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Psychopathy, Attitudinal Beliefs, and White Collar Crime

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Psychopathy, Attitudinal Beliefs, and White Collar Crime

by

James V. Ray

A thesis submitted in partial fulfillment
of the requirements for the degree of
Master of Arts
Department of Criminology
College of Arts and Sciences
University of South Florida

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Dedication

I would like to thank my family and friends for their support in my decision to continue on to graduate school. If it were not for Dr. Shayne Jones's time, energy, patience, and guidance I would have never made it this far. I would also like to thank Dr. Norman Poythress and Dr. Michael Lynch for being on my committee. Dr. Heide, thank you for all of your help. I would like to thank my cohort for their support and the rest of the criminology faculty and students. Most importantly, I dedicate this thesis to my loving wife, Phoebe; this was only possible with your support and understanding.

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James V. Ray

ABSTRACT

Psychopathy has become a highly researched personality disorder in order to better understand criminal and violent behavior (Hare, 1993). Measures of psychopathy have proven to be useful tools in predicting outcomes of institutionalized populations by predicting future dangerousness (Hare, 1999). While several experts in the field of psychopathy allude to the idea of the *successful psychopath* and their presence in the corporate world (Hare, 1993; Babiak & Hare, 2006), very little research has been done in this area. The current study builds upon the small amount of empirical research by testing hypotheses regarding the relationship between psychopathic personality traits and intentions to engage in white collar crime. Using a sample of 181 university students, psychopathic personality traits were measured using the Psychopathic Personality Inventory - Revised (PPI-R). In addition, scales were developed to measure attitudes toward white collar offending and vignettes were constructed to measure intentions to engage in white collar crime. Four relationships are of primary focus: 1.) Do psychopathic personality traits account for variability in attitudes toward white collar crime?; 2.) Do attitudes toward white collar crime correlate with intentions to engage in white collar crime?; 3.) Are psychopathic personality traits related to intentions to offend and?; 4.) Do attitudes toward offending mediate the relationship between psychopathy and intentions to offend? A major finding is that the Self-Centered Impulsivity factor of the PPI-R accounts for a significant amount of variance in intentions to engage in white collar crime and environmental crime. Additional relationships between psychopathy, attitudes, and intentions are also discussed.

Chapter One

Introduction

In 1939 Edwin H. Sutherland not only coined the term “white collar crime,” he brought to light its importance as a basis for sociological inquiry. By illuminating the existence of crimes related to business or crimes of the elite, he gave rise to a new direction of research. Sutherland (1940) stressed the prevalence and harm of white collar crime, suggesting a need for more research in order to better understand its etiology. Still today, the prevalence and impact of white collar crime dramatically exceeds that of common street crime, with one in three American households being the victim of some form of white collar crime (Kane & Wall, 2006). Also, recent high profile cases such as Martha Stewart, Kenneth Lay, and Enron have brought white collar crime to the public’s attention. Nonetheless, white collar crime still remains under-researched. Even less researched are psychological explanations or personality traits of white collar criminals.

In his discussion of white collar crime, Sutherland (1940) indicated that psychological explanations of crime are inadequate. By suggesting the psychological normality of white collar criminals, he dismissed the utility of such explanations. Sutherland suggested that white collar crime cannot be explained at the individual level. Instead, he intimated that the proper unit of analysis should be the organization. Although the majority of research on white collar crime followed Sutherland’s anti-psychological position, recent examinations have challenged this contention by identifying

psychological correlates of white collar offending (Blickle, Schlegel, Fassbender, & Klein, 2006; Alalehto, 2003; Collins & Schmidt, 1993; Walters & Geyer, 2004; Mon, 2002; Ben-David, 1991; Szockyj & Geis, 2002; Collins & Bagozzi, 1999; and Terpstra, Rozell, & Robinson, 1993).

Even though there has been some research focusing on personality and white collar crime, this area of inquiry still remains largely unexamined. Sociological explanations of crime have focused mainly on structural explanations, organizational criminality, or opportunity, while ignoring individual differences (Freidrichs, 2007). Most criminological research does not include personality traits in studies of white collar crime. Therefore, it is important to examine how individual differences, such as personality, might compliment other perspectives or explanations. For example, given the same structural forces, organizational climates, and opportunity, do certain personality traits increase the likelihood of individuals engaging in white collar crime? If so, what specific traits are the most relevant? Additionally, do these traits coalesce into a unified syndrome? While such questions remain largely unanswered, there are conceptual and empirical justifications to expect personality does matter, and that a specific constellation of traits may characterize those who are most likely to engage in white collar crime.

One promising possibility is that psychopathic personality traits are related to white collar offending. Psychopathy is a personality disorder that has been robustly associated with antisocial and criminal behavior (Hare & McPherson, 1984; Walters, 2003; Hare, 1996; Serin, 1991; Guy et al., 2005; Porter et al., 2000). While psychopathy has heretofore been examined primarily as a correlate of “street” crime, it may also be related to white collar crimes. For instance, some scholars have suggested the existence

of the “successful psychopaths” (Babiak & Hare, 2006; Babiak, 1995; 1996) or “organizational psychopaths” (Boddy, 2006). These individuals presumably possess psychopathic personality traits, such as manipulateness and callousness, which they share with their “street” criminal counterparts. However, they are likely to be less impulsive and without notable criminal histories. Despite this compelling link, empirical support for the association between psychopathy and white collar crime remains virtually nonexistent. Therefore, this study will attempt to address this void by examining the relationship between psychopathic personality traits and white collar crime.

Chapter Two

Literature Review

White Collar Crime

Sutherland (1949) defines white collar crime (WCC)¹ as “a crime committed by a person of respectability and high social status in the course of his occupation” (p. 2). While this definition was meant to capture a broad range of offenses not traditionally studied by criminologists, it brought about much disagreement among researchers regarding how to define WCC (Shapiro, 1990; Sutherland, 1949; Coleman, 1987; Friedrichs, 2007). These contentions have brought three major types of definitions of WCC (United States Department of Justice [USDOJ], N.D.). According to the USDOJ (N.D.), these three major definitions include those that define WCC according to the characteristics of the offender, definitions based on the offense type, and those that are based on the culture of the organization. Similarly, Friedrichs (2007) suggests criteria that differentiate between types of WCC based on setting, level of offender, offender’s status, victim, harm, and legal aspects. In 1996, initiated by the National White Collar Crime Center (NW3C), a group of WCC researchers met with the intent of developing an agreed upon working definition. Ultimately they found consensus for one definition of WCC:

White collar crimes are illegal or unethical acts that violate fiduciary responsibility of public trust committed by an individual or organization, usually

¹ WC will denote white collar and WCC will denote white collar crime.

during the course of legitimate occupational activity, by persons of high or respectable social status for personal or organizational gain. (Helmkamp, Ball, & Townsend, 1996: 351)

This definition expanded upon Sutherland's (1949) by including crimes that are not necessarily committed during the course of some occupation. Although, this most recent definition still incorporates the status of the offender as part of the definition. This, however, can make measurement and operationalization of WCC problematic. This is especially true when using official records of WCC (e.g., UCR), which do not account for status of offender, and therefore, research using such data must define WCC by offense type (USDOJ, N.D.).

Friedrichs (2007) provides a typology of WCC, which includes: corporate crime; occupational crime; governmental crime; state-corporate crime, crimes of globalization, or finance crime, and enterprise, entrepreneurial, techno-, or avocational crime. According to Friedrichs, corporate crime is crime done for the benefit of the corporation by individuals associated with that corporation. He suggests that occupational crime includes acts committed during the course of one's occupation with the intent of financial gain. Government crime involves harmful activity committed solely by government entities, where state-corporate crime includes acts by government and corporate entities in conjunction with one another. Finally, enterprise, entrepreneurial, techno-, and avocational crime include marginal forms of WCC, which capture those crimes that resemble white collar crime (e.g., tax evasion), but are not committed through the course of an occupation.

Although these typologies help to provide some uniformity, operational definitions of WCC have varied across studies. For example, several studies have used broad definitions of WCC to include acts that are not violations of criminal law (Sutherland, 1949; Clinard & Yeager, 1980; Michalowski & Kramer, 1987; Simpson & Koper, 1997). Weisburd, Chayet, and Waring (1990) used official crime records of specific types of WCC such as embezzlement, mail fraud, false claims, credit fraud, bribery, tax evasion, securities fraud, and antitrust violations. Other studies have measured WCC as intentions to offend using vignettes (Elis & Simpson, 1995; Simpson & Piquero, 2002; Piquero, Tibbetts, & Blankeship, 2005; Piquero, Exum, & Simpson, 2005; Paternoster & Simpson, 1996). This latter method is effective because obtaining valid data on actual offenses is markedly difficult. For example, because WCC is not likely to lead to arrest and incarceration, prison samples are biased. Although not ideal, vignettes provide some insight into WCC.

Regardless of the definitional and methodological inconsistencies, research is important in order to develop effective policy focusing on the prevention of WCC. The harm that WCC results in is far reaching in scope and extends beyond the physical and monetary repercussions of conventional “street” crime (Moore & Mills, 1990; Friedrichs, 2007). Costs of WCC, both direct and indirect, have been said to be over 1 trillion dollars annually. This conservative estimate is about 50 times higher than the costs of street crime (Lynch & Michalowski, 2006). Physical harm resulting from WCC is also much greater for WCC. Workplace disease and injury alone has been estimated at 3 million per year, while the number of workplace deaths per year is about 55,238 (Reiman, 2004). This means that, compared to estimates for street crime, individuals are 2.4 times more

likely to be killed and 13 times more likely to be injured as a result of preventable workplace accidents (Lynch & Michalowski, 2006). The revelation regarding the harmful extent of WCC may explain the recent development and application of theories to explain WCC.

Criminological Theories and WCC

Attempts to understand WCC have employed a wide range of theoretical perspectives, with most studies employing macro-level, social psychological, and rational choice perspectives. A review of these theoretical perspectives, along with a presentation of empirical evidence of each, follows below in order to provide the reader with a better understanding of their application to WCC.

Broadly speaking, social structural explanations suggest that characteristics such as race, class, and gender, promote WCC through means of exploiting inequality in capitalist societies (Lynch & Michalowski, 2006; Messerschmidt, 1997; & Friedrichs, 2007). The powerful (i.e., wealthy, white males) are able to use their position in society that reduces effective regulation and control, while deflecting attention from the harm that their behavior causes (Lynch & Michalowski, 2006). Additionally, laws and agencies that are constructed to regulate corporate entities do so in a way that is either ineffective or only protects those with power (Saha & Mohai, 2005; Stretesky & Lynch, 1999; 2001; Burns & Lynch, 2002).

Marxian perspectives also suggest that the state is controlled by those with capital, and therefore laws promote the interests of the powerful and maintain the status quo (Lynch & Michalowski, 2006). Barnett (1981) suggests that the state and corporations share an interest in promoting profit, which places constraints upon the

state's ability to effectively regulate corporate entities. Therefore, it follows that in capitalist nations a lack of effective regulation, positions of power, and an increase in competition among corporations creates a society where profits are placed above the welfare of workers, consumers, and citizens. This, in turn, creates opportunity for individuals and corporations to engage in WCC (Hagan & Parker, 1985; Barnett, 1981).

Empirical examinations of structural and Marxian perspectives have substantiated their ability to explain crimes of the powerful. More importantly, empirical support has underscored the notion that the legal system favors elites and large corporations through its neglect of and ineffective legal sanctions on corporate crime (Yeager, 1987; & Burns & Lynch, 2002). For example, as a result of strong political resistance from higher echelons of society, Saha and Mohai (2005) found that the regulation of toxic dumping diverted illegal dumping from upper class areas to impoverished, minority communities. Additionally, Burns and Lynch (2002) analyzed fines meted out by the National Highway Traffic Safety Administration between 1970 and 1997 and found that this form of punishment has a limited effect on deterring automobile manufacturers from recidivating, especially large corporations. Michalowski and Kramer (1987) noted that corporations are able to avoid regulation and maximize profits by moving production to other nations where their actions are not regulated. They also suggest that even though the state is aware of these injurious acts they have not found an effective way to regulate U.S. corporations in other nations.

In addition to looking at structural location within or across societies, structural explanations have also focused on offender status within the organization. For example, Hagan and Parker (1985) examined security violation cases and interviewed the

prosecutors of those cases. They found that individuals who held higher positions in a corporation were punished less severely than lower status employees. They also concluded that individuals who are in positions of power (i.e., the employers) take advantage of the resources their position offers to engage in WCC. Weisburd, Waring, and Wheeler (1990), employing similar methods, also find support for a class-based bias in judicial sentencing decisions, although they find that those in higher class positions (i.e., managers and employers) are more likely to receive harsher penalties.

Similar to structural explanations and Marxist theories are the conceptions of structural strain and Durkheim's (1933) anomie. Durkheim (1933) suggests that anomie occurs when cultural norms fail to keep up with social change. Political, economic, and technological advancements increase wants and desires. Norms that once regulated these desires fail to do so, and until cultural norms are able to catch up with the prevailing social structure, a state of normlessness exists. In this anomic state, corporations have nothing to inhibit deviant means of obtaining these newly created goals. Additionally, structural strain suggests that a state of anomie exists when the ability to obtain goals valued by society (i.e., success, profit) are not achievable. In this situation individuals will resort to innovative (criminal) ways to obtain these materialistic goals (Merton, 1938).

Messner and Rosenfeld (1994) elaborate on strain theory and suggest that a dominant economic institution will have positive associations with WCC. Their Institutional Anomie Theory suggests that economic institutional power promotes material gains and weakens the effect of noneconomic institutions that promote alternative, noneconomic goals and social norms causing a state of anomie. This results

in an individualism and unconventional means to gain monetary rewards. This is especially applicable to WCC, where norms that once regulated illegal or unethical behavior lag behind cultural values that promote economic success.

As suggested by Friedrichs (2007), anomie can be appropriately applied to WCC given the elevated levels of competition and celebration of success. For example, Keane (1993) found support for strain theory in a study of large corporations. It was shown that financial strain was a key factor in corporations offending. When pressures to gain profits are high and these goals are blocked by competition, legal regulation, or market fluctuations, normless environments are created. Accordingly, this situation will increase the likelihood that corporations will use innovative tactics to obtain its goals.

Organizational theories of WCC focus on the organization or corporation as a rational actor, guided by internal and external climates and patterns of behavior (Friedrichs, 2007). Similar to strain theories, organizational theories also focus on norms governing corporations. This is explained as individuals enter the organization, their personal beliefs and intentions are altered by the climate of the organization. Individuals therefore adapt to the policies and procedures of the organization. Accordingly, Vaughan (1999) stated “Formal organizations are designed to produce means-ends oriented social action by formal structures and processes intended to assure certainty, conformity, and goal attainment” (p.273). Therefore, individuals become committed to the organization conforming to its culture and climate.

Vaughan (1998), using the 1986 space shuttle disaster as an example, shows that criminal behavior becomes normalized in deviant organizations in their pursuit of goals. She suggests that deterrent actions targeting deviant behavior is ineffective when

organizations are in a state that normalizes deviance by placing success over costs.

Simpson and Koper (1997) found that several organizational characteristics were related to criminal behavior. For example, they found that past organizational offending predicts future offending and that some corporate strategies are conducive to offending (e.g., companies profiting from one dominant product).

Simpson and Piquero (2002) found that organizational variables, such as instructions from supervisors to offend and the possibility of gaining optimal positions over competitors, predicted offending by business managers. Other studies have found additional support for organizational theory, showing that organizations engage in illegal activity based on situational variables such as: market climate, organizational profitability, decentralization, and top management team characteristics. (Daboub, Rasheed, Priem, & Gray, 1995; McKendall & Wagner, 1997; Baucus & Near, 1991; & Hill, Kelley, Agle, Hitt, & Hoskissin, 1992).

It has also been suggested that organizations are not the proper unit given their inability to learn, act with intent, and possess motivations to commit crime (Cressey, 1989). On the contrary, individuals can evince such characteristics, and therefore may be a more appropriate unit of analysis in the study of WCC.

Several studies have employed a broad range of individual level theories to explain WCC, such as neutralization (Piquero, Tibbets, & Blankeship, 2005), differential association and social learning (Piquero et al., 2005; Jones & Kavanagh, 1996; & Vowell & Chen, 2004), social control and bonding (Lasley, 1988; Nagin & Paternoster, 1994; & Watkins, 1977), general strain theory (Langton & Piquero, 2007), and deterrence/rational

choice theories (Weisburd, Waring, & Chayet, 1995; Nagin & Paternoster, 1994; Paternoster & Simpson, 1996; Piquero, Exum, & Simpson, 2005; & Vaughn, 1998).

Differential association and social learning theories suggest that individuals learn criminal behavior in the same manner that normal behavior is learned (Akers & Sellers, 2004; Sutherland, 1947). For example, organizations may provide definitions (e.g., inflating stock values is an acceptable practice) and reinforcements (e.g., bonuses) conducive to WCC. Despite the appeal and apparent applicability of social learning theories to WCC (Friedrichs, 2007), relatively few studies have utilized this perspective. Vowell and Chen (2004) found that variables representing social learning and differential association (i.e. number of friends that cheat and definitions favorable to cheating) were strong predictors of cheating behavior. Jones and Kavanagh (1996) found that peer and managerial influences played a role in unethical decision making. Using vignettes, Piquero et al. (2005) found that respondents were more likely to endorse the manufacturing and marketing of a drug that was to be recalled when superiors and coworkers held the same beliefs. However, they also found support for techniques of neutralization among older respondents when confronted with offending opportunities that involved profits. These studies support the notion that social learning theory provides a viable explanation of WCC. Other social psychological theories have been proffered as well.

General strain theory posits that blocked goals will lead to frustration within the individual, who will then use innovative means to obtain those valued goals (Agnew, 1992). Given the high value placed on monetary success in the business world it seems appropriate that general strain theory be applied to WCC. Langton and Piquero (2007)

tested general strain theory among a group of convicted WC offenders. They found that strain was positively related to financial motives for offending. They also found that strain was positively associated with securities violations and tax fraud. Their findings suggest that strain may explain certain types of WC offending but not all.

Other explanations of WCC draw from social control and bonding theories. Bonding theories reverse the traditional position of theories that attempt to explain why some individuals engage in crime by asking why it is that individuals do not engage in crime (Hirschi, 1969). Accordingly, bonding theories assume that all individuals are prone to criminal behavior, and informal social control inhibits such criminal tendencies. Because WCC occurs within the realm of an organization with strong social ties and networks, bonding theories may be applicable (Friedrichs, 2007). Bonding theory, as applied to WCC, suggests that corporations with strong, positive social networks promote informal social control among its employees. For example, Lasley (1988) found that individuals with stronger attachments to supervisors and co-workers, higher levels of commitment to rules, and an increased sense of accountability and worth to the company were less likely to engage in WCC.

Another theoretical perspective that has been applied recently to WCC is control balance theory (Piquero & Piquero, 2006). Tittle's (1995) control balance theory suggests that an imbalance of control (control surplus or control deficits) will result in autonomous and repressive forms of deviance, respectively. While Tittle's theory has not been widely tested, it has been examined in an attempt to explain corporate deviance. Piquero and Piquero (2006) investigated the ability of control surpluses to explain exploitative behavior in corporate settings. According to Tittle (1995), surpluses of power result in the

actors attempt to extend that surplus by expressing “autonomous” acts, which are exploitative and domineering in nature. Piquero and Piquero (2006) used vignettes to capture the extent to which respondents would engage in price fixing when placed in a situation which depicted them as the exploiter. Additionally, they measured the control balance of a sample of upper-level business students and found that respondents who had a surplus of power were more likely to indicate that they had intentions to engage in price fixing.

Of the individual-level theories, rational choice/deterrence has received the most attention among WCC researchers (Makkai & Braithwaite, 1994; Weisburd, Waring, & Chayet, 1995; Nagin & Paternoster, 1994; Paternoster & Simpson, 1996; Piquero et al., 2005; & Vaughn, 1998), likely because WCC is seen as a calculating and rational decision (Friedrichs, 2007). Additionally, individuals in corporations are trained to make decisions based on maximizing profits, and as such are presumed to be rational decision-makers.

Most studies that have tested the theoretical propositions of rational choice theory as applied to WCC find support for the theory (Paternoster & Simpson, 1996; Nagin & Paternoster, 1994; Piquero, Exum, & Simpson, 2005). For example, Paternoster and Simpson (1996) found that individuals were less likely to commit WCC when confronted with formal sanctions, moral commitments, and organizational factors. Nagin and Paternoster (1994) and Piquero et al. (2005) found that there is an interaction between individual differences (self-centeredness and desire-for-control, respectively) and the likelihood of being deterred by perceived risk. More specifically, Nagin and Paternoster (1994) found that individuals who are self-centered are less likely to weigh the costs of

engaging in WCC, where Piquero et al. (2005) found that desire-for-control was positively related to sanction threats and negatively related to perceived benefits.

However, other studies have not found support for rational choice or deterrence in WCC research (Vaughn, 1998; Weisburd et al., 1995). For example, Vaughn (1998), as mentioned above, did not find support for rational decision making or effective deterrence among individuals in a struggling organization. Additionally, Weisburd et al. (1995) did not find support for specific deterrence. They found no differences in recidivism between those who were and were not incarcerated for their white collar offenses. These studies question the rationality of WC criminals suggest that they are not easily deterred by perceived sanction threats. Thus, the efficacy of deterrence as it applies to WC crime remains unclear.

While these explanations have shown some success in explaining WCC, they ignore individual differences and assume that under the same circumstances and situations, different individuals will behave similarly. However, some relatively recent investigations have empirically examined the influence of psychological characteristics on WCC, and revealed that specific traits are related to WCC (e.g., Walters & Geyer, 2004; Collins & Bagozzi, 1999; Alalehto, 2003; Blickle et al., 2006; Board & Fritzon, 2005; Piquero, Exum, & Simpson, 2005; Terpstra, 1993).

Personality Traits and White Collar Offending

Broad dimensions of personality have gained acceptance among psychologists, such as the Big Five personality traits, which include Agreeableness, Neuroticism, Extroversion, Conscientiousness, and Intellect (Goldberg, 1993; 1990). Research on the use of measures of broad personality traits and their application in personnel selection

and screening has also received attention among researchers (Detrick & Chibnall, 2006; Marcus, Hoft, & Riediger, 2006; & Salgado, 2003). Given the success that personality measures and integrity tests have in predicting productive and ethical work behavior (Hough & Oswald, 2000), research focusing on personality and WCC seems warranted.

While research in this area remains underdeveloped, a few studies have examined broad measures of personality and their relation to WCC. Alalehto (2003), for example, used the Big Five model to assess personality traits of individuals who engage in tax evasion. Alalehto relied on a unique method for collecting qualitative data, in which individuals were interviewed and asked questions about their co-workers. It was found that certain personality traits based on the Big Five model increased the likelihood that individuals engaged in economic crime. For example, he found that individuals high on extroversion, disagreeableness, or neuroticism were more likely to engage in WCC.

Based on these findings, Alalehto (2003) suggests that there are three types of WC offenders. This typology includes the *positive extrovert*, who is driven into economic crime by his manipulative and egocentric characteristics and desire for control; the *disagreeable business man* who acts on suspicion and envy and uses deceitful tactics; and the *neurotic*, characterized by high levels of anxiety, low self-esteem, anger, and hostility, making them susceptible to persuasion, and in turn engages in WCC. These findings are broad and suggest that several specific personality constellations may characterize individuals who engage in WCC. Other studies have focused on additional traits or different conceptualizations of personality. The following section will explore these studies within the context of Alalehto's (2003) typologies.

Costa and McCrae (1992) describe individuals who score high on Extraversion as having a preference for large groups, and they are typically the center of attention given their talkative and social tendencies. They also characterize individuals high on Extraversion as being very assertive and socially dominant. The *positive extrovert*, according to Alalehto (2003), would use their outgoing social skills as a manipulative tool in order to get what they want, and achieve the social prowess they desire. Other studies have found empirical support for the socially outgoing white collar criminal. For instance, Ben-David (1991) found that WC criminals, as defined by Sutherland, tend to be more outgoing than fraud offenders, who did not fit the status requirements of Sutherland's definition. This study also showed that "Sutherland's white collar criminals" tend to be more cunning and domineering than the general population. Also, in the same study it was found that WC criminals tend to be more assertive, aggressive and extroverted than criminals convicted on property and sex offenses. Collins and Schmidt (1993) found that WC criminals tend to score higher on scales measuring social extraversion and extra-curricular activity involvement than non-WC offenders. They suggest that business people who are gregarious tend to be more social involved. In turn, this social involvement leads to an increased status within a company where there are higher levels of competition and more criminal opportunities.

Excitement-Seeking as a facet of Extraversion is a personality trait characteristic of individuals who crave exciting or thrilling behavior (Costa & McCrae, 1992). Business people with this personality type may take risks in order to achieve higher rates of success or status. This may push such individuals to engage in criminal behavior if necessary or simply out of the need to fulfill a desire for risky or stimulating behavior.

Few studies, however, have focused on the relationship between WCC and excitement-seeking, although, risk-taking (a construct similar to Excitement-Seeking) was found to be related to greater likelihood to engagement in fraud and pilferage (Mikulay & Goffin, 1998).

While empirical examinations of risk-taking or -seeking personalities are relatively scarce, indirect evidence of the influence of this trait can be garnered from studies employing self-control, as risk-seeking is a major component of self-control. Simpson and Piquero (2002) used scenarios to assess intentions to engage in corporate crime. They found that managers who endorse the situation as being exciting are more likely to engage in WCC. Alternatively, Szockyj and Geis (2002) found that individuals convicted on charges of insider trading tended to be more risk averse given that the information used was a “sure thing.” However, they did conclude that individuals who were in possession of insider information took risks based on the fact that they supplied it to others, which increases the likelihood of being caught. Therefore, it is possible that risk-taking or excitement-seeking is a characteristic of white collar offenders, although more research is needed.

While empirical evidence seems to support the relationship between the risk-taking aspect of self-control and WCC, other aspects of the theory have not been so successful. For example, Simpson and Piquero (2002) did not find general support for the General Theory based on behavioral measures of self-control (with the exception of the risk-taking aspect as mentioned above) in explaining WCC. Other tenets of the theory remain equivocal, such as its proposition that street and WC offenders are essentially the same (Walters & Geyer, 2004). Other aspects of self-control, such as impulsivity, a

preference for simple tasks, and physical tasks, have not been subject to much empirical investigation. However, it seems unlikely individuals holding influential corporate positions will possess such characteristics. That is, some types of WCC appear to be complex and require a certain level of sophisticated knowledge. However, such suppositions have yet to be empirically examined.

Similar to low self-control is the Conscientiousness factor of the FFM. Costa and McCrae (1992) describe those high in Conscientiousness as being driven, disciplined, organized, dutiful, and motivated. Alternatively, they suggest that individuals low on Conscientiousness lack competence, organization, and the ability to follow through on tasks. Conceptually, most successful individuals in corporate or business settings would require traits associated with high Conscientiousness, and has been suggested to be related to WCC (Blickle et al. 2006; & Collins & Schimdt, 1993). Collins and Schmidt (1993) found that a group of convicted WC offenders tended to exhibit characteristics of low Conscientiousness when compared to a group of white collar workers not convicted of WCC. However, their construct of Conscientiousness was based on shared subscales of three separate measures. Blickle et al. (2006) reevaluated this relationship between WCC and Conscientiousness, using the NEO-FFI (Costa & McCrae, 1992) and found that convicted WC criminals scored higher in Conscientiousness than a group of non-criminal WC employees.

Reviewing the extant literature on the relationship between personality and WCC, there appears to be some support for the *positive extrovert* typology suggested by Alalehto (2003). WC criminals tend to be gregarious and outgoing; they thrive on situations in which they can use their outgoing, aggressive, and assertive nature to their

benefit, by promoting themselves and their abilities through networking; they maintain the ability to locate and impress those with decision-making power. This, in turn, places them in positions that grant more opportunities to engage in criminal activity, which may ultimately increase their social status and supply the excitement and attention that they crave. While the extrovert is one type of individual who, in the course of their occupation, may engage in criminal behavior given the opportunity, the *disagreeable business man* is prone to WCC through different means.

The *disagreeable business man* type suggests that this individual is inflexible and not easy to get along with (Alalehto, 2003). According to Alalehto, these individuals are highly competitive and resort to dishonest and cunning behavior when things do not go their way, or when their status is threatened. Similarly, Costa and McCrae (1992) suggest that individuals who score low on Agreeableness tend to be self-centered or egocentric, narcissistic, egoistic, lack empathy for others, and are antagonistic. Several of these traits have been suggested to characterize the personality that is consistent among individuals who maintain WC positions.

For example, Narcissistic personality has long been associated with business type individuals. Even more so, narcissism has been suggested to be a desirable and almost a necessary trait for success in the business world. Lasch (1979) suggests that narcissism is a prerequisite for success stating:

For all his inner suffering, the narcissist has many traits that make for success in bureaucratic institutions, which put a premium on the manipulation of interpersonal relations, discourage the information of

deep personal attachments, and at the same time provide the narcissist with the approval he needs in order to validate his self-esteem. (p. 43-44)

While the narcissism has been alluded to as a common trait among executives, only one study has directly examined its relationship to white collar crime. Blickle et al. (2006) found that convicted WC criminals had significantly higher rates of narcissism than a group of non-criminal WC executives.

Other studies have found that traits similar to narcissism and characteristic of the *disagreeable business man* are associated with WCC (Piquero, Exum, & Simpson, 2005; Terpstra, Rozell, & Robinson, 1993; & Collins & Schmidt, 1993). Conceptions of narcissism (Paulhus & Williams, 2002) and disagreeableness (Costa & McCrae, 1992) describe individuals who are egocentric, dominant, and controlling. Accordingly, Collins and Schmidt (1993) found that convicted WC criminals tended to be more suspicious of others and are more controlling than WC non-criminals. This suggests that the WC criminal is an individual who feels a need to be in control and whose suspicions make it difficult to work with others.

Another aspect of the disagreeable individual is that they tend to prefer competition as opposed to cooperation, which is captured in the compliance subscale (Costa & McCrae, 1992). A competitive personality may be desirable in a business or corporate setting and some have suggested that a disagreeable personality is necessary for success in these types of settings (Costa & McCrae, 1992). Although, Terpstra et al. (1993) found that business students who have a highly interpersonal competitive personality were more likely to endorse decisions to engage in insider trading. Ben-David (1991) also found that WC criminals had competitive personalities, although it was

suggested in this study that competitiveness is a common trait among upper- and middle-class communities.

Supporting the typology of the *disagreeable business man*, a few studies have found that WC criminals tend to have personality traits such as being deceitful (Collins & Schmidt, 1993), and Machiavellian (Jones & Kavanagh, 1996; Rayburn & Rayburn, 1996; & Verbeke, Ouwerkerk, & Peelen, 1996). More specifically, Jones & Kavanagh (1996) found that across situations of different levels of dissatisfaction with work and peer influence, individuals who were Machiavellian were more likely to engage in unethical behavior. The characterization of those who engage in WCC as being Machiavellian and manipulative suggests that these individuals see victims as a means to end, with a callous and unemotional concern for their victims.

Considering both the disagreeable and the extrovert typologies, the common thread seems to be a sense of competition for status and through the use of manipulative, cunning, or deceitful means the acquisition of that goal. The literature tends to suggest that the WC criminal seems not to be impulsive or lacking self-control, but rather opportunistic and calculating. Given their competitive and egocentric nature, their engagement in WCC tends to be self-serving, while lacking remorse for those the harm that their actions cause. Therefore, an overlap between these two WC criminal personality types is apparent. One that might not seem to fit so well is the third personality type, the *neurotic*.

The WC criminal characterized as the *neurotic* suggests that such individuals may be prone to engage in criminal behavior given their low-self esteem, anxiety, and insecurity. Individuals who score high on Neuroticism tend to be guilt-prone, anxious,

and depressed, with an increased likelihood of experiencing severe forms of negative affects (Costa & McCrae, 1992). Accordingly, these individuals may feel pressured into committing white collar criminal acts in the event that they feel guilty or responsible for poor performance. Ben-David (1991) found that when compared to the normal population, WC criminals tend to experience elevated levels of guilt, anxiety, and low self-confidence. Such offenders are consistent with Alalehto's (2003) *neurotic*. In addition, neurotic individuals tend to be easily frustrated and angered (Costa and McCrae, 1992) and they may be particularly sensitive to external stressors and demands. Some evidence suggest that individuals who possess an external locus of control, and therefore are more affected by their environment, are more likely to engage in WCC (Jones & Kavanagh, 1996; & Terpstra et al., 1993). Although indirect, this provides some support for the neurotic WC offender.

The three personality types – the *positive extrovert*, *disagreeable business man*, and the *neurotic* (Alalehto, 2003) – demonstrate empirical relationships with WCC, and provide a conceptually meaningful explanation of why such individuals engage in WCC. At the trait level, there are certain personality traits that seem consistently related to WC offending. Machiavellian, narcissistic, self-centered, egotistic, angry, disagreeable, competitive, antagonistic, and anxious personality traits tend to predispose individuals to engage in WCC. A personality disorder that might encapsulate several, if not all, of these traits is psychopathy. The psychopathic personality has long been associated with common street crime (Hare, 1996), while more recently it has been suggested that psychopathic personality traits may also be common among WC criminals (Babiak & Hare, 2006).

Psychopathy

The explanation, conceptualization, and measurement of psychopathy have been highly debated topics among experts (Lilienfeld, 1994; Levenson, 1992). Nonetheless, there is some consensus regarding the personality traits that properly describe psychopathic individuals. Generally accepted is the idea posed by Hare (1993) regarding the factor structure of psychopathy. It has been suggested that psychopathy is a unidimensional construct that consists of two underlying, correlated factors; an emotional/interpersonal factor (Factor 1) and a social deviance factor (Factor 2; Hare et al., 1990).

According to Hare (1993), Factor 1 includes glibness, superficial charm, egocentricity, grandiosity, deceitfulness, manipulative, shallowness and lacking remorse, guilt, and empathy. The Factor 2 psychopathy can be characterized by impulsivity, poor behavioral controls, need for excitement, lacking responsibility, early behavior problems, and adult antisocial behavior. Distinct from common criminals, psychopathic offenders commit a greater variety and severity of crimes, without remorse, sympathy, or care for those whom they inflict harm upon (Hare & McPherson, 1984; Hare, 1993; Babiak, 1995).

Psychopathy has been found to be correlated with criminal behavior, with psychopaths committing a disproportionate amount of crime (Hare & McPherson, 1984). Psychopathy has also been found to predict high rates of violent and non-violent recidivism (Hare & McPherson, 1984; Grann, Langstrom, Tengstrom, & Kullgren, 2002; Harris, Rice, Cormier, 1991; Salekin, Rogers, & Sewell, 1996), sexual assault (Porter et

al. 2002), alcohol and drug abuse (Smith & Newman, 1990), and therefore is a useful tool among clinicians in risk assessment (Hare et al., 2000; Hare, 1999).

There have been several tools for assessing psychopathic personalities. The most predominant measure of psychopathy is Hare's (1991) Psychopathy Checklist Revised, which is a semi-structured interview developed for use in forensic settings.

Administration of the Psychopathy Checklist is difficult in the sense that it requires an in-depth interview and review of file data. To avoid these problems, self-report measures, such as the Levenson's Self-Report Psychopathy Scale (LSRP; 1995) and the Psychopathic Personality Inventory Revised (PPI-R; Lilienfeld & Andrews, 1996), of psychopathy have been developed. Both the PPI-R and the LSRP have been found to be successful at identifying psychopathic personality traits among non-criminal samples (Lynam, Whiteside, & Jones, 1999; Lilienfeld & Andrews, 1996).

Several studies have found psychopathic traits among university and college samples (Kosson, Kelly, & White, 1997; Levenson, Kiehl, & Fitzpatrick, 1995; Lilienfeld & Andrews, 1996; Lynam, Whiteside, & Jones, 1999; Ross & Rausch, 2001). Lynam, Whiteside, and Jones (1999) validated the LSRP using a sample of university students. Based on self-report delinquency and performance tasks they found that psychopathic traits were present among this non-incarcerated sample. Kosson, Kelly, and White (1997) assessed sexual aggression and psychopathy among a group of university students. They found that both primary and secondary psychopathy was related to sexual aggression. These studies suggest that psychopathic personality traits exist and can be studied in college samples.

Evidence has corroborated the idea that psychopathy is a personality disorder characterized by extreme dimensions of normal personality traits (Lilienfeld, 1994; Edens, Marcus, Lilienfeld, & Poythress, 2006). Additionally, several studies have found that psychopathy can be successfully assessed using the FFM of personality. Specifically, psychopathy is positively related to Extroversion (Miller et al., 2001; Paulhus & Williams, 2002; Hall, Benning, & Patrick, 2004), and negatively related to Agreeableness (Lynam et al., 2005; Jakobowitz & Egan, 2006; Ross, Lutz, & Bailey, 2004; Miller et al. 2001; Paulhus & Williams, 2002), and Conscientiousness (Lynam et al., 2005; Ross et al., 2004; Jakobowitz & Egan, 2006; Miller et al., 2001). While some conceptualizations of psychopathy suggest a negative association with Neuroticism (Hare, 1996; Cleckely, 1988), recent research indicates this is a complex relationship that warrants further examination (Ross et al., 2004; Frick, Lilienfeld, Ellis, Loney, and Silverthorn, 1999; Jakobowitz & Egan, 2006).

Several other personality traits have additionally been found to characterize psychopathic individuals. In general, psychopathy has been found to have positive associations with impulsivity/sensation-seeking (Benning et al., 2005; Daderman, 1999; Haapasalo, 1990; & Thornquist & Zuckerman, 1995; Ross et al., 2004; & Hunt, Hopko, Bare, Lejuez, & Robinson, 2005), narcissism (Paulhus & Williams, 2002; Benning et al. 2005; Lee & Ashton, 2005; Skeem, Poythress, Edens, Lilienfeld, & Cale; 2003), and Machiavellianism (Jakobowitz & Egan, 2006; Paulhus & Williams, 2002; McHoskey, Worzel, & Szyarto, 1998).

In an attempt to develop a measure that assesses the personality traits associated with psychopathy apart from its behavioral components, Lilienfeld and Andrews (1996)

empirically derived the Psychopathic Personality Inventory (PPI). The results suggest that the PPI consists of eight subscales that characterize psychopathy. As originally suggested by Lilienfeld and Andrews, the PPI is more strongly related to Factor 1 psychopathy (i.e., the interpersonal and affective dimensions), which captures the core personality traits of the disorder (Poythress, Edens, & Lilienfeld, 1998). However, more recently it has been found that the PPI is best described by three factor (Fearless-Dominance, Self-Centered Impulsivity, and Coldheartedness; Lilienfeld & Widows, 2001). Also it has been found that the Fearless Dominance (FD)² and Self-Centered Impulsivity (SCI) factors are associated with Factors I and II of the PCL-R, respectively (Lilienfeld & Widows, 2001).

In sum, psychopathy is an important construct when examining antisocial behavior and assessing risk and recidivism. While research has been successful in linking psychopathy to conventional street crime and antisocial behavior, it has yet to be applied to WCC, even though conceptualizations of WC psychopaths exist.

White Collar Crime and Psychopathy

The personality traits that seem to characterize the WC offender include Machiavellianism, narcissism, self-centeredness, egoism, disagreeableness, competitiveness, manipulateness, antagonism, anger and hostility. Combinations of these personality traits that characterize WC criminals are captured in psychopathy. Given its cut-throat nature, psychopathic individuals may be attracted to the business world. Such traits may also be considered valuable in the corporate world, making psychopathic individuals efficient at what they do (Boddy, 2006; & Babiak & Hare,

² Fearless Dominance will be denoted by FD and Self-Centered Impulsivity will be denoted by SCI.

2006). Therefore, it is possible that many of these individuals are successful when entering and pursuing business or corporate careers. This would, in turn, give psychopathic individuals the opportunity to engage in WCC, and given their nature, they would be more likely to take advantage of these situations.

The existence of psychopaths as successful business people has not been overlooked. This is especially true considering the many conceptualizations that describe these individuals, such as Widom's (1977) *successful psychopath*, Babiak's (1995; 1996) *industrial psychopath*, Hare's (1993) *white collar psychopath*, and Boddy's (2006) *organizational psychopath*.

Cleckley (1988) described several case studies of professionals, including a physician, a scientist, a business man, and a psychiatrist, who he suggested possess psychopathic traits. While he noted that such individuals have found a way to adjust to their dispositions, he is clear that these individuals are far from *real psychopaths*. He described successful psychopaths as manifesting mild psychopathic characteristics with an ability to channel their psychopathology in constructive outlets. He explains that these individuals are able to function as normal members of society, maintaining predominant roles, by masking their psychopathic traits.

Hare (1993) describes the *white-collar psychopath* as being able to fraud and con using charm, deception, and manipulation. He suggests that there is a distinction between common WC criminals and psychopathic WC criminals concerning the motives and nature of their offending. The latter's affinity for WCC goes beyond utility and permeates other aspects of life, including family and friends. These individuals are able to use their status and networks in way to establish trust and create opportunity to carry out self-

serving and injurious acts. Additionally, Hare (1993) suggests that *white-collar psychopaths* are able to avoid detection from the law by being calculating and discrete, and even when caught, they are not only remorseless, but do not accept wrongfulness of their actions.

Boddy's (2006) organizational psychopathy is consistent with Hare's (1993) description of successful psychopaths. He describes their lack of conscience, ability to appear desirable as an employee, exceptional ability to lie and manipulate others, while at the same time finding ways to gain confidence in others and targeting the weak and naïve.

Both Boddy (2006) and Babiak and Hare (2006) go beyond a general description of the successful psychopath to explain how these individuals may enter and navigate through organizations. Considering the relationship between those personality traits that have been found to be associated with white collar crime and these conceptualizations of psychopathy suggests that the construct of psychopathy may capture those personality traits that are characteristic of WC criminals. More specifically, WC criminals may manifest some of the personality traits more characteristic of the emotional/affective aspect of psychopathy, such as narcissism, glibness, deception, and callousness.

Based on these conceptualizations of the successful psychopath, it is apparent that their existence is not overlooked and lays ground for the importance of future empirical examinations. While such conceptualizations are helpful in understanding what these individuals may look like, little empirical research has been conducted to support the existence of psychopaths operating in the business sector (Board & Fritzon, 2006; Babiak, 1996).

Babiak (1995; 1996) conducted case studies of individuals in business settings who he describes as being industrial psychopaths. Babiak's (1995) case study was based on co-worker interviews, direct observations, and personnel files. Based on the Psychopathy Checklist: Screening Version (PCL: SV), it was found that these individuals tended to score high on the psychopathic personality component (equivalent to Factor 1 of the PCL-R) and moderate on the deviant lifestyle component (Factor 2 of the PCL-R).

Babiak (1996) draws upon his original case study and suggests a “psychopathic process” of how these individuals move through the organization. He describes the psychopath as first gaining entry into the company and then manipulating his way to the top, creating an atmosphere of distrust and hate among employees, and ultimately ruining company morale and cohesiveness. However, his small sample is representative of the inaccessibility of this population and the small number of them that do exist (1% of general population who work in organizations; Boddy, 2006). Because his findings are based on unrepresentative case studies, generalizability to larger populations is questionable.

Only one study has empirically examined the relationship between psychopathic personality traits in a business setting using a large sample. Board and Fritzon (2005) compared results from the Minnesota Multiphasic Personality Inventory across a group of business managers, mentally ill patients, and a group classified as psychopathic disordered. They found that the business group evinced narcissistic and histrionic personality disorders. Of particular import in the current discussion is that these personality disorders share conceptual overlap with the affective/interpersonal features of psychopathy (Factor 1; Hare, 1996).

To date, there have been no studies that examine psychopathy and white collar crime directly, and only a few that have examined its existence among white collar workers (Babiak, 1995; 1996; Board & Fritzon, 2005). Empirical evidence, however, does suggest that some of these personality traits found to be correlated with WCC are also correlated with psychopathy (Paulhus & Williams, 2002; Wiebe, 2003; Frick et al. 1999; Schmitt & Newman, 1999; & Lynam et al., 2005). Such evidence provides indirect support for the link between psychopathy and white-collar criminals.

Chapter Three

Current Study

Methodology

Sample

This sample consists of undergraduates enrolled in a criminology course at a large state university located in Florida. This particular course serves as a general education requirement for the university, and therefore contains a relatively wide variety of college students (e.g., various majors and college experience).

The descriptive statistics are presented in Table 1. The sample is 70% White, 16% African American, 8% Hispanic, 3% Asian, and 3% listed as other. The sample is 57% female; mean age is 20.7, with an average of 1.35 years enrolled in college. Descriptive statistics for the remainder of the variables used in the analyses can be found in Table 1.

Measures

Dependent Variables:

White Collar Crime Intentions: Scenarios were developed in order to present respondents with an offending example. Each scenario presents participants with a situation in which a fictitious character is depicted engaging in one of four general forms of WCC, including corporate crime, environmental crime, white collar crime (or occupational crime), and state-corporate crime. The characters were given gender ambiguous names in order to rule out gender bias. These scenarios were developed

Table 1: Descriptive Statistics for the Sample on Age, Sex, Years Enrolled in College, Intentions to Offend, Psychopathic Personality (PPI-R), and Attitudes.

	<i>N</i>	<i>X</i>	<i>SD</i>	<i>Minimum</i>	<i>Maximum</i>
<u>Demographics</u>					
Age	181	20.69	2.867	18	45
Sex (1=male)	181	.43	.497	0	1
Years Enrolled in College	180	1.35	.7	.5	7
<u>Intentions to Offend</u>					
WCC	179	8.14	2.83	4	16
Environmental	180	4.37	1.83	3	12
Corporate	180	11.34	2.57	4	16
State-Corp.	179	8.03	2.5	3	12
<u>PPI-R</u>					
SCI (Self-Centered Imp.)	171	149.9	22.57	70	290
FD (Fearless Dominance)	169	119.03	15.66	45	180
Total	165	301.63	29.28	115	470
<u>Attitudes</u>					
WCC	180	17.41	4.14	7	35
Environmental	179	17	4.36	7	35
Corporate	180	17.73	4.04	9	45
State-Corp.	180	18.03	3.35	7	35

to reflect real situations, in which participants indicated their level of agreement with four different statements about each scenario.

Respondents indicated their level of agreement by circling False (F), Mostly False (MF), Mostly True (MT), and T (T) to the following statements: (1) *The character's actions are unethical*, (2) *The characters actions are criminal* (3) *The character's actions are typical given the situation*, and (4) *You would never act as the character did*.

However, the directions of the statements were reversed for some of the scenarios in order to prevent response bias (e.g., “*You would never act as the character did*” changed to “*You would always act as the character did*”). Scales were developed for each type of WCC by summing scores for each question. Therefore, scale scores were available for intentions to engage in corporate crime ($\alpha=.67$), environmental crime ($\alpha=.58$), white collar or occupational crime ($\alpha=.68$), and state-corporate crime ($\alpha=.74$).

Ethical Attitudes Index (EAI): This is a 30-item self-report instrument designed to measure individual level of justification for WCC. This scale is designed to measure attitudes that may be consistent with or are precursors of each of the four types of white collar crime. Each type of white collar crime contains 7 – 9 items. The four types of white collar crime include corporate crime (9 items; $\alpha = .67$; e.g., “*Temporarily inflating the value of stock is okay if future profits are expected.*”), environmental crime (7 items; $\alpha = .66$; e.g., “*Environmental laws are too costly for businesses.*”), white collar crime or crimes against the organization (7 items; $\alpha = .62$; e.g., “*There is nothing wrong with supplementing my salary with corporate funds.*”), and state-corporate crime (7 items; $\alpha = .57$; e.g., “*Legislators are overly influenced by business concerns.*”).

Respondents indicated level of agreement with each statement based on a 5-point likert scale (1 = strongly disagree – 5 = strongly agree). High scores indicate that respondents have attitudes that are precursors to white collar crime and low scores indicate attitudes that are not consistent with WCC. Specifically, high scores on the corporate crime attitudes indicate that individuals are likely to hold attitudes that are consistent with crimes that are committed in order to benefit the corporation, such as price fixing or stock inflation. High scores for white collar crime attitudes indicate that individuals are likely to have attitudes that are consistent with offending against the organization they are working for such as embezzlement. Respondents that have high scores on environmental crime attitudes are likely to agree with statements that are consistent with violations against the environment. Finally, high scores on the state-corporate crime attitudes suggest that respondents’ are likely to hold beliefs that support

criminal activity that is the result of cooperation between the government and corporations such as lobbying.

Independent Variable

Psychopathic Personality Inventory-Revised (PPI-R): The PPI-R is a 154-item self-report measure of psychopathy. This measure allows for a total psychopathy score, as well as scores on specific facets (i.e., Self-Centered Impulsivity, Fearless Dominance, and Cold-heartedness). Respondents indicate how true each statement is in describing themselves based on a 4-point likert scale (1 = False, 2 = Mostly False, 3 = Mostly True, 4 = True). Higher scores on the PPI-R indicate that the respondent possesses more psychopathic traits, while lower scores indicate fewer psychopathic traits. The PPI-R does not just focus on criminal or antisocial behaviors and was designed to measure personality traits that theoretically make up the construct of psychopathy (e.g., impulsiveness, self-centeredness, and fearlessness). Therefore, it can be used in both clinical and non-clinical settings as a continuous measure of psychopathic personality traits. It has good reliability with community/college samples ($\alpha = .78-.92$) and has good convergent validity with other self-report measures of psychopathy (e.g., Hare's Self-Report Psychopathy Scale; Lilienfeld & Widows, 2005).

The current study focuses only on the Fearless Dominance and the Self-Centered Impulsivity factors and does not examine the relationship between Coldheartedness and WCC. According to Lilienfeld and Widows (2005) the Coldheartedness factor does not load well on either of the other factors of the PPI and is not traditionally used in their computation. The Self-Centered Impulsivity factor characterizes individuals as being self-centered, often blaming others for their own mistakes, impulsive, manipulative, and

having a disregard for norms (Benning, Patrick, Hicks, Blonigen, & Krueger, 2003). The Fearless Dominance factor characterizes individuals as lacking anxiety, harm avoidance, and socially dominant (Benning et al., 2003). Additionally, the Fearless Dominance and Self-Centered Impulsivity factors correlate with Factors 1 and 2 of the PCL-R, respectively (Lilienfeld & Widows, 2005). Past research using the PPI has focused on these factors without the Coldheartedness factor (Benning et al. 2003; 2005; & Benning, Patrick, Salekin, & Leistico, 2005). Therefore to be consistent with past research the current study focuses on the Fearless Dominance and Self-Centered Impulsivity factors only.

Control Variables:

The analysis includes several control variables including sex, age, race, major, years of experience, degree program, and years in college. Respondents indicated their sex as either 0 for male or 1 for female. Respondents were also asked to record their age at the time of the questionnaire. Participants indicated their race as one of the following: 0 = American Indian, 1 = Asian, 2 = Black or African American, 4 = Native Hawaiian or other Pacific Islander, 5 = White, or 6 = other. Additionally, by answering no (0) yes (1) respondents indicated if they were of Hispanic, Latino, or Spanish origin. Finally, respondents indicated their current major, how many years they have been enrolled in college at the time of the survey, and years of professional experience with open-ended responses.

Procedure

This study follows ethical guidelines regarding human subjects approved by University's Institutional Review Board (IRB). Students from an undergraduate

criminology course were given the opportunity to participate in a research study for extra credit. Researchers entered a pre-approved class at which time the research study was described and students were presented with an opportunity to participate. The questionnaire took approximately 25-30 minutes to complete. Additionally, upon receipt of the questionnaire and before they began, directions were explained to the participants and they were told that their responses will be completely confidential and that they will be given extra credit for their participation. Those students who were interested in taking part were given a questionnaire and asked to return their completed questionnaires by the end of class. Those students who wanted to earn extra credit, but do not want to participate in the research study were given an alternative option related to the content of their course.

Analytic Plan

Descriptive statistics (as shown in Table 1) were examined in order to present the characteristics of the sample and the distribution of control variables. Sample means and frequencies are reported on race, ethnicity, age, major, sex, degree program, years in college, and years of professional experience.

The scales used were examined for internal consistency and reliability. Using the SPSS reliability analysis function inter-item correlations, and mean item inter-correlations were examined in order to address the internal consistency and reliability of each of the scales. Additionally, factor analysis was conducted on each of the scales in order to assess their factor structure.

In order to justify a multivariate model, it is necessary to assess the bivariate correlations among key dependent, mediating, and independent variables. Bivariate analyses are conducted between the intentions to offend scale, the EAI, and the PPI-R.

All subsequent analyses are conducted using linear regression. All models include demographic variables in the first step of the regression analysis. A model is established in order to assess the relationship between psychopathy and intentions to offend, controlling for demographic variables. Specifically, a regression analysis is conducted using the intention to offend variable as the dependent variable. The primary independent variable that is included in the initial model is the psychopathy variable (based on results from the PPI-R), which is inserted in the second step of the regression analysis after the controls. .

The second model assesses the relationship between attitudes toward white collar crime and intentions to offend. The regression analysis includes the results from the intentions to offend scenarios as the dependent variable and the Ethical Attitudes Inventory (EAI) as the independent variable while controlling for demographic characteristics.

A third model is presented to show the relationship between psychopathic personalities and attitudes toward white collar crime. A regression analysis is conducted that includes the EAI as the dependent variable and results from the PPI-R as the independent variable (along with the control variables). This method has been suggested as a means to assess mediation (Baron and Kenny, 1986).

Finally, a complete model shows the mediating effect of attitudes toward white collar crime on the relationship between psychopathy and intentions to offend. This

model represents the intentions to offend scenarios regressed on the demographic variables, the PPI-R, and the EAI. The first step, again, includes intentions to offend regressed on demographic controls. The second step inserts psychopathy and the third step inserts the EAI variable. A non-significant relationship between psychopathy and intentions to offend after the inclusion of the EAI indicates a mediating effect of attitudes toward white collar crime.

Hypotheses

The purpose of this study is to explore the relationship between psychopathic personality traits and intentions to engage in WCC. Additionally, the study will examine if individuals who have psychopathic personalities are more likely to hold attitudes that are consistent with WCC. It is expected that individuals who have psychopathic personality traits will be more likely to hold attitudes that are consistent with WCC, which will, in turn, increase the likelihood of intentions to engage in WCC. More formal and specific hypotheses are listed below.

Hypotheses for WCC:

- (1) Fearless Dominance (FD) will be positively related to WCC intentions.
- (2) Self-Centered Impulsivity (SCI) will not be related to WCC intentions.
- (3) WCC Attitudes (WCCA)³ will be positively related to WCC intentions.
- (4) FD will be positively related to WCCA.
- (5) SCI will not be related to WCCA.

³ From this point forward WCCA will denote outputs from the scale measuring White Collar Crime Attitudes. The same notation will be used for Environmental Crime Attitudes (ECA), Corporate Crime Attitudes (CCA), and Stat-Corporate Crime Attitudes (SCCA).

(6) The positive relationship between FD and WCC intentions will be reduced to nonsignificance after WCCA are included in the model (i.e., WCCA will mediate the relationship between FD and WCC intentions).

Hypotheses for EC:

- (1) The FD will be positively related to EC intentions.
- (2) The SCI will not be related to EC intentions.
- (3) The ECA will be positively related to EC intentions.
- (4) FD will be positively related to ECA.
- (5) SCI will not be related to ECA.
- (6) The positive relationship between FD and EC intentions will be reduced to nonsignificance after ECA are included in the model (i.e., ECA will mediate the relationship between FD and EC intentions).

Hypotheses for CC:

- (1) FD will be positively related to CC intentions.
- (2) SCI will not be related to CC intentions.
- (3) The CCA will be positively related to CC intentions.
- (4) FD will be positively related to CCA.
- (5) SCI will not be related to CCA.
- (6) The positive relationship between FD and CC intentions will be reduced to nonsignificance after CCA are included in the model (i.e., CCA will mediate the relationship between FD and CC intentions).

Hypotheses for SCC:

- (1) FD will be positively related to SCC intentions.

- (2) SCI will not be related to SCC intentions.
- (3) The SCCA will be positively related to SCC intentions.
- (4) FD will be positively related to SCCA.
- (5) SCI will not be related to SCCA.
- (6) The positive relationship between FD and SCC intentions will be reduced to nonsignificance after SCCA are included in the model (i.e., SCCA will mediate the relationship between FD and SCC intentions).

Chapter Four

Results

Bivariate Findings

The Pearson's zero-order correlation matrix for all variables examined in this study is presented in Table 2. The results show that the Psychopathic Personality Inventory – Revised (PPI-R) total score is positively related to three of the four subscales of the Ethical Attitudes Inventory (EAI). Total scores on the PPI-R have significant positive correlations with WCC Attitudes (WCCA; $r=.254$, $p<.01$), Corporate Crime Attitudes (CCA; $r=.287$, $p<.001$), and Environmental Crime Attitudes (ECA; $r=.248$, $p<.01$), but is not associated with State-Corporate Crime Attitudes (SCCA). Therefore, those individuals with psychopathic traits are more likely to endorse attitudes that are consistent with several types of WCC, but not State-Corporate Crime.

The bivariate correlations also demonstrate significant, but divergent and unexpected, relations with the EAI subscales. Specifically, Self-Centered Impulsivity (SCI) is positively associated with all of the subscales of the EAI, with the exception of the SCCA. More specifically, there is a significant positive correlation between SCI and WCCA ($r = .309$, $p<.001$), ECA ($r = .217$, $p<.01$), and CCA ($r = .294$, $p<.001$). Although it was hypothesized to be related to the EAI, Fearless Dominance (FD) is not related to any of the EAI subscales.

Bivariate results regarding the relationship between the PPI-R and intentions to engage in WCC are also presented in Table 2. Total scores on the PPI-R reveal a positive association with intentions to engage in WCC (WCC Intent; $r=.239$, $p<.01$) and environmental crime (EC Intent; $r=.338$, $p<.001$). Again, those individuals characterized as having psychopathic personality traits express greater willingness to engage in EC and WCC. However, there is no significant association between total PPI-R scores and intentions to engage in state-corporate crime (SCC Intent) or corporate crime (CC Intent). Similar to the analyses involving the EAI, it appears that the relationship between the PPI-R and intentions is driven primarily by the SCI factor. For instance, the SCI factor is positively associated with WCC ($r=.263$, $p<.01$) and EC Intent ($r=.379$, $p<.001$). Additionally, the FD factor is not associated with any of the intentions to offend scales.

Finally, Table 2 also presents the correlations between the individual EAI subscales and intentions to offend. As predicted, WCCA is positively associated with WCC Intent ($r=.285$, $p<.001$), and ECA is positively correlated with EC Intent ($r=.365$, $p<.001$). However, SCCA and CCA do not show the expected relationship with their respective intentions to offend outcomes (SCC Intent and CC Intent).

While the bivariate results do not support the hypotheses regarding FD and attitudes and intentions, the positive association between the SCI and certain aspects of intentions to engage in offending and attitudes warrant a multivariate analysis. Additionally, it is necessary to assess any mediation between PPI-R and intentions to offend given the positive association between certain aspects of the EAI and their respective intentions to offend.

Table 2: Pearson's Zero-Order Correlations for Psychopathy, Attitudinal Beliefs, and White Collar Crime

	1. PPI-SCI	2. PPI-FD	3. PPI-Total	4. WCC Attitude	5. EC Attitude	6. CC Attitude	7. SCC Attitude	8. WCC Intent	9. EC Intent	10. CC Intent	11. SCC Intent
1	-	-.064	.781***	.309***	.217**	.294***	.065	.263**	.379***	.069	.075
2		-	.532***	-.056	.068	.077	.013	.019	-.056	-.057	.004
3			-	.254**	.248**	.287***	.054	.239**	.338***	-.013	.079
4				-	.259***	.349***	.322***	.285***	.108	-.006	.078
5					-	.588***	.469***	.149*	.365***	-.068	-.016
6						-	.522***	.322***	.358***	.071	-.016
7							-	.097	.137	.136	.010
8								-	.349***	.055	.010
9									-	-.114	-.120
10										-	.157*
11											-

*p<.05, **p<.01, p<.001

Note: SCI = PPI = Psychopathic Personality Inventory – Revised, Self-Centered Impulsivity, FD = Fearless Dominance, WCC Attitude = White Collar Crime Attitude, EC Attitude = Environmental Crime Attitude, CC Attitude = Corporate Crime Attitude, SCC Attitude = State-Corporate Crime Attitude, WCC = White Collar Crime Intentions, EC Intent = Environmental Crime Intentions, CC Intent = Corporate Crime Intentions, and SCC Intent = State-Corporate Crime Intention

Multivariate Findings

In order to test how robust the independent relationships are from the bivariate correlations, while including the appropriate controls (age, sex, race, years enrolled in college), a multivariate analysis was conducted for each intention to offend variable. In addition, a hierarchical regression approach allows for the examination of any mediation effect of the EAI on the relationship between the PPI-R and intentions of offend.

Therefore, each of the variables representing intentions to engage in each type of WCC is regressed on demographic controls, PPI-R, and their respective EAI subscales using OLS regression. The results from each analysis are presented in the subsequent tables.

Table 3 presents four separate models regressing WCC Intent onto demographic controls, PPI-R (SCI and FD), and WCCA. Model I includes only the demographic variables (sex, age, race, and years enrolled in college). The overall fit of this model is significant ($F = 2.75, p < .05$), although only able to explain 6% of the variance in WCC Intent. Specifically, gender seems to account for most of the explained variance with males more likely to engage in WCC ($\beta = .19, p < .05$). However, the effect of gender on WCC Intent is reduced to nonsignificance in Model II of Table 3 when SCI and FD are included. This model is able to explain 10% of the variance in WCC Intent, a significant increase of 4% from the previous model ($F\text{-Change} = 3.37, p < .05$). SCI is the only variable in the model that is significantly related to WCC Intent ($\beta = .20, p < .05$). This suggests that the intentions to engage in WCC increases as scores on the SCI also increase.

Table 3: Estimated coefficients from a series of nested OLS models of WCC by age, race, ethnicity, gender, years in college, psychopathy, and ethical attitudes

	<i>MODEL I</i> <i>Demographics</i>			<i>MODEL II</i> <i>Dems., Psych.</i>			<i>MODEL III</i> <i>Dems., Att.</i>			<i>MODEL IV</i> <i>Dems., Att., Psych.</i>		
	b	s.e.	β	b	s.e.	β	b	s.e.	β	b	s.e.	β
<u>Demographics</u>												
Age	-.08	.09	-.08	-.04	.09	-.05	-.10	.09	-.09	-.07	.45	.09
Gender	1.05*	.42	.19	.72	.46	.13	1.05*	.42	.19	.54	.45	.09
Race	-.03	.02	-.13	-.03	.02	-.11	-.03	.02	-.13	-.03	.02	-.14
Y.E.C.	.15	.19	.07	.17	.19	.08	.24	.18	.11	.25	.19	.12
<u>PPI-R</u>												
SCI				.03*	.01	.20				.02	.01	.13
FD				.00	.01	.02				.01	.01	.04
<u>EAI</u>												
WCC							.20***	.05	.29	.18**	.05	.26
R ²		.06*			.10*			.14***			.15**	

* $p < .05$, ** $p < .01$, *** $p < .001$

In Model III of Table 3 the SCI and FD variables are removed and WCCA is entered. This model is significant and explains 14% of the variance, which is a significant

increase from the baseline model of 8% (F-Change = 15.12, $p < .001$). Even while controlling for race, gender, age, and years enrolled in college, WCCA has a positive association with WCC Intent ($\beta = .285$, $p < .001$). This suggests that individuals who have attitudes consistent with WCC are more likely to have intentions to engage in WCC.

The final model presented in Table 3 suggests that WCCA mediates the relationship between SCI and WCC Intent. This model is able to explain 15% of the variance in WCC Intent, which is also a significant increase in the variance explained from the baseline model of 9% (F-Change = 10.50, $p < .01$). When both WCCA and SCI are included in the model, SCI no longer has a significant association with WCC Intent. As shown in the bivariate analysis, SCI has a positive correlation with WCCA ($r = .309$, $p < .001$). Considering the bivariate association between SCI and WCCA ($r = .309$, $p < .001$) and results when regressing WCCA on to SCI ($\beta = .309$, $p < .001$; not shown in table) while holding demographics constant is additional support for what appears to be a mediating effect of WCCA. Thus it appears that SCI is operating through WCCA, suggesting that individuals who are high in SCI are more likely to hold attitudes consistent with WCC, which in turn increases their likelihood of reporting intentions to engage in WCC.

Table 4 presents the same set of independent variable in OLS regression models, but the dependent variable is now EC Intent. The first model does not explain a significant amount of variance in EC Intent. However, gender has a significant positive relationship with EC Intent ($\beta = .15$, $p < .05$), while controlling for other demographic characteristics, suggesting that males are more likely to express intent to engage EC.

The psychopathic facets of SCI and FD are included in the second model, which explains 17% of the variance in EC Intent. This is a significant increase from the baseline model of 13% (F-Change = 11.84, $p < .001$). Not surprisingly, given the findings from the bivariate results, we see that there is a significant increase in intentions to engage in EC as SCI increases ($\beta = .36$, $p < .001$). This association remains even when controlling for demographic characteristics. However, FD does not demonstrate a significant relationship with EC intentions.

Model III of Table 4 presents the results from the regression analysis when SCI and FD are removed and ECA is inserted into the model. Overall, this model is significant explaining 16% of the variance in EC Intent. Again, this model is also significantly better in explaining the variance in EC Intent than the model including only the demographic variables (F-Change = 25.59, $p < .001$). As with the previous model,

Table 4: Estimated coefficients from a series of nested OLS models of Environmental Crime by age, race, ethnicity, gender, years in college, psychopathy, and ethical attitudes

	<i>MODEL I</i> Demographics			<i>MODEL II</i> Dems., Psych.			<i>MODEL III</i> Dems., Att.			<i>MODEL IV</i> Dems., Att., Psych.		
	b	s.e.	β	b	s.e.	β	b	s.e.	β	b	s.e.	β
<u>Demographics</u>												
Age	-.07	.06	-.11	-.03	.06	-.04	-.03	.06	-.05	-.00	.05	-.01
Gender	.55*	.28	.15	.37	.28	.10	.35	.26	.10	.23	.27	.06
Race	-.01	.01	-.05	.00	.01	-.00	-.01	.01	-.08	-.00	.01	-.03
Y.E.C.	.12	.12	.09	.07	.11	.05	.13	.11	.10	.08	.11	.06
<u>PPI-R</u>												
SCI				.03***	.01	.36				.02**	.01	.31
FD				-.01	.01	-.05				-.01	.01	-.06
<u>EAI</u>												
Enviro							.15***	.03	.37	.12***	.03	.30
R ²		.04			.17***			.16***			.24***	

* $p < .05$, ** $p < .01$, *** $p < .001$

gender is no longer significant. However, there is a positive association between ECA and EC Intent ($\beta = .37, p < .001$), suggesting that as attitudes consistent with environmental crime increase so do intentions to offend.

The significant positive association between SCI and EC Intent and ECA and EC Intent warrants further analysis in order to address a mediating effect of ECA.

Additionally, there is a significant positive association when regressing ECA onto SCI while holding FD and demographic characteristics constant ($\beta = .18, p < .05$; results not shown in table).

Model IV of Table 4 is the final model that includes all predictors. In this model, there is no evidence of a mediating effect by ECA on the relationship between SCI and EC Intent. As a matter of fact, this model is significantly better than the baseline model (F-Change = 17.09, $p < .001$), and is able to explain 20% more of the variance in EC Intent. However, both SCI ($\beta = .31, p < .001$) and ECA ($\beta = .30, p < .001$) remain significant predictors of EC Intent. Therefore, unlike WCC Intent, SCI explains unique variance in WCC Intent beyond ECA.

Table 5 presents the regression models for CC Intent. The results of regressing CC on all predictors included in the model are not significant, as suggested by the bivariate analysis. In addition, Table 6 presents those the OLS regression models for SCC Intent. Looking across these models we see that there is a consistent negative relationship between SCC Intent and age ($\beta = -.19, p < .05$; $\beta = -.22, p < .05$; $\beta = -.19, p < .05$; $\beta = -.22, p < .05$ respectively). Similarly, there is a consistent positive relationship between SCI and years enrolled in college ($\beta = .22, p < .05$; $\beta = .27, p < .01$; $\beta = .24, p < .01$; $\beta = .29, p < .01$ respectively). In neither of these sets of models is psychopathy or attitudes associated

with intentions to engage in SCC or CC. However, this is not surprising given the results from the bivariate correlations.

Table 5: Estimated coefficients from a series of nested OLS models of Corporate Crime by age, race, ethnicity, gender, years in college, psychopathy, and ethical attitudes

	<i>MODEL I</i> <i>Demographics</i>			<i>MODEL II</i> <i>Dems., Psych.</i>			<i>MODEL III</i> <i>Dems., Att.</i>			<i>MODEL IV</i> <i>Dems., Att., Psych.</i>		
	b	s.e.	β	b	s.e.	β	b	s.e.	β	b	s.e.	β
<u>Demographics</u>												
Age	-.07	.08	-.07	-.06	.09	-.06	-.06	.08	-.07	-.05	.09	-.06
Gender	-.52	.38	-.10	-.06	.42	-.12	-.56	.39	-.11	-.62	.42	-.12
Race	-.03	.02	-.12	-.02	.02	-.12	-.03	.02	-.12	-.02	.02	-.12
Y.E.C.	-.19	.17	-.10	-.14	.17	-.08	-.18	.17	-.09	-.13	.17	-.07
<u>PPI-R</u>												
SCI				.01	.01	.06				.01	.01	.05
FD				-.00	.01	-.03				-.01	.01	-.03
<u>EAI</u>												
Corporate							.03	.05	.04	.03	.05	.04
R ²		.06*			.06			.06			.06	

*p<.05, **p<.01, ***p<.001

Table 6: Estimated coefficients from a series of nested OLS models of State-Corporate Crime by age, race, ethnicity, gender, years in college, psychopathy, and ethical attitudes

	<i>MODEL I</i> <i>Demographics</i>			<i>MODEL II</i> <i>Dems., Psych.</i>			<i>MODEL III</i> <i>Dems., Att.</i>			<i>MODEL IV</i> <i>Dems., Att., Psych.</i>		
	b	s.e.	β	b	s.e.	β	b	s.e.	β	b	s.e.	β
<u>Demographics</u>												
Age	-.17*	.08	-.19	-.19*	.08	-.22	-.17*	.08	-.19	-.18*	.08	-.22
Gender	.01	.38	.00	-.01	.41	-.00	.02	.38	.00	.02	.41	.00
Race	-.01	.02	-.05	-.01	.02	-.04	-.01	.02	-.05	-.01	.02	-.05
Y.E.C.	.43*	.17	.22	.51**	.17	.27	.45**	.17	.24	.55**	.18	.29
<u>PPI-R</u>												
SCI				.00	.01	.03				.00	.01	.03
FD				.00	.01	.00				.00	.01	.00
<u>EAI</u>												
State-Corp.							.04	.06	.05	.06	.06	.08
R ²		.05			.07			.05			.07	

*p<.05, **p<.01, ***p<.001

Chapter Five

Discussion

Most research assessing the correlates of WCC have focused on traditional sociological (e.g., structural) and criminological (e.g., social learning) theories. The purpose of the present study was to supplement this literature by exploring what role personality plays in understanding WCC. We found a relationship between psychopathy and intentions to engage in WCC and EC. In addition, a relationship between the attitudes and intentions of certain types of white collar crime were also found.

With respect to psychopathy, differential relations were observed depending on the specific subscale examined. Specifically, it was found that the SCI factor of the PPI-R is positively related to two forms of WCC (WCC and EC). That is, individuals who have impulsive, self-centered, and Machiavellian personality are more likely to have intentions to engage in WCC and EC. It was also found that those individuals who score high on the SCI factor were more likely to have attitudes consistent with the corresponding forms of WCC (i.e., WCCA and ECA). Additionally, based on the regression analysis, it appears that the relationship between SCI and WCC intentions is mediated by WCCA. In other words, individuals with psychopathic personality traits captured by SCI are likely to have attitudes that might enable them to justify engaging in WCC. In regards to EC, there was no mediation effect found, suggesting that SCI is directly related to EC beyond attitudes. Alternatively, SCI was not found to be related to CC or SCC attitudes or intentions.

It should be noted that it was unclear from the outset what, if any, relationship would be observed between SCI and the various types of white collar crimes included in the study. The relationships between SCI and WCC and EC are intriguing and therefore demand further discussion. High scores on SCI characterize individuals as being impulsive, manipulative and deceitful (i.e., Machiavellian), and self-centered. It may be that this cluster of personality traits works together in a way that is conducive to making decisions to offend. Alternatively, it may be that one or two of these more specific traits drive the relationship between SCI and attitudes and SCI and WCC intentions. In the former case, it may be that individuals high on SCI when confronted with offending opportunities are more likely to quickly make a utilitarian decision without thinking of the costs or repercussions and regardless of the legality of the decision.

Another interpretation is that the relationship between SCI and WCC attitudes and SCI and WCC intentions is the result of high scores on a specific subscale of the SCI factor. For example, individuals may have Machiavellian personalities, while not necessarily being impulsive. Someone who is Machiavellian is able to justify an action on account of it being a means to an end, regardless of the fact that it may be unethical or criminal (Turner & Martinez, 1977). This proposition has been supported in prior research (Giacalone & Knouse, 1990; Rayburn & Rayburn, 1996; Turner & Martinez, 1977; & Verbeke, Ouwerkerk, & Peelen, 1996). Accordingly, it is thought that WC workers are socialized to be rational actors with the ability to make calculated decisions (Simpson & Piquero, 2002). Therefore, it would appear that these individuals should have lower scores on the impulsive subscale of SCI (i.e., are less impulsive). Based on

these rationales, it is plausible that the relationship between SCI and WCC is due to high scores on the Machiavellian Egocentricity subscale.

Another reason that SCI may have been found to have a positive association with WCC is that impulsivity actually does factor into one's likelihood of engagement in white collar offending. In other words, while those who maintain WC positions may not be as impulsive as the rest of the population, those who are at the higher end of the impulsivity spectrum within that context may be more likely to engage in WCC. This suggestion has more credence when considering the use of a college sample.

Impulsiveness is not expected to be a predominant trait among college students for many of the same reasons that levels of impulsivity are thought to be low among WC workers. However, there may be a range of impulsiveness within these groups or contexts, with those that are at the higher end (i.e., more impulsive) being the ones that are most likely to endorse offending behavior.

FD was not found to be related to any of the attitudes or intentions. The non-significant relationship between FD and WCC also deserves further discussion. Individuals who score high on FD are likely to have socially dominant and fearless personalities, while being calm and collected under pressure. As suggested in our hypotheses, these traits would also be expected to characterize those individuals who would be most likely to engage in WCC. WCC crime may involve possible losses or gains of millions of dollars, lives, or result in criminal or civil sanctions. This offers the risk and excitement that psychopathic individuals may desire (i.e., those with high FD scores), making them more likely to engage in such behavior. Also, these individuals are more likely to have the ability to calmly and confidently make these critical decisions.

However, it may be for the very opposite reasons that individuals engage in WCC. For example, individuals may make criminal decisions because their susceptibility to external pressures and the stress of organizational goals. As Vaughn (1998) points out her analysis of the Challenger space shuttle disaster, individuals who would not have normally engaged in unethical decision-making uncharacteristically did so. This was, in part, due to the desperate climate that normalized unethical behavior within the NASA organization.

An additional explanation for the nonsignificant relationship between FD and WCC may also have to do with subscale composition. The FD factor consists of three subscales (i.e., Social Potency, Fearlessness, and Stress Immunity; Lilienfeld & Widows, 2001), which may mask more subtle distinctions. For example, individuals who endorsed offending behavior may have low scores on Stress Immunity, yet have high scores on Fearlessness. This would then obfuscate significant relationships between the total score of FD and WCC intentions. Therefore, as was suggested for SCI, looking at the FD subscales may provide a more nuanced picture of why the total FD score failed to be related empirically to WCC.

However, in order to address the aforementioned explanations for these associations, future research must look at the relationship between the separate subscales of both SCI and FD with WCC. By reducing the analyses to look at subscales it will be possible to examine how specific personality traits of psychopathy are related to WCC. This will allow researchers to see how, if at all, distinct relationships are masked by the FD total factor score.

Another possibility may be that even within the subscales there are certain items that are not particularly relevant to WCC. Because measures of psychopathy were originally developed based on definitions consistent with street crime, it may be that several of these items are not consistent with WCC. Therefore, future research should look into item-level correlations with WCC. By selecting certain items from each subscale that are more consistent with WCC, it may be possible to develop scales that measure personality traits that are more indicative of WCC.

The current study developed two unique measures; one which assesses attitudes consistent with WCC (i.e., EAI) and another based on intentions to engage in WCC (i.e., the four vignettes). The EAI was developed to measure attitudes of four different types of WCC (i.e., WCC, EC, CC, and SCC). Each of the vignettes was also created to represent each form of WCC, and they were expected to correspond with their respective attitude scales. However, this was not the case for CC and SCC. CC and SCC attitudes were not found to be predictive of offending intentions. This questions the validity of these measures, suggesting that they may not be measuring what they were intended to. Additionally, the exploratory nature of this study did not allow for test-retest examination of these instruments. However, reliability analysis on each of the scales and vignettes was assessed, and suggested the exclusion of specific items. Despite dropping these items from the scales, they continued to demonstrate significant relationships with other variables. Future research should also build upon the current measures used in order to increase their validity by developing more consistent groups of items.

Future research should also study the relationship between psychopathy and WCC in certain contexts using an integrated approach. For example, psychopathy and

organizational climate may interact with each other when considering WCC. Therefore, it may be possible for studies to employ a factorial vignette design in which organizational factors are varied. This will allow researchers to examine how, if at all, individuals with psychopathic personalities operate across different organizational settings. Additionally, vignettes could be developed in a way to assess perceived sanctions and threats of the respondent. For example, varying the level of risk and legal repercussions experienced by the actor or the organization as a result of their behavior would allow for the application of deterrence or rational choice perspectives to also be included.

Although this study served its purpose in filling a notable void in the empirical literature, there are limitations that deserve to be mentioned. First, the methodology in the current analysis employed vignettes. As Simpson and Piquero (2002) note, there are two criticisms leveled against this methodological tool. The first criticism is in regards to their inability to capture real-world situations. More specifically, there may be a variety of factors that surround one's decision to engage in WCC that are not captured in vignettes. However, based on previous WCC literature, the vignettes were designed to depict concrete, realistic events that could occur in a business or corporate setting. Additionally, because our sample consisted of college students, it is believed that the majority of respondents were able to properly interpret and place themselves in the situations that were presented in the vignettes.

Beyond the critique of their verisimilitude, vignettes are often criticized on the grounds that there is a disjunction between intentions and actual behavior. In other words, what respondents indicate they would hypothetically do might be far removed from what they would do if the situation actually presented itself. This limitation may appear more

damning than it really is. For instance, several studies have found intentions are related to actual behavior (Green, 1988; & Kim & Hunter, 1993).

The benefits to using vignettes may outweigh alternative methods of measuring outcomes. Other methods of collecting data on criminal behavior are also subject to criticism such as self-report surveys (Huizinga & Elliot, 1986) and official crime records (MacDonald, 2002). For the most part, official data on WCC does not exist, while self-reports of WCC may suffer from over- or under-reporting. On the other hand, vignettes can easily measure intentions to a wide variety of behavior. By the same token, vignettes are capable of measuring situations and outcomes that are normally not observable, which is especially beneficial in the study of WCC. Thus, the use of vignettes in exploratory research is beneficial to WCC research. Nonetheless, we implore future researchers to find additional ways of measuring actual WCC.

Another limitation is that the current study relied upon a college sample. Convenient samples such as this compromise generalizability. While this criticism is warranted, and the use of a random sample of business sector or WC workers would lend more validity to the results, it is extremely difficult to gain access to this population (see Freidrichs, 2007 for a detailed discussion of this topic). Alternatively, college students are likely to be the very individuals who may obtain WC positions. Most individuals who move into the WC sector are college graduates and it reasonably likely that this study's participants include individuals who could be future WC criminals. This not only lends credibility to the use of this type of sample, but it has certain implications for understanding what types of individuals might be future WC criminals. However, this would require more elaborate methods of data collection, such as longitudinal data

collection and supplementary measurements, such as self-report data, official crime data, and alternative personality measures.

Considering that these are the individuals likely to move into WC positions, it would be beneficial to follow them as they move out of college and into their careers. This would allow researchers to assess data longitudinally and make more reliable causal inferences regarding correlates of WCC. The use of longitudinal data would allow researchers to apply Babiak's (1995; 1996) concept of the *industrial psychopath* and Boddy's (2006) *organizational psychopath* by assessing how these individuals move into and through organizations. More specifically, this would allow researchers to examine if certain personality traits are selective within the WC sector, how these individuals gain status, and most importantly, their involvement in WCC.

The collection of other sources of data would allow for the corroboration of information on offending and personality measures. For example, self-report surveys, as well as official crime data for WCC, would help to validate vignette responses. Future studies should also incorporate measures of common "street" crime in order to address its association with WCC. Additional measures of psychopathy would lend to a more valid estimate of psychopathy within the sample. Future research should also employ the use of broad measures of personality, such as the NEO-P-I-R (Costa & McCrae, 1992). This would enable researchers to assess personality traits outside the domain of psychopathy that may be related to WCC.

In conclusion, the results of this exploratory study suggest that psychopathy is related to certain aspects of WCC. Individuals who score high on the SCI factor of the PPI-R are more likely to have both attitudes consistent with and intentions to engage in

WCC and EC. This study is unique in that it is the only study to date that has examined the relationship between psychopathy and WCC. Therefore, it serves a very important role in giving direction to future studies assessing this relationship. As suggested above, future research should expand upon the current study in several ways (i.e., more valid measures of WCC, longitudinal data collection, and inclusion of additional measures) in order to better understand the role of psychopathic personality traits in WCC. More research employing such methods is important considering the costs of WCC and the disproportionate amount of crime that these individuals are suspected of committing (Hare, 1993; Babiak, 2006; and Boddy, 2006).

References

- Akers, R.L., Sellers, C.S. (2004). *Criminological theories: Introduction, evaluation, and application* (4th ed.). Los Angeles, CA: Roxbury.
- Alalehto, T. (2003). Economic crime: Does personality matter? *International Journal of Offender Therapy and Comparative Criminology*, 47(3), 335-355.
- Babiak, P. (1995). When psychopaths go to work: a case study of an industrial psychopath. *Applied Psychology: An International Review*, 44, 171-188.
- Babiak, P. (1996). Psychopathic manipulation in organizations; pawns, patrons, and patsies. *Issues in Criminological and Legal Psychology*, 24, 12-17.
- Babiak, P. & Hare, R. D., (2006). *Snakes in suits: When psychopaths go to work*. New York: HarperCollins.
- Baron, R.M., Kenny, D.A. (1986). The moderator-mediator variable distinction in social psychological research: conceptual, strategic, and statistical considerations. *Journal of Personality and Individual Differences*, 51(6), 1173-1183.
- Baucus, M.S & Near, J.P. (1991). Can illegal corporate behavior be predicted? An event history analysis. *Academy of Management Journal*, 34(1), 9-36.
- Barnett, H.C. (1981). Corporate capitalism, corporate crime. *Crime & Delinquency*, 27, 4-23.
- Ben-David, S. (1991). Personality traits in white-collar offenders. *Medicine and Law*, 10, 527-536.
- Benning, S.D., Patrick, C. J., Hicks, B. M., Blonigen, D. M., & Krueger, R. F. (2003). Factor structure of the Psychopathic Personality Inventory: Validity and implications for clinical assessment. *Psychological Assessment*, 15, 340-350.
- Benning, S. D., Patrick, C. J., Blonigen, D. M., Hicks, B. M., & Iacono, W. G. (2005). Estimating facets of psychopathy from normal personality traits: A step toward community epidemiological investigations. *Assessments*, 12(1), 3-18.
- Benning, S. D., Patrick, C. J., Salekin, R. T., & Leistico, A. R. (2005). Convergent

and discriminant validity of psychopathy factors assessed via self-report: A comparison of three instruments. *Assessment*, 12(3), 270-289.

- Blickle, G., Schlegel, A., Fassbender, P., & Klein, U. (2006). Some personality correlates of white collar crime. *Applied Psychology: An International Review*, 55(2), 220-233.
- Board, B. J., & Fritzon, K., (2005). Disordered personalities at work. *Psychology, Crime & Law*, 11(1), 17-32.
- Boddy, C. R. (2006). The dark side of management decisions: organizational psychopaths. *Management Decision*, 44(10), 1461-1475.
- Burns, R.G. & Lynch, M.J. (2002). Another fine mess...A preliminary examination of the use of fines by the national highway traffic safety administration. *Criminal Justice Review*, 27(1), 1-25.
- Cleckley, H. (1988). *The mask of sanity* (5th ed.). Augusta, GA: Cleckley, E.
- Clinard, M. B., & Yeager, P. C. (1980). *Corporate Crime*. New York: Free Press.
- Coleman, J.W. (1987). Toward an integrated theory of white-collar crime. *American Journal of Sociology*, 93, 406-439.
- Coleman J. W. (2006). *The criminal elite: Understanding white-collar crime* (6th ed.). New York: Worth Publishers.
- Collins, J.M. & Bagozzi, R.P. (1999). Testing the equivalence of the socialization factor structure for criminals and noncriminals. *Journal of Personality Assessment*, 72(1), 68-73.
- Collins, J.M. & Schmidt, F.L. (1993). Personality, integrity, and white collar crime: A construct validity study. *Personnel Psychology*, 46(2), 295-311.
- Costa, P. T. Jr., & McRae, R. R. (1992). *NEO PI-R professional manual*. Odessa, FL: Psychological Assessment Resources.
- Cressey, D.R. (1980). Management fraud, controls, and criminological theory. In W.S. Laufer & F. Adler (Eds.), *Advances in criminological theory* (pp. 31-55). New Brunswick, NJ: Transaction.
- Daboub, A.J., Rasheem, A.M.A., Priem, R.L., & Gray, D.A. (1995). Top management team characteristics and corporate illegal activity. *The academy of management review*, 20(1), 138-170.

- Daderman, A.M., (1999). Differences between severely conduct-disordered juvenile males and normal juvenile males: The study of personality. *Personality and Individual Differences*, 26, 827-845.
- Detrick, P., & Chibnall, J. T., (2006). NEO-PI-R personality characteristics of high-performing entry-level police officers. *Psychological Services*, 3(4), 274-285.
- Durkheim, E. (1933). *The division of labor in society*, New York: The Free Press.
- Edens, J., Marcus, D., Lilienfeld, S., & Poythress, N. (2006). Psychopathic, not psychopath: Taxometric evidence for the dimensional structure of psychopathy. *Journal of Abnormal Psychology*, 115, 131-144.
- Elis, L. A., & Simpson, S., (1995). Informal sanction threats and corporate crime: Additive versus multiplicative models. *Journal of Crime and Delinquency*, 32, 399-424.
- Frick, P.J., Lilienfeld, S.O., Ellis, M., Looney, B., & Silverthorn, P. (1999). The association between anxiety and psychopathy dimensions in children. *Journal of Abnormal Child Psychology*, 27(5), 383-392.
- Friedrichs, D.O. (2007). *Trusted Criminals: White collar crime in contemporary society* (3rd ed.). Belmont, CA: Thomson Wadsworth.
- Giacalone, R.A. & Knouse, S.B. (1990). Justifying wrongful employee behavior: The role of personality in organizational sabotage. *Journal of Business Ethics*, 9(1), 55-61.
- Goldberg, L. R. (1990). An alternative “description of personality”: The big five factor structure. *Journal of Personality and Social Psychology*, 59, 1216-1229.
- Goldberg, L. R. (1993). The structure of phenotypic personality traits. *American Psychologist*, 48(1), 26-34.
- Grann, M., Langstrom, N., Tengstrom, A., & Kullgren, G. (1999). Psychopathy (PCL-R) predicts violent recidivism among criminal offenders with personality disorders in Sweden. *Law & Human Behavior*, 23(2), 205-217.
- Green, D. (1988). Measures of illegal behavior in individual-level deterrence research. *Journal of Research in Crime & Delinquency*, 26, 253-275.
- Guy, L. S., Edens, J. F., Anthony, C., & Douglas, K. S. (2005). Does psychopathy predict institutional misconduct among adults? A meta-analytic investigation. *Journal of Consulting and Clinical Psychology*, 73(6), 1056-1064.

- Haapasalo, J. (1990). Sensation seeking and Eysenck's personality dimensions in an offender sample. *Personality and Individual Differences*, 11(1), 81-84.
- Hagan, J. & Parker, P. (1985). White-collar crime and punishment: The class structure and legal sanctioning of securities violations. *American Sociological Review*, 50(3), 302-316.
- Hare, R.D., Clark, D., Grann, M., & Thornton, D. (2000). Psychopathy and the predictive validity of the PCL-R: An international perspective. *Behavioral Sciences and the Law*, 18, 623-645.
- Hare RD. 1999. Psychopathy as a risk factor for violence. *Psychiatric Quarterly* 70, 181–197.
- Hare, R.D., (1996). Psychopathy: A clinical construct whose time has come. *Criminal Justice and Behavior*, 23(1), 25-54.
- Hare, R.D. (1993). *Without Conscience: The disturbing world of the psychopaths among us*. New York: The Guilford Press.
- Hare, R.D., Harpur, T.J., Hakstian, A.R., Forth, A.E., Hart, S.D., & Newman, J. (1990). The revised psychopathy checklist: Reliability and factor structure. *Psychological Assessment: A Journal of Consulting and Clinical Psychology*, 2(3), 338-341.
- Hare, R.D. & McPherson, L.M. (1984). Violent and aggressive behavior by criminal psychopaths. *International Journal of Law and Psychiatry*, 7, 35-50.
- Harris, T.H., Rice, M.E., & Cormier, C.A. (1991). Psychopathy and violent recidivism. *Law & Human Behavior*, 15(6), 625-637.
- Helmkamp, J., Ball, J., & Townsend, K. (eds.) (1996). *Definitional dilemma: Can and should there be a universal definition of white collar crime?* Morgantown, WV: National White Collar Crime Center.
- Hill, C.W.L., Kelley, P.C., Agle, B.R., Hitt, M.A., & Hoskisson, R.E. (1992). An empirical examination of the causes of corporate wrong-doing in the United States. *Human Relations*, 45(10), 1055-1075.
- Hirschi, T. (1969). *Causes of delinquency*. Berkley, CA: University of California Press.
- Hough, L. M., & Oswald, F. L. (2000). Personnel selection: Looking toward the future – Remembering the past. *Annual Review in Psychology*, 51, 631-664.
- Huizinga, D. & Elliott, D.S. (1986). Reassessing the reliability and validity of self-report delinquency measures. *Journal of Quantitative Criminology*, 2(4), 293-327.

- Hunt, M.K., Hopko, D.R., Bare, R., Lejuez, C.W., Robinson, E.V. (2005). Construct validity of the balloon analog risk test (BART). *Assessment*, 12(4), 416-428.
- Jakobwitz, S. & Egan, V. (2006). The dark triad and normal personality traits. *Personality and Individual Differences*, 40, 331-339.
- Jones, G.E. & Kavanagh, M.J., (1996). An experimental examination of the effects of individual and situational factors on unethical behavioral intentions in the workplace. *Journal of Business Ethics*, 15(5), 511-523.
- Kane, J. & Wall, A.D. (2006). The 2005 national public survey on white collar crime. Abstract retrieved April 20, 2006, from <http://www.nw3c.org/research>.
- Keane, C. (1993). The impact of financial performance on frequency of corporate crime: A latent variable test of strain theory. *Canadian Journal of Criminology*, July, 293-308.
- Kim, M. & Hunter, J. (1993). Relationships among attitudes, behavioral intentions and behavior: A meta-analysis of past research. *Communications Research*, 20, 331-364.
- Kosson, D.S., Kelly, J.C., & White, J.W. (1997). Psychopathy-related traits predict self-report sexual aggression among college men. *Journal of Interpersonal Violence*, 12(2), 241-254.
- Langton, L. & Piquero, N.L. (2007). Can general strain theory explain white-collar crime? A preliminary investigation of the relationship between strain and select white-collar offenses. *Journal of Criminal Justice*, 35, 1-15.
- Lasch, C. (1979). *The culture of narcissism: American life in an age of diminishing expectations*. New York: W.W. Norton & Company.
- Lasley, J. R., (1988). Toward a control theory of white collar offending. *Journal of Quantitative Criminology*, 4, 347-362.
- Lee, K., & Ashton M. C. (2005). Psychopathy, Machiavellianism, and narcissism In the five-factor model and the HEXACO model of personality structure. *Personality and Individual Differences*, 38, 1571-1582.
- Levenson, M. R., Kiehl, K. A., & Fitzpatrick, C. M. (1995). Assessing psychopathic attributes in a noninstitutional population. *Journal of Personality and Social Psychology*, 68, 151-158.

- Levenson, M.R. (1992). Rethinking psychopathy. *Theory & Psychology*, 2(1), 51-71.
- Lilienfeld, S.O. (1994). Conceptual problems in the assessment of psychopathy. *Clinical Psychology Review*, 14(1), 17-38.
- Lilienfeld, S. O., & Andrews, B. P. (1996). Development and preliminary validation of a self-report measure of psychopathic personality traits in non-criminal populations. *Journal of Personality Assessment*, 66, 488-524.
- Lilienfeld, S. O. & Widows, M.R. (2005). Psychological Assessment Inventory-Revised (PPI-R). Lutz, FL: Psychological Assessment Resources.
- Lynam, D.R., Caspi, A., Moffit, T.E., Laine, A., Loeber, R., Stouthamer-Loeber, M. (2005). Adolescent psychopathy and the big-5: Results from two samples. *Journal of Abnormal Child Psychology*, 33(4), 431-443.
- Lynam, D.R., Whiteside, S., & Jones, S. (1999). Self-reported psychopathy: A validation study. *Journal of Personality Assessment*, 73(1), 110-132.
- Lynch, M.J. & Michalowski, R. (2006). *Primer in radical criminology: Critical perspectives on crime, power, & identity* (4th ed.). New York: Criminal Justice Press.
- Lynch, M.J. & Stretesky, P. (2001). Toxic crimes: Examining corporate victimization of the general public employing medical and epidemiological evidence. *Critical Criminology*, 10, 153-172.
- MacDonald, Z. (2002). Official crime statistics: Their use and interpretation. *The Economic Journal*, 112(477), F85-F106.
- Marcus, B., Hoft, S., & Riediger, M. (2006). Integrity tests and the five-factor model of personality: A review of empirical tests of two alternative positions. *International Journal of Selection and Assessment*, 14(2), 113-130.
- McHoskey, J.W., Worzel, W., & Szyarto, C. (1998). Machiavellianism and psychopathy. *Journal of personality and social psychology*, 74(1), 192-210.
- McKendall, M.A., Wager, J.A. (1997). Motive, opportunity, choice, and corporate illegality. *Organization Science*, 8(6), 624-647.
- Merton, R. (1938). Social structure and anomie. *American Sociological Review*, 3, 672-682.
- Messerschmidt J.W. (1997). *Crime as structured action: Gender, race, class, and crime in the making*. California: Sage.

- Messner, S. & Rosenfeld, R. (1994). *Crime and the American dream*. Belmont, CA: Wadsworth.
- Michalowski, R. J., & Kramer, R. C. (1987). The space between the laws: The problem of corporate crime in a transnational context. *Social Problems*, 34: 34-52.
- Mikulay, S.M. & Goffin, R.D. (1998). Measuring and predicting counterproductivity in the laboratory using integrity and personality testing. *Educational and Psychological Measurement*, 58(5), 768-791.
- Miller, J.D., Lynam, D.R., Widiger, T.A., & Leukefeld, C. (2001). Personality disorders as extreme variants of common personality dimensions: Can the five-factor model adequately represent psychopathy? *Journal of Personality*, 69(2), 253-275.
- Millon, T. (1981). *Disorders of Personality DSM-III: Axis II*. New York: John Wiley and Sons.
- Mon, W. (2002). Causal factors of corporate crime in Taiwan: Qualitative and quantitative findings. *International Journal of Offender Therapy and Comparative Criminology*, 46(2), 183-205.
- Moore, E., Mill, M. (1990). The neglected victims and unexamined costs of white-collar crime. *Crime & Delinquency*, 36(3), 408-418.
- Nagin, D.S. & Paternoster, R. (1994). Personal capital and social control: The deterrence implications of individual differences in criminal offending. *Criminology*, 32, 581-606.
- Paternoster, R., Simpson, S. S., (1996). Sanction threats and appeals to morality: Testing a rational choice model of corporate crime. *Law & Society Review*, 30(3), 549-584.
- Paulhus, D.L. & Williams, K.M. (2002). The dark triad of personality: Narcissism, Machiavellianism, and psychopathy. *Journal of Research in Personality*, 36, 556-563.
- Piquero, N. L., Exum, M. L., & Simpson, S. S. (2005). Integrating the desire-for-control and rational choice in a corporate crime context. *Justice Quarterly*, 22(2), 252-280.
- Piquero, N.L. & Piquero, A.R. (2006). Control balance and exploitative corporate crime. *Criminology*, 44(2), 397-430.

- Piquero, N. L., Tibbetts, S. G., & Blankenship, M. B. (2005). Examining the role of differential association and techniques of neutralization in explaining corporate crime. *Deviant Behavior*, 26, 159-188.
- Porter, S., Fairweather, D., Drugge, J., Herve, H., Birt, A., & Boer, D.P. (2000). Profiles of psychopathy in incarcerated sexual offenders. *Criminal Justice and Behavior*, 27(2), 216-233.
- Poythress, N.G., Edens, J.F., & Lilienfeld, S.O. (1998). Criterion-related validity of the psychopathic personality inventory in a prison sample. *Psychological Assessment*, 10(4), 426-430.
- Rayburn, J.M. & Rayburn, L.G. (1996). Relationship between Machiavellianism and type-a personality and ethical orientation. *Journal of Business Ethics*, 15(11), 1209-1219.
- Reiman, J. (2004). *The rich get richer and the poor get prison*. (7th ed.). Boston, MA: Pearson.
- Ross, S.R., Lutz, C.J., & Bailey, S.E. (2004). Psychopathy and the five factor model in a noninstitutionalized sample: Domain and facet level analysis. *Journal of Psychopathology and Behavioral Assessment*, 26(4), 213-223.
- Ross, S.R. & Rausch, M.K. (2001). Psychopathic attributes and achievement dispositions in a college sample. *Personality and Individual Differences*, 30, 471-480.
- Saha, R. & Mohai, P. (2005). Historical context and hazardous waste facility siting: Understanding temporal patterns in Michigan. *Social Problems*, 52(4), 618-648.
- Salgado, J. F., (2003). Predicting job performance using FFM and non-FFM personality measures. *Journal of Occupational and Organizational Psychology*, 76, 323-346.
- Salekin RT, Rogers R, Sewell KW. (1996). A review and meta analysis of the psychopathy checklist and psychopathy checklist-revised: Predictive validity of dangerousness. *Clinical Psychology: Science and Practice*, 3, 203-215.
- Schmitt, W.A. & Newman, J.P. (1999). Are all psychopathic individuals low-anxious? *Journal of Abnormal Psychology*, 108(2), 353-358.
- Serin, R.C. (1991). Psychopathy and violence in criminals. *Journal of Interpersonal Violence*, 6(4), 423-431.
- Shapiro, S. P., (1990). Collaring the crime, not the criminal: Reconsidering the concept of white-collar crime. *American Sociological Review*, 55(3), 346-365.

- Simpson, S. S., & Koper, C. S. (1997). The changing of the guard: Top management team characteristics, organizational strain, and antitrust offending, 1960-1988. *Journal of Quantitative Criminology*, 13, 373-404.
- Simpson, S. S., & Piquero, N. L. (2002). Low self-control, organizational theory, and corporate crime. *Law & Society Review*, 36(3), 509-548.
- Skeem, J. L., Poythress, N., Edens, J. F., Lilienfeld, S. O., & Cale, E. M. (2003). Psychopathic personality or personalities? Exploring potential variants of psychopathy and their implications for risk assessment. *Aggression and Violent Behavior*, 8(5), 513-546.
- Stretesky, P. & Lynch, M.J. (1999). Corporate environmental violence and racism. *Crime, Law, and Social Change*, 30, 163-184.
- Sutherland, E. H. (1940). White-collar criminality. *Sociological Review*, 5(1), 1-12.
- Sutherland, E.H. (1947). Principals of criminology (4th ed.). Philadelphia: J.B. Lippincott.
- Sutherland, E. H. (1949). *White-collar crime*. New York: Holt, Rinehart & Winston.
- Szockyj, E. & Geis, G. (2002). Insider trading patterns and analysis. *Journal of Criminal Justice*, 30, 273-286.
- Terpstra, D.E., Rozell, E.J., & Robinson, R.K. (1993). The influence of personality and demographic variables on ethical decisions related to insider trading. *The Journal of Psychology*, 127(4), 375-389.
- Thornquist, M.H. & Zuckerman, M. (1995). Psychopathy, passive-avoidance learning and basic dimensions of personality. *Personality and Individual Differences*, 19(4), 525-534.
- Turner C.F., Martinez, D.C. (1977). Socioeconomic achievement and the Machiavellian personality. *Sociometry*, 40(4), 325-336.
- United States Department of Justice. (N.D.). *The measurement of white collar crime using uniform crime (UCR) reporting data*. Retrieved February 7, 2006, from www.fbi.gov/ucr/whitecollarforweb.pdf
- Vaughn, D. (1998). Rational choice, situated action, and the social control of organizations. *Law & Society Review*, 32(1), 23-61.
- Vaughn, D. (1999). The dark side of organizations: Mistake, misconduct and disaster. *Annual Review of Sociology*, 25, 271-305.

- Verbeke, W., Ouwerkerk, C., & Peelen, E. (1996). Exploring the contextual and individual factors on ethical decision making in salespeople. *Journal of Business Ethics*, 15(11), 1175-1185.
- Vowell, P.R. & Chen, J. (2004). Predicting academic misconduct: A comparative test of four sociological inquiries. *Sociological Inquiry*, 74(2), 226-249.
- Walters, G.D. (2003). Predicting institutional adjustment and recidivism with psychopathy checklist factor scores: A meta-analysis. *Law and Human Behavior*, 27(5), 541-558.
- Walters, G.D., Geyer, M.D. (2004). Criminal thinking and identity in male white-collar offenders. *Criminal Justice and Behavior*, 31(3), 263-281.
- Watkins, J.C. (1977). White-collar crime, legal sanctions, and social control: "Idols of the theater" in operation. *Crime & Delinquency*, July, 290-303.
- Weisburd, D., Chayet, E. F., & Waring, E. J. (1990). White collar crime and criminal careers: Some preliminary findings. *Crime and Delinquency*, 36(3), 342-355.
- Weisburd, D., Waring, E.J., & Chayet, E.F. (1995). Specific deterrence in a sample of offenders convicted of white-collar crime. *Criminology*, 33(4), 587-607.
- Weisburd, D., Waring, E, Wheeler, S. (1990). Class, status, and the punishment of white-collar criminals. *Law & Social Inquiry*, 15(2), 223-243.
- Wiebe, R.P., (2003). Reconciling psychopathy and low self-control. *Justice Quarterly*, 20(2), 297-336.
- Widom, C. (1977). A methodology for studying noninstitutionalized psychopaths. *Journal of Consulting and Clinical Psychology*, 45(4), 674-682.
- Yeager, P.C. (1987). Structural bias in regulatory law enforcement: The case of the U.S. environmental protection agency. *Social Problems*, 34(4), 330-344.