A Comparison of White-Collar Offenders and Non-White-Collar Offenders on the Psychological Variables of Personality, Criminal Thinking, and Psychopathy

Laurie Ragatz
West Virginia University

Follow this and additional works at: https://researchrepository.wvu.edu/etd

Recommended Citation
Ragatz, Laurie, "A Comparison of White-Collar Offenders and Non-White-Collar Offenders on the Psychological Variables of Personality, Criminal Thinking, and Psychopathy" (2011). Graduate Theses, Dissertations, and Problem Reports. 4770.
https://researchrepository.wvu.edu/etd/4770

This Dissertation is protected by copyright and/or related rights. It has been brought to you by the The Research Repository @ WVU with permission from the rights-holder(s). You are free to use this Dissertation in any way that is permitted by the copyright and related rights legislation that applies to your use. For other uses you must obtain permission from the rights-holder(s) directly, unless additional rights are indicated by a Creative Commons license in the record and/or on the work itself. This Dissertation has been accepted for inclusion in WVU Graduate Theses, Dissertations, and Problem Reports collection by an authorized administrator of The Research Repository @ WVU. For more information, please contact researchrepository@mail.wvu.edu.
A Comparison of White-Collar Offenders and Non-White-Collar Offenders on the Psychological Variables of Personality, Criminal Thinking, and Psychopathy

Laurie Ragatz M.A.

Dissertation submitted to
The Eberly College of Arts and Sciences
at West Virginia University
in partial fulfillment of the requirements
for the degree of

Doctor of Philosophy
in
Psychology

William Fremouw, Ph.D., ABPP, Chair
Kevin Larkin, Ph.D.
Amy Fiske, Ph.D.
Claire St. Peter Pipkin, Ph.D.
Edward Baker, Ph.D.

Department of Psychology

Morgantown, West Virginia
2010

Keywords: Psychopathy, Criminal Thinking, White-Collar Criminals
ABSTRACT

A Comparison of White-Collar Offenders and Non-White-Collar Offenders on the Psychological Variables of Personality, Criminal Thinking, and Psychopathy

Laurie Ragatz

The first purpose of this study was to replicate Walters and Geyer (2004) by examining how white-collar offenders differ from non-white-collar offenders on criminal thinking styles and lifestyle criminality. The second purpose was to examine the psychopathic characteristics of white-collar offenders in comparison to non-white-collar offenders. The third purpose was to explore the psychopathology of white-collar offenders compared to non-white-collar offenders. The study sample included 48 white-collar only offenders (offenders that only committed white-collar crime), 89 white-collar versatile offenders (offenders that have previously committed non-white-collar crime), and 89 non-white-collar offenders. Groups were matched on age and ethnicity. All participants completed the Psychological Inventory of Criminal Thinking Styles (PICTS), the Psychopathic Personality Inventory-Revised (PPI-R), and the Personality Assessment Inventory (PAI). The Lifestyle Criminality Screening Form (LCSF) was completed using participants’ Presentence Investigation Reports (PSIs). Results demonstrated white-collar only offenders had lower scores on the PICTS Sentimentality scale and LCSF. Additionally, white-collar offenders scored higher on PPI-R subscales (i.e., Social Potency and Machiavellian Egocentricity) and PAI scales (i.e., Alcohol Problems and Anxiety-Related Disorders). Non-white-collar offenders had higher scores on the PAI Drug Problems scale. Logistic regression findings demonstrated PAI Drug and Alcohol Problem scales distinguished white-collar versatile and non-white-collar offenders. White-collar only offenders were differentiated from non-white-collar offenders by the PAI Anxiety-Related Disorders scale, PAI Drug Problems scale, PAI Alcohol Problems scale, and PPI-R total score. The logistic regression model was not significant for distinguishing white-collar only and white-collar versatile offenders. Research findings have implications for treatment practices with white-collar offenders.
Acknowledgements

I would like to acknowledge my advisor and dissertation committee chairperson William Fremouw for his suggestions and support developing this project. In addition, I would like to thank my dissertation committee member Edward Baker for his assistance with formulating and implementing this study. I also want to acknowledge Amy Fiske, Claire St. Peter Pipkin, and Kevin Larkin for the recommendations they provided as part of my dissertation committee. I would like to thank Katrina McCoy for her help with data collection and coding. I want to acknowledge Glenn Walters for his feedback regarding some of the dissertation findings. I would like to thank Aaron Metzger for his advice on statistics utilized in this study. Lastly, I would like to thank Brett Ragatz for all his support throughout the dissertation process.
Table of Contents

Introduction ..................................................................................................................1

Prevalence of White-Collar Crime ...........................................................................1

Definitions of White-Collar Crime ..........................................................................2

Demographic Variables .............................................................................................4

Psychological Attributes of White-Collar Criminals ..............................................7

Criminal Thinking Patterns .....................................................................................10

Lifestyle Criminality Screening Form ....................................................................14

Psychopathy .............................................................................................................15

Personality Assessment Inventory .........................................................................22

Current Study ..........................................................................................................26

Method .....................................................................................................................28

Participants .............................................................................................................28

Measures ..................................................................................................................31

Procedures ..............................................................................................................36

Design and Data Analysis .......................................................................................37

Results .......................................................................................................................38

Offender Group Comparisons for Demographic Variables .........................38

Offender Group Comparisons for the LCSF and PICTS ..............................38

Offender Group Comparisons for the PPI-R ..................................................41

Offender Group Comparisons for the PAI .........................................................44

Using Psychological Variables to Predict White-Collar and Non-White-Collar Status...46

Discussion .............................................................................................................48
A Comparison of White-Collar Offenders and Non-White-Collar Offenders on the Psychological Variables of Personality, Criminal Thinking, and Psychopathy

Bernie Madoff deceived investors out of nearly $65 billion in an elaborate ponzi scheme (CBC News, 2009). The Enron scandal, led by chief executive Kenneth Lay, cost stockholders $31.8 billion (BBC News, 2006). In fact, it is estimated that the costs of white-collar crime in the U.S. may reach as much as $1 trillion annually (Friedrichs, 2007; Schlegel, 2000). Of course, this estimate overlooks the psychological impact these crimes can have on their victims. Research has shown victims of white-collar crime are at an increased risk for both depression and anxiety (Sharp, Shreve-Neiger, Fremouw, Kane, & Hutton, 2004).

Prevalence of White-Collar Crime

White-collar crime prevalence data has been frequently gathered from various government organizations, media channels, and journals. This method of data collection is problematic because different coding methods and definitions are utilized across sources (Friedrichs, 2007). The 2007 white-collar crime data from the Federal Judiciary of the U.S. Courts showed there were 994 forgery, 10,678 fraud, and 565 embezzlement cases. Fraud offenses were broken down into 18 categories. The most prominent fraud convictions included conspiracies to defraud the U.S. \((n = 2,195)\), identification or information fraud \((n = 1,951)\), false statements \((n = 811)\), mail fraud \((n = 717)\), tax fraud \((n = 615)\), wire or television fraud \((n = 577)\), and health care fraud \((n = 316)\). Embezzlement offenses were subdivided into the following categories: bank \((n = 202)\), postal service \((n = 173)\), financial institutions \((n = 23)\), and other \((n = 167)\) (National White-Collar Crime Center, 2008). These statistics substantially underestimate the prevalence of white-collar crime because they only included criminals who were prosecuted and convicted in federal courts. These statistics do not take into account white-collar crimes
which are prosecuted in state criminal courts, civil courts, or at an administrative level.

Furthermore, these statistics also do not include white-collar criminals who evade conviction.

**Definitions of White-Collar Crime**

Edwin H. Sutherland first defined white-collar crime as “crime committed by a person of respectability and high social status in the course of his occupation” (Sutherland, 1949, p. 9). Since Sutherland’s initial white-collar crime definition, debate regarding whether white-collar crime is best defined by offender characteristics (e.g., socioeconomic status, job position), offense characteristics (e.g., context, legal statute, victim type, nature of harm), or a combination of offender and offense characteristics has flourished (Friedrichs, 2007). Moreover, several terms for different subtypes of white-collar crime (i.e., elite deviance, occupational crime, and corporate crime) have been developed, which has led to even more confusion about the definition (Friedrichs, 2007).

Clinard and Quinney (1973) asserted that the term white-collar crime should be replaced by the terms occupational crime and corporate crime. They defined occupational crime as “offenses committed by individuals for themselves in the course of their occupations and the offenses of employees against their employers” (p. 188). Corporate crime was described as “offenses committed by corporate officials for their corporation and the offenses of the corporation itself” (p. 188). Edelhertz (1970) advocated for a definition of white-collar crime which did not restrict such offenses to the occupational domain. Specifically, he stated white-collar crime was “an illegal act or series of illegal acts committed by nonphysical means and by concealment or guile to obtain money or property to avoid the payment or loss of money or property or to obtain business or personal advantage” (p. 3). The Federal Bureau of Investigation also excludes occupation context from their definition of white-collar crime, which
they define as “those illegal acts which are characterized by deceit, concealment, or violation of trust and which are not dependent upon the application of threat of physical force or violence. Individuals and organizations commit these acts to obtain money, property, or services; to avoid the payment or loss of money or services; or to secure personal or business advantage” (United States Department of Justice, 1989, p. 3).

When studying white-collar crime, scholars (Benson & Moore, 1992; Daly, 1989; Langton & Piquero, 2007; Poortinga, Lemmen, & Jibson, 2006; Walters & Geyer, 2004; Weisburd, Chayet, & Waring, 1990; Wheeler, Weisburd, Waring, & Bode, 1988) have predominately relied on the definition or an adaptation of the definition set forth by Wheeler, Weisburd, and Bode (1982), which stated that white-collar crimes are “economic offenses committed through the use of some combination of fraud, deception, or collusion” (p. 642). The definition has been then further qualified by requiring that the offender’s offense be one of eight types: bank embezzlement (taking company funds, which were meant for other purposes, and using them for their own personal gain), tax fraud (deceiving the government in effort to avoid paying or decrease the amount of taxes one pays), postal fraud (using a government-regulated means of communication, such as the mail, to deceive others), credit fraud (attempting to secure or securing loans with a dishonest application), false claims and statements (defrauding a government agency in order to receive undeserving funds), bribery (influencing a public officer by giving or promising to give him or her something in return), securities fraud (providing investors with untrue stock information meant to impact their purchasing practices and other illegal stock market actions), or antitrust violations (attempting to regulate or fix the prices of different merchandise and services) (Wheeler et al., 1982).
Demographic Variables

Despite the definition used to describe white-collar crime, scholars have recognized that white-collar offenders are unique from non-white collar offenders (e.g., drug dealing, theft) on several demographic variables. Wheeler et al. (1988) conducted a descriptive study of the demographic characteristics of non-white-collar offenders \( (n = 210, 31.4\% \text{ women}) \), white-collar offenders \( (n = 1,342, 14.5\% \text{ women}) \), and a U.S. community sample. White-collar crime was defined using Wheeler et al.’s (1982) criteria. The data was gathered from the presentence investigation (PSI) reports of offenders convicted in U.S. federal criminal courts in seven districts between the years of 1976 and 1978. The community sample data was collected from several different federal sources (i.e., Federal Judicial Center, United States Bureau of the Census). Non-white collar offenders were convicted of forgery or postal fraud. Findings showed white-collar offenders were more likely to be male (white-collar: 85.5\% vs. non-white-collar: 68.6\% vs. community: 48.6\%), Caucasian (white-collar: 81.7\% vs. non-white-collar: 34.3\% vs. community: 76.8\%), older age (white-collar: 40.0 vs. non-white-collar: 30.0 vs. community: 30.0), graduate from high school (white-collar: 79.3\% vs. non-white-collar: 45.5\% vs. community: 69.0\%), graduate from college (white-collar: 27.1\% vs. non-white-collar: 3.9\% vs. community: 19.0\%) and less likely to be unemployed (white-collar: 5.7\% vs. non-white-collar: 56.7\% vs. community: 5.9\%) when compared to the non-white-collar offender and community samples.

Findings also demonstrated that the costs of white-collar crime were more extensive, with white-collar criminals more likely to have 100 or more victims (white-collar: 17.7\% vs. non-white-collar: 1.9\%), to have caused damage to an organization (white-collar: 88.3\% vs. non-white-collar: 28.9\%) and to steal amounts greater than $100,000 (white-collar: 29.7\% vs. non-
white-collar: 2.1%) when compared to non-white-collar offenders. White-collar offenders were also more likely to have five or more codefendants (white-collar: 35.7% vs. non-white-collar: 18.9%) and to have been perpetrating the crime for longer than a year (white-collar: 50.9% vs. non-white-collar: 7.0%) compared to non-white-collar offenders.

Benson and Moore (1992) utilized the PSI reports of male and female federal white-collar \((n = 2,462)\) and non-white-collar \((n = 1,986)\) offenders convicted in eight federal districts (different federal districts than the districts examined in the Wheeler et al. [1988] study) between the years 1973 and 1978. White-collar crimes included bank embezzlement, bribery, income tax violations, false claims and statements, and mail fraud. Non-white collar offenders were found guilty of drug crimes, postal forgery, or bank robbery. Overall, descriptive findings showed white-collar offenders were less likely to have an arrest history (embezzlement [18.4%], bribery [23.6%], income tax fraud [42.1%], false claims [49.0%], and mail fraud [65.9%]) than non-white-collar offenders (bank robbery [88.4%], postal forgery [82.6%] and drug crimes [72.2%]).

The crimes each offender had previously committed were categorized into violent, property, white-collar, or minor offenses. A comparison of the criminal histories of white-collar and non-white-collar offenders demonstrated white-collar offenders were more likely to only have an arrest history of white-collar crime, while non-white-collar criminals showed a criminal history that included all four crime categories. White-collar offenders were also less likely to have previously used drugs (5.5% vs. 48.5%, respectively), to have used alcohol excessively (4.2% vs. 8.3%, respectively), and to have demonstrated impaired academic performance (24.6% vs. 53.5%, respectively) than non-white-collar offenders.

A more recent study (Poortinga et al., 2006) of the demographic characteristics of white-collar offenders utilized a sample of male and female white-collar and non-white-collar criminals
in a psychiatric facility between the years of 1991 and 2002. All data were gathered from the court evaluations. White-collar offenders were charged with embezzlement ($n = 70$, $52.9\%$ women) and non-white-collar offenders ($n = 73$, $39.7\%$ women) were charged with a non-violent theft offense (i.e., retail fraud, stealing from a person, bank robbery without a weapon, vehicle theft). No significant differences were found between white-collar offenders and non-white-collar offenders on age ($39.2$ vs. $36.7$, respectively), marital status, or gender. Study findings demonstrated white-collar offenders were more likely to have been employed ($85.7\%$ vs. $51.8\%$, respectively), have a higher level of education ($12.9$ years vs. $10.7$ years, respectively), be Caucasian ($80.9\%$ vs. $60.3\%$, respectively), and to have been in management ($21.9\%$ vs. $0.0\%$, respectively) compared to non-white-collar offenders.

White-collar offenders were also significantly less likely to have contact with police as a juvenile ($12.8\%$ vs. $37.2\%$, respectively), and were less likely to have an adult conviction ($41.8\%$ vs. $76.6\%$, respectively) than non-white-collar criminals. Non-white-collar offenders were significantly more likely to meet diagnostic criteria for substance abuse or dependence ($90.9\%$ vs. $64.4\%$, respectively) and less likely to meet diagnostic criteria for depressive disorders ($13.0\%$ vs. $32.3\%$, respectively) than white-collar offenders. Also, the average monetary damages caused by white-collar offenders were significantly higher than those caused by non-white-collar offenders ($$35,792$ vs. $246$, respectively). This study concluded by showing the variables most predictive of white-collar criminality were not having a substance abuse disorder, being Caucasian, and having a higher education level. In sum, it appears that white-collar offenders are distinct from non-white-collar offenders on several demographic variables (e.g., ethnicity, age, education level, and criminal history).
Psychological Attributes of White-Collar Criminals

Research exploring the psychological characteristics of white-collar criminals is limited. Moreover, these limited studies have only compared the personality characteristics of white-collar offenders to those of non-criminal white-collar professionals. For instance, Collins and Schmidt (1993) used a self-report survey design to assess the personality traits of federal white-collar criminals \( n = 329, 21.6\% \text{ women} \) and non-criminal white-collar employees \( n = 320, 53.8\% \text{ women} \). White-collar criminals were convicted of the following crimes: antitrust violations, counterfeiting, embezzlement, forgery, fraud, interstate transportation of stolen vehicles, misuse of public money, money laundering, bribery, and racketeer influence in corrupt organizations. Personality was measured with the California Psychological Inventory (CPI; Gough, 1987), the General Biodata Questionnaire (GBQ; Owens, 1976), and the Employment Inventory (measure of work-related traits; Paajanen, 1988). White-collar offenders were significantly higher in anxiety, involvement in extracurricular activities, and social extraversion. In comparison, non-criminal white-collar professionals were significantly elevated in socialization, responsibility, tolerance, and performance.

One study (Kolz, 1999) examined the personality traits of individuals admitting to employee theft. The study sample included 218 (69.3\% women) individuals employed at a women’s clothing store chain. Nineteen percent of the sample endorsed taking part in workplace theft. All participants completed a demographic questionnaire and the NEO Five-Factor Inventory (NEO-FFI; Costa & McCrae, 1992). Study findings showed low conscientiousness and low agreeableness predicted admitting to employee theft.

Utilizing a semi-structured interview procedure, Alalehto (2003) had 128 business professionals report on the behavior and personality traits of a colleague in the construction,
music, or engineering business. Specifically, the researcher instructed participants to describe the illegal behavior of their friend or coworker if they had “close knowledge of whether or not the person committed the economic crime, regardless of whether that person was convicted of it” (p. 343). Participants who did not know of a colleague partaking in illegal activities at work were instead asked to describe a co-worker who did not participate in illegal acts at work. A total of 55 criminal white-collar offenders and 69 non-criminal white-collar professionals were described. The interview manual consisted of questions assessing six personality traits (i.e., extroversion, agreeableness, conceitedness, neuroticism, intellectualism, negative valency). Example interview questions included “Is he dutiful or does he take each day as it comes, rather thoughtlessly, and so forth?” and “Would he rather be liked by others in all that he does or is he not bothered much by this?” (p. 353). After a participant described his colleague’s attitude in response to a specific interview question, the descriptions were categorized into one of the six traits. A computer program was then used to assess the different combination of personality traits that were common among white-collar offenders and professionals. Descriptive data showed a greater number of white-collar offenders were described as extroverted (e.g., outgoing, controlling, calculating), less agreeable, and neurotic. The non-criminal white-collar professionals were more agreeable and conceited (e.g., diligent, frugal, refined).

Blickle, Schlegel, Fassbender, and Klein (2006) explored the differences in personality between 76 (7.9% women) incarcerated white-collar offenders and 150 (37.3% women) business managers. The white-collar offenders (46.8 years) were older than the managers sample (44.1 years). White-collar offenders reported having had a mean annual income of $93,472 previous to their current incarceration. Individuals in the management sample reported a mean annual income of $148,326. All respondents completed self-report measures assessing social
desirability, hedonism, narcissism, and conscientiousness. Self-control was measured via an assessment in which individuals read four separate scenarios where cheating another individual was possible. If respondents chose to cheat, they were considered low in self-control. Self-control was also measured using the Retrospective Behavioral Self-Control scale (RBS; Marcus, 2003). A logistic regression showed higher hedonism, narcissism, conscientiousness, and lower levels of behavioral self-control predicted white-collar criminality.

In a recent study, Listwan, Piquero, and Van Voorhis (2010) investigated whether white-collar criminals (n = 64) with specific personality styles were more likely to recidivate. The white-collar sample was primarily Caucasian (68.8%), married (59.4%), had children (82.5%), had a high school degree (29.7%), employed full-time (53.2%), and had a prior criminal record (78.1%). The mean age of respondents was 38.75. All white-collar criminals were male and convicted of at least one of the following crimes: bank crimes (e.g., bank fraud, bank fund theft) or fraud crimes (e.g., bribery, embezzlement, mail fraud, wire fraud, RICO violation, FDA violation, extortion). Data for this study was obtained at two different intervals. Between the years of 1986 and 1988, all participants completed the Jesness Inventory (Jesness, 1996). The Jesness Inventory was utilized to measure four personality styles (i.e., aggressive, neurotic, dependent, and situational). Ten years later, archival records (i.e., National Crime Information Center records, incarceration records) were reviewed to determine if the offender had recidivated (i.e., arrested). Listwan and colleagues then conducted a regression to examine the extent that personality predicted future arrest. Results demonstrated that white-collar offenders that had high scores on the neurotic personality dimension were significantly more likely to recidivate when compared to all the other personality types.
Criminal Thinking Patterns

Walters (1990; 2006a; 2006c; 2010) suggests three variables (i.e., conditions, cognitions, and choices) interact to initiate and maintain the criminal lifestyle. Conditions include both external environmental and internal personal factors which have an impact a person’s behavior. Conditions represent the alternatives available to a person in any given situation. An individual then makes a choice from the accessible options. Next, an individual evaluates the outcome of his or her selection. When an individual receives an unfavorable consequence because of his or her choice, he or she does not make that same selection in the future. However, when an individual receives a desired consequence, he or she subsequently makes that same selection in the future. What then follows is the development of a system of cognitions (i.e., criminal thinking patterns) an individual uses to substantiate his or her antisocial choices and acts. Yochelson and Samenow (1976) originally assumed there to be 52 criminal thinking errors which contributed to the criminal lifestyle. Walters (2006a, 2010) believes eight criminal thinking styles maintain the criminal lifestyle. Interventions which target criminal thinking assume that changing underlying thinking patterns ultimately lead to changes in behavior.

Criminal thinking or attitudes conducive to a criminal lifestyle have been linked to several behavioral outcomes such as treatment completion (Staton-Tindall et al., 2007), treatment effects (Walters, 1995; 2003a; Walters, Trgovac, Rychlec, Di Fazio, & Olson, 2002), recidivism (Palmer & Hollin, 2004a; Walters, 1997; 2005; Walters & Elliot, 1999), risk for sexually offending (Walters, Deming, & Elliot, 2009), and participation in disciplinary acts in prison (Walters, 1996; 2007; Walters & Geyer, 2005; Walters & Mandell, 2007). In fact, one study with male federal inmates demonstrated that criminal thinking contributed to the prediction of three different types of disciplinary outcomes (i.e., severe, aggressive, total), above what was
already accounted for in the model by psychopathy (measured with the Psychopathy Checklist: Screening Version [Hart, Cox, & Hare, 1995]), age, and prior disciplinary acts (Walters & Mandell, 2007). Additionally, criminal thinking dimensions have been found to be moderately correlated with a self-report measure of antisocial personality (i.e., Antisocial Features scale of the Personality Assessment Inventory [PAI]) and to a much lesser extent with other dimensions of psychopathology (i.e., Somatic Complaints, Depression, Mania, Schizophrenia, Paranoia, and Anxiety scales of the PAI) (Morey, 1991; 2003; Walters & Geyer, 2005).

Several self-report measures exist for assessing criminal thinking dimensions (e.g., Texas Christian University Criminal Thinking Scale [Knight, Simpson, & Morey, 2002], Criminal Sentiments scale [Andrews & Wormith, 1984]), with the Psychological Inventory of Criminal Thinking Styles (PICTS; Walters, 2006a; 2010; see Walters & Schlauch, 2008) having the most extensive empirical foundation. The PICTS contains 80-items, which load onto 19 subscales and also a general criminal thinking scale. The 19 scales of the PICTS includes two validity indices, eight thinking style scales, four factor scales, two content scales, two composite scales, and a Fear-of-Change scale (Walters, 2006a; 2010). The PICTS General Criminal Thinking scale score can be computed by summing responses to the 64-items of the eight thinking style scales (see Walters & Schlauch, 2008).

Criminal thinking patterns have been studied in research with male federal offenders (Walters, 1995), sex offenders (Hatch-Maillette, Scalora, Huss, & Baumgartner, 2001; Walters et al., 2009), white-collar offenders (Walters & Geyer, 2004), female federal offenders (Walters, Elliott, & Miscoll, 1998), female state offenders (Walters et al. 1998; Walters & Elliot, 1999), male English offenders (Palmer & Hollin, 2004b), male Irish probationers (Healey & O’Donnell, 2006), male Dutch prisoners (Bulten, Nijman, & van der Staak, 2009), and male and female
college students (McCoy et al., 2006; Walters, Felix, & Reinoehl, 2009; Walters & McCoy, 2007).

For instance, Hatch-Maillette et al. (2001) found child molesters demonstrated lower scores on the Cutoff (eliminating distress with drugs or by committing illegal acts) and Discontinuity (proclivity to be frequently distracted, which leads to neglect of personal goals) thinking style scales in comparison to a non-sex offender sample. A comparison of male federal offenders and female federal and state offenders on the eight thinking style scales showed female offenders (combined state and federal samples) had significantly higher scores on all eight scales than males (Walters et al., 1998). Walters and McCoy (2007) showed female offenders (sample included state and federal offenders) scored highest on seven of the eight thinking style scales (female offenders were significantly lower on Power Orientation [preferring to be in control of circumstances] compared to male students) when compared to male students, female students, and male federal offenders. Additionally, research suggests that male federal offenders (Walters, 1995) have demonstrated significantly lower levels of criminal thinking on the eight thinking style scales when compared to male English (Palmer & Hollin, 2004b) and Irish (Healy & O’Donnell, 2006) offenders.

Only one previous study (Walters & Geyer, 2004) has investigated criminal thinking patterns unique to white-collar offenders. In this study, the definition of white-collar crime was adopted from Wheeler et al. (1982) and included offenders that committed the eight crimes (i.e., antitrust offenses, securities and exchange fraud, postal/wire fraud, false claims/statements, credit fraud, bank embezzlement, tax fraud, and bribery) specified by Wheeler et al. with the addition of two white-collar offenses (i.e., health care fraud and counterfeiting). The white-collar offenders were then divided into two separate groups. One group consisted of 34 male
white-collar offenders (with no criminal history or only a history of committing white-collar offenses) and the other white-collar offender group consisted of 23 male criminally versatile white-collar offenders (had a criminal history of offenses that were not white-collar crimes). A comparison group of 66 male non-white-collar criminals (primarily convicted of drug, theft, or firearm violation offenses) was also utilized.

Individuals in all three groups completed the PICTS (Walters, 2006a; 2010) and the Social Identity as a Criminal Scale (SIC; Cameron, 1999). The authors chose to focus only on the factor scales of the PICTS (Problem Avoidance, Interpersonal Hostility, Self-Assertion/Deception, and Denial of Harm) when comparing the three groups. In addition, the researchers looked at the three subscales (In-Group Ties, Centrality, and In-Group Affect) of the SIC (measure of degree one identifies with other offenders). The In-Group Ties subscale measured the extent an individual has corresponded with other criminals. The Centrality subscale assessed whether an individual believed identity in a group was necessary. The In-Group Affect subscale assessed an individual’s viewpoint of offenders. Lastly, the authors looked at differences between groups on a modified version (arrest items were eliminated) of the Lifestyle Criminality Screening Form-Revised (LCSF-R; Walters, 1998; Walters, White, & Denney, 1991). The LCSF-R was utilized to measure four interpersonal subtypes important to criminality (irresponsibility, self-indulgence, interpersonal intrusiveness, and social rule-breaking) and was completed via file review by one of the study authors.

Several noteworthy differences were found between the three groups on demographic variables. The white-collar crime only group was significantly older (50.1) than the white-collar criminally versatile (43.6) and non-white-collar (41.6) offender groups. Also, education differences were found, with the white-collar crime only individuals (16.0) having more
education than white-collar criminally versatile (14.1) and non-white-collar offenders (12.4). Lastly, both white-collar offender groups were primarily Caucasian compared to non-white-collar offenders. An ANOVA comparing the three groups found white-collar only offenders to be significantly lower on the PICTS Self-Assertion/Deception subscale (tendency to justify or give reasons for taking part in criminal behavior) and also the SIC In-Group Ties subscale. Additionally, the criminally versatile white-collar offender group had a significantly higher score on the SIC Centrality subscale when contrasted with the other groups. The non-white-collar group was found to score significantly highest on the LCSF-R measure, followed by the criminally versatile white-collar offender group, and lastly the white-collar crime only group. When controlling for the influence of demographic differences (i.e., education, age, sentence length, ethnicity, marital status) between groups, the only significant findings that remained was on the SIC In-Group Ties subscale and the LCSF-R total score.

Interestingly, findings from Walters and Geyer’s (2004) study suggest that the PICTS did not distinguish well between white-collar offenders and non-white-collar offenders. However, these results could be an artifact of just focusing on the PICTS factor scales. Future research should examine whether differences exist on the eight thinking style scales or the general criminal thinking scale score.

**Lifestyle Criminality Screening Form**

The LCSF (Walters et al., 1991), a measure of behaviors associated with criminality, consists of four subscales: Irresponsibility, Self-Indulgence, Interpersonal Intrusiveness, and Social Rule Breaking. The LCSF is a short risk appraisal measure which is completed in ten minutes by reviewing information available in client files. Much of the instrument’s data can be collected from the PSI.
Walters (2006b) conducted a meta-analysis of 22 studies utilizing either a risk appraisal instrument (completed with existing records) or self-report measure to predict recidivism or institutional misconduct. Findings demonstrated that each assessment type (risk appraisal vs. self-report) contributed unique variance to the prediction of recidivism or institutional misconduct (Walters, 2006b). Furthermore, Walters and Geyer (2004) found white-collar only offenders could be reliably distinguished from white-collar criminally versatile offenders and a non-white-collar offender group by a self-report measure (SIC In-Group Ties subscale) and risk-appraisal measure (LCSF). This demonstrates the importance of utilizing both risk appraisal and self-report measures with forensic samples to answer psycho-legal questions.

LCSF total scores have been found to be predictive of substance misuse (Walters, 1995), unemployment (Walters & McDonough, 1998), violation of parole or probation terms (Walters, Revella, & Baltrusaitis, 1990), reconviction (Kroner & Mills, 2001; Walters et al., 1990; Walters & Chlumsky, 1993), and disciplinary infractions (Walters, 2005; 2007). The LCSF has also been found to significantly predict criminal justice outcomes, beyond what can be predicted by a diagnosis of antisocial personality disorder (Walters & Chlumsky, 1993) and demographic variables (e.g., age, gender, and race) (Walters et al., 1990; Walters & Chlumsky, 1993; Walters & McDonough, 1998). The Psychopathy Checklist-Revised (PCL-R; Hare, 1991; 2003b) is a risk appraisal instrument with considerable research demonstrating its usefulness in predicting criminal justice outcomes. Research shows that the LCSF is just as capable of predicting recidivism and institutional misconduct as the PCL-R (Walters, 2003b).

**Psychopathy**

Cleckley (1941/1988), in his renowned book *The Mask of Sanity*, described the 16 traits he believed exemplified the psychopath. Some of the traits described by Cleckley were
superficial charm, high intelligence, self-centeredness, lack of nervousness, impaired judgment, not having goals, undependable, propensity to commit antisocial acts, dishonesty, lack of regret for actions, and impaired emotional capabilities. The book is largely a constellation of case studies which illustrate that psychopathy can be seen across professions (i.e., scientist, physician, and businessman) and social classes. Furthermore, Babiak (2007) asserted that many characteristics of the psychopath may be favorable in the business or corporate domain. For instance, self-centeredness might be recognized as having “Self-confidence” or a lack of specified goals might be deemed “Visioning” (Babiak, 2007). Recently, Babiak, Neumann, and Hare (2010) explored the relation between psychopathy and various work performance dimensions in a sample of 203 (77.8% male, 91.1% Caucasian) corporate professionals. Psychopathy scores (as measured by the PCL-R) were found to be positively correlated with being a successful communicator across several modalities (e.g., writing, presenting), producing and following through with new proposals, and having critical thinking skills. Psychopathy scores were negatively correlated with effectively getting along with other employees and managing employees appropriately so that they work successfully together.

Hare (1991; 2003), relying on the work of Cleckley, developed the gold standard for the assessment of psychopathy: the PCL-R. This instrument requires extensive training to implement, and is based on extensive file-review information (often taking two hours or longer) along with a supplemental interview with the individual being assessed (Hare, 1991; 2003). Factor analytic research with the PCL-R has provided the most support for a two-factor model. Factor 1 has been said to be most representative of the interpersonal and affective features of psychopathy, with items such as superficial charm, shallow affect, remorselessness, and grandiosity loading on this factor. Factor 2 is described as primarily composed of the behavioral
or antisocial aspects of psychopathy, which includes items such as parasitic lifestyle, lack of responsibility, impulsiveness, and versatility in criminal acts. Psychopathy has become a necessary construct for empirical examination as it has been found to be predictive of violent recidivism (Porter, Birt, & Boer, 2001; Serin & Amos, 1995), committing disciplinary infractions while incarcerated (Edens, Poythress, & Lilienfeld, 1999; Edens, Poythress, Lilienfeld, & Patrick, 2008a; Edens, Poythress, Lilienfeld, Patrick, & Test, 2008b; Patrick, Edens, Poythress, Lilienfeld, & Benning, 2006; Walters, Duncan, & Geyer, 2003), and propensity to become more antisocial (i.e., increased chance of recidivism) following psychological treatment (Hare, Clark, Grann, & Thornton, 2000; Rice, Harris, & Cormier, 1992; Seto & Barbaree, 1999).

In recent years, several self-report measures of psychopathy (i.e., Levenson Primary and Secondary Psychopathy Scales [Levenson, Kiehl, & Fitzpatrick, 1995], Self-Report Psychopathy Scale-II [SRP-II; Hare, 1985], and the Psychopathic Personality Inventory-Revised [PPI-R; Lilienfeld & Widows, 2005]) have been developed. These self-report measures have helped to decrease assessment duration (amount of time spent completing and scoring assessments) and have extended the populations (e.g., college students and community samples) that can be sampled for psychopathic features (Lilienfeld & Fowler, 2006).

The Psychopathic Personality Inventory-Revised (PPI-R; Lilienfeld & Widows, 2005) was modified from its earlier version (Psychopathic Personality Inventory [PPI; Lilienfeld & Andrews, 1996]) by a reduction in the number of questions (PPI had 187-items and the PPI-R has 154-items). The PPI-R is unique from the PCL-R because it does not contain items assessing illegal behaviors, and instead represents a measure specifically devoted to the personality aspects
of psychopathy. In fact, research supports this premise because the PPI has been found to correlate more strongly with Factor 1 than with Factor 2 of the PCL-R (Poythress et al., 1998).

The PPI-R consists of three validity scales, eight subscale scores, and a total score. Research has also demonstrated that the PPI-R consists of two factors: Fearless Dominance (PPI-I; contains the Social Potency, Fearlessssness, and Stress Immunity subscales) and Self-Centered Impulsivity (PPI-II; Machiavellian Egocentricity, Impulsive Nonconformity, Blame Externalization, and Carefree Nonplanfulness) (Benning et al., 2003; 2005; Lilienfeld & Andrews, 1996; Lilienfeld & Widows, 2005; Patrick et al., 2006). Empirical research supporting the reliability, validity, and utility of the Psychopathic Personality Inventory with community and correctional samples has been steadily growing (Benning, Patrick, Hicks, Blonigen, & Krueger, 2003; Benning, Patrick, Blonigen, Hicks, & Iacono, 2005a; Benning, Patrick, Salekin, & Leistico, 2005b; Falkenbach, Poythress, Falki, & Manchak, 2007; Poythress, Edens, & Lilienfeld, 1998; Sandoval, Hancock, Poythress, Edens, & Lilienfeld, 2000); however, research is just beginning to investigate the utility of the PPI-R (Ray, Poythress, Weir, & Rickelm, 2009; Witt, Donnellan, Blonigen, Krueger, & Conger, 2009).

With the advent of self-report measures of psychopathy, research on community and college student samples has grown, with the objective of gaining some understanding of the characteristics of non-incarcerated psychopaths (e.g., successful psychopaths). Research utilizing the PPI with such samples has found support for the two-factor structure of the PPI (Benning et al., 2003; 2005a; 2005b). Additionally, PPI-I has been found to correlate moderately positively with Factor 1 and Factor 2 of the SRP-II. PPI-II has demonstrated a weak correlation with Factor 1 and a strong correlation with Factor 2 of the SRP-II (Benning et al., 2005b; Derefinko & Lynam, 2006). In a sample of male and female college students, PPI-I correlated significantly
negatively with Neuroticism ($r = -0.48$) and Agreeableness ($r = -0.19$), but correlated positively with Openness to Experience ($r = 0.24$) and Extraversion ($r = 0.36$). PPI-II correlated significantly negatively with Extraversion ($r = -0.17$), Agreeableness ($r = -0.55$), and Conscientiousness ($r = -0.60$), but significantly positively with Neuroticism ($r = 0.33$) (Derefinko & Lynam, 2006). In a male community sample, higher PPI-I scores were related to higher education level and high school rank. Conversely, higher PPI-II scores were correlated with lower high school rank, lower education level, lower income, lower occupational status, and lower verbal IQ scores. PPI-II scores were also correlated with several antisocial behavior variables (e.g., using different drug types, younger age of drug and alcohol use) (Benning et al., 2003). Self-report measures completed by college students measuring aggression (e.g., verbal and physical) and anxiety have been found to correlate significantly positively and moderately with PPI-II scores. Significant negative correlations have been found regarding anxiety and hostility in relation to PPI-I scores (Falkenbach et al., 2007).

In forensic samples, the relation of PPI to more traditional psychopathy measures (PCL-R and PCL: SV) is less clear. For instance, in a forensic psychiatric sample, PPI total scores were found to correlate more strongly with Factor 2 then with Factor 1 of the PCL: SV. Furthermore, a regression predicting self-report violence found the PPI total score and PCL: SV explained comparable variance in the prediction model (Kruh et al., 2005). In a sample of male offenders (mean age of 18.6), PPI total scores were found to correlate most strongly and positively with Factor 1 then Factor 2 scores on the PCL-R (Poythress et al., 1998). Also, utilizing a young male offender sample, Edens et al. (1999) found that the PPI total score and PCL-R total score was related to receiving disciplinary reports for aggression (both verbal and physical). A regression model demonstrated that the PPI total and PCL-R total scores accounted for the same variance...
when predicting aggressive disciplinary reports. The two-factor structure of the PPI was confirmed in a forensic sample that included both general population and psychiatric offenders (Patrick et al., 2006). Conversely, a three factor model was found to be more appropriate with a sample of minimum and maximum security state offenders (individuals were excluded from the study if they had specific psychiatric illnesses or were older than 45) (Neumann, Malterer, & Newman, 2008); however, research has mainly only investigated the two-factor model.

In a sample of male offenders (mean age of 18.6) only PPI-II (i.e., Self-Centered Impulsivity) scores were found to correlate with PCL-R total scores ($r = .50$). PPI-I (i.e., Fearless Dominance) scores were found to be related to committing total and nonaggressive disciplinary acts. PPI-II scores demonstrated a correlation with total and aggressive infractions. Interestingly, PCL-R scales were not correlated with disciplinary infractions in the study (Edens et al., 2008a). In a large-scale study that included male offenders (mean age of 33.70), PPI total scores were found to be predictive of total, aggressive, and non-aggressive disciplinary acts over two-years. A look at the factor scores demonstrated that PPI-II was predictive of total, aggressive, and non-aggressive acts, but PPI-I was not predictive of disciplinary acts (Edens et al., 2008b). Male offenders’ (sample included offenders with and without a psychiatric diagnosis) PPI-II scores were found to correlate more strongly and positively with psychopathology measures of the PAI (i.e., Antisocial Features, Aggression, Borderline Features, Anxiety, Anxiety-Related Disorders, Somatic Complaints, Alcohol Problems, Drug Problems, and Suicidal Ideation). PPI-I scores were negatively correlated with Anxiety, Anxiety-Related Disorders, Somatic Complaints, and Alcohol Problems scales of the PAI. Conversely, PPI-I scores were positively correlated with Dominance scale of the PAI (Edens, Poythress, & Watkins, 2001; Patrick et al., 2006). Sandoval et al. (2000) surveyed a male and female jail
sample. Findings from this study showed that the PPI total score correlated at a moderate negative level with empathy, and at a moderate to high level with aggression and borderline personality features. Additionally, results illustrated that the PPI subscales that make up PPI-II (i.e., Machiavellian Egocentricity, Impulsive Nonconformity, Blame Externalization, and Carefree Nonplanfulness) were most strongly correlated with aggression and borderline features. No significant correlations were demonstrated between work ethic attitudes and PPI total or subscales scores (Sandoval et al., 2000). Also, with a predominately male forensic sample, PPI-I scores have been found to correlate positively with sensation-seeking (one dimension of impulsivity) while PPI-II scores were found to correlate positively with all dimensions of impulsivity (i.e. sensation-seeking, lack of premeditation, lack of perseverance, and urgency) and negative emotionality (Ray et al., 2009).

The PPI is a recently developed self-report measure of psychopathy that is just beginning to gain efficacy with forensic populations. Research has not fully examined the extent to which differences exist between different forensic samples (e.g., psychiatric inpatients, juvenile offenders, adult offenders) and community samples; but preliminary research suggests differences may exist. For instance differences have been found in PPI factor structure, PPI correlation strength with the PCL-R, and PPI prediction capability depending on the sample studied (Benning et al., 2003; 2005a; 2005b, Dereunik & Lynam, 2006; Edens et al., 1999; 2008a; 2008b; Kruh et al., 2005; Neumann et al., 2008; Patrick et al., 2006; Poythress et al., 1999). Moreover, PAI scales (Antisocial Features, Borderline Features, Aggression) have been found to correlate with psychopathic features in male (Edens, Poythress et al., 2001; Walters et al., 2003; Walters & Duncan, 2005) and female offenders (Salekin, Rogers, & Sewell, 1997); however, the relation tends to primarily be with the behavioral dimensions (i.e., factor 2) of the
construct, suggesting psychopathy is a psychological construct unique from what is measured on traditional personality measures. Understanding psychopathy in white-collar criminals as compared to non-white-collar criminals could advance utility of the PPI-R with forensic populations.

**Personality Assessment Inventory**

Only two studies assessing the personality traits of white-collar offenders (Collins & Schmidt, 1993; Kolz, 1999) used well-recognized, reliable, and valid psychological inventories (e.g., NEO-FFI; CPI). However, these personality measures are used infrequently by forensic psychologists (Archer, Buffington-Vollun, Stedney, & Handel, 2006) and were primarily developed to provide measures of normal personality traits (Costa & McCrae, 1992; Gough, 1987; 1996). Conversely, personality measures such as the Minnesota Multiphasic Personality Inventory-2 (MMPI-2; Butcher et al., 2001) and the Personality Assessment Inventory (PAI; Morey, 1991; 2003) are used to assess psychopathology and are commonly utilized by forensic psychologists to answer various psycho-legal questions (e.g., competency, criminal responsibility) (Archer et al., 2006). Research examining the utility of the PAI or MMPI-2 with white-collar criminals could provide further understanding of their psychopathology and advancements to the psycho-legal field.

The PAI consists of four validity indices, 11 scales measuring psychopathology, five treatment indices, and two interpersonal style scales (Morey, 1991; 2003). Moreover, the PAI has also grown in popularity in the forensic field because of its relatively low reading level (fourth grade) in comparison to other personality measures (MMPI-2 has a sixth grade reading level, CPI has an eighth grade reading level, and the NEO-FFI has a sixth grade reading level). Additionally, the PAI contains only 344-items, which is substantially shorter than the MMPI-2
(567-items) or CPI (434-items) (Butcher et al., 2001; Costa & McCrae, 1992; Edens, Cruise, & Buffington-Vollum, 2001; Gough, 1987; 1996; Morey, 1991; 2003; Morey & Quigley, 2002).

The usefulness of the PAI in addressing various legal (e.g., competency, parental fitness, employment-related injury, and dangerousness) and psychological concerns (e.g., treatment adherence, malingering, and psychopathology) is continually advancing (Edens, Cruise, et al., 2001; Morey & Quigley, 2002; Mullen & Edens, 2008). For instance, the PAI consists of several indices (i.e., Negative Impression, Rogers Discriminant Function, Malingering Index, Negative Distortion Scale) that measure whether a respondent is exaggerating psychological symptoms (e.g., malingering) and several of these indices have shown promise in detecting this response style in forensic populations (Edens, Poythress, & Watkins-Clay, 2007; Mogge, Lepage, Bell, & Ragatz, 2010; Poythress, Edens, & Watkins, 2001; Rogers, Sewell, Cruise, Wang, & Ustad, 1998; Wang et al., 1997). Additionally, the PAI contains various indices (Positive Impression, Defensiveness Index, Cashel Discriminant Function) used to assess potential defensiveness or a tendency to dismiss personal shortcoming (Cashel, Rogers, Sewell, & Martin-Cannici, 1995; Morey, 1991; 2003).

These PAI indices have shown some preliminary utility with correctional populations (Edens, Cruise et al., 2001; Morey & Quigley, 2002). The PAI consists of two scales (i.e., Alcohol Problems and Drug Problems) that assess use, abuse, and dependence of drugs or alcohol (Morey, 1991). In addition to these scales, Fals-Stewart (1996) has developed a classification algorithm which has demonstrated some utility in detecting defensiveness in substance use reporting (Fals-Stewart & Lucente, 1997). The several scales on the PAI that measure psychosis-like (i.e., Schizophrenia, Paranoia, Mania) and diagnosable mental disorders symptoms (i.e., Somatic Complaints, Anxiety, Anxiety-Related Disorders, Depression, Drug
Problems, and Alcohol Problems) can be of assistance with various psycho-legal questions (i.e.,
criminal responsibility, competency, treatment) (Edens, Cruise, et al., 2001; Edens & Ruiz,
2008).

Several PAI indices (i.e., Antisocial Features, Dominance, Treatment Rejection scale,
Treatment Process Index) have been found to relate to motivation and adhere to therapy
programs in forensic populations (Caperton, Edens, & Johnson, 2004; Edens, 2009).
Additionally, the PAI consists of various indices found to correlate with risk for committing
suicide (i.e., Suicidal Ideation, Suicide Potential Index, Depression, Borderline Features) (Rogers
et al., 1998; Wang et al., 1997), perpetrating violent and nonviolent infractions (Aggression,
Antisocial Features, Borderline Features, Dominance) in forensic settings (Edens, 2009; Edens,
Poythress et al., 2001; Salekin et al., 1997; Walters et al., 2003) and criminal recidivism
(Aggression, Antisocial Features) (Walters & Duncan, 2005). The Antisocial Features and
Aggression scales have been found to correlate with psychopathy (a personality style indicative
of a greater propensity to commit criminal acts) (Edens, Poythress, et al., 2001; Edens, Hart,
Johnson, Johnson, & Olver, 2000; Salekin et al., 1997; Walters et al., 2003; Walters & Duncan,
2005). To a lesser degree, the Borderline Features scale has been found to correspond with
psychopathy (Salekin et al., 1997). In sum, it appears the PAI has been shown to be valid,
reliable, and useful with a variety of forensic populations such as female offenders (Edens,
Marcus, & Ruiz, 2008; Salekin et al., 1997), male offenders in state prisons (Edens, Poythress, et
al., 2001; 2008b; Edens et al., 2007; Poythress et al., 2001), male offenders in state jails (Cashel
et al., 1995), male federal offenders (Walters et al., 2003; Walters & Duncan, 2005), drug
offenders (Fals-Stewart, 1996; Fals-Stewart & Lucente, 1997), sex offenders (Caperton et al.,
2004; Edens, Buffington-Vollum, Colwell, Johnson, & Johnson, 2002), and forensic psychiatric
patients (Edens et al., 2000; 2007; Edens & Ruiz, 2008; Mogge et al., 2010, Poythress et al., 2001; Wang et al., 1997). Research still has not determined whether the PAI exhibits the same utility with white-collar offenders.

Limited research has examined the psychological characteristics of white-collar offenders. However, the existing research findings demonstrate that white-collar offenders are unique from white-collar professionals and non-white-collar offenders on several measures of psychopathology. For instance, research demonstrates that white-collar offenders tend to exhibit high levels of both depression and anxiety (Alalehto, 2003; Blickle et al., 2006; Collins & Schmidt, 1993; Poortinga et al., 2006). High levels of anxiety or depression could lead to increased treatment dropout among white-collar offenders. Anxiety has also been linked to increased risk of recidivism among white-collar offenders (Listwan et al., 2010). Further research on the psychopathology of white-collar offenders could provide insight into variables that might potentially impact treatment retention and recidivism risk. Research also needs to explore criminal thinking patterns and psychopathic traits among white-collar offenders as these variables have also been found to be predictive of treatment dropout and effectiveness (Hare et al., 2000; Rice et al., 1992; Staton-Tindall et al., 2007; Seto & Barbaree, 1999). In addition, examining the psychopathic characteristics, psychopathology, and criminal thinking patterns of white-collar offenders could inform treatment needs with this population. Lastly, results of this research could possibly advance hiring practices among employers. Specifically, this research could help to inform employers of the various traits that are likely related to taking part in workplace criminal behavior.
Current Study

1. The first purpose of this study was to replicate Walters and Geyer’s (2004) study of white-collar criminals. Utilizing the same white-collar crime definition as Walters and Geyer, offenders were considered white-collar if their current offense was one of these 10 crimes: bank embezzlement, tax fraud, postal fraud, credit fraud, false claims and statements, bribery, securities fraud, antitrust violations, health care fraud, and counterfeiting. Additionally, just like Walters and Geyer, white-collar criminals were subdivided into the white-collar only offenders and criminally versatile white-collar offenders. White-collar only crime offenders had a criminal offense history of only committing crimes classified among the 10 white-collar crimes or had no past criminal convictions or arrests. White-collar criminally versatile offenders were currently incarcerated for a white-collar offense and also had a criminal history that included non-white-collar crimes. These two white-collar offender groups were compared to a non-violent non-white-collar offender group on the PICTS and LCSF. It was hypothesized that white-collar only offenders would have a lower LCSF total score than the white-collar criminally versatile group and the non-violent offender group. This finding would demonstrate non-white-collar are more likely to live a criminal lifestyle. It was also hypothesized that the white-collar crime only group would have lower scores on the PICTS factor scales. Lastly, I explored whether the white-collar only offenders had significantly different scores from the other offender groups on PICTS general criminal thinking score and eight criminal thinking subscales. Higher scores on the PICTS scales would suggest greater use of criminal thinking styles.

2. The second purpose of this study was to examine the psychopathic traits of white-collar offenders. Research on the psychological traits of white-collar offenders has demonstrated that they do display several characteristics of psychopathy (i.e., narcissism, hedonism,
impulsivity, low conscientiousness) (Blickle et al., 2006; Kolz, 1999). However, research also suggests that white-collar offenders exhibit various other traits (i.e., less criminal versatility, anxiety, depression, fewer difficulties in school, less contact with police as a juvenile, less extensive arrest history, fewer problems with drugs or alcohol) which are not suggestive of psychopathy (Alalehto, 2003; Benson & Moore, 1992; Collins & Schmidt, 1993; Poortinga et al., 2006). Based on the existing research, it was hypothesized that white-collar crime only offenders would exhibit high scores on PPI-R-I (i.e., Fearless Dominance) when compared to non-white-collar offenders since past research suggests higher education level (Benning et al., 2003) and less psychopathology (Edens et al., 2004; Patrick et al., 2006) is associated with elevations on this PPI factor. It was also hypothesized that white-collar offenders would have lower scores on PPI-R-II (i.e., Self-Centered Impulsivity) when compared to non-white-collar offenders, since PPI-R-II scores have been found to positively correlate with antisocial behaviors (e.g., alcohol or drug problems, aggression, number of arrests, problems in school, juvenile record) more frequently exhibited by the non-white-collar offender (Benson & Moore, 1992; Edens et al., 2008b; Patrick et al., 2006; Poortinga et al., 2006). Additionally, it is hypothesized that white-collar crime only offenders would have the lowest scores on the PPI-R Coldheartedness factor scale compared to the other offender groups. Lastly, I examined whether white-collar only offenders had significantly different scores from non-white-collar offenders on the PPI-R subscale scores and total score. Higher scores on the PPI-R scales would suggest the individual is more likely to exhibit traits and behaviors associated with psychopathy.

3. The third purpose of this study was to examine the psychopathology of white-collar offenders. Few researchers have investigated the psychopathology of white-collar offenders (Alalehto, 2003; Benson & Moore, 1992; Blickle et al., 2006; Collins & Schmidt, 1993;
Poortinga et al., 2006). In comparison to non-white-collar criminals, white-collar criminals have been found to be less likely to use or abuse drugs and alcohol and more inclined to experience depression (Benson & Moore, 1992; Poortinga et al., 2006). When contrasted with white-collar professionals, white-collar criminals have demonstrated higher anxiety levels (Alalehto, 2003; Blickle et al., 2006; Collins & Schmidt, 1993). Based on the existing research, it was hypothesized that white-collar crime only offenders would be elevated on the PAI depression and anxiety indices (i.e., Anxiety, and Anxiety-Related Disorders) compared to criminally versatile white-collar offenders and non-violent non-white collar offenders. It was also hypothesized that white-collar crime only offenders would have lower scores on the PAI substance use scales (i.e., Alcohol Problems and Drug Problems) compared to the other offender groups.

**Method**

**Participants**

The Federal Correctional Institution in Morgantown West Virginia (FCI-Morgantown) is a minimum security institution. Any inmate housed at FCI-Morgantown can place a request to interview for the Residential Drug Abuse Program (RDAP). Due to the large size of the RDAP program at FCI-Morgantown, individuals throughout the United States are often sent to the facility to take part in the program. All inmates included in this study sample volunteered to complete the interview screening process for the RDAP program between the years of 2007-2010. All requests to interview for the RDAP program were reviewed and approved by the RDAP coordinator (who is a Ph.D. level psychologist). Individuals interviewing for the RDAP program are not necessarily eligible to take part in the RDAP program; therefore, this study
sample included both individuals eligible and not eligible for the RDAP program, as long as they have taken part in the interview screening process.

Of those inmates that took part in the RDAP interview screening process, 48 were classified as white-collar offenders and 89 were classified as white-collar versatile offenders. Specifically, individuals were classified as white-collar if their most current charge was one of 10 white-collar offenses (bank embezzlement, tax fraud, postal fraud, credit fraud, false claims and statements, bribery, securities fraud, antitrust violations, health care fraud and counterfeiting). This is the same definition of white-collar crime that was used in Walters and Geyer (2004). The white-collar offender group was then subsequently divided into white-collar only offenders and white-collar criminally versatile offenders. Next, a control group of 89 non-white-collar offenders, also individuals who volunteered to interview for the RDAP program, was matched to the white-collar group on ethnicity and age (see Figure 1).

Based on findings from past research (Poortinga et al., 2006; Walters & Geyer, 2004; Wheeler et al., 1988), it was expected that white-collar offenders would be predominately Caucasian, have a higher level of education, and be older in age than non-white-collar offenders. For this study white-collar and non-white-collar offenders were matched on the demographic variables of ethnicity and age. Across all three offender groups the majority of offenders were classified as white (i.e., white-collar only [75.0%], white-collar versatile [69.7%], and non-white-collar [68.5%]). The second most prominent race among offender groups was black (i.e., white-collar only [20.8%], white-collar versatile [29.2%], and non-white-collar [29.2%]) (see Table 3). The percentage of white offenders included in this study was higher than the percentage of white offenders (57.6%) in the federal prison population. Also, a smaller percentage of black offenders were included in this study compared to the percentage of black
offenders (38.9%) in the federal prison population (see United States Department of Justice, 2010). The mean age for white-collar only offenders was 46.79 ($SD = 11.52$), 44.62 ($SD = 9.39$) for white-collar versatile offenders, and 45.93 ($SD = 9.14$) for non-white-collar offenders (see Table 4). The age of offenders in this study was substantially higher than the average age of offenders incarcerated in federal prisons ($M = 39.00$) (see United States Department of Justice, 2010).

Several notable demographic differences existed between the three groups. White-collar only offenders were more likely to be married (68.8%) compared to white-collar versatile (52.8%) and non-white-collar (43.8%) offenders. Non-white-collar (28.1%) and white-collar versatile (29.2) offenders were significantly more likely to be single/never married compared to white-collar only (10.4%) offenders. White-collar offenders ($M = 14.67$, $SD = 3.14$) had significantly more years of education compared to white-collar versatile ($M = 12.78$, $SD = 2.50$) and non-white-collar ($M = 11.93$, $SD = 2.50$) offenders. Non-white-collar offenders had significantly more codefendants ($M = 1.17$, $SD = 1.16$) than white-collar only ($M = 0.53$, $SD = 0.83$) or white-collar versatile ($M = 0.75$, $SD = 1.09$) offenders. White-collar only ($M = 40.48$, $SD = 16.74$) and white-collar versatile ($M = 43.03$, $SD = 19.82$) offenders had significantly shorter sentences than non-white-collar offenders ($M = 65.76$, $SD = 45.85$). Lastly, white-collar only offenders ($M = 0.29$, $SD = 0.85$) had significantly fewer adult arrests than white-collar versatile ($M = 4.89$, $SD = 4.93$) and non-white-collar ($M = 6.15$, $SD = 5.47$) offenders.

When considering mental health history, white-collar only offenders were more likely to have not had past psychological treatment (56.3%) compared to white-collar versatile (44.9%) and non-white-collar (34.8%) offenders. Non-white-collar offenders (48.3%) and white-collar versatile (39.3%) offenders were significantly more likely to have a past substance abuse
diagnosis compared to white-collar only (18.8%) offenders. Finally, a look at abuse history demonstrated white-collar versatile (7.9%) and white-collar only offenders (6.3%) were significantly less likely to have been previously abused compared to non-white-collar offenders (20.2%) offenders. Table 3 and Table 4 display demographic information for each of the three groups.

**Measures**

**Demographic variables.** All demographic variables were gathered from the PSIs. The PSI is written by a probation officer and utilized as an aid to the court when determining appropriate sentencing for a convicted offender. The PSI includes the following information: details of the instant offense, previous criminal history (adult and juvenile arrests and convictions), family history, marital history, health information (physical and psychological), substance use history, educational attainment history, past employment details, and previous financial standing (Administrative Office of the United States Courts, 2006). An example of the demographic form utilized when collecting the demographic data from PSIs is displayed in Appendix A.

Several demographic variables were coded for this study including age, race, marital status, number of children, educational attainment, income, military service, legal offense, sentence length, employment history, previous arrests, previous convictions, mental health history, and abuse history. Educational attainment was measured by the number of years of school an individual had completed. For instance, if an individual completed eighth grade and dropped out in ninth grade, then the individual was coded as completing eighth grade. Graduating from high school or receiving a GED was coded as 12 years of school. Additionally, receiving an Associate’s degree was coded as 14, receiving a Bachelor’s degree was coded as 16,
receiving a Master’s degree was coded as 18, and receiving a Ph.D, M.D., or J.D. was coded as 20. Sentence length only included the number of months an individual was incarcerated.

Number of arrests was calculated by adding together the number of adult arrests and adult convictions an individual had documented in his PSI. Arrests and convictions attained under the age of 18 were not included when calculating this variable. Number of arrests did not include the offender’s conviction for his current offense.

A graduate student volunteered to assist with coding demographic data from the PSIs. This graduate student was trained by the primary researcher on the coding process. Interrater reliability was analyzed using the Kappa statistics. Kappa results are displayed in Tables 1 and 2. To determine interrater reliability the trained graduate student recoded 13% ($n = 30$) of the participant cases previously coded by the primary researcher. The primary researcher discussed any disagreements in the coding process with the graduate student. After an agreement was reached between the graduate student and primary researcher on any variable disagreement, the participant case was then recoded.

**Psychological Inventory of Criminal Thinking Styles (PICTS).** The PICTS (see Appendix B; Walters, 2006a; 2010) consists of 80-items which assess attitudes about criminality. The PICTS has an eighth grade reading level. All responses are measured on a four-point scale ($4 = strongly agree$, $3 = agree$, $2 = uncertain$, $1 = disagree$). A total of 19 scales and a total scale score can be derived from the PICTS. The PICTS includes two validity indices (Confusion-revised [measure of reading difficulty or random response style] and Defensiveness-revised [measure of inability to endorse personal difficulties]). The eight thinking style scales of the PICTS measure Mollification (blaming outside causes so that one can evade responsibility), Cutoff (eliminating distress with drugs or by committing illegal acts), Entitlement (believing that
one is special and needs treatment that suits his or her uniqueness), Power Orientation (preferring to be in control of circumstances), Sentimentality (believing that doing good acts expunges previous antisocial acts), Superoptimism (believing one can escape or avoid the consequences of illegal actions), Cognitive Indolence (tendency to use cognitive short-cuts when resolving problems), and Discontinuity (proclivity to be frequently distracted, which leads to neglect of personal goals).

Additionally, the PICTS includes four factor scales (Problem Avoidance [proclivity to avoid problems with substance use], Interpersonal Hostility [tendency to become confused because of hostile experiences], Self-Assertion/Deception [tendency to justify or give reasons for taking part in criminal behavior], Denial of Harm [proclivity to discount the extent of the consequences of participating in criminal behaviors]), two content scales (Current Criminal Thinking [measure of presently having criminal attitude], Historical Criminal Thinking [measure of previous criminal attitude]), two composite scales (Proactive Criminal Thinking [premeditated and goal-oriented], Reactive Criminal Thinking [impulsive and unplanned]), and a Fear-of-Change scale (measure of distress in changing one’s actions) (Walters, 2006a; 2010). Raw scores on the different PICTS scales are transformed into t-scores, with scores between 40 and 50 in the average range and scores over 60 signifying high scores. A total General Criminal Thinking Score can be computed by adding together the scores for the 64 criminal thinking subscales items (see Walters & Schlauch, 2008). The PICTS has previously demonstrated satisfactory validity and reliability with male and female offender samples (Walters, 2006a; 2010).

**Lifestyles Criminality Screening Form (LCSF).** The LCSF (see Appendix C; Walters et al., 1991) measures behavioral components found to be part of the criminal lifestyle. The
measure contains 14-items and is completed via a file-review process. The LCSF consists of four subscales: Irresponsibility, Self-Indulgence, Interpersonal Intrusiveness, and Social Rule Breaking. The Irresponsibility scale consists of four items that assess education, employment, and child support payment compliance history. Total scores on Intrusiveness scale can range from 0 to 6. The Self-Indulgence scale contains three items which measure drug use, marital history, and presence of tattoos. Scores on this scale range from 0 to 6. The Interpersonal Intrusiveness scale consists of items that assess characteristics of an individual’s current offense, past offenses, and past arrests. Total scores range from 0 to 5. The Social Rule Breaking scale assesses previous troublesome school behavior, earliest age of arrest, and frequency of arrests. Scores on the Social Rule Breaking scale range from 0 to 5. Total LCSF scores can range from 0 to 22 and are calculated by adding together scores on the four subscales. A total LCSF score of 10 or higher is found to be indicative of adherence to a criminal lifestyle. Acceptable interrater reliability (.81 to .96) has been demonstrated with the LCSF (Walters, 1998).

**Psychopathic Personality Inventory-Revised (PPI-R).** The PPI-R (Lilienfeld & Widows, 2005) consists of 154-items that measure psychopathic personality dimensions. The PPI-R has a fourth grade reading level. All responses are measured on a four-point scale (1 = false to 4 = true). The PPI-R has three validity indices which include the Unlikely Virtues scale (measure of defensive responding), Deviant Responding scale (measure of symptom exaggeration in responding), and the Variable Response Inconsistency scale (measure of lackadaisical responding).

Additionally, a total score and eight subscale scores can be computed from the PPI-R. The eight subscales are Social Potency (belief that one can control or sway others), Fearlessness (tendency to not experience worry when taking part in risky or unsafe actions), Stress Immunity
(propensity to be devoid of anxiety in situations where others likely exhibit anxiety),
Machiavellian Egocentricity (potential to be self-centered and callous in social interactions),
Impulsive Nonconformity (tendency to be inattentiveness towards or exhibit disregard for social rules),
Blame Externalization (propensity to place culpability for personal actions on other people or to justify one’s wrongful actions),
Carefree Nonplanfulness (tendency to be unconcerned with planning personal actions),
and Coldheartedness (potential to lack remorse and exhibit insensitivity). Factor analytic research has shown that
the PPI-R consists of two factor scales:
Fearless Dominance (contains the Social Potency, Fearlessness, and Stress Immunity subscales) and
Self-Centered Impulsivity (Machiavellian Egocentricity, Impulsive Nonconformity, Blame Externalization, and Carefree Nonplanfulness). The Coldheartedness subscale was not found to load onto either of the two factors (see Benning et al., 2003; 2005). A total score can also be calculated from the PPI-R. The PPI-R has demonstrated acceptable reliability and validity with offender samples (Lilienfeld & Widows, 2005).

**Personality Assessment Inventory (PAI).** The PAI is a self-report measure of personality that consists of 344-items and has a fourth grade reading level. Response options are measured on a four-point scale (*totally false, slightly true, mainly true, very true*). The PAI consists of 22 scales, which includes four validity indices (i.e., Inconsistency, Infrequency, Negative Impression, and Positive Impression), 11 psychopathology scales (i.e., Somatic Complaints, Anxiety, Anxiety-Related Disorders, Depression, Mania, Paranoia, Schizophrenia, Borderline Features, Antisocial Features, Alcohol Problems, and Drug Problems) five treatment indices (i.e., Aggression, Suicidal Ideation, Stress, Nonsupport, and Treatment Rejection), and two interpersonal style scales (i.e., Dominance and Warmth). Before interpreting PAI results, the four validity scales must be interpreted. The Inconsistency scale assesses the extent to which
a respondent’s answers are similar on like-worded questions. The Infrequency scale measures possible inattentiveness or misunderstanding of test items. The Negative Impression scale assesses for a tendency to exaggerate psychological symptomology and the Positive Impression scale measures a defensive response style. Validity scale scores of 70 or greater suggest the assessment findings are questionable and potentially uninterruptible. If validity indices are not elevated, all subsequent scales can be interpreted. A $t$-score of 70 or greater is indicative of a high score (Morey, 1991; 2003). The PAI has previously demonstrated acceptable reliability and validity with offender samples (Douglas, Hart, & Kropp, 2001; Morey, 1991; White, 1996).

**Procedures**

Currently, all inmates at FCI-Morgantown who place a request to interview for the Residential Drug Abuse Program (RDAP) are asked to complete the following self-report assessments: PICTS (Walters, 2006a; 2010) PPI-R (Lilienfeld & Widows, 2005), and PAI, (Morey, 1991). Inmates also take part in an unstructured interview which assesses their substance use history, mental health history, and treatment history. Information gleaned from the testing and interviews are then used by RDAP coordinators to assist with determining if an inmate is eligible for the RDAP program. Additionally, this information is also utilized by RDAP counselors when formulating treatment plans for inmates admitted into the RDAP program.

Participants were included in this study if they had taken part in the screening process for the RDAP program. All participants completed the PICTS, PPI-R, and PAI to be in this study. Data to complete the LCSF as well as demographic information was gathered from the PSIs of all offenders included in this study. White-collar offenders and non-white-collar offenders were
matched on the demographic variables of age and ethnicity. For this project, Institutional Review Board approval was acquired from West Virginia University and FCI-Morgantown.

**Design and Data Analysis**

Participants were considered white-collar offenders if they were currently serving time in federal prison for one of the following 10 crimes: bank embezzlement, tax fraud, postal fraud, credit fraud, false claims and statements, bribery, securities fraud, antitrust violations, health care fraud, and counterfeiting. Then white-collar offenders were divided into a white-collar crime only group and a criminally versatile white-collar crime group. This is the same definition of white-collar crime that was utilized in Walters and Geyer’s (2004). The white-collar only group consisted of individuals that only have a criminal history of white-collar crime or were currently incarcerated for the first time for a white-collar offense. The criminally versatile white-collar offender group consisted of individuals currently incarcerated for a white-collar offense but that had a criminal history of being convicted or arrested for non-white-collar crimes. A comparison group of non-white-collar offenders included non-violent offenders who were currently incarcerated for a non-violent crime.

First, univariate analyses (chi-square analyses and ANOVAs) were conducted to compare the three offender groups (i.e., white-collar crime only, white-collar criminally versatile, and non-white-collar) on the demographic variables of age, marital status, educational attainment, ethnicity, and sentence. Then ANOVAS or MANOVAS were conducted to determine if significant differences existed between the white-collar only group, criminally versatile white-collar group, and control group on the PICTS, LCSF, PPI-R, and PAI. When significant differences were found for the three groups on these psychological measures, ANCOVAs or MANCOVAs were conducted. Demographic variables (i.e., marital status and education) were
used as covariates in the ANCOVAs and MANCOVAs. The procedure of using demographic variables as covariates was utilized in the Walters and Geyer study\(^1\). Finally, a series of logistic regressions were conducted to see if any of the psychological variables (i.e., PICTS, PAI, and PPI-R) significantly differentiated the offender groups.

**Results**

**Offender Group Comparison for the Demographic Variables**

To determine if significant differences existed between the three groups (white-collar only, white-collar versatile and non-white-collar offenders) on the demographic variables, chi-square analyses and ANOVAs were conducted. Results for the chi-square analyses are displayed in Table 3. Findings for the ANOVAs are displayed in Table 4. For all univariate and multivariate analyses Sum of Squares IV was used due to unequal cell sizes. In addition, pairwise comparisons were conducted using Tukey’s tests. However, when the Levene’s test for homogeneity of variance was significant, pairwise comparisons were done using Dunnett’s C tests.

**Offender Group Comparisons for the LCSF and PICTS**

For this study, I hypothesized that white-collar only offenders would have a lower LCSF total score than the white-collar versatile group and the non-violent offender group. To evaluate this hypothesis, a one-way (offender group: white-collar only, white-collar versatile, and non-white-collar) ANOVA with the LCSF total score as the dependent variable was conducted. A significant main effect was found, \(F(2, 223) = 53.47, p < .01, \text{partial } n^2 = .32\), which supported the hypothesis. Specifically, white-collar only offenders were found to have significantly lower LCSF total scores than the white-collar versatile and non-white-collar offenders (see Table 5).
Next, correlations were conducted between the LCSF total score and the demographic variables of marital status and educational attainment. The LCSF total score was found to be significantly correlated with marital status ($r = .33, p < .01$) and educational attainment ($r = -.43, p < .01$). The significantly correlated variables were then used as covariates. A one-way (offender group: white-collar only, white-collar versatile, and non-white-collar) ANCOVA was performed with the LCSF as the dependent measure. The covariates were educational attainment and marital status. Findings showed that the covariates of educational attainment, $F(1, 221) = 20.45, p < .01$, partial $\eta^2 = .09$, and marital status $F(1, 221) = 16.18, p < .01$, partial $\eta^2 = .07$ were significant. The main effect for offender group was still significant, $F(2, 221) = 32.12, p < .01$, partial $\eta^2 = .23$. Pairwise comparisons showed all groups were significantly different from each other, with white-collar only offenders having the lowest LCSF total scores ($M = 2.55, SD = 1.66$), followed by white-collar versatile offenders ($M = 4.50, SD = 2.19$), and lastly non-white-collar offenders ($M = 5.91, SD = 2.78$).

**PICTS factor scales.** I predicted that the white-collar crime only group would have lower scores on the PICTS factor scales and also a lower PICTS general criminal thinking score compared to the other offender groups. Pearson correlations between the four PICTS factor scales demonstrated the scales were moderately correlated (see Table 8). A one-way (offender group: white-collar only, white-collar versatile, and non-white-collar) MANOVA was conducted with the PICTS factor scales (Problem Avoidance, Interpersonal Hostility, Self-Assertion/Deception, and Denial of Harm) as the dependent variables. Results demonstrated a significant multivariate main effect for offender group, $F(8, 440) = 2.44, p < .01$, partial $\eta^2 = .04$. Evaluation of the univariate follow-ups demonstrated that none of the follow-up tests were
significant (see Table 5). Since none of the univariate follow-ups were significant, MANCOVAs controlling for demographic variables were not conducted.

**PICTS general criminal thinking score.** Next, I explored whether white-collar only offenders would have significantly different scores on the PICTS general criminal thinking (PICTS GCT) scale when compared to the other offender groups. A one-way (offender group: white-collar only, white-collar versatile, and non-white-collar) ANOVA was conducted with the PICTS GCT as the dependent measure. Findings demonstrated no significant difference between the offender groups on the PICTS GCT, $F(2, 223) = 1.63, p = .20, \text{partial } n^2 = .01$.

**PICTS thinking style scales.** I examined whether white-collar only offenders would have significantly different scores on the eight PICTS thinking style scales when compared to the other offender groups. Correlations between the PICTS thinking style scales ranged from .36 to .76 ($p < .01$). A one-way (offender group: white-collar only, white-collar versatile, and non-white-collar) MANOVA was conducted with the eight PICTS thinking style scales (Mollification, Cutoff, Entitlement, Power Orientation, Sentimentality, Superoptimism, Cognitive Indolence, and Discontinuity) as the dependent measures. A significant multivariate effect was found for offender group, $F(16, 432) = 2.13, p < .01, \text{partial } n^2 = .07$. Evaluation of the univariate follow-ups demonstrated that there was a significant difference for the dependent variable of Sentimentality, $F(2, 223) = 3.79, p < .02, \text{partial } n^2 = .03$. Pairwise comparisons showed that white-collar only offenders had significantly lower scores on PICTS Sentimentality thinking style scale compared to the white-collar versatile offenders.

Correlations were then conducted between the PICTS Sentimentality thinking style scale and demographic variables of marital status and educational attainment. Marital status ($r = .13, p < .05$) was found to be significantly correlated with Sentimentality. No other significant
correlations were found; therefore, only marital status was used as a covariate in a subsequent ANCOVA. A one-way (offender group: white-collar only, white-collar versatile, and non-white-collar) ANCOVA was conducted with the PICTS Sentimentality thinking style scales as the dependent measure. Marital status was used as a covariate. No significant effect was found for the covariate of marital status, $F(1, 222) = 3.32, \ p = .07, \ \text{partial } n^2 = .02$. The main effect for offender group was still significant for the PICTS Sentimentality thinking style scale, $F(2, 221) = 3.38, \ p < .04, \ \text{partial } n^2 = .03$. Pairwise comparisons demonstrated that white-collar only offenders ($M = 51.21, \ SD = 11.77$) and non-white-collar offenders ($M = 55.72, \ SD = 11.92$) had significantly lower scores on the Sentimentality thinking style scale compared to white-collar versatile offenders ($M = 52.15, \ SD = 10.14$).

**Offender Group Comparisons for the PPI-R**

**PPI-R factor scales.** For this study, it was predicted that white-collar crime only offenders would exhibit high scores on PPI-R-I (i.e., Fearless Dominance) when compared to all other offender groups. Additionally, it was hypothesized that white-collar offender would have lower scores on PPI-R-II (i.e., Self-Centered Impulsivity) factor and the PPI-R Coldheartedness factor scales compared to the other offender groups. Pearson correlations were conducted between the three factor scales. Coldheartedness was significantly correlated with Self-Centered Impulsivity ($r = .21, \ p < .01$). However, Fearless Dominance was not significantly correlated with the Coldheartedness ($r = .06, \ p = .34$) or Self-Centered Impulsivity ($r = .01, \ p = .84$) factor scales; therefore, separate ANOVAs were conducted with each of the factor scales. A one-way (offender group: white-collar only, white-collar versatile, and non-white-collar) ANOVA was conducted with the PPI-R Fearless Dominance factor scale as the dependent measure. The main effect for offender group was not significant, $F(2, 223) = 2.65, \ p = .07, \ \text{partial } n^2 = .02$. Next, a
ANOVA was performed with the PPI-R Self-Centered Impulsivity factor scale as the dependent variable. The main effect for offender group was not significant, $F(2, 223) = 1.56, p = .21$, partial $n^2 = .01$. A one-way (offender group: white-collar only, white-collar versatile, and non-white-collar) ANOVA was conducted with the PPI-R Coldheartedness factor scale as the dependent variable. The main effect for offender group was not significant, $F(2, 223) = 0.05, p = .95$, partial $n^2 = .001$ (see Table 7).

**PPI-R subscales.** Next I sought to explore whether the three offender groups were significantly different from each other on the PPI-R subscales (Social Potency, Machiavellian Egocentricity, Fearlessness, Stress Immunity, Impulsive Nonconformity, Blame Externalization, and Carefree Nonplanfulness). Pearson correlations were conducted to examine if the PPI-R subscales were correlated (see Table 6). Several of the PPI-R subscales were not correlated; therefore, separate ANOVAs were conducted. Since the PPI-R subscale analyses were exploratory, Bonferroni adjustments ($p < .01$) were utilized to control for Type I error.

A one-way (offender group: white-collar only, white-collar versatile, and non-white-collar) ANOVA was performed with the PPI-R subscale of Machiavellian Egocentricity as the dependent variable. A significant main effect was found for offender group, $F(2, 223) = 4.52, p < .01$, partial $n^2 = .04$. Pairwise comparisons demonstrated that the white-collar offender groups were significantly higher on Machiavellian Egocentricity than the non-white-collar offender group (see Table 7). A one-way (offender group: white-collar only, white-collar versatile, and non-white-collar) ANOVA was performed with the PPI-R subscale of Impulsive Nonconformity as the dependent measure. No significant main effect was found, $F(2, 223) = .43, p = .65$, partial $n^2 = .004$. A one-way (offender group: white-collar only, white-collar versatile, and non-white-
collar) ANOVA was conducted with the PPI-R subscale of Blame Externalization as the dependent measure. No significant main effect was found for offender group, $F(2, 223) = 1.13$, $p = .33$, $partial n^2 = .01$. A one-way (offender group: white-collar only, white-collar versatile, and non-white-collar) ANOVA was conducted with the PPI-R subscale of Carefree Nonplanfulness as the dependent variable. No significant main effect was found for offender group, $F(2, 223) = .26$, $p = .77$, $partial n^2 = .002$. A one-way (offender group: white-collar only, white-collar versatile, and non-white-collar) ANOVA was performed with the PPI-R subscale of Social Potency as the dependent variable. A significant main effect was demonstrated for offender group, $F(2, 223) = 6.74$, $p < .01$, $partial n^2 = .06$. White-collar offenders were found to be significantly higher in Social Potency than non-white-collar offenders (see Table 7). A one-way (offender group: white-collar only, white-collar versatile, and non-white-collar) ANOVA was performed with the PPI-R subscale of Fearlessness as the dependent measure. No significant main effect was found for offender group, $F(2, 223) = 0.02$, $p = .82$, $partial n^2 = .002$. Lastly, a one-way (offender group: white-collar only, white-collar versatile, and non-white-collar) ANOVA was conducted with the PPI-R subscale of Stress Immunity as the dependent measure. No significant main effect was found for offender group, $F(2, 223) = 0.24$, $p = .79$, $partial n^2 = .002$.

A series of correlations were conducted between the PPI-R subscales (Machiavellian Egocentricity and Social Potency) and the demographic variables of educational attainment and marital status. Social Potency was found to be significantly correlated with educational attainment ($r = .24$, $p < .01$). No other significant correlations were found. An ANCOVA was not performed for Machiavellian Egocentricity because the demographic variables (i.e., educational attainment and marital status) were not significantly correlated with this PPI-R scale.
A one-way (offender group: white-collar only, white-collar versatile, and non-white-collar offender) ANCOVA was performed with the PPI-R Social Potency subscale as the dependent measure. The covariate was educational attainment. Bonferroni adjustments were still utilized with these analyses ($p < .01$). The covariate of educational attainment, $F(1, 222) = 8.71$, $p = .01$, $partial \, n^2 = .04$, was significant. The main effect for offender group was no longer significant for the Social Potency scale, $F(2, 222) = 4.08$, $p = .02$, $partial \, n^2 = .04$.

**PPI-R total score.** To explore whether white-collar only, white-collar versatile, and non-white-collar offenders significantly differed on the PPI-R total score, a one-way ANOVA (offender group: white-collar only vs. white-collar versatile vs. non-white-collar) was conducted with the PPI-R total score as the dependent measure. No main effect was found for offender group, $F(2, 223) = 3.04$, $p = .05$, $partial \, n^2 = .03$. Since the main effect was not significant, subsequent ANCOVAs controlling for demographic variables were not conducted.

**Offender Group Comparisons for the PAI**

For this study, I hypothesized that white-collar crime only offenders would be elevated on the PAI depression and anxiety indices (i.e., Anxiety, and Anxiety-Related Disorders) when contrasted with the other offender groups. Additionally, I predicted white-collar crime only offenders would have lower scores on the PAI substance use scales (i.e., Alcohol Problems and Drug Problems) compared to the other offenders. Pearson correlations were conducted between the five PAI indices. Findings demonstrated multicollinearity existed between the PAI Anxiety and PAI Depression scales (see Table 8); therefore, ANOVAs were conducted. Bonferroni adjustments ($p < .03$) were utilized only for the ANOVAs examining the PAI anxiety indices (i.e., Anxiety and Anxiety-Related Disorders) to control for Type I error.
I conducted a one-way (offender group: white-collar only, white-collar versatile, and non-white-collar) ANOVA with the PAI Anxiety scale as the dependent variable. No significant main effect was found for offender group, $F(2, 223) = 2.57, \ p = .08, partial \ n^2 = .02$. Next, a one-way (offender group: white-collar only, white-collar versatile, and non-white-collar) ANOVA was conducted with the PAI Anxiety-Related Disorders scale as the dependent variable. A significant main effect was found for offender group, $F(2, 223) = 4.22, \ p < .02, partial \ n^2 = .04$. Pairwise analyses demonstrated white-collar versatile offenders had significantly higher scores than non-white-collar offenders. A one-way (offender group: white-collar only, white-collar versatile, and non-white-collar) ANOVA was performed with the PAI Depression scale as the dependent measure. No significant main effect was found for offender group, $F(2, 223) = 2.46, \ p = .09, partial \ n^2 = .02$. A one-way (offender group: white-collar only, white-collar versatile, and non-white-collar) ANOVA was conducted with the PAI Alcohol Problems scale as the dependent measure. A significant main effect was found for offender group, $F(2, 223) = 22.29, \ p < .01, partial \ n^2 = .17$. Pairwise analyses demonstrated white-collar offenders had significantly higher scores than non-white-collar offenders. Finally, a one-way (offender group: white-collar only, white-collar versatile, and non-white-collar) ANOVA was performed with the PAI Drug Problems scale as the dependent measure. A significant main effect for offender group was found, $F(2, 223) = 5.56, \ p < .01, partial \ n^2 = .05$. Pairwise comparisons revealed white-collar only offenders had lower scores than both the white-collar versatile and non-white-collar offenders (see Table 8).

A series of correlations were conducted between the PAI scales (i.e., Anxiety-Related Disorders, Alcohol Problems, and Drug Problems) and the demographic variables of marital status and educational attainment. Alcohol Problems was significantly correlated with
educational attainment ($r = .30, p < .01$). Drug Problems was significantly correlated with marital status ($r = .24, p < .01$) and educational attainment ($r = -.16, p < .02$). No other significant correlations were found. No ANCOVA was conducted with the PAI Anxiety-Related Disorders scale because none of the demographic variables were significantly correlated with this PAI scale. A one-way (offender group: white-collar only, white-collar versatile, and non-white-collar) ANCOVA was conducted with the PAI Alcohol Problems scale as the dependent measure. Educational attainment was used as a covariate. The covariate of educational attainment was significant, $F(1, 222) = 12.62, p < .01$, $partial n^2 = .05$. A significant main effect for offender group still existed, $F(2, 222) = 17.42, p < .01$, $partial n^2 = .14$. Pairwise comparisons demonstrated white-collar offenders had higher scores than non-white-collar offenders.

Lastly, a one-way (offender group: white-collar only, white-collar versatile, and non-white-collar) ANCOVA was conducted with the PAI Drug Problems scale as the dependent measure. Educational attainment and marital status were used as covariates. The covariate of marital status was significant, $F(1, 221) = 8.78, p < .01$, $partial n^2 = .04$. The main effect for offender group was no longer significant, $F(2, 221) = 2.39, p = .09$, $partial n^2 = .02$.

**Using Psychological Variables to Predict White-Collar and Non-White-Collar Status**

Correlations were conducted between the PICTS GCT score, PICTS factor scales, PPI-R total score, PPI-R factor scales, and PAI indices to assure that multicollinearity did not exist before conducting logistic regressions. The PICTS GCT score and PICTS factor scales were all strongly significantly correlated (correlations ranging from .75 to .86); therefore, only the PICTS GCT was included in the subsequent logistic regressions. In addition, the PPI-R total score and PPI-R factor scales were strongly significantly correlated (correlations ranging from .39 to .83);
therefore, only the PPI-R total score was used in the following logistic regressions. Lastly, correlation between the PAI Depression scale, PAI Anxiety scale, and PAI Anxiety-Related Disorders scale were found to exhibit multicollinearity (correlations ranging from .74 to .85). Consequently, only the PAI Anxiety-Related Disorders scale was included in the subsequent logistic regressions (see Table 9).

Next, a logistic regression analysis was conducted using the Enter method to determine if the predictor variables PICTS GCT score, PPI-R total score, and PAI scales (Anxiety-Related Disorders, Alcohol Problems, and Drug Problems) could uniquely predict being a white-collar only offender or white-collar versatile offender (0 = white-collar only, 1 = white-collar versatile). The overall model was not significant, $\chi^2 (5, N = 137) = 9.99, p = .08$, Nagelkerke $R^2 = 0.10$ (see Table 10). Classification using this model resulted in 11 of the 48 white-collar only offenders (22.9%) being placed in the correct category, and 78 of 89 white-collar versatile offenders (87.6%) being correctly identified. The overall classification rate was 65.0%.

A second logistic regression analysis was conducted using the Enter method to determine if the predictor variables PICTS GCT score, PPI-R total score, and PAI scales (Anxiety-Related Disorders, Alcohol Problems, and Drug Problems) could uniquely predict being a white-collar versatile offender or non-white-collar offender (0 = white-collar versatile, 1 = non-white-collar). The overall model was significant, $\chi^2 (5, N = 178) = 46.05, p < .01$, Nagelkerke $R^2 = 0.30$. The PAI Drug Problems scale ($\beta = .03, p < .03$) and PAI Alcohol Problems scale ($\beta = -.06, p < .01$) were the only significant predictors in the model (see Table 11). Classification using this model resulted in 65 of the 89 white-collar versatile offenders (73.0%) being placed in the correct category, and 63 of 89 white-collar versatile offenders (70.8%) being correctly identified. The overall classification rate was 71.9%.
A logistic regression was conducted using the Enter method to determine if the predictor variables PICTS GCT score, PPI-R total score, and PAI scales (Anxiety-Related Disorders, Alcohol Problems, and Drug Problems) could uniquely predict being a white-collar only offender or non-white-collar offender ($0 = \text{white-collar only}, 1 = \text{non-white-collar}$). The overall model was significant, $\chi^2 (5, N = 137) = 49.16, p < .01$, Nagelkerke $R^2 = 0.42$. The PAI Anxiety-Related Disorders ($\beta = -.05, p < .02$), PAI Alcohol Problems scale ($\beta = -.05, p < .01$), PAI Drug Problems scale ($\beta = .07, p < .01$) and the PPI-R total score ($\beta = -.05, p < .02$) were all significant predictors in the model (see Table 12). Classification using this model resulted in 28 of the 48 white-collar only offenders (58.3%) being placed in the correct category, and 78 of 89 non-white-collar offenders (87.6%) being correctly identified. The overall classification rate was 77.4%.  

**Discussion**

The purpose of this study was threefold. The first purpose of this study was to replicate Walters and Geyer’s (2004) study by utilizing a similar white-collar offender definition and methodology. Specifically, I investigated whether differences existed between white-collar only offenders (white-collar offenders that only commit white-collar crimes), white-collar versatile offenders (white-collar offenders that are currently convicted of a white-collar crime but have previously committed non-white-collar crimes), and non-white-collar offenders (offenders currently convicted of a non-white-collar crime) on measures of criminal thinking and criminal lifestyle. The second purpose of this study was to explore whether white-collar offenders differed from non-white-collar offenders on psychopathy. The third purpose of this study was to examine differences between white-collar and non-white-collar offenders on a measure of psychopathology. Findings gleaned from this study demonstrated that white-collar only
offenders had lower levels of Sentimentality and exhibited fewer behaviors consistent with a criminal lifestyle as compared to the other offender groups. Furthermore, both white-collar offender groups scored higher on measures of perceived social influence, self-centeredness, anxiety, and alcohol use compared to the non-white-collar group. Non-white-collar offenders had significantly higher scores on a measure of drug use.

Previous research has demonstrated that white-collar offenders tend to be significantly different from non-white-collar offenders on various demographic variables. For instance, several studies have found white-collar offenders are typically older and more likely to be Caucasian compared to non-white-collar offenders (Blickle et al., 2006; Walters & Geyer, 2004; Wheeler et al., 1982). In this study I was able to match white-collar and non-white-collar offenders on the variables of ethnicity and age. Even with the matched samples, several demographic differences still remained. White-collar offenders were significantly more likely to be married than the non-white-collar offenders. White-collar only offenders had a significantly higher level of educational attainment than both white-collar versatile and non-white-collar offenders. Additionally, white-collar offenders were also less likely to have been abuse victims, have a past substance abuse or dependence diagnosis, or to have been involved in psychological treatment. Lastly, white-collar offenders had a much less extensive arrest history when contrasted with non-white-collar offenders. The different demographic differences between white-collar and non-white-collar offenders discovered in this study resemble those findings previously found in other studies of white-collar offenders (Benson & Moore, 1992; Poortinga et al., 2006; Walters & Geyer, 2004; Wheeler et al., 1982).

The current research on white-collar criminality is substantially limited. Few studies have examined the psychopathology of white-collar criminals. In addition, the majority of
scholars have only investigated how white-collar offenders differ psychologically from a white-collar professional sample (Alalehto, 2003; Blickle et al., 2006; Collins & Schmidt, 1993). Only one previous study (Walters & Geyer, 2004) had investigated how white-collar offenders may be different on several psychological variables when contrasted with non-white-collar offenders. Similar to Walters and Geyer study, the LCSF was utilized for this research. Findings for this study demonstrated that white-collar only offenders had significantly lower scores on the LCSF, followed by white-collar criminally versatile offenders, and non-white-collar offenders. Even when controlling for demographic variable (i.e., educational attainment and marital status) the significant differences still existed on the LCSF. These findings resemble those results yielded in Walters and Geyer’s study.

Understanding criminal thinking or attitudes conducive to a criminal lifestyle is of importance to the criminal justice system, as such beliefs have been linked to treatment retention (Staton-Tindall et al., 2007), recidivism (Palmer & Hollin, 2004a; Walters, 1997; 2005; Walters & Elliot, 1999), and perpetration of disciplinary acts in prison (Walters, 1996; 2007; Walters & Geyer, 2005; Walters & Mandell, 2007). Walters and Geyer (2004) found white-collar only offenders to have lower scores on the Self-Assertion/Deception factor scale of the PICTS. However, controlling for demographic variables (i.e., education, age, sentence, ethnicity, and marital status) eliminated these findings. For this study, I predicted white-collar offenders would have lower scores on the PICTS indices when compared to non-white-collar offenders. No significant differences were demonstrated on the PICTS factor scales or PICTS GCT scale. When exploring differences on the eight PICTS thinking style scales, white-collar only offenders were found to have lower scores on the Sentimentality scale when compared to white-collar versatile offenders. This finding suggests that white-collar versatile offenders are more inclined
to endorse the attitude that doing prosocial deeds can erase previous antisocial acts. Importantly, even when controlling for demographic differences (i.e., marital status), white-collar versatile offenders still had significantly higher Sentimentality scores, suggesting this finding is not due to demographic differences between the groups.

As discussed above, white-collar offenders have been found to have a higher level of educational attainment when compared to non-white-collar offenders (Walters & Geyer, 2004). Individuals with higher educational attainment levels tend to score higher on the PPI-R-I factor scale (i.e., Fearless Dominance; Benning et al., 2003). In accordance with previous research, I suspected white-collar only offenders would have higher scores on PPI-R-I factor when compared to non-white-collar. White-collar offenders are also less likely to have past arrests and endorse past engagement in antisocial acts. Therefore, it was hypothesized that white-collar offender would have lower scores on PPI-R-II (i.e., Self-Centered Impulsivity) when compared to non-white-collar offenders since PPI-R-II scores have been found to positively correlate with antisocial behaviors (Benson & Moore, 1992; Edens et al., 2008b; Patrick et al., 2006; Poortinga et al., 2006). I also hypothesized white-collar offenders would have the lowest scores on the PPI-R Coldheartedness factor scale.

Results of this study demonstrated no significant differences between the offender groups on the factor scales. However, exploration of the PPI-R subscales yielded some interesting findings. Both white-collar groups were found to have significantly higher scores on the Social Potency and Machiavellian Egocentricity scales when contrasted with non-white-collar offenders. Previous research demonstrates white-collar offenders tend to be more outgoing socially when contrasted with white-collar professionals (Alalehto, 2003; Collins & Schmidt, 1993). This study extends upon this previous research by demonstrating white-collar offenders...
are also more socially outgoing than non-white-collar offenders, as displayed by their high scores on the Social Potency scale of the PPI-R. In addition, white-collar offenders’ high scores on the Social Potency scale provides further information on the function of their social involvement. Specifically, white-collar offenders are likely to believe that they have persuasive influence over others. In addition, previous research also shows white-collar offenders tend to be low in agreeableness (Alalehto, 2003; Kolz, 1999) and high in narcissism (Blickle et al., 2006). Such traits (low agreeableness and high narcissism) could be components reflected in the Machiavellian Egocentricity scale of the PPI-R. High Machiavellian Egocentricity suggests white-collar offenders are more likely to appear self-centered and invested in their own needs when interacting with others. Such behavior could be perceived as narcissistic. Moreover, when pushing for one’s own interests, others may be more inclined to perceive the individual as disagreeable.

White-collar criminals have been found to be less likely to have problems with drugs or alcohol when compared to non-white-collar offenders (Benson & Moore, 1992; Poortinga et al., 2006). In addition, white-collar offenders also exhibit higher level of depression compared to other offender groups (Poortinga et al., 2006). When contrasted with white-collar professionals, white-collar criminals have demonstrated elevated anxiety (Alalehto, 2003; Blickle et al., 2006; Collins & Schmidt, 1993). Therefore, I hypothesized that white-collar crime only offenders would be elevated on the PAI depression and anxiety indices (i.e., Anxiety, and Anxiety-Related Disorders) compared to all other offender groups. I also predicted that white-collar only offenders would have the lowest scores on the PAI substance use scales (i.e., Alcohol Problems and Drug Problems).
Contrary to what was hypothesized and previous research (Poortinga et al., 2006), no significant differences were found between white-collar and non-white-collar groups on the PAI Depression scale. In regards to anxiety, significant differences were demonstrated for the PAI Anxiety-Related Disorders scale but not the PAI Anxiety scale. It should be noted that findings for the PAI Anxiety-Related Disorders scale were still significant even when making bonferroni adjustments for the two PAI anxiety indices ($p < .03$). The PAI Anxiety-Related Disorders scale is unique because it measures symptoms which correspond with specific anxiety disorders (e.g., phobias, obsessive-compulsive disorder, and posttraumatic stress disorder) (Morey, 1991; 2003). Means for the white-collar offender groups on the PAI Anxiety-Related Disorders scale were much higher than the mean for non-white-collar offenders on the PAI Anxiety-Related Disorders scale, but significant differences only existed between the white-collar versatile and non-white-collar groups. The sample size for the white-collar offender group was much smaller ($n = 48$) than the white-collar versatile group ($n = 89$) or the non-white-collar group ($n = 89$), limiting the power available to detect findings for the white-collar only group. The PAI Anxiety-Related Disorders scale is approaching significance for the white-collar only group, and likely would have been significant with a larger sample.

Findings for the PAI substance use (i.e., Alcohol Problems and Drug Problems) indices showed that both white-collar offender groups had significantly higher scores on the Alcohol Problems scale compared to non-white-collar offenders. In addition, white-collar offenders had significantly lower scores on the Drug Problems scale compared to non-white-collar offenders. These findings contradict past research demonstrating white-collar offenders have fewer substance abuse problems than non-white-collar offenders (Benson & Moore, 1992; Poortinga et al., 2006). Interestingly, white-collar offenders reported substantially more problems with
alcohol than non-white-collar offenders yet substance use information (i.e., previous substance abuse or dependence diagnosis and previous mental health treatment) gathered from PSIs suggests white-collar offenders are much less likely to seek or be court-ordered to take part in professional treatment for substance abuse or dependence problems.

A series of logistic regressions were conducted to determine if the psychological measures (i.e., PICTS, PPI-R, and PAI) could distinguish white-collar types from each other and from non-white-collar offenders. When compared to non-white-collar offenders, white-collar versatile offenders were distinguished by their higher scores on the PAI Alcohol Problems scale and lower scores on the PAI Drug Problems scale. White-collar only offenders were found to be differentiated from non-white-collar offenders by having higher scores on the PAI Anxiety-Related Disorders scale, higher scores on the PAI Alcohol Problems scale, lower scores on the PAI Drug Problems scale, and higher scores on the PPI-R total score. The logistic regression model was not significant for distinguishing white-collar versatile offender from white-collar only offenders.

**Study Limitations**

All individuals that participated in this study were completing the psychological measures as part of a standard interview process that is conducted to screen inmates for their suitability to be involved in a residential drug program. Individuals that complete the drug treatment program are eligible for up to a year sentence reduction; therefore, some offenders may feign past substance abuse or dependence problems so that they could be admitted into the program and potentially receive the sentence reduction. The alcohol and drug indices of the PAI may be an inaccurate measure of true past substance abuse or dependence since offenders may be motivated to exaggerate such behaviors in an attempt to increase their chances of being
admitted into the residential drug program. This could also explain the discrepancy that was seen in this study between self-reported substance use on the PAI and substance use information gathered from each offender’s PSI.

However, at the same time the self-report measures could be more accurate at identifying substance abuse problems, especially problems with alcohol. An individual’s problem with alcohol may go largely unnoticed because it is culturally more acceptable than use of illicit drugs. Therefore, other individuals (e.g., family, friends, legal professionals) may be less likely to involuntarily admit or recommend someone for substance abuse treatment if their problem substance is alcohol. Problems with alcohol can also go undetected by legal professionals (e.g., probation officers) because use is not detected in traditional court-ordered drug tests. In addition, the findings in this study for the PAI Alcohol Problems scale were quite substantial, demonstrating a large effect size (partial $n^2 = .17$; see Greene & Salkind, 2005). The potential usefulness for self-report measures for detecting problems with alcohol should not be ignored.

The PAI contains several measures of scale validity (i.e., Positive Impression, Negative Impression, Infrequency, and Inconsistency). The Negative Impression (NIM) scale assesses the extent an individual may overly endorse symptoms of psychopathology. T-scores of 70 or higher are indicative of a moderate to high elevation on this scale, suggesting the possibility findings on the measure may be inaccurate due to symptom exaggeration (see Morey, 1991; 2003). Thirteen (25.0%) of 48 white-collar only offenders in this study had a score of 70 or higher on the PAI NIM scale. A total of 17 (15.7%) of 89 white-collar versatile offenders had a score of 70 or higher on the PAI NIM scale. Lastly, 13 (13.5%) of 89 non-white-collar offenders had scores of 70 or higher on the PAI NIM scale. These findings suggest white-collar only offenders were substantially more likely to exaggerate symptoms of psychopathology compared
to non-white-collar offenders. Such high PAI NIM scores for white-collar only offenders could suggest they were attempting to portray themselves as more pathological to increase their chances of being admitted into the RDAP program. Alternatively, white-collar only offenders may have been more likely to exaggerate psychopathology because they could be using psychological symptoms as an excuse or for justifying their criminal activity.

Comparisons were made on several demographic and psychological variables between the sample utilized in this study and Walters and Geyer’s (2004) sample. Similar to Walters and Geyer’s findings, the LCSF demonstrated a large effect size across all analyses with white-collar offender groups. The finding for the PICTS Self-Assertion/Deception factor scale was not replicated in this study. However, it is important to recognize Walters and Geyer’s finding for the PICTS Self-Assertion/Deception factor scale was no longer significant when demographic variables (i.e., age, race, education, sentence length, and marital status) were controlled. The PICTS Self-Assertion/Deception scale may not have been significant for this study because demographic differences were already controlled for because the groups were matched on demographic variables (i.e., age and race).

Interestingly, the white-collar sample utilized in this study had very different scores on the PICTS factor scales than the sample utilized by Walters and Geyer. In fact, this study sample was found to have significantly higher scores on PICTS factor scales when compared to Walters and Geyer’s sample (see footnote 1). These different PICTS scores may be due to the composition of the white-collar offender groups. The most notable differences were between the white-collar versatile samples. In the Walters and Geyer study, the white-collar versatile offenders were predominately convicted of tax evasion or credit and lending fraud while in this study they were primarily convicted of postal fraud or false claims and statements.
In addition, the PICTS factor scores may have been significantly higher for this study sample compared to Walters and Geyer’s (2004) sample because of educational attainment differences. Walters and Geyer’s white-collar sample had significantly higher educational attainment levels than the white-collar sample used in this study. Also, demand characteristics may have contributed to the PICTS score differences between the two samples. In Walters and Geyer’s study, offenders completed the PICTS and SIC in a single testing period. For this study, offenders completed the PICTS, PAI, and PPI-R in a single testing period. Due to the large number of questions offenders were answering during one testing session for this study, fatigue or inattentiveness could have influenced participant responding on the PICTS. Furthermore, offenders completing the PICTS for this study were informed that they were completing the PICTS as part of the interview process for the RDAP program. For this study, there was a clear incentive for completing the measures; specifically, increased chance of getting admitted into the RDAP program and receiving a sentence reduction. Conversely, the individuals included in Walters and Geyer’s study volunteered to participate in a research study and no incentive was provided. It is likely that only a very unique subset of the offender population would volunteer to take part in research for no incentive. Therefore, the sample unitized in this study may be more representative of white-collar and non-white-collars incarcerated in federal prisons as compared to Walters and Geyer’s sample.²

In this study I only studied the psychological dimensions of convicted white-collar offenders. White-collar offenders convicted in federal criminal courts likely represent a very unique group of white-collar offenders. In many cases, white-collar offenses may be handled administratively by the company rather than legally in criminal or civil courts. Future research needs to gain access to white-collar offenders not prosecuted by the criminal justice system. For
instance, Babiak et al. (2010) uniquely looked at the relation between PCL-R scores and employee evaluation ratings on dimensions such as communication approach, creativeness, team work ability, leadership potential, critical thinking, and overall performance in a sample of 203 corporate professionals across seven organizations. To attain this information, employee records were reviewed, collateral interviews with co-workers and supervisors were conducted, in-person interviews were performed, and observations of employee work performance were done. Although Babiak et al. did not study criminal behavior in the workplace, they did take a unique approach to studying a construct related to criminal behavior and of interest in this study, psychopathy. Future research could use the approach utilized by Babiak et al. to examine psychopathy and other dimensions related to criminal behavior (i.e., criminal thinking, psychopathology) in white-collar offenders who commit criminal acts that are dealt with at an administrative level. In addition, white-collar offenders that commit crimes that are handled administratively should be compared to white-collar offenders who are prosecuted at the criminal level and also to non-criminal white-collar professionals on various psychological dimensions (i.e., psychopathy, criminal thinking, and psychopathology).

This study demonstrates that there were many more similarities than differences between the two white-collar offender groups on psychological dimensions (similarities were found for anxiety, psychopathy [i.e., Machiavellian Egocentricity and Social Potency], and alcohol use). Specifically, the logistic regression demonstrated that none of the psychological variables (e.g., PICTS, PPI-R, and PAI scales) significantly differentiated the two white-collar groups from each other. In addition, logistic regression findings demonstrated the model distinguishing white-collar and non-white-collar offenders was significant and correctly classified white-collar only offenders 58.3% of the time. Study findings suggest that future researchers may want to
investigate other psychological dimensions (aggression style [proactive or reactive], callousness, narcissism, and conscientiousness) which could better differentiate white-collar offenders from each other and non-white-collar offenders.

A normative sample composed of offenders is not available for the PAI; therefore, the offender sample utilized in this study was compared to the community sample norms available for the measure. All raw scores were transformed to $t$-scores; therefore, a score of 50 is equivalent to the 50th percentile. White-collar and non-white-collar offenders scored well above the 50th percentile on many of the scales explored in this study. For instance, both white-collar offender groups had mean $t$-scores above 60 on the PAI Anxiety-Related Disorders scale and Depression scale, suggesting they exhibit anxiety and depression levels well above the mean of the general population (equivalent to the 83rd percentile). In addition, the Alcohol Problems subscale was above 80 for the white-collar groups (equivalent to the 99th percentile of the community) and above 70 for the non-white-collar group (equivalent to the 96th percentile of the community). On the Drug Problems scale, white-collar and non-white-collar also scored substantially higher than the normative community sample (equivalent to the 96th percentile or higher of the community; see Morey, 2003). In sum, this suggests that white-collar offenders may have higher levels of psychopathology (i.e., anxiety and depression) than individuals that reside in the community. In addition, all three offender groups were considerably more likely to have problems with drugs and alcohol compared to the community sample.

Originally I had planned on using the variable of income level as a covariate in the above analyses. However, income level was not always available in the PSIs. Only 45 white-collar only offenders, 81 white-collar versatile offenders, and 84 non-white-collar offenders had income information in their PSIs. Also, univariate comparisons between the three groups (white-
collar only, white-collar versatile, and non-white-collar offenders) demonstrated that no significant differences existed for income level. Therefore, due to missing data and non-significant group differences, I chose not to use the variable of income as a covariate.

Several variables were difficult to code from PSI data and consequently demonstrated interrater reliability below 0.70. For instance, income had a kappa of 0.46. This was likely due to the fact that no uniform way of reporting income was utilized across PSIs. Some PSIs listed hourly wages while other PSIs listed annual income. Mental health treatment was also difficult to code (kappa = 0.44) because PSIs did not always detail whether past treatments were inpatient or outpatient. Similarly, a kappa of 0.46 was shown for the LCSF total score, but this was likely due to a few items on the LCSF which were more difficult to code, such as prior arrests for intrusive behavior (Interpersonal Intrusiveness B, kappa = 0.57), physical abuse of significant other (Interpersonal Intrusiveness D, kappa = 0.65), and failure to pay child support (Irresponsibility A, kappa = 0.65). Importantly, it should be acknowledged that all of these abovementioned variables still demonstrated kappa scores which were in the moderate or higher range of agreement (Landis & Koch, 1977).

Similar to Walters and Geyer (2004), I intended to use previous arrest history as a covariate in the above analyses. Problematically, white-collar versatile offenders by definition have at least one previous criminal arrest, while white-collar only and non-white-collar offenders do not necessarily have to have one previous arrest. Specifically, white-collar versatile offenders have to have one previous non-white-collar offense arrest, while the other two groups do not have to meet such a definition. Therefore, due to the fact that previous arrest history is confounded with white-collar criminal versatility I chose not to use the variable as a covariate.
Lastly, a limitation of this study is that in many circumstances MANOVAs could not be performed due to multicollinearity between dependent variables or the lack of a moderate significant correlation between dependent measures. Consequently, ANOVAs had to be conducted instead of MANOVAs. This creates the potential for Type I error to occur. However, to control for Type I error in this study, Bonferroni adjustments were utilized when univariate tests were utilized to test exploratory analyses.

**Implications and Future Directions**

Demographic data in this study was gathered from each offender’s PSI. Information included in the PSI is subject to the bias and selectivity of the original writer of the PSI. To decrease potential bias in data collection, multiple archival data sources, in addition to the PSI, could be utilized by future research investigators. Moreover, psychological information for each offender was primary gathered via self-report from the assessments each individual completed. Additional modes of data collection could be used in the future when assessing psychological attributes of offenders, such as structured interviews with the offender, interviews with collateral contacts (e.g., family, correctional staff), and archival data collection.

The white-collar crime definition utilized in this study was adopted from Walters and Geyer’s (2004) study. It is interesting to note that some studies (Benson & Moore, 1992; Wheeler et al., 1988) included individuals convicted of postal fraud in the white-collar and non-white-collar offender groups in their studies. Conversely, this study along with several other studies (Benson & Moore, 1992; Collins & Schmidt, 1993; Listwan et al., 2010; Walters & Geyer, 2004; Wheeler et al., 1982; 1988) classified offenders committing postal fraud as white-collar offenders. One reason for the discrepancy in classifying postal fraud offenders could be due to the nature of the postal fraud offense. Specifically, drug offenders could receive a postal
fraud charge if they distribute drugs via the mail. A drug offender receiving a postal fraud conviction may be very different from the postal fraud offender who distributes letters via mail advertising a false investment business to consumers. It appears an offense-based definition of white-collar crime has limitations. In the future, scholars could work to streamline the definition of white-collar crime so that potentially non-white-collar criminals (e.g., drug offenders who are convicted of postal fraud) are not included in the white-collar criminal category.

Researchers are only beginning to measure psychopathic traits in noncriminal samples. One previous study (Babiak et al., 2010) explored the factor structure of the PCL-R in a sample of corporate professionals finding that the factor structure resembles that seen with offender samples. No previous studies have investigated the factor structure of the PCL-R in a sample of white-collar offenders. In addition, no research before this study has examined the factor structure or utility of the PPI-R. Future research should continue to explore psychopathic traits in professional and criminal samples as such traits are strongly linked to repeated engagement in criminal behavior (Porter et al., 2001; Serin & Amos, 1995). Therefore, continued research in psychopathy may eventually help employers to detect employees that are likely to exhibit criminal conduct in the workplace.

Results of this study demonstrate that white-collar offenders are different demographically and psychologically than a comparison group of drug offenders (89.9% were drug offenders). Future research could examine whether white-collar offenders differ on various demographic and personality dimensions when contrasted with offenders of other crimes (e.g., property crimes, sex crimes). Such research could help clarify the treatment needs of various offender types.
Although not explored in this study, several studies have demonstrated physiological response (e.g., heart rate, skin conductance) differences between incarcerated psychopaths and non-psychopaths on various tasks (e.g., avoiding an aversive stimulus, participation in an aggressive task) (Arnet, Howland, Smith, & Newman, 1993; Levenston, Patrick, Bradley, & Lang, 2000; Patrick, 1994). Research illustrates decreased eye blink (a startle response measure) and heart rate in psychopaths when viewing stimuli depicting aversive images (e.g., mutilation, physical violence) compared to neutral stimuli (Levenston et al., 2000; Patrick, 1994). When experiencing punishment, psychopaths show lower heart rate levels compared to when they are rewarded and in contrast to non-psychopaths (Arnet et al., 1993). Future research could examine whether white-collar offenders and non-white-collar offenders high in psychopathy exhibit similar physiological responses to aversive stimuli. Such research could inform treatment practices with white-collar offenders.

Many findings from this study advance treatment practices with white-collar offenders. For instance, white-collar offenders were found to endorse having the belief that they are highly capable of being socially persuasive (Social Potency) and self-centered or callousness (Machiavellian Egocentricity). Possessing these traits may lead white-collar offenders to be more argumentative, which could result in problematic communication. White-collar offenders in particular could possibly benefit from communication training which specifically targets conflict resolution and empathy.

In addition, results of this study showed white-collar offenders were higher in anxiety when compared to non-white-collar offenders. Such findings are problematic, as high anxiety has been linked to treatment dropout and recidivism (Listwan et al., 2010). Therefore, appropriate treatment approaches with white-collar offenders may include techniques which
teach them how to appropriately cope with anxiety, such as cognitive restructuring and relaxation strategies. Researchers may want to investigate if including strategies that help offenders manage anxiety in treatment programs for white-collar offenders actually increases treatment retention.

In this study, the white-collar offender sample was divided by criminal history. Several significant differences were found on many of the demographic and psychological attributes when comparing the white-collar offender groups. This suggests that white-collar offenders are a heterogeneous group. Possibly, different treatment approaches may have to be used with different subsets of white-collar offenders. Moreover, there may be a more appropriate way to divide white-collar offenders so that more homogenous groups could be formulated for treatment purposes. For instance, white-collar offenders with different motives (e.g., greed, fitting in with the corporate culture, paying off personal financial debt) for committing their crime may need different treatment approaches.

The recent conviction of Bernie Madoff for his $65 billion ponzi scheme (CBC News, 2009) reminds us of the damage and devastation white-collar crime can cause for its victims. However, as this study demonstrates, white-collar offenders possess traits that may be valuable in the corporate environment. For instance, white-collar offenders were found to demonstrate traits such as persuasiveness (i.e., PPI-R Social Potency scale) and self-centeredness (i.e., Machiavellian Egocentricity). It is clear that detection of white-collar criminals will remain a difficult but necessary task.
References


Butcher, J. N., Graham, J. K., Ben-Porath, Y. S., Tellegen, A., Dahlstrom, W. G., & Kaemmer,


psychiatric unit: Examining the criterion-related validity of the personality assessment inventory. *Psychological Services, 5*, 108-117. doi: 10.1037/1541-1559.5.2.108


doi:10.1177/0093854895022003008


A series of one-sample t-tests were conducted to compare the sample of white-collar only, white-collar versatile and non-white-collar offenders to the offender sample used in the Walters and Geyer (2004) study. Table 13 displays the one-sample t-test findings which resulted when comparing the study sample of white-collar only offenders to Walters and Geyer’s white-collar only sample. Findings show my study sample had significantly fewer years of education than Walters and Geyer’s sample. In addition, the white-collar only offender sample used in my study had significantly higher scores on the LCSF and PICTS factor scores when compared to Walters and Geyer’s sample. Results for the one-sample t-tests comparing the white-collar versatile offenders from this study to the white-collar versatile offender sample utilized in the Walters and Geyer study are shown in Table 14. The sample of white-collar versatile offenders utilized in my study had fewer years of education and longer sentences than Walter and Geyer’s sample. Also, my sample had significantly higher scores on the LCSF and PICTS factor scales. Lastly, one-sample t-tests were conducted comparing the non-white-collar sample utilized in my study to the non-white-collar offender sample used in Walters and Geyer’s study (see Table 15). Findings demonstrated that the non-white-collar offender group utilized in this study was older and had fewer years of education that the non-white-collar offender group utilized in the Walters and Geyer study. Additionally, the non-white-collar offender group used in this study had significantly higher PICTS factor scores than the Walters and Geyer sample (see Table 15).

Glenn Walters, Ph.D. was contacted via email regarding his feedback on the one-sample t-tests conducted comparing the white-collar and non-white-collar offenders utilized in this study and Walters and Geyer’s (2004) sample. Dr. Walters mentioned several factors that may have contributed to the significant PICTS differences found between the two samples such as different
education levels and different demand characteristics within the testing situation (how the testing was administered, who administered the testing, and other assessments administered along with the PICTS). The feedback provided by Walters was incorporated into the discussion of this paper.

3 I would like to acknowledge Aaron Metzger, Ph.D. for his helpful advice and assistance with the logistic regression analyses.
### Table 1

**Interrater Reliability Findings for Demographic Variables**

<table>
<thead>
<tr>
<th>Demographic Variable</th>
<th>Kappa</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>1.00</td>
</tr>
<tr>
<td>Marital status</td>
<td>0.83</td>
</tr>
<tr>
<td>Number of children</td>
<td>0.88</td>
</tr>
<tr>
<td>Education</td>
<td>0.94</td>
</tr>
<tr>
<td>Income</td>
<td>0.46</td>
</tr>
<tr>
<td>Military status</td>
<td>0.92</td>
</tr>
<tr>
<td>Honorable discharge</td>
<td>0.92</td>
</tr>
<tr>
<td>Sentence length</td>
<td>0.86</td>
</tr>
<tr>
<td>Number of Codefendants</td>
<td>0.86</td>
</tr>
<tr>
<td>Juvenile arrests</td>
<td>0.87</td>
</tr>
<tr>
<td>Adult arrests</td>
<td>1.00</td>
</tr>
<tr>
<td>Classification into three offender groups</td>
<td>1.00</td>
</tr>
<tr>
<td>Mental Health Diagnosis</td>
<td>0.83</td>
</tr>
<tr>
<td>Substance Diagnosis</td>
<td>1.00</td>
</tr>
<tr>
<td>Mental Health Treatment</td>
<td>0.44</td>
</tr>
<tr>
<td>Psychiatric Medication</td>
<td>0.91</td>
</tr>
<tr>
<td>Suicide Attempt</td>
<td>0.65</td>
</tr>
<tr>
<td>Abuse Victim</td>
<td>0.78</td>
</tr>
<tr>
<td>Type of abuse</td>
<td>0.79</td>
</tr>
</tbody>
</table>

*Note.* Kappa was used to calculate interrater reliability when only two response options were available for items. Number of arrests was coded as an agreement when there was a difference of two arrests or less between coders. Income was coded as an agreement when there was a difference of $10,000 or less between raters.
Table 2

*Interrater Reliability for the Lifestyle Criminality Screening Form-Revised Items*

<table>
<thead>
<tr>
<th>LCSF Items</th>
<th>Kappa</th>
</tr>
</thead>
<tbody>
<tr>
<td>Irresponsibility item A</td>
<td>0.65</td>
</tr>
<tr>
<td>Irresponsibility item B</td>
<td>0.71</td>
</tr>
<tr>
<td>Irresponsibility item C</td>
<td>0.84</td>
</tr>
<tr>
<td>Irresponsibility item D</td>
<td>1.00</td>
</tr>
<tr>
<td>Irresponsibility total</td>
<td>0.72</td>
</tr>
<tr>
<td>Self Indulgence item A</td>
<td>0.84</td>
</tr>
<tr>
<td>Self Indulgence item B</td>
<td>0.80</td>
</tr>
<tr>
<td>Self Indulgence item C</td>
<td>0.93</td>
</tr>
<tr>
<td>Self Indulgence total</td>
<td>0.86</td>
</tr>
<tr>
<td>Interpersonal Intrusiveness item A</td>
<td>1.00</td>
</tr>
<tr>
<td>Interpersonal Intrusiveness item B</td>
<td>0.57</td>
</tr>
<tr>
<td>Interpersonal Intrusiveness item C</td>
<td>1.00</td>
</tr>
<tr>
<td>Interpersonal Intrusiveness item D</td>
<td>0.65</td>
</tr>
<tr>
<td>Interpersonal Intrusiveness total</td>
<td>0.41</td>
</tr>
<tr>
<td>Social Rule Break item A</td>
<td>0.90</td>
</tr>
<tr>
<td>Social Rule Break item B</td>
<td>1.00</td>
</tr>
<tr>
<td>Social Rule Break item C</td>
<td>1.00</td>
</tr>
<tr>
<td>Social Rule Break total</td>
<td>0.82</td>
</tr>
<tr>
<td>LCSF total</td>
<td>0.46</td>
</tr>
</tbody>
</table>

*Note.* Kappa was used to calculate interrater reliability when only two response options were available for items. Pearson correlations were used to compute interrater reliability when more than two response options were available. LCSF = Lifestyle Criminality Screening Form. LCSF total scores were coded as an agreement if there was a difference of two points or less between raters.
Table 3

Demographic Characteristics of Study Participants

<table>
<thead>
<tr>
<th>Demographic Variable</th>
<th>White-collar only (n = 48)</th>
<th>White-collar versatile (n = 89)</th>
<th>Non-white-collar (n = 89)</th>
<th>(\chi^2)</th>
<th>(p)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instant Offense</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bank Embezzlement</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tax Fraud</td>
<td>6</td>
<td>9</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wire and Postal Fraud</td>
<td>15</td>
<td>23</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lending and Credit Fraud</td>
<td>10</td>
<td>14</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>False Claims and Statements</td>
<td>9</td>
<td>29</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bribery</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Securities Fraud</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Antitrust Violations</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health Care Fraud</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Counterfeiting</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Drug</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>80</td>
<td>89.9</td>
</tr>
<tr>
<td>Firearms Violation</td>
<td>0</td>
<td>0</td>
<td>5</td>
<td>5</td>
<td>5.6</td>
</tr>
<tr>
<td>Other</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>4</td>
<td>4.5</td>
</tr>
<tr>
<td>Race</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Black</td>
<td>10</td>
<td>26</td>
<td>26</td>
<td>26</td>
<td>29.2</td>
</tr>
<tr>
<td>White</td>
<td>36</td>
<td>62</td>
<td>61</td>
<td>61</td>
<td>68.5</td>
</tr>
<tr>
<td>Asian/Pacific Islander</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1.1</td>
</tr>
<tr>
<td>Hispanic</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1.1</td>
</tr>
</tbody>
</table>

(Table 3 continues)
### Marital Status

<table>
<thead>
<tr>
<th>Status</th>
<th>33&lt;sub&gt;a,b&lt;/sub&gt;</th>
<th>68.8</th>
<th>47&lt;sub&gt;a&lt;/sub&gt;</th>
<th>52.8</th>
<th>39&lt;sub&gt;b&lt;/sub&gt;</th>
<th>43.8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Married</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Divorced/Separated</td>
<td>10</td>
<td>20.8</td>
<td>16</td>
<td>18.0</td>
<td>25</td>
<td>28.1</td>
</tr>
<tr>
<td>Single/Never Married</td>
<td>5&lt;sub&gt;a,b&lt;/sub&gt;</td>
<td>10.4</td>
<td>26&lt;sub&gt;a&lt;/sub&gt;</td>
<td>29.2</td>
<td>25&lt;sub&gt;b&lt;/sub&gt;</td>
<td>28.1</td>
</tr>
</tbody>
</table>

### Served in Military

<table>
<thead>
<tr>
<th>Status</th>
<th>12</th>
<th>25.0</th>
<th>15</th>
<th>16.9</th>
<th>15</th>
<th>16.9</th>
</tr>
</thead>
</table>

### Honorable Discharge from Military

<table>
<thead>
<tr>
<th>Status</th>
<th>10</th>
<th>20.8</th>
<th>11</th>
<th>12.4</th>
<th>13</th>
<th>14.6</th>
</tr>
</thead>
</table>

### Past Mental Health Diagnosis

<table>
<thead>
<tr>
<th>Status</th>
<th>23</th>
<th>47.9</th>
<th>37</th>
<th>41.6</th>
<th>32</th>
<th>36.0</th>
</tr>
</thead>
</table>

### Past Substance Abuse Diagnosis

<table>
<thead>
<tr>
<th>Status</th>
<th>9&lt;sub&gt;a,b&lt;/sub&gt;</th>
<th>18.8</th>
<th>35&lt;sub&gt;a&lt;/sub&gt;</th>
<th>39.3</th>
<th>43&lt;sub&gt;b&lt;/sub&gt;</th>
<th>48.3</th>
</tr>
</thead>
</table>

### Past Mental Health Treatment

<table>
<thead>
<tr>
<th>Status</th>
<th>5</th>
<th>10.4</th>
<th>20</th>
<th>22.5</th>
<th>15</th>
<th>16.9</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inpatient and outpatient</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inpatient</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>5</td>
<td>5.6</td>
</tr>
<tr>
<td>Outpatient</td>
<td>16</td>
<td>33.3</td>
<td>29&lt;sub&gt;a&lt;/sub&gt;</td>
<td>32.6</td>
<td>38&lt;sub&gt;a&lt;/sub&gt;</td>
<td>42.7</td>
</tr>
<tr>
<td>No treatment</td>
<td>27</td>
<td>56.3</td>
<td>40&lt;sub&gt;a&lt;/sub&gt;</td>
<td>44.9</td>
<td>31&lt;sub&gt;a&lt;/sub&gt;</td>
<td>34.8</td>
</tr>
</tbody>
</table>
(Table 3 continued)

<table>
<thead>
<tr>
<th>Past use of psychiatric medication</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>15</td>
<td>31.3</td>
<td>30</td>
<td>33.7</td>
<td>24</td>
<td>27.0</td>
</tr>
<tr>
<td>No</td>
<td>33</td>
<td>68.8</td>
<td>59</td>
<td>66.3</td>
<td>65</td>
<td>73.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Previous abuse victim</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>3a</td>
<td>6.3</td>
<td>7b</td>
<td>7.9</td>
<td>18a,b</td>
<td>20.2</td>
</tr>
<tr>
<td>No</td>
<td>45a</td>
<td>93.8</td>
<td>82b</td>
<td>92.1</td>
<td>71a,b</td>
<td>79.8</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Type of abuse victim</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Sexual</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1.1</td>
<td>2</td>
<td>2.2</td>
</tr>
<tr>
<td>Physical</td>
<td>1</td>
<td>2.3</td>
<td>1</td>
<td>1.1</td>
<td>5</td>
<td>5.6</td>
</tr>
<tr>
<td>Psychological</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>3.9</td>
<td>4</td>
<td>4.5</td>
</tr>
<tr>
<td>Mixed</td>
<td>2</td>
<td>4.5</td>
<td>2</td>
<td>2.2</td>
<td>7</td>
<td>7.9</td>
</tr>
<tr>
<td>N/A</td>
<td>45</td>
<td>93.8</td>
<td>82</td>
<td>92.1</td>
<td>71</td>
<td>79.8</td>
</tr>
</tbody>
</table>

*Note.* White-collar offenders who committed crimes that did not fit within the other nine white-collar crime categories (e.g., money laundering, identity theft) were classified in the instance offense category of false claims and statements. N/A = Not Applicable. Individuals were classified as N/A for the honorable discharge from military if they were not in the military or if the reason for their discharge was not included in the Presentence Investigation Report.
### Table 4

**Demographic Variables of Study Participants**

<table>
<thead>
<tr>
<th>Demographic Variable</th>
<th>White-collar only ($n = 48$)</th>
<th>White-collar versatile ($n = 89$)</th>
<th>Non-white-collar ($n = 89$)</th>
<th>$M$</th>
<th>$SD$</th>
<th>$M$</th>
<th>$SD$</th>
<th>$M$</th>
<th>$SD$</th>
<th>$F$</th>
<th>$P$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>46.79</td>
<td>11.52</td>
<td>44.62</td>
<td>9.39</td>
<td>45.93</td>
<td>9.14</td>
<td>0.86</td>
<td>.43</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sentence Length</td>
<td>40.48a, 16.74</td>
<td>43.03b, 19.82</td>
<td>65.76a,b, 45.85</td>
<td>14.52</td>
<td>.01</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of children</td>
<td>2.13</td>
<td>1.68</td>
<td>2.01</td>
<td>1.72</td>
<td>2.11</td>
<td>1.81</td>
<td>0.10</td>
<td>.91</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Income</td>
<td>205901</td>
<td>5.88</td>
<td>76314</td>
<td>1.06</td>
<td>61478</td>
<td>3.26</td>
<td>2.80</td>
<td>.06</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education (in years)</td>
<td>14.67a,b, 3.14</td>
<td>12.78a, 2.50</td>
<td>11.93b, 2.50</td>
<td>16.65</td>
<td>.01</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of Codefendants</td>
<td>0.53a, 0.83</td>
<td>0.75b, 1.09</td>
<td>1.17a,b, 1.16</td>
<td>6.33</td>
<td>.01</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of defendants</td>
<td>0, 0</td>
<td>0.15, 0.51</td>
<td>0.21, 0.71</td>
<td>2.33</td>
<td>.10</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of arrests</td>
<td>0.29a,b, 0.85</td>
<td>4.89a, 4.93</td>
<td>6.15b, 5.47</td>
<td>25.60</td>
<td>.01</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of suicide attempts</td>
<td>0, 0</td>
<td>.08, 0.31</td>
<td>0.09, 0.36</td>
<td>1.55</td>
<td>.22</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note.* The variable of income was not included in the Presentence Investigation Report (PSI) for all offenders. A total of 45 white-collar only, 81 versatile white-collar, and 84 non-white-collar offenders had income information available in their PSI and were therefore included in analyses for the income variable.

Means in the same row with the same subscript are significantly different from each other.
Table 5

*Lifestyle Criminality Screening Form and Psychological Inventory of Criminal Thinking Styles*

*Scores for White-Collar Only, White-Collar Versatile, and Non-White-Collar Offenders*

<table>
<thead>
<tr>
<th></th>
<th>White-collar only</th>
<th>White-collar versatile</th>
<th>Non-white-collar</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>((n = 48))</td>
<td>((n = 89))</td>
<td>((n = 89))</td>
</tr>
<tr>
<td><strong>M</strong> <strong>SD</strong></td>
<td><strong>M</strong> <strong>SD</strong></td>
<td><strong>M</strong> <strong>SD</strong></td>
<td></td>
</tr>
<tr>
<td>LCSF total score</td>
<td>1.88(_a) 1.66</td>
<td>4.55(_a) 2.19</td>
<td>6.22(_a) 2.78</td>
</tr>
<tr>
<td>PICTS factor scores</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Problem Avoidance</td>
<td>56.56 10.63</td>
<td>58.13 10.74</td>
<td>55.70 10.27</td>
</tr>
<tr>
<td>Interpersonal Hostility</td>
<td>53.17 15.34</td>
<td>52.21 12.59</td>
<td>52.69 13.47</td>
</tr>
<tr>
<td>Self-Assertion/Deception</td>
<td>54.92 12.34</td>
<td>59.27 12.58</td>
<td>58.25 10.25</td>
</tr>
<tr>
<td>Denial of Harm</td>
<td>50.25 10.15</td>
<td>53.73 10.90</td>
<td>51.33 9.56</td>
</tr>
<tr>
<td>PICTS GCT</td>
<td>55.42 14.28</td>
<td>59.26 12.61</td>
<td>57.11 10.83</td>
</tr>
<tr>
<td>PICTS thinking styles</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mollification</td>
<td>50.56 12.25</td>
<td>53.21 12.26</td>
<td>53.88 12.07</td>
</tr>
<tr>
<td>Cutoff</td>
<td>55.46 11.75</td>
<td>59.15 10.26</td>
<td>56.88 10.13</td>
</tr>
<tr>
<td>Entitlement</td>
<td>53.96 13.17</td>
<td>57.33 11.87</td>
<td>54.18 10.06</td>
</tr>
<tr>
<td>Power Orientation</td>
<td>56.56 13.85</td>
<td>57.61 13.17</td>
<td>55.01 12.54</td>
</tr>
<tr>
<td>Sentimentality</td>
<td>50.71(_a) 11.77</td>
<td>55.79(_a) 11.92</td>
<td>52.35 10.14</td>
</tr>
</tbody>
</table>

(Table 5 continues)
(Table 5 continued)

<p>| | | | | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Superoptimism</td>
<td>56.40</td>
<td>12.97</td>
<td>59.84</td>
<td>13.53</td>
<td>59.45</td>
<td>11.65</td>
<td>1.26</td>
<td>.29</td>
<td>.01</td>
</tr>
<tr>
<td>Cognitive Indolence</td>
<td>56.67</td>
<td>11.08</td>
<td>57.35</td>
<td>10.74</td>
<td>56.47</td>
<td>9.54</td>
<td>0.17</td>
<td>.84</td>
<td>.002</td>
</tr>
<tr>
<td>Discontinuity</td>
<td>54.54</td>
<td>11.96</td>
<td>57.21</td>
<td>11.30</td>
<td>55.17</td>
<td>10.69</td>
<td>1.15</td>
<td>.32</td>
<td>.01</td>
</tr>
</tbody>
</table>

*Note.* Means in the same row with the same subscript are significantly different from each other. LCSF = Lifestyle Criminality Screening Form. PICTS = Psychological Inventory of Criminal Thinking Styles. PICTS GCT = Psychological Inventory of Criminal Thinking Styles General Criminal Thinking Score.
Table 6
Correlations between the PPI-R Subscales

<table>
<thead>
<tr>
<th></th>
<th>1.</th>
<th>2.</th>
<th>3.</th>
<th>4.</th>
<th>5.</th>
<th>6.</th>
<th>7.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Machiavellian Egocentricity</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Impulsive Nonconformity</td>
<td>.67**</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Blame Externalization</td>
<td>.53**</td>
<td>.42**</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Carefree Nonplanfulness</td>
<td>.48**</td>
<td>.30**</td>
<td>.27**</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Social Potency</td>
<td>.32**</td>
<td>.24**</td>
<td>-.09</td>
<td>-.12</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Fearlessness</td>
<td>.33**</td>
<td>.45**</td>
<td>.16*</td>
<td>.06</td>
<td>.27**</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>7. Stress Immunity</td>
<td>-.36**</td>
<td>-.16*</td>
<td>-.49**</td>
<td>-.44**</td>
<td>.34**</td>
<td>.09</td>
<td>-</td>
</tr>
</tbody>
</table>

*Note.* PPI-R = Psychopathic Personality Inventory-Revised.

* *p < .05, ** p < .01
Table 7

*Psychopathic Personality Inventory-Revised Scores for White-Collar Only, White-Collar Versatile, and Non-White-Collar Offenders*

<table>
<thead>
<tr>
<th></th>
<th>White-collar only $(n = 48)$</th>
<th>White-collar versatile $(n = 89)$</th>
<th>Non-white-collar $(n = 89)$</th>
<th>$F$</th>
<th>$p$</th>
<th>Partial $n^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$M$</td>
<td>$SD$</td>
<td>$M$</td>
<td>$SD$</td>
<td>$M$</td>
<td>$SD$</td>
</tr>
<tr>
<td>PPI-R Factors</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fearless Dominance</td>
<td>47.10</td>
<td>12.79</td>
<td>46.75</td>
<td>13.83</td>
<td>42.79</td>
<td>12.42</td>
</tr>
<tr>
<td>(Factor 1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-Centered Impulsivity</td>
<td>54.60</td>
<td>12.46</td>
<td>54.42</td>
<td>12.27</td>
<td>51.75</td>
<td>9.73</td>
</tr>
<tr>
<td>(Factor 2)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coldheartedness</td>
<td>47.31</td>
<td>7.79</td>
<td>47.49</td>
<td>9.68</td>
<td>47.75</td>
<td>7.08</td>
</tr>
<tr>
<td>PPI-R subscales</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Machiavellian Egocentricity</td>
<td>55.44&lt;sub&gt;a&lt;/sub&gt;</td>
<td>11.18</td>
<td>55.83&lt;sub&gt;b&lt;/sub&gt;</td>
<td>11.63</td>
<td>50.56&lt;sub&gt;a,b&lt;/sub&gt;</td>
<td>10.26</td>
</tr>
<tr>
<td>Impulsive Nonconformity</td>
<td>54.96</td>
<td>11.33</td>
<td>53.36</td>
<td>12.73</td>
<td>53.03</td>
<td>11.34</td>
</tr>
<tr>
<td>Blame Externalization</td>
<td>49.23</td>
<td>11.54</td>
<td>51.37</td>
<td>9.90</td>
<td>49.31</td>
<td>10.22</td>
</tr>
<tr>
<td>Carefree Nonplanfulness</td>
<td>54.40</td>
<td>10.67</td>
<td>53.38</td>
<td>11.38</td>
<td>53.06</td>
<td>9.31</td>
</tr>
<tr>
<td>Social Potency</td>
<td>48.50&lt;sub&gt;a&lt;/sub&gt;</td>
<td>11.91</td>
<td>47.74&lt;sub&gt;b&lt;/sub&gt;</td>
<td>13.75</td>
<td>41.75&lt;sub&gt;a,b&lt;/sub&gt;</td>
<td>11.62</td>
</tr>
<tr>
<td>Fearlessness</td>
<td>51.31</td>
<td>11.58</td>
<td>51.46</td>
<td>10.75</td>
<td>50.46</td>
<td>11.01</td>
</tr>
<tr>
<td>Stress Immunity</td>
<td>42.67</td>
<td>14.49</td>
<td>43.83</td>
<td>11.86</td>
<td>44.10</td>
<td>9.98</td>
</tr>
<tr>
<td>PPI-R Total Score</td>
<td>51.56</td>
<td>12.07</td>
<td>51.38</td>
<td>14.15</td>
<td>47.26</td>
<td>12.60</td>
</tr>
</tbody>
</table>

*Note.* Means in the same row with the same subscript are significantly different from each other. PPI-R = Psychopathic Personality Inventory-Revised.
Table 8

**Personality Assessment Inventory Scores for White-collar Only, White-Collar Versatile, and Non-White-Collar Offenders**

<table>
<thead>
<tr>
<th></th>
<th>White-collar only (n = 48)</th>
<th>White-collar versatile (n = 89)</th>
<th>Non-white-collar (n = 89)</th>
<th>M</th>
<th>SD</th>
<th>M</th>
<th>SD</th>
<th>M</th>
<th>SD</th>
<th>F</th>
<th>p</th>
<th>Partial n²</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
<td>M</td>
</tr>
<tr>
<td>PAI scales</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anxiety</td>
<td></td>
<td></td>
<td></td>
<td>60.56</td>
<td>16.39</td>
<td>58.60</td>
<td>12.99</td>
<td>55.54</td>
<td>11.01</td>
<td>2.57</td>
<td>.08</td>
<td>.02</td>
</tr>
<tr>
<td>Anxiety-Related Disorders</td>
<td></td>
<td></td>
<td></td>
<td>61.15</td>
<td>15.79</td>
<td>60.85&lt;sup&gt;a&lt;/sup&gt;</td>
<td>13.66</td>
<td>55.74&lt;sup&gt;a&lt;/sup&gt;</td>
<td>11.02</td>
<td>4.22</td>
<td>.02</td>
<td>.04</td>
</tr>
<tr>
<td>Depression</td>
<td></td>
<td></td>
<td></td>
<td>63.17</td>
<td>16.62</td>
<td>60.92</td>
<td>12.23</td>
<td>58.74</td>
<td>10.44</td>
<td>1.97</td>
<td>.14</td>
<td>.02</td>
</tr>
<tr>
<td>Alcohol Problems</td>
<td></td>
<td></td>
<td></td>
<td>84.52&lt;sup&gt;a&lt;/sup&gt;</td>
<td>20.47</td>
<td>86.06&lt;sup&gt;b&lt;/sup&gt;</td>
<td>16.28</td>
<td>69.58&lt;sup&gt;a,b&lt;/sup&gt;</td>
<td>17.14</td>
<td>22.29</td>
<td>.01</td>
<td>.17</td>
</tr>
<tr>
<td>Drug Problems</td>
<td></td>
<td></td>
<td></td>
<td>76.63&lt;sup&gt;a,b&lt;/sup&gt;</td>
<td>16.71</td>
<td>84.18&lt;sup&gt;a&lt;/sup&gt;</td>
<td>16.97</td>
<td>86.09&lt;sup&gt;b&lt;/sup&gt;</td>
<td>14.95</td>
<td>5.56</td>
<td>.01</td>
<td>.05</td>
</tr>
</tbody>
</table>

*Note.* Means in the same row with the same subscript are significantly different from each other. PAI = Personality Assessment Inventory.
Table 9

Correlations between PICTS GCT Score, PICTS Factor Scales, PPI-R Total Score, PPI-R Factor Scales, and the PAI Scales.

<table>
<thead>
<tr>
<th></th>
<th>1.</th>
<th>2.</th>
<th>3.</th>
<th>4.</th>
<th>5.</th>
<th>6.</th>
<th>7.</th>
<th>8.</th>
<th>9.</th>
<th>10.</th>
<th>11.</th>
<th>12.</th>
<th>13.</th>
</tr>
</thead>
<tbody>
<tr>
<td>PICTS GCT</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PICTS: Problem</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Avoidance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.78**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PICTS: Interpersonal</td>
<td>.82**</td>
<td>.54**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hostility</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.82**</td>
<td>.54**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PICTS: Self-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.86**</td>
<td>.58**</td>
<td>.68**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assertion/ Deception</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PICTS: Denial</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.75**</td>
<td>.41**</td>
<td>.60**</td>
<td>.54**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>of Harm</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PPI-R total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.54**</td>
<td>.33**</td>
<td>.48**</td>
<td>.39**</td>
<td>.54**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fearless</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dominance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-.06</td>
<td>-.22**</td>
<td>.05</td>
<td>-.07</td>
<td>.11</td>
<td>.52**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PPI-R: Self-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.70**</td>
<td>.57**</td>
<td>.60**</td>
<td>.52**</td>
<td>.58**</td>
<td>.83**</td>
<td>.01</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Centered Impulsivity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coldheartedness</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.06</td>
<td>-.01</td>
<td>.11</td>
<td>.07</td>
<td>.10</td>
<td>.39**</td>
<td>.06</td>
<td>.21**</td>
<td></td>
</tr>
<tr>
<td>PAI: Anxiety</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-.45**</td>
<td>.51**</td>
<td>.41**</td>
<td>.31**</td>
<td>.27**</td>
<td>.13*</td>
<td>-.40**</td>
<td>.48**</td>
<td>-.18**</td>
</tr>
<tr>
<td>Anxiety-Related</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.48**</td>
<td>.41**</td>
<td>.45**</td>
<td>.36**</td>
<td>.36**</td>
<td>.22**</td>
<td>-.22**</td>
<td>.46**</td>
<td>.15*</td>
</tr>
<tr>
<td>Disorders</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PAI: Depression</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.49**</td>
<td>.55**</td>
<td>.46**</td>
<td>.35**</td>
<td>.30**</td>
<td>.21**</td>
<td>-.36**</td>
<td>.53**</td>
<td>-.12</td>
</tr>
<tr>
<td>Problems</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PAI: Alcohol</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.25**</td>
<td>.23**</td>
<td>.17*</td>
<td>.23**</td>
<td>.12</td>
<td>.21**</td>
<td>.13</td>
<td>.21**</td>
<td>-.01</td>
</tr>
<tr>
<td>Problems</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PAI: Drug Problems</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.52**</td>
<td>.44**</td>
<td>.36**</td>
<td>.54**</td>
<td>.23**</td>
<td>.23**</td>
<td>-.05</td>
<td>.34**</td>
<td>-.11</td>
</tr>
</tbody>
</table>

Note. LCSF: Lifestyle Criminality Screening Form. PICTS = Psychological Inventory of Criminal Thinking Styles. GCT = general criminal thinking. PPI-R = Psychopathic Personality Inventory-Revised. PAI = Personality Assessment Inventory. * p < .05, ** p < .01
Table 10

Summary of the Logistic Regression Predicting White-Collar Only and White-Collar Versatile Offender Status using the PICTS, PPI-R, and PAI.

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>SE</th>
<th>Odds ratio</th>
<th>Wald statistic</th>
</tr>
</thead>
<tbody>
<tr>
<td>PICTS GCT</td>
<td>.04</td>
<td>.03</td>
<td>1.04</td>
<td>2.38</td>
</tr>
<tr>
<td>PPI-R total</td>
<td>-.03</td>
<td>.02</td>
<td>.97</td>
<td>2.36</td>
</tr>
<tr>
<td>PAI Anxiety-Related Disorder</td>
<td>-.02</td>
<td>.02</td>
<td>.98</td>
<td>2.24</td>
</tr>
<tr>
<td>PAI Alcohol Problems</td>
<td>.002</td>
<td>.01</td>
<td>1.00</td>
<td>.04</td>
</tr>
<tr>
<td>PAI Drug Problems</td>
<td>.02</td>
<td>.01</td>
<td>1.02</td>
<td>2.92</td>
</tr>
</tbody>
</table>

Note. 0 = white-collar only, 1 = white-collar versatile. LCSF = Lifestyle Criminality Screening Form. PICTS GCT score = Psychological Inventory of Criminal Thinking Styles General Criminal Thinking score. PPI-R = Psychopathic Personality Inventory-Revised. PAI = Personality Assessment Inventory.

* p < .05; ** p < .01
Table 11

*Summary of the Logistic Regression Predicting White-Collar Versatile and Non-White-Collar Offender Status using the PICTS, PPI-R, and PAI.*

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>SE</th>
<th>Odds ratio</th>
<th>Wald statistic</th>
</tr>
</thead>
<tbody>
<tr>
<td>PICTS GCT</td>
<td>.01</td>
<td>.02</td>
<td>1.02</td>
<td>.13</td>
</tr>
<tr>
<td>PPI-R total</td>
<td>-.02</td>
<td>.02</td>
<td>.98</td>
<td>1.95</td>
</tr>
<tr>
<td>PAI: Anxiety-Related Disorder</td>
<td>-.02</td>
<td>.02</td>
<td>.98</td>
<td>1.48</td>
</tr>
<tr>
<td>PAI: Alcohol Problems</td>
<td>-.06</td>
<td>.01</td>
<td>.95</td>
<td>26.37**</td>
</tr>
<tr>
<td>PAI: Drug Problems</td>
<td>.03</td>
<td>.01</td>
<td>1.03</td>
<td>4.62*</td>
</tr>
</tbody>
</table>

*Note.* 0 = white-collar versatile, 1 = non-white-collar. LCSF = Lifestyle Criminality Screening Form. PICTS GCT = Psychological Inventory of Criminal Thinking Styles General Criminal Thinking score. PPI-R = Psychopathic Personality Inventory-Revised. PAI = Personality Assessment Inventory.

* p < .05; ** p < .01
Table 12

Summary of the Logistic Regression Predicting White-Collar Only and Non-White-Collar Offender Status using the PICTS, PPI-R, and PAI.

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>SE</th>
<th>Odds ratio</th>
<th>Wald statistic</th>
</tr>
</thead>
<tbody>
<tr>
<td>PICTS GCT</td>
<td>.04</td>
<td>.03</td>
<td>1.04</td>
<td>1.94</td>
</tr>
<tr>
<td>PPI-R total</td>
<td>-.05</td>
<td>.02</td>
<td>.95</td>
<td>5.38*</td>
</tr>
<tr>
<td>PAI: Anxiety-Related Disorder</td>
<td>-.05</td>
<td>.02</td>
<td>.95</td>
<td>5.84*</td>
</tr>
<tr>
<td>PAI: Alcohol Problems</td>
<td>-.05</td>
<td>.01</td>
<td>.95</td>
<td>13.60**</td>
</tr>
<tr>
<td>PAI: Drug Problems</td>
<td>.07</td>
<td>.02</td>
<td>1.07</td>
<td>12.49**</td>
</tr>
</tbody>
</table>

Note. 0 = white-collar only, 1 = non-white-collar. LCSF = Lifestyle Criminality Screening Form. PICTS GCT = Psychological Inventory of Criminal Thinking Styles General Criminal Thinking score. PPI-R = Psychopathic Personality Inventory-Revised. PAI = Personality Assessment Inventory.
* p < .05; ** p < .01
Table 13

*Comparison of the White-Collar Only Study Sample and Walters and Geyer’s (2004) White-Collar Only Sample*

<table>
<thead>
<tr>
<th>Demographic Variables</th>
<th>White-Collar only study sample ($n = 48$)</th>
<th>White-Collar only comparison sample ($n = 34$)</th>
<th>$t(47)$</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>46.79 11.52</td>
<td>50.06 10.60</td>
<td>-1.97</td>
<td>.06</td>
</tr>
<tr>
<td>Education</td>
<td>14.67 3.14</td>
<td>16.03 2.66</td>
<td>-3.01</td>
<td>.01</td>
</tr>
<tr>
<td>Sentence length</td>
<td>40.58 16.74</td>
<td>40.94 34.46</td>
<td>-0.19</td>
<td>.85</td>
</tr>
<tr>
<td>LCSF total score</td>
<td>1.88 1.66</td>
<td>1.12 1.32</td>
<td>3.15</td>
<td>.01</td>
</tr>
<tr>
<td>PICTS factor scales</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Problem Avoidance</td>
<td>56.56 10.63</td>
<td>47.00</td>
<td>6.23</td>
<td>.01</td>
</tr>
<tr>
<td>Interpersonal Hostility</td>
<td>53.17 15.34</td>
<td>45.00</td>
<td>3.69</td>
<td>.01</td>
</tr>
<tr>
<td>Self-Assertion/Deception</td>
<td>54.92 12.34</td>
<td>45.00</td>
<td>5.57</td>
<td>.01</td>
</tr>
<tr>
<td>Denial of Harm</td>
<td>50.25 10.15</td>
<td>47.00</td>
<td>2.22</td>
<td>.05</td>
</tr>
</tbody>
</table>

*Note.* Means in the same row with the same subscript are significantly different from each other. LCSF = Lifestyle Criminality Screening Form. PICTS = Psychological Inventory of Criminal Thinking Styles. Walters and Geyer (2004) provided raw scores for the PICTS factor scales. These raw scores were translated into $t$-scores for the one-sample $t$-tests by rounding raw scores to the nearest whole number and using the $t$-score translation chart in the PICTS manual (Walters, 2006a; 2010). Standard Deviations are not given for the PICTS factor scale scores for Walters and Geyer’s sample because they are not known for the $t$-scores. White-collar only study sample refers to the sample of white-collar offenders used in this study. White-collar only comparison sample refers to the sample of white-collar offenders used in the Walters and Geyer (2004) study. White-collar only offenders are currently convicted of a white-collar crime and have history of only committing white-collar crime or no criminal history.
Table 14

Comparison of the White-Collar Versatile Study Sample and Walters and Geyer’s (2004) White-Collar Versatile Sample

<table>
<thead>
<tr>
<th>Demographic Variables</th>
<th>White-Collar versatile study sample ( (n = 89) )</th>
<th>White-Collar versatile comparison sample ( (n = 23) )</th>
<th>( t )</th>
<th>( p )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>44.62 ( SD = 9.39 )</td>
<td>43.61 ( SD = 9.40 )</td>
<td>1.01</td>
<td>.31</td>
</tr>
<tr>
<td>Education</td>
<td>12.78 ( SD = 2.50 )</td>
<td>14.09 ( SD = 2.66 )</td>
<td>-4.95</td>
<td>.01</td>
</tr>
<tr>
<td>Sentence length</td>
<td>43.03 ( SD = 19.82 )</td>
<td>30.17 ( SD = 17.34 )</td>
<td>6.12</td>
<td>.01</td>
</tr>
<tr>
<td>LCSF total score</td>
<td>4.55 ( SD = 2.19 )</td>
<td>4.22 ( SD = 2.61 )</td>
<td>1.42</td>
<td>.16</td>
</tr>
</tbody>
</table>

PICTS factor scales

<table>
<thead>
<tr>
<th>PICTS factor scales</th>
<th>( M )</th>
<th>( SD )</th>
<th>( M )</th>
<th>( SD )</th>
<th>( t )</th>
<th>( p )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Problem Avoidance</td>
<td>58.13 ( SD = 10.74 )</td>
<td>52.00</td>
<td>5.39</td>
<td>.01</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interpersonal Hostility</td>
<td>52.21 ( SD = 12.59 )</td>
<td>48.00</td>
<td>3.16</td>
<td>.01</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-Assertion/Deception</td>
<td>59.27 ( SD = 12.58 )</td>
<td>50.00</td>
<td>6.95</td>
<td>.01</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Denial of Harm</td>
<td>53.73 ( SD = 10.90 )</td>
<td>51.00</td>
<td>2.36</td>
<td>.02</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. Means in the same row with the same subscript are significantly different from each other. LCSF = Lifestyle Criminality Screening Form. PICTS = Psychological Inventory of Criminal Thinking Styles. Walters and Geyer (2004) provided raw scores for the PICTS factor scales. These raw scores were translated into t-scores for the one-sample t-tests by rounding raw scores to the nearest whole number and using the t-score translation chart in the PICTS manual (Walters, 2006a; 2010). Standard Deviations are not given for the PICTS factor scale scores for Walters and Geyer’s sample because they are not known for the t-scores. White-collar versatile study sample refers to the sample of white-collar versatile offenders used in this study. White-collar versatile comparison sample refers to the sample of white-collar offenders used in the Walters and Geyer (2004) study. White-collar versatile offenders are currently convicted of committing a white-collar crime and have a history of committing a non-white-collar crime.
Table 15

Comparison of the Non-White-Collar Study Sample and Walters and Geyer’s (2004) Non-White-Collar Sample

<table>
<thead>
<tr>
<th>Demographic Variables</th>
<th>Non-White-Collar study sample ((n = 89))</th>
<th>Non-White-Collar comparison sample ((n = 66))</th>
<th>(t) ((88))</th>
<th>(p)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>45.93, 9.14</td>
<td>41.59, 9.01</td>
<td>4.48</td>
<td>.01</td>
</tr>
<tr>
<td>Education</td>
<td>11.93, 2.50</td>
<td>12.39, 1.65</td>
<td>-1.72</td>
<td>.09</td>
</tr>
<tr>
<td>Sentence length</td>
<td>65.76, 45.85</td>
<td>95.44, 55.87</td>
<td>-6.11</td>
<td>.01</td>
</tr>
<tr>
<td>LCSF total score</td>
<td>6.22, 2.78</td>
<td>5.76, 2.97</td>
<td>1.58</td>
<td>.12</td>
</tr>
</tbody>
</table>

PICTS factor scales

<table>
<thead>
<tr>
<th></th>
<th>Non-White-Collar study sample</th>
<th>Non-White-Collar comparison sample</th>
<th>(t) ((88))</th>
<th>(p)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Problem Avoidance</td>
<td>55.70, 10.27</td>
<td>49.00</td>
<td>6.15</td>
<td>.01</td>
</tr>
<tr>
<td>Interpersonal Hostility</td>
<td>52.69, 13.47</td>
<td>48.00</td>
<td>3.28</td>
<td>.01</td>
</tr>
<tr>
<td>Self-Assertion/Deception</td>
<td>58.25, 10.25</td>
<td>49.00</td>
<td>8.51</td>
<td>.01</td>
</tr>
<tr>
<td>Denial of Harm</td>
<td>51.33, 9.56</td>
<td>49.00</td>
<td>2.30</td>
<td>.02</td>
</tr>
</tbody>
</table>

Note. Means in the same row with the same subscript are significantly different from each other. LCSF = Lifestyle Criminality Screening Form. PICTS = Psychological Inventory of Criminal Thinking Styles. Walters and Geyer (2004) provided raw scores for the PICTS factor scales. These raw scores were translated into \(t\)-scores for the one-sample \(t\)-tests by rounding raw scores to the nearest whole number and using the \(t\)-score translation chart in the PICTS manual (Walters, 2006a; 2010). Standard Deviations are not given for the PICTS factor scale scores for Walters and Geyer’s sample because they are not known for the \(t\)-scores. Non-white-collar study sample refers to the sample of non-white-collar offenders used in this study. Non-white-collar comparison sample refers to the sample of non-white-collar offenders used in the Walters and Geyer (2004) study. Non-white-collar offenders are currently convicted of a non-white-collar crime.
Figure 1. Flow Chart of Study Participants

2812
Number of offenders incarcerated at FCI Morgantown between January 2007 and November 2010

2117
Number of offenders who do not interview for RDAP at FCI Morgantown for various reasons (e.g., less than 36 months left of sentence, no drug history, not eligible for the sentence reduction)

695
Number of individuals who participated in the interview process for the Residential Drug Program

48
Number of individuals in the white-collar only offender group

89
Number of individuals in the white-collar versatile offender group

558
Number of non-white-collar offenders and offenders who did not complete all testing

89
Number of non-white-collar offenders after sample was matched on age and race to white-collar groups

Figure 1. FCI Morgantown = Federal Correctional Institution Morgantown WV. RDAP = Residential Drug Abuse Program.
Appendix A

Demographic Characteristics

Number:________________________________________

1. Age in years (at time of testing)___________________

2. Race (circle): Black    White         Asian/     Hispanic     Native American     Other
   Pacific Islander

3. Marital status (circle): Married    Divorced/Separated    Single/never married    widowed  Other

4. Number of children___________________

5. Number of years of education completed and degree(s) (e.g., High School Diploma/GED = 12,
   Bachelor’s Degree = 16, Master’s= 18, Ph.D./M.D. = 20) _________________________________

6. Annual income in dollars $___________________

7. Has the individual previously served in the military: YES          NO
   a. Did the individual receive honorable discharge from military? YES          NO  N/A

8. Legal offense(s) currently incarcerated for (white-collar offenses include bank
   embezzlement, tax fraud, postal fraud, credit fraud, false claims and statements, bribery,
   securities fraud, antitrust violations, health care fraud, and
   counterfeiting):__________________________________________________________

9. Sentence length in months_________________________________________________

10. Number of co-defendants  0                   1-2                     3-5                   >5

11. Was the individual employed when arrested for current offense (circle): YES          NO

12. Did the individual commit the crime in the course of his occupation: YES          NO

13. Legal job title (e.g., chief executive, manager, employee)_________________________

14. Number of employees supervised  0                   1-2                     3-5                   >5

15. List each of the individual’s past juvenile arrests/convictions (occurred at age 17 or
    younger) and punishment/sentence length if convicted:

<table>
<thead>
<tr>
<th>Charge</th>
<th>Arrest</th>
<th>Conviction</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
16. List each of the individual’s past adult arrests/convictions (occurred after turning 18) and punishment/sentence length if convicted:

<table>
<thead>
<tr>
<th>Charge</th>
<th>Arrest</th>
<th>Conviction</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Based on responses to questions 15 and 16 which category does the individual fit in (white-collar only individuals only have arrest/conviction history of white-collar crimes and current offense is white-collar or are first time offenders with current offense as white-collar; white-collar versatile offenders have arrest/conviction history of crimes that are not just white-collar and current offense is white-collar; control group has current conviction that is not white-collar):

<table>
<thead>
<tr>
<th>White-collar only</th>
<th>White-collar versatile</th>
<th>Control group</th>
</tr>
</thead>
</table>

17. List past mental health diagnoses:

18. Has individual previously had mental health treatment (circle one):

Yes/inpatient and outpatient Yes/inpatient Yes/outpatient No treatment

19. Has the individual previously taken psychotropic medication: YES NO

20. Number of times previously attempted suicide

21. Has individual previously been a victim of abuse: YES NO
   a. Describe type of abuse experienced (circle answer)
   Sexual Physical Psychological Mixed (more than one type)
Appendix B

PSYCHOLOGICAL INVENTORY OF CRIMINAL THINKING STYLES
_Version 4_

Glenn D. Walters, Ph.D.

Name ________________________  Reg. No._____________________  Date______________

Age_______  Sex______  Race___________  Education_______  Marital_________________

Confining Offense__________________________________  Sentence____________________

Directions: The following items, if answered honestly, are designed to help you better understand your thinking and behavior. Please take the time to complete each of the 80 items on this inventory using the four-point scale defined below:

4= strongly agree (SA)
3= agree (A)
2= uncertain (U)
1= disagree (D)

1. I will allow nothing to get in the way of me getting what I want.........................4   3   2   1

2. I find myself blaming society and external circumstances for the problems I have had in life.......................................................................................................... 4   3   2   1

3. Change can be scary..................................................................................................... 4   3   2   1

4. Even though I may start out with the best of intentions I have trouble remaining focused and staying "on track"....................................................................... 4   3   2   1

5. There is nothing I can't do if I try hard enough.................................................... 4   3   2   1

6. When pressured by life's problems I have said "the hell with it" and followed this up by using drugs or engaging in crime......................................................... 4   3   2   1

7. It’s unsettling not knowing what the future holds.................................................. 4   3   2   1

8. I have found myself blaming the victims of some of my crimes by saying things like "they deserved what they got" or "they should have known better"........... 4   3   2   1

9. One of the first things I consider in sizing up another person is whether they look strong or weak................................................................................................... 4   3   2   1

10. I occasionally think of things too horrible to talk about......................................... 4   3   2   1
26. I will frequently start an activity, project, or job but then never finish it........... 4 3 2 1

27. I regularly hear voices and see visions which others do not hear or see................. 4 3 2 1

28. When it's all said and done, society owes me.......................................................... 4 3 2 1

29. I have said to myself more than once that if it wasn't for someone "snitching" on me I would never gotten caught......................................................... 4 3 2 1

30. I tend to let things go which should probably be attended to, based on my belief that they will work themselves out.......................................................... 4 3 2 1

31. I have used alcohol or drugs to eliminate fear or apprehension before committing a crime.................................................................................................. 4 3 2 1

32. I have made mistakes in life....................................................................................... 4 3 2 1

33. On the streets I would tell myself I needed to rob or steal in order to continue living the life I have coming.......................................................... 4 3 2 1

34. I like to be on center stage in my relationships and conversations with others, controlling things as much as possible......................................................... 4 3 2 1

35. When questioned about my motives for engaging in crime, I have justified my behavior by pointing out how hard my life has been........................................... 4 3 2 1

36. I have trouble following through on good initial intentions...................................... 4 3 2 1

37. I find myself expressing tender feelings toward animals or little children in order to make myself feel better after committing a crime or engaging in irresponsible behavior.......................................................... 4 3 2 1

38. There have been times in my life when I felt I was above the law............................ 4 3 2 1

39. It seems that I have trouble concentrating on the simplest of tasks......................... 4 3 2 1

40. I tend to act impulsively under stress......................................................................... 4 3 2 1

41. Why should I be made to appear worthless in front of friends and family when it is so easy to take from others.......................................................... 4 3 2 1

42. I have often not tried something out of fear that I might fail..................................... 4 3 2 1
43. I tend to put off until tomorrow what should have been done today.......................... 4 3 2 1

44. Although I have always realized that I might get caught for a crime, I would tell myself that there was "no way they would catch me this time"............4 3 2 1

45. I have justified selling drugs, burglarizing homes, or robbing banks by telling myself that if I didn't do it someone else would.................................4 3 2 1

46. I find it difficult to commit myself to something I am not sure of because of fear.................................................................4 3 2 1

47. People have difficulty understanding me because I tend to jump around from subject to subject when talking..................................................4 3 2 1

48. There is nothing more frightening than change.............................................4 3 2 1

49. Nobody tells me what to do and if they try I will respond with intimidation, threats, or I might even get physically aggressive.................................4 3 2 1

50. When I commit a crime or act irresponsibly I will perform a "good deed" or do something nice for someone as a way of making up for the harm I have caused.........................................................4 3 2 1

51. I have difficulty critically evaluating my thoughts, ideas, and plans.........................4 3 2 1

52. Nobody before or after can do it better than me because I am stronger, smarter, or slicker than most people.........................................................4 3 2 1

53. I have rationalized my irresponsible actions with such statements as "everybody else is doing it so why shouldn't I".............................................4 3 2 1

54. If challenged I will sometimes go along by saying "yeah, you're right," even when I know the other person is wrong, because it's easier than arguing with them about it..........................................................4 3 2 1

55. Fear of change has made it difficult for me to be successful in life.....................4 3 2 1

56. The way I look at it I'm not really a criminal because I never intended to hurt anyone.............................................................................................4 3 2 1

57. I still find myself saying "the hell with working a regular job, I'll just take it".................................................................................................4 3 2 1
58. I sometimes wish I could take back certain things I have said or done .......................... 4 3 2 1

59. Looking back over my life I can see now that I lacked direction and consistency of purpose.......................................................... 4 3 2 1

60. Strange odors, for which there is no explanation, come to me for no apparent reason............................................................. 4 3 2 1

61. When on the streets I believe I could use drugs and avoid the negative consequences (addiction, compulsive use) that I observed in others.......................... 4 3 2 1

62. I tend to be rather easily sidetracked so that I rarely finish what I start.......................... 4 3 2 1

63. If there is a short-cut or easy way around something I will find it.......................... 4 3 2 1

64. I have trouble controlling my angry feelings.......................................................... 4 3 2 1

65. I believe that I am a special person and that my situation deserves special consideration.......................................................... 4 3 2 1

66. There is nothing worse than being seen as weak or helpless..................................... 4 3 2 1

67. I view the positive things I have done for others as making up for the negative things.......................................................... 4 3 2 1

68. Even when I set goals I frequently do not obtain them because I am distracted by events going on around me.................................. 4 3 2 1

69. There have been times when I tried to change but was prevented from doing so because of fear.................................................. 4 3 2 1

70. When frustrated I will throw rational thought to the wind with such statements as "fuck it" or "the hell with it"........................................... 4 3 2 1

71. I have told myself that I would never have had to engage in crime if I had a good job.................................................................. 4 3 2 1

72. I can see that my life would be more satisfying if I could learn to make better decisions.................................................................... 4 3 2 1

73. There have been times when I have felt entitled to break the law in order to pay for a vacation, new car, or expensive clothing that I told myself I needed................. 4 3 2 1
74. I rarely consider the consequences of my actions when I was in the community ........................................................................................................................................................................4 3 2 1

75. A significant portion of my life has been spent trying to control people and situations..................................................................................................................................................................................................................4 3 2 1

76. When I first began breaking the law I was very cautious, but as time went by and I didn't get caught I became overconfident and convinced myself that I could do just about anything and get away with it........................................................................................................................................................................................................................................................................4 3 2 1

77. As I look back on it now, I am a pretty good person even though I am or was involved in crime........................................................................................................................................................................................................................................................................................................................................4 3 2 1

78. There have been times when I have made plans to do something with my family and then cancelled these plans so that I could hang out with my friends, use drugs, or commit crimes........................................................................................................................................................................................................................................................................................................................................4 3 2 1

79. I tend to push problems to the side rather than dealing with them........................................................................................................................................................................................................................................................................................................................................4 3 2 1

80. I have used good behavior (abstaining from crime for a period of time) or various situations (fight with a spouse) to give myself permission to commit a crime or engage in other irresponsible activities such as using drugs........................................................................................................................................................................................................................................................................................................................................4 3 2 1
Appendix C
LIFESTYLE CRIMINALITY SCREENING FORM-REVISED
Glenn D. Walters, Ph.D.

Section I. IRRESPONSIBILITY

A. Failed to provide child support for at least one biological child.
   YES................................................................. (1)
   NO................................................................. (0)

B. Terminated formal education prior to graduating from high school.
   YES................................................................. (1)
   NO................................................................. (0)

C. Longest Job ever held.
   Less than six months................................................................. (2)
   At least six months but less than two years............................................. (1)
   Two or more years................................................................. (0)

D. Terminated from job for irresponsibility/quit for no apparent reason.
   Two or more times................................................................. (2)
   Once................................................................. (1)
   None reported................................................................. (0)

TOTAL IRRESPONSIBILITY

Section II. SELF-INDULGENCE

A. History of drug or alcohol abuse.
   YES................................................................. (2)
   NO................................................................. (0)
B. Marital Background.

Two or more prior divorces................................................................. (2)

One prior divorce/more than one separations.................................. (1)

Single but with illegitimate child..................................................... (1)

Married, no divorces/single no children........................................... (0)

C. Physical Appearance (check only one box).

More than 4 separate tattoos/tattoos on face or neck.................... (2)

Presence of one to four separate tattoos........................................... (1)

No tattoos............................................................................................. (0)

TOTAL SELF-INDULGENCE

Section III. INTERPERSONAL INTRUSIVENESS

A. Confining offense.

Intrusive (e.g., murder, rape, robbery, B&E, assault)........................... (1)

Nonintrusive........................................................................................... (0)

B. History of prior arrests for intrusive behavior (excluding instant offense).

Three or more ....................................................................................... (2)

One or two.............................................................................................. (1)

None......................................................................................................... (0)

C. Use of weapon or threatened use of weapon during instant offense.

YES......................................................................................................... (1)

NO............................................................................................................ (0)
D. Physical abuse of significant others (primarily family members).

YES ................................................................. □ (1)

NO ................................................................. □ (0)

TOTAL INTERPERSONAL INTRUSIVENESS □

Section IV: SOCIAL RULE BREAKING

A. Prior non-traffic violation arrests (excluding instant offense).

Five or more ............................................................. □ (2)

Two to four .............................................................. □ (1)

One or none ............................................................ □ (0)

B. Age at time of first non-traffic arrest.

14 years of age or younger ........................................ □ (2)

Older than 14 but younger than 19 .............................. □ (1)

19 years of age or older ............................................ □ (0)

C. History of disruptive behavior in school (e.g., suspensions).

YES ..................................................................... □ (1)

NO ..................................................................... □ (0)

TOTAL SOCIAL RULE BREAKING □

TOTAL CUMULATIVE INDEX □
CURRICULUM VITAE

Laurie L. Ragatz, M.A.

Life Sciences Building, Room 1200
West Virginia University
Morgantown, WV  26506
Laurie.Ragatz@mail.wvu.edu

EDUCATION

Doctorate of Philosophy in Clinical Psychology (expected August 2011)
West Virginia University
Morgantown, WV

Advanced to Doctoral Candidacy
April 2009

Dissertation: “A Comparison of White-Collar Offenders and Non-White-Collar
Offenders on the Psychological Variables of Personality, Criminal Thinking, and
Psychopathy.”

Dissertation Defense
November 2010

Master of Arts in Forensic Psychology
Castleton State College
Castleton, VT


Have On Verdicts In A Crime-of-Passion Case?”

Bachelors of Arts in Psychology
University of Wisconsin-Whitewater

September 1999 – May 2004

Major: Psychology
Minor: Criminal Justice

CERTIFICATES

Facilitator Training
Agency of Human Services
Department of Corrections, Vermont.

July 2006

Completed a 12 hour workshop on advanced skills for facilitating the Cognitive
Self Change Program. The workshop concentrated on implementing newly developed tools (e.g., practice logs, presentation logs).

**Advanced Facilitator Training**
Agency of Human Services
Department of Corrections, Vermont.

Completed an 18 hour workshop that was necessary to become certified to begin facilitating Cognitive Self Change groups with violent offenders.

**FORMAL CLINICAL EXPERIENCE**

**Intern**
August 2010 – Present
U.S. Medical Center for Federal Prisoners
Springfield, Missouri

Conduct individual and group therapy with inmates with a variety of mental health concerns, perform intake interviews, administer and interpret psychological assessments, and write psychological reports.

Supervisors: Richart Demier, Ph.D., Elizabeth Tyner, Ph.D., and Elizabeth Weiner, Ph.D.

**Practicum Student**
July 2009 – June 2010
Federal Correctional Institution
Morgantown, West Virginia

Conduct individual and group therapy with inmates with a variety of mental health concerns. Additional duties include facilitating clinical interviews as well as administering, scoring and interpreting psychological assessments.

Supervisor: Edward Baker, Ph.D.

**Graduate Student Supervisor**
July 2009 – June 2010
Quin Curtis Center
Morgantown, West Virginia

Supervise other graduate students providing individual or group therapy to clients with variety of mental health concerns. Duties include providing feedback to graduate student therapists on taped therapy sessions, written reports, therapy notes, and treatment planning.

Supervisor: William Fremouw, Ph.D., ABPP

**Practicum Student**
July 2008 – June 2009
William R. Sharpe Hospital
Weston, West Virginia
Conducted individual and group therapy with clients presenting with a variety of mental health concerns. Additional duties included facilitating clinical interviews, administering and interpreting psychological assessments, and writing psychological evaluations.

Supervisor: Neil Mogge, Ph.D.

**Graduate Student Therapist**  
Quin Curtis Center  
Morgantown, West Virginia  
August 2007 – August 2009

Conducted individual therapy with adult and adolescent clients presenting with a variety of mental health concerns. Duties included facilitating intake interviews, administering and scoring assessments, developing treatment plans, and conducting cognitive-behavioral oriented therapy.

Supervisors: William Fremouw, Ph.D., ABPP and Steven Branstetter, PhD.

**OTHER CLINICAL EXPERIENCE**

**Intern**  
Probation and Parole Office of Rutland County  
Rutland, Vermont  
May 2006 – August 2006

Co-facilitated a Cognitive Self Change group of violent offenders within the second stage of the treatment program. Group process consisted of examining offender thinking reports, assisting the offender with determining prominent thinking patterns, and facilitating the offender’s development of an intervention thinking plan.

**Teen Coordinator**  
Boys and Girls Club of Rutland County  
Rutland, Vermont  
January 2006 – May 2006

Organized and implemented activities for adolescents that promoted good character and a healthy lifestyle. Assisted adolescents with seeking employment, preparing for college, and making positive life choices.

**Community Recovery Specialist**  
Rutland Mental Health  
Rutland, Vermont  
October 2005 – May 2006

Assisted individuals in the community with a mental illness by taking them shopping or to appointments. Visited with clients in their homes to assess their health and provide medication access.

**Facilitator**  
Rutland Mental Health  
Rutland, Vermont  
October 2005 – December 2005
Parents Together Support Group/Prevent Child Abuse Vermont
Rutland Marble Regional Correctional Facility
Rutland, Vermont

Co-facilitated a self-help group for offenders about positive parenting practices. Discussions focused on educating group members about the roles and responsibilities of parents.

Intern
Racine Correctional Institution
Racine, Wisconsin.

Co-facilitated two 12-week Anger Management cognitive-behavioral oriented treatment groups for male offenders. Group activities consisted of identifying feelings, completing anger logs, and practicing assertiveness training. Assisted with evaluating individual group member progress and making program recommendations. Additionally, took part in providing individual therapy to male offenders.

TEACHING EXPERIENCE

Co-Instructor
West Virginia University
Morgantown, West Virginia

Developed the curriculum for and taught a Forensic psychology course. Duties included planning and facilitating lectures, developing tests, grading, leading in-class discussions, and mentoring students.

Graduate Teaching Assistant
West Virginia University
Morgantown, West Virginia

Taught a course in Introductory Psychology. Duties included planning and facilitating lectures, grading, implementing in-class activities, and mentoring students.

Graduate Teaching Assistant Supervisor
West Virginia University
Morgantown, West Virginia

Supervised and mentored an undergraduate student who assisted with Psychology 101. Duties included training the student on effective tutoring techniques, planning and facilitating lectures, and grading procedures.

Teaching Assistant
Castleton State College
Castleton, Vermont
Planned and facilitated study groups for students in a Biopsychology course. Duties included assisting students with understanding the structure and function of different brain regions, the organization of the nervous system, and the impact of various brain diseases or damages on functioning.

**Teaching Assistant**  
August 2006 – May 2007  
Castleton State College  
Castleton, Vermont

Taught Psychological Research Methods students how to input and analyze data using SPSS. Assisted students with developing APA format research papers and poster presentations.

**Graduate Student Instructor**  
August 2006 – May 2007  
Castleton State College  
Castleton, Vermont

Taught the lab section of multiple Introductory Psychology courses. Duties included preparing and facilitating lectures, grading papers, and mentoring students. Class lectures consisted of discussing psychological concepts (e.g., independent variables, dependent variables, study designs, external validity) as they apply to the featured research articles.

**RESEARCH EXPERIENCE**

**Research Assistant**  
August 2007-Present  
West Virginia University  
Morgantown, West Virginia

Conduct several quantitative research projects investigating variables (e.g., dog ownership, psychopathy, criminal thinking, personality, substance use) associated with engaging in deviant or criminal behavior. Duties included developing online survey instruments, conducting univariate and multivariate statistical analyses, and writing APA format manuscripts for publication.

**Research Assistant**  
Castleton State College  
Castleton, Vermont

Conducted a departmental evaluation for Castleton State College’s undergraduate psychology program. Duties included developing an assessment tool, formulating an online version of the assessment tool, conducting data analyses, and writing the program evaluation.

**Research Assistant**  
November 2006 – January 2008  
Castleton State College
Castleton, Vermont

Conducted a statewide evaluation of the efficacy of the Criminal Sentiments Scale-Modified (CSS-M) and the Psychological Inventory of Criminal Thinking (PICTS) among a population of violent offenders currently in a cognitive-behavioral treatment program. Trained group facilitators on how to administer the assessments. Additionally duties included scoring assessments, conducting data analyses, and writing a final report.

**Research Assistant**  
Castleton State College  
Castleton, Vermont  
September 2006 – May 2007

Assisted with conducting program evaluations of the after school Tapestry program targeting children in the Rutland area school districts. Duties consisted of collecting achievement data from student files, creating data files, and coding data.

**Research Assistant**  
Castleton State College  
Castleton, Vermont  
September 2005 – May 2006

Conducted several quantitative studies investigating the impact of defendant and victim characteristics (e.g., gender, sexual orientation) on jury perceptions of duress and homicide cases. Activities consisted of conducting literature searches, collecting research participants by means of online or paper-format surveys, analyzing data using both univariate and multivariate statistical procedures, and developing completed manuscripts in APA format.

**Research Assistant**  
University of Wisconsin-Whitewater  
Whitewater, Wisconsin  
September 2003 – February 2004

Assisted with implementing a qualitative study that assessed the needs of Latinos in five Wisconsin counties. Activities consisted of transcribing data, coding data, conducting literature searches, and performing descriptive and univariate analyses.

**CONSULTING EXPERIENCE**

**Media Consultant**  
RBB Inforadio  
Berlin, Germany  
June 2009

Took part in an interview with a radio reporter from RBB Inforadio in Berlin, Germany. The interview focused on my article “The behavioral and psychological characteristics of vicious dog owners.”
Canwest News Service
Ottawa, Ontario, Canada

Took part in an interview with a reporter from Canwest News Service in Canada which focused on my article “The behavioral and psychological characteristics of vicious dog owners.” Canwest News Service than published an article titled “Pooch pick reflects owner’s view of social status,” which included details of the interview.

Media Consultant
New Scientist Magazine
United Kingdom

Took part in an interview with a reporter from New Scientist Magazine regarding my article “The behavioral and psychological characteristics of vicious dog owners.” New Scientist then published an article titled “Vicious dog, vicious owner?” which included details of the interview.

UNIVERSITY INVOLVEMENT

Graduate Student Representative, Clinical Training Committee, August 2008-May 2009
Graduate Student Representative, Wellness Committee, August 2008-May 2009

EDITORIAL EXPERIENCE

Ad hoc reviewer: International Journal of Forensic Mental Health: 2010
Ad hoc reviewer: Aggressive and Violent Behavior: 2009
Ad hoc reviewer: Aggressive Behavior: 2009
Ad hoc reviewer: Criminal Behaviour and Mental Health: 2009

PROFESSIONAL DEVELOPMENT ARTICLES


REPRESENTATIVE PUBLICATIONS


Schenk, A., Ragatz, L. L., & Fremouw, W. *Vicious Dogs Part 2: Criminal Thinking, Callousness, and Personality Styles of their Owners*. Manuscript was revise and resubmit.

**REPRESENTATIVE PRESENTATIONS**


Schwartz, R. L., Fremouw, W., Ragatz, L. L., & Schenk, A. (2010, March). *Psychological*
profile of male and female college-aged animal abusers versus controls. Poster was presented at the annual meeting of the American Psychology-Law Society Conference, Vancouver, Canada.


Kraus, S. W., **Ragatz, L. L.,** & Russell, B. L. (2009, November). Do defendant characteristics impact jury decision-making in a homicide trial. Paper was presented at the annual meeting of the American Society of Criminology, Philadelphia, PA.

Stapleton, H. L., Russell, B., **Ragatz, L. L.,** & Kraus, S. (2009, November). Who is more likely to be believed when defendants claim abuse? Gender and sexual orientation. Poster will be presented at the annual meeting of the American Society of Criminology, Philadelphia, PA.


Kraus, S. W., Russell, B., & **Ragatz, L. L.** (2009, May). Does adolescent exposure to pornography impact the adult use of sexual coercion? Paper was presented at the annual meeting of the Midwestern Psychological Association, Chicago, IL.

Kraus, S. W., Russell, B., & **Ragatz, L. L.** (2009, May). Does participant sex and love style type influence use of sexually coercive tactics? Paper was presented at the annual meeting of the Midwestern Psychological Association, Chicago, IL.

**Ragatz, L. L.,** & Kraus, S. W. (2009, May). Profile of Vermont offenders on two prominent criminal attitude measures. Poster was presented at the annual meeting of the Midwestern Psychological Association, Chicago, IL.


Messerli, L. L., Sobolewski, M., & Poorman, P.B. (2003, March). *Preliminary findings*
of the effects of personality traits on perceptions of domestic violence. Poster presented at the annual meeting of the National Conference on Undergraduate Research, Salt Lake City, UT.

RESEARCH PROJECTS IN-PROGRESS

Russell, B., Ragatz, L. L., & Kraus, S. W. *Expert testimony of the battered person’s syndrome in a case of duress: What influence does sexism and heterosexism have on jury decisions?* Manuscript in preparation for submission.


AWARDS AND GRANTS

2006 Recipient of the Rise-Up Competition Award: Annual award given at the Association for Psychological Science conference to a student for making an outstanding contribution to research on socially and economically underrepresented populations.

*Research Grant:* Received $500 from West Virginia University for research travel expenses.

*Research Grant:* Received $700 from West Virginia University for research travel expenses.

*Research Grant:* Received $1000 from Castleton State College for research travel expenses.

*Research Grant:* Received $1200 from Castleton State College for research travel expenses.

*Research Grant:* Received $500 from Castleton State College for research expenses.

*Research Grant:* Received $400 from Castleton State College for research expenses.

*Research Grant:* Received $1600 from UW-Whitewater for research travel expenses.

*Research Grant:* Received $250 from UW-Whitewater for research expenses.

*Research Grant:* Received $250 from UW-Whitewater for research expenses.

PROFESSIONAL AFFILIATIONS

*Member:* American Psychological Association

*Member:* Association for Psychological Science

*Member:* American Psychology-Law Society
Member: Psi Chi

Member: Golden Key International Honor Society

Member: Who’s Who Among Students

REFERENCES

Available upon request.