2005). In agreement, the state of Pennsylvania enacted Act 81 of 2008, creating the Recidivism Risk Reduction Incentive (RRRI) (Bucklen & Russell, 2012). The primary thrust of the RRRI has been directed at improving the rates of recidivism among nonviolent offenders (Bucklen & Russell, 2012, p. 3). Since 2006 the PDOC has implemented specialized criminogenic assessment tools and refined treatment programs to reduce recidivism of men convicted of violent crimes but the reduction in recidivism within this group has not experienced a statistically significant reduction (Zajac & Bucklen, 2004, p. 2), the recidivism rates of men incarcerated for violent crimes indicate a need for a new approach. Although recidivist rates of men convicted of violent crimes are not as high as nonviolent crimes, they are costlier in terms of physical and emotional distress among their victims (Cohen & Miller, 1998; Dolan, et al., 2005). Additionally, they present a financial burden, in light of long-term incarceration periods.

Though state correctional facilities have relied on CBT programs to treat men convicted of violent crimes (Zajac & Bucklen, 2004), the recidivism rates of men incarcerated for violent crimes indicate a need for a new approach. This required a better understanding of the mediating variables among men convicted of violent crimes, including living in an HCN and maternal abandonment. Little has been done to understand the combined relationship of environmental stressors and familial influences on AAB, especially in terms of convictions for violent crimes. Because studies have

linked experienced abuse with abusive behavior toward others (Robertson & Burton, 2010), this study also included the variable experienced abuse to determine if living in an HCN and experiencing maternal abandonment demonstrates a higher incidence of AAB than any singular occurrence of the three variables most identified in the literature as factors in AAB. The study was conducted to determine whether the experience of maternal abandonment while living in a HCN has a greater impact on AAB than the sole experience of having experienced a self-reported history of abuse.

A review of literature identifies a number of factors associated with AAB: (a) impairment of the frontal lobe (Anderson & Bushman, 2002; Pincus, 2001); (b) physiology (Grimes, Ricci, & Melloni, 2007; Jacobs, Van Den Broeck, & Simoens, 2006; Nomura et al., 2006); (c) environmental stressors (Nijman, 2002), (d) externalized dimensions of psychopathology (Maltó, et al., 2007); (e) familial influences on behavior (Ainsworth & Bowlby, 1991; Beck, 1999); or (f) experienced abuse which precipitates abusive behavior toward others (Robertson & Burton, 2010). Some of the factors noted above overlap and have been used to understand the forces contributing to AAB with the more prominent probabilities identified in literature as environmental stressors, familial influences on behavior, and experienced abuse.

Gap in Literature

The gap in the literature is that little has been done to understand the combined relationship of environmental stressors and familial influences on AAB, especially in terms of convictions for violent crimes. The researcher will focus on specific environmental stressors that are suspected to impact AAB. The element of living in a high crime neighborhood (HCN) is one environmental stressor that will be measured and

evaluated to determine its impact on AAB. A familial experience is another environmental stressor that will be measured. In regard to familial experiences, the focus will be on the absence of a birth mother's parental care, which will be termed maternal abandonment. The narrowed terms and usage of HCN and maternal abandonment will be operationalized in Chapter 2. Because studies have linked experienced abuse with abusive behavior towards others (Robertson & Burton, 2010), this study will include the variable experienced abuse in an attempt to determine if living in an HCN and experienced maternal abandonment demonstrates a higher incidence of AAB than any singular occurrence of the three variables most identified in the literature as factors in AAB. The thesis of this study is that the experience of maternal abandonment while living in an HCN has a greater impact on AAB than the sole experience of having experienced a self-reported history of abuse.

There are two caveats in the current available literature: (a) contributing factors of AAB are often studied in a singular fashion, e.g., head trauma, learned, physiology, socioeconomic influences, (b) little has been written regarding the co-occurrence and interaction of multiple variables on AAB. This study will seek to expand our understanding by investigating the co-occurrences of specific variables that are discussed in the research question. The variables studied will be the combined variables of experienced maternal abandonment, living in an HCN, and experienced abuse in the history of men convicted of AAB. The rationale for inclusion of this third variable is that there is a significant contribution to literature citing abuse as a risk factor to aggression (Kazdin, 1985; Patterson, Capaldi, & Bank, 1991). Additionally, this variable is included to determine the strength of this study's hypothesis that the combined effect of males

experiencing maternal abandonment during the developmental years while living in an HCN is predominant in men identified as possessing AAB characteristics. The proposed analysis will be a binary logistic regression with the three independent variables, (a) experienced maternal abandonment, (b) living in an HCN, and (c) experienced abuse, predicting aggressive assaultive behavior. The use of a binary logistic regression will be used to determine the relative importance and potential interaction of each predictor on the dependent variable.

Using a random selection from a purposive sample of convenience, incarcerated men at a Department of Corrections (DOC) within the Northeastern region of the United States answer questions in a structured interview as determined by the DOC and conducted by classification counselors. The classification counselor uses a structured format to identify criminogenic needs. The questions are not limited to but include a social history, which include information related to the independent variables of experienced maternal abandonment, living in an HCN, and the experience of a self-reported history of abuse during the developmental years. The structure of the interview in gathering social history is subjective. Because responses of inmates are not categorical, the social history will need to be coded. An explanation of how the coding is operationalized will be included in Chapter 3 under the Methods section of this study. This study will also include categorical data relating to the history of convictions. The conviction history will be differentiated between crimes that are aggressive and assaultive in nature and nonassaultive in nature. The definition of what constitutes aggressive assaultive nature is provided in the Definitions later in this chapter.

As previously noted, human development is not encapsulated into one predominant experience or a specific physiological influencing factor, but through a compilation of influencing experiences that Bronfenbrenner (1977) would term as the ecology of human development. Ainsworth and Bowlby (1991), along with Anderson (2001) and Beck (1999) would suggest that familial influences on behavior significantly contribute to the ecology of human development. Additionally, studies support the possibility that people interpret events through the influential construct of significant people in their lives, specifically parental influences, or primary caregivers (Beck & Freeman, 1990; Smith, et al., 1999; Linver et al., & Kohen, (2002); Davison & Neale, 2001; DuBois, et al., 2002).

Nature of the Study

The intent of this study was to explore the relationship between three specific independent variables (the experience of maternal abandonment, living in an HCN, and a self-reported history of abuse) as they relate to the dependent variable of AAB. Understanding the contributions of the singular or combined relationship between the variables in this study (experienced maternal abandonment, living in an HCN, and experienced abuse) are essential in bringing about change. The primary principal subjects of this study represent a vulnerable population, prisoners. Studies of this population are complicated when considering the use of an experimental design. Access, security, and confidentiality are logistic hurdles. Fortunately, the intent of this study as mentioned at the beginning of this paragraph can be satisfied through an ex post facto study. The intent of this study is to explore the relationship between three specific independent variables as they relate to the dependent variable of AAB. An ex post facto design is appropriate since

I can derive an analysis from historical data. Research has suggested that experienced abuse precipitates abusive behavior toward others (Robertson & Burton, 2010) and is included as a variable because of the volume of research pointing to this variable as a serious contributor. Research has suggested that experienced abuse precipitates abusive behavior toward others (Robertson & Burton, 2010) and is included as a variable because of the volume of research pointing to this variable as a serious contributor. However, the emphasis of this study is an attempt to understand the impact of the combined relationship between living in an HCN and experienced maternal abandonment. The analysis was a binary logistic regression with the three independent variables predicting aggressive assaultive behavior. Additionally, a step-wise regression was included to determine the possible incremental contribution of each variable.

Because of restrictions resulting from the COVID pandemic of 2020, a de-identified Department of Corrections (DOC) within the Northeastern region of the United States will be the source of mined data. All convicted felons going through the DOC participate in a diagnostic and classification process at a DOC within the Northeastern region of the United States where a cumulative adjustment record is compiled. Information gathered during the classification process includes a comprehensive criminal history report and a dialectical social history that reflects information gathered from multiple sources to include state police investigators, local and state government documentation, and family members as well as the inmate himself. The data gathered through the classification process includes statistical historical data and narratives. The narratives are part of that historical data and are not separately gathered by me but by the staff members of the DOC. Because the cumulative adjustment record compiled on each

inmate includes content analysis coding of qualitative data for quantitative analysis, this study was a hybrid methods study, one that does not strictly follow traditional sequential, concurrent, or transformative quantitative designs (see Caracelli & Greene, 1993). The mixed secondary data were coded and analyzed in an attempt to explore the individual and combined effects of maternal abandonment, having lived in an HCN, and having experienced abuse that was not sexual in nature for AAB compared to non-AAB.

Scope of the Study

Understanding the history and development of a person's cognitive processes are essential to bring about change (Witherington & Crichton, 2007). So, how does the conscious mind integrate an event with prior negative experiences to formulate a belief or response about that event? Chapter two of this paper will seek to understand what factors contribute to Aggressive Assaultive Behavior (AAB) with the intended goal of better understanding AAB.

Environmental stressors (Nijman, 2002) have been cited as influencing aggressive assaultive behavior, as well as externalized dimensions of psychopathology (Maltó, et al., 2007). Social learning (Anderson & Bushman, 2002), and script theory (Huesmann, 1988) have both been reported as mechanisms in aggressive responses. It has been reported that family dynamics (Anderson & Bushman, 2002; Kim & Kim, 2007; Leary, et al., 2006), and abuse (Kim & Kim, 2007) establish continued patterns of aggression and alienation (Caspi, 2000). Ainsworth and Bowlby (1991) have significantly contributed to our understanding of familial influences on behavior through the lens of attachment theory and its contribution to understanding personality development. Beck (1999) has written about the cognitive basis of anger, hostility, and violence and the familial

influence on behavior. Although some theories or perspectives are overlapping, they represent the majority of theoretical models that attempt to explain contributing factors to AAB.

Researchers of AAB have traditionally studied this topic from a distance. They work with statistical data that comes out of a correctional institution with little or no personal contact with convicted felons of AAB. This is in part because of stringent guidelines established in the Code of Federal Regulations: Title 45 – Public welfare part 46 (45 CFR 46) – Protection of Human Subjects Subpart C, which identifies prisoners as a vulnerable population and outlines additional protections to consider when prisoners are participants in a study (Department of Health and Human Services (DHHS), 2005). I have personally interviewed over 7,000 convicted felons in a super-max prison, where it was my responsibility to create diagnostic reports that are used to determine criminogenic needs and identify other dynamics that are used to facilitate treatment. Those experiences have provided me with a unique perspective that when coupled with my extensive research on this topic may help fill in the gaps of the available literature. Perhaps that is why my 2005 research into this topic pointed to a suspicion that an individual's perception of injustice (Flood, 2005) may be an important factor to investigate.

Delimitations

The population of this study is limited to men incarcerated in a state correctional facility. The data extracted from the cumulative adjustment record included only three independent variables: experienced maternal abandonment, living in an HCN, and experienced abuse. Other variables like birth order, education, or vocational experiences could have an influence on AAB, but I limited the independent variables to specific

identifiable experiences that are discussed in Chapter 2 with support for concentrating on these specific experiences.

Limitations

The COVID pandemic impacted the ability to do research with the population of this study. As of April 2020, the PDOC halted all research. To work around this limitation I used a data set that provides all of the significant information necessary to fulfill the intent of this study. The data set is slightly dated in that it was gathered in 2005 as work toward the completion of my thesis. The 2005 study was approved by the DOC and the data was mined from the archived inmate records with all identifying information being removed before the writing of the 2005 thesis. Because of limitations doing a study of prisoners, I was limited to secondary historical data. The data recorded in an inmate's file includes discrete data, or data represented in cardinal numbers such as the number of convictions a person may have on record. Because of the nature of this study is a secondary analysis of data provided by the DOC through the classification process at diagnostic center, it is possible some narratives of an inmate's developmental history will not be as descriptive as others. The developmental history narrative gathered during the classification process reflecting an inmate's self-reported history of abuse may possibly fail in distinguishing between physical, sexual, and emotional abuse. Additionally, if questions are asked assuming a specific response, the counselor may have failed to investigate further with open-ended questions. An example would be asking inmates if during their childhood they lived at home or if they were in a state-operated facility. Home could be living with an aunt, grandmother, or other relative that did not include the

presence of a mother, thereby providing an incomplete history of that individual's developmental experiences.

Types of Information

All historical data will be derived from one primary source, the classification intake documentation of inmates being classified for criminogenic needs and security concerns at a DOC within the Northeastern region of the United States. This data will include a narrative of an individual's social history that includes familial history and experiences of abuse. It will also note place of residence during the individual's developmental years and any gang activity they may have been involved in. The gang activity will help to determine if they lived in an HCN. Documents available through the classification process will also include a thorough record of an individual's criminal history (PDOC, 2019).

Purpose Statement

The purpose of this non-experimental quantitative study was to examine the relationship between the reported experience of abuse, growing up in an HCN, and maternal abandonment with regards to individuals incarcerated for crimes that are operationally classified in this study as AAB. Because the cumulative adjustment record compiled on each inmate includes content analysis coding of qualitative data for quantitative analysis, this study did not strictly follow traditional sequential, concurrent, or transformative quantitative method designs. The proposed hybrid method in this study best fits what Caracelli and Greene (1993) referred to as typology development in which, for example, qualitative types are developed (e.g., maternally abandoned, lived in high crime area, physically abused), then quantitatively contrasted. As noted earlier, this is not

an experimental study but an ex post facto study that looks at historical data and possible relationship that exist between the measured variables.

Conceptual Framework

Working from the framework that life is not defined in one predominant experience or a specific physiological influencing factor, this study was guided by the framework that the ecology of human development is significant in the influence of an individual (Bronfenbrenner, 1977). The ecology system brought forth by Bronfenbrenner (1977) suggests that human development is not understood solely by an individual's physiology or a classical conditioned response like Pavlov's dogs. Rather, to understand the human experience a multisystem needs to be considered (e.g., an overarching understanding of family, social, and regional systems that an individual interacts with thereby contributing to encounters that impact experiences and ultimately the individual's personal interaction with the world around themselves). These interactions contribute to and give structure to how one frames an event or experience.

Studies support the possibility that people interpret events through the influential construct of significant people in their lives, specifically parental influences or primary caregivers (Beck & Freeman, 1990; Davison & Neale, 2001; DuBois et al., 2002; Linver et al., 2002; Smith et al., 1999). Ainsworth and Bowlby (1991), along with Anderson (2001) and Beck (1999) suggested that familial influences on behavior significantly contribute to the ecology of human development. This interpretation of an event or encounter is framed by an individual primarily through familial influences (Beck, 1999; Cohen, 1997) coupled with a person's sense of self (Beck, 1999). This study addressed the relationship of maternal abandonment, growing up in an HCN, and the experience of

abuse with regard to individuals incarcerated for crimes that are operationally classified in this study as AAB. To determine if the hypothesis is valid, that the relationship between having experienced maternal abandonment coupled with living in an HCN is stronger predictor of AAB than the singular event of any one of these three variables: maternal abandonment, growing up in an HCN, and experienced abuse. The variables will be evaluated through a binary logistic regression revealing if there is a predictor of aggressive assaultive behavior. Additionally, a step-wise regression will be included to determine the possible incremental contribution of each variable.

A conviction for a violent crime incorporates some aspect of AAB. It is the aggressive assaultive behavior resulting in the conviction of a violent crime that this study proposes to investigate which in turn may contribute to a better model of violent behavior from which programs can be designed in an effort to address psychosocial constructs of violent crimes. Understanding the history and development of a person's thought processes are essential to bringing about change. Attempting to understand incarcerated men has its caveats. Prisoners are considered a vulnerable population because of the potential blurred lines of taking advantage of this population and a potential for prisoners to suspect that participation may in some way influence length of sentence or treatment. Additionally, there are safety and security risks that by nature of the correctional setting limit access to this population. Because of limitations doing a study of prisoners, I am limited to secondary historical data. The data recorded in an inmate's file includes discrete data, or data represented in cardinal numbers such as the number of convictions a person may have on record. Some data measured will be offered in the form of categorical data, e.g., robbery, murder, and aggravated assault. A third

form of data used in this study will be in the format of a narrative. The inmate goes through a classification process that includes gathering historical data about an individual's family history. The counselors recording the narrative ask inmates in a semi-structured interview about the type of residential experiences they had, e.g., HCN, if they experienced abuse, and with whom they identify as the primary caretaker. Because of the limitations and restrictions of the population in this study, I will have to work with mixed historical data. One accepted methodology to gaining insight into this vulnerable population is through a mixed secondary data analysis study. Because this cannot be an experimental study, an ex post facto study is required. The intent is to explore the relationship between three specific independent variables as they relate to the dependent variable of AAB. The design of this study attempts to explore the individual and combined effects of maternal abandonment, having lived in an HCN, and having experienced abuse of men incarcerated for violent crimes that represent AAB that is not sexual in nature compared to those incarcerated for crimes that are not reflective of AAB.

The mixed secondary data will be coded and analyzed in an attempt to explore the individual and combined effects of maternal abandonment, having lived in an HCN, and having experienced abuse that was not sexual in nature for AAB compared to non-AAB. The thesis of this study is that the experience of maternal abandonment while living in an HCN has a greater impact on AAB than the sole experience of having experienced a self-reported history of abuse or any combination of the independent variables. The proposed analysis will be a binary logistic regression with the three independent variables predicting aggressive assaultive behavior.

Research Question

The central research question is the following: “What is the relationship between maternal abandonment, living in an HCN, and experienced abuse in discriminating individuals incarcerated for AAB?” The null hypothesis is there is no significant relationship among the combined independent variables of experienced maternal abandonment and living in an HCN, compared to the sole experience of being abused in the history of men convicted of AAB or any combination of independent variables. The alternative hypothesis is that there is a significant relationship between the combined variables of experienced maternal abandonment, living in an HCN, over the sole experience of being abused in the history of men convicted of AAB or any combination of independent variables.

Limitations

The COVID pandemic impacted the ability to do research with the population of this study. As of April 2020, the PDOC halted all research. To work around this limitation, I will use a data set that provides all the significant information necessary to fulfill the intent of this study. The data set is slightly dated in that it was gathered in 2005 as work towards the completion of a thesis. The title of the Thesis was Maternal Abandonment in a High Crime Neighborhood and the Impact it has on Assaultive Behavior: A Non-Experimental Ex Post Facto Study (Flood, 2005). The same process described throughout this present dissertation was completed back in 2005. The 2005 study was approved by the DOC and the data was mined from the archived inmate records with all identifying information being removed before the writing of the 2005 thesis.

Because of the nature of this study is a secondary analysis of data provided by the DOC through the classification process at diagnostic center, it is possible some narratives of an inmate's developmental history will not be as descriptive as others. The developmental history narrative gathered during the classification process reflecting an inmate's self-reported history of abuse may possibly fail in distinguishing between physical, sexual, and emotional abuse. Additionally, if questions are asked assuming a specific response, the counselor may have failed to investigate further with open-ended questions. An example would be asking inmates if during their childhood they lived at home or if they were in a state-operated facility. Home could be living with an aunt, grandmother, or other relative that did not include the presence of a mother, thereby providing an incomplete history of that individual's developmental experiences.

As a note on cultural sensitivities, this study fails to incorporate research that could help better understand or to put into context what is being observed in the data in terms of cultural awareness/sensitivities.

Delimitations

The population of this study is limited to men incarcerated in a state correctional facility. The data extracted from the cumulative adjustment record will include only three independent variables: experienced maternal abandonment, living in a high crime neighborhood, and experienced abuse. Other variables like birth order, education, or vocational experiences could have an influence on AAB, but I have limited the independent variables to specific identifiable experiences that are discussed in Chapter 2 with support for concentrating on these specific experiences.

Significance of Study

Having retired from the PDOC, I have a special interest and knowledge base specific to the diagnostic process completed in a state prison. I should note that during my employment with the PDOC I was provided opportunities to visit and observe the classification process in other state correctional facilities. The PDOC has stressed an importance on rehabilitation through programming facilitated with improved testing and diagnostic tools. The PDOC has developed community corrections centers throughout the state to ease inmates back into society and encourage community outreach programs. The goal is to return the individual back into the community to be a productive and responsible citizen. The PDOC (2016) also created the Recidivism Risk Reduction Incentive program to get nonviolent offenders with short sentences back into civilian population to become productive citizens. These programs are primarily for individuals who are not physically aggressive or assaultive. The PDOC utilizes accepted strategies within the field to improve treatment to reduce recidivism rates. They implement cognitive behavioral programs like Cage your Rage, Thinking for a Change, or Violence Prevention, or the once trendy Boot Camp program to the more recent trend of using the Level of Service Inventory - Revised (LSI-R) to measure risk.

The PDOC utilizes accepted strategies within the field to improve treatment in an attempt to reduce recidivism rates. They implement cognitive behavioral programs like Cage your Rage, Thinking for a Change, or Violence Prevention, or the once trendy Boot Camp program to the more recent trend of using the Level of Service Inventory - Revised (LSI-R) to measure risk.

Program Efficacy

Effective programming first identifies high-risk inmates for program inclusion (Listwan et al., 2006). This is significant since my personal experience working in the PDOC was that other treatment-based employees believed to some degree that the really difficult offenders would never change, and therefore, why waste money on programs to rehabilitate. Of course, none of those sentiments were empirically based, but merely sentiments expressed within treatment staff. The second concentrates on meeting the criminogenic needs of the inmate. This requires teaching them problem solving skills, helping foster a better self-esteem and teaching them to become more responsible for their behavior. The third element is responsivity, which means that programming factors in the capabilities of the inmate and the theoretical approach of the counselor/therapist.

Listwan et al. (2006) concentrate primarily on the aftercare programs, believing this is where the true success of treatment lies. There is indeed support throughout the available literature that this is true. However, it is postulated that the reduction of recidivist behavior begins with an empirically sound therapy model that is tailored to the criminogenic needs of an inmate, while not neglecting the need for a positive support system that continues with learned experienced while participating in a sound therapy and treatment programming.

When talking about recidivism, each state, county, and district has its own interpretation of what constitutes recidivism adding to the complexity of this task. For instance, New York does not consider a parole violation with new charges a recidivist matter. Their stance on this matter is that they had not yet completed the program (parole supervision), therefore they are actually still wards of the state and counted as an inmate

under the custody of the New York Department of Corrections. On the flip side, Pennsylvania considers even a technical violation an act of recidivist behavior. For the Pennsylvania Department of Parole, violating parole is a criminal act punishable by incarceration.

Definition of Terms and Variables

Abuse: Because the nature of this study is a secondary analysis of data provided by the DOC through the classification process at the diagnostic center, it is possible some narratives of an inmate's developmental history will not be as descriptive as others. The developmental history narrative gathered during the classification process reflecting an inmate's self-reported history of abuse may possibly fail in distinguishing between physical, sexual, and emotional abuse. Therefore, a broad definition of abuse was used.

Aggression: An act that is directed toward a target with the intent of inflicting or releasing physical or emotional energy toward the offending object that has hindered a desired goal (Kaufmann, 1965; Millon et al., 1998), while that target is motivated to avoid the consequences of the aggressor (Anderson & Bushman, 2002). There are two types of aggression: "direct aggression where the aggressor is easily identified by the victim" (Geen & Donnerstein, 1998, p. 24), and indirect aggression where the victim does not easily identify the aggressor (Geen & Donnerstein, 1998). These are true for both verbal and physical aggression. Anderson and Bushman (2002) distinguished between hostile and instrumental aggression, where hostile aggression is reactive and instrumental aggression is a premeditative or "proactive rather than reactive" (p. 29).

Aggressive assaultive behavior (AAB): An individual who had an arrest and conviction for one or more of the following crimes of violence: murder (of any degree),

homicide (of any degree, except homicide by DUI), aggravated assault, and robbery (of any degree or type). Convictions for three or more simple assaults were included as AAB. Histories of less than three simple assaults are usually coupled with resisting arrest or some alcohol related offense and does not appear to demonstrate intent to cause serious bodily harm. The same rationale contributes to why homicide by DUI will not be reflected as AAB; it is presumed the injury was not deliberate or with criminal intent. Burglaries will not be considered assaultive if they are not coupled with an assault crime. Burglaries are generally committed when the victim is not present in the structure they burglarize; otherwise, the charge would be coupled with robbery or some degree of an assault crime since it puts the victim at risk for bodily injury.

The following charges were not reflected as AAB: recklessly endangering another person, terroristic threats, propulsion of missiles into an occupied vehicle or onto a roadway, harassment (of any degree), arson, and possession of a firearm (of any degree). These crimes are not usually associated with serious bodily injury unless coupled with one of the already noted assault charges. Kidnapping was excluded as an assault crime because unless it is coupled with an assault crime, it may not be committed with the intent of causing bodily injury. An example would be a father kidnapping his child because he has not been permitted visiting rights. For this study, assault crimes of rape or sexual assault or any degree of rape or sexual assault were not included. The only exception to this rule was where additional convictions of assault or robbery are coupled with the charges. Sex related crimes need to be addressed separately, as they appear to have a different root issue that contributes to their behavior.

Developmental years: Years for which an individual is under the care and custody

of an adult from the time of birth through the age of 18 or having been emancipated by a court order.

High crime neighborhood: The National Criminal Justice Reference Service (NCJRS) noted that “the Bureau of Justice Statistics does not define high crime neighborhood” (personal email communication, October 13, 2003). They noted that researchers used a complex formula that required specific crime statistics for specific populations. That level of statistical research is not feasible for this study; therefore, a more subjective approach is necessary. The classification intake counselor at the diagnostic center asks an inmate if he lived in a high crime neighborhood. If the inmate needs clarification, he will be asked if he had ever witnessed an assault, robbery, or drug dealing where police had intervened or whether they had ever been the victim of one of these crimes within their immediate neighborhood.

Maternal abandonment: For this study, maternal abandonment was framed as an individual living with anyone other than the birth mother of the inmate for more than one year at any time from birth until they were either 18 years old or deemed by the courts “certified adult” for prosecuting the individual as an adult before reaching the age of 18.

Assumptions

The design of this study relies on the structure of the environment from which data are retrieved. The state correctional facility that is the sole source of data evaluated for this study employs educated and trained intake counselors. Although counselors bring their own personal technique to the classification process, they have a set of expectations established by the DOC in creating each inmate’s cumulative adjustment record. I assume that the narrative report reflecting an inmate’s ecological influences like family structure

and the socioeconomic environment will provide data needed to answer the research question: “What is the relationship between maternal abandonment, living in an HCN, and experienced abuse in discriminating individuals incarcerated for aggressive assaultive behavior?”

Summary

The beginning of Chapter 1 offers an introduction into this study. This introduction describes the significance of this study in terms of how it can impact social change in addressing AAB. A background on the efforts in a correctional system coupled with a note on results of past efforts to reduce AAB as it relates to the state prisons efforts, is noted. This is followed with thoughts from myself suggesting that an attempt to produce even better results can impact society both in terms of reducing emotional trauma as well as reduced potential financial burden in addressing AAB.

After introducing the background of this study, I provided a guide through the structure of Chapter 1. The sections that follow begin with a brief and concise problem statement. To give context, I review the nature of the subject material followed with the purpose of this study.

A theoretical framework is essential in providing evidence of tested theories that provide a foundation for this study. The framework here is founded on an ecology system brought forth by Bronfenbrenner (1977). I discuss how an ecology system is supported by researchers like Ainsworth and Bowlby (1991), along with Anderson (2001) and Beck (1999) who suggest that familial influences on behavior significantly contribute to the ecology of human development. And I look at studies that investigate the impact of environmental influences on behavior.

The framework is followed with a concise statement reflecting the research question. Next the nature of the study is described to give context to the subject matter coupled with the population group this study purports to investigate. Knowing the population this study investigates requires some understanding of how data is gathered with respects to ethical guidelines when working with a vulnerable population.

Chapter 2: Literature Review

Investigating Theories

Major Sections of Chapter 2

Chapter 2 begins with a brief introduction into aspects of aggression that researchers have investigated to understand aggressive and assaultive behavior. As noted in Chapter 1, the purpose of this non-experimental quantitative study was to examine the relationship between the reported experience of abuse, growing up in a high crime neighborhood (HCN), and maternal abandonment with regards to individuals incarcerated for crimes that are operationally classified in this study as Aggressive Assaultive Behavior (AAB). Because the cumulative adjustment record compiled on each inmate includes content analysis coding of qualitative data for quantitative analysis, this study did not strictly follow traditional sequential, concurrent, or transformative quantitative method designs. The proposed hybrid method in this study best fits what Caracelli and Greene (1993) referred to as typology development in which, for example, qualitative types are developed (e.g., maternally abandoned, lived in high crime area, physically abused), then quantitatively contrasted. As noted earlier, this is not an experimental study but an ex post facto study that looks at historical data and possible relationship that exist between the measured variables. Reviewing the various approaches to investigating aggression will hopefully provide insight into why the framework of this study is chosen.

After presenting a review on the structuralist's investigative inquiry on the physiological and neurological I follow with a review of literature related to memory structure and organization. Beginning with a structuralist's understanding of investigative inquiry through the phenomenological perspective of the functionalists to an inclusive

model like Bronfenbrenner's (1977) ecology multisystem. After providing a review of systems of study I report on the research of how studies investigating physiological and neurological elements to aggression have significantly added to our understanding of aggression, but also in how and why this alone falls short of understanding AAB.

After presenting a review on the structuralist's investigative inquiry on the physiological and neurological I return us to a review of literature related to memory structure and organization. Significant theories on how we process encounters are reviewed here. Understanding cognitive processing does not negate the value of the physiological or neurological process of the brain, but at present they do not give us a greater insight into the uniqueness of the phonological aspect of the individual's AAB.

I conclude the chapter with a theoretical model of how a person goes from feeling offended to feeling a great sense of being unjustly treated that may require an act of aggression to satisfy the sense of injustice perceived. This study is not an attempt to create a theoretical model of AAB, but it does add to the understanding of why I am approaching this inquiry from a narrow yet unique framework.

Literature Search Strategy

The literature search strategy began with a concept of what I wanted to investigate: HCNs, effect of maternal abandonment on development of males under the age of 18 and research on theories of AAB. The objective was to investigate the relationship between maternal abandonment, growing up in an HCN, and the experience of abuse with regard to individuals incarcerated for crimes that are operationally classified in this study as AAB. The third variable of abuse was included in the literature search because much of the literature on AAB has focused on associating the experience

of abuse to AAB.

Using the Walden University online library I searched databases including Academic Search Complete, Eric, Military and Government Collection, PsycARTICLES, PsycINFO and SAGE Research Methods Online. Eventually the search focused on journal specific to topic and theory of the variables. Examples are *Federal Probation: A Journal of Correctional Philosophy and Practice*, *Developmental Psychology*, and *Journal of Interpersonal Violence*. Additional resources for the literature search were government agency websites like the PA Department of Corrections and the National Criminal Justice Reference Service. Searches were first word specific: *assault*, *aggression*, *high crime neighborhood*, *abandonment*, *maternal abandonment*, *recidivism*, and *abuse*. This broadened to include synonyms and phrases of the search words and supportive resources found in the journals reviewed. The search eventually used authors listed in the citations of significant articles.

Conceptual Framework

A theoretical framework is essential in providing evidence of tested theories that provide a foundation for this study. The framework here is founded on an ecology system brought forth by Bronfenbrenner (1977). I discuss how an ecology system is supported by researchers like Ainsworth and Bowlby (1991), along with Anderson (2001) and Beck (1999), who suggest that familial influences on behavior significantly contribute to the ecology of human development.

Literature Review Related to Key Variables

The Research of Aggression

Researchers of AAB have studied this topic from a distance. They work with

statistical data that comes out of a correctional institution with little or no personal contact with convicted felons of AAB. This is in part because of guidelines established in the Code of Federal Regulations: Title 45 – Public welfare part 46 (45 CFR 46) – Protection of Human Subjects Subpart C, which identifies prisoners as a vulnerable population and outlines additional protections to consider when prisoners are participants in a study (Department of Health and Human Services [DHHS], 2005).

Despite limitations on research, environmental stressors (Nijman, 2002) have been cited as influencing AAB as well as externalized dimensions of psychopathology (Maltó et al., 2007). Social learning (Anderson & Bushman, 2002) and script theory (Huesmann, 1988) have both been reported as mechanisms in aggressive responses. It has been reported that family dynamics (Anderson & Bushman, 2002; Kim & Kim, 2007; Leary et al., 2006), and abuse (Kim & Kim, 2007) establish continued patterns of aggression and alienation (Caspi, 2000). Although some theories or perspectives are overlapping, they represent the majority of theoretical models that attempt to explain contributing factors to AAB. For instance, Ainsworth and Bowlby (1991) contributed to the understanding of familial influences on behavior through the perspective of attachment theory and its contribution to understanding personality development. Beck (1999) also wrote about the cognitive basis of anger, hostility, and violence and the familial influence on behavior.

Understanding the history and development of a person's cognitive processes are essential to bring about change (Witherington & Crichton, 2007). So, how does the conscious mind integrate an event with prior negative experiences to formulate a belief or response about that event? Chapter two of this paper will seek to understand what factors

contribute to Aggressive Assaultive Behavior (AAB) with the intended goal of better understanding AAB.

Despite limitations on research, environmental stressors (Nijman, 2002) have been cited as influencing AAB as well as externalized dimensions of psychopathology (Maltó et al., 2007). Social learning (Anderson & Bushman, 2002) and script theory (Huesmann, 1988) have both been reported as mechanisms in aggressive responses. It has been reported that family dynamics (Anderson & Bushman, 2002; Kim & Kim, 2007; Leary et al., 2006), and abuse (Kim & Kim, 2007) establish continued patterns of aggression and alienation (Caspi, 2000). Although some theories or perspectives are overlapping, they represent the majority of theoretical models that attempt to explain contributing factors to AAB. For instance, Ainsworth and Bowlby (1991) contributed to the understanding of familial influences on behavior through the perspective of attachment theory and its contribution to understanding personality development. Beck (1999) also wrote about the cognitive basis of anger, hostility, and violence and the familial influence on behavior.

Although some theories or perspectives are overlapping, they represent the majority of theoretical models that attempt to explain contributing factors to AAB.

Researchers of AAB have traditionally studied this topic from a distance. They work with statistical data that comes out of a correctional institution with little or no personal contact with convicted felons of AAB. This is in part because of stringent guidelines established in the Code of Federal Regulations: Title 45 – Public welfare part 46 (45 CFR 46) – Protection of Human Subjects Subpart C, which identifies prisoners as a vulnerable population and outlines additional protections to consider when prisoners are

participants in a study (Department of Health and Human Services (DHHS), 2005). I have personally interviewed over 7,000 convicted felons in a super-max prison, where it was my responsibility to create diagnostic reports that are used to determine criminogenic needs and identify other dynamics that are used to facilitate treatment. Those experiences have provided me with a unique perspective that when coupled with my extensive research on this topic may help fill in the gaps of the available literature. Perhaps that is why my research into this topic has revealed that an individual's perception of injustice (Flood, 2005) may be an important factor to investigate.

Understanding Mental Processing

The realm of the physical world is known through those things we touch, see, smell, or hear. Those objects perceived through our senses that can be described by dimension, density, color, or any measurable constituent is known by its arbitrary subjective title that is classified and stored away for retrieval in our minds (Wundt, 1897). This structuralist perspective to understanding cognitive processes falls short of being able to understand the phenomenological aspect of aggression. The question for a functionalist is how does this process take place. How do we know what we know?

Titchener (1899) introduced psychology to a system of understanding how the brain works to create and retrieve thoughts. To understand how conscious thoughts are experienced, Titchener attempted to break down the observational process into elements that do not incorporate the concept that our conscious thoughts are unified and that they are not merely individual pieces to be surgically analyzed. As noted by Witherington and Crichton (2007), understanding the phenomenological aspects of aggression may require a functionalist's approach that provides a foundation for understanding the dynamic

system, which may be required to understand the role of perceived injustice and its effect on mental processes. From a functionalist's perspective it is important to understand how our observations of life can be applied in practical terms, in contrast to the behaviorist who seeks a purely scientific experimental approach to psychology that concentrates on the objective observations of stimulus/response. But before we look at the phenomenon of AAB, it may be important to look at the brain from a structuralist's perspective and determine what physiological factors we need to investigate in understanding AAB.

That is to say, I want to present the concrete mechanics that represents a structuralist understanding of AAB. To look at how experiences are understood through the physical constructs of the brain where observable experience A is understood to directly affect observable experience B. In my review of available research attempting to understand AAB through a structuralist I note where these studies fall short in understanding external variables that may impact the findings they describe. As noted, earlier structuralism lacks the ability to understand cognitive processes through a dynamic system. In Chapter 1 I introduced the dynamic system that represents the grounded theory utilized to understand the research hypothesis, Bronfenbrenner's (1977) ecology of human development. This study does not deny the impact of understanding AAB through the structuralist's perspective but wants to consider the phonological influences on AAB.

The next section of this chapter will present a review of the structuralist's understanding of AAB. With each study represented I attempt to demonstrate how these studies fall short of explaining AAB. Following the section that presents a review of physiological and neurological contributors to AAB I present research on memory

structure and cognitive processing. That is followed with a theoretical model of perceived injustice and the value of presenting this model.

Physiological and Neurological Contributors to AAB

Estrogen receptor- β gene disruption potentiates estrogeninducible aggression (Nomura et al., 2006), the androgen receptor (Jacobs et al., 2006) and testosterone metabolite levels (Sannen et al., 2004; Zitzmann, 2006), and the anterior hypothalamus vasopressin system (Grimes et al., 2007) may also be influencing elements of aggressive behavior. Looking towards the arginine vasopressin (AVP) neural system, serotonin (5-HT), and androgen receptor (AR), researchers attempt to find a physiological relationship to aggression. Grimes, Ricci, and Melloni, (2006, 2007) investigated anabolic-androgenic steroid (AAS) induced aggression on adolescent hamsters (*Mesocricetus auratus*) for the purpose of understanding the role of the anterior hypothalamus (AH), and the AVP/5-HT neural system in aggressive behavior. They suspected that the AH releases AVP, and 5-HT, both playing a critical role in communicating with the lateral septum, medial amygdala, and ventrolateral hypothalamus, which govern offensive aggression. Grimes et al. observed that longer exposure to AAS correlated with more acts of aggressive attacks against a resident-intruder. It was also observed that within the latero-anterior hypothalamic (LAH) region, the density of 5-HT decreased in comparison with the control hamsters, but its decreased density stabilized after the first week, whereas the AVP demonstrated a significant increased density and peptide content from the second and fourth day of treatment. The significance of this study is that the observable increase of aggressive behavior was not correlated with the decreased density of 5-HT, suggesting that the role of 5-HT on the neural system within the LAH region may not be significant

in regulating aggression. Nevertheless, it was clear to them that the LAH AVP neural system correlates with aggressiveness.

Grimes et al. (2006, 2007) suggested that 5-HT alone does not appear to mediate aggressive behavior. However, Dolan, Anderson and Deakin (2001) report there is a distinction between impulsivity and aggression, and that perhaps 5-HT may be better associated with impulsivity rather than offensive aggression. They also note that testosterone (T) is potentially a factor in aggression. Their concluding thoughts are that there is a correlation of reduced 5-HT levels as it relates to impulsivity. Dolan et al. (2001), and Birger et al. (2003) note there is extensive research verifying the 5-HT influence on modulating impulsivity and aggression. They suggest the 5-HT function may be likened to a conductor orchestrating the neural communication between 14 other synaptic receptor subtypes. Birger et al. (2003) propose that 5-HT is linked with trait aggression, high impulsivity hyper-responsiveness, while T correlates with competitive aggression and dominance-related aggression.

Using a gregarious species to investigate the relationship of testosterone (T) with aggression, Sannen, Van Elsacker, Heistermann and Eens (2004) chose the bonobo (*Pan paniscus*), which are propitiative in nature possessing low levels of aggression. The study indicates there is no increase of T with unprovoked aggression (e.g., pestering, or short charge). However, there was a marked significance of provoked aggression, correlating with the increase of T. Birger et al. (2003) note that high T levels coupled with socioeconomic factors correlate with some criminal behaviors. They report one study of 4,462 men that demonstrate a relationship between high T levels and excessive aggressive behavior, and a second study of 692 male prisoners revealing that persons

convicted of violent crimes correlated with high T levels in contrast to those within that group who had non-assaultive crimes.

It is reported that the Androgen receptor (AR) mediates signals of behavioral patterns during developmental stages of growth (Jacobs et al., 2006). One area of AR activity that contributes to the discussion of aggression is observed in the basolateral nuclear group (BNG) of the amygdaloid body. Jacobs et al. (2006) suggest there is a relationship between decreased aggression and lesions of the amygdaloid; therefore, they chose to investigate the expression of ARs in the basolateral amygdala in canines. They conclude that the arginine-vasopressin receptors of the ventrolateral hypothalamus play a role in testosterone's function in aggression, which is also noted by Grimes et al. (2007). Jacobs et al. also suggest that 5-HT mediates T, as is noted by Birger et al. (2003).

There are several mediating factors contributing to aggression, but the genomic actions of androgens may not be a contributing mechanism to aggression. It is reported that the androgen receptor (AR) mediates signals of behavioral patterns during developmental stages of growth (Jacobs et al., 2006). One area of AR activity that contributes to the discussion of aggression is observed in the basolateral nuclear group (BNG) of the amygdaloid body. Research suggests there is a relationship between decreased aggression and lesions of the amygdaloid (Jacobs et al., 2006). The arginine-vasopressin receptors of the ventrolateral hypothalamus play a role in testosterone's function in aggression (Grimes et al., 2007; Jacobs et al., 2006). Additionally, 5-HT mediates T (Birger et al., 2003; Jacobs et al., 2006). T is functional by means of the AR and through estrogen receptors (ER) aromatized to estradiol (E₂), and that both AR and ER mechanisms modulate aggressive behavior (Nomura et al., 2006). Understanding that

the ER-a and ER-b binding proteins act on the neuroendocrine system differently, they studied ER-knockout mice. ER-b plays a contributory role in aggression and ER-a inhibits aggression. ER-b may mediate the 5-HT system, which has been linked to the modulation of aggression (Nomura et al., 2006).

Research that seeks to understand aggression through the physiological or neurological perspective concentrates on testosterone and or the androgen receptor, with an equal amount of research on the serotonin (5-HT) effect. Additional studies reporting a relationship between aggression and β ER gene disruption (Nomura et al., 2006), GluR-A subunit containing AMPA receptors (Vekovischeva et al., 2004), and/or NOS (Wen et al., 2004) generally return to the subject of T and 5-HT. Reduced production of 5-HT may modulate aggression, but its role may be more of a conductor than as the primary agonist. Testosterone is a strong contender for being the culprit of aggressive behavior, but it is mediated by not only 5-HT, but possibly AR and the AVP neural system. The ER-b has been strongly linked with aggression, but again, it too is possibly modulated by 5-HT. Wen et al. (2004) suggest that the photoperiod effects of neuronal nitric oxide synthase regulate aggression in Siberian hamsters. But this too may be regulated by 5-HT. Vekovischeva et al. (2004) implicates AMPA-type glutamate receptors as regulators of emotions.

There is no disagreement that specific neurotransmitters mediate aggression, but it is worthy to note how Sannen et al. (2004) chose the bonobo chimpanzee as subjects of their research. One reason for possibly having these primates as subjects of their research may be that they are gregarious creatures. It hints at the possibility that they understand the value of social acceptance or the idea of belonging to a group when trying to

understand the role of neurotransmitters in mediating aggression. Such a point is not lost on myself. I do not deny the role of neurology or physiology on AAB, but once again, it cannot be understood solely through the structuralist's isolated stimulus response perspective. It is important to note here that memory structure is reliant on neural pathways. The signaling of neurotransmitters from one neuron to another that sets and determines the pathway of cognitive processing is critical to making sense of how information is processed for each individual. The next section of this chapter is a review of available research on cognitive processing without going into detail about the chemical process that allows this marvel to occur.

Memory: Structure and Organization

There are a number of ways to understand how the brain stores, organizes and retrieves memories. One important model to describe this process is the Information Processing Model (IPM). This model incorporates four steps to understanding our mental processes. The first step of mental processing (input) looks at how external stimuli are received (Kaufman & Lichtenberger, 1999; Kaufman & Lichtenberger, 2005). That is to say, it looks at how our sensory system is used to gather external stimuli, which is processed in step two. The second step is the integration (processing) of those external stimuli (Kaufman & Lichtenberger, 1999; Kaufman & Lichtenberger, 2005). Once the sensory stimuli are processed, they need to be stored away for retrieval sometime in the future. This storage process is the third step in the IPM. Eventually there is the need to utilize that stored information, leading us to the fourth step of IMP - output.

The genesis of our memories may be found in the temporal lobe, or more specifically, within the amygdala, and hippocampus. Our cognitive functions can be

found in the prefrontal cortex, posterior parietal cortex, and inferior temporal cortex (Pinel, 2006). It is here that data received from our sensory system is processed. Using the IPM we can picture the four stages of mental process.

Cognitive Processing

Pinel (2006) notes that perception is the “higher-order of process of integrating, recognizing, and interpreting complete patterns of sensations” (p. 157). Sternberg (2006) reiterates this sentiment with both men reporting the value of reordering sensory stimuli. How much a person can organize and manipulate data is significant to how they retrieve and use that data in their environment. The integration of mental processes is the building of mental structures, which consist of schemas (Gregory, 2007). Some decision-making processes are built on experiences that are encoded, which in turn provide a base from which procedural knowledge is implemented (Geen & Downnerstein, 1998). As we implement procedural knowledge in day-to-day decisions, we build schemas. A particular schema drawn on to make a decision is known as top-down processing because a decision is based on schema, which in turn was based on procedural knowledge. That is to say, what was already established in a schema influences our decision making process. These schemas build in greater complexity so that as a person assimilates or applies acquired knowledge they add to a repertoire of skills or knowledge that shapes the schema. Working through this process may lead to an unsuccessful event that requires some accommodation to make an element of experience work. These two factors of experience (assimilation and accommodation) hopefully cause a state of harmony, or equilibrium. This entire process is the process Piaget calls equilibration (Gregory, 2007).

Perceptions may be a matter of how semantic or episodic memories are retrieved and integrated into an event. Studies indicate that people react to an event through the perspectives of significant people in their lives, specifically their parents or primary caregivers (Beck & Freeman, 1990; Newirth, 1992). Zacks et al. (2007) note that previously learned experiences act as sensory cues triggering the perception of an event. This priming affect is also noted by Squire, Knowlto, and Musen (1993). Squire et al. suggest that the usual processing perspective understood through Thurstone's primary mental abilities (PMAs), or the IPM may not be sufficient to understand the retrieval of long-term declarative and nondeclarative memories. They suggest a systems perspective for understanding mental processes.

An example is a person who learns that every time they tell the truth they experience negative consequences. After years of encoding these experiences, they learn to lie as a method of self-preservation. Once this person is married, they are confronted with what could be a neutral event like being asked if they picked up the milk from the store like they were asked to do, and they make up an excuse to justify forgetting about getting the milk. Why make up a story instead of telling the truth? Because prior experiences have taught this individual that truthfulness results in negative experiences.

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suggest that the usual processing perspective understood through Thurstone's primary mental abilities (PMAs), or the IPM may not be sufficient to understand the retrieval of long-term declarative and nondeclarative memories. They suggest a systems perspective for understanding mental processes.

Kimball et al., (2007) note that the rehearsal of an event reinforces the stability of that event in long-term memory (LTM). This concept represents the search of associative memory (SAM). They also note that SAM includes the concept of contextual drift, where an item decays while stored in short term memory (STM). Walker, Skowronski, and Thompson (2003) have noted that people experience a fading effect of bad memories resulting in most people filtering life positively. Yet, Weidemann et al. (2008) note there is a relationship in the strength and longevity of a stimulus in determining a response. With that in mind, Beck (1999) notes that familial influences shape the way people view events, and I would suggest that long-term negative experiences might contribute to the fading out of positive experiences, rather than the bad. The result is framing even neutral events negatively. Gardiner Greg, and Karayianni (2006) note that the encoding of events is easily incorporated into our cognitive processing as episodic processes and does not require the thoughtful retrieval of information.

As noted by DeGloma and Friedman (2005), people filter what they observe through social experiences. For instance, the way a person interacts with an event depends on how he or she frames an event. A person's sense of self is significant to how the event is framed. If it is framed or perceived as benevolent, then a response may not be one of aggression. But if the cognitive processing is that an event is unjustified, a response may be anger (Beck, 1999). Beck (1999) believes that people are not sensitive

specifically to events, but to their cognitive processing that triggers a response. Beck (1999, p. 8) says, “They mistake the image for the person. The most negative frame contains an image of the adversary as dangerous, malicious, and evil... The fixed negative representation is backed up by selective memories of past wrongs, real or imaginary, and malevolent attributions”. In applying the concept of framing, it is possible that a person frames an event as threatening, precipitating aggression. When there is a “fixed negative representation backed up by selective memories of past wrongs, real or imaginary” (Beck, 1999, p. 8) the response could be aggressive in nature. The filters used to frame an event are conceptualized and then employed dynamically “pushing reality through the pre-defined holes... fitting it into the available forms, shapes and categories” (DeGloma & Friedman, 2005, p. 5). If these foundational filters continue throughout life, it is possible the individual will begin to experience the stoop effect.

Philippot, Schaefer, and Herbette (2003) researched the interaction of episodic memories on emotional responses that are cued by visual stimuli. The results revealed that priming autobiographical memories (through visual stimuli) would elicit strong emotions of anger or joy for those asked to recall generalized episodic memories over those asked to recall specific memories. The conclusion of Philippot et al. (2003) was that the seemingly effortless process of retrieving a generalized memory requires greater cognitive resources to reconstruct the past, requiring “strategic attentional focus” (p. 272). My conclusion was that because we are strategically focusing on a matter, it brings the issues to the forefront of our attention acting like a spotlight to draw attention to the matter.

As noted by Holmes and Mathews (2005), mental images can significantly influence our emotions. However, mental imagery is not limited to visual stimuli. Anyone who has ever lost a loved one can easily recall memories when they smell the clothes that person wore, or smell the shampoo they used, or hear a song the loved one would sing. Images or analogical codes are not the only way people conceptualize mental representations; they also rely on words and language as symbolic code (Holmes & Mathews, 2005).

The Influences on Cognitive Processing

Studies indicate that the influence of external factors such as peer pressure, the media, and society are contributors to antisocial behavior (Bonner, Dorr, Reid, & Walker, 1986; Farrington, Loeber, Stouthamer-Loeber, & Van Kammen, 1998). However, the influence of the family on the development and behavior of an individual is perhaps the most significant.

Beck (1999) notes that familial influences shape the way people view events. Gardiner Greg, and Karayianni (2006) note that the encoding of events is easily incorporated into our perceptions as episodic processes and does not require the thoughtful retrieval of information. As noted by DeGloma and Friedman (2005), people filter what they observe through social experiences. For instance, the way a person interacts with an event depends on how he or she frames an event. A person's sense of self is significant to how the event is framed. If it is framed or perceived as benevolent, then a response may not be one of aggression. But if the perception is that an event is unjustified, a response may be anger (Beck, 1999). Beck (1999) believes that people are not sensitive specifically to events, but to their perception that triggers a response. Beck

(1999, p. 8) says, “They mistake the image for the person. The most negative frame contains an image of the adversary as dangerous, malicious, and evil... The fixed negative representation is backed up by selective memories of past wrongs, real or imaginary, and malevolent attributions”. The filters used to frame an event are conceptualized, or in terms of SI it generates the language used to give meaning. As noted by Holmes and Mathews (2005), mental images can significantly influence our emotions. Images or analogical codes are not the only way people conceptualize mental representations; they also rely on words and language as symbolic code (Holmes & Mathews, 2005). And then the modification of an individual’s interpretation is dynamically employed in “pushing reality through the pre-defined holes... fitting it into the available forms, shapes and categories” (DeGloma & Friedman, 2005, p. 5).

Research indicates there is a correlation between familial factors and antisocial personalities (Bonner, et al., 1986; Smith et al., 1999; Gibbons, 1968). The influence of the family is evident in the development of an individual’s behavior and perception of events. Surprisingly, it is not the neglect or abuse that shapes his or her behavior (Fagan & Wexler, 1987), but how events were perceived.

Whatever the intent of parental interaction, studies indicate there is a correlation between familial factors and antisocial personalities (Bonner et al., 1986; Smith et al., 1999; DuBois et al., 2002; Dornfeld & Kruttschnitt, 1991; Gibbons, 1968). The lack of nurturing care and loving discipline during developmental stages results in the externalizing of behavior (Linver et al., 2002) that may establish continued patterns of aggression and alienation (Caspi, 2000), the characteristics of a personality disorder.

According to the Linehan's Diathesis-Stress Theory, genetics and the biological makeup of an individual coupled with the invalidation of a caregiver or anyone he or she holds in high esteem is the contributing factor to antisocial behavior (Davison & Neale, 2001). Twin and adoption studies show a definitive influence in how the family and environment contributes to the development of personality disorders and criminal behavior (Bonner et al., 1986; Wolman, 1987). Millon (1998) cites a study that reports an 80% DZ correlation for the influence of common family environment in criminality.

The Object-Relations Theory suggests that children incorporate values and identify with persons with whom they have a strong emotional attachment. Studies indicate that people react to their world through the perspectives of significant people in their lives, specifically their parents or primary caregivers (Beck & Freeman, 1990; Smith et al., 1999; Linver et al., 2002; Davison & Neale, 2001; DuBois et al., 2002). When maternal security and attachment are not present during developmental years, adaptive behaviors are not nurtured and behavior problems increase (Caspi, 2000). The issue of attachment and security are evident even in adoption where children are at a higher risk of externalizing problems. The result is a struggle with their identity and a sense of where they belong in the scheme of things. Children of adoption are mistrusting and fearful (Beck & Freeman, 1990). They perceive themselves as vulnerable and even weak. Males experiencing maternal abandonment while also living in the setting of an HCN also experience the same stages of frustration and mistrust as seen in children of adoption. Because they are mistrusting of others, they are not able to receive loving constructive criticism. Taking advice enforces their belief that they are weak, and this enrages them. They have a black or white perception of events, which is to say they cognitive process

an event concretely. People are either for them or against them. Their constant state of vigilance is perceived as being out of control. People begin to distance themselves from the individual who is “out of control” which further perpetuates their defensiveness, and they find themselves in a situation where survival requires drastic measures, which could be manifested in illegal activities.

Perceived Injustice: A Theoretical Model

Buss and Durkee (1957) would suggest that the model for aggression is understood in terms of quantity, frequency, cultural acceptability, and temperament. The model I have theorized for AAB follows this logic: A response to an event is an over generalized sense of wrong or hurt that is fostered by the cognitive processing of being diminished as perceived by an individual experience or event. I hypothesize that a reaction is equal to or greater than the sum of a person’s self-esteem multiplied by the duration of the devalued self-esteem, plus the value assigned to the offender, plus the value assigned to the event. It is the individual offended that assigns value to each factor. The only factor that is magnified is the value of self. It is possible that the longer a person lives with a devalued perception of self, the greater the assigned value of an offender or an offense (these observations come from 15 years working in the penal system). It is suspected that the opposite is true for those who have a better self-esteem. The value of a person’s self-esteem was illustrated by Bonanno’s (2004) discussions on resilience. The reaction to a traumatic event was not significant to cause emotional harm when the person hurt by an event has a support system strong enough to foster a healthy self-esteem (Bonanno, 2004).

While biopsychologist search for specific physiological determinates, the greater volume of research suggests that external stimuli significantly correlate with types of behavior. In the later part of the 20th century, Erich Fromm reflected on the complexities of behavior noting that there is no single stimulus that produces an equal and predictable behavioral response. He clarified his theory by correctly noting that individuals have contributing influences that shape their personalities that cannot be duplicated by any other person in time (Millon et al., 1998). Social and familial influences and exceptional events are all processed through the individuality of each person's personality. It is this complexity in psychological development that gives cause to believe AAB is better understood through an ecology of human development rather than through a singular determinant.

Chapter 3: Research Method

Note On COVID

The COVID pandemic impacted the ability to do research with the population of this study. As of April 2020, the Pennsylvania Department of Corrections (PDOC) halted all research. To work around this limitation, I will use a data set that provides all the significant information necessary to fulfill the intent of this study. The data set is slightly dated in that it was gathered in 2005 as work towards the completion of a thesis. The title of the Thesis was Maternal Abandonment in a High Crime Neighborhood and the Impact it has on Assaultive Behavior: A Non-Experimental Ex Post Facto Study (Flood, 2005). The same process described throughout this present dissertation was completed back in 2005. The 2005 study was approved by the Department of Corrections (DOC) and the data was mined from the archived inmate records with all identifying information being removed before the writing of the 2005 thesis. I will use the acronym NERDOC (Northeastern Region Department of Corrections) for the de-identified DOC within the northeastern region of the United States. The data set used the same parameters in gathering data from the previous study as designed in this study. The differences between these two studies will be reflected in the description of data gathering.

Introduction

The purpose of this non-experimental quantitative study with a postpositivist perspective is to examine the relationship between the reported experience of abuse, growing up in a high crime neighborhood (HCN), and maternal abandonment with regards to individuals incarcerated for crimes that are operationally classified in this study as Aggressive Assaultive Behavior (AAB). Because the cumulative adjustment

record compiled on each inmate includes content analysis coding of qualitative data for quantitative analysis, this study will be a hybrid methods study, one that does not strictly follow traditional sequential, concurrent, or transformative quantitative method designs. The proposed hybrid method in this study best fits what Caracelli and Greene (1993) referred to as typology development in which, for example, qualitative types are developed (e.g., maternally abandoned, lived in high crime area, physically abused), then quantitatively contrasted. As noted earlier, this is not an experimental study but an ex post facto study that looks at historical data and possible relationship that exist between the measured variables. The thrust is to determine if the hypothesis is valid, that the relationship between living in an HCN with the experience of maternal abandonment is stronger than the singular event of any combination of these three variables: maternal abandonment, growing up in an HCN, and the experience of abuse.

The variables will be compared between adult males convicted of assault crimes against adult males convicted of non-assault. That is to say the framing of experiences, which is influenced through the ecology of human experiences are strong factors in AAB, more so than any singular aspect of life. Understanding the contributions of the singular or combined relationship between the variables in this study (experienced maternal abandonment, living in an HCN, and experienced abuse) are essential in decreasing the recidivist rate of men incarcerated of crimes that are assaultive in nature.

Research Design and Rationale

The intent for having approached this study as non-experimental, mixed methods study with a postpositivist perspective was to examine the relationship between the reported experience of abuse, growing up in an HCN, and maternal abandonment with

regards to individuals incarcerated for crimes that are operationally classified in this study as AAB. Because manipulating maternal abandonment, abuse, and exposure to crime would be unethical, an experimental study is not feasible. An ex post facto study was required, as it does not introduce a variable into a study as would an experimental design, but merely observes the possible interaction of dependent variables with independent variables to determine if the interaction is strong enough to suggest more than a relationship to an identified dependent variable (Rosen et al., 1999; Salkind, 2010). An ex post facto design is appropriate since I can derive an analysis from historical data. Because the population of this study is a vulnerable population the data were limited to information gathered through the diagnostic process that is a part of an intake conducted by DOC staff.

Major Sections of Chapter 3

I begin Chapter 3 by introducing the purpose of this study followed with a layout of major sections found in Chapter 3. It is important to know the population being studied so I begin with the describing not only the population that is the cornerstone of this study but also the unique vulnerability of this population. I also note that the population in this study is limited to a Department of Corrections within the Northeastern region of the United States. This is followed with a description of variables and why they are included. This section also reviews expected limitations of conducting secondary data analysis.

This chapter then provides a thorough description of the setting for this study, the setting of the data gathered, and the setting of the population from which data is gathered. This is followed with a brief statement on procedure. This is brief because the data used is historical at the time it is provided to me in the form of secondary data. I want to again

note that the uniqueness of this study is in looking at the phenomenological information gathered, like: was the mother the primary caregiver, did the individual experience abuse and was there a sense of growing up in a high crime neighborhood. And this information is not gathered via a yes, no questionnaire but through an intake interview that is recorded in a narrative format.

Next a review of the instruments used for this study. Because this is historical secondary data the instruments used to gather data is set and determined by the DOC. A thorough description is provided with a list of data gathered through this narrative construction of an inmate's life history as they relate to what the DOC needs to create an assessment of inmate needs and cautions that may be noted. This section also reviews how data will be handled in creating an analysis.

Population

The population of this study is a vulnerable population. Stringent guidelines established in the Code of Federal Regulations: Title 45 – Public welfare part 46 (45 CFR 46) – Protection of Human Subjects Subpart C, identifies prisoners as a vulnerable population and outlines additional protections to consider when prisoners are participants in a study (Department of Health and Human Services (DHHS), 2005).

Because manipulating maternal abandonment, abuse, and exposure to crime would be unethical, an experimental study is not feasible to investigate how the individual and combined relationship between maternal abandonment, having lived in an HCN, and having experienced abuse of men incarcerated for violent crimes impacts AAB. Because this cannot be an experimental study, an ex post facto study is required. An ex post facto study does not introduce a variable into a study as would an

experimental design, but merely observes the possible interaction of dependent variables with independent variables to determine if the interaction is strong enough to suggest more than a relationship to an identified dependent variable (Rosen et al., 1999; Salkind, 2010).

Description of Variables

Research has suggested that experienced abuse precipitates abusive behavior toward others (Robertson & Burton, 2010) and is included as a variable because of the volume of research pointing to this variable as a serious contributor. However, the emphasis of this study is an attempt to understand the impact of the combined relationship between living in an HCN and experienced maternal abandonment. The purposed analysis will be a binary logistic regression with the three independent variables predicting aggressive assaultive behavior. Additionally, a step-wise regression will be included to determine the possible incremental contribution of each variable. This study of men convicted of assault crimes that are not sexual in nature against men not convicted of assault crimes investigates the combined effect of living in an HCN while also having experienced maternal abandonment during the developmental years. While the independent variables of experienced maternal abandonment while living in an HCN are the focus of this study, there is a need to include abuse as a third variable of comparison to determine the strength of the effect of maternal abandonment and living in an HCN as it relates to AAB.

A 2005 thesis from myself will be the source of data analyzed for this study. The data gathered from that thesis originally shared raw data generated from a DOC within the northeastern region of the United States during the diagnostic and classification

process. An Internal Review Board (IRB), created by Walden University to ensure ethical procedures are followed, set the determined process. The first step was to secure written approval from the originating authority leading up to the 2005 study. After securing the approval from the DOC representative, IRB ensured the data set was available in its entirety from the originating source.

The data set is derived from a cumulative adjustment record compiled during the classification process. The data gathered during the classification process was extracted by the DOC ensuring anonymity of this vulnerable population. Information gathered during the classification process included a comprehensive criminal history report and a dialectical social history that reflects information gathered from multiple sources to include state police investigators, local and state government documentation, and family members as well as the inmate himself. The data gathered through the classification process includes statistical historical data and narratives. Because the cumulative adjustment record compiled on each inmate includes content analysis coding of qualitative data for quantitative analysis, this study will be a hybrid methods study, one that does not strictly follow traditional sequential, concurrent, or transformative quantitative method designs. The proposed hybrid method in this study best fits what Caracelli and Greene (1993) referred to as typology development in which, for example, qualitative types are developed (e.g., maternally abandoned, lived in high crime area, physically abused), then quantitatively contrasted. As noted earlier, this is not an experimental study but an ex post facto study that looks at historical data and possible relationship that exist between the measured variables.

The logistics of this study limits the amount and quality of data that can be gathered. Because the population of this study is a vulnerable population the data will be limited to information gathered through the diagnostic process that is a part of an intake conducted by DOC staff. Because this study cannot be an experimental study it will utilize an ex post facto mixed study using a secondary analysis. The mixed secondary data will be coded and analyzed in an attempt to explore the individual and combined effects of maternal abandonment, having lived in an HCN, and having experienced abuse that was not sexual in nature for aggressive compared to non-aggressive assaultive behavior. The proposed analysis will be a binary logistic regression with the three independent variables predicting aggressive assaultive behavior. Binary logistic regression is a statistical technique for evaluating dichotomous dependent variables. In this study the dichotomous dependent variables are conviction for a non-assaultive crime and a conviction for an assault crime as defined in the definitions section of Chapter 2 of this paper. Using sample of convenience, incarcerated men answered questions in a structured interview conducted by DOC classification counselors who have a structured format to identify criminogenic needs. The questions are not limited to but include a social history, which includes information related to the independent variables of experienced maternal abandonment, living in an HCN, and the experience of abuse during the developmental years. The structure of the interview in gathering social history is subjective. Because responses of inmates are not categorical but recorded in the narrative, the social history was coded by me after data retrieval in the previous thesis. The de-identified dataset also included categorical data relating to the history of convictions. The conviction history differentiated between crimes that are aggressive and

assaultive in nature and non-assaultive in nature. Having categorical data and narratives to evaluate, the study is best approached as a quantitative study. Because the cumulative adjustment record compiled on each inmate includes content analysis coding of qualitative data for quantitative analysis, this study will be a hybrid methods study, one that does not strictly follow traditional sequential, concurrent, or transformative quantitative method designs. The proposed hybrid method in this study best fits what Caracelli and Greene (1993) referred to as typology development in which, for example, qualitative types are developed (e.g., maternally abandoned, lived in high crime area, physically abused), then quantitatively contrasted. As noted earlier, this is not an experimental study but an ex post facto study that looks at historical data and possible relationship that exist between the measured variables.

Setting

The population has been limited to inmates sentenced to this particular Department of Corrections. The de-identified dataset came from a sample of 406 male inmates from a population of approximately 2,500 incarcerated adult males. Every male inmate in this state having a maximum sentence of two years or greater is evaluated for potential risk to the public and himself, and specific needs for future program considerations.

The following identifying factors will not be reported in this study: race, religion and ethnic background. That determination was based on the thesis that the variables are cross-cultural and effect all people equally. It is also believed that with sample of convenience, subjects will be chosen without bias to these factors. The only factors to be noted and recorded are the types of crimes inmates committed (assaultive or non-

assaultive), a self-report of experienced abuse, a self-report of experiencing the mother not being present in their life for at least one year or greater and the self-report of living in an HCN.

As inmates arrive at the designated diagnostic center, they are systematically assigned a number. A computer system assigns the numbers so that there are no duplicates. Inmates are assigned in the order they enter the DOC. Once they arrive at the diagnostic center, they are systematically assigned a classification counselor. There are approximately 20 counselors processing inmates on a daily basis.

Data retrieved was compiled within the confines of the de-identified DOC diagnostic center, a super maximum-security prison. There is an average of 3,350 inmates housed in this facility. The majority of these inmates are there for diagnostic and classification purposes. Inmates are housed according to custody levels. The levels are:

1. Custody level 2 (minimum) – Inmates who demonstrate patterns of non-aggressive behavior
2. Custody level 3 (medium) – Inmates who demonstrate behavior that is generally non-assaultive, but may present a risk to the public
3. Custody level 4 (close) – Inmates who require a high degree of supervision, may have a history of assaultive behavior, they have demonstrated a pattern of maladjustive behavior and are a definite risk to the public
4. Custody level 5 (maximum) – Inmates who require continual direct and indirect supervision by staff members, need a high degree of structure, and have demonstrated maladjustive and assaultive behavior.

Inmates processed at the diagnostic center do not freely walk about the prison. They are issued passes for specific times and locations. The building where the classification process takes place is the same building the inmate is housed in until the classification process is complete, which can take several days. The facility is a modern structure with heating and air-conditioning. There are correctional officers stationed in the building and the atmosphere is relatively free of intimidation. Psychologists, counselors and secretarial staff are present in the building. Counselors and psychologists have their own office separated by walls and a door. Each inmate is met individually for classification. It is during the counselor's classification of the inmate that the data collected was mined for the 2005 study, that I am using for this study. Each interview averages between 15 and 30 minutes. One hour is the average preparation time for the interview. Data available for review prior to the counselor's classification include the following: medical needs, psychological history, educational history, criminal records and any current or prior documentation relating to arrests and dispositions of those arrests, history of substance abuse, a history of program participation, family history and vocational experiences. Inmates are asked to confirm or supplement available information for the purpose of classification and program recommendations. Counselors also complete the Level of Severity and Risk – Revised, which is a diagnostic tool to evaluate level of criminality and risk of recidivism.

Power Analysis

The following parameters are factors in determining sample size. An accepted margin of error is 5%, and a confidence level of 95%. Using an online sample size calculator (Raosoft, 2004), with a population size of 47,590, it was determined that a

sample size of 382 is needed to achieve acceptable results to reject the null hypothesis that there is no significant relationship among the combined independent variables of experienced maternal abandonment and living in an HCN, compared to the sole experience of being abused in the history of men convicted of AAB or any combination of the independent variables. In using the de-identified dataset it was determined that the complete sample of 406 incarcerated men only strengthens the results and will therefore, include the entire dataset.

Procedure

The data was gathered during the standard classification process by classification counselors employed by the DOC and then shared with the researcher in the de-identified format eventually published in his 2005 thesis. The process required clarifying data that may already be available to the classification counselor through a variety of sources like a presentence investigation (PSI) and through interviewing the inmate, getting additional information that may not already be known about the inmate. There were no particular data collection instruments used in the present study, as the entire dataset was accessed from the 2005 thesis.

The information gathered during the original data collection pertained to the following aspects of an individual inmate's life experiences:

- Family background (raised by both parents, relatives, foster or adoptive parents, or a ward of the state)
- Types and degrees of abuse they may have experienced growing up
- Other significant life incidents that might contribute to a better understanding of the inmate's developmental years

- Educational history
- Vocational experiences
- Substance use or abuse history
- Mental health history
- Suicidal history
- Medical concerns
- Gang affiliations
- Criminal activities as a juvenile and as an adult
- Their version of the current offense
- Whether they believe they are guilty or innocent of their current charges

The classification counselor would have privately interviewed each inmate in an office that provides a limited level of confidentiality. There are three circumstances where a third person might be present during the classification process:

1. The inmate being interviewed does not speak English
2. The inmate is an execution case
3. The inmate is an extremely assaultive individual and as a custody level 5 (five) inmate they are kept in irons and always accompanied by at least one correctional officer when they are not in their cells

Nothing was added to the normal process of a classification interview to obtain research data. During the classification process counselors asked the inmate to verify and clarify matters of the family background and setting. Once data were entered and the data became a historical record, the narrative responses were extracted electronically by staff

within the DOC. The extracted data were coded in the original study and used in a Binary logistic regression in this present use of that data to determine the interaction of independent variables on the dependent variables. In the original study the variables were extracted from the classification documents without the names of the inmates noted. All identifying information about any one particular inmate was stripped from the data extracted for the 2005 study.

The dataset from that 2005 study was placed into SPSS, a statistical analysis computer program. There will be five columns of data recorded. Those columns contained the following information:

1. Assaultive/non-assaultive classification
2. Self-reported experience of being abused or not abused
3. Residency in a high crime neighborhood or did not live in high crime neighborhood as a youth
4. Self-reported history of not having the individual's mother living with them for one year or greater during their developmental years

Using the definition for an assaultive crime found in the Introduction, column number one will be assigned a binary rating of 0 (zero) to reflect those who were non-assaultive and 1 (one) to reflect those identified as assaultive. Column number two will be assigned a binary rating of 0 (zero) to reflect no self-reported abuse and the 1 (one) to reflect a self-reported history of abuse. Column number three will be assigned a binary rating of 0 (zero) to reflect that the inmate reports he did not live in an HCN when growing up, and 1 (one) to reflect that he did report living in an HCN. Column number four will be assigned a binary rating of 0 (zero) to reflect that the individual did not

experience maternal abandonment for one year or more during the developmental years, and 1 (one) to reflect that he did experience maternal abandonment for one year or more during the developmental years.

Threats to Validity

The very nature of research lends itself to the understanding that there are potential limitations or delimitations that may potentially impact internal validity of a study. Therefore, the inclusion of potential constructs that can sway internal validity is necessary. As a point, did the data collected follow a predefined protocol that meets the expectations of the study hypothesis. This point identifies the aspect that data for this study is extracted from a previous study. Additionally, significant threats to validity in this study relies on the data gathered during the classification process which might have had some biases from the justice system setting. The process requires clarifying data that may already be available through a variety of sources and getting additional information that may not already be known about the inmate.

Issues of Trustworthiness

In this section I will address determinates of trustworthiness by discussing the credibility of this study, the conformability and transferability as well as the dependability of this study within the limitations of historical data gathered to test my hypothesis that the combined effect of males experiencing maternal abandonment during the developmental years while living in an HCN is predominant in men identified as possessing AAB characteristics.

Neutrality is paramount in establishing credibility (Patton, 2002). Having retired from this particular Department of Corrections, I potentially have a special interest and

knowledge base specific to the DOC. To adjust for my potential bias because of a personal knowledge of the DOC, I chose to use historical data in testing my thesis. The design of this study relies on the structure of the environment from which data is retrieved. The department employs educated and trained intake counselors. While each individual counselor brings their own personal technique to the classification process, they have a set of expectations established by the DOC in creating each inmate's cumulative adjustment record. It is my assumption that the narrative report reflecting an inmate's ecological influences like family structure and the social economical environment is adequate to gather specific data that will answer the research question: "What is the relationship between maternal abandonment, high crime neighborhood, and experienced abuse in discriminating individuals incarcerated for aggressive assaultive behavior."

The conformability and transferability of this study are limited by the design structure. The design of this study is a hybrid methods study, one that does not strictly follow traditional sequential, concurrent, or transformative quantitative method designs. The proposed hybrid method in this study best fits what Caracelli and Greene (1993) referred to as typology development in which, for example, qualitative types are developed (e.g., maternally abandoned, lived in high crime area, physically abused), then quantitatively contrasted. A factor that can potentially limit conformability and transferability is that correctional institutions outside of the DOC may gather data dissimilar to what is necessary for the DOC in their effort to fulfill the mission as understood by administration in classifying inmates. However, a study conducted within the limitations of the DOC where data gathered is limited to the structured interview,

should result in a greater degree of conformability and transferability. Another factor that contributes to conformability and transferability is in the design model of an ex post facto study, which does not introduce a variable into a study as would an experimental design, but merely observes the possible interaction of dependent variables with independent variables to determine if the interaction is strong enough to suggest more than a relationship to an identified dependent variable (Rosen, Proctor, & Staudt, 1999; Salkind, 2010).

Ethical Procedures

The primary principal subjects of this study represent a vulnerable population, prisoners. Studies of this population are complicated when considering the use of an experimental design. Access, security, and confidentiality are logistic hurdles. Fortunately, the intent of this study can be satisfied through an ex post facto study. The intent of this study is to explore the relationship between three specific independent variables as they relate to the dependent variable of AAB. An ex post facto design is appropriate since I can derive an analysis from historical data. The study is designed to explore the individual and combined relationship between maternal abandonment, having lived in an HCN, and having experienced abuse, of men incarcerated for violent crimes that represent AAB compared to those incarcerated for crimes that are not reflective of AAB.

In the data gathering process an interviewing counselor will not inform the inmate that data pertaining to the variables will be used for research because the data used will become mined, de-identified, historical data. Nothing is added to the normal process of a classification interview to obtain research data. The variables were extracted from the

classification documents without the names of the inmates noted. All identifying information about any one particular inmate were stripped from the data extracted for this study.

Summary

I began Chapter 3 by introducing the purpose of this study followed with a layout of major sections found in Chapter 3. Because I am working with a vulnerable population I began with describing not only the population that is the cornerstone of this study but also the unique vulnerability of this population. I also noted that the population in this study is limited to the one Northeast state's Department of Corrections. This section also discusses how the research model allows for data collection while eliminating potential harm to this vulnerable population. This is followed with a description of the variables and why they are included as well as what data is to be collected and how the data was collected. This section also reviews expected limitations of gathered secondary data.

This chapter then provided a description of the setting for the study, the setting of the data gathered, and the setting of the population from which data is gathered. That is followed with a brief statement on procedure. The statement is brief because the data used is historical at the time it is provided from secondary data.

Next, I generate a review of the instruments used for the original study in 2005. Because stored responses were historical secondary data, the instruments used to gather data is set and determined by the DOC. A thorough description is provided with a list of data gathered through this narrative construction of an inmate's life history as they relate to what the DOC needs to create an assessment of inmate needs and cautions that may be noted. The concluding sections reflect on validity and the trustworthiness of design. This

is followed with a section on ethical procedures reflecting what steps were taken to ensure the vulnerable population is sufficiently protected. Chapter 4 will review the results that are born out of this unique design that is a hybrid where a traditional sequential, concurrent, or transformative quantitative designs cannot adequately capture some of the phonological aspects necessary to understand the dynamics in the relationship between maternal abandonment, growing up in a high crime neighborhood, and the experience of abuse with regards to individuals incarcerated for crimes that are operationally classified in this study as AAB.

Chapter 4: Results

Introduction

The COVID Pandemic provided some obstacles to completing this study as originally designed. Beginning in March of 2020 the Pennsylvania Department of Corrections (PDOC) halted all research related to inmates and access to gather data was not an option. I had access to a data set from a prior study in 2005. The data was mined from a de-identified Department of Corrections (DOC) within the Northeastern region of the United States. I will use the acronym NERDOC (Northeastern Region Department of Corrections) for the de-identified DOC within the northeastern region of the United States. The data set used the same parameters in gathering data as designed in this study. The differences between these two studies will be reflected in the description of data gathering.

Major Sections of Chapter 4

I begin Chapter 4 by introducing the purpose of this study followed with the research question and the null hypothesis. Next, I will review the data collection process. The data collection from a 2005 study will be reviewed and include a discussion on what data was retrieved and how the data was used to fulfill the design of this study. This is followed with a brief review on why a binary logistic regression model was chosen to process the data. I will then provide descriptive characteristics of the data. This will be followed with the interpretive results and a discussion on the results.

Purpose

The purpose of this non-experimental quantitative study was to examine the relationship between the reported experience of abuse, growing up in an HCN, and

maternal abandonment with regard to individuals incarcerated for crimes that are operationally classified in this study as Aggressive Assaultive Behavior (AAB). to individuals incarcerated for crimes that are operationally classified in this study as AAB. As noted earlier, this was an ex post facto study that looks at historical data and possible relationship that exist between the measured variables.

The proposed hybrid method in this study best fits what Caracelli and Greene (1993) referred to as typology development in which, for example, qualitative types are developed (e.g., maternally abandoned, lived in high crime area, physically abused), then quantitatively contrasted. As noted earlier, this is not an experimental study but an ex post facto study that looks at historical data and possible relationship that exist between the measured variables. The intent is to determine if the hypothesis is valid, that the relationship between living in an HCN with the experience of maternal abandonment is stronger than the singular event of any one of these three variables individually or in all possible combinations: the experience of abuse, growing up in an HCN, and maternal abandonment. The variables will be compared between adult males convicted of assault crimes against adult males convicted of non-assault. That is to say the framing of experiences, which is influenced through the ecology of human experiences are strong factors in AAB, more so than any singular aspect of life. Understanding the contributions of the singular or combined relationship between the variables in this study (experienced maternal abandonment, living in an HCN, and experienced abuse) are essential in decreasing the recidivist rate of men incarcerated of crimes that are assaultive in nature.

Data Collection

The data used in this study are archival data from a study completed in 2005, that was a requirement in working toward a Master of Arts degree in mental health counseling. Fresh data were not available because of restrictions that resulted from the COVID Pandemic that began in 2020. The data were gathered during the classification process by classification counselors employed by a Department of Corrections within the Northeastern region of the United States. The parameters for data collection are the same as what was written in Chapter 3 of this study. To recap, the sample population has been limited to inmates sentenced to the DOC. A purposive sampling of 406 male inmates from a population of approximately 2,500 incarcerated adult males was the source of data used in this study. No additional processes were applied in gathering data over what would have been the routine intake process at the Diagnostic Center in a Department of Corrections within the northeastern region of the United States.

The logistics of the original study limits the amount and quality of data that can be gathered. Because the population of this study was a vulnerable population the data used were limited to information gathered through the diagnostic process that is a part of an intake conducted by counselors at the diagnostic center. Because this study cannot be an experimental study it utilizes an ex post facto mixed study using a secondary analysis. The mixed secondary data was coded during the original data retrieval in 2005. The data was then transposed to a binary code: 1=yes 0=no. The analysis involved a binary logistic regression where I investigated the interaction of three independent variables and observing any interaction predicting AAB. Binary logistic regression is a statistical technique for evaluating dichotomous dependent variables. In this study the dichotomous

dependent variables are conviction for a non-assaultive crime and a conviction for an assault crime.

Population

The population of this study is a vulnerable population. Stringent guidelines established in the Code of Federal Regulations: Title 45 – Public welfare part 46 (45 CFR 46) – Protection of Human Subjects Subpart C, identifies prisoners as a vulnerable population and outlines additional protections to consider when prisoners are participants in a study (Department of Health and Human Services (DHHS), 2005). There is no attrition because this is historical data.

Rationale for Logistic Regression Model

The previous study from 2005 involved a chi-square to analyze the data. The chi-square does not have the power of a regression model in that it looks at a single interaction between one independent variable with the dependent variable and does not control for how other variables are interacting with the observed outcome. But the binary logistic model can be used to control for variables and provide an outcome that can investigate how each independent variable interacts with the dependent variable on each solo variable and all possible combinations of independent variables. Tables 1 and Table 2 demonstrate how looking at the data without that control can result in a different outcome when controlling for variable interaction. When calculating the degree of significance, where I am not controlling for possible variable interaction, we see it is a dismal and nonsignificant interaction (See Table 1 for interaction results before controlling for variables). When controlling for the interaction of these two specific independent variables of Reported Experience of Abuse and HCN Interaction we see a

measurable degree of significance ($p=.009$, see Table 4). After controlling for the variables, the interaction of HCN and Maternal Abandonment demonstrated no significant difference ($p=.692$, see Table 2).

Table 1

Results before controlling for variable interaction

		Variables in the Equation						95% C.I. for EXP(B)	
		B	S.E.	Wald	df	Sig.	Exp(B)	Lower	Upper
Step 1 ^a	Reported Experienced Abuse	-.111	.468	.056	1	.813	.895	.358	2.238
	Growing Up in High Crime Neighborhood	.279	.271	1.054	1	.305	1.321	.776	2.248
	Experienced Maternal Abandonment	-.254	.405	.393	1	.531	.776	.351	1.716
	Reported Experience of Abuse and High Crime Neighborhood Interaction	1.119	.730	2.348	1	.125	3.061	.732	12.804
	Reported Experience of Abuse and Maternal Abandonment Interaction	.804	.848	.899	1	.343	2.234	.424	11.767
	HCN and Maternal Abandonment Interaction	-.131	.510	.066	1	.798	.878	.323	2.384
	Reported Experience of Abuse with High Crime Neighborhood and Reported Experience of Maternal Abandonment Interaction	-.997	1.149	.753	1	.385	.369	.039	3.506
	Constant	-.257	.175	2.161	1	.142	.773		

a. Variable(s) entered on step 1: Reported Experience of Abuse with High Crime Neighborhood and Reported Experience of Maternal Abandonment Interaction .

Table 1

Results of after controlling for variable interaction

	Variable interaction					95% C.I. for EXP(B)		
	B	S.E.	Wald	df	Sig.	Exp(B)	Lower	Upper
Reported Experienced Abuse	.538	.268	4.048	1	.044	1.713	1.014	2.895
Growing Up in a High Crime Neighborhood	.354	.208	2.881	1	.090	1.425	.947	2.143
Experienced Maternal Abandonment	-.292	.221	1.755	1	.185	.747	.484	1.150
Reported Experience of Abuse and High Crime Neighborhood Interaction	.957	.366	6.821	1	.009	2.604	1.270	5.341
Reported Experience of Abuse and Maternal Abandonment	.524	.391	1.795	1	.180	1.688	.785	3.633
HCN and Maternal Abandonment interaction	.093	.235	.156	1	.692	.911	.575	1.444

Study Results

In this section I provide descriptive statistics in separate tables for each of the variables and their values. Next, I will state the null hypothesis and discuss whether I can reject the null hypothesis. I will then provide the results of the study and an analysis of the results.

Descriptive Statistics

Table 2

Conviction of Assault Crime

	Conviction of Assault Crime				
	Frequency	Percent	Valid	Percent	Cumulative Percent
Conviction of Assault Crime					
No	217	53.4	53.4		53.4
Yes	189	46.6	46.6		100.0
Total	406	100.0	100.0		

Table 3

Descriptive Statistics of Independent Variables

	Descriptive Statistics of Independent Variables				
	Frequency	Percent	Valid	Percent	Cumulative Percent
Reported Experience of Abuse					
No	336	82.8	82.8		82.8
Yes	70	17.2	17.2		100.0
Total	406	100.0	100.0		
Growing up in High Crime Neighborhood					
No	198	48.8	48.8		48.8
Yes	208	51.2	51.2		100.0
Total	406	100.0	100.0		
Experienced Maternal Abandonment					
No	267	65.8	65.8		65.8
Yes	139	34.2	34.2		100.0
Total	406	100.0	100.0		

In Table 3 the dependent variable of Conviction for an Assault Crime has a binary outcome reflecting that of the 406 sampled 53.4% (N=217) had no convictions for an assault crime as operationalized in Chapter 3 of the Methods section. The remaining

46.6% (N=189) reflected a history for conviction of an assault crime. In Table 4 the independent variable of Reported Experienced Abuse reveals 82.8% (N=336) were observed to report they did not experience abuse and the remaining 17.2% (N=70) reported some experience of abuse. In Table 4 the independent variable of Growing up in a High Crime Neighborhood (HCN) reveals 48.8% (N=198) were observed to report they did not live in an HCN and the remaining 51.2% (N=208) reported having grown up in an HCN. In Table 4 the independent variable of Experienced Maternal Abandonment reveals 65.8% (N=267) reportedly stated they did not experience maternal abandonment and the remaining 34.2% (N=139) reported having experienced maternal abandonment during their developmental years.

Results of Binary Logistic Regression

The instrument used to process input and results was IBM SPSS Statistics (Version 27). Syntax used to produce results for this study are included in the appendix under the title of Logistic Regression Dataset. A binary logistic regression analysis was conducted to investigate the interaction of three independent variables (IV): reported experience of abuse, growing up in a high crime neighborhood (HCN), and maternal abandonment and the interaction they may have on the dependent variable (DV) conviction of an assault crime. The central research question is the following: “What is the relationship between maternal abandonment, living in an HCN, and experienced abuse in discriminating individuals incarcerated for aggressive assaultive behavior?” The stated null hypothesis is that there is no significant relationship among the combined independent variables of experienced maternal abandonment and living in a HCN, compared to the sole experience of being abused in the history of men convicted of AAB

or any combination of independent variables. The alternative hypothesis is that there is a significant relationship between the combined variables of experienced maternal abandonment, living in an HCN, over the sole experience of being abused in the history of men convicted of AAB or any combination of independent variables.

I failed to reject the null hypothesis at the 5% significance level ($p=.692$).

However, when investigating the combined effect of Reported Experience of Abuse and High Crime Neighborhood Interaction while controlling for variable input, there is an observed significant interaction ($p=.009$). It is also observed that at a 95% confidence level the sole interaction of Reported Experienced Abuse was significant at $p=.044$ when controlling for variable interaction. A look at goodness fit using Nagelverke R^2 and Log Ratio Test (-2 Log likelihood) is provided in Table 5. The Omnibus Test of Model Coefficients reveal a marginal difference when controlling for variables: Reported Experienced Abuse ($p=.051$), Growing Up in a High Crime Neighborhood ($p=.055$), and Experienced Maternal Abandonment ($p=.056$). As IV's are combined, the model fit decreases. The odds ratio (-2 Log likelihood) suggests odds decrease of predicting outcome decreases from 557.095 (Reported Experienced Abuse) to 550.699 as the IV's are grouped together in the assorted combinations. The interpretation is supporting the decision to control for the variables.

Table 5

	Evaluation of Model Fit		
	Omnibus Test of Model Coefficients	Model Summary	
	Sig.	Nagelverke R ²	-2 Log likelihood
Reported Experienced Abuse	.051	.012	557.095
Growing Up in a High Crime Neighborhood	.055	.019	555.118
Experienced Maternal Abandonment	.056	.025	553.351
Reported Experience of Abuse and High Crime Neighborhood Interaction	.051	.031	551.486
Reported Experience of Abuse and Maternal Abandonment	.085	.031	551.217
HCN and Maternal Abandonment interaction	.116	.033	550.699
Abused with HCN and Maternal Abandonment interaction	.116	.033	550.699

Analysis of Results

While the null hypothesis was rejected, the alternative hypothesis is accepted.

There is a significant difference when combining the experience of abuse with living in a HCN (.009). The results answer the research question, “What is the relationship between maternal abandonment, living in an HCN, and experienced abuse in discriminating individuals incarcerated for aggressive assaultive behavior?” The results reflect an agreement with the grounded theory based on Bronfenbrenner’s ecology of human development and Beck’s perspective on framing. Unfortunately, the results are not supporting the concept driving this study, that there is a strong interaction when looking at the combined variables of living in a high crime neighborhood while also experiencing maternal abandonment. As observed in Table 1 and Table 2, I demonstrate how looking

at the data without controlling the variables can result in a different outcome when controlling for variable interaction. When calculating the degree of significance, where I am not controlling for possible variable interaction, we see it is a dismal and nonsignificant interaction (See Table 1 for interaction results before controlling for variables). When controlling for the interaction variables these two specific independent variables of Reported Experience of Abuse and High Crime Neighborhood Interaction demonstrates a measurable degree of significance (.009) (See Table 2). After controlling for the variables, the interaction of HCN and Maternal Abandonment demonstrated no significant difference ($p=.692$) (See Table 2).

Summary

I begin Chapter 4 with a notice of how the COVID Pandemic impacted this study and what was done to work around this obstacle. This is followed with an introduction to the purpose of this study followed with the research question and the null hypothesis. Next, I review the data collection process. The inclusion of data collected from a 2005 study was reviewed including a discussion on what data was retrieved and how the data were used to fulfill the design of this study. This is followed with a brief review on why a binary logistic regression model was chosen to process the data. I then provide descriptive characteristics of the data, followed with the interpretive results and a discussion on the results. This is followed with Chapter 5 where I discuss the value of the results followed with concluding commentary on the work and recommendations on future studies in an attempt to further understand Aggressive Assaultive Behavior.

Chapter 5: Discussion, Conclusions, and Recommendations

Introduction

The importance of reducing violence was not missed by the World Health Organization (WHO), who published a white paper on violence in 2002 (World Health Organization, 2002). One stated objective was to end violence globally. That is a tall order that is desirable but may not be achievable. The WHO objectives were: “describe the magnitude and impact of violence throughout the world: describe the key risk factors for violence, give an account of the types of intervention and policy responses that have been tried and summarize what is known about their effectiveness, make recommendations for action at local, national and international levels.” This present study attempts to address three of those four objectives:” identify risk factors, effectiveness of past intervention attempts with a vision toward where we should go, and recommendations on how to address violence, or in this situation, Aggressive Assaultive Behavior (AAB). The fear of physical trauma or death etched into the memories of victims can be overwhelmingly debilitating. Anything psychology can do in contributing to the reduction of assault crimes, contributes to the positive social change desired by all healthcare providers.

I began this study with a note on the significance of better understanding the contributing factors to AAB. It is a discussion that is often sounded during political campaigns. With the media coverage of ongoing gun violence in the United States, an awareness of our need for reform is evidenced with multiple reports of mass shootings throughout the past several decades. Depending on the emphasis of the individual identifying a need for reform, opinions vary on what holds a priority when working to

bring reform. I clarified in this study the need for reform in understanding the psychology behind AAB and potential treatment plans that could bring recidivist rates down.

Treatment plans born out of better understanding the geneses of AAB will potentially be more effective. This study did not look at how to prevent violence but how to understand AAB with the intent of establishing effective programming to reduce AAB.

Reform of the criminal justice system is not limited to effective policing, or a fair and balanced judicial system, but includes the housing and treatment within the correctional arm of criminal justice. Although recidivist rates of men convicted of violent crimes are not as high as nonviolent crimes, they are costlier in terms of physical and emotional distress (Cohen & Miller, 1998; Dolan, et al., 2005).

Major Sections of Chapter 5

The introduction to Chapter 5 reflects on the challenges put forth by our political leaders to bring about social change in the criminal justice system, and even the WHO, who has laid down the challenge to eradicate violence from society. Additionally, Chapter 5 reflects on a summary about what was learned from this study. In this summary I review the results and provide an analysis of the data, followed with concluding thoughts of the results. Following the summary I comment on the identified limitations. The conclusion of the results also includes their implications and where to go with future studies that contribute to the understanding of AAB.

Overview

The purpose of this non-experimental quantitative study is to examine the relationship between the reported experience of abuse, growing up in an HCN, and maternal abandonment with regards to individuals incarcerated for crimes that are

operationally classified in this study as AAB. Because the cumulative adjustment record compiled on each inmate includes content analysis coding of qualitative data for quantitative analysis, this study will be a hybrid methods study, one that does not strictly follow traditional sequential, concurrent, or transformative quantitative method designs. The proposed hybrid method in this study best fits what Caracelli and Greene (1993) referred to as typology development in which, for example, qualitative types are developed (e.g., maternally abandoned, lived in high crime area, physically abused), then quantitatively contrasted. As noted earlier, this is not an experimental study but an ex post facto study that looks at historical data and possible relationship that exist between the measured variables.

The theory of this study was based on Bronfenbrenner's ecology of human development and Beck's perspective on framing to understand how individuals are impacted by their experiences and the potential outcome of such experiences. Some decision-making processes are built on experiences that are encoded, which in turn provide a base from which procedural knowledge is implemented (Geen & Downnerstein, 1998). As individuals implement procedural knowledge in day-to-day decisions, they build schemas. A particular schema drawn on to make a decision is known as top-down processing because a decision is based on schema, which in turn was based on procedural knowledge. That is to say, what was already established in a schema influences our decision making process. Understanding the construct of these schemas could potentially provide constructs that guides the development of programming for AAB. Having a better understanding of these constructs could eventually be used in developing therapy specifically for this group of people.

Working off the grounded theory presented in this chapter led to the eventual stated null hypothesis that there is no significant relationship among the combined independent variables of experienced maternal abandonment and living in an HCN, compared to the sole experience of being abused in the history of men convicted of AAB or any combination of independent variables. To determine if the hypothesis is valid, the variables in this study compared adult males convicted of assault crimes against adult males convicted of non-assault in a state prison on the northeastern part of the United States.

A 2005 study used a chi-square to analyze the data. The chi-square does not have the power of a regression model in that it looks at a single interaction between one independent variable with the dependent variable and does not control for how other variables are interacting with the observed outcome. Whereas, the binary logistic model can be used to control for variables and provide an outcome that can investigate how each independent variable interacts with the dependent variable on each solo variable and all possible combinations of independent variables.

Overall Findings

While the null hypothesis was rejected, the alternative hypothesis is accepted. There is a significant difference when combining the experience of abuse with living in an HCN ($p=.009$). The results answer the research question, “What is the relationship between maternal abandonment, living in an HCN, and experienced abuse in discriminating individuals incarcerated for aggressive assaultive behavior?” The results reflect an agreement with the grounded theory based on Bronfenbrenner’s ecology of human development and Beck’s perspective on framing. Unfortunately, the results are

not supporting the concept driving this study, that there is a strong interaction when looking at the combined variables of living in a high crime neighborhood while also experiencing maternal abandonment. As observed in Table 1 and Table 2, I demonstrate how looking at the data without controlling the variables can result in a different outcome when controlling for variable interaction. When calculating the degree of significance, where I am not controlling for possible variable interaction, we see it is a dismal and nonsignificant interaction (See Table 1 for interaction results before controlling for variables). When controlling for the interaction variables these two specific independent variables of Reported Experience of Abuse and High Crime Neighborhood Interaction demonstrates a measurable degree of significance ($p=.009$) (See Table 2). After controlling for the variables, the interaction of HCN and Maternal Abandonment demonstrated no significant difference ($p=.692$) (See Table 2). The result demonstrates that while the grounded theory helped shape significant findings that can be used both in further studies and potential basis for developing programming for AAB, the belief that maternal abandonment was a significant influence on AAB did not bear evidence of such an influence.

Summary Review of Findings

A look at goodness fit using Nagelverke R^2 and Log Ratio Test (-2 Log likelihood) is provided in Table 5. The Omnibus Test of Model Coefficients reveal a marginal difference when controlling for variables: Reported Experienced Abuse ($p=.051$), Growing Up in a High Crime Neighborhood ($p=.055$), and Experienced Maternal Abandonment ($p=.056$). As IV's are combined, the model fit decreases. The odds ratio (-2 Log likelihood) suggests odds decrease of predicting outcome decreases

from 557.095 (Reported Experienced Abuse) to 550.699 as the IV's are grouped together in the assorted combinations. The interpretation is supporting the decision to control for the variables.

Summary Analysis of Results

While the null hypothesis was rejected, the alternative hypothesis is accepted. There is a significant difference when combining the experience of abuse with living in an HCN ($p=.009$). The results answer the research question, "What is the relationship between maternal abandonment, living in an HCN, and experienced abuse in discriminating individuals incarcerated for aggressive assaultive behavior?" The results reflect an agreement with the grounded theory based on Bronfenbrenner's ecology of human development and Beck's perspective on framing. Unfortunately, the results are not supporting the concept driving this study, that there is a strong interaction when looking at the combined variables of living in a high crime neighborhood while also experiencing maternal abandonment. As observed in Table 1 and Table 2, I demonstrate how looking at the data without controlling the variables can result in a different outcome when controlling for variable interaction. When calculating the degree of significance, where I am not controlling for possible variable interaction, we see it is a dismal and nonsignificant interaction (See Table 1 for interaction results before controlling for variables). When controlling for the interaction variables these two specific independent variables of Reported Experience of Abuse and High Crime Neighborhood Interaction demonstrates a measurable degree of significance ($p=.009$) (See Table 2). After controlling for the variables, the interaction of HCN and Maternal Abandonment demonstrated no significant difference ($p=.692$) (See Table 2).

Interpretation of the Findings

The alternative hypothesis was accepted, meaning there is a significant difference when combining the experience of abuse with living in an HCN ($p = .009$). The results answer the research question, “What is the relationship between maternal abandonment, living in an HCN, and experienced abuse in discriminating individuals incarcerated for aggressive assaultive behavior?” The results reflect an agreement with Bronfenbrenner’s ecology of human development and Beck’s perspective on framing. However, the results do not support a strong interaction when looking at the combined variables of living in a HCN while also experiencing maternal abandonment. When controlling for the interaction of Reported Experience of Abuse and HCN Interaction, there was a measurable degree of significance ($p = .009$). After controlling for the variables, the interaction of HCN and maternal abandonment demonstrated no significant difference ($p = .692$).

Limitations

As has been noted throughout this study, the COVID pandemic impacted the ability to do a current study with this population. As of April 2020, the PDOC halted all research. To work around this limitation, I used a data set that I gathered in 2005 as work towards the completion of my thesis. The 2005 study was approved by the DOC and the data were mined from the archived inmate records with all identifying information being removed before the writing of the 2005 thesis. The 2005 study was approved by the DOC and the data was mined from the archived inmate records with all identifying information being removed before the writing of the 2005 thesis.

Because this study is a secondary analysis of data provided by the DOC through the classification process at diagnostic center, it is possible some narratives of an inmate's developmental history were not as descriptive as others and may not have distinguished between physical, sexual, and emotional abuse. Additionally, if questions are asked assuming a specific response, the counselor may have not investigated further with open-ended questions. An example would be asking inmates if during their childhood they lived at home or if they were in a state-operated facility. Home could be living with an aunt, grandmother, or other relative that did not include the presence of a mother, thereby providing an incomplete history of that individual's developmental experiences.

No study should be tackled without understanding the bias that can skew a study. As a retired employee of a department of corrections, I made observations that were limited to my knowledge of what I thought I was observing. the "observation" was limited to not only what I could see, but limited to how I made sense of it in my analytical mind. The design of a collegiate study attempts to identify and isolate bias.

That is why even the failure to reject the null hypothesis is a success. The information and understanding I have on this subject contributes to informed knowledge that can be used to catapult other studies and potential working models of AAB that can be used to develop effective programming designed to not only reduce AAB but to help individuals better understand themselves and what drives them.

Delimitations

The population of this study is limited to men incarcerated in a state correctional facility. The data extracted from the cumulative adjustment record will include only three

independent variables: experienced maternal abandonment, living in a high crime neighborhood, and experienced abuse. Other variables like birth order, education, or vocational experiences could have an influence on AAB, but I have limited the independent variables to specific identifiable experiences that are discussed in Chapter 2 with support for concentrating on these specific experiences.

Conclusion

Throughout my undergraduate studies three words dominated the experiences: observation, interpretation and application. A strong emphasis was on the application part of that triad. Before I offer an application, or in this study as it is known by the tag conclusion, I want to note the flaws of “observation”. Observations are limited to the base knowledge of the person making the observation. With the interpretation there will be bias inserted, a bias that comes out of limited experiences and limited knowledge. Fortunately, the design for this study was carefully crafted to work with limited resources while attempting to maintain collegiate integrity and control for bias. Without a good design the interpretation, or in this case the conclusion, would be clouded with bias and inaccuracies born out of those biases.

The conclusion is that I failed to reject the null hypothesis at the 5% significance level ($p=.692$). However, when investigating the combined effect of Reported Experience of Abuse and High Crime Neighborhood Interaction while controlling for variable input, there is an observed significant interaction ($p= .009$). It is also observed that at a 95% confidence level the sole interaction of Reported Experienced Abuse was significant at $p=.044$ when controlling for variable interaction.

While the null hypothesis was rejected, the alternative hypothesis is accepted. There is a significant difference when combining the experience of abuse with living in an HCN ($p=.009$). The results answer the research question, “What is the relationship between maternal abandonment, living in an HCN, and experienced abuse in discriminating individuals incarcerated for aggressive assaultive behavior?” The results reflect an agreement with the grounded theory based on Bronfenbrenner’s ecology of human development and Beck’s perspective on framing. Unfortunately, the results are not supporting the concept driving this study, that there is a strong interaction when looking at the combined variables of living in a high crime neighborhood while also experiencing maternal abandonment. As observed in Table 1 and Table 2 I demonstrate how looking at the data without controlling the variables can result in a different outcome when controlling for variable interaction. When calculating the degree of significance, where I am not controlling for possible variable interaction, we see it is a dismal and nonsignificant interaction (See Table 1 for interaction results before controlling for variables). When controlling for the interaction variables these two specific independent variables of Reported Experience of Abuse and High Crime Neighborhood Interaction demonstrates a measurable degree of significance ($p=.009$) (See Table 2). After controlling for the variables, the interaction of HCN and Maternal Abandonment demonstrated no significant difference ($p=.692$) (See Table 2).

Final Analysis

The final analysis is that attempting to identify a single variable that may contribute to AAB is not the path to take when attempting to understand AAB. As an example, Reported Experienced Abuse was marginally significant at $p=.044$, where the

combined variables of Reported Experience of Abuse and High Crime Neighborhood Interaction we see a measurable degree of significance ($p=.009$). When each independent variable is measured independently the results are marginal, Reported Experienced Abuse ($p=.051$), Growing Up in a High Crime Neighborhood ($p=.055$), and Experienced Maternal Abandonment ($p=.056$). It is when the independent variables are combined, we begin to see the influence of the grounded theory reported by Bronfenbrenner's ecology of human development, of Reported Experience of Abuse and High Crime Neighborhood Interaction demonstrates a measurable degree of significance ($p=.009$) (See Table 2).

In summary, it is observed that independent variables in this study singularly have a marginal interaction (Reported Experienced Abuse ($p=.044$), HCN ($P=.090$), Experienced Maternal Abandonment ($p=.185$), but only one combination of independent variables results in a significant degree of difference Reported Experience of Abuse and High Crime Neighborhood Interaction ($p=.009$). The interaction of the combined independent variables of Reported Experience of Abuse and HCN resulted in a marginal significance ($p=.180$), and the interaction of the combined independent variables of HCN and Maternal Abandonment was also marginal ($p=.692$).

Discussion

In Chapter's 3 and 4 I reflect in detail how and why inclusion of data collected from a 2005 study was necessary and relevant to the present study. In summary, the data used in this study is archival data from a study completed in 2005. Fresh data were not available because of restrictions that resulted from the COVID pandemic that began in 2020. Data gathering is restricted to what was required and permitted during the original

study in 2005. Ethical guidelines of that period were followed and directed by the committee chair during that study.

A binary logistic model is used to control for variables and provide an outcome that can investigate how each independent variable interacts with the dependent variable on each solo variable and all possible combinations of independent variables. Looking at the data without that control resulted in a different outcome from when controlling for variable interaction. When calculating the degree of significance, where I am not controlling for possible variable interaction, I discover a nonsignificant interaction; however, when controlling for the interaction of these two specific independent variables of Reported Experience of Abuse and High Crime Neighborhood Interaction, there is a measurable degree of significance ($p=.009$) (See Table 4). After controlling for the variables, the interaction of HCN and Maternal Abandonment demonstrated no significant difference ($p=.692$).

The central research question is the following: “What is the relationship between maternal abandonment, living in an HCN, and experienced abuse in discriminating individuals incarcerated for aggressive assaultive behavior?” The null hypothesis is there is no significant relationship among the combined independent variables of experienced maternal abandonment and living in an HCN, compared to the sole experience of being abused in the history of men convicted of AAB or any combination of independent variables.

Having failed to reject the null hypothesis at the 5% significance level ($p=.692$), the study still provided an important understanding of variables that may contribute to AAB. However, the Omnibus Test of Model Coefficients reveals a marginal difference

when controlling for variables: Reported Experienced Abuse ($p=.051$), Growing Up in a High Crime Neighborhood ($p=.055$), and Experienced Maternal Abandonment ($p=.056$). As IV's are combined, the model fit decreases. The odds ratio (-2 Log likelihood) suggests odds decrease of predicting outcome decreases from 557.095 (Reported Experienced Abuse) to 550.699 as the IV's are grouped together in the assorted combinations. The interpretation is supporting the decision to control for the variables. Hence, when investigating the combined effect of Reported Experience of Abuse and High Crime Neighborhood Interaction while controlling for variable input, there is an observed significant interaction ($p= .009$). It is also observed that at a 95 percent confidence level the sole interaction of Reported Experienced Abuse was significant at $p=.044$ when controlling for variable interaction demonstrating the value of understanding AAB as having combined influences.

There is a significant difference when combining the experience of abuse with living in an HCN ($p=.009$). The results answer the research question, "What is the relationship between maternal abandonment, living in an HCN, and experienced abuse in discriminating individuals incarcerated for aggressive assaultive behavior?" The results reflect an agreement with the grounded theory based on Bronfenbrenner's ecology of human development and Beck's perspective on framing. Unfortunately, the results are not supporting the concept driving this study, that there is a strong interaction when looking at the combined variables of living in a high crime neighborhood while also experiencing maternal abandonment.

The results of this study contribute to understanding how the history and development of a person's cognitive processes are essential to bring about change

(Witherington & Crichton, 2007). Previous studies tend to concentrate on one specific contributing factor like violence observed in games or other forms of entertainment. Some of those solo factors reviewed in the past are environmental stressors (Nijman, 2002), externalized dimensions of psychopathology (Moltó, Poy, & Segarra, 2007). Social learning (Anderson & Bushman, 2002), and script theory (Huesmann, 1988) have both been reported as mechanisms in aggressive responses. Family dynamics (Anderson & Bushman, 2002; Kim & Kim, 2007; Leary, et al., 2006), abuse (Kim & Kim, 2007) and social economic status are some of those solo factors investigated in prior studies. Because of my personal work in a state prison, I saw patterns of influence on AAB and believed that we cannot narrow our scope of understanding AAB to singular variables. The results of how abuse impacted AAB is not surprising but not where I anticipated the study would go.

The observations of life rely on our sense to interpret what it encounters. Sometimes our brains fill in information to help us make sense of what we are observing or experiencing. How much a person can organize and manipulate data is significant to how they retrieve and use that data in their environment. The integration of mental processes is the building of mental structures, which consist of schemas (Gregory, 2007). Some decision-making processes are built on experiences that that are encoded, which in turn provides a base from, which procedural knowledge is implemented (Geen & Downnerstein, 1998). As individuals implement procedural knowledge in day-to-day decisions, we build schemas. A particular schema drawn on to make a decision is known as top-down processing because a decision is based on schema, which in turn was based on procedural knowledge. That is to say, what was already established in a schema

influences our decision-making process. These schemas build in greater complexity so that as a person assimilates or applies acquired knowledge they add to a repertoire of skills or knowledge that shapes the schema. Understanding the constructs of that scheme may contribute to better understanding the individual and in turn, develop effective programming that addresses not anger management, but the processes that contribute to a scheme and try to untangle its impact on the individual, which leads into the recommendations section of this study.

Significance of the Study

The results of this study contribute to understanding how the history and development of a person's cognitive processes are essential to bring about change (Witherington & Crichton, 2007). Previous studies tend to concentrate on one specific contributing factor like violence observed in games or other forms of entertainment. Some of those solo factors reviewed in the past are environmental stressors (Nijman, 2002), externalized dimensions of psychopathology (Moltó et al., 2007). Social learning (Anderson & Bushman, 2002), and script theory (Huesmann, 1988) have both been reported as mechanisms in aggressive responses. Family dynamics (Anderson & Bushman, 2002; Kim & Kim, 2007; Leary et al., 2006), abuse (Kim & Kim, 2007), and social economic status are some of those solo factors investigated in prior studies. Further, as individuals implement procedural knowledge in day-to-day decisions, they build schemas. Understanding the constructs of that scheme may contribute to better understanding the individual and in turn, develop effective programming that addresses AAB.

Recommendations

The COVID pandemic introduced a set of complications and barriers to researchers and this study was no stranger to COVID related hurdles. Researchers are creative in working around limitations related to the COVID pandemic and I will not reflect on what changes could be instituted to enhance future studies as I step back and allow that topic to be addressed in the research design of future academics. However, the results of this study point to the value of understanding which factor(s) are the stronger contributors in Aggressive Assaultive Behavior (AAB). In terms of the design of this study and the conceptual framework, there are a couple of potential recommendations I would make to advance the understanding of AAB. Future studies investigating AAB can use a phenomenological study. To understand the phenomenon of AAB, it is important to have a better understanding of how the individual makes sense of the experience.

I offer this major revision of recommendation toward future studies investigating AAB. Approach this initially as a phenomenological study. Phenomenological studies tend to follow along with these two components: identifying a descriptive element and an interpretive element (Stoltz, 2022). In essence, giving a voice to the individual and then assigning value to those observations. As a cautionary note, the interpretive element can be through the words of the individual contributing to the phenomenological study or the researchers gathering the data. While it would seem obvious that it will be the researcher's interpretation of the phenomenological study that is of value, it might be important to note the subjectivity and bias of the researcher's interpretation. There would be a need to trust the subjective interpretations of the individual who is part of the

phenomenological study. The emphasis would be on what it means to the individual rather than the researcher.

In understanding the meaning of an experience, we give weight and meaning to the observations made. It is an attempt to understand the “lived experience” (Finlay, 2014) of those incarcerated for AAB crimes. In our personal lives we make sense of our experiences through a lens of past encounters. Those encounters are processed and understood through the history of our personal experiences. Because our personal experiences are limited our interpretation of others will be equally limited to our experiences. Because the experiences of others can be processed and understood differently, noting their encounters would be interpreted through their personal histories. Without allowing the individual to assign meaning to their experiences I only skew my interpretations through my personal subjective lens.

Phenomenological studies tend to follow along with these two components: identifying a descriptive element and an interpretive element (Stoltz, 2022). This would give a voice to the individual and then assign value to those observations. An example is where a gang leader shoots and kills another person for making disparaging remarks to one of his friends. The gang member sees the gang as his family and when he believed no one from his family would stand up for him during conflicts, he was determined to not let anyone in his “family” go without a support system. Shooting the offender making the disparaging remarks is tantamount to the virtue of standing up and supporting a “family member”. However, there would be a need to trust the subjective interpretations of the individual who is part of the phenomenological study. The emphasis would be on what it means to the individual rather than the researcher.

While shooting and killing another person for mere words may never cross the minds of many, this gang member could see it no other way. We cannot assume we understand the thought processes behind a response or an interaction. In an attempt to better understand how that person came to that particular conclusion on how to best address the disparaging words we should attempt to quantify their experiences through their reasoning, with the emphasis on the reasoning used by the interviewed subject. Then quantify the information that can be utilized in various studies or applications.

Another recommendation is taking the final analysis of a study to determine if specific patterns emerge that could be used to design personality inventories based off a factor analysis developed from data gathered in the phenological study. The tool or tools developed from the accrued data would be used in the DOC diagnostic process to determine programming. This could lead to the next step of developing AAB programming based out of this research.

References

- Ainsworth, M. D. S., & Bowlby, J. (1991). An ethological approach to personality development. *American Psychologist*, 46(4), 333–341.
<https://doi.org/10.1037/0003-066X.46.4.333>
- Anderson, C. A., & Bushman, B. J. (2002). Human aggression. *Annual Review Of Psychology*, 53(1), 27–51.
<https://doi.org/10.1146/annurev.psych.53.100901.135231>
- Beck, A. T., (1999). *Prisoners of hate: The cognitive basis of anger, hostility, and violence*. Harper Collins Publishers
- Birger, M., Swartz, M., Cohen, D., Alesh, Y., Grishpan, C., & Kotelr, M. (2003). Aggression: The testosterone-serotonin link. *The Israel Medical Association Journal*, 5(9), 653–658. <http://www.ima.org.il/imag/ar03sep-12.pdf>
- Bronfenbrenner, U. (1977, July). Toward an experimental ecology of human development. *American Psychologist*, 32(7), 513–531.
<https://doi.org/10.1037/0003-066X.32.7.513>
- Bronfenbrenner, U. (1986, November). Ecology of the family as a context for human development: Research perspectives. *Developmental Psychology*, 22(6), 723–742.
<https://doi.org/10.1037/0012-1649.22.6.723>
- Byrne, J. M., & Taxman, F. S. (2005). Crime control strategies and community change – Reframing the surveillance vs. treatment debate. *Federal Probation. A Journal of Correctional Philosophy and Practice*, 70, (1), 3–12.
- Bucklen, B., & Russell, D. L. (2012). Recidivism risk reduction incentive program 2012 report - PA Department of Corrections.

http://www.portal.state.pa.us/portal/server.pt/document/1222122/rrri_2012_report.pdf

Caracelli, V. W., & Greene, J. C. (1993). Data analysis strategies for mixed-method evaluation designs. *Educational Evaluation and Policy Analysis*, 15(2), 195–207.

<http://www.jstor.org/stable/1164421>

Cohen, M. A., & Miller, T. R. (1998). The cost of mental health care for victims of crime. *Journal of Interpersonal Violence*, 13(1) 93–110.

<https://doi.org/10.1177/088626098013001006>

Davison, G. C., & Neale, J. M. (2001). *Abnormal psychology* (8th ed.). John Wiley & Sons.

Dolan, P., Loomes, G., Peasgood, T., & Tsuchiya, A. (2005). Estimating the intangible victim costs of violent crime. *The British Journal of Criminology*, 45(6), 958–976. <https://doi.org/10.1093/bjc/azi029>

DuBois, D. L., Burk-Braxton, C., Swenson, L. P., Tevendale, H. D., Lockerd, E. M., & Moran, B. L. (2002). Getting by with a little help from self and others: Self-esteem and social support as resources during early adolescence. *Developmental Psychology*, 38(5), 822–839. <https://doi.org/10.1037/0012-1649.38.5.822>

Finlay, L. (2014). Engaging phenomenological analysis. *Qualitative Research in Psychology*, 11(2), 121–141. <https://doi.org/10.1080/14780887.2013.807899>

Flood, M. (2005). *Maternal abandonment in a high crime neighborhood and the impact it has on assaultive behavior: A non-experimental ex post facto study* [Unpublished master's thesis]. Lancaster Bible College.

Grimes, J. M., Ricci, L. A., & Melloni, R. H., Jr. (2007). Alterations in anterior

hypothalamic vasopressin, but not serotonin, correlate with the temporal onset of aggressive behavior during adolescent anabolic-androgenic steroid exposure in hamsters (*Mesocricetus auratus*). *Behavioral Neuroscience*, 121(5), 941–948.
<https://doi.org/10.1037/0735-7044.120.1.115>

International Association of Crime Analysts. (2013). *Identifying high crime areas* (White Paper 2013-02).
http://www.iaca.net/Publications/Whitepapers/iacawp_2013_02_high_crime_areas.pdf

Jacobs, C., Van Den Broeck, W., & Simoens, P. (2006). Increased number of neurons expressing androgen receptor in the basolateral amygdala of pathologically aggressive dogs. *Journal of Veterinary Medicine Series A*, 53(7), 334–339.
<https://doi.org/10.1111/j.1439-0442.2006.00840.x>

Kruger, D. J. (2008). Verifying the operational definition of neighborhood for the psychosocial impact of structural deterioration. *Journal Of Community Psychology*, 36(1), 53–60. <https://doi.org/10.1002/jcop.20216>

Linver, M. R., Brooks-Gunn, J., & Kohen, D. E. (2002). Family processes as pathways from income to young children's development. *Developmental Psychology*, 38(5), 719–734. <https://doi.org/10.1037/0012-1649.38.5.719>

Moltó, J., Poy, R., & Segarra, P. (2007). Response perseveration in psychopaths: Interpersonal/affective or social deviance traits? *Journal of Abnormal Psychology*, 116(3), 632–637. <https://doi.org/10.1037/0021-843X.116.3.632>

Nijman, H. L. I. (2002). A model of aggression in psychiatric hospitals. *Acta Psychiatrica Scandinavica, Supplement 412*, 106, 142–143.

<https://doi.org/10.1034/j.1600-0447.106.s412.30.x>

Nomura, M., Andersson, S., Korach, K. S., Gustafsson, J-K, Pfaff, D. W., & Ogawa, S.

(2006). Estrogen receptor- β gene disruption potentiates estrogen-inducible aggression but not sexual behaviour in male mice. *European Journal of*

Neuroscience, 23(7), 1860–1868. <https://doi.org/10.1111/j.1460->

9568.2006.04703.x

Patton, M. (2002) *Qualitative research and evaluation methods*, (3rd ed.). Sage

Publications.

Pennsylvania Department of Correction, Bureau of Planning, Research, & Statistics.

(2019). Pennsylvania Department of Corrections Monthly Population Report As Of December 31, 2019.

<https://www.cor.pa.gov/About%20Us/Statistics/Documents/Monthly%20Population%20Reports/Mtpop1912.pdf>

Pennsylvania Department Of Corrections. (2019). Policy Subject: Population

Management.

<https://www.cor.pa.gov/About%20Us/Documents/DOC%20Policies/11%2001%2001%20Population%20Management.pdf>

Pennsylvania Department Of Corrections. (2016). Recidivism Risk Reduction Incentive 2016 Report.

<http://www.cor.pa.gov/Administration/Statistics/Documents/Reports/2016%20RRI%20Annual%20Report.pdf>

Pincus, J. H. (2001). *Base instincts: What makes killers kill*. New York: W.W. Norton & Co.

- Raosoft. (2004). Sample size calculator. <http://www.raosoft.com/samplesize.html>
- Robertson, C. I. B., & Burton, D. L. (2010). An exploration of differences in childhood maltreatment between violent and non-violent male delinquents, *Journal of Child & Adolescent Trauma*, 3:4, 319-329. doi: 10.1080/19361521.2010.523065
- Rosen, A., Proctor, E. K., & Staudt, M. M. (1999). Social work research and the quest for effective practice. *Social Work Research*, 23(1), 4-14
- Salkind, N. J. (2010). *Encyclopedia of research design* Thousand Oaks, CA: SAGE Publications Ltd doi: 10.4135/9781412961288
- Sannen, A., Van Elsacker, L., Heistermann, M., & Eens, M. (2004). Urinary testosterone metabolite levels and aggressive behaviors in male and female bonobos (*Pan paniscus*). *Aggressive Behavior*, 30(5), 425-434. doi: 10.1002/ab.20046.
- Smith, S., Mullis, F., Kern, R. M., & Brack, G. (1999). An Adlerian model for the etiology of aggression in adjudicated adolescents. *The Family Journal: Counseling and Therapy for Couples and Families*, 7(2), 135-147. doi: 10.1177/1066480799072006
- Steven A. Stolz (2022) The practice of phenomenology in educational research, *Educational Philosophy and Theory*, doi: [10.1080/00131857.2022.2138745](https://doi.org/10.1080/00131857.2022.2138745)
- Titchener, E. B. (1899). *Structural and functional psychology*. [Electronic version]. *Philosophical Review*, 8, 290–299.
<http://psychclassics.yorku.ca/Titchener/strucfunc.htm>
- Vekovischeva, O. Y., Aitta-aho, T., Echenko, O., Kankaanpää, A., Seppälä, T., Honkanen, A., Sprengel, R., Korpi, E. R. (2004). Reduced aggression in AMPA-

- type glutamate receptor GluR-A subunit-deficient mice. *Genes, Brain & Behavior*, 3(5), 253-265. doi: 10.1111/j.1601-1848.2004.00075.x.
- Weidemann, C., Huber, D., & Shiffrin, R. (2008). Prime diagnosticity in short-term repetition priming: Is primed evidence discounted, even when it reliably indicates the correct answer?. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 34(2), 257-281. doi:10.1037/0278-7393.34.2.257
- Wilson, R. E., Brown, T. H., & Schuster, B. (2009). Preventing Neighborhood Crime: Geography matters. *National Institute of Justice Journal*. pp. 30-35.
doi:10.1037/e516022010-006
- Wooldredge, J. (2002), Examining the (IR) relevance of aggregation bias for multilevel studies of neighborhoods and crime with an example comparing census tracts to official neighborhoods in Cincinnati. *Criminology*, 40: 681–710.
doi:10.1111/j.1745-9125.2002.tb00970.x
- Wen, J. C., Hotchkiss, A. K., Demas, G. E., & Nelson, R. J. (2004). Photoperiod affects neuronal nitric Oxide synthase and aggressive behaviour in male Siberian Hamsters (*Phodopus sungorus*). *Journal of Neuroendocrinology*, 16(11), 916-92.
doi: 10.1111/j.1365-2826.2004.01248.x.
- Wundt, W. (1897). Chapter 1: Problem of Psychology, and Chapter 2: General Theories of Psychology [Electronic version]. *Outlines of Psychology*. Leipzig: Wilhelm Engelmann.
<http://www.marxists.org/reference/subject/philosophy/works/ge/wundt.htm>
- Zajac, G., & Bucklen, K. B. (2004). Summary and major findings of articles reviewed. *Research in Review*, 7(4).

www.state.pa.us/portal/server.pt/document/916216/rirv6n2_pdf

Zajac, G., & Bucklen, K. B. (2003). Special focus on Pennsylvania DOC evaluation agenda. *Research in Review*, 6(4).

www.state.pa.us/portal/server.pt/document/916216/rirv6n2_pdf