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Chad O'Brien
No Inhibitions, No Moral
Sense, and No Social
Structure: The Etiology of the
Psychopath and the
Sociopath

ABSTRACT

Psychopathy and sociopathy are two personality disorders that are similar in action though different in origin. Whereas the psychopathic individual is a product of nature in that the origin of the social disorder originates in the mind, the sociopathic individual is a product of upbringing as sociopathy is more so a result of a learned/defensive behavior. Although the number is uncertain, there could be as many as ten million psychopathic and sociopathic people living in the United States today. This paper focuses on the etiology of both psychopathy and sociopathy. It also looks at how psychopathy and sociopathy are recognized in modern day American society and argues the importance of understanding these people as they have a devastating and long lasting affect on the world around them

NO INHIBITIONS, NO MORAL SENSE, AND NO SOCIAL STRUCTURE: THE
ETIOLOGY OF THE PSYCHOPATH AND THE SOCIOPATH

A project based upon independent research,
submitted in partial fulfillment of the requirements
for the degree of Master of Social Work

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2010

ACKNOWLEDGEMENTS

This project is the result of more than twenty years curiosity revolving around the darker aspects of humanity. I was only able to delve into this dark place because of the people who were there to remind me that not all the world is cast in shadow. So thank you to Jenny, my father, Patrick, Cassidy, Tyler, Sharon, Slash and all things comedic. I would also like to thank Gael McCarthy for her tireless dedication and support throughout this writing process. Thank you dotting all of the I's and crossing of the T's.

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CHAPTER 1

INTRODUCTION

Do unto others as you would have done unto yourself. This is what has come to be known as “the golden rule.” And ideally this would be the formulation of life in America or in the world for that matter. Sadly, reality has a tendency to paint a different picture. Ever since books have been written, humans have been fascinated with the darker side of their species. It is natural to be curious about humanity’s capacity for evil on a global and an individual scale. What does lie beneath the surface of a seemingly “moral” person if anything?

In 1971, Philip Zimbardo set out to test the psychological effects of the prisoner and the prison guard experience. What he found in his experiment was a disturbing understanding of human nature. Zimbardo recruited college students to participate in a role-playing exercise in a makeshift “prison” set up in the basement of the psychology department building on the Stanford University campus. Students were randomly assigned to take the roles of either prisoners or guards, in an effort to see what proportion of behavior is induced by a particular role, rather than internal character. What Zimbardo found in his proposed two-week study was that underneath the surface of seemingly moral people if they were given the proper push or by the result of permission to act accordingly by a person of perceived power (for example, playing the role of prison guard), a darker side of humanity has the potential to surface. Zimbardo found that after only six days, at which time he prematurely ended the experiment, after having been

given a role of power, the subjects who had been enrolled as the prison guards demonstrated a sadistic cruelty over the now victimized and dominated prisoner subjects, rendering them passive and depressed (Roller, 2008, p. 431,).

The results of the Zimbardo's Stanford Prison Experiment shocked the country because the end results seemed to point to another dark aspect of human history. During World War II, seemingly decent people became S.S. officers and commenced to commit unspeakable acts on human beings simply because they had been ordered to do so (Taylor, 2009). In 1961, Stanley Milgram conducted an experiment at Yale University to test the Shirer thesis, which was a theory that suggested it was Adolf Hitler's strong personality, which encouraged and drove his followers to obey orders without question. Milgram conducted his test by recruiting volunteers to participate in a learning exercise allegedly testing the effects of electric shock punishment upon a learner. He asked his volunteers to ask questions of an unseen person playing the role of a learner (actually, a research associate confederate). Each time the person's question was answered incorrectly, the volunteer was instructed to push a button. The result of the pressed button was pre-recorded dramatized screams of agony from the unseen person who was -- in the perception of the button-pushing volunteer -- being subjected to increasing volts of electric shock at every new "error." When the volunteer showed concern and sought guidance as a result of these screams, the person overseeing the experiment told the volunteer that the experiment must continue and to not worry about the learner's screams of agony. What Milgram found was that more often than not, people tended to carry out the orders of the experimenter's authority figures: thus, country of origin [immoral Germany vs. moral United States] appeared to be irrelevant. Milgram's findings

suggested a common human predisposition to follow orders regardless of the effects those orders have on others and regardless of any moral predisposition prior to the given instructions (Meyer, 2003).

Milgram (1973) concluded from his findings that, “Ordinary people, simply doing their jobs, and without any particular hostility on their part, can become agents in a terrible destructive process” (p.76). Moreover, even when the destructive effects of their work become patently clear and they are asked to carry out actions incompatible with fundamental standards of morality, relatively few people have the resources needed to resist authority (Milgram, 1973).

Because this experiment was conducted over thirty-five years ago, it could be argued that Milgram’s results more reflected the era than human nature. With this argument in mind, Jerry M. Burger received approval from the Institutional Review Board and the American Psychological Association to recreate Milgram’s experiment, recruiting volunteers consisting of half men and half women. Approval required modifying aspects of the original experimental protocols –in particular, changing the alleged voltage and taking into consideration long standing effects of the volunteers’ belief that the volts were genuine and upon completion of the experiment, undoing the deception perpetrated on the volunteers by informing them that the “volts” of electricity were not real (Burger, 2009). Burger’s experiment generated the same results that Milgram found in the 1960’s (Borge, 2007). Even when people are under the impression that they are hurting others, most will continue doing so if they are informed that what they are doing is acceptable and deemed permissible by someone viewed as a superior. This experimental finding implies that in society, morality is only as strong the person of

authority dictates. As time goes on and researchers begin to understand more about the human brain's behavior, researchers are beginning to learn some disturbing things about human nature. Researchers have come to understand that human cruelty is as much a part of the average person's capability as is love and kindness (Taylor, 2009).

In the case of the students in the Stanford Prison Experiment, the Milgram Experiment, and as demonstrated by the Nazi soldiers of World War II (among others), we see seemingly normal, typically functioning people do unspeakable things because they were instructed to do so by authority figures. As in the Zimbardo Stanford Prison Experiment and in the recent Abu Ghraib prison scandal, we see that other people who have become figures of authority and in a position to punish do so with zeal. It seems from these examples, that people have the capacity for terribly inhumane acts if they are given the permission and thus, freed of guilt in the moment. Later, after the moment has passed and the realization of what they have done comes to them, it is likely that the people who committed these immoral acts reflect negatively and with remorse. In fact, some of the volunteers in the Zimbardo and Milgram experiments suffered significant psychological distress following their participation. And it is this remorse and this guilt that sets apart the sociopathic and the psychopathic individuals from the rest of the population.

The identification of the disorder of psychopathy is generally credited to Pinel who was a man appointed to the Bicetre, an institution for the insane in Paris, in the year 1792 (Smith, 1978). Writing about Pinel, Smith (1978) writes:

He ascribed the label *emportement manaque sans delier* in 1801 to a man of wealthy and aristocratic heritage who was given to savage and seemingly unprovoked aggressiveness, in spite of his enviable social position. However, according to Pinel, “when unmoved by passion” he showed good judgment and capable management of his affairs. After pushing a woman who had verbally attacked him into a well, killing her, he was confined to the Bicetre (p. 3).

Here we have an early example of a man who would appear to be socially and financially sound acting in rash and anti-social ways, killing simply because someone made him angry. In 1835 J.C. Prichard first presented the term “moral insanity” in his writing *Treatise on Insanity* (Banay, 1963, p. 1637) in reference to the personality that seemed to have no remorse or guilt or empathy for others. For well over a century, social scientists have been studying people who are capable of performing immoral acts with seemingly no remorse or guilt. This form of functioning is, according to the DSM-IV-TR, an Axis II disorder known as Antisocial Personality Disorder (American Psychiatric Association, 2000). Associated with the psychopathic mind and the sociopathic mind, the person with antisocial personality disorder has the capacity to engage in cruelty without the pangs of guilt (Walsh, 2008). Although not exclusive to men, antisocial personality disorder is more prevalent in males than in females (Waldman & Rhee, 2007).

Human history -- through research and as evidenced in times of war and stress -- has already shown that seemingly socially moral people, after given only a little push, have the capabilities to do horrific things. But what of those who do not need such a push? These people are known as sociopaths, psychopaths or people diagnosed with antisocial personality disorder. The DSM-IV-TR (2000) is the current guide to the criteria for diagnosis of mental disorders (Hare, 1999). According to the DSM-IV-TR,

psychopathology and sociopathology are aspects of antisocial personality disorder. That is to say, according to the DSM-IV-TR there is officially no specific diagnosis for psychopathology or sociopathology: these former designations for disorders demonstrate essentially the same characteristics of antisocial personality disorder (Hare, 1999).

Within the DSM-IV-TR, the criteria for antisocial personality read:

A. There is a pervasive pattern of disregard for and violation of the rights of others occurring since age 15 years, as indicated by three (or more) of the following:

1. Failure to conform to social norms with respect to lawful behaviors as indicated by repeatedly performing acts that are grounds for arrest.
- 2). Deceitfulness, as indicated by repeated lying, use of aliases, or conning others for personal profit or pleasure.
3. Impulsivity or failure to plan ahead.
4. Irritability and aggressiveness, as indicated by repeated physical fights or assaults.
5. Reckless disregard for safety of self or others.
6. Consistent irresponsibility, as indicated by repeated failure to sustain consistent work behavior or honor financial obligations.
7. Lack of remorse, as indicated by being indifferent to or rationalizing having hurt, mistreated, or stolen from another.
8. The individual is at least age 18 years.
9. There is evidence of Conduct Disorder with onset before age 15 years.
10. The occurrence of antisocial behavior is not exclusively during the course of Schizophrenia or a Manic Episode (American Psychiatric Association, 2000).

Although these criteria are often seen in both sociopaths and psychopaths, there exists an argument that sociopathology, psychopathology and antisocial personality disorder by themselves are their own individual personality disorders (Hare, Hart & Harpur, 1991). The argument for seeing these three – sociopathology, psychopathology,

and antisocial personality disorder, as separate entities will be developed in the following sections.

Sociopathy

Lykken (1995) defines the sociopath as "...the largest genus of all, consisting of young men -- and increasing numbers of young women -- who were simply never adequately socialized during childhood and adolescence" (p. 22). Lykken (1995) believes that the sociopath exists simply based on poor parenting and thus is the result of nurture rather than nature. Because of this, Lykken (1995) also believes that there is reason for concern if children of neglectful parents are beginning to show signs of blossoming sociopathy such as "risk-tak[ing], fearless[ness], aggressive[ness] and [who are] tough, who are not very bright, who are prenatally charming and successfully manipulative, who are highly sexed or have violent tempers" (p. 30-31). If such children are allowed to engage in these behaviors without intervention, Lykken (1995) believes sociopathy is a "natural consequence" (p. 30).

Kantor (2006) expands on this idea by writing, "The term '*sociopathy*' (italics added) implies that the individual's troubles are either the product of a faulty upbringing by or maladaptive identification with one's parents, or else the product of maladaptive identification with deviant members of a given society -- often a 'deviant' subsociety such as the Mafia" (p. 124). Hare (2007) argues that sociopaths, unlike psychopaths, do have a "...capacity for empathy, remorse, and loyalty to their own group" (p. 13).

Lykken (1995) agrees with Hare and states that sociopaths "...have a weak and

unelaborated conscience, are not shamed by much of what would shame you or me” (p. 22). Taking Lykken and Kantor’s definitions, a sociopath therefore is born as a result of nurture more than nature. More specifically, the sociopath is created based on the survival instincts learned through experiences with one’s primary care giver whether that be a parent or guardian or a criminal outfit (gang or antisocial social circle). I will explore this theory in more detail in chapter two.

Psychopathy

Lykken (1995) attributes psychopathology, as opposed to sociopathology, resulting from a defective psyche rather than solely the result of an individual’s upbringing (Lykken, 1995). According to this definition, the psychopath could come from any home or any environment, rich or poor, educated or not so.

There has been a great deal of research distinguishing the differences between antisocial personality disorder and psychopathy (Hare, Hart & Harput, 1991; Lilienfield, 1994; Rogers, Salekin, Sewell & Cruise, 2000; Widiger, 2007). A checklist devised by Robert Hare, Ph.D., known as the Psychopathy Checklist-Revised (PCL-R) is the most accepted clinical measure used to diagnose psychopathy as opposed to a diagnosis of solely antisocial personality disorder (Hare & Neumann, 2008). It is often referred to as the “gold standard” for such a diagnosis (Lynam, Derefinko, Caspi, Loeber & Southamer-Loeber, 2007).

The PCL-R consists of four factors of psychopathic personality. The first of the four focuses is on the Interpersonal Skills of an individual. The second focuses on

Affective Factors of the personality. The third element focuses on Impulsivity, and irresponsibility known as the Lifestyle Factor. The fourth and final factor looks at antisocial behavior and its presence throughout the life and to what degree. This is known as the Antisocial Factor (Sevecke, Pukrop, Kosson, & Krischer, 2009; Hare, 2003). According to Hare's PCL-R, these four distinguishing factors make up the primary aspects of psychopathy. As distinguished from sociopathy, the causes of psychopathic behavior are nature based in that psychopathy is an innate, not developed, element of the individual psychopath's psyche. It is comprised of the inability to feel guilt, difficulty with interpersonal relationships, lack of empathy, impulsivity and a seeming inability to look at the world in an altruistic manner, or in that sense, to behave humanely (Kantor, 2006). In summation, when differentiating psychopathology from antisocial behavior, Hare and Neumann (2009) write:

Psychopathy is conceptually similar to ASPD; however, at the measurement level the former places more emphasis on interpersonal and affective features and their links to broad antisocial tendencies, while the latter emphasizes overt antisocial behaviors. The empirical association between psychopathy and ASPD is asymmetric; most people with psychopathy meet the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, diagnostic criteria for ASPD, but the converse is not true (p. 791).

So what makes the psychopathic or sociopathic mind different from a seemingly moral mind? Understanding how someone develops these personality disorders has been the focus of research for many years. To explore these potential explanations and to examine what a psychopathic mind is, I will look at attachment disorders in relation to psychopathy and sociopathy; sociopathy and psychopathy in the young, as well as neurology and the environmental factors (nurture) also in correlation to psychopathy/sociopathy. The focus of this paper directly relates to the professional

interests of psychology, social work and other psychotherapists, for clinicians will undoubtedly work with victims of sociopathic and psychopathic individuals, or even with sociopathic and/or psychopathic individuals themselves.

Chapter 2

ATTACHMENT AND CHILDHOOD EXPERIENCE LEADING TO SOCIOPATHY: NURTURE'S ROLE

In 1951, a researcher by the name of John Bowlby suggested that parental deprivation within the first 5 years of life would in turn affect the child's development in negative ways, ultimately resulting in the child becoming an "affectionless character" as well as a delinquent (Bowlby, 1951; Farrington, 2007). Bowlby also suggested that avoidantly attached children learn to express anger derived from their experiences of having unresponsive or intrusive parental figures, displacing the resulting anger at unmet needs outwardly towards their environment (Bowlby, 1973; Deklyen & Greenberg, 2008). Between the 1960s and the 1970s, Mary Ainsworth began doing research on children's attachment to the adult figures in their lives. Through this research, she devised the concept of the "secure base" and from this also devised three distinct attachment patterns in infants: secure attachment, avoidant attachment and anxious attachment (Bretherton, 1992). Because of the nature of attachment, which is a direct result of a parental figure's interactions with the child, using the pre-established difference between sociopathy and psychopathology, it is presumed that attachment styles may have causal effect on a sociopathic outcome rather than a psychopathic outcome.

Types of Attachment

According to Applegate and Shapiro (2005), “Infants categorized as ‘securely attached’ are able to seek out and utilize proximity of the caregiver when distressed and are able to utilize the caregiver as a secure base from which to explore and gain mastery over the external world” (p. 66). Through this process, infants are able to explore the world around them through means of “checking back” or “social referencing,” that is to say that infants will look to the parent or guardian for signs or cues that their exploration is warranted, safe and good. Through the cues the parent or guardian offers, an infant may learn more about an object or an environment. It is a safe bond that reinforces positive exploration techniques for the infant (Applegate & Shapiro, 2005).

An infant with an insecure/avoidant attachment may appear to be less needy or unsure than a child with a secure attachment pattern. Insecure/avoidant infants tend more to be loners, or apparently independent and lacking a need for comfort and nurturance from parents. They do not seek out the cues from a parent or a guardian when exploring new places or objects. “Checking back” is something insecure/avoidant infants tend not to do; they have learned “via repeated interactions with primary caregivers, that dyadic interaction is not associated with positive affective experiences” (Applegate & Shapiro, 2005, p.66.). This creates a situation where infants have to rely on themselves in a world where everything is new. It is suggested that a child with an insecure/avoidant attachment style is using a defense learned through neglect or being made to feel as a burden and over time such infants tend to become more emotionally distant, angry and might behave in “negative” ways (Davies, 2004).

An ambivalent/resistant attachment occurs when a child that has an intense desire for attachment from a parental figure and is lacking confidence in that attachment figure's availability. The result is a strong reaction upon separation of the parental figure from the child (Davies, 2004). As cited in Davies' (2004) text, Mary Ainsworth (1982) writes about ambivalent/resistant children, referring to them as "C babies," "The conflict of the C babies is a simple one -- between wanting close bodily contact and being angry because their mothers do not consistently pick them up when they want to be held or hold them for as long as they want. Because their mothers are insensitive to their signals C babies lack confidence in their responsiveness" (Ainsworth, 1982, p.18). Davies (2004) writes, "Longitudinal studies have linked the C category with behavioral inhibition and lack of assertiveness in preschool children and with social withdrawal and poor peer interaction skills in early school-age children" (p. 16).

Following Ainsworth's early research, Mary Main and Judith Solomon (1986) developed a fourth attachment category, disorganized attachment, which is demonstrated when an infant shows contradictory behavior when becoming reunited with a parental figure (Main & Solomon, 1986). Such children may approach their parental figures with outstretched arms as if asking to be picked up -- although they might be crying or have a look of fear on their face simultaneously. Disorganized attachment is a result of inner conflict or confusion that the infant or the child is unable to fully understand. Researchers speculate that children with disorganized attachment patterns have failed to develop a consistent pattern of A, B, or C attachment behavior because none of these has been predictably most effective with the D child's particular parents. Main and Hesse (1990) proposed that parents' frightening or frightened behavior (perhaps linked to the parents'

own unresolved traumatic experiences) were factors causally linked to infants' development of disorganized attachment. With disorganized attachment, often a child lacks the ability to signal to a caregiver through affect that s/he needs help. Because of this, the child or infant is unable to self-regulate needs and is unable to self-soothe (Davies, 2004). As van IJzendoorn, Schuengel and Bakermans-Kranenberg, (1999) write, "The essence of disorganized attachment is fright without solution" (p. 226) and that disorganized attachment is "...the breakdown of the otherwise consistent and organized strategy of emotional regulation" (p. 226).

Social competency, effective problem solving, mastery motivation, empathic skills with others, the ability to sustain friendships, the ability to depend on others when necessary as well as the ability to maintain one's affect in developmentally appropriate ways are all aspects of a person who has developed a secure attachment (Applegate & Shapiro, 2005; Lieberman & Pawl, 1990; Sroufe, Egeland, & Kreutzer, 1990; Davies, 2004).

While referencing Sroufe (1983), Deklyen & Greenberg (2008) write:

Sroufe (1983) proposed that whereas both avoidant and ambivalent infants may develop externalizing behavior problems, the meaning of their behavior and the specific manifestations may differ in predictable ways. Avoidant children may develop a hostile, antisocial pattern in response to a rejecting and emotionally unavailable caregiver. The underlying anger, which is not directed to its source, may be manifested in lying, bullying, blaming, and being insensitive to others. Ambivalent children, on the other hand, may be easily over stimulated and exhibit impulsivity, restlessness, a short attention span, and low frustration tolerance. Both kinds of children may be aggressive -- but, Sroufe suggests, for different reasons (Deklyen & Greenberg, 2008, p.644).

However, Applegate and Shapiro (2005) state:

Infants classified as insecure or disorganized are more likely to show evidence of some level of psychopathology as development continues. Among the clinical outcomes observed are difficulties in the regulation of affect and emotion, a higher incidence of antisocial behavior, and lower levels of empathic understanding. Longitudinal studies on attachment describe powerful associations between attachment quality and longer-term indicators of emotional well being -- not only in childhood, but through adolescence and adulthood as well (p. 67).

Martha Stout (2005) points out that "Children who suffer from attachment disorder are impulsive and emotionally cold, and are sometimes dangerously violent toward their parents, siblings, playmates and pets. They tend to steal, vandalize, and start fires, and they often spend time in detention facilities when they are young and in jail when they become adults, just like sociopaths" (p. 133). Meloy and Gacono (2003) found that 88% of the children diagnosed with Conduct Disorder who were involved in their study demonstrated attachment deficits, 86% in adolescence with Conduct Disorder, and 71% of female antisocial inmates (with Antisocial Personality Disorder and other Cluster B diagnoses/traits), and that "91% of Antisocial Personality Disorder male inmates were also primary psychopaths" (p. 98).

In addition, Meloy and Gacono (2003) write, "Although chronic emotional detachment is not specific to antisocial individuals, we think that it is a necessary (but, alone insufficient) psychobiological substrate for the development of a pattern of chronic antisocial behavior and, in its extreme form, psychopathy" (p. 98).

According to the DSM-IV, the criteria for Conduct Disorder are as follows:

A. A repetitive and persistent pattern of behavior in which the basic rights of others or major age-appropriate societal norms or rules are violated, as manifested by the presence of three (or more) of the following criteria in the past 12 months, with at least one criterion present in the past 6 months:

Aggression to people and animals:

1. often bullies, threatens, or intimidates others
2. often initiates physical fights
3. has used a weapon that can cause serious physical harm to others (e.g., a bat, brick, broken bottle, knife, gun)
4. has been physically cruel to people
5. has been physically cruel to animals
6. has stolen while confronting a victim (e.g., mugging, purse snatching, extortion, armed robbery)
7. has forced someone into sexual activity

Destruction of property:

8. has deliberately engaged in fire setting with the intention of causing serious damage
9. has deliberately destroyed others' property (other than by fire setting)

Deceitfulness or theft:

10. has broken into someone else's house, building, or car
11. often lies to obtain goods or favors or to avoid obligations (i.e., "cons" others)
12. has stolen items of nontrivial value without confronting a victim (e.g., shoplifting, but without breaking and entering; forgery)

Serious violations of rules:

13. often stays out at night despite parental prohibitions, beginning before age 13 years
14. has run away from home overnight at least twice while living in parental or parental surrogate home (or once without returning for lengthy period)

15. is often truant from school, beginning before age 13 years

B. The disturbance in behavior causes clinically significant impairment in social, academic, or occupational functioning.

C. If the individual is age 18 years or older; criteria are not met for Antisocial Personality Disorder (American Psychological Association, 2000).

It is clear from this set of criteria how it is that children with Conduct Disorder are demonstrating antisocial traits. This of course does not mean that children who exhibit Conduct Disorder, who are emotionally void, and who demonstrate antisocial behaviors are necessarily sociopaths. Of course, this also does not mean that simply because they are children that they are not on a trajectory to become sociopaths, either.

A study conducted by Frodi, Dernevik, Sepa, Philipson and Bragesjo (2001)

focused on Adult Attachment Interviews (AAI) with psychopathic inmates. As Frodi et al. (2001) write:

The AAI yields three major categories: ‘dismissing of attachment’ (Ds); ‘free to evaluate attachment experiences’ (F); and ‘entangled, enmeshed in early relationships’ (E). There are two additional categories: ‘unresolved-disorganized with regard to early abuse/trauma’ (U/d); and ‘cannot classify’ or unclassifiable (CC)” (p. 210).

Frodi et al. (2001) go on to write:

The AAI (Adult Attachment Interview) is a semi-structured, in-depth interview, from one to one and a half hours long, with roots in the psycho- dynamic tradition, which, for example, deals with early attachment relationships/experiences with parents and other attachment figures, separations, feelings of rejection, loss, trauma, physical and sexual abuse (p. 273).

The results of this study showed that virtually none of the individuals with psychopathy whom the authors interviewed had secure attachments with their parental figures (Frodi et al., 2001). Frodi et al. (2001) also found that 71% of their 14 interviewees had been physically abused as children. Their results found that the D men

“...were characterized by a high degree of idealization (of mother) and very poor recall of experiences in childhood” (Frodi et al., 2001, p. 280). This finding is compatible with a study conducted in 1986 which found that, of the juveniles incarcerated in the United States at that time, 70% of them had been reared without fathers (Beck, Kline & Greenfield, 1987), as well as is a study conducted by Flight & Forth (2007) which found a correlation between father attachment and PCL:YV (Youth Version) scores. The youth in Flight & Forth’s study who scored higher for psychopathic traits “reported being less attached to their father, but not to mother or peers” (p. 749). Flight & Forth (2007) continue to write:

It is important to note that this finding must be interpreted with care as the results are not causal. Nonetheless, the findings suggest that a lack of attachment to a father figure, for male youthful offenders, may be related to higher ratings on psychopathy and, more specifically, behavioral and antisocial features (p. 749).

The U/d/CC category of men, however, demonstrated “A lack of resolution of childhood trauma (primarily severe physical abuse)” (Frodi et al., 2001, p. 280).

The results of the Frodi et al. (2001) experiment also found that the D men had a difficult time using adjectives to describe their parental figures and instead focused on nouns to remember their parental figures by way of describing events or objects they related with them. The U/d and C/C tended to reflect on the physical abuse or traumatic events inflicted upon them by their parental figures (Frodi et al., 2001, p. 280).

Psychopathology and Sociopathology in Youth

According to Lykken (2007) and the DSM-IV-TR (2005), 18 years of age is the legal age at which children can be diagnosed with antisocial personality disorder

(Lykken, 2007, American Psychological Association, 2000). In certain cases, antisocial personality disorder as I have elaborated earlier could, after being explored by a trained professional, specifically be revealed to be sociopathy or psychopathy (Lykken, 2007). Lykken makes the point that simply because the legal cutoff age for diagnosis is 18, that 18 is not a magical time where personality disorders suddenly take form. Lykken (2007) defines this point by writing:

In most of the United States, 18 is the age of legal responsibility, although, of course, it is absurd to suppose that delinquent youth undergo some psychological transformation on their 18th birthdays. In view of the alarming recent increase in the number of homicides and other major crimes by youngsters under age 18, many of them now being tried as adults and incarcerated for long periods, it is noteworthy that none of them could be classified as APD (p. 4).

Technically, antisocial personality disorder, psychopathy or sociopathy aren't diagnosed until age 18. Because symptoms of these disorders exist within some children, research has subtyped two classes of children with behavioral problems or who demonstrate antisocial tendencies. There are those children who have demonstrated severe behavioral problems before adolescence (known as the childhood-onset group) and those children who have demonstrated severe behavioral problems during adolescence (adolescent-onset group) (Frick, 2009, & Moffitt, 2003). This research has shown that children from the childhood-onset group demonstrate “...numerous characteristics that are similar to adults with psychopathy” (Frick, 2009, p. 804). The noted characteristics are an increase in aggressive behaviors upon reaching adolescence and then onward into adulthood. In addition, “Children and adolescents with childhood-onset antisocial behavior tend to show more dispositional vulnerabilities (for example, temperament risk factors and neurocognitive deficits) than those in the adolescent-onset

group” (Frick, 2009, p. 804). Furthermore children in the childhood-onset group “ ... are more likely to show several of the affective (for example lack of guilt and empathy) and behavioral (for example, impulsivity) features of psychopathy (Frick, 2009, p. 804). Thus, research has dictated that although the legal age of diagnosing a child with a full-fledged personality disorder such as antisocial personality disorder or psychopathy is, according to the American Psychological Association, age 18, the capabilities of psychopathic or antisocial tendencies are evident much earlier.

Robert Hare recognizes this and has adapted his psychopathy checklist for youth. This adapted version is called the Psychopathy Check List: Youth Version (or PCL:YV). Adapted from the PCL-R, the PCL:YV has modified the parasitic lifestyle section, as adolescents are generally thought to have limited work and life experience, as well as section 17, which looks at the short-term marital relationships of an individual. In addition, item 18 on the PCL-R scale, juvenile delinquency, and item 20, criminal versatility, were also modified for adolescents, as they generally have had less opportunity to become involved with both the law and like offenders. Additional modifications included a scoring system that relied more heavily on school, peers and family, a scoring system that was modified to take into account characteristics of youth, and language that was more pertinent to adolescents than adults was also altered (Salekin, 2007, p. 395).

Although the DSM-IV-TR does not recognize psychopathy, sociopathy or antisocial personality disorder in youth, within the manual there are three particularly relevant categories of adolescent behavioral disorders. These are: Attention Deficit Hyperactivity Disorder, Conduct Disorder (as has already been discussed) and

Oppositional Defiant Disorder. Although the symptoms of these behavior disorders at times may resemble the actions of a budding sociopath or a budding psychopath, as Hare (1999) writes, “Most children with Conduct Disorder will not become adult psychopaths” (p. 159). These defining characteristics of antisocial personality disorder are not enough to necessarily diagnose a person as a sociopath or a psychopath -- or even a budding one for that matter. Adolescence is a time for development and because of this, behaviors relevant to Conduct Disorder could be evidence of a longer lasting disorder or a passing phase of adolescent development (Flight & Forth, 2007; Edens, Skeem, Cruise, & Cauffman, 2001; Seagrave & Grisso, 2002). In addition, the presence of antisocial personality disorder does not always equate to psychopathy. In a study, Robins, Tipp, & Przybeck (1991) determined that throughout five U.S. cities, 25% of the juvenile delinquent adolescents developed antisocial personality disorder and that 16% of children who had been suspended or expelled from school developed psychopathy (Robins, Tipp, & Przybeck, 1991; Holmqvist, 2008). This means then that throughout these five U.S. cities, if 25% of the juvenile delinquent adolescents developed antisocial personality disorder, then mathematically speaking, 75% do not.

Regarding Flight and Forth's finding that there is likely a correlation between a lack of attachment to a father figure within young male criminal offenders and behavioral and antisocial features of psychopathy (Flight & Forth, 2007, p. 749), the authors note that violence could be a result of a lack of attachment because those who have strong attachments fear losing those attachments. Thus, if there is a lack of attachment, there are no inhibiting factors towards violent or antisocial tendencies (Flight & Forth, 2007).

As evidenced by this chapter, research has indicated that there appears to be some

form of a link between sociopathy and early childhood attachment disorders. This is not to say that attachment disorders are an inevitable link to sociopathic or even psychopathic behavior. This researcher has found no evidence that proves all sociopaths ever diagnosed have experienced attachment disorders. According to Deklyen and Greenberg (2008), “There are insufficient longitudinal data from infancy to establish with certainty that specific pathways exist between early attachment types and differing forms of psychopathology” (p. 656). Deklyen and Greenberg (2008) also write, “With few exceptions, however, insecure attachment is unlikely to be either a necessary or a sufficient cause of later disorder, and in some cases it may be an effect of the disorder itself” (p. 657). Still, with this in mind, it seems that through years of research on attachment, sociopathic behavior within individuals is theoretically more likely to occur in people who have had insecure/avoidant, insecure/ambivalent, or disorganized styles than with someone who as an infant developed a secure attachment style. However, this is theoretical only, based on a logical extrapolation from the research cited in this thesis, but not on specific empirical findings. In regard to antisocial-like or oppositional defiant behaviors of a youth that may have theoretically derived from an insecure or a disorganized attachment style, Robert Hare, Ph.D., writes (1999), “There is little doubt that correction of these early problems ultimately would lead to a dramatic reduction in crime and other forms of social dysfunction. But it is unlikely there would be a comparable reduction in the number of psychopaths and in the severity of their antisocial behavior” (p. 170). There is no specific conclusion to derive from the information provided other than that there is likely a correlation between sociopathic behavior and attachment disorders, though this researcher has found no direct evidence that can

specifically prove this.

CHAPTER 3

THE ENVIRONMENTAL FACTORS OF SOCIOPATHY AND PSYCHOPATHY: THE CHILD'S SURROUNDINGS, PEER GROUP, GUARDIANS AND GENETIC PREDISPOSITIONS

Besides attachment theory, researchers and theorists of psychopathy and sociopathy have suggested that environmental factors are a potential cause for these personality disorders. With regard more to sociopathy, which again, this thesis has differentiated from psychopathy as being the primary result of irresponsible and neglectful and/or abusive parental figures -- literal or figurative familial figures -- Kantor (2006) suggests that one possible cause for these behaviors relates to the hypothesis I wrote about earlier regarding people's apparent empathy for, or at least vicarious enjoyment of, psychopathic behavior. Kantor (2006) writes, "We secretly want to act psychopathically, but laudable self-restraint keeps us in check" (Kantor, 2006, p. 129). An example of Kantor's hypothesis might be that of a parental figure who encourages or eggs a child on with antisocial ideals or behaviors so as to potentially live vicariously through these actions. A parent of this kind might say, "If no one is looking, take milk during lunch. It won't be a problem as long as you don't get caught." Or, "If someone is bothering you at school, hit them. Don't take crap from anyone." An even more liberal perspective is that the encouragement to children to ignore that inappropriate behavior which does not immediately concern them is a passive encouragement of antisocial behavior; such parental encouragement could lead to sociopathy. For example, parents

might encourage children not to worry about their witnessing cheating because it is none of their business or that such things do not concern them directly and therefore are not matters they, as individuals, need to be concerned with. This form of parenting is a two-way street as it has been argued that children learn pro-social values when parents offer “Clear, consistent rules of conduct legitimated by moral principles of fairness, compassion, and respect for persons” (Baumrind, 1986 p. 408). Therefore, arguably pro-social and anti-social behaviors are behaviors that are modeled by parents themselves.

Baumrind finds that it is the parent who educates the child on how to interact within society. Baumrind (1986) writes, “Socialization is an adult-initiated process by which young persons through education, training and imitation acquire their culture and the habits and values congruent with adaptation to that culture” (p. 408). Baumrind (1986) argues that it is the responsibility of a parent to raise a child “...from a dependant infant into a self-determining, socially responsible young person” (p. 480). Baumrind (1986) continues by writing, “Socialization researches have implicitly assumed that internalization of society’s rules, represented by parental values, is the prime objective of childrearing” (p. 408). Baumrind (1986) argues for clear limit setting as a way of establishing this path:

Clear limits that are firmly enforced during the early years and that occur within the context of a rational-authoritative relationship minimize the need for punishment by mid-adolescence, at which time the rights and responsibilities of parents and children become more symmetrical and less complementary, finally approaching the egalitarian relationship characteristic of adult peers (p. 413).

These arguments from developmental, observational research demonstrate why childhood abuse or victimization often leads to sociopathy and antisocial behaviors (Farrington, 2007). Farrington (2007) notes six pathways by which children are

negatively affected and thus anti-socially influenced through victimization. First, Farrington (2007) notes the immediate consequences of abuse. The shaking of a baby that might cause brain damage is one example Farrington uses. Second, Farrington notes bodily damage or the child becoming desensitized to pain that could encourage or pave the way for future violence. Third, Farrington notes that children may learn dissociative or impulsive ways of coping with abuse. These coping styles, Farrington notes, could lead to problems with problem solving or school performance. Fourth, Farrington notes the potential effect on a child's self esteem of learned social skills (or lack thereof). Fifth, Farrington notes the changes in family environments that could result in antisocial outcomes for children; for instance, being placed in a foster home could lead to negative long lasting effects on a child. Finally, the potential labeling that victims of a child abuse experience may isolate them from pro-social peers and encourage them to instead associate with delinquent or antisocial peers (Farrington, 2007, p. 235).

In the situation of a child growing up in a rough city neighborhood, a potential environmental factor that might contribute to sociopathy may revolve around survival: a child may feel the necessity of joining a gang for reasons such as securing a substituted family structure (Lykken, 1995). Wood & Alleyne (2010) write:

Where there are street gangs there is likely to be poverty, victimization, fear and social disorganization and low socio-economic status. Young people living in neighborhoods with high rates of delinquency are more likely to commit delinquent acts than are their counterparts living in areas of low delinquency and gang members have higher rates of delinquency than their non-gang counterparts *before* becoming involved in gangs (p. 103).

If not joining for survival, then the simple presence of a delinquent gang in a poor neighborhood may be enticing enough, though Robins (1978) cautions the joining of

gangs as a causality factor of sociopathy by pointing out that “His delinquent friends may have been selected for similarity of interests *after* the emergence of his problem behavior rather than having ‘led him astray’” (p. 263). With that in mind, those individuals who are seeking out gang life for survival or safety, or as family substitutes, and who have not embraced antisocial tendencies, often will find that the cost of gang admittance is at times costly, as is the upkeep or membership cost. An example of this comes in the way an adolescent male petitioning to join a gang who needs to prove his worth or his loyalty in acts that demonstrate toughness or an aggressive vision of manliness. The demonstration demanded by gang leaders or other members could be a plethora of antisocial behaviors. Theft, muggings, robbery, targeted and non-targeted violence, rape, terrorization and even murder are all potentially examples of required initiation acts or acts demanded if membership is to be maintained. Morality can in fact become detrimental to survival for gang members. Wood & Alleyne (2010) write:

Gang membership offers additional protection; possibly from threats stemming from competing criminal entities (e.g., rival drug dealers); it provides social support, offers elevated status, the chance to acquire power, and opportunities for excitement. Gang membership may also bring with it sets of rules or new social controls that members are expected to abide by—thus providing a form of familial environment. As a gang member, the youth is exposed to further opportunities for criminal learning, and s/he will become even more involved in criminal activity (p. 109).

A Theoretical Perspective on Sociopathy: Ego Psychology

Blackburn (2007) describes the causality of sociopathy with the use of Freudian theory. Blackburn writes that Freud’s “...theory of socialization aimed to explain the socialization of group standards in early childhood through the formation of the

superego” (Blackburn, 2006, p. 36). Blackburn goes on to explore the development of the *ego* and its developmental functions with regard to sociopathy. “This inner moral agency comprises moral rules in the form of the *conscience* and the positive values of the *ego-ideal*, and provides the standards by which the reality orientated ego regulates behavior” (Blackburn, 2006, p. 36). Using this theory, the *superego* is formed or defined through the parent-child relationship and the child's successful resolution of the Oedipal Complex. Thus, theoretically, if a parent or familial figure encourages antisocial behavior, the child will demonstrate failed socialization and thus more likely become sociopathic based on a skewed understanding of right from wrong (Blackburn, 2006).

Freud believed that human beings are inherently aggressive and to become pro-social, Freud proposed that people used a defense mechanism he referred to as *reaction formation* which functionally helps a person reverse negative impulses into their opposites so as to appear and function in pro-social ways. An angry person becoming overly nice towards someone that person would on one level like to target for aggression is an example of this. *Inhibition* is another defense function that regulates and controls anti-social behaviors or desires. Freud believed that civilization would be doomed without socialization to help us contain our aggressive impulses. (Mitchell & Black, 1995). The psychopath or sociopath would not embrace these pro-social defenses and instead would act based on their id or drives with little to no influence or filtering from a superego.

Conversely, referring back to children being raised in foster care, the same is also true: simply because a child is raised under foster, adoptive parental or guardian figures who are socially moral individuals, if the child has been conceived and borne by socially

immoral parents, based on the research reported to date, it is conceivable that the genetic predisposition towards antisocial behaviors may counter the child's positive familial upbringing.

Many of the conclusions about heritability of human traits have been drawn from studies of twins adopted away at birth from their biological parents and raised by unrelated parent figures. While referring to such twin studies, McGuffin and Thapar (2003) write "We can conclude that personality in general, as well as personality traits within the normal range that have a bearing on antisocial personality, are at least moderately influenced by genes" (p. 218). After examining multiple twin and adoptee studies, McGuffin and Thapar (2003) note that "Delinquent or antisocial behavior in adolescence generally shows important environmental influences, but that as adolescents emerge into adulthood, persistent antisocial behavior is more likely to occur in those who have genetic predisposition towards it" (p. 224). Scarr and McCartney (1983) argue that although genes more or less set up the person (which they refer to as the organism) to experience the world, "The organism's abilities to experience the world change with development and are individually variable" (p. 425). Scarr and McCartney (1983) conclude that differences within people can be a result of both genetic and environmental factors. They say that the genetic process is best described as driven by a genotype, whereas the phenotype is that which is more determined by environmental effects. Scarr and McCartney (1983) propose "... that the genotype is the driving force behind development, because, we argue, it is the discriminator of what environments are actually experienced" (p. 425). In the case of identical twins when reared apart, Scarr and McCartney (1983) argue that if given similar experiential opportunities, the twins should

make similar choices and that one would see a major difference only if one (or both) of the twin's experiential opportunities were very restricted. Scarr and McCartney (1983) support this argument by referring to research with monozygotic (MZ) twins (identical twins) that was conducted at the University of Minnesota:

The most dissimilar pairs of MZs reared apart are those in which one was severely restricted in environmental opportunity. Extreme deprivation or unusual enrichment can diminish the influence of genotype on environment and therefore lessen the resemblance of identical twins reared apart. (p. 433).

Scarr and McCartney (1983) also write that in households, parents, adoptive or otherwise, tend to raise their children in environments of their choosing that best meets what these parents feel are best. However, as time goes on, adopted siblings tend to chose their own environmental niches and, in a sense, begin to follow their own intellectual and personal interests while demonstrating different personalities and phenotypic characteristics from their adoptive siblings (p. 432). This theory argues that as time goes on, adopted children begin to resemble their biological parents' characteristics even if they were raised to be similar (or heritable) to their adoptive parents' lifestyles.

Hare (2007) notes that twin studies have determined that the interpersonal-affective and antisocial traits of psychopathy are heritable. Hare (2007) references other research, which concludes that genetics is the explanation for the variations in psychopathic personality. These results, according to Hare, suggest that some individuals are likely "destined" to become psychopaths (Hare, 2007). Still, to counter this theory, Hare (2007) also writes:

Thus far, the evidence for genetic determinants of psychopathy is based on research using self-reports and simple observer ratings of psychopathic (or psychopathy-related) traits and behaviors. It is very likely that similar findings will be obtained when structured assessments are used to assess psychopathy. Meanwhile, the increasing evidence that psychopathic traits have a substantial genetic basis may lead to the belief that some individuals are destined to become psychopaths. However, both the environment and environmental-genetic interactions also are very important in shaping personality and its behavioral manifestations, as well as ‘subtypes’ of psychopathy. As twins are followed into adulthood, we will gain new insights into the etiological and developmental factors of psychopathy. I might note that the early results from behavioral genetics research are consistent with the evolutionary psychology view that psychopathy is less a result of a neurobiological defect than a heritable, adaptive life-strategy. In this view, the early emergence of antisocial behavior, including aggressive sexuality, is central to psychopathy (p. 14).

With this, Hare is arguing that psychopathy is not inevitable and without the early onset of antisocial behavior, psychopathy may not manifest (Hare, 2007). Lykken (1995) goes further to state that the variations and quality of parenting are important and that “heritability of criminality is less than the heritability of the more basic psychological traits” (Lykken, 1995, p. 109). Lykken (1995) adds:

And it is the case that, if we could somehow prevent the most unskilled and indifferent of young adults from becoming parents, then we would, paradoxically, increase the heritability of criminality, while drastically reducing the number of criminals in the next generation (p. 109).

Lykken is thus arguing that if people who were unskilled at parenting or who in no way wanted to become a parent could suddenly or magically find a way to cease the ability to reproduce, then the offspring that otherwise would be born into unloving and likely abusive households would cease to be. This in turn would create a generation that has significantly reduced attachment disorders and traumatic upbringings as the result of poor and abusive parenting; thus, any criminality that is present would be a result completely based on heritability and in no way on upbringing. Although this is

theoretical, Lykken is arguing that parental upbringing is a crucial aspect of who it is that the child ends up becoming. Criminality or antisocial behaviors will always exist but in a perfect world of “perfect” parents, these behaviors would become a rarity instead of increasing.

CHAPTER 4

THE PSYCHOPATHIC INDIVIDUAL'S BRAIN – A DERIVATIVE OF NATURE

Over 150 years ago, a railway construction worker by the name of Phineas Gage was in a work related accident that caused severe damage to his prefrontal cortex. As a result of this injury, Gage underwent a dramatic change in personality, becoming very much psychopathic in nature (Gao, Glenn, Schug, Yaling, & Raine, 2009). This injury suggested to medical and psychological researchers that the nature of psychopathology could have a biological or, more specifically, a neurological origin. There is currently no evidence definitively indicating that psychopathic individuals demonstrate anything but average intellectual and neurological functioning (Siever, 2003; Hare et al., 1990; Hare, 1999), though researchers have since been studying the brain activity of people who have scored high enough on the PCL-R to be diagnosed as psychopathic with the goal of determining whether there are some forms of abnormalities present.

Research has found distinctions between the brain of a person diagnosed as psychopathic from the brain of a non-psychopathic individual. The prefrontal cortex is the area of the brain responsible for regulating emotions and social behavior as well as distinguishing between reward and punishment with regard to actions (Banich, 2004). According to Gao et al. (2009) “Most structural brain imaging studies have focused on the PFC, and findings suggest that psychopathic people exhibit impairments in this region” (p. 814).

Yang et al.'s. (2009) research study discovered focal amygdala abnormalities

within psychopathic individuals diagnosed with psychopathy (Yang et al., 2009). According to Yang et al. (2009), “Psychopathic people also show volume reductions in the bilateral amygdala, particularly in the basolateral and superficial nuclei groups” (p. 814). The amygdala, researchers have learned, is an aspect of the brain that helps process emotional information. Emotional learning is also a function of the amygdala (Banich, 2004). Emotional learning occurs when people react emotionally to positive or negative stimuli based on pre-understood outcomes from said stimuli. A person appearing fearful of fire after being seriously burned in the past would be an example of emotional learning (Banich, 2004).

Research has found that damage done to the frontal cortex may produce changes in behavior and personality (Blair, Mitchell & Blair, 2005) as was observed in the case of Phineas Gage. Blair, Mitchell & Blair (2005) write, “However, it is important to note that such patients present with increased levels of reactive aggression and not instrumental aggression” (p. 84). That is, such patients respond to provocation by reacting aggressively but are not likely to use aggression to gain particular ends, as in deliberate burglary. Further research has indicated that this reactive aggression is manufactured within the orbital (ventral) and medial frontal cortex but not within the dorsolateral prefrontal cortex (Blair, Mitchell & Blair, 2005; Damasio, 1994). The implications of this research are that psychopathy in all forms may not be reflected in the dorsolateral prefrontal cortex and thus may have an unknown origin (not within the prefrontal cortex) all of its own (Blair, Mitchell & Blair 2005); or that:

While dorsolateral executive dysfunction may be associated with reactive antisocial behavior, the association is likely to be correlational rather than casual. The association between dorsolateral executive dysfunction and reactive antisocial behavior probably reflects that the individuals with this dysfunction also have dysfunction in ventral medial and orbital frontal cortex” (Blair, Mitchell & Blair, 2005, p. 90).

According to Glenn, Raine and Shug (2009), “Highly emotional moral dilemmas have been found to evoke activity in the amygdala, medial prefrontal cortex, posterior cingulate and angular gyrus. It has been hypothesized that persistent immoral behavior may result from deficiencies in some components of the moral neural circuit” (p. 5).

Glenn, Raine and Shrug (2009) also write, with regard to the medial prefrontal cortex, posterior cingulate and angular gyrus, that these aspects of the brain:

...have been found to be involved in self-referential thinking, emotional perspective taking, recalling emotional experiences to guide behavior and integrating emotion in social cognition. Dysfunction in these regions suggest failure to consider how one’s actions affect others, failure to consider the emotional perspective of the harmed other, or a failure to integrate emotion into decision making processes” (p. 6).

In a study focusing on the amygdala of psychopathic individuals, Yang, Raine, Narr, Colletti, and Toga (2009) found “Amygdala abnormalities in psychopathic individuals and corroborate findings from previous lesion studies. Findings support prior hypotheses of amygdala deficits in individuals with psychopathy and indicate that amygdala abnormalities contribute to emotional and behavioral symptoms of psychopathy” (p. 986). These findings are compatible with the Gao, Glenn, Schug, Yang and Raine (2009) findings of volume reductions in the bilateral amygdala “...particularly in the basolateral and superficial nuclei groups” (p. 814). Gao and co-authors (2009) go on to write, “Deficits in the amygdala-hippocampal complex have been associated with emotional deficits including shallow affect and lack of remorse in psychopathic people,

as well as social dysfunctions including pathological lying and superficial charm” (p. 814).

A study conducted by Glenn, Raine and Schug (2009) found through the use of functional magnetic resonance imaging (fMRI) that during emotional moral decision-making, psychopathic individuals show reduced activity within the amygdala (Glenn, Raine & Schug, 2009). Glenn, Raine and Shug (2009) further determined that psychopathic individuals skilled at conning and manipulation also showed reduced activity within the entire moral neural circuit. This study found that in all features of psychopathy, during periods of moral decision-making, the functionality of the amygdala is impaired, thus suggesting that amygdala dysfunction is possibly a core deficit in psychopathy. (Glenn, Raine & Shug, 2009).

There have been research findings of reduced grey matter within psychopathic individuals which as Gao and co-authors (2009) write, may “...contribute to the emotional dysregulation and poor fear conditioning of unsuccessful psychopathic people and consequently render these people less sensitive to environmental cues predicting danger and capture” (p. 814).

As noted in Science Blog (2004), professor Adrian Raine focused a study on two parts of the brain: the hippocampus, which “...is a part of the temporal lobe that regulates aggression and transfers information into memory; and the corpus callosum, a bridge of nerve fibers that connects the cerebral hemispheres” (para. 4). These brain scans showed that in 94 percent of "unsuccessful" psychopaths (that is, psychopathic individuals who have been arrested for antisocial acts) a brain abnormality was present wherein the right side of the hippocampus was larger than the left (para. 21).

Electroencephalographic (EEG) testing over the years has resulted in inconsistent findings about EEG abnormalities in those designated as psychopaths (Siever, 2003). A study by Monroe (1978) saw temporal spiking activity in aggressively driven psychopathic individuals (Monroe, 1978; Siever, 2003). Recent studies, however, indicate that the opposite is in fact true and that there are no EEG abnormalities that are specifically related to psychopathic individuals (Dolan, 1994; Blackburn, 1979; Siever, 2003).

As noted in Science Blog (2004), in addition to the abnormal size of the hippocampus in unsuccessful psychopathic individuals, Raine also found that “The psychopaths' corpus callosums (the major nerve fiber tract that’s role is to transfer information from the brain’s two cerebral hemispheres [Banich, 2004]) were an average of 23 percent larger and 7 percent longer than the control groups” [that of non psychopathic individuals] (para. 27). Raine explained these findings by saying, “With an increased corpus callosum came less remorse, fewer emotions and less social connectedness - the classic hallmarks of a psychopath” (Science Blog, 2004, para. 31).

Research has also shown a notable reduction in gray matter in people who scored highly in the PCL-R and who were already diagnosed with antisocial personality disorder (Raine, Lencz, Bihrlé, LaCasse, & Colletti, 2000; Gao et al., 2009; Yang, Raine, Lencz, et al., 2005). These research findings have thus been argued to “...contribute to the poor decision-making, emotional dysregulation, and impaired moral judgment in psychopathic people (Gao et al., 2009, p. 814). Again, these findings strengthen the idea that the brain functioning of someone diagnosed with psychopathy is different from that of someone without the disorder.

A study conducted by LaPierre, Braun and Hodgins (1995) investigated two areas within the prefrontal cortex: the orbitofrontal, which provides information that determines the appropriate social response or behaviors based on a reward to consequence ratio, as well as remembering mistakes so as to avoid them in the future (Banich, 2004); and the frontal ventromedial, which is "...likely involved in the representation of basic positive and negative affective states" (Banich, 2004, p. 406). The investigation asked individuals diagnosed with psychopathy to verbally identify particular odors. The study determined that psychopathic individuals performed poorly in these tests. Prior research has already determined that non-psychopathic people with orbitofrontal damage also perform poorly in this task. The results demonstrate a likely malfunction in processing within the brain of a person diagnosed as psychopathic which may occur in those with other types of brain damage; these results further provide evidence for a potential neurological explanation for psychopathy (LaPierre, Braun & Hodgins, 1995). Through various studies, Gao et al. (2009) have also found evidence for orbitofrontal deficits in individuals diagnosed as psychopathic (p. 817).

Object Relational World of Individuals Diagnosed with Psychopathy

What is the inner working model of the world like for a psychopathic individual? Looking at the psychopath through an object relational lens is a difficult if not impossible task. As Hare describes (1999), diagnosed psychopaths are glib and superficial and are often confident bordering on overconfident. They are egocentric and grandiose in nature and often believe that they are worthy of anything they desire. Individuals with psychopathy lack remorse or guilt and often cannot accurately reflect on their past

actions. To accompany their lack of remorse and/or guilt, these individuals show a lack of empathy and they are seemingly unable to empathize fully with anyone else, whether relating to the pain they themselves have caused others, or through experiences they may have shared with another in the past. Individuals diagnosed as psychopathic are often manipulative and deceitful to the point where many take pleasure in lying, often covering up lies with more lies as if doing so were a game. Often individuals with psychopathic traits appear emotionless or cold and shallow. When emotion is expressed, it can often be seen to be invalid or staged because of its unnatural quality (Hare, 1999). These are personality traits most would deem immoral and evil. For a typically functioning person to attempt to look at the world through the eyes of an individual with psychopathy is likely almost as impossible as it is for a psychopathic individual to empathize with another. Furthermore, most people are probably not able to see the world as a person with psychopathy might because, as the research reviewed above has indicated, people diagnosed as psychopaths quite possibly relate to the world in a way that is organically different in origin than is someone who is not psychopathic.

Neurointegrative Differences in Persons Diagnosed as Psychopathic

In a study by Williamson, Harpur and Hare (1991), the theory that people meeting the criteria for psychopathy do not process affective verbal material the same way a person without the disorder would, as is demonstrated by the glibness of a person with psychopathy, was put to a test. The result of this study implied that individuals diagnosed as psychopathic take in less meaning from affective words (emotional words that were rated as pleasant or unpleasant) than do those who are not psychopathic

(Williamson, Harpur & Hare, 1991).

In summary, researchers have been looking for deficits in the brain with individuals diagnosed with psychopathy for some time now. As provided in this chapter, evidence is increasingly being found to support the hypothesis that the psychopathic mind is literally different than the non-psychopathic mind. Researchers are still looking for more information and collecting data with hopes of gaining a better understanding of the psychopathic mind. Hare (2007) writes:

Psychopathy will not be understood as a defect or anomaly in any one brain region. Rather, it is probably the result of poor or abnormal integration of many regions. It also is possible that many of the functional differences observed are related to those of unusual cognitive and affective processing strategies, perhaps the result of some interactions between genetically based dispositions and life experiences. In any case, the neuroimaging studies of brain-personality-behavior relationships will provide remarkable new insights into the problems of psychopathy over the next few years, particularly when combined with behavioral genetics, neurochemistry, and cognitive processing (p. 15-16).

. As researchers continue to learn more about the psychopathic mind, new discoveries will undoubtedly uncover further explanations behind at least some of the causes of this major personality disorder, particularly from studies that use functional imaging to map the brain regions in actual use under varied conditions.

CHAPTER 5

SOCIETY'S REACTION TO PSYCHOPATHY AND SOCIOPATHY

Lykken (1995) suggests that people have developed the means to survive in a structured society by way of "...curbing our self-seeking individualism" (p. 52). Lykken (1995) suggests that people did this by evolving a disposition towards what he calls "...a certain basic set of social impulses" (p. 52). Examples Lykken (1995) provides for this are love, empathy, nurturance, and the innate hunger for approval (Lykken, 1995). Conversely Lykken (1995) suggests that in a healthy and safe society, people develop restraints through means of shame, guilt and "... our apparently innate tendency to march with the group and take orders" (Lykken, 1995, p. 52). So when these dispositions are ignored or dismissed, the people dismissing them are in a sense rebelling against social expectations and norms and, thus, are behaving in anti-social ways. And although monstrous acts have been committed and justly abhorred, to be sure, there may be something attractive about living a life free of guilt. To live without the burden of morality or not to be hindered by a sense of wrongdoing could arguably be viewed as liberating. With the ability to cast aside guilt or to not even understand its meaning, the deepest and darkest desires a person holds within could realistically be brought to the surface and acted out without remorse or empathy. Simon (1996) addresses this when he writes, "If murderous thoughts and dreams were a capital crime, we all would be on death row" (p. 282). Acting with a narcissistic self-absorption regardless of who is hurt along the way is how the high scoring PCL-R individual experiences the world. The main point

to keep in mind, however, that what differentiates a typically functioning person's fantasy from that of a person diagnosable as psychopathic or a sociopathic is that those who meet criteria for these disorders cannot shut this aspect of their personalities off, nor would they want to.

People are currently able to live fantasies of immorality vicariously through modern media such as movies and books. Anti-heroes, likable villains and heroes who kill indiscriminately such as James Bond, Jason Vorhees, Dexter Morgan, Indiana Jones and Jason Bourne have made authors and producers very wealthy as evidenced through the enormous box office gross sales from these films and from the numerous editions of books containing these characters that are published. Freud (1942) noted this phenomenon by writing:

The sympathetic witnessing of a dramatic performance fulfils the same function for the adult as does play for the child, whose besetting hope of being able to do what the adult does, it gratifies. The spectator at the play experiences too little; he feels like a 'Misero, to whom nothing worth while can happen'; he has long since had to moderate, or better direct elsewhere, his ambition to occupy a central place in the stream of world events; he wants to feel, to act, to mold the world in the light of his desire—in short, to be a hero. And the playwright-actors make all this possible for him by giving him the opportunity to identify himself with a hero. But they thus spare him something also; for the spectator is well aware that taking over the hero's rôle in his own person would involve such griefs, such sufferings and such frightful terrors as would almost nullify the pleasure therein; and he knows too that he has but a single life to live, and might perhaps perish in a single one of the hero's many battles with the Fates. Hence his enjoyment presupposes an illusion; it presupposes an attenuation of his suffering through the certainty that in the first place it is another than himself who acts and suffers upon the stage, and that in the second place it is only a play, whence no threat to his personal security can ever arise. It is under such circumstances that he may indulge in the luxury of being a hero; he may give way unashamedly to suppressed impulses such as the need for freedom in religious, political, social or sexual respects, and may let himself go in all directions in each and every grand scene of the life enacted upon the stage (p. 459-460).

There has been significant testing over the last 75 years and more which indicates that people who watch violent media are more likely to engage in violent acts against others than are people who do not watch a lot of violent media (Grimes & Bergen, 2008; Smith & Donnerstein, 1998). In three separate studies, Comstock (2008) and fellow researchers have come to believe that media violence will instigate or cause antisocial behavior (Comstock & Scharrer, 2003; Paik & Comstock, 1994). These findings could suggest, then, that people who are watching violent media are doing so not necessarily to perpetuate violence, but to vicariously experience it. Then, having lived through it vicariously, as the Comstock et al. research has argued, people may decide to take that fantasy and turn it into reality; hence, violent media causing or perpetuating antisocial behaviors. There have been more than 2000 studies that have focused on the correlation between popular media and violent or aggressive acts (Simon, 1996). Referring to this, Simon (1996) writes, "I have no doubt that what we put into our minds strongly influences what comes out. But focusing exclusively on the popular media as the cause of upsurging violence in America ignores other important factors" (p. 268).

This is only a fraction of the population, however, as clearly not every person who has engaged in viewing violent media has become violent. Not all. But as seen in the Duke University case, where a Lacrosse player for the Duke University team bragged to his friends about his plans to kill and skin some strippers that he hired to attend his party the next night, some do. In the Duke University case, one of the strippers ended up accusing some attendees of the party of rape. Although the boys were eventually found innocent, the idea of skinning the girls derived from a book turned movie by the name of *American Psycho*; the main character of the story being a successful psychopath

(Wentworth, 2009). Although it was later revealed that the stripper who accused the boys of rape was lying, no comments in the following press addressed the boys' degradation of women and their attempts at humiliating the girl at the party. Even though violent media may influence some, they have proven to be extremely profitable since they continue to be produced. So what lies in the darker side of this fan base? This constant success could indicate that people may in fact admire those capable of living without conscience. Given the opportunity to be rid of conscience, how many would take it? How close is the average person really to slipping from social morality into antisocial immorality? And what holds people to maintaining moral decisions? Whatever the reason, the darker side of humanity more often than not is kept at bay.

Speaking in regard to this desire, Nussbaum (2001), referencing self-psychology, writes about the effects of being unable to progress beyond separating oneself from the motherly object. She writes, "...denial [of the mother being separate from the self object] frequently involves a denial of one's own vulnerability and embodied self. Thus they [the self objects] link pathological narcissism to general facts of infancy, seeing them as exaggerated or perverse developments of deeply shared human difficulties" (p. 345). To utilize a self psychology model, the self object can relate to violent media because the self is able to reconnect with an object and attach itself safely to the sociopathic actions of the characters s/he is experiencing. The safety of attachment comes by way of what Winnicott would call "object use" (Mitchell & Black, 1995, p. 128). The antisocial behaviors being witnessed are only temporary to which the self object can disconnect with or "destroy" at any time. Still, the characters are enticing because they are fulfilling a narcissistic need or vicarious desire to be capable of such actions.

Such a theory might argue that there is safety in vicarious relationship with a fictional sociopathic or psychopathic character. In truth, with regard to the “healthy mind” there is likely a narcissistic need or fulfilled desire being met by viewing or vicariously relating to fictional sociopathic/psychopathic behavior. The rub of course is that there may not be any such thing as a “healthy mind.” If so, then perhaps vicarious experiences are in fact only fuel for the sociopathic fire (i.e., potential) that could lie in just about everyone. The “convergence hypothesis” set forth by Rubenstein (1982) who states:

[B]ecause many correlational studies consistently show associations between heavy TV consumption and sociopathic attitudes and behaviors, there is probably a cause-and effect relation between viewing and attitude formation and behavior. Most television researchers look at the totality of the evidence and conclude . . . that the *convergence* [italics added] of most of these findings about televised violence and later aggressive behavior by the viewer supports the positive conclusion of a causal relationship” (p. 104).

This quote does not imply that everyone is a psychopath. In fact, research has found that over ten years ago there were likely a total of more than 5 million psychopaths and sociopaths in the United States alone (Lykken, 2003), though in the grand scheme of things, even ten years ago, this is a relatively small fraction of the country’s population (though alarmingly large at the same time). Lykken (2003) goes on to state that “Because of the rates of both divorce and illegitimacy continue to rise rapidly” (p. 134) that “In the year 2011 [there will be] at least double the number [of sociopaths] *italics* that we are now contending with. And it will double again in another 10 years” (p.134).

The truth is that the majority of the population is not psychopathic, although it is fair to say that many non-psychopathic people enjoy the fictional world of psychopathic acts. These acts free the non-psychopathic individual from guilt because it is not they

personally who are committing the acts they are viewing on a movie or television screen or that they are reading in a book or interacting with in a video game. Fantasy and reality are clearly two very different things. There is safety in fantasy. To live as a psychopath is to live without morality. It is thus that the general populations love of vicarious interactions with violent media is evidence in itself that the majority is not psychopathic and is instead very much aware of their potential for guilt as well as the distinction between wrong and right. Finally, this distinction helps to spotlight the significant difference between how a psychopathic or sociopathic individual interacts with the world than does a non-psychopathic or a non-sociopathic individual.

CHAPTER 6

CONCLUSION

We are all individuals who derive from our own unique upbringings and cultural and societal backgrounds. -- as is evidenced by what is, for all intents and purposes, a relatively stable society within the United States: that is, a society governed by law and order, wherein most people within the United States one way or another learn to adhere to these rules, laws and “moral code” set forth within. This paper has demonstrated, however, that not every person everywhere is able to live within the expectations set forth by our society. For reasons nature or nurture based, sociopaths and psychopaths are examples of just such persons, and it is these people who cause much turmoil and strife within the world.

As has been addressed in this paper, parenting is often recognized as being the chief contributing force to the outcome of development. In the absence of modeling or the teaching of pro-social behavior, Lykken (1995) believes, as mentioned earlier in this paper, that sociopathy would become a “natural consequence” (p. 30). It is poor parenting, i.e., a lack of supervision, poor monitoring, a lack of parental involvement, a lack of discipline (reacting in a positively appropriate manner to the child’s behavior) and/or a cold degree of emotional involvement/relationships with their children that is “...the strongest and most replicable predictor of offending, as well as chronic offending and high antisocial personality scores” (Farrington, 2007 p. 232). Farrington (2007) continues this point by writing, “Many studies show that parents who do not know where

their children are when they are out, and parents who let their children roam the streets unsupervised from an early age, tend to have delinquent children” (p. 232). In addition, punitive discipline of all forms including physical punishment is also a predictor of antisocial risk (Farrington, 2007). Sociopathy, as opposed to psychopathy, is the product of poor upbringing or environmental factors, rather than genetic ones; such environmental factors result in a very low sense of morality or conscience (Lykken, 2003). The mind of an individual with psychopathy is organically configured such that he/she does not interact with society in expected ways, but for reasons related to neurological differences, whereas a sociopathic individual’s mind has *learned* how not to behave in socially acceptable ways.

In the case of psychopathy, however, things are even more complex. Lykken (1995) writes:

The potential psychopath is not ‘born bad’ but he is born *difficult* and he is likely to become ‘bad’ unless his parents are skillful, or have skillful help, so that they can avoid the usual ‘coercive cycles’ of this kind of gene-environment correlation (p. 84).

The coercive cycle Lykken (1995) refers to is one in which a member of the family or members of the family use predominantly negative reinforcement and punishment to meet their immediate needs. A mother striking her fighting children in order to get them to stop fighting or children learning that a temper tantrum in a public department store will get them the toy they desire after their parent has said “no” are examples of behavior patterns involving coercive cycles (Patterson, 2005). “Research results suggest that families in which coercive behavior is effective will have children with the highest rates of antisocial behavior” (Patterson, 2008, p. 1225). This would

indicate then that if a parent or a guardian were to use methods of positive modeling and positive reinforcement, likely the result would ultimately leads to pro-social behaviors rather than the negative ones instilled when parents and children relate coercively.

Logically we are left to deduce that if parenting can raise a child to be pro-social, then as this paper has indicated, parenting can also raise a child to be anti-social or to develop sociopathic traits. Research has demonstrated that children who are abused physically or who are neglected tend to grow into offenders themselves (Farrington, 2007). So are “bad” parents destined to spawn “bad” children? Are the genes of “bad” parents transferred to their offspring? The answer, as Lykken (1995) indicates is both yes and no:

Nature works *through* nurture, even in the fabrication of bone and neurons. In creating the mental software that is the essence of human individuality, the nature via nurture coupling is looser, leaving greater room both for both accidental and selective interventions (p. 85).

People are individuals: thus no one person will experience the world the exact same way as another. Lykken (1995) writes, “The studies at Minnesota, like those of other investigators, indicate that being raised together in the same home by the same parents in the same general environment usually does not make children more alike” (p. 85). So, even if two siblings were to be raised in an abusive and/or neglectful environment, there is no certainty that either or both would become sociopathic or later abusive individuals themselves, though it is worth noting that although there is no guarantee, the statistical likelihood *is* much higher. Other factors may contribute to the risk for children to develop sociopathic tendencies.

The psychopathic personality, as opposed to the sociopathic personality, is a product of a defective psyche rather than solely the result of an individual's upbringing (Lykken, 1995). Research has been gradually determining that individuals diagnosed as psychopathic are not necessarily a product of their environment so much as a result of nature. As discussed in chapter four, much research has focused on the physical brain of the psychopathic individual. The result of this research has found quite a few discrepancies between the brain of a psychopathic individual and that of a non-psychopathic individual.

Chapter four of this paper discusses research which has found that the corpus callosum tends to be larger in individuals diagnosed with psychopathy. Research has also found that the right side of the hippocampus tends to be larger than the left side in psychopathic individuals as well. In addition, a reduced amount of gray matter within psychopathic individuals has been noted, as has volume reduction in the amygdala - specifically within the basolateral and superficial nuclei group - with the addition of reduced activity within the amygdala with special regard to emotional decision-making.

As the years pass on, new research is sure to find further contributing factors of psychopathy that are both physiologically and sociologically based. In many articles the authors have suggested areas where additional research would benefit the study of psychopathy. Writing about future research, Flight and Forth (2007) write:

Research in psychopathy has focused on negative outcomes (i.e., antisocial behavior). No study has examined the association between psychopathic traits and altruistic behavior. Altruism has been linked to distinct etiologies and personality traits as compared with antisocial behavior. Finally, for purposes of early intervention, longitudinal studies that examine psychopathic traits, attachment styles, and types of violence in childhood through adolescence are needed (p. 749).

So what does the future have in store for the psychopaths and sociopaths among us? Hare (1993) suggests that more research needs to be done to understand these disorders so as to “socialize them, not resocialize them” (p. 220). Hare (1993) drives the point home that if research can better understand the psychopathic individual, then perhaps we can learn how to help these people before they cause harm to others. “Compared with other major clinical disorders, little systematic research has been devoted to psychopathy, even though it is responsible for far more social distress and disruption than all other psychiatric disorders combined” (Hare, 1993, p. 219). New babies at risk for psychopathy are born into the world every day. In addition, children who are abused and neglected are currently learning how to live without morality. Sociopathic and psychopathic individuals operate in the world leaving victims in their wake. It is these victims that social workers, psychologists and therapists work with on a daily basis. Understanding how these people have become victims can be understood by understanding the victimizers. What better reason for additional research on sociopathy and psychopathy than for not only the futures of these children who may become sociopathic or psychopathic but for the future’s of everyone these children will encounter as well?

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