

INTEGRATED PSYCHOTHERAPY FOR OFFENDERS WITH
ANTISOCIAL PERSONALITY DISORDER

KATRINA N. KUZYSZYN-JONES

Edward N. Shearin, Ph.D.
Chair

William Brown, Psy.D.
Member

A Clinical Research Project submitted to the Faculty of the American School of Professional Psychology of Argosy University/Washington DC in partial fulfillment of the requirements for the degree of Doctor of Psychology in Clinical Psychology.

Arlington, Virginia
June 2007

Abstract

The psychological treatment of antisocial personality has fallen to the wayside because most individuals with this disorder are excluded from therapy due to the punitive philosophy of the correctional system. These individuals continue to have unhealthy interactions with others, commit crimes, and return to prison after they have served both short and prolonged sentences. This suggests some reform needs to occur in the treatment of offenders with antisocial personality disorder. After reviewing current literature, a common factors approach is suggested for use in the correctional system. This involves a treatment package which includes motivational techniques and treatments for impulse control, social deviance, negative affect, criminal behavior and thinking, and reactive violence. This treatment is suggested only for use with persons with sociopathy, which is operationally defined as an individual who is unsocialized due to parental failures rather than inborn disposition. Future research explores ideas such as including more specialized populations such as women, juveniles, sexual offenders, substance abusers, and those with major mental illness.

Acknowledgments

I would like to thank those who served as mentors to me over the years: Helen Brantley, William Brown, Barbara Deluty, Ann Heflin, Lynn Fainsilber Katz, John Fillinger, William Ryan, Tom Guthrie, Steve Flanagan, and Edward Shearin. Thanks to Ginny and Jason for letting me live with them during my first year and a half of school. It really made the transition back to being a student much easier and you gave, and continue to give, me so much emotional support. Thanks for all those who allowed me to spend the night with them while I was commuting back and forth between DC and North Carolina. To my parents for always believing in me and being my champions. And, to Don, thank you for putting up with the stress and poverty. Bless you for your never ending love and encouragement.

Table of Contents

Title Page	
Abstract	
Acknowledgments.....	iii
Table of Contents	iv
List of Tables	vii
Chapter 1: Introduction.....	1
Definitions and Issues	1
Criminal Justice	2
Role of Psychology	3
Issues.....	4
Overview and Limitations.....	5
Chapter 2: Treatment Population.....	8
Antisocial Personality Disorder	9
Assessment Measures for Antisocial Personality Disorder	9
Critique of Assessment Measures	13
Chapter 3: Distinction between Psychopathy and Sociopathy	15
Psychopathy	15
Biological Theories	16
Neuroanatomy and Neurochemistry	18
Sociopathy.....	19
Psychosocial Factors	20
Personality Theories.....	20

Comparison to Other Disorders	23
Developmental Factors	24
Family Factors	27
Cognitive Factors	30
Summary	31
Chapter 4: Treatment Methods	36
Program	37
Motivational Techniques	38
Dialectical Behavior Therapy	41
Delivery of Dialectical Behavior Therapy	46
Skill Building Exercises	47
Cognitive Restructuring	50
Reasoning and Rehabilitation	51
Lifestyle Change Program	52
Social Skills Training	52
Offense-Focused Problem Solving	53
Anger Management	54
Participants	55
Assessment Measures	56
Treatment Groups	57
Procedures	57
Assessment of Treatment Effectiveness	61
Chapter 5: Summary	64
Looking Forward	69

References.....71

List of Tables

Table 1: PCL-R Two Factors of Psychopathy	12
Table 2: Models of Personality	22
Table 3: Summary of DBT General Strategies	44
Table 4: Survey Questions for the Evaluation of the Treatment Program	63

Chapter 1

Introduction

In the last half century, the American public and government has been concerned with criminal activity (Schmallegger, 2005). Crime waves occurred during the 1850's-1880's related to immigration and again during the years of Prohibition. However, from World War II through the 1960s crime rates stayed comparatively stable. Then, during the 1960's and 1970's, the emphasis on individual rights was accompanied by a dramatic increase in reported criminal activity. Murder, rape, and assault increased during the 1970's and 1980's. By the mid 1980's drug use and trafficking increased violence and other criminal activity. Over the past 20 years crime has been at the forefront of public thought. This is evident in the influx of television shows that focus on criminal justice such as *CSI: Crime Scene Investigation* and *Law and Order*. Everyday there are news stories about crime. Often, the spotlight is not on the victim, but the offender, who has a long criminal record and has been in and out of prison numerous times. This has placed a heavy burden on the criminal justice system to apprehend, punish, and rehabilitate offenders. This paper will focus on the rehabilitation of a particular population of offenders, those with antisocial personality disorder (ASPD).

Definitions and Issues

Before we can explore treatment options for this population, however, we must first understand how the criminal justice system works. Criminal justice and related terms will be defined below, the role of psychology will be described, and the issues associated with these two areas will be introduced.

Criminal Justice

Criminal justice is defined as the study of how social justice is achieved in criminal courts (Schmallegger, 2005). It includes the procedures and activities used to enforce the law. Criminal justice is composed of two types of justice, social justice and civil justice. Social justice is the fundamental notion of fairness, of right and wrong. Civil justice includes the procedures and activities related to private rights. Criminal justice is maintained through social control, which is the use of sanctions and rewards to influence individual, group, and community behavior. There are two approaches to achieve social control — the crime control model and the due process model. These two models are two opposing viewpoints regarding approaches to criminal justice. The crime control model emphasizes the efficient arrest and conviction of criminals. People who support this model can be referred to as public-order advocates. They believe that the interests of society should take precedence over individual rights and emphasize imprisonment. The due process model emphasizes individual rights at all stages of processing. People who support this model can be referred to as individual rights advocates. They seek to protect personal freedom and are more likely to suggest the rehabilitation of criminals. During the 1980's there was a shift from an emphasis on individual rights to the conviction of criminals. This has created a split between the individual rights advocates and the public-order advocates. This has impacted how criminals are treated within the criminal justice system.

The criminal justice system comprises three key subsystems: police, courts, and corrections. These subsystems work together to achieve justice through two models, the consensus model and the conflict model (Schmallegger, 2005). The consensus model

envisions the components of the criminal justice system as functioning together to achieve the goals of justice. The conflict model envisions the components of the criminal justice system as serving their own interests and competing with one another over scarce resources, public recognition, and various other forms of accomplishment. The two models can be applied to several areas of the criminal justice system, one of which is criminology. This area of criminal justice scientifically studies the cause and prevention of crime. Criminology also deals with the rehabilitation and punishment of offenders, mainly through the use of incarceration.

There are four main goals of incarceration (Schmallegger, 2005). Incapacitation through containment keeps prisoners from harming people in the community. Deterrence is intended to dissuade prisoners, through the fear of punishment, from committing further crimes. Retribution is intended to punish criminals. Rehabilitation is intended to improve criminals during their time in prison. The most controversial of these goals has been rehabilitation. This is probably because some researchers and politicians do not believe certain criminals can be rehabilitated. This is the area in which psychology is most implicated.

Role of Psychology

Almost every area of psychology is relevant to some aspect of the law. For example, developmental psychology affects the study of the effects of divorce on children. Social psychology affects the influence of group think on terrorism laws. Clinical psychology influences the prediction of dangerousness in the mentally ill. Cognitive psychology influences the study of the reliability of memory in eyewitness testimony. Psychology and the law have a long history dating back to the early 1900's

(Costanzo, 2004). However, the goals of the criminal justice system and psychology are fairly divergent.

The goal of psychology is to provide a full and accurate explanation of human behavior while the goal of the criminal justice system or law is to regulate human behavior. Criminal justice depends on precedents while psychology believes our current understanding of human behavior should be revised in light of new data. Lawyers advocate for a particular view; psychologists remain objective and focus on what the data show. Given these differing objectives, one might wonder why psychology and the criminal justice system should merge. These two disciplines overlap simply because criminal justice system shapes people and there are many inescapably psychological issues in the legal system. Such issues are generally studied by those who practice forensic psychology. Forensic psychology includes research that examines aspects of human behavior directly related to legal processes. It is the professional practice of psychology within or in consultation with a legal system that encompasses both criminal and civil law. Most forensic psychologists are clinical psychologists who receive continuing education and training in forensic psychology (Wrightsman, 2005). Those who practice correctional psychology fall under the heading of forensic psychology. These are the individuals who try to treat offenders despite the castigatory goals of the criminal justice system.

Issues

An air of punitive policies began in the 1970's when research suggested offenders could not be rehabilitated (Martinson, 1974). However, rebuttals to these findings found some offenders can be rehabilitated as long as certain types of treatment are implemented

(Palmer, 1975). Current research also suggests rehabilitation programs can be successful in reducing recidivism rates (Bonta, Wallace-Capretta, & Rooney, 2000). Part of the difficulty in implementing such programs appears to be that somewhere between 15% and 20% of people in prison are mentally ill (Benson, 2003). Therefore, correctional psychologists are focused on basic mental health care and unable to devote enough time to rehabilitative services. Another problem appears to be that people who commit crimes are not a homogeneous group. Offenders are often categorized as individuals with antisocial personality disorder (ASPD), but this does not efficiently explain all offenders or help clinicians decide what form of treatment is most effective. It appears treatment is quite reliant on the type of crime committed (Palmer). Different forms of treatment are suggested for sexual offenders, repeat offenders, and juveniles. While individuals who commit crime often disregard social norms, are impulsive, and fail to live up to interpersonal and vocational commitments (Hare, McPherson, & Forth, 1988), there are differences in the development of these characteristics (Lykken, 1995). These differences directly affect treatment implications. Finally, the correctional setting does not always encourage rehabilitation.

Overview and Limitations

A review of the literature suggests a common factors approach, where common elements among different therapies are combined, is the most effective in the treatment of offenders with ASPD. Cognitive-behavioral approaches appear to be the most readily used methods of treatment for this population. Therefore, a number of cognitive-behavioral approaches will be suggested to form a treatment package for offenders with ASPD. Chapters 2 and 3 will delineate the treatment population for which this treatment

package is recommended. Chapter 4 will address motivational techniques and treatments for impulse control, social deviance, negative affect, criminal behavior and thinking, and reactive violence. The goal of such a treatment program is to reduce disciplinary actions during incarceration and recidivism rates upon release.

Because of the link between low socioeconomic status, lack of education, lack of unemployment, and crime, it appears appropriate to explore the inclusion of vocational and educational training (Bouffard, Layton Mackenzie, & Hickman, 2000). However, these interventions are largely not conducted in the course of therapy and will therefore not be reviewed in this paper. It is also clear that providing substance abuse treatment for drug-using offenders is important given the relationship between offending and use of alcohol or other drugs (Anglin, Longshore, & Turner, 1999). In fact, more than 60% of inmates in federal prisons are drug offenders (Costanzo, 2004). However, due to space limitations, the focus of this paper will be on psychotherapeutic interventions. It is strongly encouraged that this treatment package be used in conjunction with substance abuse treatment in a correctional setting.

Individuals with mental illness do not necessarily commit crimes or become violent (Wrightsmann, 2005). However, particular disorders such as bipolar disorder and schizophrenia may increase the likelihood of criminal behavior. It has been found that most of the cognitive-behavioral methods described in this paper are useful in the treatment of antisocial offenders with major mental disorders as well (Hodgins, 2004). Therefore, it is recommended that the proposed treatment package be used in conjunction with psychiatric treatment such as medication education and management as well as therapy or case management needs.

Antisocial personality disorder and crime are strongly linked in the literature. Therefore, many treatment options focus on reducing recidivism rates. It has been discovered that reducing recidivism rates is strongly linked to the risk level of the individual, type of crime committed, and style and mode of treatment used (Andrews et al., 1990). This finding suggests treatment may need to be very specific to the needs of the individual, making the development a uniform treatment difficult. As such, sexual offenders will be only be included in treatment should they also receive additional treatment for their sexual behavior. Before describing the treatment methods included in this treatment package, we must first develop an operational definition for our treatment population.

Chapter 2

Treatment Population

The following chapter defines ASPD and reviews the associated assessment instruments. In order to focus on what population is best served by this treatment package, a definition of ASAP needs to be specified. This includes an understanding of the difference between sociopaths and psychopaths. This will enable us to understand why this form of treatment is best suited for sociopaths. Chapter 3 will further differentiate sociopathy from psychopathy. This will then lead to a discussion of the treatment package in chapter 4.

According to the *Diagnostic and Statistical Manual of Mental Disorders* (4th ed., text rev.; *DSM-IV-TR*; American Psychiatric Association [APA], 2000), antisocial personality disorder is best defined as an individual with a “pervasive pattern of disregard and violation of, the rights of others that begins in childhood or early adolescence and continues into adulthood.” The specific criteria are as follows:

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 environment or honor financial obligations
7. Lack of remorse, as indicated by being indifferent to or rationalizing having hurt, mistreated, or stolen from another. (p. 706)

In order to receive a diagnosis of ASPD, only three of these criteria must be met. Most individuals who are incarcerated easily meet criterion number three. However, one must be certain that an individual meets the criteria for ASPD before inclusion in this program. An individual, who has committed a one-time, crime of passion, may not benefit from this treatment package.

Antisocial Personality Disorder

It appears that antisocial personality disorder is best understood using an integrative approach. There are various etiological factors that are relevant in the development of ASPD. Therefore, we will use a biopsychosocial model to understand the distinction between psychopathy and sociopathy. Most of the research that will be reviewed was conducted on samples of 100 or more. Most studies were conducted with males although females were included in smaller sample sizes. Inmates were the general population utilized although forensic inpatient populations and, even less often, community samples were studied. Therefore one may question the generalizability of these studies but they are representative of the group investigated in this proposal.

Assessment Measures for Antisocial Personality Disorder

There are several measures used in the assessment of antisocial personality disorder or psychopathy. This section will review and critique each measure. The purpose of this review is to set the stage for a critique of the construct of ASPD. It is also intended

to later determine which measures are most appropriate for use with the proposed treatment package. Most of these measures were normed on male inmates unless otherwise stated. Therefore, the tools may not be generalizable to the population at large, but they are suitable for the purposes of this treatment package.

The Multidimensional Personality Questionnaire (MPQ) is a self-report inventory which evaluates three factors (Tellegen & Waller, 1994). The first factor is Positive Emotionality, which is comprised of Well-Being, Social Potency, Achievement, and Social Closeness. The second factor is Negative Emotionality, which is comprised of Stress Reaction, Alienation, and Aggression. The third factor, Constraint is comprised of Control, Harm Avoidance, and Traditionalism. When used with male inmates, the MPQ showed that a third of those tested had different antisocial profiles and another third exhibited normal profiles. This suggests those with ASPD are not a homogeneous group.

The Hare Psychopathy Checklist Revised (PCL-R) is a 20-item assessment that includes a semi-structured interview, file and collateral information, and specific scoring criteria to assess personality traits and behaviors related to psychopathy. Each item is scored on a 3-point Likert scale reflecting the degree to which one matches the prototypical psychopath, where 0 indicates that the item does not apply and 2 indicates that it definitely applies. The general cut-off score in North America is 30 (Hare, 1991). This is believed to be the gold standard of psychopathy assessment. It requires extensive training. When used with male inmates it appeared to have respectable reliability and high interrater reliability. The standard error of measurement held constant and there was extensive evidence for the validity. The PCL-R has two factors on which the qualities load. Factor 1 is related to affective-interpersonal dimensions and Factor 2 is related to

impulsive-antisocial behavior. Items which do not load onto either of these factors include promiscuous sexual behavior and many short-term marital relationships (see Table 1).

A four factor model has been developed for the PCL-R 2nd edition which includes Interpersonal, Affective, Lifestyle, and Antisocial factors but these findings have not yet been replicated. This edition also included validation data for use with females, substance abusers, sex offenders, African American offenders, forensic psychiatric patients, and offenders in other countries (Hare, 2003).

The Psychopathy Checklist: Screening Version (PCL: SV) is a 12-item version of the PCL-R. It is scored in the same manner with a cut off of 18 for the diagnosis of psychopathy (Steadman et al., 2000). It was found to be conceptually, psychometrically, and empirically related to the PCL-R and exhibited the same factor structure (Hart, Cox, & Hare, 1995; Hill, Neumann, & Rogers, 2004). It has been suggested that this form better discriminates different severity levels of psychopathy (Cooke, Michie, Hart, & Hare, 1999).

The Levenson Primary and Secondary Psychopathy Scales (LPSP) consist of 26 items in a 1-4 Likert format. The scales were developed to assess Factors 1 and 2 of the PCL-R (Levenson, Kiehl, & Fitzpatrick, 1995). Given the measure of both factors of psychopathy, it appeared a valid measure of the traits seen in psychopathy (Lilienfeld & Fowler, 2006, p. 118). While it did tap into the sensation seeking and antisocial behavior often seen in ASPD, it appeared to have more construct validity for behavioral indicators than affective and interpersonal features of psychopathy.

Table 1

PCL-R Two Factors of Psychopathy

Factor 1	Factor 2	
glibness/superficial charm	need for stimulation/proneness to boredom	
grandiose sense of self-worth	parasitic lifestyle	
pathological lying	poor behavioral controls	
conning/manipulative	early behavior problems	
lack of remorse of guilt	lack of realistic long-term goals	
shallow affect	impulsivity, irresponsibility	
callous/lack of empathy	juvenile delinquency	
failure to accept responsibility for own actions	revocation of conditional release	criminal versatility

Note. From “The PCL-R Assessment of Psychopathy” by R. D. Hare and C. S. Newmann, in *The Handbook of Psychopathy* (p. 63, Table 4.1), edited by C. J. Patrick, 2006, New York: Guilford. Copyrighted 2006 by Guilford Press. Adapted with permission.

The Self-Report Psychopathy Scale consists of 29 items which assess the two factors seen in the PCL-R (Hare & Newmann, 2006). There was promising internal consistency and construct validity particularly related to measures of narcissism, empathy, absence of agreeableness, and absence of conscientiousness (Lilienfeld & Fowler, 2006, p. 120). One concern regarding this tool was that it did not discriminate between general antisocial behavior and that which was directly related to ASPD.

The Psychopathic Personality Inventory (PPI) consists of 187 items in a 4-point Likert scale to detect psychopathy in noncriminals (Lilienfeld & Fowler, 2006, p. 121). It was recently revised but no published research is available. The PPI consists of eight

subscales that assess Machiavellian Egocentricity, Social Potency, Fearfulness, Cold-heartedness, Impulsive Nonconformity, Blame Externalization, Carefree Nonplanfulness, and Stress Immunity. It also consists of validity scales to assess positive impression management, (Unlikely Virtues scales), malingering, and careless or random responding (Deviant Responding scale). The PPI appeared to be internally consistent and stable over time. It appeared to have good convergent and discriminate validity with self-report, interview, and observer-rated measures of psychopathy. The PPI correlated highly with PCL-R Factor 1 but also correlates moderately with Factor 2. Therefore, it appeared to be a good measure of the interpersonal and affect traits but did not discriminate between primary and secondary psychopathy (p. 124).

Critique of Assessment Measures

Most assessment of antisocial personality is completed through self-report measures. This is the most time efficient way to assess personality. However, there are several concerns which have been voiced regarding the use of self-report measures with antisocial individuals. Those with antisocial personality disorder are generally dishonest, lack insight into their behavior, and have difficulty either experiencing or expressing emotions. There are therefore concerns that self-report measures will not adequately assess the client's behavior or affect (Lilienfeld & Fowler, 2006, p. 125). However, it has been argued that while all items may not be factually accurate, they still enable the assessor to gather important diagnostic information. It was also suggested that those with ASPD, perhaps due to lack of insight, accurately describe deviant behavior because they believe it is normal. Such behavior may include antisocial behavior, recklessness, hostility, and poor impulse control (Lilienfeld, 1994).

Another critique of the use of self-report measures with ASPD is the ongoing debate regarding the differentiation between psychopathy and sociopathy (Lilienfeld & Fowler, 2006, p. 127). Therefore, the instruments developed are not necessarily measuring the same constructs. There may be an overemphasis on behavior vs. affective traits of ASPD. However, we may be able to make self-report measures work for the assessment of ASPD if we continue to interview clients as well as obtain observer reports which may provide evidence of the absence of guilt, warmth, love, and empathy. Overall, while all of the described measures assess ASPD, they appear to measure different constructs. Some tools measure primary psychopathy while others measure secondary psychopathy. Therefore, it is important to distinguish between the two types of ASPD.

Chapter 3

Distinction between Psychopathy and Sociopathy

This chapter will define the terms psychopath and sociopath and relate these two types of ASPD to primary and secondary psychopathy, respectively. This chapter will also discuss different biopsychosocial theories for the etiology and development of these disorders. This examination will include a comparison to other disorders. Chapter 4 will then discuss why sociopathy is better suited to the treatment package.

The study of psychopathy dates back to 1941, when Cleckley wrote *The Mask of Sanity* (as cited in Cleckley, 1988). It is here that characteristics were described that echo modern day antisocial personality disorder such as superficial charm, untruthfulness, lack of remorse, and poor judgment to name a few. Since that time, the terms ASPD, sociopath, and psychopath have been used interchangeably. More recently, a distinction has been made between primary psychopathy and secondary psychopathy. Both of these terms are used to describe ASPD. However, primary psychopathy is believed to correlate with Cleckley's psychopath while secondary psychopathy is correlated to sociopathy.

Psychopathy

According to Lykken (1995), a psychopath is often referred to as an individual with inherent temperamental characteristics that make that person particularly difficult to socialize. This is an individual in whom the normal processes of socialization have failed to produce a conscious and law-abiding behavior. Psychopaths generally do not feel they need treatment. They do not see anything wrong with their attitudes and behavior. They tend to blame others and do not accept responsibility for their actions. They seek treatment only when it is in their best interest such as when involved in court proceedings

(Hare et al., 1988). Therefore, most individuals who are psychopaths will not respond to psychotherapy. While most psychopaths meet criteria for ASPD, not all individuals with ASPD are psychopaths (Hare, Cooke, & Hart, 1999, p. 559).

Psychopathy is thought to be the worst manifestation of ASPD. It describes both the inner experiences of individuals and their behavior. In contrast, those who are called sociopaths are often thought to be raised poorly whereas psychopaths are thought to be individuals who are “born bad.” There is some evidence that psychopaths exhibit biological differences from other people, including other criminals (Hare, 1993).

Biological Theories

As early as 1957, Lykken proposed the theory that primary psychopaths are biologically predisposed. He proposed that a primary psychopath is an individual with inherent temperamental characteristics that make that person particularly difficult to socialize. Lykken suggested that this is related to low fear and poor avoidance of punishment in the individual. Lykken tested this low fear hypothesis by measuring electrodermal activity. He found that primary psychopaths showed less reactivity (Lykken, 1957).

Based on Lykken's theory, Gray (1978) proposed another measure of constitutional difference between those with antisocial personality disorder. Gray postulated that the Behavioral Approach System (BAS), which is part of the nervous system, is activated when one works to achieve rewards and avoid punishment. In other words, this system is activated when one feels anxious about being punished. The Behavioral Inhibition System (BIS) inhibits the BAS so one does not learn to avoid punishment. Therefore, one is behaviorally disinhibited as well as less anxious about

receiving punishment. Gray believed those with a disinhibited BAS and an activated BIS would show less electrodermal reactivity (i.e., they would not sweat because they were not anxious). The most consistent critique of this theory was that it was not empirically tested. However, electrodermal reactivity findings have since been replicated several times (Fowles & Dindo, 2006, p. 15).

Similarly to Lykken, Porter (1996) argued that psychopathy is a congenital affective deficit whereas sociopathy is acquired through environmental factors such as abuse. Porter suggested that sociopathic affective deficits are acquired and individuals with sociopathy adapt a self-focused lifestyle. However, there has not been enough empirical research conducted to support this theory.

The meta-analysis of twin studies points to the heritable nature of antisocial behavior and the contribution of shared environmental factors (Waldman & Rhee, 2006). Research with MPQ data with non-criminal twins raised in the same environment (Lykken, 2000) confirmed that there were differences between those who admitted to illegal or antisocial acts and those who did not. Those who admitted to antisocial acts were less likely to avoid harm, lacked constraint, and were higher in alienation and aggression. However, there are no twin studies that examine PCL-R defined psychopathy. Therefore it is not clear if studies are addressing the heritability of psychopathy or primarily antisocial deviance (McDonald & Iacono, 2006, p. 377). Generally, there appear to be differences between nonpsychopathic criminals and psychopathic criminals. There also appear to be differences within psychopathy where primary and secondary psychopathies differentiate levels of ASPD.

Neuroanatomy and Neurochemistry

Amygdala dysfunction has been suggested as a reason for a learning deficit regarding fear in those with ASPD because the dysfunction reduces the individual's ability to respond to sadness and fear in a potential victim (Blair, 2006, p. 307). It has also been suggested that the deficit does not allow people to learn to avoid using antisocial behavior to reach their goals, which may help explain the impulsiveness seen in those with ASPD (Blair, Fowles, & Dindo, 2006, p. 16). Reduced amygdala volume has also been found in violent offenders who score high on psychopathy (Tiihonen, Hodgins, & Vaurio, 2000). However, others have failed to find these volume deficits (Elst, Woermann, Lemieux, Thompson, & Trimble, 2000). It is therefore difficult to determine if this dysfunction exists at birth or if it is shaped by environmental factors such as alcohol and drug use or head injury.

Compared to "normal" criminals, psychopaths appears to have an enlargement of the corpus callosum (Raine et al., 2003), volume reduction in the posterior hippocampus (Laasko et al., 2001), an exaggerated right to left asymmetry to the anterior hippocampus (Raine et al., 2004), and reduced prefrontal gray volume (Raine et al., 2000; Yang, Raine, Lencz, LaCasse, & Colletti, 2005). Looking at differences between primary and secondary psychopathy, those who are higher on Factor 1 traits have increased prefrontal white matter (Raine & Yang, 2006, p. 291). It appears that these "normal" criminals best suit the definition of sociopathy.

Hare (1991) suggested that emotional processing and regulation deficits are associated with prefrontal cortex dysfunction. This includes problems with controlling one's responses (LaPierre, Braun, & Hodgins, 1995; Roussy & Toupin, 2000), dangerous

decision making (Mitchell, Colledge, Leonard, & Blair, 2002), and not monitoring one's errors when making future decisions (Dikman & Allen, 2000). This suggests that both the ventral and dorsal systems are dysfunctional because psychopaths do not recognize emotional signals and are unable to regulate emotions (Rogers, 2006, p. 327). It appears that those who show these deficits best fit the definition for primary psychopathy.

There are consistent findings which suggest psychopaths have impaired central serotonergic activity which increases impulsivity and aggression. There also appear to be disturbances in dopamine and norepinephrine systems as well as altered testosterone and lipids. These neurotransmitter and neurochemical systems appear to interact with serotonin and increase impulsive and aggressive behavior (Minzenberg & Siever, 2006, p. 267).

Overall, it appears that psychopaths are those with biological predispositions toward low fear and poor avoidance of punishment. These individuals also appear to have neuroanatomical and neurochemical deficits that lead to increased impulsivity, the inability to recognize other's emotions, poor decision making, and increased aggression. These people best describe the primary psychopath.

Sociopathy

A sociopath is an individual who is unsocialized due to parental failures rather than inborn disposition (Lykken, 1995). While we must keep in mind that these parental failures may be in part due to the parents' inability to react appropriately to their child's natural temperament, the focus will remain on the need to resocialize the offender. Socialization refers to conformity to one's society's rules and expectations. Socialization includes avoidance of antisocial behavior, active prosocial behavior, and acceptance of

adult responsibility. The common sociopath is the person most likely to be found in prison. It is this person who has a weak conscious, does not plan for the future, takes pride in breaking the rules, and lives impulsively for the moment.

Psychosocial Factors

Psychosocial factors have been used chiefly to distinguish primary psychopaths from secondary psychopaths (sociopaths). There appears to be a general agreement among theorists that primary psychopaths are those who are “born bad” while secondary psychopaths are those who have been largely impacted by environmental factors. The main focus of this treatment package is resocialization. Therefore, it is important to understand the difference between primary and secondary psychopathy and why those with sociopathy are more suited to this form of treatment.

Personality Theories

Eysenck (1977, 1996) proposed a theory of criminality based on a structural model of personality. This model looks at Neuroticism-Stability (N), Psychoticism-Superego (P), and Extraversion-Introversion (E). P was regarded as hostile, unempathic, impulsive, and egocentric rather than psychotic. He stated that these temperaments are related to biology and socialization. He proposed that criminals should have higher scores on all scales and that primary psychopaths would have higher P scores than secondary psychopaths. The strongest support has been found that E is related to criminality (Blackburn, 1993) but does not support a clear relationship with psychopathy (Harpur, Hart, & Hare, 2002). Also, primary psychopaths scored higher on E but lower on P in another study (Blackburn, 1987). Therefore there is some support of differences between primary and secondary, but it is difficult to support Eysenck’s theory.

Lynam and Derefinko (2006) looked at models of personality to evaluate whether psychopathy can be deemed a personality disorder. There is good evidence for the validity of all of these models. They looked at four models (See Table 2). The first method they used to evaluate these models was a meta-analysis on the relation of structural models of personality to psychopathy. The meta-analysis included studies where incarcerated samples, community samples, and student samples were assessed. Young to middle-age adult males and females were assessed, although most studies were completed on males. They found the FFM most negatively correlated psychopathy with Agreeableness and Conscientiousness. The other traits were weakly related to psychopathy. The PEN Model most positively correlated with Psychoticism. The other traits were weakly related. Tellegen's three-factor model was positively related to Negative Emotionality and negatively related to Constraint. There was a small positive relationship to Positive Emotionality that is due to Social Potency. Based on the Big Four they found that the psychopathic individual is low in Agreeableness, has trouble controlling impulses, and experiences negative emotions. There does not appear to be a dominant relationship between psychopathy and either low or high Extraversion. The authors also compared the FFM to the items on the PCL-R. They were able to relate all of Factor 1 and Factor 2, either negatively or positively to facets of the FFM. In other words, there was not a trait that did not appear related to one of the FFM domains.

Finally, Lynam and Derefinko (2006) compared expert descriptions of psychopathy to the FFM domains. Experts described psychopaths in the following ways. Neuroticism explained one as extremely low on anxiety, depression, self-consciousness,

Table 2

Models of Personality

Five-factor Model (FFM)	Eysenck's PEN	Tellegen's Three-Factor Model	Consensus Big Four – combination of other three models
<i>Neuroticism</i> (N) = emotional stability and adjustment versus instability and maladjustment	<i>Neuroticism-Stability</i> (N) = similar to FFM	<i>Positive Emotionality</i> (P) = egocentricity, interpersonal coldness and discontentedness, lack of empathy, and impulsiveness	<i>Neuroticism/negative Affect</i>
<i>Extraversion</i> (E) = sociability and agency	<i>Extraversion-Introversion</i> (E) = similar to FFM	<i>Negative Emotionality</i> (E) = socialability and agency	<i>Extraversion/positive Affect</i>
<i>Openness to Experience</i> (O) = interest and willingness to try or consider new activities, ideas, beliefs.			
<i>Agreeableness</i> (A) = interpersonal strategies	<i>Psychoticism-Superego</i> (P) = hostile, unempathic, impulsive, and egocentric		<i>Agreeableness</i>
<i>Conscientiousness</i> (C) = ability to control impulses, carry out plans, organizational skills, following an internal moral code		<i>Constraint</i> = (N) = emotional stability and adjustment versus instability and maladjustment	<i>Conscientiousness/Constraint</i>

Note. From “Psychopathy and Personality,” by D. R. Lynam and K. J. Derefinko, in *The Handbook of Psychopathy* (pp. 133-155), edited by C. J. Patrick, 2006, New York: Guilford. Copyrighted 2006 by Guilford Press. Adapted with permission.

and vulnerability and extremely high on impulsiveness. Extraversion portrayed one as extremely low on warmth and extremely high on assertiveness and excitement seeking. Agreeableness depicted one as extremely low on all measures which included trust, straightforwardness, altruism, compliance, modesty, and tendermindedness. Conscientiousness described one as extremely low on dutifulness, self-discipline, and deliberation and extremely high on competence. Openness illustrated one who was extremely low on feelings and extremely high on actions. Across methods, using the Consensus Big Four, the most robust finding is that psychopaths are low in Agreeableness and Conscientiousness. There was disagreement across methods on Neuroticism. This may be due to the difference between sociopathy and psychopathy, which again may suggest that there exists a higher order of psychopathy related to the sociopath's ability to feel negative affect. With Extraversion, there was similar disagreement where some traits of E were low, such as warmth, and others were high such as excitement seeking. What this suggests is that sociopaths may be more treatable because they have the ability to feel negative affect, which may be targetable in therapy.

Comparison to other disorders

Narcissism is conceptually similar to ASPD given the motivation to dominate, humiliate, and manipulate others (Widiger, 2006). This paper suggests the psychopath is more narcissistic than the sociopath. Narcissism appears to be related to Factor 1 measures such as self-importance and arrogance, lack of empathy, inability or unwillingness to recognize the needs and feelings of others, and interpersonal exploitation. While those with narcissistic personality disorder are more grandiose and

look to humiliate others to enhance their self-esteem, psychopaths are usually more exploitative for instrumental reasons.

Studies have found comorbidity of anxiety disorders with those diagnosed with ASPD (Widiger, 2006). The *DSM-IV-TR* (APA, 2000) also states people may have complaints of dysphoria, tension, inability to tolerate boredom, and depressed mood. Again, this appears related to sociopathy where negative affect can be experienced thus further differentiating psychopathy and sociopathy.

Blackburn used the MMPI-based Special Hospitals Assessment of Personality and Socialization to assess ASPD (SHAPS; Blackburn, 1999). The SHAPS assesses Belligerence and Withdrawal and correlates moderately with PCL-R scores. According to Blackburn, the degree of psychopathy is related to degree of withdrawal. The psychopath is extraverted, confident, dominant, and not particularly anxious. The sociopath is emotionally disturbed, socially anxious, withdrawn, moody, more submissive, and low in self-esteem. Blackburn also developed the Antisocial Personality Questionnaire which has shown sociopaths to perceive themselves as lower social rank, greater shamefulness, and greater anger. Again, these findings suggest a difference between the sociopath and psychopath.

Developmental Factors

Children who exhibit oppositional and defiant behaviors appear to later exhibit antisocial personality disorder (Dodge & Petit, 2003). A distinction has been made between those who exhibit reactive versus proactive aggression.

Reactive aggression is impulsive aggression that occurs as a response to perceived provocation or threat (Dodge & Petit, 2003). Proactive aggression is instrumental in that

it is unprovoked and involves planning. It appears that those who are higher on proactive aggression share characteristics with primary psychopaths. When looking at violent and nonviolent sexual offenders, violent offenders who exhibited higher levels of proactive violence scored higher on psychopathy scales (Caputo, Frick, & Brodsky, 1999). In another sample of juvenile offenders incarcerated in an adult prison, those who showed more severe, repeated, proactive aggression scored higher on psychopathy traits (Kruh, Frick, & Clements, 2005). It is inferred that higher psychopathy scores represent primary psychopathy. In a nonreferred community sample of children, juveniles with conduct disorders and psychopathic traits were more likely to exhibit proactive aggression than other children with conduct problems (Frick et al., 2003).

Children who exhibit oppositional and defiant behaviors in early childhood versus adolescence tend to have an increase in the severity and rate of behavioral problems throughout their childhood and into adolescence (Lahey & Loeber, 1994). These children are more likely to continue to show antisocial and criminal behavior into adulthood (Frick & Looney, 1999). In contrast, those who develop oppositional behavior in adolescence are more likely to “grow out” of this type of behavior. Most of the features associated with antisocial behavior such as neuropsychological abnormalities have been seen primarily in the childhood onset type of conduct disorder (Moffitt, 1993; Moffitt & Caspi, 2001). Moffitt proposed that the childhood-onset group consists of temperamentally difficult and vulnerable children who are inadequately reared and that these together lead to difficulty with socialization. In contrast, those who develop defiant behavior in adolescence are exhibiting an exaggerated process of adolescence. They may still have problems that persist into adulthood but they are related to earlier behavior such

as substance abuse (Moffitt & Caspi). Two studies have supported this theory that those who develop conduct problems in childhood have problems later in life which include impulsivity, callousness, narcissism, and suspiciousness (Moffitt, Caspi, Dickson, Silva, & Stanton, 1996; Silverthorn, Frick, & Reynolds, 2001).

Other research has suggested that children with conduct problems and attention-deficit/hyperactivity disorder show more severe and aggressive antisocial behavior (Waschbush, 2002). They also exhibit poor outcomes with overall offending (Loeber, Brinthaup, & Green, 1990), higher rates of convictions and arrests (Babinski, Hartsough, & Lambert, 1999), and neurological deficits (Frick & Marsee, 2006, p. 359). It has been proposed that those with ADHD and conduct disorder have a disorder distinct from other conduct disorders, which may represent primary psychopathy in adults. Lynam (1998) found those with both disorders were similar to those adults with primary psychopathic traits.

It has been further suggested that juveniles exhibit characteristics that differentiate between psychopathy and sociopathy. In one study, youthful offenders were categorized into psychopathic and socialized offenders (Quay, 1964). The distinction identified psychopathic children as those who lacked concern for others, were untrustworthy, were unable to bond with others, and were more destructive and aggressive. These children were more likely to have continued to get into trouble by violating probation or receive infractions in jail (Quay, 1987). These children were also more likely to show physiological characteristics similar to adult primary psychopaths such as low autonomic arousal and stimulation-seeking behavior (Frick & Marsee, 2006, p. 360). Those who were sociopathic were less aggressive and more able to get along with others.

Family Factors

In order to determine what contributes to adult antisocial personality disorder, an investigation of the factors which contribute to childhood delinquency must be conducted. A review of the literature suggests that family factors are predictive of offending. There are several areas where family factors are involved in criminal behavior and childhood delinquency: childrearing, abuse or neglect, parental conflict and disrupted families, large family size, criminal or antisocial parents or siblings, parental factors, and socioeconomic factors. It is suggested that these areas also contribute to adult antisocial personality disorder (Farrington, 2006).

There are several examples of childrearing problems that contribute to delinquency. Poor parental supervision, low parental reinforcement of good behaviors, and poor parental-child communication increase delinquency (Farrington & Loeber, 1999). Other areas which increase childhood criminal behavior include harsh or punitive discipline (Haapasalo & Pokela, 1999), physical punishments at age 7 and 11 (Newson & Newson, 1989), erratic or inconsistent discipline (West & Farrington, 1973), low parental involvement (Lewis, Newson, & Newson, 1982), and low family cohesiveness (Gorman-Smith, Tolan, Zelli, & Huesmann, 1996.). When a child is physically abused by one parent, parental warmth of the other parent may act as a protective factor against delinquent behavior (McCord, 1997). A study of adult non-psychopathic and psychopathic prisoners found that psychopathic prisoners had experienced more parental indifference or neglect, poor parental supervision, and poor parental discipline (Marshall & Cooke, 1999). Poor supervision predicted high antisocial scores (Factor 2) but not high affective scores (Factor 1) whereas harsh or erratic discipline and low involvement

predicted high scores on both factors. This is further argument that psychosocial factors may contribute to the development of subtypes of psychopathy where one individual primarily exhibits antisocial behavior (sociopathy) and the other exhibits affective deficits (psychopathy).

Childhood physical abuse and neglect tends to contribute to offending later in life. Those who were abused or neglected as children were more likely to be arrested for violent or sexual acts as children and adults (Maxfield & Widom, 1996; Widom & Ames, 1994). Further studies have shown that child abuse predicts adulthood antisocial personality disorder and high PCL-R scores in adulthood (Luntz & Widom, 1994; Weiler & Widom, 1996). This may occur for several reasons: biological changes due to head injury, desensitization to violence, poor coping and problem-solving skills, poor self-esteem, erratic family environment, and socialization with delinquent peers (Widom, 1994). These findings tend to be higher on Factor 2 scores than on Factor 1, again, suggesting a differences between sociopathy and psychopathy.

Parental conflict and disrupted families appear to affect childhood delinquency and adult psychopathy. McCord (1982) studied boys from broken homes up to age 45. She found that those boys who lost the presence of their biological father were more likely to offend when their mothers were not affectionate or when there was parental conflict in the home. Again, maternal warmth appears to work as a protective factor against antisocial behavior. Other studies have also found that parental conflict, interpersonal violence, and father-initiated violence predict later antisocial behavior (Buehler et al., 1997; Fergusson & Horwood, 1998). Large family size appears to be a predictor of offending as well. This appears to be most related to household

overcrowding which decreases individualized parental attention and supervision and increases frustration, irritation, and conflict (Farrington, 2006, p. 236). Further, it appears to increase Factor 2 but not necessarily Factor 1 scores.

Crime appears to run in families and to be related to parental features. Paternal arrest greatly increases the likelihood of delinquent behavior in male children (Farrington, Jolliffe, Loeber, Stouthamer-Loeber, & Kalb, 2001). Having a delinquent older sibling also contributes to a boy's antisocial behavior (Farrington, 2003). Antisocial behavior and affect in parents has been found to be related to higher psychopathy in violent offenders (Harris, Rice, & Lalumiere, 2001). Other parental features which appear to contribute to antisocial behavior are boys who are born to teenager mothers (Farrington, 2000), high parental stress and anxiety or depression, (Loeber, Farrington, Stouthamer-Loeber, & van Kammen, 1998), and substance abuse by parents (Loeber et al.). This antisocial behavior is better represented by Factor 2 than Factor 1 scores.

Finally, socioeconomic status, based on the father's occupation, predicts later violent crimes (Henry, Caspi, Moffitt, & Silva, 1996). However, socioeconomic factors appear to be a less consistent predictor of offending (Farrington, 2006, p. 238). What appears to be more important is living in high crime neighborhoods and having delinquent friends (p. 239). However, it is difficult to determine if those who are antisocial gravitate towards particular neighborhoods or if the poverty of these neighborhoods lead to antisocial behavior. Generally, the likelihood of the occurrence of ASPD increases with the number of risk factors. If one has biopsychosocial risk factors and few or no protective factors then an individual is more likely to demonstrate ASPD.

It also appears that biological risk factors increase psychopathy while purely environmental factors increase sociopathy.

Cognitive Factors

Many studies have suggested that those with antisocial personality disorder have information-processing deficits in areas such as attention, language, and behavioral inhibition. These findings are most representative of psychopaths versus sociopaths.

Several studies have found that psychopaths only pay attention to one set of information and ignore additional information that may help them make better decisions. It has been suggested that psychopaths only pay attention to information that is immediately of interest to them, which leads them to ignore other material outside their primary focus (Hiatt, Schmitt, & Newman, 2004; Jutai & Hare, 1983). In fact, psychopaths may have difficulty keeping track of new information, thus leading them to pay attention to only one part of the available information (Jutai, Hare, & Connolly, 1987). Psychopaths have also been found not to pay attention to emotional information when making decisions (Christianson et al., 1996). However, psychopaths may be more likely than nonpsychopaths to be able to pay close attention to information that interests them (Forth & Hare, 1989). Psychopaths are more likely to make errors when completing visual searches of secondary information and fewer mistakes when searching primary information (Kosson & Newman, 1986). This indicates that psychopaths are rigid in their focus to material that is their primary focus of attention but they ignore secondary information (Hiatt & Newman, 2006, p. 337). Psychopaths are unable to shift their focus from one task to the next.

Psychopaths are not able to understand or effectively use language with emotional content (Hare, Williamson, & Harpur, 1988; Herve, Hayes, & Hare, 2003). Psychopaths also have more difficulty understanding and using language that has more than one meaning (Williamson, Harpur, & Hare, 1991) or is abstract in nature (Kiehl, Hare, McDonald, & Brink, 1999). In other words, psychopaths use shallow and concrete language. This is more evident in primary psychopaths.

Psychopaths do not appear to be responsive to verbal and physical punishment. It does not appear to make them fearful or anxious nor does it affect their avoidance of later punishment (Mitchell et al., 2002; Schmauk, 1970). However, a difference does exist if the punishment is related to loss of money or if there is competition for reward involved (Schmauk, 1970; Newman & Kosson, 1986). Psychopaths are better at learning from their mistakes and delaying their actions when punishment or rewards are made explicit (Newman, Wallace, Schmitt, & Arnett, 1997). It should be noted that these findings are more robust in low anxious (primary) psychopaths than high anxious (secondary) psychopaths (Hiatt & Newman, 2006, p. 344).

Overall, there appears to be a difference between cognitive functioning of those with ASPD and controls. More important to this discussion is the evidence which suggests a difference exists between those with primary and secondary psychopathy.

Summary

In 1941, Cleckley first proposed the use of the term psychopath to help understand antisocial personality and behavior (Cleckley, 1988). This theory ignited a debate regarding those who are born psychopaths and those who develop psychopathic personality traits and behaviors. Early research by Karpman (1948) suggested a theory

that a difference exists between psychopaths who lack a conscious (primary) and those who have neurotic conflicts (secondary). Karpman suggested primary psychopathy reflects an affective deficit that is constitutional whereas secondary psychopathy, or sociopaths, reflects maladaptive emotional disturbance related to early childhood experience. He suggested that with “moral training” sociopaths may be amenable to treatment.

According to the *DSM-IV-TR*, there is a prevalence of antisocial personality disorder in 3% of males and 1% of females in community samples. However, these numbers increase when prison, forensic psychiatric, and substance abuse treatment settings are sampled (APA, 2000). In forensic populations, the prevalence of ASPD is two to three times higher than for psychopathy when measured by the PCL-R. Most offenders who meet the criteria for psychopathy also meet the criteria for ASPD but not necessarily the other way around. ASPD is strongly associated with Factor 2 items, but not necessarily factor 1 items (Hare & Neumann, 2006, p. 61).

Given the diversity of characteristics present in psychopathy, it is accepted that psychopathy is not a homogenous syndrome (Cooke, Michie, & Hart, 2006). These authors proposed an alternative three factor model opposed to Hare’s two factor model. They stated that a three factor model allows for differences within psychopathy without placing such a hierarchy on primary and secondary psychopathy as does the two factor model. They stated that these three factors, *Arrogant and Deceitful Interpersonal Style*, *Deficient Affective Experience*, and *Impulsive and Irresponsible Behavioral Style* allow for a psychopath’s overriding presentation to best explain the behavior exhibited (p. 94). The authors stated that this model works well with the PCL-SV, the various criteria of

antisocial personality disorder, and has been replicated (p. 95). Hare (2003) rejected this and suggested a four factor model, which stated earlier, has not yet been replicated. The question remains, is antisocial behavior the same as psychopathy? It appears that the answer is no, they are qualitatively different. One individual may have psychopathic personality tendencies and either engages in criminal behavior or not. One may also act criminally and not evidence signs of psychopathy such as lack of remorse.

Cooke et al. (2006) completed an Item Response Theory (IRT) method to test the factor model. Because psychological characteristics are not always directly observable, IRT methods allow for an inference to be made about behavior based on an individual's responses to test items or their report of symptoms (p. 99). When they examined the PCL-R items they found that items such as *promiscuous sexual behavior, poor behavioral controls, and criminal versatility* had shallow slopes whereas items such as *callous/lack of empathy, lack of remorse of guilt, and grandiosity* had steep slopes suggesting they were better measurements of psychopathy (p. 100). The authors suggested that there are different severity levels of psychopathy where the lowest level correlates with Impulsive and Behavioral Style, moderate levels correlate with Deficient Affective Experience, and high levels are related to Arrogant and Deceitful Interpersonal factors.

Subtypes of psychopathy have also been suggested based on clinical observation at a forensic hospital (Murphy & Vess, 2003). The sadistic subtype is an individual who is assaultive and derives pleasure from harming others. The narcissistic subtype is a person who is grandiose, entitled, and has callous disregard for others. The antisocial subtype is impulsive, stimulation seeking, and exhibits socially deviant behavior. The

borderline subtype has affective instability and is self-destructive. Exposure therapy and dialectical behavior therapy have been suggested for use with borderline types (Poythress & Skeem, 2006, p. 186).

There is considerable disagreement in the field regarding ASPD and how this disorder can be understood. Many researchers have focused on different behaviors, internal dynamics, and criteria for explaining ASPD. Furthermore, few studies have replicated the findings and models of other researchers. With the differences between studies, it is difficult to know exactly to whom any particular results apply. Therefore, the hypothesis that a distinction exists between sociopathy and psychopathy should be tentative until there is more consistency across studies.

Given the biopsychosocial differences within those with ASPD, it may be concluded that there is a difference between psychopathy and sociopathy. However, it appears that we need to redefine psychopathy. While there are some overlapping trait similarities, psychopathy appears to be at a higher level of dysfunction than sociopathy. This paper proposes a new category, psychopathic personality disorder, to include two major subtypes. Secondary psychopathy (sociopathy) can be defined as someone who is impulsive, exhibits social deviance, can experience negative affect, displays criminal behavior and lifestyle, and performs reactive violence. This definition can include specifiers of antisocial and borderline type, as described by Murphy and Vess (2003). Primary psychopathy can be defined as someone who lacks affect and personal connection, can not experience negative affect, has low fear, performs instrumental violence, and is not necessarily criminal. This definition can include specifiers of sadistic and narcissistic type, as described by Murphy and Vess. It can be presumed that both

subtypes of psychopathy have a biological predisposition regarding difficult socialization but the primary psychopath is at a more dysfunctional level and perhaps can not be socialized.

We may also need to revise how we categorize other disorders. It appears that impulse disorders may need to be recategorized. Antisocial behaviors can be listed with other impulse disorders such as gambling rather than as a V code. Antisocial behavior may also be listed with co-morbid substance abuse if crime is directly related to drug use. The distinction between antisocial behavior and antisocial personality disorder may also help clinicians better differentiate between narcissistic and antisocial personality disorder where people are focused on making themselves look better rather than exploiting people for instrumental purposes. This further suggests that treatment may be more appropriate for those who are sociopaths than psychopaths.

One of the main foci of this treatment package is resocialization. Therefore, this treatment package will be used with individuals who are sociopaths rather than psychopaths. Most crime is committed by men (Costanzo, 2004) and there are significant differences between the development of crime and criminal personality in men and women (Dittmann, 2003). Therefore, this treatment package is most appropriately used with males. Also, as juveniles and adults differ in their level of maturity and development, this treatment will focus on adults.

Chapter 4

Treatment Methods

This chapter will review the cognitive-behavioral approaches that appear to be the most effective methods of treatment for offenders with sociopathy. The proposed treatment package will address motivational techniques and treatments for impulse control, social deviance, negative affect, criminal behavior and thinking, and reactive violence. This chapter will also explain who to include in the treatment and how the treatment should be administered.

Some research suggests that due to the painful (Toch, 1992) and harmful (Paulus, 1988) effects of imprisonment, offenders may be at greater risk to society when they leave prison than when they entered. Therefore, rehabilitation programs are developed to reduce the risk of recidivism. One of the most popular treatments for antisocial personality disorder has been the therapeutic community. However, it has been determined that this form of treatment leads to higher violent recidivism rates in primary psychopaths (Rice, Harris, & Cormier, 1992). Psychopaths are also more likely to drop out of treatment (Ogloff, Wong, & Greenwood, 1990). It has been suggested that primary psychopaths learn to use their new skills of understanding others to manipulate and exploit others in new ways (Harris & Rice, 2006, p. 556). It may be that management is more important than treatment for those with primary psychopathy. This highlights the need to understand if there is a distinction between psychopathy and sociopathy. Most treatment has not distinguished between psychopaths and sociopaths and may account for the unfavorable improvement rates. It may also be that not having a clear definition of antisocial personality disorder and proper control groups has affected the construct

validity of previously studied treatments. It appears that those treatments which are most promising are those that focus on behavioral and skill building therapies (p. 565). Harris and Rice suggested that the most effective cognitive-behavioral treatments include substance abuse prevention, anger management, prosocial modeling, and motivational interviewing.

The main focus of this treatment package is to reduce disciplinary infractions during incarceration and recidivism rates upon release through resocialization. Research shows that criminals are conditioned more slowly to the socialization process (Raine, 1993). Socialization involves recognizing and monitoring antisocial behavior, punishing antisocial behavior, encouraging and rewarding prosocial behavior, and explaining right actions from wrong actions (Lykken, 1995). This lack of socialization is presumed to be due to neglectful or incompetent parenting. In fact, boys who do not have a father present in their life are more likely to demonstrate antisocial behavior (Draper & Belsky, 1990). As the focus of this paper is on adults, reparenting will be conducted through the use of modeling. This modeling will be demonstrated by therapists and correctional officers. Furthermore, as aggressive and antisocial behavior is often found in siblings, this treatment will use group therapy to emulate productive peer models (Patterson, 1986).

Program

This proposed treatment package addresses several components of antisocial personality disorder: impulse control, social deviance, negative affect, criminal behavior and thinking, and reactive violence. Each problem area will be addressed by a particular treatment technique but areas may overlap with each other. Also, given the likelihood that inmates will become frustrated and try to avoid or disengage from treatment,

motivational interviewing will be used throughout the treatment program (Miller & Rollnick, 1993). This will be accomplished by the facilitator building rapport, listening to the inmate's perspective, and encouraging the participant to make his own decisions regarding change. A solution-focused brief therapy approach will be taken as described below.

Motivational Techniques

A solution-focused brief therapy approach assumes that people create their own realities and people have many realities (Miller, Hubble, & Duncan, 1996, p. 11). This approach does not just help reframe the problem. It also helps the client think about new options in order to promote hope and motivation. It is non-pathology oriented and assumes that people have the strength and ability to find their own solutions (p. 69). When working with mandated clients, such as inmates, the emphasis must be placed on cooperating with the client (Tohn & Oshlag, 2006, p. 152). This includes rethinking concepts of resistance and denial, cooperating with the client, and using solution-focused techniques. With mandated clients, one must focus on what the client wants versus what the referral source wants. In the case of an inmate population, the client's goal of "wanting custody off my back" must be respected. If the clinician helps the client understand how treatment can help the client meet his own goals, then he is more likely to actively participate in treatment and meet the goals of the referral source as well.

Tohn and Oshlag (2006) suggested that the client's goals can be formed by cooperating with the client. They proposed six steps including honoring the client's worldview, establishing treatment goals with the client, utilizing the referral source to further establish goals, using the referral source to maintain progress, identifying the

client-therapist relationship, and helping clients move toward their goals (p. 154). The therapist must validate the client's viewpoints and feelings about being mandated into therapy. Rather than confronting the client's presumed denial, the therapist's goal is to adopt the client's worldviews and help the client set his own goals for treatment. In other words, "If you have to be here anyway, what can you learn from treatment?" This process can begin by asking the client who referred him to treatment and what the referring person wants to the client to do in order to be considered successful (p. 158). The primary goal of the client may be to terminate treatment, therefore the referral source can be used to help determine when the client no longer needs to be in therapy (p. 160). This includes checking in with the referral source to determine if the client is progressing toward his goals. The therapist must also determine if the client is willing to work on the problem, views the problem as someone or something that needs to change, or if the client does not see that there is a problem (p. 165). Understanding where the client is coming from helps the therapist cooperate with the client and move towards the client's goals.

These six steps are accomplished by using the solution-focused techniques of looking for exceptions, scaling questions, the miracle question, and assigning tasks between sessions (Tohn & Oshlag, 2006, p. 170). *Looking for exceptions* helps the client verbalize that the problem does not always occur. For example, "Do you break the rules every day? If not, under what circumstances do you not break the rules?" The *miracle question* helps build rapport with the client, without challenging his beliefs about what needs to change, in order to establish treatment goals (p. 171). For example, "If you were to wake up tomorrow and your problem was changed without you knowing it, what would you notice to tell you that something was different?" *Scaling questions* help the

client define the next step of treatment, break each step into small achievable goals, and determine if the client is improving (p. 174). For example, “On a scale of 1-10, 1 being no infractions and 10 being five or more infractions, how many infractions have you had this week? What would need to happen to decrease the number of infractions from 6 to 4?” *Tasks can be assigned* between sessions to both the client and the referral source (p. 176). In our case, inmates can be asked to practice prosocial skills and custody staff can be asked to keep a log of infractions.

Evaluation of solution-focused therapy is limited but results are promising. Three studies have been conducted with solution-focused brief therapy. Kiser found that 65.6% of clients accomplished their goals (unpublished manuscript as cited in McKeel, 2006, p. 252). Kiser and Nunnally found another 14.7% made significant improvement during therapy (unpublished manuscript as cited in McKeel, p. 252). Andreas presented a study at the Institution for Applied Psychology in Sweden that found 80% of clients accomplished their goals (as cited in McKeel, p. 252). However, these studies were exploratory, have not been published in peer-reviewed journals, used small sample sizes, simplistic assessment in follow-up, and did not use control samples (McKeel, p. 253). So, why use this form of treatment? It is imperative to help mandated clients become comfortable and motivated in order to obtain treatment goals. Research has shown that motivational interviewing is helpful with mandated clients but these techniques are based on the client-therapist relationship and therefore difficult to teach and measure (Miller & Rollnick, 1993). Using solution-focused brief therapy gives the clinician particular techniques to utilize in conjunction with listening to the client, building rapport, and

including the client in treatment decisions. This is an area that begs for further investigation.

Dialectical Behavior Therapy

Sociopaths can experience negative affect as well as deficits in interpersonal relationships and impulse control. Dialectical behavior therapy (DBT), which was developed specifically for use with individuals with borderline personality disorder, has been found to be useful in the treatment of these symptoms (Linehan, 1993a). This treatment was produced to address problem-solving, interpersonal skills, maladaptive cognitions, and emotion regulation (McMurran, 2004, p. 247). Preliminary small case studies have found it to be useful for those with ASPD with reducing anger, irritability, and increasing self-control (Davidson & Tyrer, 1996). Despite these small numbers, DBT is being adopted at a fast rate for use with inmates. In this treatment package, DBT will be used as a foundation to help clients regain more control over their emotions in order to practice better problem solving skills. This may be particularly useful for individuals with ASPD who experience negative affect such as depression as well as impulsive anger.

According to Marra (2005), dialectical behavior therapy assumes that attempted escape and avoidance of negative affect is responsible for psychopathology. DBT also presumes that there is a conflict between the person and his or her environment. This therapy is similar to a psychodynamic approach, which emphasizes that conflicts lead to psychopathology, but the DBT conflicts are present time and observable. DBT is also similar to cognitive-behavior therapy (CBT) on which it is based, but focuses more on emotion regulation than on maladaptive thinking as more purely cognitive therapies do. There have been more randomized clinical control studies of techniques for behavior

therapy than any other approach (Elkin et al., 1989; Lambert, 1992; Roth & Fonagy, 1996; Wampold, 2001). CBT is a widely accepted form of treatment. The similarities between CBT and DBT suggest that the core parts of DBT are also an acceptable form of treatment. Additionally, DBT is similar to acceptance-based therapy procedures as it encourages clients to experience their affect without judgment or expectation of change (Marra). Mindfulness, which has been adopted as a core strategy of DBT, is the most widely received technique of acceptance-based therapies (Goleman, 2003; Kabat-Zinn et al., 1998; Teasdale et al., 2000). DBT presumes that the struggle to avoid negative affect increases painful emotions and that acceptance of these emotions decreases the pain. Validating that all people experience negative emotions helps the client differentiate between accepting the painful emotion and approving of the affect. Exposure to the emotional pain along with support and validation helps the client endure the affect and develop new affect. Addressing the client's unwillingness to experience negative feelings is central to DBT.

The strategies of DBT include acceptance of the client's experience through validation and offering new coping strategies such as discovering meaning in the client's life, exposure to intolerable emotions, preventing avoidance strategies, and a new focus on experiencing painful emotions while learning solutions to deal with the emotions. Acceptance is differentiated from approval and clients are invited to understand the conflict between their need to feel safe and their desire to experience freedom and pleasure (Marra, 2005). Thus it is important not to tell clients that their thoughts or feelings are wrong. DBT suggests that clients be helped to understand that their reaction is understandable and reasonable given their history, experience, and pain. However,

clients may need to alter their reactions because the emotions and thoughts cause the clients pain. The therapist must verbally recognize the client's strain in choosing between safety and pleasure. (See Table 3).

DBT has been selected for use in this treatment package not only because it increases emotional regulation but also because it has been shown to be effective with a variety of symptoms and populations. In those with borderline personality disorder, DBT has been found to reduce parasuicidal behavior and hospitalizations (Linehan, Armstrong, Suarez, Allmon, & Heard, 1991; Verheul et al., 2003). It has also been found to reduce anger, anger expression, and improve social adjustment (Linehan, 1993a; Linehan, Tutek, Heard, & Armstrong, 1994; Koons et al., 2001). DBT also appears to work with those who abuse substances (Linehan et al., 2002; Linehan et al., 1999; Verheul et al.). Those treated showed improvement for depression, dissociation, anxiety, and global stress (Bohus et al., 2000). DBT has been used with incarcerated women with histories of childhood sexual or physical abuse, similar to histories of male sociopaths, and demonstrated reductions in PTSD, mood, and interpersonal symptoms (Bradley & Follingstad, 2003). DBT has also been used to reduce antisocial behavior in juveniles and adults (Rizvi & Linehan, 2001). In other forensic settings, DBT has been used with inmates with ASPD who had violent histories (McCann, Ball, & Ivanoff, 2000). DBT was found to reduce hostile mood, paranoia, and depressed mood, and there appeared to be lower staff burnout. When used with juvenile female offenders, there was a reduction in aggression, parasuicide, and class disruption (Trupin, Stewart, Beach, & Boesky, 2002). Given the variety of treatment populations and symptoms, DBT appears to be a powerful and robust treatment.

Table 3

Summary of DBT General Strategies

Psychopathology	DBT Strategies
High emotional arousal	Identify and label affect. Mindfulness (acceptance). Stress-management and self-soothing techniques. Redeploy attention to external rather than internal cues. Redeploy problems solving to long-term objectives.
Slow return to emotional baseline	Shift attention between affect, cognition, physiology, behavior, and environment. Decrease mood-dependent behaviors. Reduce arousal through stress management. Identify secondary emotional reactions and reframe.
Emotional sensitivity	Mindfulness (acceptance). Redirect to solution-focused strategies. Move between short-term and long-term objectives.
Hypervigilance	Reduce avoidance and escape strategies. Cognitive reframing. Attuned to safety cues.
Emotional avoidance and escape	Exposure (acceptance). Identify and label affect. Mindfulness (acceptance). Reduce mood-dependent behavior. Teach emotion regulation and distress tolerance skills. Coach application of skills to daily living (generalization). Increase solution-focused coping.

Note. From *Dialectical Behavior Therapy in Private Practice: A Practical and Comprehensive Guide*, by T. Marra, 2005, Oakland, CA: New Harbinger Publications, Inc. Copyrighted 2005 by New Harbinger Publications. Adapted with permission.

There is further evidence that DBT is not just useful for those with BPD but anyone with emotional dysregulation such as those who have experienced difficulties with attachment, trauma, loss of a loved one, and an environment which invalidates affect

(Marra, 2005). As described earlier, those with ASPD most certainly have difficulties with attachment related to poor parenting, experiences of physical and sexual abuse, loss of fathers, and an environment which does not tolerate a focus on emotions. Emotional dysregulation does not only apply to overarousal but can also apply to underarousal such as seen in disinhibited, antisocial, and violent behavior (Raine, 1997). Sociopaths can be labeled as emotionally sensitive in that they are naturally attuned to become more anxious and hyperaroused. This high emotional arousal detracts from one's ability to concentrate and attend to the environment. Clients may also find it difficult to relax and lower their arousal level. This difficulty to return to an "emotional baseline" creates anticipatory fear that leads to stronger avoidance responses and hypervigilance (Marra). Similarly, those who experience underarousal may engage in impulsive behavior to increase their arousal. DBT therefore appears to be appropriate for use with sociopaths.

It is of vital importance that change be balanced with acceptance (Marra, 2005). It is necessary to validate the client's feelings and functional aspects of behavior as making sense given the situation and the client's experience, and acknowledge the stress involved with the urgency to have one's needs met. However, it is just as important to help the client understand that to accept something does not mean to approve of it. We can understand how things come to be the way they are and adopt a nonjudgmental attitude yet acknowledge that change needs to occur. Mindfulness is of utmost importance to help the client increase his attention to the environment. This means the client can learn to be mindful of his thoughts and behaviors while allowing him to take in more information that may lead to better problem solving regarding the situation. Mindfulness is a form of exposure to the avoidance of affect and repeated exposure can lead to desensitization to

that particular type of affect. Finding meaning in the client's life is also an important consequence of increased mindfulness. If the client is able to recognize his affect, then he will be better able to identify, shift, and redefine meaning in his life. This helps the client work with what is important to him in order to help find a compromise between his dialectical conflicts. The role of the therapist is to help the client identify patterns of past thinking, behavior, and affect to help resolve the conflicts (Marra).

For individuals with ASPD, it is important to emphasize that acceptance is not approval. For those with impulse-control difficulties, the core conflict may be to discharge overwhelming affect as quickly as possible (Marra, 2005). The individual believes that he needs to escape the situation so he acts out violently. The goal of DBT in this case is to help the client focus on long-term goals, pay closer attention to the context of the situation in order to evaluate if it is truly threatening, focus on the consequences of his actions, modify his underlying affect, increase attention to internal versus external variables, and increase distress tolerance skills (p. 137). DBT can also be helpful for those individuals with ASPD who appear narcissistic and disregard the rights of others. The core conflict may be between "envy, inferiority, superiority, insufficiency, weakness, inadequacy, and shame" (p. 157). DBT helps to decrease devaluation of others and improve interpersonal skills. This may include decreasing judgmentalness and the ability to accept disappointment in oneself and others.

Delivery of Dialectical Behavior Therapy

DBT is delivered in four modes of treatment: individual therapy, group skills training, case consultation, and telephone calls (McCann, Comtois, & Ball, 2006, p. 137). For one hour, once a week, each client meets with a DBT trained therapist. These

sessions will allow the client to review information learned in the skills training groups, set a goal for behavior change, identify problem solving strategies, and role-play using the skills (p. 138). Group skills training will be described in the next section.

Case consultation is an integral part of DBT (Marra, 2005). It functions to keep the therapist focused and prevent burnout (McCann, Comtois, & Ball, 2006, p. 138). People with ASPD are often easy to dislike. Therapists may come to perceive these individuals as lying, manipulative, and intimidating. Case consultation helps the therapist deal with the difficult client as well as ensures the best possible treatment is being delivered. In the case consultation group, an agenda is set by the treating therapist and the other therapists help assess the possible problems and solutions (p. 148). The consultation also allows consulting therapists to help the practicing therapist find empathy for and validate the client (p. 148).

Telephone calls are used to decrease life-threatening behaviors and increase skills generalization (McCann, Comtois, & Ball, 2006, p. 138). However, correctional facilities have their own policies for managing life-threatening behavior. Most institutions have segregation cells where they place individuals under observation. This may not be as validating as a phone call to a therapist but it is a safe and realistic arrangement. The therapist can be notified without direct intervention. Skills generalization skills can be practiced in individual therapy, group, and interactions with correctional staff.

Skill Building Exercises

In DBT, there is a balance between psychotherapy and skill building through psychoeducation. The psychoeducational skills used in this treatment package are mindfulness, interpersonal effectiveness, emotion regulation, and distress tolerance skills

(Linehan, 1993b). Worksheets, handouts, and session strategies are adopted from Linehan's skills training manual. Each psychoeducational session focuses on developing skills to change behavior, emotional, and thinking patterns associated with problems in living that are causing distress (p. 60). Specific goals deal with interpersonal chaos, mood stability, impulsiveness, and confusion about the self (p. 60).

Mindfulness skills include observing information without analyzing. This allows the client to balance between collecting and analyzing information and observing and experiencing it (Marra, 2005.) In the proposed treatment package, this portion of psychoeducation will take three 2½ hour sessions. The first session will focus on understanding the different states of mind to include the reasonable, emotional, and wise minds (Linehan, 1993b, p. 109). Session two will include learning to observe, describe, and participate in experiences (p. 111). Session three will involve looking at situations in a non-judgmental manner where the participants learn to do one thing at a time and focus on what works effectively (p. 113).

Interpersonal effectiveness skills include strategies for coping with interpersonal conflict by changing what one seeks from a relationship, maintaining the relationship, and developing self-respect (Linehan, 1993b, p. 70). This psychoeducation portion will take 4, two and a half hour sessions. The first session will include an overview of the situations in which one needs to work on relationships, goals for interpersonal effectiveness, and what decreases effectiveness (pp. 115-124). The second session will involve guidelines for getting what one wants out of a relationship (pp. 125-126). The third session will entail ideas for keeping relationships (p. 127). The fourth session will focus on developing and maintaining self-respect (p. 128).

Emotion regulation skills help clients better understand, observe, and describe their emotions. This also helps clients expose themselves to emotions in a positive manner as well as teaching them to manage painful emotions (Marra, 2005). The facilitator must acknowledge that some emotions may seem intolerable and recognize the urgent need the client may feel to escape from those emotions. The biopsychosocial model is taught to help participants see how their emotions are based on patterns built from their past, present, and anticipated future. The client is helped to understand that emotions do not come out of nowhere and may therefore be changed at many different points. The client must learn that emotions are natural and required of all human beings. Finally, the client must understand that emotions are predictable and can therefore be anticipated and changed.

In emotion regulation skills, the client must also learn the difference between primary and secondary emotions where the primary emotion is a reaction to the event and the secondary emotion is a reaction to his emotions (Marra, 2005). In other words, shame or embarrassment may be related to feeling angry or sad in a given situation. Clients are encouraged to identify positive aspects of their emotions and identify obstacles to changing negative emotions. The client is coached to experience more positive experiences as well as creating new feelings by practicing something he is afraid of doing or feeling. The client is taught to shift between experiencing the painful emotion and focusing on something pleasant until the painful emotion is tolerable. Finally, clients are taught to identify and change the beliefs they have about how they must behave when they experience a particular emotion. This portion of psychoeducation will take four 2½ hour sessions. The first session will include an understating of the goals of emotion

regulation training, myths about emotions, and an explanation of the biopsychosocial model of emotions (Linehan, 1993b, pp. 125-137). Session two will involve learning different ways to describe emotions (pp. 139-152). Session three will entail learning why emotions are valid, ways to reduce the possibility of experiencing negative emotions, and steps for increasing positive emotions (pp. 153-159). Session four will focus on strategies for letting go of emotional suffering and changing emotions by acting opposite to the current emotion (pp. 160-161).

Finally, the client is taught distress tolerance skills which help the client increase mindfulness to emotional distress, self-soothing techniques, distraction skills, improving the moment, and acceptance of the painful emotions (Marra, 2005). This psychoeducational portion will take two 2½ hour sessions. The first session will involve learning crisis survival strategies such as distraction, self-soothing, and improving the moment (Linehan, 1993b, pp. 165-169). The second session will include guidelines for accepting reality (pp. 170-177).

Each participant will receive DBT skills training groups prior to completing the following treatment groups. However, they will continue to rehearse the skills learned during appropriate phases of treatment. They will also continue to practice these skills during individual therapy.

Cognitive Restructuring

As cognitive restructuring and other skills introduced afterwards are change techniques, they will need to be balanced with validation to avoid losing the effectiveness of DBT. This practice of balancing acceptance versus change is noted when appropriate.

Mindfulness and distress tolerance skills will also be revisited and applied during this portion of treatment.

Reasoning and Rehabilitation

As noted in Chapter 3, sociopaths have deficits in cognition. Therefore, participant's cognitive skills need to be improved. Cognitive restructuring skills, based on the Reasoning and Rehabilitation program (R & R) will address criminal behavior and thinking and impulse control (Ross, Fabiano, & Ewles, 1988). This portion of the treatment will address maladaptive thinking patterns that lead to criminal behavior and promote pro-social behavior (Robinson & Porporino, 2004, p. 63). Since identifying these thinking patterns as maladaptive may be perceived as invalidating, an effort will be made on the part of the group facilitator to balance acceptance versus change.

The program will emphasize that participants learn to make decisions based on new skills rather than instructing inmates about the appropriate response. Those who work with inmates repeatedly hear, "I didn't have any choice." This portion of treatment will teach participants new problem-solving skills. The main patterns of thinking that are addressed are thinking before acting, recognizing problems and assessing consequences in order to respond appropriately, understanding the impact of one's behavior on others, evaluating situations critically, learning to be flexible in thinking, and acknowledging and adhering to socially acceptable values and norms (p. 65). Cognitive restructuring has been suggested as the most promising form of treatment for criminals (Andrews et al., 1990; Izzo & Ross, 1990; Lipsey, 1995; Losel, 1995). These types of programs have been shown to reduce recidivism rates (Porporino & Robinson, 1995; Robinson, 1995; Ross et al.). There has also been evidence that participants show improvement in social

perspective taking, problem-solving, attitudes about law breaking, controlling anger, and handling stress (Fabiano, Robinson, & Porporino, 1990).

Lifestyle Change Program

The R & R program will be combined with strategies from The Lifestyle Change Program (LCP; Walters, 1990). The LCP appears more successful in lowering disciplinary reports than reducing rearrest rates (Walters, 1999). However, having fewer infractions helps maintain a better institution and predicts moderate results for reducing recidivism (Zamble & Porporino, 1990). The LCP emphasizes cognitive skills to empower clients, instruct them in basic skills, and encourage resocialization (Walters, 1999). Empowerment occurs through the discouragement of self-labeling which will be enhanced by DBT validation techniques. Skill-building in turn helps the client gain self-efficacy and accept responsibility for his actions. This in turn helps resocialization the participant. Topics covered include the importance of choice and self-monitoring, role of fear in creating a criminal lifestyle, and self-labeling. Keeping in mind DBT principles, cognitive distortions and thinking styles that maintain a criminal lifestyle will be addressed as well to help participants understand how things come to be the way they are. Clients will be taught to adopt a nonjudgmental attitude while acknowledging that change needs to occur. Clients will also learn skills in stress management, fear management, communication, problem solving, goal setting, and values clarification.

Social Skills Training

It can be argued that the social deviance, criminal behavior and thinking, and lack of impulse control found in those with antisocial personality disorder is due to poor skills with social perception, cognition, and performance (Hollin & Palmer, 2004, p. 117).

Social perception is the ability to perceive and understand social cues and signals. When coupled with cognitive deficits, this problem area may explain why inmates are apt to misperceive the intention of others, which can lead to hostile interactions (Crick & Dodge, 1996). Deficits in social cognition include the inability to solve social problems and understand feedback from others, which may lead to antisocial behavior. Social performance anxiety may also lead to impulsive and reactive behaviors (Spence, 1981). Studies have found that improving these skills improves problem-solving skills, attitudes towards authority, and prosocial skills (Jones & McColl, 1991; Marshall, Turner, & Barbaree, 1989). Therefore it is suggested that this be an area of intervention as well. These skills will be taught in conjunction with the reiteration of skills learned during interpersonal effectiveness groups.

Offense-Focused Problem Solving

Offense-Focused Problem Solving reduces offending through social problem solving techniques, which help the client analyze and negotiate criminal situations (McGuire & Hatcher, 2001). When conducted with medium- to high-risk probationers, this program has demonstrated an increase in prosocial attitudes, self-esteem, feelings of power over situations, and empathy. It has also shown a decrease in impulsivity and viewing crime as worthwhile. Cognitive-skills include problem awareness, problem definition, information gathering, distinguishing facts from opinion, alternative-solution thinking, formulating means-ends steps, consequential thinking, decision making and perspective taking. Self-management, social interactions, and deeply embedded criminal thinking patterns are targeted by these cognitive-skills.

Participants will be given social situations in which they will be asked to role-play their reactions. Appropriate guidance will be given to help them learn to understand tone and body language. Also, brain storming will occur with the group in order to develop alternative reactions. Participants will be given the chance to practice within the confines of the group and asked to practice with peers and staff to alleviate social performance anxiety. Relaxation skills will be taught along with this as well. Additionally, skills that build empathy will encompass perception, cognition, and performance such as recognizing other's emotions, taking the perspective of others, matching another's response to one similar to their own, and generating appropriate responses (Marshall, Hudson, Jones, & Fernandez, 1995).

Anger Management

Reactive violence and lack of impulse control is commonly seen in sociopaths. Therefore, anger management is included in this treatment package. Anger often triggers acts of aggression; therefore, participants must learn to not only control impulsive outbursts but also to regulate their feelings of anger (Novaco, Ramm, & Black, 2004, p. 130). The anger management portion will follow the State Hospital anger treatment protocol (Novaco, 1975). The following techniques will be utilized (Novaco et al., p. 138). Participants will receive education regarding anger and aggression. Clients will be taught to maintain an anger log in order to recognize when they become angry. This will include an assessment of what situations create more anger than others. This will also include a separate assessment of the consequences of the anger and any aggression that occurred. Additionally, inmates will be taught relaxation and cognitive restructuring techniques in order to regulate their feelings. This will involve the identification of

cognitive distortions while balancing acceptance versus change dialectics. Alternatives will be brainstormed by the group and each scenario will be acted out for practice. Participants will be encouraged to use examples from their own interactions with others. DBT emotion regulation and distress tolerance techniques for anger will also be reviewed during this stage of treatment.

Participants

Participants will be selected by inviting a random sample of adult male inmates at a medium security correctional facility to participate in treatment. There will be no exclusions based on race, ethnicity, or age. It is understood that certain inmates may benefit more from culturally informed treatment, and that younger and elderly inmates may have different needs, but this is an area for future research. This treatment package is recommended for those in a medium security facilities because studies have determined that attempts at changing criminal lifestyle are more beneficial for medium- to high-risk than low-risk individuals (Andrews et al., 1990; Gendreau, Goggin, & Law, 1997; Gendreau, Little, & Goggin, 1996; Walters, 1999) . Also, participants must have a least one year left on their sentence given the length of the treatment package. Participants will not be excluded from the treatment package based on type of crime, mental illness, or substance abuse. However, it will be required that these individuals also participate in appropriate treatment for their other needs. Inmates with mental illness will be required to continue taking their medication and/or participating in individual therapy. Those men with substance-related disorders must continue substance abuse treatment. Individuals with sexual offenses will be required to participate in sex offender treatment.

Assessment Measures

The most important step to determining who to include in this treatment is to assess whether the person meets the criteria for sociopathy and to rule out psychopathy. First, the Multidimensional Personality Questionnaire (MPQ) will be administered by a Correctional Behavior Specialist or someone with the equivalent of a bachelor's degree in psychology. The MPQ is a self-report inventory which evaluates three factors (Tellegen & Waller, 1994). The first factor is *Positive Emotionality*, which is comprised of Well-Being, Social Potency, Achievement, and Social Closeness. The second factor is *Negative Emotionality*, which is comprised of Stress Reaction, Alienation, and Aggression. The third factor, *Constraint* is comprised of Control, Harm Avoidance, and Traditionalism. This measure distinguishes those with antisocial profiles from those with normal profiles. It also begins to differentiate between sociopathy and psychopathy.

Those who have antisocial profiles will then be administered the Psychopathy Checklist: Screening Version (PCL: SV) by an individual with at least a masters degree in psychology and appropriate training to use this instrument. The PCL-SV is a 12-item version of the PCL-R. It is scored in the same manner with a cut off of 18 for the diagnosis of psychopathy (Steadman et al., 2000). This measure is selected because it is shorter and simpler to administer than the PCL-R, yet was found to be conceptually, psychometrically, and empirically related to the PCL-R and exhibited the same factor structure (Hart et al., 1995; Hill et al., 2004). It has also been suggested that this form better discriminates different severity levels of psychopathy (Cooke et al., 1999). Those who fall within the range of 15-18 will be eliminated from the treatment. Those included

in the treatment must also meet the criteria for antisocial personality disorder as described in Chapter 2.

Treatment Groups

Three treatment groups will be assigned. The treatment as usual group will consist of those who declined involvement with the new treatment package. These individuals are expected to continue their usual treatment such as medication, individual, and group therapies. This may also include all those services readily available in the prison such as vocational and educational, religious, and case management. A random sample of inmates not invited for inclusion in the treatment package will form the control group. These individuals will be matched based on race and ethnicity, age, and participation in mental health or other correctional facility activities. The intention of this control group is to balance those who volunteered with those who declined. The final treatment group will be those included in the treatment and will include 10-12 participants. All participants will stay with the regular population rather than be placed in a therapeutic community. This may help alleviate concerns related to findings that inmates tend to learn poor behavior from one another in therapeutic communities. This will also help participants practice their new skills in realistic situations with other inmates who are not participating in treatment.

Procedures

Several studies suggest that a token economy works with adult felons to increase involvement in academic activities and adherence to facility rules while threats and intimidation by staff lead to increased aggression and disobedience (Milan & McKee, 1976; Milan, Throckmorton, McKee, & Wood, 1979). This suggests that positive

reinforcement should be preferred to punishment during resocialization efforts. It has also been found that while token reinforcements do not necessarily reduce recidivism rates, they reduce the severity of new offences (Jenkins et al., 1974). Token economy procedures have also been helpful with military personal in reducing psychotic episodes, suicidal gestures (Coleman, 1970) and increased completion of tour of duty, honorable discharge, and satisfactory adjustment to military life (Coleman & Baker, 1969). Given these findings, it is suggested that a token economy be employed with this treatment package.

This treatment package will focus on psychoeducational groups. Each inmate will also participate in individual therapy for one hour, once a week. Therefore, four therapists will be needed to conduct individual therapy as well as facilitate groups. This will allow the therapists to work in teams, rotate days, and be available as back-up if a facilitator is absent. It will also give the participants exposure to different teaching styles. Additionally, case consultation will be required two hours a week. Correctional staff will also receive training to help maintain reinforcement of positive behaviors and extinction of negative behaviors.

Participants will begin with DBT for 14 weeks. They will attend a two and a half hour skills group once a week and individual therapy for one hour, once a week. The first week of training will include two sessions. The first session will include a half hour to introduce clients to one another, the facilitators, and the treatment they are about to undertake. This will include determination of group rules and rewards which will be on display each day. The next half hour will introduce the clients to the specific goals of group and guidelines for skills training. This will include a discussion of the general

handouts presented in the Skills Training Manual (Linehan, 1993b, pp. 107-108). The second session will include one-hour of psychoeducation regarding mindfulness followed by an hour of experiential work for the clients to practice their newly learned skills. The first half hour of sessions 3 and 4 will review the past weeks. The next hour will be used to teach new skills and the last hour to practice new skills. This format will remain the same for each DBT session. Interpersonal effectiveness and emotion regulation skills will be conducted over four weeks each, for a total of eight weeks. Distress tolerance will occur in two weeks.

After the DBT portion of treatment is completed, clients will participate in treatment Tuesday, Wednesday, Thursday, and Friday, two and a half hours each day, for 6 months. The design is structured to mimic real life employment situations in order to increase responsibility and prosocial behavior. It also allows clients to participate in other treatment, vocational, or educational requirements. Each session will be structured with the first half hour for review, the next hour for presentation of new material, and the final hour for practice of the new skill. The group will not be conducted in a lecture format but from the Socratic method where participants are expected to participate based on their own knowledge and experience as well as learning new information from the facilitator. The second hour will allow participants to practice their new skills through didactic experiences such as art projects, journaling, writing a play, role-playing, puzzle solving, board games, and dilemma games (Robinson & Porporino, 2004, p. 65). Fridays will consist of a review of the material and incorporating the information learned each day in the first hour and a half and an award ceremony for one half hour. Those who earned enough points for the week will be released a half hour early. Those who did not earn the

points will be required to stay and help clean up after the ceremony. Each day of the week will consist of a different topic. Tuesday is Cognitive Restructuring, Wednesday is Social Skills, Thursday is Anger Management, and Friday is review and rewards. All DBT skills will be reiterated and applied as appropriate (see previous descriptions).

It is imperative that this treatment package be used in conjunction with other measures that decrease infractions and recidivism. Educational and vocational skills lead to positive results in behavior both during and after incarceration (Milan, 2004, p. 54). While the participants will not receive education or job skills through this program, they will be required to participate in academic training, paid, or volunteer work in order to gain points during treatment. Those participants who have substance abuse, sex offender, or mental health treatment will receive a point for each type of treatment they are required to attend (i.e., individual or group therapies and medication).

As different inmates will have different needs, points will be earned on an individual basis to determine what the expected maximum points are for that person. Everyone will earn points on both a weekly and monthly basis. Each week all participants can earn a maximum of four points for daily attendance at treatment groups and five points for participation in daily academic or vocational training. Inmates will also earn one point for each day of the week that they do not obtain an infraction, up to seven points for each week. Each week all participants will be involved in an award ceremony and those who earn the maximum points in these three areas will earn 30 minutes of free time. Those who must participate in adjunct treatment may receive points for those activities in lieu of academic or vocational pursuits. Each participant will be given a card which staff must sign in order to verify participation in said programs. After one month,

those who reach their maximum number of points can earn \$10 worth of free products at the canteen. After the second month, they can earn a book or CD worth \$15. After the third month, they can earn an extra telephone call. After the fourth month, an animal shelter will provide an hour of time with some pets. After the fifth month, participants can earn an extra visit. At the end of the sixth month, participants must take an examination and participate in role-plays. Those who pass will participate in a graduation ceremony.

Assessment of Treatment Effectiveness

The examination will include both written questions as well as role-playing. The client must receive at least a 70% on the written portion of the exam. This exam will be administered in a group setting. On a separate day from the exam, the participants will have to complete three role plays with one of the facilitators. This will be conducted individually rather than in a group setting. These exams will determine if the client has adequately learned the material presented and if they are able to use it in “real life” situations.

In order to determine if the treatment package has effectively increased prosocial and decreased antisocial behavior, correctional officers will be asked to complete a questionnaire regarding improvement as well as disciplinary reports. Similar questions will be posed to the participants themselves (See Table 4).

Long-term assessment will occur during incarceration and upon release. While still incarcerated, the client’s infraction record will be monitored on a 6-month basis for comparison with their infraction record pre- and post-treatment. After release, assessment will include the amount of time between release and negative outcome such as getting

kicked out of a halfway house, rearrest, or parole violation. Participants will be monitored for a minimum of 5 years post release.

Table 4

Survey Questions for the Evaluation of the Treatment Program

1. Did the participant (you) appear better able to regulate emotional outbursts? (negative affect, impulse control)
 2. Did the participant's (your) mood appear to change? If so, in what way? (negative affect)
 3. Was the participant more cooperative with daily activities around the prison? (social deviance)
 4. Did the participant (you) appear more likely to volunteer to help others? (social deviance)
 5. Did the participant (you) engage in more prosocial pursuits such as working, attending classes, exercising, attending religious ceremonies, or in any other way not listed here? (social deviance)
 6. How many infractions did the participant (you) have each month last year? Did this change during the course of treatment, if so, how? (impulse control, criminal behavior, reactive violence)
 7. Did the participant (you) appear to think more about the consequences of his behavior before acting? (impulse control)
 8. Did the participant (you) vocalize different values than before the treatment? If so, please describe. (criminal behavior and thinking)
 9. Did the participant's (your) social skills change in any way? If so, please describe. (social deviance)
 10. For the participant: On a scale of 0-10 how helpful did you find this treatment, if 0 is not helpful at all and 10 is the most improvement you can imagine?
 11. Please describe any other changes you noticed in the participant (yourself) from the beginning to the end of the treatment period.
-

Chapter 5

Summary

The psychological treatment of antisocial personality disorder has fallen to the wayside because most individuals with this disorder are excluded from therapy due to the punitive philosophy of the correctional system. These individuals continue to have unhealthy interactions with others, commit crimes, and return to prison after they have served both short and prolonged sentences. This suggests some reform needs to occur in the treatment of offenders with antisocial personality disorder. However, it appears that the criminal justice system incarcerates two types of criminals, the psychopath and the sociopath. In order to effect change within the system, a differentiation must be made between these two types of inmates.

There is considerable disagreement in the field regarding ASPD and how this disorder can be understood. Many researchers have focused on different behaviors, internal dynamics, and criteria for explaining ASPD. Furthermore, few studies have replicated the findings and models of other researchers. With the differences between studies, it is difficult to know exactly to whom any particular results apply. Therefore, the hypothesis that a distinction exists between sociopathy and psychopathy should be tentative until there is more consistency across studies.

With this caveat, differences may exist between psychopaths and sociopaths as demonstrated by biological theories, personality theories, type of aggression, family, developmental, and cognitive factors. It appears that primary psychopaths are those with biological predispositions toward low fear and poor avoidance of punishment. These individuals also appear to have neuroanatomical and neurochemical deficits that lead to

increased impulsivity, the inability to recognize other's emotions, poor decision making, and increased aggression. A sociopath is an individual who is unsocialized due to parental failures rather than inborn disposition. The psychopath appears to be more hostile, unempathic, impulsive, and egocentric than the sociopath. While both the psychopath and sociopath are low in agreeableness and conscientiousness the sociopath shows more negative emotion and neuroticism. The psychopath appears more narcissistic, extraverted, confident, dominant, and not anxious. The sociopath has higher levels of emotional disturbance that include anxiety, depression, withdrawal, shame, anger, and lower self-esteem. Psychopaths also appear to demonstrate more proactive, or instrumental, aggression whereas the sociopath behaves more reactively to provocation or threat.

Family, developmental, and cognitive factors further differentiate the psychopath from the sociopath. Psychopaths appear to have behavioral problems earlier in life and show signs of childhood onset conduct disorder. Family factors appear to have a greater influence on the development of sociopathy than psychopathy. Such factors include childrearing, abuse or neglect, parental conflict, disrupted families, family size, antisocial parents and siblings, and socioeconomic status. While both psychopaths and sociopaths demonstrate cognitive deficits, the psychopath appears to have more problems with information processing. Psychopaths respond more poorly in areas of attention, language, behavioral inhibition, and punishment.

Given the biopsychosocial differences seen in those with ASPD, it can be concluded that there may be differences between psychopathy and sociopathy. However, it appears that we need to redefine psychopathy. While there are some overlapping trait

similarities, psychopathy appears to be at a higher level of dysfunction than sociopathy. This paper proposes a new category, psychopathic personality disorder, to include two major subtypes. Secondary psychopathy (sociopathy) can be defined as someone who is impulsive, exhibits social deviance, can experience negative affect, displays criminal behavior and lifestyle, and performs reactive violence. This definition can include specifiers of antisocial and borderline type. Primary psychopathy can be defined as someone who lacks affect and personal connection, can not experience negative affect, has low fear, performs instrumental violence, and is not necessarily criminal. This definition can include specifiers of sadistic and narcissistic type. It can be presumed that both subtypes of psychopathy have a biological predisposition regarding difficult socialization but the primary psychopath is at a more dysfunctional level and perhaps can not be socialized.

The main focus of this treatment package is to reduce disciplinary infractions during incarceration and recidivism rates upon release through resocialization. Socialization involves recognizing and monitoring antisocial behavior, punishing antisocial behavior, encouraging and rewarding prosocial behavior, and explaining right actions from wrong actions. The proposed treatment package is for use with male inmates in medium security correctional facilities who meet the criteria for sociopathy. The administration of the MPQ, PCL-SV, and clinical interview will determine who is included in treatment. Three treatment groups will include the control group, treatment as usual group, and those receiving the new treatment package. The treatment will be conducted via a token economy. The treatment addresses motivational techniques and treatments for impulse control, social deviance, negative affect, criminal behavior and

thinking, and reactive violence. The first 14 weeks will include two and a half hour sessions, 3 days a week, of dialectical behavior therapy (DBT). Clients will also participate in weekly individual therapy. The therapist will conduct a consultation group as well. The final 6 months will include two and a half hour sessions, 4 days a week, of cognitive restructuring, social skills, and anger management. During this treatment phase, DBT principles and skills will continue to be reiterated and practiced as appropriate. Participants will also continue to engage in DBT individual therapy. Outcome will be evaluated based on a written exam, role-plays, custody staff evaluation, and client evaluation. Long-term assessment will include monitoring of infractions and post-released recidivism.

Motivational techniques include the facilitator building rapport, listening to the inmate's perspective, and encouraging the participant to make their own decisions regarding change. Solution-focused brief therapy is suggested to include honoring the client's worldview, establishing treatment goals with the client, utilizing the referral source to further establish goals, using the referral source to maintain progress, identifying the client-therapist relationship, and helping clients move toward their goals. This involves the use of finding exceptions, scaling questions, miracle questions, and assigning tasks between sessions. Motivational techniques will be employed throughout the treatment process.

The first portion of treatment begins with dialectical behavior therapy (DBT). The use of DBT with sociopaths targets negative affect, social deviance, impulse control, and reactive violence. Validation of the client's feelings and teaching new coping skills is intended to increase emotional regulation and problem solving skills. The techniques

used are mindfulness, distress tolerance, interpersonal effectiveness, and emotion regulation. The clients are taught to find meaning in their life, expose themselves to painful emotions, prevent the avoidance of these emotions, and accept the negative affect. The strategies include providing information, identifying problem solving strategies, using mnemonics to implement the strategies, identifying obstacles to change, and confronting the obstacles to change.

The cognitive restructuring component includes the Reasoning and Rehabilitation program (R & R) and Lifestyle Change Program (LCP) to target criminal behavior and thinking as well as impulse control. The R & R program emphasizes thinking before acting, recognizing problems and consequences, the impact of one's behavior on others, evaluating situations critically, flexible thinking, and social interactions. The LCP focuses on empowerment, basic skills, and resocialization. This is accomplished by teaching the client about choices, self-labeling, cognitive distortions, stress management, fear management, communication, problem solving, goal setting, and values.

Social skills training targets social deviance, criminal behavior and thinking, and impulse control. Offense-Focused Problem Solving highlights problem awareness, problem definition, information gathering, distinguishing facts from opinion, alternative-solution thinking, formulating means-ends steps, consequential thinking, decision making, perspective taking, self-management, social interactions, criminal thinking patterns, and relaxation.

Anger management is conducted with the State Hospital anger treatment protocol. The steps include education regarding anger and aggression, keeping an anger log,

assessing what makes the client angry, consequences of the anger, relaxation techniques, cognitive restructuring, and recognizing cognitive distortions.

Looking Forward

The focus of this treatment package is not only to reduce recidivism rates, but also to gain a greater understanding of antisocial personality disorder and who can be effectively treated. Despite the findings which suggest that psychopathy is not treatable, and that treating these individuals only creates more antisocial behavior, there appears to be a focus in the literature on psychopathy versus sociopathy. A review of the literature suggests that a greater emphasis needs to be placed on determining effective treatment for common criminals including the sociopath. It appears that preventative efforts should focus on this population as well. In contrast, why waste our time and money on continued research with the psychopathic population that can not be changed? Perhaps this effort should be shifted towards educating the public about psychopathy and how to avoid being hurt by these individuals.

Most intervention efforts have occurred with males without co-occurring disorders. It appears that there is a need to conduct research on women with ASPD as well as those who commit sex offenses, abuse substances, and are mentally ill. Preventative efforts should begin in childhood; therefore, more research needs to be conducted on children as well as adolescents. This may include an investigation of what age antisocial personality disorder truly begins to develop so that intervention can occur earlier. This will emphasize the need to focus on community samples as well as those who are already incarcerated.

Longitudinal designs are particularly difficult to implement with this population but may more easily be employed through the use of probation and parole officers. Community follow-up is imperative with this population. Some studies have already found that those who participate in the R&R program while on probation and parole are less likely to be reincarcerated (Fabiano et al., 1990; Ross, Fabiano, & Ewles, 1988). The R& R Program has also shown a reduction in recidivism rates for juveniles (Garrido & Sanchis, 1991) and substance abusers (Johnson & Hunter, 1995). We need to continue to monitor sociopaths after they have been released and offer them additional education and support. Short-term treatment, even the 10 month program as is suggested here, is not enough to exterminate life-long learning. If the sociocultural emphasis is on preventing future crime then we need to focus on culturally informed treatment, treatment for men and women, treatment for children, low-risk individuals, and long term programs.

References

- Andrews, D., Zinger, I., Hoge, R., Bonta, J., Gendreau, J., & Cullen, F. (1990). Does correctional treatment work? A clinically relevant and psychologically informed meta-analysis. *Criminology*, 28, 369-404.
- Anglin, M., Longshore, D., & Turner, S. (1999). Treatment alternatives to street crime. An evaluation of five programs. *Criminal Justice and Behavior*, 26, 168-195.
- American Psychiatric Association. (2000). *Diagnostic and statistical manual of mental disorders* (4th ed., text rev.). Washington, DC: Author.
- Babinski, L. M., Hartsough, C. S., & Lambert, N. M. (1999). Childhood conduct problems, hyperactivity-impulsivity, and inattention as predictors of adult criminal activity. *Journal of Child Psychology and Psychiatry*, 40, 347-355.
- Benson, E. (2003). Rehabilitate or punish? *Monitor on Psychology*, 34, 46-47.
- Blackburn, R. (1987). Two scales of the assessment of personality disorder in antisocial populations. *Personality and Individual Differences*, 8, 81-93.
- Blackburn, R. (1993). *The psychology of criminal conduct: Theory, research, and practice*. Chichester, UK: Wiley.
- Blackburn, R. (1999). Personality assessment in violent offenders: The development of the Antisocial Personality Questionnaire. *Psychologica Belgica*, 39, 87-111.
- Blair, R. J. R. (2006). Subcortical brain systems in psychopathy: The amygdala and associated structures. In C. J. Patrick (Ed.), *The handbook of psychopathy* (pp. 296-312). New York: Guilford.
- Bohus, M., Haaf, B., Stiglmayr, C., Pohl, U., Bohme, R., & Linehan, M. (2000). Evaluation of inpatient dialectical-behavioral therapy for borderline personality disorder – A prospective study. *Behavior Research and Therapy*, 38, 875-887.
- Bonta J., Wallace-Capretta, S., & Rooney, J. (2000). A quasi-experimental evaluation of an intensive rehabilitation supervision program. *Criminal Justice and Behavior*, 27, 312-329.
- Bouffard, J., Layton Mackenzie, D., & Hickman, L. (2000). Effectiveness of vocational education and employment programs for adult offenders: A methodology-based analysis of the literature. *Journal of Offender Rehabilitation*, 31, 1-41.
- Bradley, R. G., and Follingstad, D. R. (2003). Group therapy for incarcerated women who experienced interpersonal violence: A pilot study. *Journal of Traumatic Stress*, 16, 337-340.

- Buehler, C., Anthony, C., Krishnakumar, A., Stone, G., Gerard, J., & Pemberton, S. (1997). Interparental conflict and youth problem behaviors: A meta-analysis. *Journal of Child and Family Studies*, *6*, 233-247.
- Caputo, A. A., Frick, P. J., & Brodsky, S. L. (1999). Family violence and juvenile sex offending: Potential mediating roles of psychopathic traits and negative attitudes toward women. *Criminal Justice and Behavior*, *26*, 338-356.
- Christianson, S. A., Forth, A. E., & Hare, R. D., Strachan, C., Lidberg., L., & Thorell, L. H. (1996). Remembering details of emotional events: A comparison between psychopaths and nonpsychopathic offenders. *Personality and Individual Differences*, *20*, 437-443.
- Cleckley, H. (1988). *The mask of sanity* (5th ed.). St. Louis, MO: The C.C. Mosby Co.
- Cooke, D. J., Michie, C., Hart, S. D., & Hare, R. D. (1999). The functioning of the Screening Version of The Psychopathy Checklist- Revised: An item response theory analysis. *Psychological Assessment*, *11*, 3-13.
- Cooke, D. J., Michie, C., & Hart, S. D. (2006). Facets of clinical psychopathy: Toward clearer measurement. . In C. J. Patrick (Ed.), *The handbook of psychopathy* (pp. 91-106). New York: Guilford.
- Coleman, A. D. (1970). Behavior therapy in a military setting. *Current Psychiatric Therapies*, *10*, 171-178.
- Coleman, A. D., & Baker, S. L. (1969). Utilization of an operant conditioning model for the treatment of character and behavior disorders in a military setting. *American Journal of Psychiatry*, *125*, 101-109.
- Costanzo, M. (2004). *Psychology applied to law*. Belmont, CA: Thomson Wadsworth.
- Crick, N. R., & Dodge, K. A. (1996). Social information-processing mechanisms in reactive and proactive aggression. *Child Development*, *67*, 993-1002.
- Davidson, K. M., & Tyrer, P. (1996). Cognitive therapy for antisocial and borderline personality disorders: single case study series. *British Journal of Clinical Psychology*, *35*, 413-429.
- Dikman, Z. V., & Allen, J. J. (2000). Error monitoring during reward and avoidance learning in high- and low-socialized individuals. *Psychophysiology*, *37*, 43-54.
- Dittmann, M. (2003). A voice for women in prison. *Monitor on Psychology*, *34*, 60-61.
- Dodge, K. A., & Petit, G. S. (2003). A biopsychosocial model of the development of chronic conduct problems in adolescence. *Developmental Psychology*, *39*, 349-371.

- Draper, P., & Belsky, J. (1990). Personality development in evolutionary perspective. *Journal of Personality, 58*, 141-162.
- Elkin, I. Shea, T., Watkins, J. T., Imber, S. D., Sotsky, S. M., and Collins, J. F. (1989). National Institute of Mental Health Treatment of Depression Collaborative Research Program: General effectiveness of treatments. *Archives of General Psychiatry, 46*, 971-982.
- Elst, L. T. V., Woermann, F. G., Lemieux, L., Thompson, P. J., & Trimble, M. R. (2000). Affective aggression in patients with temporal lobe epilepsy: A quantitative MRI study of the amygdala. *Brain, 123*, 234-243.
- Eysenck, H. J. (1977). *Crime and personality* (3rd ed.). London: Paladin.
- Eysenck, H. J. (1996). Personality and crime: Where are we now? *Psychology, Crime and Law, 2*, 143-152.
- Fabiano, E., Robinson, D., & Porporino, F. (1990). *A preliminary assessment of the cognitive skills training programme: A component of living skills programming. Programme description, research findings and implementation strategy*. Ottawa, Canada: Correctional Service Canada.
- Farrington, D. P. (2000). Psychosocial predictors of adult antisocial personality and adult convictions. *Behavioral Science and the Law, 18*, 605-622.
- Farrington, D. P. (2003). Key results from the first 40 years of the Cambridge Study in Delinquency Development. In T. P. Thornberry & M. D. Krohn (Eds.), *Taking stock of delinquency* (pp. 137-183). New York: Kluwer/Plenum Press.
- Farrington, D. P. (2006). Family background and psychopathy. In C. J. Patrick (Ed.), *The handbook of psychopathy* (pp. 229-250). New York: Guilford.
- Farrington, D. P., Jolliffe, D., Loeber, R., Stouthamer-Loeber, M., & Kalb, L. M. (2001). The concentration of offenders in families, and family criminality in the prediction of boys' delinquency. *Journal of Adolescence, 24*, 579-596.
- Farrington, D. P., & Loeber, R. (1999). Transatlantic replicability of risk factors in the development of delinquency. In P. Cohen., C. Slomkowski, & L. N. Robins (Eds.), *Historical and geographical influences on psychopathology* (pp. 299-329). Mahwah, NJ: Erlbaum.
- Fergusson, D. M., & Horwood, L. J., (1998). Exposure to interparental violence in childhood and psychosocial adjustment in young adulthood. *Child Abuse and Neglect, 22*, 339-357.
- Forth, A. E., & Hare, R. D. (1989). The contingent negative variation in psychopaths. *Psychophysiology, 26*, 676-682.

- Fowles, D. C., & Dindo, L. (2006). A dual-deficit model of psychopathy. In C. J. Patrick (Ed.), *The handbook of psychopathy* (pp. 14-34). New York: Guilford.
- Frick, P. J., Cornell, A. H., Bodin, S. D., Dane, H. A., Barry, C. T., & Loney, B. R. (2003). Callous-unemotional traits and developmental pathways to severe conduct problems. *Developmental Psychology, 39*, 246-260.
- Frick, P. J., & Loney, B. R. (1999). Outcomes of children and adolescents with conduct disorders and oppositional defiant disorder. In H. C. Quay & A. Hogan (Eds.), *Handbook of disruptive behavior disorders* (pp. 507-524). New York: Plenum Press.
- Frick, P. J., & Marsee, M. A., (2006). Psychopathy and developmental pathways to antisocial behavior in youth. In C. J. Patrick (Ed.), *The handbook of psychopathy* (pp. 353-374). New York: Guilford.
- Garrido, V., & Sanchis, J. R., (1991). The cognitive model in the treatment of Spanish offenders: Theory and practice. *Journal of Correctional Education, 42*, 111-118.
- Gendreau, P., Goggin, C.E., & Law, M.A. (1997). Predicting prison misconducts. *Criminal Justice and Behavior, 24*, 414-431.
- Gendreau, P., Little, T., & Goggin, C. (1996). A meta-analysis of predictors of adult offender recidivism: What works! *Criminology, 34*, 401-433.
- Goleman, D. (2003). *Destructive emotions: How can we overcome them? A scientific dialogue with the Dalai Lama*. New York: Bantam Books.
- Gorman-Smith, D., Tolan, P. H., Zelli, A., & Huesmann, L. R. (1996). The relation of family functioning to violence among inner-city minority youths. *Journal of Family Psychology, 10*, 115-129.
- Gray, J. A. (1978). The neuropsychology of anxiety. *British Journal of Psychology, 69*, 417-439.
- Haapasalo, J., & Pokela, E. (1999). Child-rearing and child abuse antecedents of criminality. *Aggression and Violent Behavior, 1*, 107-127.
- Hare, R. D. (1985). A comparison of procedures for the assessment of psychopathy. *Journal of Consulting and Clinical Psychology, 53*, 7-16.
- Hare, R. D. (1991). *The Robert D. Hare Psychopathy Checklist-Revised*. Toronto: Multi-Health Systems, Inc.
- Hare, R. D. (1993). *Without conscience. The disturbing world of the psychopaths among us*. New York: The Guilford Press.

- Hare, R. D. (2003). *The Hare Psychopathy Checklist- Revised*, 2nd edition. Toronto, Multi-Health Systems.
- Hare, R. D., Cooke, D., & Hart, S. (1999). Psychopathy and sadistic personality disorder. In T. Millon, P. Blaney, & R. Davis (Eds.), *Oxford Textbook of Psychopathology* (pp. 555-584). New York: Oxford University Press.
- Hare, R. D., McPherson, L., & Forth, A. (1988). Male psychopaths and their criminal careers. *Journal of Consulting and Criminal Psychology*, 56, 710-714.
- Hare, R. D., & Neumann, C. S. (2006). The PCL-R assessment of psychopathy: Development, structural properties, and new directions. In C. J. Patrick (Ed.), *The handbook of psychopathy* (pp. 58-88). New York: Guilford.
- Hare, R. D., Williamson, S. E., & Harpur, T. J. (1988). Psychopathy and language. In T. E. Moffitt & S. A. Mednick (Eds.), *Biological contributions to crime causation* (pp. 68-92). Dordrecht, The Netherlands: Kluwer.
- Harpur, T. J., Hart, S. D., & Hare, R. D. (2002). Personality of the psychopath. In P. T. Costa & T. A. Widiger (Eds.), *Personality disorders and the five-factor model of personality* (2nd ed., pp. 299-324). Washington, DC: American Psychological Association.
- Harris, G. T., & Rice, M. E. (2006). Treatment of psychopathy: A review of empirical findings. In C. J. Patrick (Ed.), *The handbook of psychopathy* (pp. 555-572). New York: Guilford.
- Harris, G. T., Rice, M. E., & Lalumiere, M. (2001). Criminal violence: The roles of psychopathy, neurodevelopmental insults, and antisocial parenting. *Criminal Justice and Behavior*, 28, 402-426.
- Hart, S., Cox, D., & Hare, R. D. (1995). *Manual for the Psychopathy Checklist: Screening Version (PCL: SV)*. Toronto: Multi-Health Systems.
- Henry, B., Caspi, A., Moffitt, T. E., & Silva, P. A. (1996). Temperamental and familial predictors of violence and nonviolent criminal convictions: Age 3 to age 18. *Developmental Psychology*, 32, 614-623.
- Herve, H., Hayes, P., & Hare, R. (2003). Psychopathy and sensitivity to the emotional polarity of metaphorical statements. *Personality and Individual Differences*, 35, 1497-1507.
- Hiatt, K. D., & Newman, J. P. (2006). Understanding psychopathy: The cognitive side. In C. J. Patrick (Ed.), *The handbook of psychopathy* (pp. 334-352). New York: Guilford.
- Hiatt, K. D., Schmitt, W. A., & Newman, J. P. (2004). Stroop tasks reveal abnormal selective attention among psychopathic offenders. *Neuropsychology*, 18, 50-59.

- Hill, C., Neumann, C. S., and Rogers, R. (2004). Confirmatory Factor Analysis of the Psychopathy Checklist: Screening Version (PCL-SV) in Offenders with Axis I Disorders. *Psychological Assessment, 16*, 90-95.
- Hodgins, S. (2004). Offenders with major mental disorders. In C. Hollin (Ed.), *The essential handbook of offender assessment and treatment* (pp. 219-238). Chichester, UK: Wiley.
- Hollin, C., & Palmer, E. (2004). Skills Training. In C. Hollin (Ed.), *The essential handbook of offender assessment and treatment* (pp. 117-128). Chichester, UK: Wiley.
- Izzo, R. L., & Ross, R. R. (1990). Meta-analysis of rehabilitation programmes for juvenile delinquents: A brief report. *Criminal Justice and Behavior, 17*, 134-142.
- Jenkins, W. O., Witherspoon, A. D., Devine, M. D., deValera, E. K., Muller, J. B., Barton, M. C., et al. (1974). *The post-prison analysis of criminal behavior and longitudinal follow-up evaluation of institutional treatment*. Elmore, AL: Rehabilitation Research Foundations.
- Johnson, G., & Hunter, R. M. (1995). Evaluation of the specialized drug offender program. In R. R. Ross & R. D. Ross (Eds.), *Thinking straight: The reasoning and rehabilitation programme for delinquency prevention and offender rehabilitation* (pp. 215-234). Ottawa, Canada: AIR.
- Jones, E. J., & McColl, M. A. (1991). Development and evaluation of an interactional life skills group for offenders. *The Occupational Therapy Journal of Research, 11*, 80-92.
- Jutai, J. W., & Hare, R. D. (1983). Psychopathy and selective attention during performance of a complex perceptual motor task. *Psychophysiology, 20*, 146-151.
- Jutai, J. W., Hare, R. D., & Connolly, J. F. (1987). Psychopathy and event related brain potentials (ERPs) associated with attention to speech stimuli. *Personality and Individual Differences, 8*, 175-184.
- Kabat-Zinn, J., Wheeler, E., Light, T., Skillings, A., Scharf, M. J., Cropley, T. G., et al. (1998). Influence of a mindfulness meditation-based stress reduction intervention on rates of skin clearing in patients with moderate to severe psoriasis undergoing phototherapy (UVB) and photochemotherapy (PUVA). *Psychosomatic Medicine, 60*, 625-632.
- Karpman, B. (1948). The myth of the psychopathic personality. *American Journal of Psychiatry, 104*, 523-534.
- Kiehl, K. A., Hare, R. D., McDonald, J. J., & Brink, J. (1999). Semantic and affective processing in psychopaths: An event related potential (ERP) study. *Psychophysiology, 36*, 765-774.

- Koons, C. R., Robins, C. J., Tweed, J. L., Lynch, T. R., Gonzalez, A. M., Morese, J. Q., et al. (2001). Efficacy of dialectical behavior therapy in women veterans with borderline personality disorder. *Behavior Therapy, 32*, 371-390.
- Kosson, D., S., & Newman, J. P. (1986). Psychopathy and the allocation of attentional capacity in a divided-attention situation. *Journal of Abnormal Psychology, 95*, 257-263.
- Kruh, I. P., Frick, J. P., & Clements, C. B. (2005). Historical and personality correlates to the violence patterns of juveniles tried as adults. *Criminal Justice and Behavior, 32*, 69-96.
- Laakso, M. P., Vaurio, O., Koivisto, E., Savolainen, L., Eronen, M., & Aronen, H. J. (2001). Psychopathy and the posterior hippocampus. *Behavioral Brain Research, 188*, 187-193.
- Lahey, B. B., & Loeber, R. (1994). Framework for a developmental model of oppositional defiant disorder and conduct disorder. In D. K. Routh (Ed.), *Disruptive behavior disorders in childhood* (pp. 139-180). New York: Plenum Press.
- Lambert, M. J. (1992). Psychotherapy outcome research: Implication for integrative and elective therapist. In J. C. Norcross and M. R. Goldfried (Eds.), *Handbook of psychotherapy integration* (pp. 94-129). New York: Basic Books.
- LaPierre, D., Braun, C., & Hodgins, S. (1995). Ventral frontal deficits in psychopathy: neuropsychological findings. *Neuropsychologia, 33*, 139-151.
- Levenson, M. R., Kiehl, K. A., & Fitzpatrick, C. M. (1995). Assessing psychopathic attributes in a non-institutionalized population. *Journal of Personality and Social Psychology, 68*, 151-158.
- Lewis, C., Newson, E., & Newson, J. (1982). Father participation through childhood and its relationship with career aspirations and delinquency. In N. Beail & J. McGuire (Eds.), *Fathers: Psychological perspectives* (pp. 174-193). London: Junction.
- Lilienfeld, S. O. (1994). Conceptual problems in the assessment of psychopathy. *Clinical Psychology Reviews, 14*, 17-38.
- Lilienfeld, S. O., & Fowler, K. (2006). The self-report assessment of psychopathy. In C. J. Patrick (Ed.), *The handbook of psychopathy* (pp. 107-132). New York: Guilford.
- Linehan, M. M. (1993a). Cognitive-behavioral treatment of borderline personality disorder. New York: Guilford.
- Linehan, M. M. (1993b). Skills training manual for treating borderline personality disorder. New York: Guilford.

- Linehan, M. M., Armstrong, H. E., Suarez, A., Allmon, D., & Heard, H. L. (1991). Cognitive-behavioral treatment of chronically parasuicidal borderline patients. *Archives of General Psychiatry*, 48, 1060-1064.
- Linehan, M. M., Dimeff, L. A., Reynolds, S. K., Comtois, K. A., Welch, S. S., Heagerty, P., et al. (2002). Dialectical behavior therapy versus comprehensive validation therapy plus 12-step for the treatment of opioid dependent women meeting criteria for borderline personality disorder. *Drug and Alcohol Dependence*, 67, 13-26.
- Linehan, M. M., Schmidt, H., III., Dimeff, L. A., Craft, J. C., Kanter, J., & Comtois, K. A. (1999). Dialectical behavior therapy for patients with borderline personality disorder and drug-dependence. *American Journal of Addictions*, 8, 279-292.
- Linehan, M. M., Tutek, D. A., Heard, H. L., & Armstrong, H. E. (1994). Interpersonal outcome of cognitive behavioral treatment for chronically suicidal borderline patients. *American Journal of Psychiatry*, 151, 1771-1776.
- Lipsey, M. W. (1995). What do we learn from 400 research studies on the effectiveness of treatment with juvenile delinquents? In J. McGuire (Eds.), *What works: Reducing reoffending- Guidelines from research and practice* (pp. 63-78). Chichester, UK: Wiley.
- Loeber, R., Brinthaup, V. P., & Green, S. M. (1990). Attention deficits, impulsivity, and hyperactivity with or without conduct problems: Relationships to delinquency and unique contextual factors. In R. J. McMahon & R. D. Peters (Eds.), *Behavior disorders of adolescence: Research, intervention, and policy in clinical and school settings* (pp. 39-61). New York: Plenum Press.
- Loeber, R., Farrington, D. P., Stouthamer-Loeber, M., & van Kammen, W. B. (1998). *Antisocial behavior and mental health problems*. Mahwah, NJ: Erlbaum.
- Losel, F. (1995). The efficacy of correctional treatment: A review and synthesis of meta-evaluations. In J. McGuire (Ed.), *What works: Reducing reoffending- Guidelines from research and practice* (pp. 79-111). Chichester, UK: Wiley.
- Luntz, B. K., & Widom, C. S. (1994). Antisocial personality disorder in abused and neglected children. *American Journal of Psychiatry*, 151, 670-674.
- Lykken, D. T. (1957). A study of anxiety in the sociopathic personality. *Journal of Abnormal and Social Psychology*, 55, 6-10.
- Lykken, D. (1995). *The antisocial personalities*. Hillsdale, NJ: Lawrence Erlbaum Associates, Inc.
- Lykken, D. T. (2000). The causes and costs of crime and a controversial cure. *Journal of Personality*, 68, 55- 605.

- Lynam, D. R. (1998). Early identification of the fledgling psychopath: Locating the psychopathic child in the current nomenclature. *Journal of Abnormal Psychology, 107*, 566-575.
- Lynam, D. R., & Derefinko, K. J. (2006). Psychopathy and personality. In C. J. Patrick (Ed.), *The handbook of psychopathy* (pp. 133-155). New York: Guilford.
- Marra, T. (2005). *Dialectical behavior therapy in private practice: A practical and comprehensive guide*. Oakland, CA: New Harbinger Publications, Inc.
- Marshall, L. A., & Cooke, D. J. (1999). The childhood experience of psychopaths: A retrospective study of familial and social factors. *Journal of Personality Disorders, 13*, 221-225.
- Marshall, W. L., Hudson, S. M., Jones, R., & Fernandez, Y. M. (1995). Empathy in sex offenders. *Clinical Psychology Review, 15*, 99-113.
- Marshall, W. L., Turner, B. A., & Barbaree, H. E. (1989). An evaluation of life skills training for penitentiary inmates. *Journal of Offender Counseling, Service and Rehabilitation, 14*, 41-59.
- Martinson, R. (1974). What works? – Questions and answers about prison reform. *Public Interest, 35*, 22-54.
- Maxfield, M. G., & Widom, C. S. (1996). The cycle of violence revisited six years later. *Archives of Pediatric and Adolescent Medicine, 150*, 390-395.
- McCann, R. A., Ball, E. M., & Ivanoff, A. (2000). DBT with an inpatient forensic population: The CMHIP forensic model. *Cognitive and Behavioral Practice, 7*, 447-456.
- McCann, R.A., Comtois, K.A., & Ball, E. M. (2006). Dialectical Behavior Therapy. In F. Rotgers & M. Maniaci (Eds.), *Antisocial personality disorder. A practitioner's guide to comparative treatments* (pp. 137-155). New York: Springer Publishing Company.
- McCord, J. (1982). A longitudinal view of the relationship between parental absence and crime. In J. Gunn & D. P. Farrington (Eds.), *Abnormal offenders, delinquency, and the criminal justice system* (pp. 113-128). Chichester, UK: Wiley.
- McCord, J. (1997). On discipline. *Psychological Inquiry, 8*, 215-217.
- McDonald, A. W., & Iacono, W. G. (2006). Toward an integrated perspective on the etiology of psychopathy. In C. J. Patrick (Ed.), *The handbook of psychopathy* (pp. 375-385). New York: Guilford.

- McGuire, J., & Hatcher, R. (2001). Offense-focused problem solving. Preliminary evaluation of a cognitive skills program. *Criminal Justice and Behavior*, 28, 564-587.
- McKeel, A. J. (2006). A clinician's guide to research on solution-focused brief therapy. In S. D. Miller, M. A. Hubble, & B. L. Duncan, *Handbook of solution-focused brief therapy* (pp. 251-271). San Francisco: John Wiley & Sons, Inc.
- McMurrin, M. (2004). Offenders with personality disorders. In C. Hollin (Ed.), *The essential handbook of offender assessment and treatment* (pp. 239-251). Chichester, UK: Wiley.
- Milan, M. (2004). Behavioral Approaches to correctional management and rehabilitation. In C. Hollin (Ed.), *The essential handbook of offender assessment and treatment* (pp. 47-62). Chichester, UK: Wiley.
- Milan, M. A., & McKee, J. M. (1976). The cellblock token economy: Token reinforcement procedures in a maximum security correctional institution for adult male felons. *Journal of Applied Behavior Analysis*, 9, 253-275.
- Milan, M. A., Throckmorton, W. R., McKee, J. M., & Wood, L. F. (1979). Contingency management in a cellblock token economy: Reducing rule violations and maximizing the effects of token reinforcement. *Criminal Justice and Behavior*, 6, 307-325.
- Miller, S. D., Hubble, M. A., & Duncan, B. L. (2006). *Handbook of solution-focused brief therapy*. San Francisco: John Wiley & Sons, Inc.
- Miller, W. R., & Rollnick, S. (1993). *Motivational interviewing*. New York: Guilford.
- Minzenberg, M. J., & Siever, L. J. (2006). Neurochemistry and pharmacology of psychopathy and related disorders. In C. J. Patrick (Ed.), *The handbook of psychopathy* (pp. 251-277). New York: Guilford.
- Mitchell, D. G. V., Colledge, E., Leonard, A., & Blair, R. J. R. (2002). Risky decisions and response reversal. Is there evidence of orbitofrontal cortex dysfunction in psychopathic individuals? *Neuropsychologia*, 40, 2013-2022.
- Moffitt, T. E. (1993). Adolescence-limited and life-course persistent antisocial behavior: A developmental taxonomy. *Psychological Review*, 100, 674-701.
- Moffitt, T. E., & Caspi, A. (2001). Childhood predictors differentiate life-course persistent and adolescence-limited antisocial pathways in males and females. *Development and Psychopathology*, 13, 355-376.
- Moffitt, T. E., Caspi, A., Dickinson, N., Silva, P., & Stanton, W. (1996). Childhood-onset versus indolence-onset antisocial conduct problems in males: Natural history from age 3- 18 years. *Development and Psychopathology*, 8, 399-424.

- Murphy, C., & Vess, J. (2003). Subtypes of psychopathy: Proposed differences between narcissistic, borderline, sadistic, and antisocial psychopaths. *Psychiatric Quarterly*, *74*, 11-29.
- Newman, J. P., & Kosson, D. S. (1986). Passive avoidance learning in psychopathic and nonpsychopathic offenders *Journal of Abnormal Psychology*, *95*, 252-256.
- Newman, J. P., Wallace, J. F., Schmitt, W. A., & Arnett, P. A. (1997). Behavioral inhibition system functioning in anxious, impulsive and psychopathic individuals. *Personality and Individual Differences*, *23*, 583-592.
- Newson, J., & Newson, E. (1989). *The extent of physical punishment in the UK*. London: Approach.
- Novaco, R. W. (1975). *Anger control: The development and evaluation of an experimental treatment*. Lexington, MA: D.C. Heath
- Novaco, R. W., Ramm, M., & Black, L. (2004). Anger treatment with offenders. In C. Hollin (Ed.), *The essential handbook of offender assessment and treatment* (pp. 129-144). Chichester, UK: Wiley.
- Ogloff, J., Wong, S., & Greenwood, A. (1990). Treating criminal psychopaths in a therapeutic community program. *Behavioral Science and the Law*, *8*, 81-90.
- Palmer, T. (1975). Martinson revisited. *Crime and Delinquency*, *12*, 133-152.
- Patterson, G. (1986). The contribution of siblings to training for fighting: A microsocial analysis. In D. Olewus, J. Block, & M. Radke-Yarrow (Eds.), *Development of antisocial and prosocial behavior: Research, theories and issues* (pp. 235-262). New York: Academic Press.
- Paulus, P. B. (1988). *Prison crowding: A psychological perspective* New York: Springer-Verlag.
- Porporino, F.J., & Robinson, D. (1995). An evaluation of the reasoning and rehabilitation programme with Canadian federal offenders. In R.R. Ross & R.D. Ross (Eds.), *Thinking straight: The reasoning and rehabilitation programme for delinquency prevention and offender rehabilitation* (pp. 155-191). Ottawa, Canada: AIR.
- Porter, S. (1996). Without conscience or without active conscience? The etiologic of psychopathy revisited. *Aggression and Violent Behavior*, *1*, 179-189.
- Poythress, N. G., & Skeem, J. L. (2006). Disaggregating psychopathy: Where and how to look for subtypes. In C. J. Patrick (Ed.), *The handbook of psychopathy* (pp. 172-192). New York: Guilford.
- Quay, H. C. (1964). Dimensions of personality in delinquent boys as inferred from the factor analysis of case history data. *Child Development*, *35*, 479-484.

- Quay, H. C. (1987). Patterns of delinquent behavior. In H. C. Quay (Ed.), *Handbook of juvenile delinquency* (pp. 118-138). New York: Wiley.
- Raine, A. (1993). *The psychopathology of crime*. San Diego, CA: Academic Press.
- Raine, A. (1997). Autonomic nervous system factors underlying disinhibited, antisocial, and violent behavior. *Annals of the New York Academy of Science*, 794, 46-59.
- Raine, A., Ishikawa, S., Arce, E., Lencz, T., Knuth, K., Bihrlé, S., et al. (2004). Hippocampal structural asymmetry in unsuccessful psychopaths. *Biological Psychiatry*, 55, 185-191.
- Raine, A., Lencz, R., Bihrlé, S., LaCasse, L., & Colletti, P. (2000). Reduced prefrontal gray matter volume and reduced autonomic activity in antisocial personality disorder. *Archives of General Psychiatry*, 57, 119-127.
- Raine, A., Lencz, R., Taylor, K., Hellige, J. B., Bihrlé, S., Lacasse, L., et al. (2003). Corpus callosum abnormalities in psychopathic antisocial individuals. *Archives of General Psychiatry*, 60, 1134-1142.
- Raine, A., & Yang, Y. (2006). The neuroanatomical bases of psychopathy: A review of brain imaging findings. In C. J. Patrick (Ed.), *The handbook of psychopathy* (pp. 278-295). New York: Guilford.
- Rice, M. E., Harris, G. T., & Cormier, C. (1992). A follow-up of rapists assessed in a maximum security psychiatric facility. *Journal of Interpersonal Violence*, 5, 435-448.
- Rizvi, S. L., & Linehan, M. M. (2001). Dialectical behavior therapy for personality disorders. *Current Psychiatry Reports*, 3(1), 64-69.
- Robinson, D. (1995). *The impact of cognitive skills training on post-release recidivism among Canadian federal offenders*. No. R-41. Research Branch. Ottawa, Canada: Correctional Service Canada.
- Robinson, D., & Porporino, F. (2004). Programming in cognitive skills: The reasoning and rehabilitation programme. In C. Hollin (Ed.), *The essential handbook of offender assessment and treatment* (pp. 63-77). Chichester, UK: Wiley.
- Rogers, R. D. (2006). The functional architecture of the frontal lobes: Implications for research with psychopathic offenders. In C. J. Patrick (Ed.), *The handbook of psychopathy* (pp. 313-333). New York: Guilford.
- Ross, R. R., Fabiano, E. A., & Ewles, C. D. (1988). Reasoning and Rehabilitation. *International Journal of Offender Therapy and Comparative Criminology*, 32, 29-36.

- Roth, A., and Fonagy, P. (1996). *What works for whom? A critical review of psychotherapy research*. New York: Guildford Press.
- Roussy, S., & Toupin, J. (2000). Behavioral inhibition deficits in juvenile psychopaths, *Aggressive Behavior*, 26, 413-424.
- Schmallegger, F. (2005). *Criminal justice today: An introductory text for the 21st Century* (8th ed.). Saddle River, NJ: Pearson Prentice Hall.
- Schmauk, F. J. (1970). Punishment, arousal, and avoidance learning in sociopaths. *Journal of Abnormal Psychology*, 76, 325-335.
- Silverthorn, P. Frick, P. J., & Reynolds, R. (2001). Timing of onset and correlates of severe conduct problems in adjudicated girls and boys. *Journal of Psychopathy and Behavioral Assessment*, 23, 171-181.
- Spence, S. H. (1981). Differences in social; skills performance between institutionalized juvenile male offenders and a comparable group of boys without offence records. *British Journal of Clinical Psychology*, 20, 163-171.
- Steadman, H. J., Silver, E. P., Monahan, J., Appelbaum, P. S., Robbins, P. C., Mulvey, E. P., et al. (2000). A classification tree approach to the development of actuarial violence risk assessment tools. *Law and Human Behavior*, 24, 83-100.
- Teasdale, J. D., Segal, Z. V., Williams, J. M., Ridgeway, V., Soulsby, J., & Lau, M. (2000). Prevention of relapse-recurrence in major depression by mindfulness-based cognitive therapy. *Journal of Consulting and Clinical Psychology*, 68, 615-623.
- Tellegen, A., & Waller, N. (1994). Exploring personality through test construction: Development of the Multidimensional Personality Questionnaire. In S. R. Briggs & J. M. Cheek (eds.), *Personality measures: Development and evaluation* (Vol. 1, pp. 133-161). Greenwich, CT: JAI Press.
- Tiihonen, J., Hodgins, S., & Vaurio, O. (2000). Amygdaloid volume loss in psychopathy. *Society for Neuroscience Abstracts*, 20017.
- Toch, H. (1992). *Mosaic of human despair: Human breakdown in prison*. Washington, DC: American Psychological Association.
- Tohn, S. L., & Oshlag, J. A., (2006). Solution-focused therapy with mandated clients. In S. D. Miller, M. A. Hubble, & B. L. Duncan (Eds.), *Handbook of solution-focused brief therapy* (pp. 152-183). San Francisco: John Wiley & Sons, Inc.
- Trupin, E. W., Stewart, D. G., Beach, B., & Boesky, L. (2002). Effectiveness of a dialectical behavior therapy program for incarcerated female juvenile offenders. *Journal of Child and Adolescence Mental Health*, 7(3), 121-127.

- Verheul, R., Van Den Bosch, L. M., Koeter, M. W., De Ridder, M. A., Stijnen, T., & Van Den Brink, W. (2003). Dialectical behavior therapy for women with borderline personality disorder: 12-month, randomized clinical trial in the Netherlands. *British Journal of Psychiatry*, *182*, 135-140.
- Waldman, I. D., & Rhee, S. H. (2006). Genetic and environmental influences on psychopathy and antisocial behavior. In C. J. Patrick (Ed.), *The handbook of psychopathy* (pp. 205-228). New York: Guilford.
- Wampold, B. W. (2001). *The great psychotherapy debate: Models, methods, and findings*. Mahwah, NJ: Erlbaum.
- Waschbush, D. A. (2002). A meta-analytic examination of comorbid hyperactive-impulsive-attention problems and conduct problems. *Psychological Bulletin*, *128*, 118-150.
- Walters, G. D. (1990). *The criminal lifestyle: patterns of serious criminal conduct*. Newbury Park, CA: Sage.
- Walters, G. D. (1999). Short-term outcome of inmates participating in the lifestyle change program. *Criminal Justice and Behavior*, *26*, 322-337.
- Weiler, B. L., & Widom, C. S. (1996). Psychopathy and violent behavior in abused and neglected young adults. *Criminal Behavior and Mental Health*, *6*, 253-271.
- West, D. J., & Farrington, D. P. (1973). *Who becomes delinquent?* London: Heinemann.
- Widiger, T. A. (2006). Psychopathy and DSM-IV psychopathology. In C. J. Patrick (Ed.), *The handbook of psychopathy* (pp. 156-171). New York: Guilford.
- Widom, C. S. (1994). Childhood victimization and adolescent problem behaviors. In R. D. Ketterlinus & M. E. Lamb (Eds.), *Adolescent problem behaviors* (pp. 127-164).
- Widom, C. S., & Ames, M. A. (1994). Criminal consequences of childhood sexual victimization. *Child Abuse and Neglect*, *18*, 303-318.
- Williamson, S., Harpur, T. J., & Hare, R. D. (1991). Abnormal processing of affective words by psychopaths. *Psychophysiology*, *28*, 260-273.
- Wrightsman, L. (2005). *Forensic psychology*. Belmont, CA: Wadsworth.
- Yang, Y., Raine, A., Lencz, T., Lacasse, L., & Colletti, P. (2005). Volume reduction in prefrontal gray matter in unsuccessful criminal psychopaths. *Biological Psychiatry*, *57*, 1109-1116.
- Zamble, E., & Porporino, F. J. (1990). Coping, imprisonment, and rehabilitation: Some data and their implications. *Criminal Justice and Behavior*, *17*, 53-70.