

ABERRANT SELF-PROMOTION, VOCATIONAL INTERESTS, AND COLLEGE

by

DIRK RONALD BAXTER

(Under the Direction of Gary Lautenschlager)

ABSTRACT

The self-selection into different vocations has been studied in regards to personality variables in the literature. “Darker” personality variables have not been linked to self-selection into occupations. The current study attempts to link Machiavellianism and Aberrant Self-Promotion to vocational interest, GPA, SAT scores, gender, choice of major, and future graduate school plans.

INDEX WORDS: Aberrant Self-Promotion, Machiavellian, Personality, Vocational Interest, Business

ABERRANT SELF-PROMOTION, VOCATIONAL INTERESTS, AND COLLEGE

by

DIRK RONALD BAXTER

B.S., The University of Alaska, 1996

M.S., The University of Georgia, 1999

A Dissertation Submitted to the Graduate Faculty of the University of Georgia in Partial  
Fulfillment of the Requirements for the Degree

DOCTOR OF PHILOSOPHY

ATHENS, GEORGIA

2003

© 2003

Dirk Ronald Baxter

All Rights Reserved

ABERRANT SELF-PROMOTION, VOCATIONAL INTERESTS, AND COLLEGE

by

DIRK RONALD BAXTER

Major Professor: Gary Lautenschlager

Committee: Garnett Stokes

Kecia Thomas

Robert Mahan

Electronic Version Approved:

Maureen Grasso  
Dean of the Graduate School  
The University of Georgia  
December 2003

DEDICATION

Dad, you know that this is for you.

## ACKNOWLEDGEMENTS

To my committee, my friends, and my family: Thank you.

## TABLE OF CONTENTS

	Page
ACKNOWLEDGMENTS .....	v
LIST OF TABLES .....	vii
LIST OF FIGURES .....	viii
CHAPTER	
1. INTRODUCTION .....	1
2. LITERATURE REVIEW .....	4
3. HYPOTHESES .....	28
4. METHOD .....	40
5. RESULTS .....	46
6. DISCUSSION .....	56
REFERENCES .....	65
APPENDICES .....	100
A. OCCUPATIONAL STEREOTYPES .....	101
B. WORKPLACE DEVIANCE.....	102
C. INTEGRITY TESTING.....	105
D. CLINICAL PSYCHOPATHY .....	109

## LIST OF TABLES

	Page
Table 1: Items in the Psychopathy Checklist-Revised.....	82
Table 2: Final Interpersonal and Organization Deviance Scale Items.....	83
Table 3: Dimensions Often Reported in Factor Analyses of Integrity Tests .....	84
Table 4: Integrity Testing and the Validity Base-Rate Problem.....	85
Table 5: Correlations of Variables .....	86
Table 6: Correlations of Holland Scores.....	87
Table 7: Correlations of Holland Scores with Machiavellian and Aberrant Self-Promotion .....	88
Table 8: Correlations of GPA Scores.....	89
Table 9: Correlations of SAT scores.....	90
Table 10: Summary of Regression Analyses for Variables Predicting ASP Scores.....	91
Table 11: The Bivariate and Partial Correlations of the Predictors with ASP.....	92
Table 12: Summary of Regression Analyses for Variables Predicting ASP Scores, Variables Entered in Groups .....	93



## LIST OF FIGURES

	Page
Figure 1: A Typology of Types of Deviance .....	94
Figure 2: A Hexagon Summarizing Relations Among Environmental and Personality Types.....	95
Figure 3: types of Integrity Tests and Criteria Used for Validation .....	96
Figure 4: Relationships among Integrity, Conscientiousness, and Job Performance .....	97
Figure 5: Potential Relationship Between ASP and GPA .....	98
Figure 6: Aberrant Self-Promotion Levels for Men and Women .....	99

## CHAPTER 1

### INTRODUCTION

Self-selection into occupations based in part on an individual's personality is the basis for numerous studies in the occupational choice literature (e.g., Gupta, 1987; Holland, 1997). The vocational interest literature (e.g., Holland, 1973, 1997), the Attraction-Selection-Attrition literature (e.g., Schneider, 1987; Schneider, Goldstein, & Smith; 1995), as well as the Person-Environment fit literature (e.g., Day & Bedeian, 1995; Judge & Bretz, 1994) all focus on "normal" personality variables, with "normal" generally defined as adhering to the Big Five genre or personality tests and those closely related. However, less acceptable "negative" traits also may influence job selection. The present study examines Machiavellian and Aberrant Self-Promotion and relates higher levels of these traits to a partiality for occupations that are thought to reinforce the manifestations of them.

Holland's Vocational Interest Theory is used as the backdrop to integrate the Aberrant Self-Promotion and Machiavellianism literature with the literature pertaining to self-selection into occupations. The current study examines how undergraduate students' vocational choices diverge with regards to levels of Machiavellianism and Aberrant Self-Promotion. To behave in a Machiavellian manner is to employ aggressive, manipulative, and exploitive tactics to achieve personal and organizational objectives (Calhoun, 1969). Aberrant Self-Promotion (ASP) is a term coined by Gustafson and Ritzer (1995) to describe sub-clinical psychopathy and used to study those in a normal population. Simply

put, if Machiavellianism and Aberrant Self-Promotion are assumed to be on a normal distribution, mirroring other personality traits, then there should be individuals with high levels as well as those with low levels. If individuals choose vocations that match their personalities, then these “negative” personality traits will have an impact in matching vocational interest, just as much as more widely studied “positive” traits. This interest should be reflected in a vocation’s climate or culture, as well as the stereotypes that individuals hold about that occupation. The current study attempts to address the call for research pertaining to negative traits in non-clinical and vocational literatures (Carroll, 1987; Miranda, Goodman, & Kern, 1996). The current study provides such an opportunity to examine some of these darker personality variables not generally examined in the vocational choice arena.

There are a number of potential practical and theoretical implications for the current research. A theoretical implication involves the increase of variance explained in job performance as it relates to personality. A potential practical implication is to determine the value of assessing Machiavellianism and Aberrant Self-Promotion for career counseling. If Holland’s model does not capture all the variance other personality traits leave out, then additional measures may prove useful in the practical vocational arena. Another potential practical application is in selection. Another example of potential practical applications of the current research is in aiding a manager who gives developmental feedback to employees. Being able to coach an individual more effectively, especially in problem behaviors related to underlying personality traits, would be useful. The use of non-clinical measures of negative personality may aid the manager to coach more effectively. It also is ethical, whereas most clinical measures

would potentially have legal ramifications for a company (e.g., use of the MMPI). All of these provide impetus for the current study, and will not only serve to add to the construct validity of Aberrant Self-Promotion, but will also lead to a greater understanding of personality in the workplace.

## CHAPTER 2

### LITERATURE REVIEW

#### *Theoretical Background of Aberrant Self-Promotion*

Aberrant Self-Promotion (ASP) is a term coined when Gustafson and Ritzer (1995) studied sub-clinical psychopathy. ASP is the sub-clinical term to describe individuals in line with Hare's two-factor definition of psychopathy. Personality characteristics such as entitlement, being exploitive, grandiosity, superficial charm, and lack of empathy or guilt represent Factor 1 of clinical psychopathy. Antisocial behaviors are reflected in Factor 2 of clinical psychopathy (Harpur, Hare, & Hakstian, 1989). ASPs have the same personality and behavioral attributes as psychopaths but they differ in the degree to which they are exhibited (Gustafson, 1997). Thus, the same characteristics that define psychopaths can be used to define ASPs. These characteristics include superficial charm, dishonesty, and narcissism. It is important to note here the similarity between many of the terms used in Holland's (1997) theory of vocational choice for describing an Enterprising-type person (e.g. Ambitious, Domineering, Extroverted, and Forceful) and the terms used to describe ASPs. Babiak's (1995) case study of what he termed an "industrial" psychopath highlights an individual who is exploitative and destructive to others and who will utilize counterproductive behaviors for personal gain.

As noted by Gustafson (1997), individuals are diagnosed as psychopaths only when they display an entire constellation of characteristics that are embedded in Factor 1 and Factor 2. This mirrors aberrant self-promoters who were first defined according to a pattern of high self-esteem, high narcissism, and a high degree of antisocial behavior

(Raskin, Novacek, & Hogan, 1991). Additionally, alternative personality traits may be playing a role in success in college. One personality trait of interest is Machiavellianism.

### *Machiavellianism*

With the focus on negative personality traits in a “normal” population comes a focus on Machiavellianism regarding workplace performance (Gable, Hollon, & Dangelo, 1992). “People who score high on Machiavellianism are characterized by a propensity for interpersonal manipulation, e.g. flattery and deceit, emotional detachment, and a generally cynical viewpoint” (McHoskey, 1995, p. 755). However, some researchers support the use of Machiavellian tactics by managers. For example, Calhoun (1969) states:

[A] Machiavellian administrator is one who employs aggressive, manipulative, exploiting and devious moves in order to achieve personal and organizational objectives. These moves are undertaken according to perceived feasibility with secondary consideration (what is necessary under the circumstances) to the feelings, needs and/or “rights” of others. (p. 211)

Of potential interest to businesses is the determination of whether Machiavellianism is inherently bad for an organization and job performance. Machiavellian individuals (Hi-Machs) are viewed as persuasive, manipulative, and sometimes dishonest. The essence of Machiavellian leaders is that they feel they must do whatever is necessary to maintain or expand their influence. Individuals can be coldly rational, which is different than ASPs. However, like ASPs, they are willing to sacrifice ethics in order to attain objectives

(Calhoun, 1969, Gable & Dangelo, 1994; Gable & Topol, 1987). These objectives many times are in the organization's interests. At Cornell's Graduate School of Business & Public Administration, the "Machiavelli seminar" was taught to hone students' skills in the implementation of Machiavellian tactics (*Business Week*, 1975). Once again, a similarity of terms used in Holland's (1997) theory of vocational choice for describing an Enterprising-type person (e.g., Acquisitive, Ambitious, Domineering, Extroverted, and Forceful) appears to also describe someone high in Machiavellianism. Holland (1997) also stresses that E-type people are focused on acquisition or objects. E-type people can also be focused on leadership and power, and will manipulate people to get what they want. This appears to dovetail, at least in part, with Machiavellianism.

Narcissism and Machiavellianism have been related in some studies (e.g., McHoskey, 1995) primarily because both include a propensity for interpersonal manipulation. Although there appears to be a weak positive correlation between the two constructs, they are considered distinct (Biscardi & Schill, 1985). There is also research to suggest that psychopathy and Machiavellianism are conceptually similar (e.g., McHoskey, Worzel, & Szyarto, 1998). McHoskey, et al. argue that Machiavellianism and psychopathy are "essentially the same personality construct" (p. 192). Their contention is that researchers have studied this construct under different names. Other researchers indicate that an individual may possess Machiavellian attributes, such as the capability to manipulate others without remorse, without psychopathic or sub-clinical psychopathic tendencies (Gustafson, 2000a). Individuals who are high in Machiavellianism are coldly rational in determining what actions best serve them while putting personal ethics aside (Gustafson, 2000b).

Among the studies that have examined sex-differences in Machiavellianism there are mixed findings. Gable and Topol (1987), in their study of department store executives, found that female executives scored significantly higher on the Mach IV scale (a test to measure Machiavellianism in a normal population) than their male counterparts. This finding has been moderately supported in the literature (e.g., Burnett, Hunt, & Chonko, 1986; Chonko, 1982; Okanes & Murray, 1980). Counter to these findings, however, are findings that found no significant differences between the sexes. The Wertheim, Widom, & Wortzel (1978) study of students in four professional degree programs failed to find significant sex differences. Additionally, other studies have found that men in general score higher than women do in Machiavellianism (e.g., Gupta, 1987). The absence of consensus in the literature regarding Machiavellianism and gender warrants additional research.

#### *Machiavellian but not ASP*

As mentioned above, although some researchers contend that psychopathy is the same as Machiavellianism, there is not a consensus in the literature (e.g., Gustafson, 1998; McHoskey, Worzel, & Szyarto, 1998). McHoskey, Worzel, & Szyarto (1998) make the argument that Machiavellianism is a different name for psychopathy, and confounds both primary and secondary psychopathy in the measure. Gustafson (2000) rebukes this argument and contends Aberrant Self-Promoters (ASPs) are conceptually different from Hi-Machs. Additionally, when Machiavellian individuals are compared directly with those high in Aberrant Self-Promotion, Machiavellians do not exhibit the same antisocial and self-serving tendencies (Gustafson, 1998). In other words, though they can use manipulative and destructive tactics, they are more reserved than Aberrant



Self-Promoters (Gustafson, 1998). ASPs are viewed to be psychopathic, but sub-clinical, a “difference in degree, not in kind” (2000, Gustafson, p. 299).

ASPs are viewed to be conceptually different from Hi-Machs. ASPs are able to mask their antisocial tendencies and provide a convincing veneer of charm (Biscardi & Schill, 1985). Gustafson (1998) found that ASPs and those scoring high on Machiavellianism differ on their overall scores on the Psychopathic Checklist – Revised. Additionally, in a follow-up study examining those scoring high on Machiavellianism but low on Aberrant Self-Promotion and comparing them to individuals scoring high on Aberrant Self-Promotion, found that although Hi-Machs and ASPs performed similarly in neutral conditions, Machiavellians outperformed ASPs in affect-laden task conditions (Gustafson, 1998). The conclusions drawn from this study were that individuals high on Machiavellianism were much better at managing how they interacted and treated people, whereas individuals high in Aberrant Self-Promotion were much less skilled. The question of, “Are ASPs and Machiavellians the same?” has been answered. The questions now become, “Are ASPs and Hi-Machs successful in a college environment?” and “Do different college majors attract these types of people at different rates?”

Geis and Christie (1970) identified three situational characteristics that are pertinent for individuals high in Machiavellianism to manipulate. These are: a) face to face interaction, b) latitude for improvisation, and c) the presence of emotional issues which need to be ignored in order to perform effectively. The first two conditions are arguably more common in business and law professions and less common in pharmacy and veterinary practices. Another factor that is of potential interest, though not of immediate

relevance, is that of impression management. This skill may allow an ASP or an individual high in Machiavellianism to skillfully manipulate others.

Impression management is a trait that has been found to aide users to manipulate situations to their gain (Judge & Bretz, 1994). Impression management is a valued trait in various occupations. People self-monitor to tailor their actions in accordance with the situation (Lennox & Wolfe, 1984). The ability to effect affect is a valuable skill for many salespeople and managers (e.g., used car salesmen). Related to this is ingratiating oneself for gain (Kroner & Weekes, 1996; Paulhus & Reid, 1991). It has been shown that ingratiation tactics that focus on one's supervisor are related to being successful (Judge & Bretz, 1994). Coupled with this is the ability to hide true feelings and maneuver politically (Judge & Bretz, 1994; Kilduff & Day, 1994; Yukl & Tracey, 1992). These "chameleons" succeed at interviews better (Gilmore & Ferris, 1989) and obtain more promotions (Kilduff & Day, 1994). The ability to mask social exploitiveness relates to psychopathy, Machiavellianism, and narcissism (Raskin & Hall, 1981). All of these traits together form a constellation of cunning attributes that serve the individual by furthering their agendas and contributing to workplace deviance. These skills are thought to be consistent with the personality of Machiavellians as well as ASPs.

### *Personality and Occupational Selection*

In the field of Industrial/Organization Psychology, the roles that personality and interests play in occupation selection has been the basis for numerous interest inventories and personality measures (Borman, Hanson, & Hedge, 1997; Guion, 1991; Guion & Gottier, 1965; Holland, 1973, 1997; Strack, 1994; Widiger & Frances, 1987). These instruments may serve an individual in the selection of a field or occupation, or they may

aid an organization in hiring a person who "fits in" to their culture (Chartrand, 1991; Chatman & Barsade, 1995; Feldman, 1988; Kenrick et al., 1990; Schein & Diamante, 1988). Personality traits have generally been shown to correlate with occupational groupings or types of jobs regardless of the particular theoretical approach (Bolton, 1985; Holland, 1973, 1997; Marcic, Aiuppa, & Watson, 1989; Martin & Bartol, 1986; Strack, 1994; Tokar & Swanson, 1995). These measures of personality are utilized in the vocational literature to describe person-environment fit and the consequent choice of occupation (Betz, Fitzgerald, & Hill, 1989; Chartrand, 1991; Holland, 1997; Lindholm & Touliatos, 1995). Despite these general findings, the role of personality is still not clear due to inconsistent results relating personality to variables such as job effectiveness or negative affectivity (Guion & Gottier, 1965; Hogan, 1991; Hogan, Hogan, & Busch, 1984; Sackett & Harris, 1984; Sedge, 1985). Contrary to some investigators' expectations, the role of personality, when coupled with ability in predicting performance, has not always borne out results above chance level (e.g., Sackett, Gruys, & Ellingson, 1998). Nonetheless, with the recent emphasis on ethics in the workplace and deviance, there is an increased focus not only in the psychological literature, but also in the workplace literature pertaining to hiring practices.

There has been a call for research to address negative traits, such as psychopathy or Aberrant Self-Promotion, as well as Machiavellianism in the non-clinical and vocational literature (Carroll, 1987; Miranda, Goodman, & Kern, 1996). This provides a rich opportunity to examine some of the darker personality variables not generally examined in the vocational choice arena.

The first step in understanding how individuals interact with their surroundings is to study how well their abilities match the needs of the environment. This is true in companies, social clubs, and educational institutions. Schneider's (1987) Attraction-Selection-Attrition (ASA) model provides a useful framework for examining how individuals fit and operate in organizations. Intrinsic in his model are the assumptions that there is interaction between the individual and the organization and that the individual personalities of the members of the organization translate into the collective personality of the organization (Schneider, 1987; Schneider, Goldstein, & Smith, 1995). Another model useful in examining this interaction between individuals and organizations is Holland's (1973, 1997) vocational typology and personality theory. Holland's theory characterizes an individual's vocational interests as an expression of personality.

*Attraction-Selection-Attrition (ASA) Model and Person-Environment (P-E) Fit*

It has been shown that individuals seeking a job are influenced by the degree of similarity between their personalities and the organization's characteristics (Cable & Judge, 1996; Chatman, 1989). The degree to which an individual's personality matches the personality of others within a work environment has been considered a useful method for determining person-Environment fit (Day & Bedeian, 1995) as well as an individual's interest and success in a position (Holland, 1997). People select environments that fulfill their needs as well as organizational environments in which they are comfortable and successful (Holland, 1997; Pervin, 1989). In the literature, two terms have been used most often to describe how an individual interacts with the work environment. The first common term used is Person-Organization Fit (POF). POF has been defined as the

“match between individuals and the organizations in which they work” (Lovelace & Rosen, 1996, p. 703). The second common term used in the literature is Person-Environment (P-E) fit. P-E fit refers primarily to “the compatibility of the personality and the environment” (Furnham, Toop, Lewis, & Fisher, 1995, p. 678). Although there may be differences in the subtleties of these two concepts, the focus of this paper is not concerned with them; consequently, the Person-Environment fit (P-E fit) term will be utilized. It is based on the interactionist theory of behavior, which contends that how well a person fits into the environment is based not only on a summation of the attributes of the individual or of the environment, but also how those two entities interact (Muchinsky & Monahan, 1987).

P-E fit has been broken down into two sub-groups: Supplementary and Complementary (Muchinsky & Monahan, 1987). Supplementary P-E fit suggests that a person fits into some environmental situation because he/she possesses characteristics that are similar to other individuals in that environment. For example, an individual may decide to join a fraternal organization because he has similar values, tastes and concerns as others in that organization (Day & Bedeian, 1995; Muchinsky & Monahan, 1987). Complementary Person-Environment fit is the second sub-group of P-E fit, wherein individual characteristics serve to complete or “make whole” an organization. The person fills a need in the environment and vice-versa (Muchinsky & Monahan, 1987). An essential difference between Complementary P-E fit and Supplementary P-E fit rests on the definition of environment. The environment in the supplementary model is based on personal relations with co-workers, whereas the environment in the complementary model is based on the job demands (e.g., work environment with job duties) (Muchinsky

& Monahan, 1987). There has been a shift in emphasis from complementary to supplementary fit. This represents a move from thinking about the environment in terms of a place defined by role-based phenomena to a place where people both make up as well as define their environment (Day & Bedeian, 1995; Lawson, 1993). The P-E fit literature appears to dovetail nicely with Schneider's (1987) Attraction-Selection-Attrition (ASA) model; however, Schneider and Schneider (1994) questioned the validity of all P-E fit perspectives. Their contention rests on the interpretation that in the P-E fit perspective the environment is depersonalized and does not take into account the numerous situational and trait interactions (Schneider & Schneider, 1994). In other words, it is intrinsic in the ASA model that people self-select into situations, that their personality attributes play a role in their work success, and finally that environment and co-worker relationships need to be compatible.

Self-selection into different environments is described in Schneider's (1987) ASA model. The ASA model is drawn from the perspective of interactional psychology; it holds that organizational behavior is determined by an interaction between the person and the organization (Jackson et al., 1991). This is supported by Pfeffer's (1983) organizational demography model. Personality, interests and values are the factors that are assumed to attract individuals into different organizations. The homogeneity of these personalities, values, and interests possessed by the members of an organization are what accounts for the organization's uniqueness (Schneider, 1987). Therefore, the ASA model argues that, through attraction, selection and attrition, organizations evolve towards homogeneity (Schneider, 1987; Schneider, Goldstein, & Smith, 1995).

The first part of Schneider's (1987) theory deals with the attraction of an individual to an organization. Personality (materialism, self-efficacy, internal-external locus of control, risk aversion) has been found to predict preferences for reward systems, which are different for different occupations (Cable & Judge, 1994). It has also been shown that individuals seeking a job are influenced by the degree of similarity between their personalities and the organizations' characteristics (Cable & Judge, 1996; Chatman, 1989). Research has linked personality to general vocational interests (Hogan & Blake, 1996). The degree to which an individual's personality matches with the personality of others within a work environment has been considered a useful method for determining P-E fit (Day & Bedeian, 1995). Another attribute that has been shown to serve as an attraction element is the stated values of an individual and how well they match up with an organization (Judge & Bretz, 1992). Conversely, when individuals are not similar to the organization they might leave for a number of reasons (Schneider, 1987). These reasons may include comfort level, limited integration into groups, pressure to leave by the majority, or being perceived as poorer performers than more assimilated colleagues (O'Reilly, Caldwell, & Barnett, 1989; O'Reilly, Chatman, & Caldwell, 1991).

Person-environment (P-E) fit has been studied under the general understanding that there is a personal and organizational interaction that relates to optimal career outcomes associated with a mutual match (Betz et al., 1989). The wrong choice for an individual might predispose him/her to high stress and unhappiness. The wrong choice for an organization might translate into friction with co-workers and consequent sub-standard work or attrition. How well the person fits into an organization has also been shown to be a significant predictor of job satisfaction, attrition, and commitment

(O'Reilly, Chatman, & Caldwell, 1991). Self-selection into an occupation or organization and fitting into an occupation or organization are seen as cooperation between two entities (Erez & Judge, 1997; Judge & Cable, 1997; Semmer & Schallberger, 1996). This interaction of personality and situation impacts many variables (e.g. work performance, organization attraction, organizational satisfaction with a worker, and worker happiness) (Ferris, Youngblood, & Yates, 1985; Gifford, 1981; Peters, Yates, & Glisson, 1997). Though some studies have determined that personality can be a factor in many general workplace variables, there have also been attempts to evaluate if there are certain more specific "orientations." There have been attempts to evaluate P-E fit as it relates to behaviors such as service orientation (Hogan, Hogan, & Busch, 1984; Organ & Konovsky, 1989) and job satisfaction (Furnham, Toop, Lewis, & Fisher, 1995). Nonetheless, some of these studies have reached inconclusive findings.

One possible reason for the inconclusive findings may be the practice of some researchers to examine the overall climate fit rather than exploring the possibility that different climates exist within a single organization. French, Rodgers, and Cobb's (1974) study (as cited in Furnham et al., 1995) described how the theory of P-E fit has three basic features. The first, consistency, refers to the relevance of different personalities or environments. The second, labeled differentiation, refers to how "pure" an environment is - whether it consists of individuals with the same type of personality or individuals with many different types of personality. In other words, is the personality environment diverse? The first two, consistency and differentiation, provide no information about the interaction between the environment and the individual, and instead refer only to the person or the environment. On the other hand, congruency, which is the primary concept



in measuring P-E fit, refers to the unanimity between the environment and personality (Kirton & McCarthy, 1988). Apparently, personality as a general entity provides mixed support for environmental or organizational fit.

Various facets of an individual's personality have been found to affect performance in many focused, or specialized, occupations. Carr (as cited in Smith, 1994) concluded that a bomb disposal expert's survival could be enhanced by certain attributes such as a stable, methodical approach. Arney (1988) found that P-E fit does affect job stress; however results varied for different personality types. P-E fit was also found to be a significant predictor of occupational success in a study on college graduates (Bretz & Judge, 1994). Further, in studies that compared personality types within a single general occupation, individual personalities differed between internal groups (Rezler & Buckley, 1977; Sedge, 1985). This provides further support that specific occupational type as well as individual personality traits interact to form work-group climate. These findings need to be expanded to draw stronger conclusions, especially as they relate to self-selection into organizations and work settings.

In work settings, there are four possible domains regarding individuals' interactions with their environment. These interactions are with subordinates, superiors, colleagues, and the organization in general (Smith, 1994). These interactions provide at least some of the backdrop for how well individuals succeed in different organizational situations. Do individual personality traits add to the whole to make up the culture of the organization, or is the direction reversed and the organization guides individuals to exhibit congruent traits that fit the majority's personality? Attempts to address this issue have brought to light different influences that may impact individuals and their

consequent success in dealing with an organization's atmosphere (Hogan, Hogan, & Busch, 1984; Organ & Konovsky, 1989) and job satisfaction (Furnham, Toop, Lewis, & Fisher, 1995). One of the main influences is desire to enter and be successful in a particular occupation (Schneider, 1987).

### *Holland's Vocational Personality Typology*

The belief that people seek and remain in congruent environments is not exclusive to Schneider's (1987, 1996) ASA model or to other models of Person-Environment fit; it is also a part of Holland's (e.g., 1997) model of occupational types. Holland (1973) posits a connection between occupational choices, environments, and six personalities:

If vocational interests are construed as an expression of personality, then they represent the expression of personality in work, school subjects, hobbies, recreational activities, and preferences. In short, what we have called 'vocational interests' are simply another aspect of personality...If vocational interests are an expression of personality, then it follows that interest inventories are personality inventories. (p.7)

Holland's (1973, 1997) theory of vocational personalities has been used extensively to understand vocational interest, choice, and satisfaction. Holland's (1973, 1997) typology consists of six categories, or types: Realistic (R), Investigative (I), Artistic (A), Social (S), Enterprising (E), and Conventional (C); each type has different personality requirements for optimal vocational fit. For the remainder of the document these six categories will be referred to collectively as RIASEC. The six RIASEC types are

arranged in a hexagonal order (please see Figure 2 for more detail). This order is central to the theory and describes how two types of individuals or environments are either similar or opposite. Essential to Holland's (1997) theory is that people can be categorized as one of six RIASEC personality types, or into combinations of the six types. Individuals predominantly of one type will be R-types, I-types, A-types, S-types, E-types, or C-types. Holland contends that individuals seek out matching environments, remain in matching environments, and that environments recruit, retain, and reward congruent individuals (Gottfredson & Holland, 1996). Congruence, as defined by Gottfredson and Holland (1996), "is assessed according to the degree of match between the vocational personality of an individual and the environmental type of an occupation or position" (p. 7). In other words, people are expected to seek, be satisfied with, and remain in congruent environments, all other factors (such as pay) being held equal. This resembles the rationale behind Schneider's (1987) ASA model.

Since the RIASEC model is ordered so that congruent environments are closer than non-congruent environments, it follows that they are also similar in the patterns of both rewards and relations. Consistent environments have similar rewards and needs and are close to each other on the diagram (e.g., Realistic and Investigative). On the other hand, inconsistent environments, which are opposite on the hexagon (e.g., Investigative and Enterprising) demand different interests, competencies, and values (Holland, 1997). It is easy to see how an environment that is predominantly Enterprising (e.g., Marketing) is much different than an environment that is predominantly Investigative (e.g., Chemistry), and how the interests, needs, and personality variables differ. The following is a brief description of all six of Holland's types.

The first type is Realistic (R-type). This environment is exemplified by the primacy of environmental demands and opportunities that involve the manipulation of objects, tools, animals, and machines, and a population dominated by other R-types (Holland, 1997). The R-type individual prefers practical and structured tasks and dislikes educational activities. The majors generally favored are Industrial Arts and Agriculture. Vocational choices include Surveyor, Mechanic, and Engineer (Holland, 1997; Prediger & Vansickle, 1992). An R-type person has traditional values, prefers to work within the guidelines set by the institution, and avoids social and educational competencies. Holland (1997) describes these people to be “Conforming, Dogmatic, Genuine, Hardheaded, Inflexible, Materialistic, Natural, Normal, Persistent, Practical, Realistic, Reserved, Robust, Self-Effacing, and Un-Insightful” p. 22.

The Investigative type (I-type) individual prefers the acquisition of scientific and mathematical knowledge, and works in environments characterized by the dominance of demands that require analytical behavior. Choices of major fields include Biology and Physics and choices of vocations include Chemist or Physicist (Gottfredson & Holland, 1996). In contrast to an E-type person, an I-type person has a general deficit in persuasive competencies. Holland (p. 23, 1997) describes these people as “Analytical, Cautious, Complex, Critical, Curious, Independent, Intellectual, Introspective, Pessimistic, Precise, Radical, Rational, Reserved, Retiring, and Unassuming” p. 23.

The Artistic type (A-type) of individual prefers activities and work that are ambiguous, free, and involve the manipulation of physical, verbal, or human materials. These manipulations are toward the goal of art, and lead to a deficiency in clerical or business areas (Holland, 1997). Majors preferred by A-types include Art and Music.

Vocations normally follow the educational preferences and are Artist, in the Music area, and in Radio/TV Broadcasting (Holland, 1997; Prediger & Vansickle, 1992). Holland (1997) describes these individuals as “Complicated, Disorderly, Emotional Expressive, Idealistic, Imaginative, Impractical, Impulsive, Independent, Introspective, Intuitive, Nonconforming, Open, Original, and Sensitive” p. 24.

The Social type (S-type) prefers activities and work that involve the management of others to train, inform, or enlighten. Additionally, the S-type person generally avoids activities that are ordered, systematic, and involve working with materials, tools and machines (notably this is opposite of Realistic type preferences) (Holland, 1997). Majors preferred include Education and Social Science. Vocations preferred include Teacher, Counselor, and Journalism (Holland, 1997; Prediger & Vansickle, 1992). Holland (1997) describes the S-type individuals as “Agreeable, Cooperative, Empathic, Friendly, Generous, Helpful, Idealistic, Kind, Patient, Persuasive, Responsible, Sociable, Tactful, Understanding, and Warm” p. 25.

The Enterprising type (E-type) of individual prefers activities and work that include the manipulation of others to attain goals as well as economic gain (Holland, 1997). Additionally, there is a deficit in the scientific capabilities, especially as compared to I-types (Holland, 1997). Majors preferred by E-type individuals include Business Administration and Marketing (Gottfredson & Holland, 1996). Career choices include Sales-person, Sales Manager, and sometimes Law fits into the E-type categories (Holland, 1997; Prediger & Vansickle, 1992). In these careers, E-types can engage in preferred activities such as controlling others and being free of other’s control, and are able to avoid analytical duties not suited for the E-type temperament. E-types depreciate

being merciful or caring (Holland, 1997). Words used by Holland (1997) to describe the Enterprising person are “Acquisitive, Adventurous, Ambitious, Assertive, Domineering, Energetic, Enthusiastic, Excitement-seeking, Exhibitionistic, Extroverted, Forceful, Optimistic, Resourceful, Self-Confident, and Sociable” p. 26.

The Conventional type (C-type) individual prefers activities and work that focus on business and economic achievement. C-types prefer activities that entail the ordered, logical, and efficient manipulation of data. C-types have an aversion to activities preferred by A-types. C-types dislike procedures that are ambiguous, exploratory, and un-systematized (Holland, 1997). Majors preferred by C-types include Accounting and Business education. Vocations preferred by C-types include Accountant, Clerk, and Natural Resources Manager (Holland, 1997; Prediger & Vansickle, 1992). Holland (1997) describes these individuals as “Careful, Conforming, Conscientious, Dogmatic, Efficient, Inflexible, Inhibited, Methodical, Obedient, Orderly, Persistent, Practical, Thorough, Thrifty, and Unimaginative” p. 28 (please see Figure 2 for more detail).

#### *Holland and the Big Five*

Holland is not alone in his belief in the link between personality and vocational choice. This belief is supported by work investigating the correspondence between the Big Five model of personality and Holland’s six vocational personality types (De Fruyt & Mervielde, 1997; Gottfredson, Jones, & Holland, 1993; Tokar & Swanson, 1995). Research has shown a strong overlap between Holland types and the Big Five (Blake & Sackett, 1999; Costa, McCrae, & Holland, 1984; De Fruyt & Mervielde, 1997, 1999; Gottfredson, Jones, & Holland, 1993). Tokar and Swanson (1995) revealed that the Big Five dimensions that discriminated Holland types were Openness to Experience,

Extraversion, and Agreeableness. Extraversion has been found to be a key trait to differentiate between the two Holland types that are pertinent to the current study (Enterprising and Investigative). Extraversion is negatively related to Investigative types and positively related to Enterprising types (Hogan & Blake, 1999). This makes intuitive sense when coupled with the knowledge of the activities each type likes and dislikes. E-types like manipulating and gaining power, whereas I-types like analyzing and being intellectual. Although there is strong overlap between both models, they each account for unique variance and are not synonymous (De Fruyt & Mervielde, 1997).

### *Occupational Stereotypes*

The choice to enter an occupation depends upon many variables, and the decision requires information about oneself, about the occupations being considered, and about decision-making strategies. Research has demonstrated that people attribute distinct personalities to individuals in various occupations (cf., Holland, 1963a, 1963b, 1963c, 1963d). For more information in this area, please refer to Appendix A. However, regardless of possible flaws, stereotypes are still used in decision-making (Holland, 1997).

### *Workplace Deviance*

Although research into P-E fit, job success, and vocational choice is typically studied in terms of positive attributes, dysfunction in the workplace has been studied recently. Workplace deviance describes some of the counterproductive practices that individuals engage in that put their company or their coworkers at risk (Bennett & Robinson, 2000; Hollinger, 1986). Workplace deviance is discussed in more detail in Appendix B and includes negative behaviors as well as production deviance. One method

for measuring possible deviance in the workplace is integrity testing. Though tangential to the current study, please refer to Appendix C for more on this topic.

### *Negative Personality and Environmental Fit*

Studies of managerial effectiveness have touched upon negative personality traits that leaders often possess (e.g. Kovach, 1986). However, in the area of how an individual fits and gets along in a work environment, there is little in-depth knowledge pertaining to the less normal personality elements and the role personality elements play. A personality trait that might impact an individual's performance in an organization is narcissism. Narcissists are characterized by a need for power, and prestige, a lack of empathy, exploitiveness, exhibitionism, and Machiavellianism (Kets de Vries & Miller, 1985; Raskin & Hall, 1979; Raskin & Terry, 1988). Although not synonymous, a personality disorder associated with extreme narcissism is psychopathy (Hart & Hare, 1989). (Please refer to Table 1 for an overview of psychopathic traits). Additionally, some researchers have argued that there is an overlap in the personality characteristics defining narcissism and Machiavellianism (Kets de Vries & Miller, 1985). Some have even argued that Machiavellianism and sub-clinical psychopathy are conceptually identical (e.g., McHoskey, 1995; McHoskey, Worzel, & Szyarto, 1998). Nonetheless, the argument that this (psychopathy and Machiavellianism) is a single concept studied under two different names has not been echoed by all researchers (e.g., Gustafson, 2000a). Additionally, there is a need for research linking abnormal or negative personality traits back to a "normal" population, P-E fit, and vocational choice. An in-depth overview of the clinical measures of negative personality, psychopathy, and Machiavellianism will be discussed



followed by an overview of these briefly mentioned differences in the research. For an in-depth discussion of psychopathy, please refer to Appendix D.

### *Construct Validity*

Cronbach (1960) defines construct validity as the “analysis of the meaning of test scores in terms of psychological concepts” (p. 120). Binning and Barrett (1989) describe construct validity as “the process of identifying constructs by developing measures of such constructs and examining relationships among the various measures” (p. 479).

Crocker and Algina (1986) note that to be useful, a construct must be defined operationally. They additionally observe that a psychological construct must be explicit in how it relates to other variables. Convergent and discriminant validity are basic tools for determining these relationships.

Prior to developing the scale for Aberrant Self-Promotion, there were several methods for determining clinical psychopathy (e.g., PCL, PCL-R, SRP). Earlier validation studies concentrated on the convergent validity of the current scale with these clinical measures (Gustafson & Ritzer, 1995; Gustafson, 1997) and with discriminant validity as differing from Machiavellianism (Gustafson, 1998). The current study examines convergent and discriminant validity in regards to vocational interest.

### *Conclusion*

Machiavellianism and Aberrant Self-Promotion are some of the darker personality variables being explored in the current study. The fundamental difference in Machiavellianism and Aberrant Self-Promotion is that though both may use manipulative tactics, and both would conceivably choose similar work environments, Machiavellian individuals will be less randomly self-serving and less likely to be manipulative than

those high in Aberrant Self-Promotion. In the scope of Holland's vocational interest theory, Machiavellian individuals and those high on Aberrant Self-Promotion are not thought to be different. The self-selection into different majors or different work environments will be similar for each, conceivably.

Although students who attend college are presumed to be similar, the personality characteristics that are reinforced and thus that are predominant in diverse programs are conceivably different. Vocations have different climates and personalities, as do majors (e.g., Gupta, 1987; Holland, 1997). These differences may cause people to self-select into vocations so that their individual talents and personalities match that of their surroundings.

In the current study, where Aberrant Self-Promotion is being measured as a personality attribute in addition to Machiavellianism, individuals with different majors may differ on these attributes. As aforementioned, the connection to psychopathy and higher education has been tested in the medical school arena (Moore, Katz, & Holder, 1995; Sutker & Allain, 1983). The findings did support individual differences between programs (Moore et al., 1995). This is an area that is in need of further research under the umbrella of Schneider's ASA model and Holland's (1997) vocational interest theory.

The implications of these findings pertaining to programs focus mainly on the career development and progression of individuals who exhibit Aberrant Self-Promotion or sub-psychopathic personality tendencies. Superficial charm, grandiosity, impulsivity, and deceitfulness are included in the mannerisms of some managers. These are also personality traits of ASPs. The consequences of allowing an ASP to have the power to manipulate others are the nightmare resulting from bad management techniques. Poor

morale, high turnover, infighting, and being "conned" are among the possible rewards for employing an ASP in certain positions. However, if it is known that an individual might have some of these more negative tendencies, then steps can be taken to ensure that those mannerisms are not reinforced and are instead counteracted. Although in some occupations (e.g., criminal law) it may be advantageous to exhibit some of these tendencies, this research is being conducted to address more specifically the theoretical relationship between negative personality traits and vocational preference. However, more relevant to the current study is how individuals high in Aberrant Self-Promotion influence their classmates. College students utilizing common resources such as computers, labs, and books must have a sense of honor or else they will impact their classmates negatively. This is especially cogent when students are ranked either in a class or for a scholarship. Thus, individuals are competing against one another for grades and class standing. Additionally, ASPs may be in classes or programs requiring students to complete group projects. These projects are "on their honor"; consequently, plagiarism by one exposes all to accusations of cheating. These issues provide some of the impetus for the current study.

#### *Potential Theoretical and Practical Applications*

The implications of the current study examining potential relationships of Machiavellianism and Aberrant Self-Promotion go beyond the vocational choice literature. Besides the practical application of vocational counseling, there are also other potential applications. These include allowing managers to tailor developmental feedback to individual's personalities. Another would be coaching of employees or executives through problem behaviors. Managerial feedback, like that focusing on extraversion or

introversion, would be helpful in the “negative” trait arena as well as the more traditional Big Five area. Another application of the current research is in the selection of individuals. There are some potential risks to hiring someone who is high on Aberrant Self-Promotion. This measure can also potentially serve to make a more educated decision on who to hire for leadership positions. Finally, variance explained in job performance can be vastly improved. With the use of a non-clinical measure of negative personality, companies can legally and ethically improve their workforce and make for a better working environment.

## CHAPTER 3

### HYPOTHESES

#### *Vocational Choice Hypotheses:*

Personality and vocational choice are clearly related in the literature (Holland, 1973, 1997). This relationship is supported by work investigating the correspondence between the Big Five model of personality and Holland's six vocational personality types (Gottfredson, Jones, & Holland, 1993; Tokar & Swanson, 1995). Vocational interests are interpreted as an expression of personality and represent the expression of said personality to all areas of work and school (Holland, 1973). Intrinsic to the idea of P-E fit and vocational interest is the concept that personality is related to self-selection and success in an occupation or organization. It follows that because of the diverse career paths afforded to students internal to their respective majors that they will further self-select into a specialization that suits them. By treating psychopathy not as a taxonomy but rather a continuum there are hypothesized differences internal to each vocational choice. I-types, who value scholarly activities and achievements, will more likely enter more scientific endeavors than E-types. The I-type individual prefers the acquisition of scientific and mathematical knowledge, and works in environments characterized by the dominance of demands that require analytical behavior. Choice of vocations include being a Chemist or a Physicist (Gottfredson & Holland, 1996). In contrast to an E-type person, an I-type person tends to have a general deficit in persuasive competencies (Gottfredson & Holland, 1996). E-types prefer non-scientific, non-research based endeavors and enjoy activities and work that include the manipulation of others to attain

goals as well as economic gain (Holland, 1997). This is very similar to the environments preferred by “successful” psychopaths as noted by Babiak (1995). Additionally, E-types have a deficit in the scientific capabilities, especially as compared to an I-type (Holland, 1997). Majors preferred by E-type individuals include Business Administration and Marketing (Gottfredson & Holland, 1996). For career choice, being a Salesperson or a Manager fits into the E-type categories (Holland, 1997; Prediger & Vansickle, 1992). In these careers, E-types can engage in preferred activities such as controlling others and being free of other’s control, and are able to avoid analytical duties not suited for the E-type temperament. E-types deprecate being merciful or caring (Holland, 1997). This all fits with the theoretical description of sub-clinical psychopathy, ASP, Machiavellianism, and being high on Enterprising in Holland’s Vocational Interest scale. Therefore, personality traits that are predictive of various vocations should also be predictive of certain Holland codes, even “negative” personality traits. Therefore, it would be enlightening to examine the logical relationship of Holland’s vocational interest scores and Machiavellianism as well as the relationship between Holland’s vocational interest scores and Aberrant Self-Promotion. This is in line with both convergent as well as discriminant validity. Individuals high in Aberrant Self-Promotion are seen here to be most likely to choose E-type vocations, and least likely to choose I-type vocations. Additionally, R-type and A-type vocations will be sought by those high in ASP more than I-types but those high in ASP will be more likely to go into C-type or S-type vocations and of course E-type occupations.

Hypothesis 1a: Aberrant Self-Promotion will relate to Holland ratings, specifically positive for Enterprising.

Hypothesis 1b: Aberrant Self-Promotion will relate to Holland ratings, specifically positive for Conventional, though not as great in magnitude as Enterprising.

Hypothesis 1c: Aberrant Self-Promotion will relate to Holland ratings, specifically positive for Social, though not as great in magnitude as Enterprising.

Hypothesis 1d: Aberrant Self-Promotion will relate to Holland ratings, specifically negative for Investigative.

Hypothesis 1e: Aberrant Self-Promotion will relate to Holland ratings, specifically negative for Realistic, though not as great in magnitude as Investigative.

Hypothesis 1f: Aberrant Self-Promotion will relate to Holland ratings, specifically negative for Artistic, though not as great in magnitude as Investigative.

Hypothesis 1g: Machiavellianism will relate to Holland ratings, specifically positive for Enterprising.

Hypothesis 1h: Machiavellianism will relate to Holland ratings, specifically positive for Conventional, though not as great in magnitude as Enterprising.

Hypothesis 1i: Machiavellianism will relate to Holland ratings, specifically positive for Social, though not as great in magnitude as Enterprising.

Hypothesis 1j: Machiavellianism will relate to Holland ratings, specifically negative for Investigative.

Hypothesis 1k: Machiavellianism will relate to Holland ratings, specifically negative for Realistic, though not as great in magnitude as Investigative.

Hypothesis 1l: Machiavellianism will relate to Holland ratings, specifically negative for Artistic, though not as great in magnitude as Investigative.

*Gender Hypotheses:*

There have been numerous studies linking psychopathy to gender, with men rating significantly higher than women (Forth et al., 1996; McHoskey et al., 1998). In the realm of Aberrant Self-Promotion (sub-clinical psychopathy) and Machiavellianism, the research is not clear.

In a study examining psychopathy in male and female non-criminals, there were no significant gender differences found (Forth et al., 1996). One explanation may be that the previously reported gender differences may be a result of social desirability, sampling error, or measurement error. Alternatively, the findings may reflect the focus that the current assessment procedures have on the behavioral manifestations of psychopathy, which is seen more often in men, thus ignoring the underlying traits (Cleckley, 1976; Hare, 1991). The evidence does seem to acknowledge a gender difference in the manifestations, if not rates of psychopathy; therefore, a directional hypothesis will be utilized for Aberrant Self-Promotion. Again, this provides convergent and discriminant validity for Aberrant Self-Promotion to be used in this fashion. If the findings for gender differences mirror the clinical findings of men having a higher rate of ASP than women, this is evidence that the construct is in line with the clinical aspects of psychopathy. The evidence as gathered in the current study is not expected to mirror exactly the behavioral



aspects of clinical levels of psychopathy due to the sub-clinical nature of the population being sampled and the measures being employed.

The findings regarding gender differences in Machiavellianism are also mixed. Studies report non-significant differences, females rating higher, or men rating higher (e.g., Gable & Topol, 1987; McHoskey et al., 1998; Wertheim et al., 1978). These findings are further muddled when subscales are considered when examining purported gender differences (McHoskey et al., 1998). Nonetheless, these findings may have been due to social desirability in responding in specific occupations. When Moore and Katz (1995) corrected for social desirability, no gender differences were found. However, rationale for a directional hypothesis for sex differences in Machiavellianism can be based on its similarity to psychopathy and Aberrant Self-Promotion, especially in the ability to manipulate. Therefore, a directional hypothesis will be tested.

Hypothesis 2a: There will be significant gender differences on Aberrant Self-Promotion levels with men rating higher.

Hypothesis 2b: There will be significant gender differences on Machiavellianism levels with men rating higher.

*Academic Achievement Hypotheses:*

Intelligence measures have not been found to discriminate well between psychopaths and non-psychopaths (Heilburn, 1982; Sutker & Allain, 1987). It has also been found that level of education is unrelated to psychopathy (Hart, Hare, & Harpur, 1992). However, a simplistic testing of level of education ignores the type of education

the individual has self-selected into. It ignores the types of professional or graduate schools that one high in psychopathy chooses to attend, especially if different types of schooling reinforce (e.g., through grades) different personality manifestations. Despite the contradictory findings, ASP has been found to be negatively related to GPA (Gustafson & Ritzer, 1995). Consequently, it is thought that a sub-clinical measure would prove more precise in the current study in an overall hypothesis relating GPA and ASP. It is conceivable that an individual high on Aberrant Self-Promotion who is in a program that reinforces some of his/her personality tendencies, would do well. This would provide convergent validity for how levels of Aberrant Self-Promotion interact with academic achievement and will be in line with past findings.

Hypothesis 3a: Aberrant Self-Promotion levels will be related negatively to GPA.

One general post-graduate program that does seem to reinforce manipulation tactics (at least stereotypically) is a Masters of Business Administration (M.B.A). It is important to remember here that stereotypes often have important and reliable information in them, even if they are often inaccurate in some ways (Holland, 1997). The personality characteristics that are reinforced in different undergraduate programs or graduate schools are conceivably different. Just as vocations have different climates and personalities, so do graduate programs (e.g., Gupta, 1987; Holland, 1997). In the current study, where undergraduates are being studied, sub-clinical psychopathy is the construct of interest. It is measured as a personality attribute in addition to Machiavellianism. Different undergraduate programs may differ on these negative attributes. This is in line

with Holland's (1973, 1997) vocational typology and personality theory that views an individual's vocational interests as an expression of personality. This is also aligned with what Gottfredson and Holland (1996) posit when they view E-type individuals to prefer Business and Marketing classes and shun Science and Mathematics, as well as with Babiak (1995) in his description of "successful" psychopaths and the environments that they prefer. For students getting a more scientific (I-type) degree (i.e., B.S.), which requires more Science and Mathematics classes, the rationale is that those with higher levels of ASP will not do as well, as reflected in their GPA. The converse would be true for those receiving a B.A. This hypothesis parallels the rationale for the first hypotheses examining vocational interest. Logically, the convergent and discriminant validity questions examined there are emulated here.

Hypothesis 3b: Aberrant Self-Promotion levels will be related to GPA but moderated by receiving a B.S. or a B.A. Specifically, GPA and ASP levels will be related negatively, but the slope will be steeper for those individuals pursuing a B.S. than for those individuals pursuing a B.A.

The hypothesis testing for standardized test scores is a little bit different than for GPA. Standardized tests assess knowledge and not presentation of knowledge; therefore, it is harder for an ASP to manipulate the score (sans outright cheating). In other words, course grades allow for manipulation whereas standardized tests do not. By design, standardized tests, such as the Scholastic Aptitude Test (SAT), are supposed to block subjective bias in the assessment of an individual's potential and current knowledge. This

bias would take the form of manipulation of grades by the test-taker; therefore, it is important that it is not included in any unbiased assessment of one's ability. Additionally, individuals who have invested time into manipulation of their academic career instead of studying may have an identical GPA as their classmates, but in knowledge base, especially in the sciences, they will be lacking. Therefore, that difference will be more easily reflected in a standardized test score than in GPA where the curriculum across majors is not standardized. The correlation of SAT scores with ASP is expected to be negative. The standardized test to be related to levels of Aberrant Self-Promotion and Machiavellianism is the SAT. From a construct validity perspective, this will add some convergent validity to the scores of those with high Aberrant Self-Promotion. If individuals cheat or manipulate to get good grades, it should actually have a negative impact on their ability to perform on standardized examinations, regardless of native intelligence.

Hypothesis 4: Aberrant Self-Promotion levels will be related negatively to standardized test scores (SAT total).

#### *Research/Graduate school Hypotheses*

Intrinsic to the idea of P-E fit and vocational interest is the concept that personality is related to self-selection and success in an occupation or organization. It follows that because of the diverse career paths afforded to students internal to their respective majors that they will further self-select into a specialization that suits them. By treating psychopathy not as a taxonomy but rather a continuum there are hypothesized differences

internal to each program. I-types, who value scholarly activities and achievements, will be more likely to enter higher education than E-types. The I-type individual prefers the acquisition of scientific and mathematical knowledge and works in environments characterized by the dominance of demands that require analytical behavior. Choice of major fields includes Biology and Physics and choice of vocations include being a Chemist or a Physicist (Gottfredson & Holland, 1996). In contrast to an E-type person, an I-type person has a general deficit in persuasive competencies; however, the opposite is true for E-types (Gottfredson & Holland, 1996). E-types prefer non-scientific, non-research based endeavors and enjoy activities and work that include the manipulation of others to attain goals as well as economic gain (Holland, 1997). Additionally, there is a deficit in the scientific capabilities, especially as compared to an I-type (Holland, 1997). Majors preferred by E-type individuals include Business Administration and Marketing (Gottfredson & Holland, 1996). For career choice being a Salesperson or a Manager, and sometimes Law fits into the E-type categories (Holland, 1997; Prediger & Vansickle, 1992). In these careers, E-types can engage in preferred activities such as controlling others and being free of other's control, and are able to avoid analytical duties not suited for the E-type temperament. E-types deprecate being merciful or caring (Holland, 1997). This dearth of caring fits with the theoretical description of sub-clinical psychopathy, ASP, Machiavellianism, and being high on Holland's Enterprising.

In the spirit of Holland's (1973) taxonomy, an individual's search for further education in graduate school is tailored to fit the final occupational choice that matches his/her personality. Stated another way, the preferred post-baccalaureate degree is conceivably different for I-types and E-types, based on their personality and preferred

work environments. Although the type of degree sought is only a rough proxy, for individuals receiving a degree in a field have a wide range of options (e.g., receiving a J.D. one could be a tax lawyer or a criminal lawyer), a rough classification of degrees will be constructed based in the spirit of Holland's taxonomy (e.g., wanting an M.B.A. will be positively linked to ASP whereas wanting a Ph.D. will be negatively linked to ASP). The type of degree sought (i.e. professional or research) serves as a proxy for what type of occupation an individual may be interested in. There is no prediction on whether there is a difference in Aberrant Self-Promotion levels among those who choose to pursue an advanced degree versus those who do not.

Successful self-selection into an occupation may have stipulations besides desire. In other words, an individual's desire to be in a job, or in graduate school, does not directly translate into success. Additionally, regardless of how much an individual desires admittance into a particular degree program, there are other factors required for admittance.

Various occupations also have legal guidelines regulating the profession. These may outline the steps for certification and prerequisites. One common prerequisite to practice law or medicine is to be a successful graduate of an accredited school. Additionally, organizations have educational preferences for employees in various positions, such as having a Masters in Business Administration. It is logical to assume that individuals seeking employment in an area that they enjoy may need to attend a graduate program to realize various occupational goals. Therefore, attendance in a graduate program suggests interest in the consequential occupations. Through the selection of a graduate school, there is an implicit selection of an occupational area. As

mentioned earlier, personality has been found to be different for success at different levels of an organization (Ansari, Baumgartel, & Sullivan, 1982; Kovach, 1986). As such, personality traits have been shown to relate to choice of degree specialization (Lindholm & Touliatos, 1995). It follows that if normal personality traits have been shown to be related to occupational choice, then non-normal (negative) personality traits might also be related. “Successful” psychopaths like fluid environments that are changing, where success can be dependent on personal relationships (Babiak, 1995). This is in line with some occupational stereotypes. Therefore, it is logical that some degrees would be attractive to Aberrant Self-Promoters.

Hypothesis 5: The relationship between ASP and plans for graduate school is dependent on type of degree. Specifically, those seeking an M.B.A or J.D. (professional degree) will be higher on ASP than those seeking a Ph.D., M.S., or medical degree (research degree).

#### *Multivariate Research Question*

The previous hypotheses set the groundwork for the primary motivation for the current study: a multivariate exploration of potential predictors of Aberrant Self-Promotion. Individual variable importance in regression analyses is examined. The univariate hypotheses’ variables will be entered simultaneously. The variables to be examined are gender, grade point average (GPA), SAT score, Machiavellianism score, and the six separate Holland scores (RIASEC). The reason that Machiavellianism is included in predicting level of Aberrant Self-Promotion is there is a degree of overlap

between the two constructs. Although Aberrant Self-Promotion and Machiavellianism are viewed to be distinct constructs, the two constructs are related. For example, the behavioral aspects of Machiavellianism, such as advocating the use of duplicity are similar to pathological lying found in psychopaths. However, where ASPs are different in degree, not kind in their relationship to psychopaths, Hi-Machs are not necessarily ASPs. Hi-Machs may lie, for their ethical threshold is lower, but they won't lie pathologically. A test of the bivariate relationship between ASP level and Mach level will be conducted.

The goal with the research question is to enter the predictor variables (gender, grade point average, SAT score, and Holland-type) as well as Machiavellianism into a regression equation and see how well they predict level of Aberrant Self-Promotion. Individuals who are high in Aberrant Self-Promotion (ASPs) are predicted to be male, have lower overall GPA, have lower SAT scores, and have a higher Holland score on Enterprising as well as a lower score in Investigative. Additionally, Machiavellianism is predicted to be related positively to ASP. This overall should contribute to the construct validity of the Aberrant Self-Promotion construct as used in a normal population.

Hypothesis 6: Aberrant Self-Promotion scores will be positively correlated with Machiavellian scores.

Research Question 1: Aberrant Self-Promotion scores will be predicted by the predictor variables (male, type of degree sought [specifically strong positively for B.A. and strong negatively for B.S.], GPA, RIASEC scores [specifically strong positively for Enterprising and strong negatively for Investigative], SAT score) and Machiavellianism.



## CHAPTER 4

### METHOD

#### *Participants*

The study was conducted using students attending a large southeastern university. The total sample goal was approximately three hundred; however, four hundred individuals participated.

Completion of the packet of materials took approximately 60 minutes. All subjects were treated in accordance with the "Ethical Principles of Psychologists" (American Psychological Association, 1981; 1992), and research protocol had been approved by the University of Georgia's Institutional Review Board (I.R.B.).

#### *Materials*

All data were gathered utilizing paper and pencil measures. The anonymity of the participants was guaranteed. A consent form was distributed with a brief introduction. Following this, there was a series of questionnaires assessing the different areas (i.e., demographics, SDS [Self-Directed Search], GPA, Scholastic Aptitude Test scores, Aberrant Self-Promotion, and Machiavellianism). The demographic was collected initially. Then the participants moved into the personality area of the battery of questionnaires, starting with the Mach IV.

Christie (1970b) developed a questionnaire to assess Machiavellianism. This questionnaire was based on the philosophy purported by Machiavelli in *The Prince* and *The Discourses*. The Machiavellian scale was developed to identify individuals who agreed with a manipulative method of gaining power and with doing so without remorse.

Christie and his colleagues have refined this scale with the edition to be used here, the Mach IV (Christie, 1970b). This is a 20-item measure utilizing a 5-point Likert-type scale. Following the Christie and Geis (1970b) procedure, a constant of 20 was added to all scores so that the scores could range from 40-160, with a mean of 100 meant to be a theoretical neutral point. A .79 split-half reliability coefficient was reported for this scale (Christie, & Geis, 1970). Cronbach alpha coefficients calculated in consequent studies range between .72 (Gable & Topol, 1987) and .82 (Gable & Topol, 1988). These relate favorably with the original .79 split-half reliability coefficient.

The Self Directed Search (SDS) (Holland, 1997) is a 228-item self-report measure of Holland's occupational types. Respondents were asked to rate their daydreams, various activities, competencies, and occupations. They were given a score on each of the six RIASEC areas. Respondents used a dichotomous answer format for most of the answers; however, a 7-point Likert scale was utilized for self-estimating various competencies (Holland, 1997; Strack, 1994). Responses from the four test sections were summed to obtain summary scores for each occupational type. Reported alpha coefficients for the summary scores have ranged from .88 to .92 (Holland, 1997). Test-retest reliability over 1-4 weeks has ranged from .70-.89 in an adult sample (Holland, 1997).

To assess Aberrant Self-Promotion the 20-item ASP screening measure was used. The time to administer this measure is restricted to 25 minutes (S. Gustafson, personal communication, Spring, 2000). This measure is a conditional reasoning instrument for identifying Aberrant Self-Promoters (Gustafson, 1998, 2000a, 200b). This line of research began when Gustafson and Ritzer (1995) conceived and validated a sub-clinical condition labeled Aberrant Self-Promotion. Gustafson (p. 3, 1997) asserts that the

concept of ASP is consistent with the two-factor definition of psychopathy (e.g., Harpur, Hare, & Hakstian, 1989), with Factor 1 reflecting personality characteristics, such as “exploitativeness, entitlement, grandiosity, superficial charm, and lack of empathy or guilt,” and Factor 2 reflecting harmful or selfish behavior. It is purported that ASPs and psychopaths are different in degree, not in kind (Gustafson, 1997). The Aberrant Self-Promotion measure rests on the work of conditional reasoning by James (1998). People want to believe that their actions are justifiable and rational; consequently, they rely on reasoning processes whose purpose is to augment the logical appeal of their behaviors (James, 1998). People with different personalities will conceivably have different justification mechanisms and different reasoning mechanisms. The reasoning that differs across individuals can be thought of as conditional (James, 1998). The conditional reasoning task used in the current study is based on these assumptions, specifically to measure achievement motivation and aggression as well as the motives to avoid failure and attain goals.

This conditional reasoning measure is meant to predict creating dissention among co-workers, disobeying orders, falsifying reports, and committing espionage. Importantly, this measure is meant to be sub-clinical in nature and consequently to be exempt from the Americans with Disabilities Act (ADA). This is a 20-item measure using multiple-choice options and has been found to relate to more traditional measures of psychopathic tendencies, which include the Self-Report Psychopathic Checklist (SRP-II) and the Narcissistic Personality Inventory (NPI) (Gustafson, 2000a; Gustafson & Ritzer, 1995). Gustafson and Ritzer (1995) used these measures to verify the existence of individuals manifesting the ASP pattern. It was found that there was a convergence of

92% and 94% in two samples (Gustafson, 1995). The ASP pattern was consequently validated against the Revised Psychopathy Checklist (PCL-R; Hare, 1991) and records of antisocial behavior (Gustafson & Ritzer, 1995). As predicted, ASPs scored significantly higher than comparisons on the PCL-R total score. The prediction that ASPs would fail to score at a clinical level on the PCL-R to be diagnosed with psychopathy was also supported at a significant level. Further criterion-related validity was determined comparing ASPs vs. non-ASPs on a variety of behavior criteria. ASPs scored significantly higher on self-reported illegal acts, scored significantly lower on GPA, and had a significantly higher number of parking violations (Gustafson, 1997; Gustafson & Ritzer, 1995). Other behavioral measures that were found to be significant at the  $p < .10$  level included having more university judicial reprimands as well as university police arrests. However, both of these have an extremely low base rate in the student population which might account for their not meeting the  $p < .05$  significance level (Gustafson, 1997).

The measure used in the current study is the most recent refinement of conditional reasoning developed to measure Aberrant Self-Promotion (Gustafson, 1997). The previous measure had 34 questions and was found to discriminate between ASPs and non-ASPs. Out of 34 possible points in the previous measure, there was an average difference of 9 points between ASPs and non-ASPs. There was also virtually no overlap found between the two groups (Gustafson & Ritzer, 1995). With the most recent refinement being utilized in the current study these results will hopefully be replicated. The chi-square test of the endorsement of ASP answers to the conditional reasoning questions was found to be significant ( $p=.02$ ) for differentiating ASPs and non-ASPs in

the 34-item measure. The prevalence of ASPs was found to be 11 percent in the first sample and 6 percent in the second sample (Gustafson, 1997). This is higher than the predicted prevalence of psychopaths, which was thought to be 2 percent (Cleckley, 1976). In the current study the individuals were not classified as either ASP or non-ASP, rather the scores on the measure were looked at on a continuum.

The standardized test score data and GPA data was requested after the questionnaire was turned in. Finally, a Debriefing form was given to the participants.

### *Procedure*

In a large group-testing format, each participant completed a packet of questionnaires regarding sub-clinical psychopathic tendencies (Aberrant Self-Promotion), a demographic survey, a measure of Machiavellianism, GPA, SAT scores, and Holland's SDS. GPA was rated on a 4.0 scale. Total SAT scores were examined in testing the hypotheses. Machiavellianism scores were examined on a continuum, as will ASP scores. Finally, individuals' Holland scores were examined by looking at their Enterprising (E) score when making comparisons.

### *Analyses*

Pearson correlations were used to test each hypothesis. Additionally, to evaluate the multivariate hypotheses, (Research Question 1), regression analyses were used. There were five predictor variables used to predict Aberrant Self-Promotion: Gender, GPA, SAT, Holland Enterprising score, and Machiavellianism. Specifically, individuals who are high in Aberrant Self-Promotion (ASP) were predicted to be male, have lower overall GPA, have lower SAT scores, score highly on Enterprising in the Holland measure, and be higher in Machiavellianism. Because the individual variables' contributions to

variance were of interest, conducting a power analysis for the multiple correlations was examined (Maxwell, 2000). However, due to the absence of supporting literature for several of the predictors as they relate to the overall construct of ASP, an approximation was made based on some of the recommendations by Maxwell (2000). With a recommended effect size of .80 and with five predictors, the sample sought for the current study was 300 individuals (Maxwell, 2000). With the attained sample of 400 individuals, it was considered sufficient to be able to parse out the individual contributions of each of the five contributing variables in the variance of ASP scores.

## CHAPTER 5

### RESULTS

#### *Demographic Information*

203 men and 197 women responded to the questionnaire for a combined sample of 400 individuals. The mean age of the sample was 19 years old with a range of 17 years old to 23 years old. Of the respondents, 362 were white, 17 were black, 7 were of Asian descent, 6 were Hispanic, and 5 chose “other”. Three respondents chose not to report ethnicity.

#### *Analysis of Reliability*

A reliability analysis was conducted on the Holland measure to ensure that each area of the measure was internally consistent with this population. Cronbach's (1951) coefficient alpha, considered to be a lower-bound estimate of reliability (Cortina, 1993), was used as an index of internal consistency to assess the reliability of the self-report measures with the exclusion of the Aberrant Self-Promotion measure. This was used to assess the internal consistency of the Self Directed Search (SDS) (Holland, 1997) and its subscales. An alpha of .81 was found for 399 cases and 30 items for the Holland Self Directed Search (SDS). For the subscale Realistic, there were 400 cases, 5 items and alpha was .85. For the subscale Investigative, there were 400 cases, 5 items, and alpha was .77. For the subscale Artistic, there were 400 cases, 5 items, and alpha was .86. For the subscale Social, there were 399 cases, 5 items, and alpha was .75. For the subscale Enterprising, there were 399 cases, 5 items, and alpha was .85. And, for the subscale Conventional, there were 399 cases, 5 items, and alpha was .77. These were in-line with previously reported alpha coefficients. Internal consistency scores for the Holland SDS

measure have ranged from .88 to .92, while test-retest reliability over 1-4 weeks has ranged from .70-.89 in an adult sample (Holland, 1997). The current range of internal consistency alpha coefficients which were between .75 and .86 were viewed to be in-line with previous findings. Additionally, a list of the variables and how they correlated was completed (please see Table 5 and Table 6).

### *Analyses of Hypotheses*

The first set of hypotheses was aimed at examining the relationship between individual Holland typology scores and the score an individual received on the measure of either ASP or Machiavellianism. The first set of hypotheses (Hypothesis 1a through Hypothesis 1l) were tested using SPSS and running Pearson product-moment correlations to examine the relationships between Holland subscale scores and ASP scores, as well as between Holland subscale scores and Machiavellian scores for individuals. These hypotheses were examined using Pearson Correlations with a 1-tailed test of significance. The comparisons were not found to be significant (see Table 7).

For the next set of hypotheses (Hypothesis 2a and 2b), the gender differences in Aberrant Self-Promotion and the gender differences in Machiavellianism were examined utilizing the Independent Samples *t*-test. For Aberrant Self-Promotion, the results were significant,  $t(400) = 4.07, p < .001$ . Men ( $M = 6.65, SD = 1.9$ ) on the average scored higher on Aberrant Self-Promotion than women ( $M = 5.84, SD = 2.1$ ). The 95% confidence interval for the difference in means was small, ranging from .42 to 1.98. There was a mean difference of .81 between men and women for Aberrant Self-Promotion. This is a standard deviation difference of .4 between men and women for ASP. For Machiavellianism, the test was significant,  $t(400) = 4.93, p < .001$ . Men ( $M =$



55.60,  $SD = 6.25$ ) on the average scored higher on Machiavellianism than women ( $M = 52.56$ ,  $SD = 6.08$ ). This is a standard deviation difference of .49 for men and women. This was a mean difference of 3.04 between men and women for Machiavellianism. The 95% confidence interval for the difference in means was small, ranging from 1.83 to 4.25.

For the academic achievement hypotheses, there were two sets of data. The first set of data included self-report SAT scores, High-School GPA, and college GPA. The second set of data was collected from the university with permission from the participants. This set contained actual GPAs and SAT scores. An examination of these two sets of scores found that they correlated significantly in each case, though in each comparison self-reports were inflated. This might be attributed to rounding error or to positive self-regard. Regardless, the results of the correlation analyses presented in Table 2 show that all of the relationships were significant with 4 out of 6 relationships significant at the  $p < .001$  level. A paired samples  $t$ -test was conducted to evaluate whether the self-report high school GPAs and actual high school GPAs were significantly different. The results indicated that the mean high-school self-report GPA ( $M = 3.7$ ,  $SD = .30$ ) was significantly greater than the mean high-school actual GPA ( $M = 3.55$ ,  $SD = .36$ ),  $t(355) = 14.3$ ,  $p < .001$ . This translates into a .5 standard deviation difference between self-report and actual scores. A paired samples  $t$ -test was conducted to evaluate whether the self-report and actual college GPAs were different. The results indicated that the mean college self-report GPA ( $M = 3.14$ ,  $SD = .49$ ) was significantly greater than the mean college actual GPA ( $M = 3.1$ ,  $SD = .50$ ),  $t(284) = 3.18$ ,  $p = .002$ . Therefore, in testing the GPA hypotheses, actual GPAs were used. Though a .04 difference may seem

small, there is the additional consideration of the majority of the respondents being 19 years of age or younger, ergo it was decided that high school GPA would be more accurate than college GPA, especially since many of the participants had not been to college for a whole semester yet (see Table 8).

Correlation coefficients were computed between the self-report SAT scores and the actual SAT scores obtained from the University. The results of the correlations presented in Table 9 were all statistically significant and were greater than or equal to .92 between the actual and the self-report scores. A paired samples *t*-tests was conducted to evaluate whether the self-report and actual SAT total scores were significantly different. The results indicated that the mean self-reported SAT total scores ( $M = 1199$ ,  $SD = 113$ ) were significantly greater than the mean actual SAT total scores ( $M = 1189$ ,  $SD = 111$ ),  $t(357) = 3.58$ ,  $p < .001$ . In testing whether ASP scores relate negatively with performance on the SAT, it was decided that the actual SAT total scores would be utilized.

For the academic achievement hypotheses it was hypothesized that Aberrant Self-Promotion levels would be negatively related to GPA. This hypothesis was originally examined with self-report high school GPA and with self-report college GPA. Both of these provided insignificant results. However, with a follow-up analysis utilizing the actual college and actual high school GPAs gathered with permission from the subjects, it was found that actual high school GPA related negatively with ASP score with a correlation of  $-.10$  and with a  $p < .05$  significance level in a 2-tailed test. Therefore, hypothesis 3a “Aberrant Self-Promotion levels were related negatively to GPA” was supported.

For the next academic achievement hypothesis, it was thought that Aberrant Self-Promotion levels would be related to GPA, but moderated by the variable of attempting to gain a B.S. or a B.A. degree. Specifically, GPA and ASP levels would be related negatively, but the relationship would be stronger for those individuals pursuing a B.S. degree than for those individuals pursuing a B.A. degree. The GPA variable was determined to be the actual high-school GPA. Using regression analysis to form the product term, the moderator variable of ASP X Degree was created. The regression was conducted on actual high-school GPA as the criterion, with ASP as the predictor. Subsequently, a regression analysis was conducted on actual high-school GPA as the criterion, with the pursuit of a B.S. degree versus the pursuit of a B.A. degree as the predictor. Finally, a regression was run on actual high-school GPA as the criterion, with ASP, degree sought, and ASP X degree sought as the three predictors. The overall test  $F(3,321) = 2.57, p > .05$  was considered non-significant. Therefore, in this case, only main effects could be examined and the hypothesis regarding a possible moderation between ASP and degree sought as it relates to GPA was therefore not supported. As a follow-up, these same regressions were run with actual college GPA, however, none were found to be significant.

For the next hypothesis, that Aberrant Self-Promotion levels would be related negatively to standardized test scores (SAT total), it was found that there was no relationship between ASP levels and the actual subject-released SAT total scores. The relationship was .012, n.s. for a single-tailed directional test. There was no relationship found between SAT total and ASP level.

The next hypothesis examined the relationship between ASP and plans for graduate school. Specifically, it was thought that those seeking an M.B.A or J.D. (professional degree) would be higher on ASP than those seeking a Ph.D., M.S., or medical degree (research degree). This was not supported. Even when only those seeking a J.D. and a M.B.A were contrasted with those seeking just a Ph.D., there were only non-significant results.

For the next hypothesis, the relationship between ASP and Machiavellianism was examined. It was thought that Aberrant Self-Promotion scores would be positively correlated with Machiavellian scores. As a scoring note, when an individual skipped a question, their Machiavellianism score was calculated with a mean substitution for the missing datum. Only 36 individuals needed the mean substitution out of a total of 400 respondents. The hypothesis was supported. The Pearson correlation of Machiavellianism with ASP was  $.212, p < .001$ . This supported hypothesis 6, drawing a link between ASP scores and Machiavellian scores, while maintaining that they were not synonymous.

Finally, Research Question 1 was examined. Research Question 1 examined the assertion that Aberrant Self-Promotion scores would be predicted by the various predictor variables outlined in the univariate hypotheses. A multiple regression analysis was conducted to evaluate how well the predictor variables, entered collectively as a single unordered set, predict Aberrant Self-Promotion. These predictor variables were Holland scores (Realistic, Investigative, Artistic, Social, Enterprising, and Conservative), gender, degree sought (B.S. or B.A.), actual SAT total, and actual high-school GPA. Combined with these predictor variables was a score for Machiavellianism. The criterion variable was ASP score. The linear combination of these variables was significantly related to

ASP,  $F(11,304) = 2.86, p < .001$ . This is the un-squared value using 11 predictors. The sample multiple correlation coefficient was .306, indicating that approximately 9% of the variance of ASP in the sample can be accounted for by the linear combination of these predictor variables and Machiavellianism.

In Table 10, indices indicating the relative strength of the individual predictors are presented. Only two bivariate correlations were of note. They were gender (male) and Machiavellianism. Machiavellianism accounted for 5% of the variance of the ASP measure and was the only predictor found to be significant (please see Table 11).

As a follow-up to the previous regression analysis, the variables were then broken into three unordered sets of predictors. Set 1 consisted of the 6 separate Holland scores (RIASEC), Set 2 consisted of gender, degree sought, actual High-School GPA, and SAT total, and set 3 was the Machiavellianism score. There were three sets of predictors, and within each set the individual predictors were unordered as entered into the multiple regression. These three unordered sets of predictors were broken up so that an examination of the relative importance of each set of predictors in regards to Aberrant Self-Promotion could be examined. A multiple regression analysis was conducted to evaluate how well the predictor variables, entered sequentially as three unordered sets, predict Aberrant Self-Promotion. The criterion variable was ASP score. The regression equation with the Holland Scores (RIASEC) was not significant,  $R^2 = .034$ , adjusted  $R^2 = .02$ ,  $F(6, 309) = 1.83, p = .09$ . The next set of predictors, gender, degree sought (B.S. or B.A.), actual SAT total, and actual high-school GPA was entered in addition to the first set of predictors. The regression equation with the addition of these predictors was found to be significant,  $R^2 = .071$ , adjusted  $R^2 = .04$ ,  $F(4, 305) = 2.97, p = .02$ . Based on these

results, this set of predictors accounted for additional variance and were predictive of ASP.

Finally, the next set entered in addition to the previously entered predictor sets consisted of a single predictor, Machiavellianism. The regression equation with this predictor was significant,  $R^2 = .09$ , adjusted  $R^2 = .06$ ,  $F(1, 304) = 7.78$ ,  $p < .01$ . This predictor by itself seems to be the best at predicting ASP. To test this assertion a multiple regression analysis was conducted to evaluate how well the single Machiavellianism variable predicted Aberrant Self-Promotion. The regression equation was significant,  $R^2 = .05$ , adjusted  $R^2 = .04$ ,  $F(1, 398) = 18.77$ ,  $p < .001$ . Machiavellianism seems to be the best at predicting Aberrant Self-Promotion (please see Table 12).

#### *Additional Analyses*

Because some of the original analyses had disappointing results, some additional analyses focusing on the differences between high ASP and low ASP scorers were conducted. Specifically, the ASP scores were split into thirds. These additional analyses are annotated below, embedded in the original hypotheses' sections, and discussed.

An additional examination of the variable actual high school GPA was conducted, with only the participants with top and bottom score ranges of ASP. The top third consisted of Aberrant Self-Promoter scores of 1 through 5 with an  $N = 133$ , the middle third consisted of ASP scores of 6 and 7 with an  $N = 160$ , and the bottom third consisted of the high scoring ASPs with scores ranging from 8 through 14 with an  $N = 107$ . The top and bottom third were broken out and examined. An independent samples  $t$ -test was conducted to evaluate the post-hoc hypothesis that the bottom third ASP scorers would outperform the top third ASP scorers in regards to GPA. actual high school GPA was

used as the GPA variable instead of the self-report high school GPA. The test was significant,  $t(221) = 2.04, p = .04$ . Students that were in the bottom third ( $M = 3.59, SD = .32$ ) had better high school GPAs than students in the top third ( $M = 3.49, SD = .37$ ).

As a follow-up examination of the variables, ASP scores were split into thirds. The top third consisted of Aberrant Self-Promoter scores of 1 through 5 with an  $N = 133$ , the middle third consisted of ASP scores of 6 and 7 with an  $N = 160$ , and the top third consisted of the high scoring ASPs with scores ranging from 8 through 14 with an  $N = 107$ . The top and bottom third were broken out and examined. The top and bottom thirds' relationships to actual SAT total scores were examined. The correlation was  $.03, p = .34$  for the 219 individuals. An independent samples  $t$ -test was conducted to evaluate the post-hoc hypothesis that the bottom third ASP scorers would outperform the top third ASP scorers in regards to SAT. Actual SAT total scores were used as the variable of interest. The test was not significant,  $t(219) = .615, p = .54$ . Students that were in the bottom third of ASP scorers ( $M = 1178, SD = 121$ ) did not differ significantly in their SAT total scores than students in the top third ( $M = 1187, SD = 105$ ).

In the follow-up examination consisting of combining M.B.A and J.D. into a group and testing the difference of ASP level against a group consisting of Ph.D. and M.S., the single-tailed directional comparison of means test was found to be significant at the  $p < .05$  alpha level in the expected direction. The M.B.A/J.D. group ( $n = 113$ ) had an average ASP ( $M = 6.38, SD = 1.80$ ). The Ph.D./M.S. group ( $n = 53$ ) had an average ASP score ( $M = 5.81, SD = 2.20$ ). There were 107 high ASPs. Of these, 62% were male, 63.5% preferred seeking a B.A. degree, and 70% of those seeking a Ph.D., M.S., M.B.A or J.D. graduate degree preferred the M.B.A or J.D. type of graduate school. This is

compared to the low Aberrant Self-Promoter third. Of these 133 individuals, 61.7% were female, 52% preferred receiving a B.A., and when given a choice of graduate school to pursue, only 40% choose the M.B.A/Law education. This is in-line with the previous hypotheses. Please see Figure 6 for further details.



## CHAPTER 6

### DISCUSSION

Overall, the proposed study provided general support for the linking of Aberrant Self-Promotion and how well variables, especially school and work related variables, can predict levels of ASP. This study could have had potentially important implications for career counseling for undergraduates as well as for understanding the link between personality variables and self-selection into vocations. By identifying additional personality traits pertinent to the workplace and linking them to a propensity to enter a given vocation, companies could begin to use a both an interest measure in vocational interest, job being applied for, as well as an accompanying measure of personality.

However, the hypotheses for the relationships between an individual's vocational interests and Aberrant Self-Promotion, as well as the findings for the relationships between an individual's vocational interest scores (RIASEC), as measured by the Holland Self Directed Search (SDS) and the individual's Machiavellianism scores, proved to not be supported. No facet of an individual's vocational interest successfully predicted measured levels of negative personality variables (e.g. Machiavellianism and Aberrant Self-Promotion).

There were some interesting findings for the gender-based hypotheses. It was thought that men would score higher on average than women on Aberrant Self-Promotion. This is because ASP is thought to be a measure of sub-clinical psychopathy, and more men are diagnosed with psychopathy than women. This was supported. Men did score significantly higher than women. This supports the contention that Aberrant Self-Promotion is in-line with psychopathy. Additionally, and connected to Aberrant

Self-Promotion, was the other gender-based hypothesis finding that Machiavellianism levels were higher in men than in women. This was also found to be significant. Though Machiavellianism and Aberrant Self-Promotion are not synonymous, they are viewed to be similar. Men are supposed to rate higher than women, and this was supported.

Machiavellianism and Aberrant Self-Promotion were also found to be significantly correlated. This is important support for past findings that men exhibit some of the more negative personality traits more often than women. Though uninteresting, it adds to the foundation of research examining Aberrant Self-Promotion and Machiavellianism.

It should be noted here that as a follow-up analysis to many of the original hypothesis testing the relationships between variables, additional analyses were conducted with only part of the sample. The sample was broken into three parts - High ASP, Medium ASP, and Low ASP. Subsequently, participants with high ASP scores were compared to those with low ASP scores. There were 133 individuals in the low-ASP group (scoring 5 or lower), 160 in the middle group (individuals who score a 6 or 7), and 107 individuals in the high-ASP group (those that scored 8 or higher). This was done to highlight possible differences of ASP as it relates to various measures and variables.

There was an interesting set of significant correlations among several of the non-vocational interest variables and the Machiavellian variable as well as the Aberrant Self-Promotion variable. Individuals with clinical levels of psychopathy are noted to score lower in academic studies but they have a normal range of intelligence. Therefore, it was of interest to examine individuals higher on sub-clinical psychopathy (ASP) and their GPA. Basically, this hypothesis was meant to examine whether an individual's Aberrant Self-Promotion score would be related to GPA.

For this academic achievement comparison, two sets of data were gathered; self-report GPAs as well as actual GPAs. It was noted that there may be a difference between self-report GPA and actual GPA, and that difference might be of interest. If those high on ASP were noted to be more manipulative, then perhaps there would be more of a difference for those high in ASP than those low in ASP, and that difference would favor the individual when they self-reported their GPAs. Though there was no reason to be untruthful, they would note that they had a higher GPA than they did. One might argue that any person does this through self-serving bias, but it was interesting enough to examine. And, if there is a difference, it would be in the direction that high scorers of ASP would over-report their GPAs as compared to those who were low scorers of ASP. Additionally, there were two types of GPAs recorded. The high school GPA (self and actual) as well as the college GPA (self and actual). Though an additional source of error of self-report might be just not recalling one's GPA, it might be argued that when one is in college, their GPA might change, but the GPA that they came in with from high school will remain constant. It was thought that the smallest discrepancy might be between actual high school GPA and self-reported GPA, and the largest discrepancy would be between actual college GPA and self-reported GPA. This was not the case. Though there were differences between actual and self-report GPAs, the largest difference was between the self-report high school GPA and the actual high school GPA. Nonetheless, this difference was not significant, and could be due to people forgetting their actual scores, not through any disreputable intent. Nonetheless, none of the comparisons were found to be significant in regards to the difference scores between actual and self-report GPAs. The decision to use actual high school GPAs was based on that it was probably a more

stable measure of GPA than in some cases a semester of college, and it was the individuals' actual GPA, not self-report, that would be more accurate. Though the original hypothesis examining the relationship between ASP and GPA was not found to be significant, in the follow-up test where the ASP scores were split into thirds, there was a relationship found. Those that had high ASP scores scored significantly lower academically than those who had low ASP scores. Individuals who are high ASPs perhaps rely on their ability to be "off the cuff" in their work or who can manipulate a situation and perhaps spend less time studying. In other words, if an individual is spending his time figuring out ways around studying and instead thinking of how to get around it, then they know the material less. This brings up a related hypothesis, that testing SAT scores.

SAT scores and scores on Aberrant Self-Promotion were thought to also be related negatively for much of the same reasons that GPA and Aberrant Self-Promotion were thought to be related. This hypothesis was not supported. Additional analyses were conducted examining the top and bottom ASP scorers with SAT scores to see if there was a relationship. This also was found to be non-significant.

The connection between Aberrant Self-Promotion and future academically related plans was of interest because of the rationale that those with high ASP would like to go into graduate schools that perhaps supported certain Aberrant Self-Promotion behavior. This was similar to the rationale to the hypothesized connection between vocational interest and choice and Aberrant Self-Promotion. It was originally thought that those seeking an M.B.A or Law degree (J.D.) would be higher as a group on Aberrant Self-Promotion than those individuals seeking a more science related degree such as a Ph.D.

or M.D. This was not found to be the case. However, when individuals seeking a J.D. were combined with individuals seeking an M.B.A and this group was contrasted against a group who would potentially seek a Ph.D. or a M.S., then there was a significant difference between the two groups. Notably, that the M.B.A/J.D. group had a much higher ASP score on average than the Ph.D./M.S. group. This finding, as contrasted with the absence of a finding with the group including M.D. hopefuls, is probably due to the difference between being interested in an occupation, and actually accomplishing that goal. Individuals who are high or low in Aberrant Self-Promotion both want to be doctors about the same amount. However, there is a difference in ASP scores for individuals who wish to become lawyers as compared to those seeking a Ph.D..

One possible explanation for these mixed findings would be that becoming a doctor, though requiring years of science-based education, many individuals may look past the work and only see the “coolness” of it. And, since filling out a future interest self-report survey doesn’t hurt, they might just put it down without thinking through their choice, or believing (correctly) that it is just an interest question, and hence there is no risk/cost for their choice. Additionally, freshmen and sophomores perhaps do have the “pie in the sky” or optimistic attitude that all things are possible without thinking of the accompanying work. Regardless, this hypothesis was not supported. What was supported, however, was a follow-up examination comparing two groups on Aberrant Self-Promotion. The first group was formed with the heavy science thought in mind (Ph.D. and M.S.) versus the second type of non-science degree (J.D. and M.B.A).

Another interesting finding was that there was a significant difference in graduate school goals in the low ASP scorer group as compared to the high ASP scorers. The low-

ASP group was more likely female and was less likely to seek an M.B.A/J.D. degree. This is in-line with the other findings noted in the current study.

In general, the current study provides limited evidence for the usefulness of the Holland Vocational Interest Inventory in predicting Aberrant Self-Promotion levels in a normal population. In the current study, where ASP was measured as a personality attribute presumed to be on a normal continuum, insight was gained as to how levels of ASP related to choice of majors, as well as to their interest in pursuing specific graduate school paths. A follow-up study might do well to focus on graduate/professional students themselves and measure the difference in levels of Aberrant Self-Promotion across graduate schools.

Finally, in regards to the research question examining how Holland scores (RIASEC), gender, degree sought (B.S., B.A.), Actual SAT total scores, actual high school GPA, as well as Machiavellianism scores were combined using regression to predict variance of Aberrant Self-Promotion scores, there were mixed results. Predictably, the variables which did not predict ASP scores (e.g. Holland Scores) did not play a statistically significant role in predicting ASP in the regression equation. The largest contributor was Machiavellianism, which is in-line with previous research. Overall, however, only 9% of the variance was accounted for with the multiple correlation coefficient of .306. The only other variable besides Machiavellianism to have a significant contribution was gender. This was disappointing, however, with follow-up analyses where the predictor variables were broken up into three unordered sets there were promising results. Again, the Holland set of variables (RIASEC) did not contribute significantly. The set of predictors which included gender, degree sought, actual SAT

total and actual high school GPA was significant, and Machiavellianism in its own group, was also significant. The conclusion drawn is that some of the fundamental predictors linked to real-world data, and not interests, are better suited for predicting Aberrant Self-Promotion. This conclusion is drawn from the findings of grade point averages and Machiavellianism scores being predictive of ASP, but Holland scores did not relate significantly to ASP at all. Holland's Vocational Interest measure is perhaps too far removed from the real-world to be useful in this context. In other words, examining real choices regarding vocation selection might better tie in the behavioral choice to choose a specific career path and link it to the underlying personality dimension of ASP.

#### *Limitations and Future Research*

The use of a student sample limits the generalizability of the current findings. Additionally, a student sample, especially with an average age of 19 years old, can be problematic when attempting to measure the attitudes of what job they might like in the future. This is especially true when linking it to a criterion, being high on Aberrant Self-Promotion, which has a low base-rate. As mentioned before, an older sample who are invested in either their occupation or at least in their graduate school would likely provide a more realistic appraisal of how personality variables such as Aberrant Self-Promotion are linked to real-world choices. Linked to this is the problem with the use of a sub-clinical measure of psychopathy in a non-clinical, fairly homogeneous college population, where the criterion of interest (ASP) has a low base-rate and individuals are still unsure of their future plans.

### *Implications*

A number of the potential theoretical and practical applications for the current study were supported. Of note was that Machiavellianism is indeed related significantly to predicting Aberrant Self-Promotion. Though not synonymous, it is an important link that in a normal population when examining vocational interests needed to be established. Another finding with potential application is that the self-report GPAs and the actual GPAs of the individual were not significantly different. This is interesting, especially in light of the foundation of the current study which is examining potentially negative personality variables. Apparently, when some data can be checked, GPAs may be slightly inflated, but not significantly so.

While many of the hypothesized results were modest or nonsignificant, the findings have a number of implications for future research. It appears, for example, that an individual's vocational interests are strong enough to be linked to strength of Aberrant Self-Promotion levels. This was demonstrated when those interested in attaining a M.B.A or J.D. were compared to those interested in earning a Ph.D. or a B.S.

For many reasons, the current study must be viewed as a preliminary step, awaiting additional investigations with other universities. It would also be beneficial to incorporate a longitudinal design to provide a firmer basis for any causal interpretation between ASP and any vocational choice. Finally, it should be noted that the present study failed to consider many variables such as actual job involvement and a direct measure of intelligence. Though SAT scores may be linked to crystallized intelligence, fluid intelligence was not necessarily tapped. This is a rich area for studying potentially negative personality variables and how intelligence can perhaps damper any noted



effects, if there are any. While the theoretical importance of such measures (intelligence and job involvement) is recognized and it is fully agreed that they should be included in future efforts, they were considered beyond the feasibility of the present endeavor.

Perhaps in a future study job involvement could be linked in a real-world job and ASP and then those job duties could be examined as reinforcements of particular behavioral attributes (e.g. a used car salesman manipulating a situation for gain). Such issues appear to be fruitful areas for future research addressing individual vocational interests and some of the darker areas of personality.

## REFERENCES

- American Psychological Association. (1981). Ethical principles of psychologists. *American Psychologist, 36*, 633-638.
- American Psychological Association. (1992). Ethical principles of psychologists and code of conduct. *American Psychologist, 47*, 1597-1611.
- Ansari, M. A., Baumgartel, H., & Sullivan, G. (1982). The personal orientation-organizational climate fit and managerial success. *Human Relations, 35(12)*, 1159-1178.
- Arney, L. K. (1988). Effects of personality-environment fit on job stress. *Educational and Psychological Research, 8(1)*, 1-18.
- Babiak, P. (1995). When Psychopaths go to work: A case study of an industrial psychopath. *Applied Psychology: An International Review, 44(2)*, 171-188.
- Bennett, R. J., & Robinson, S. L. (2000). Development of a measure of workplace deviance. *Journal of Applied Psychology, 85(3)*, 349-360.
- Betz, N. E., Fitzgerald, L. F., & Hill, R. E. (1989). Trait-factor theory: Traditional cornerstone of career theory. In M. B. Arthur, D. T. Hall, & B. S. Lawrence (Eds.), *Handbook of career theory*, (pp. 26-40). Cambridge: Cambridge University Press.
- Binning, J., & Barrett, G. (1989). Validity of personnel decisions: A conceptual analysis of the inferential and evidential bases. *Journal of Applied Psychology, 74(3)*, 478-494.
- Biscardi, D., & Schill, T. (1985). Correlations of narcissistic traits with defensive style, Machiavellianism, and empathy. *Psychological Reports, 57*, 354.

Blake, R. J., & Sackett, S. A. (1999). Holland's typology and the five-factor model: A rational-empirical analysis. *Journal of Career Assessment, 7*(3), 249-279.

Bolton, B. (1985). Discriminant analysis of Holland's occupational types using the sixteen personality factor questionnaire. *Journal of Vocational Behavior, 27*, 210-217.

Borman, W. C., Hanson, M. A., & Hedge, J. W. (1997). Personnel Selection. *Annual Review of Psychology, 48*, 299-337.

Bretz, R. D., & Judge, T. A. (1994). Person-organization fit and the theory of work adjustment: Implications for satisfaction, tenure, and career success. *Journal of Vocational Behavior, 44*, 32-54.

Burnett, J. J., Hunt, S. D., & Chonko, L. B. (1986). Machiavellianism across sexes: An examination of marketing professionals. *Psychological Reports, 59*, 991-994.

Cable, D. M., & Judge, T. A. (1996). Person-organization fit, job choice decisions, and organizational entry. *Organizational Behavior and Human Decision Processes, 67*(3), 294-311.

Calhoun, R. P. (1969). Niccoli Machiavelli and the twentieth century administrator. *Academy of Management Journal, 12*, 205-212.

Camara, W., & Schneider, D. (1995). Questions of construct breadth and openness of research in integrity testing. *American Psychologist, 50*(6), 459-460.

Carroll, L. (1987). A study of narcissism, affiliation, intimacy, and power motives among students in business administration. *Psychological Reports, 61*, 355-358.

Chartrand, J. M. (1991). The evolution of trait-and-factor career counseling: A person x environment fit approach. *Journal of Counseling & Development, 69*, 518-524.

Chatman, J. A. (1989). Improving interactional organizational research: A model of a person-organizational fit. *Academy of Management Review*, *14*, 333-349.

Chatman, J. A., & Barsade, A. G. (1995). Personality, organizational culture, and cooperation: Evidence from a business simulation. *Administrative Science Quarterly*, *40*, 423-443.

Chonko, L. B. (1982). Machiavellianism: Sex differences in the profession of purchasing management. *Psychological Reports*, *51*, 645-646.

Christie, R. (1970a) Why Machiavelli? In R. Christie & F. L. Geis (Eds.), *Studies in Machiavellianism* (pp. 1-9). New York: Academic Press.

Christie, R. (1970b) Scale Construction. In R. Christie & F. L. Geis (Eds.), *Studies in Machiavellianism* (pp. 10-34). New York: Academic Press.

Christie, R., & Geis, F. L. (1970) Implications and speculations. In R. Christie & F. L. Geis (Eds.), *Studies in Machiavellianism* (pp. 339-358). New York: Academic Press.

Cleckley, H. (1955). *The mask of sanity*. St. Louis: The C. V. Mosby Company.

Cleckley, H. (1976). *The mask of sanity (5th edn.)*. St. Louis: The C. V. Mosby Company.

Collins, M. D. (1998). Criminality in the corporate organization. In R. W. Griffin, A. O'Leary-Kelly, & J. M. Collins (Eds.), *Dysfunctional Behavior in Organizations: Violent and Deviant Behavior*, *23, Part B*, (pp. 1-20). Stamford, Jai Press, Inc.

Collins, J. M., & Griffin, R. W. (1998). The psychology of counterproductive job performance. In R. W. Griffin, A. O'Leary-Kelly, & J. M. Collins (Eds.), *Dysfunctional Behavior in Organizations: Violent and Deviant Behavior*, *23, Part B*, (pp. 219-242). Stamford, Jai Press, Inc.

- Cortina, J. (1993). What is coefficient alpha? An examination of theory and applications. *Journal of Applied Psychology, 78*(1), 98-104.
- Costa, P. T., McCrae, R. R., & Holland, J. L. (1984). Personality and vocational interests in an adult sample. *Journal of Applied Psychology, 69*(3), 390-400.
- Crocker, L., & Algina, J. (1986). *Introduction to Classical & Modern Test Theory*. New York: Harcourt Brace Javanovich College Publishers.
- Cronbach, L. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika, 16*, 297-334.
- Cronbach, L. (1960). *Essentials of Psychological Testing (2<sup>nd</sup> Ed.)*. U. Illinois.
- Dalton, D., & Metzger, M. (1993). "Integrity testing" for personnel selection: An unsparing perspective. *Journal of Business Ethics, 12*, 147-156.
- Damarin, F. L. (1998). Accuracy and exaggeration in occupational stereotypes exemplified with clinical psychology. *Journal of Vocational Behavior, 53*, 1-14.
- Day, D. V., & Bedeian, A. G. (1995). Personality similarity and work-related outcomes among African-American nursing personnel: A test of the supplementary model of person-environment congruence. *Journal of Vocational Behavior, 46*, 55-70.
- De Fruyt, F., & Mervielde, I. (1997). The five-factor model of personality and Holland's RIASEC interest types. *Personality and Individual Differences, 23*(1), 87-103.
- De Fruyt, F., & Mervielde, I. (1999). RIASEC types and Big Five traits as predictors of employment status and nature of employment. *Personnel Psychology, 52*(3), 701-727.

Erez, A., & Judge, T. A. (1997, April). *Psychological processes underlying the dispositional source of job satisfaction*. Poster session presented at the annual meeting of Society of Industrial Organizational Psychology, St. Louis.

Feldman, D. C. (1988). *Managing careers in organizations*. (pp. 27-43). Glenview, IL: Scott Foresman.

Ferris, G. R., Youngblood, S. A., & Yates, V. L. (1985). Personality, training performance, and withdrawal: A test of the person-group fit hypothesis for organizational newcomers. *Journal of Vocational Behavior, 27*, 377-388.

Forth, A. E., Brown, S. L., Hart, A. D., & Hare, R. D. (1996). The assessment of psychopathy in male and female noncriminals: Reliability and validity. *Personality & Individual Differences, 20*(5), 531-543.

Furnham, A., Toop, A., Lewis, C., & Fisher, A. (1995). P-E fit and job satisfaction: A failure to support Holland's theory in three British samples. *Personality & Individual Differences, 19*(5), 677-690.

Gable, M., & Dangelo, F. (1994). Locus of control, Machiavellianism, and managerial job performance. *Journal of Psychology, 128* (5), 599-608.

Gable, M., Hollon, C., & Dangelo, F. (1992). Managerial structuring of work as a moderator of the Machiavellianism and job performance relationship. *Journal of Psychology, 126*(3), 317-325.

Gable, M., & Topol, M. T. (1987). Job satisfaction and Machiavellian orientation among department store executives. *Psychological Reports, 60*, 211-216.

Gable, M., & Topol, M. T. (1988). Machiavellianism and the department store executive. *Journal of Retailing, 64*(1), 68-84.

Gacono, C. B., & Hutton, H. E. (1994). Suggestions for the clinical and forensic use of the Hare psychopathy checklist-revised (PCL-R). *International Journal of Law and Psychiatry*, *17*(3), 303-317.

Gatewood, R. D., & Feild, H. S., (1998). *Human Resource Selection*. New York: Dryden Press.

Geis, F. L., & Christie, R. (1970) Overview of experimental research. In R. Christie & F. L. Geis (Eds.), *Studies in Machiavellianism* (pp. 285-313). New York: Academic Press.

Gifford, R. (1981). Sociability: Traits, settings, and interactions. *Journal of Personality and Social Psychology*, *41*(2), 340-347.

Gilmore, D. C., & Ferris, G. R. (1989). The effects of applicant impression management tactics on interviewer judgments. *Journal of Management*, *15*(4), 557-564.

Glick, P., Wilk, K., & Perreault, M. (1995). Images of occupations: Components of gender and status in occupational stereotypes. *Sex Roles*, *32*, 565-582.

Gottfredson, L. (1981). Circumscription and compromise: A developmental theory of occupational aspirations. *Journal of Counseling Psychology*, *28*, 545-580.

Gottfredson, G. D., & Holland, J. L. (1996). *Dictionary of Holland Occupational Codes (3<sup>rd</sup> Ed.)*. United States: Psychological Assessment Resources, Inc.

Gottfredson G.D., Jones, E. M., & Holland, J. L. (1993). Personality and vocational interests: The relation of Holland's six interest dimensions to five robust dimensions of personality. *Journal of Counseling Psychology*, *40*(4), 518-524.

Greenwald, A. G., & Banaji, M. R. (1995). Implicit social cognition: Attitudes, self-esteem, and stereotypes. *Psychological Review*, *102*, 4-27.

Griffin, R. W., O'Leary-Kelly, A., & Collins, J. M. (1998a). Introduction. In R. W. Griffin, A. O'Leary-Kelly, & J. M. Collins (Eds.), *Dysfunctional Behavior in Organizations: Violent and Deviant Behavior, 23, Part A*, (pp. xix-xxiii). Stamford, Jai Press, Inc.

Griffin, R. W., O'Leary-Kelly, A., & Collins, J. M. (1998b). Introduction. In R. W. Griffin, A. O'Leary-Kelly, & J. M. Collins (Eds.), *Dysfunctional Behavior in Organizations: Violent and Deviant Behavior, 23, Part B*, (pp. xix-xxi). Stamford, Jai Press, Inc.

Guion, R. M. (1991). Personnel assessment, selection, and placement. In M. D. Dunnette & L. M. Hough (Eds.), *Handbook of industrial and organizational psychology*, (pp. 327-397). Palo Alto, CA: Consulting Psychologists Press, Inc.

Guion, R. M., & Gottier, R. F. (1965). Validity of personality measures in personnel selection. *Personnel Psychology, 18*, 135-164.

Gupta, M. D. (1987). Machiavellianism of different occupational groups. *Indian Journal of Psychometry & Education (Abstract), 18(2)*, 61-66.

Gustafson, S. B. (1997). *Personality and organizational destructiveness: Fact, fiction, and fable*. Paper presented at *Developmental science and the holistic approach: A symposium followed up at the Royal Swedish Academy of Sciences*, Stockholm, Sweden, May 24-28, 1997. Gustafson, S. B. (1998). *Personality and leadership: Machiavellian but not destructive*. Paper presented at *Society of Industrial Organizational Psychology*, Dallas, TX, Spring, 1998.

Gustafson, S. B. (2000a). *Out of their own mouths II: Continuing evidence for the validity of a conditional reasoning instrument for identifying aberrant self-promoters*.



Paper presented at *Society of Industrial Organizational Psychology*, New Orleans, LA, April 15, 2000.

Gustafson, S. B. (2000b). Personality and organizational destructiveness: Fact, fiction, and fable. In Bergman L. R., Cairns, R. B., Nilsson, L. G., & Nystedt, L. (Eds.), *Developmental Science and the Holistic Approach*, (pp. 299-313). Mahwah, NJ: Erlbaum.

Gustafson, S. B., & Ritzer, D. R. (1995). The dark side of normal: A psychopathy-linked pattern called Aberrant Self-Promotion. *European Journal of Personality*, 9, 147-183.

Hare, R. D. (1991). *The Hare Psychopathy Checklist-Revised (PCL-R)*. New York: Multi-Health Systems.

Harpur, T. J., Hare, R. D., & Hakstian, A. R. (1989). Two-factor conceptualization of psychopathy: Construct validity and assessment implications. *Psychological Assessment*, 1(1), 6-17.

Hart, S. D., & Hare, R. D. (1989). Discriminant validity of the psychopathy checklist in a forensic psychiatric population. *Psychological Assessment*, 1(3), 211-218.

Hart, S. D., Hare, R. D., & Harpur, T. J. (1992). The Psychopathy Checklist-Revised (PCL-R): An overview for researchers and clinicians. In Hare, R. *The Hare Psychopathy Checklist-Revised (PCL-R)*. (pp. 103-129). New York: Multi-Health Systems.

Heilbrun, A. B. (1982). Cognitive models of criminal violence based upon intelligence and psychopathy levels. *Journal of Consulting and Clinical Psychology*, 50, 546-557.

Hogan, R. T. (1991). Personality and personality measurement. In M. D. Dunnette & L. M. Hough (Eds.), *Handbook of industrial and organizational psychology*, (pp. 327-397). Palo Alto, CA: Consulting Psychologists Press, Inc.

Hogan, R., & Blake, R. (1996). Vocational interests: Matching self-concept with the work environment. In K. R. Murphy (Ed.), *Individual Differences in Behavior in Organizations*, (pp. 89-144). San Francisco: Jossey Bass.

Hogan, R., & Blake, R. (1999). John Holland's vocational typology and personality theory. *Journal of Vocational Behavior*, 55(1), 41-56.

Hogan, J., Hogan, R., & Busch, C. M. (1984). How to measure service orientation. *Journal of Applied Psychology*, 69(1), 167-173.

Hogan, J., Raskin, R., & Fazzini, D. (1990). The dark side of charisma. In K. Clark (Ed.), *Measures of leadership* (pp. 343-354). Miriam.

Holland, J. L. (1963a). A theory of vocational choice part I: Vocational images and choice. *Vocational Guidance Quarterly*, 11(4), 232-239.

Holland, J. L. (1963b). A theory of vocational choice part II: Self-descriptions and vocational preferences. *Vocational Guidance Quarterly*, 12(1), 17-21.

Holland, J. L. (1963c). A theory of vocational choice part III: Coping behavior, competencies, and vocational preferences. *Vocational Guidance Quarterly*, 12(1), 21-24.

Holland, J. L. (1963d). A theory of vocational choice part IV: Vocational daydreams. *Vocational Guidance Quarterly*, 12(2), 93-97.

Holland, J. L. (1973). *Making vocational choices: A theory of careers*. Englewood Cliffs, NJ: Prentice Hall.

Holland, J. L. (1997). *Making vocational choices: A theory of vocational personalities and work environments (3<sup>rd</sup> ed.)*. Odessa, FL: Psychological Assessment Resources, Inc.

Hollinger, R. C. (1986). Acts against the workplace: Social bonding and employee deviance. *Deviant Behavior, 7*, 53-75.

Jackson, S. E., Brett, J. F., Sessa, V. I., Cooper, D. M., Julin, J. A., & Peyronnin, K. (1991). Some differences make a difference: Individual dissimilarity and group heterogeneity as correlates of recruitment, promotions, and turnover. *Journal of Applied Psychology, 76(5)*, 675-689.

James, L. R. (1998). Measurement of personality via conditional reasoning. *Organizational Research Methods, 1(2)*, 131-163.

Judd, C. M., & Park, B. (1993). Definition and assessment of accuracy in social stereotypes. *Psychological Review, 100(1)*, 109-128.

Judge, T. A., & Bretz, R. D. (1994). Political Influence behavior and career success. *Journal of Management, 20(1)*, 43-65.

Judge, T. A., & Cable, D. M. (1997). Applicant personality, organizational culture, and organization attraction. *Personnel Psychology, 50*, 359-394.

Kenrick, D. T., McCreath, H. E., Govern, J., King, R., & Bordin, J. (1990). Person-environment intersections: Everyday settings and common trait dimensions. *Journal of Personality and Social Psychology, 58(4)*, 685-698.

Kets de Vries, M. F. R. (1991). On becoming a CEO: Transference and the addictiveness of power. In M.F.R. Kets de Vries & D. Miller (Eds.), *Organizations on the*

*couch - Clinical perspectives on organizational behavior and change*, (pp. 120-139). San Francisco: Jossey-Bass Publishers.

Kets de Vries, M. F. R., & Miller, D. (1985). Narcissism and leadership: An object relations perspective. *Human Relations*, 38(6), 583-601.

Kilduff, M., & Day, D. V. (1994). Do chameleons get ahead: The effects of self-monitoring on managerial careers. *Academy of Management Journal*, 37(4), 1047-1060.

Kirton, M. J., & McCarthy, R. M. (1988). Cognitive climate and organizations. *Journal of Occupational Psychology*, 61, 175-184.

Kovach, B. E. (1986). The derailment of fast-track managers. *Organizational Dynamics*, 15(2), 41-48.

Kroner, D. G., & Weekes, J. R. (1996). Balances inventory of desirable responding: Factor structure, reliability, and validity with an offender sample. *Personality & Individual Differences*, 21(3), 323-333.

Lennox, R. D., & Wolfe, R. N. (1984). Revision of the self-monitoring scale. *Journal of Personality and Social Psychology*, 46(6), 1349-1364.

Lilienfeld, S. O., & Andrews, B. P. (1996). Development and preliminary validation of a self-report measure of psychopathic personality traits in noncriminal populations. *Journal of Personality Assessment*, 66(3), 488-524.

Lindholdm, B. W., & Touliatos, J. (1995). Personality traits and curricular choices of undergraduate women in home economics. *Psychological Reports*, 76, 579-586.

Lovelace, K., & Rosen, B. (1996). Differences in achieving person-organization fit among diverse groups of managers. *Journal of Management*, 22(5), 703-722.

Mack, D. A., Shannon, C., Quick, J. D., & Quick, J. C. (1998). Stress and the preventative management of workplace violence. In R. W. Griffin, A. O'Leary-Kelly, & J. M. Collins (Eds.), *Dysfunctional Behavior in Organizations: Violent and Deviant Behavior*, 23, Part A, (pp. 119-141). Stamford, Jai Press, Inc.

Marcic, D., Aiuppa, T. A., & Watson, J. G. (1989). Personality type, organizational norms and self-esteem. *Psychological Reports*, 65, 915-919.

Martin, D. C., & Bartol, K. M. (1986). Holland's vocational preference inventory and the Myers-Brigg type indicator as predictors of vocational choice among master's of business administration. *Journal of Vocational Behavior*, 29, 51-65.

Martinko, M. J., & Zellars, K. L. (1998). Toward a theory of workplace violence and aggression: A cognitive appraisal perspective. In R. W. Griffin, A. O'Leary-Kelly, & J. M. Collins (Eds.), *Dysfunctional Behavior in Organizations: Violent and Deviant Behavior*, 23, Part A, (pp. 1-42). Stamford, Jai Press, Inc.

Maxwell, S. E. (2000). Sample size and multiple regression analysis. *Psychological Methods*, 5(4), 434-458.

McHoskey, J. (1995). Narcissism and Machiavellianism. *Psychological Reports*, 77, 755-759.

McHoskey, J. W., Worzel, W., & Szyarto, C. (1998). Machiavellianism and psychopathy. *Journal of Personality and Social Psychology*, 74(1), 192-210.

Miranda, A. O., Goodman, E. D., & Kern, R. M. (1996). Similarities between social interest and contemporary definitions of corporate leadership. *Individual Psychology*, 52(3), 261-269.

- Moore, S., & Katz, B. (1995). Machiavellian scores of nursing faculty and students. *Psychological Reports, 77*(2), 383-386.
- Moore, S., Katz, B., & Holder, J. (1995). Machiavellianism and medical career choices. *Psychological Reports, 76*, 803-807.
- Muchinsky, P. M., & Monahan, C. J. (1987). What is person-environment congruence? Supplementary versus complementary models of fit. *Journal of Vocational Behavior, 31*, 268-277.
- Murphy, K. R. (1993). *Honesty in the Workplace*. Pacific Grove, CA: Brooks/Cole.
- Okanes, M. M., & Murray, W. (1980). Achievement and Machiavellianism among men and women managers. *Psychological Reports, 46*, 783-788.
- Ones, D., & Viswesvaran, C. (1993). The effects of social desirability and faking on personality and integrity assessment for personnel selection. *Human Performance, 11*(2-3), 245-269.
- Ones, D., Viswesvaran, C., & Schmidt, F. (1993). Comprehensive meta-analysis of integrity test validities: Findings and implications for personnel selection and theories of job performance. *Journal of Applied Psychology, 78*(4), 679-703.
- O'Reilly, C. A., Caldwell, D. F., & Barnett, W. P. (1989). Work group demography, social integration, and turnover. *Administrative Science Quarterly, 34*(1), 21-37.
- O'Reilly, C. A., Chatman, J., & Caldwell, D. F. (1991). People and organizational culture: A profile comparison approach to assessing person-organization fit. *Academy of Management Journal, 34*(3), 487-516.

Organ, D. W., & Konovsky, M. (1989). Cognitive versus affective determinants of organizational citizenship behavior. *Journal of Applied Psychology, 74*(1), 157-164.

Paetzold, R. L. (1998). Workplace violence and employer liability: Implications for organizations. In R. W. Griffin, A. O'Leary-Kelly, & J. M. Collins (Eds.), *Dysfunctional Behavior in Organizations: Violent and Deviant Behavior, 23, Part A*, (pp. 143-164). Stamford, Jai Press, Inc.

Paulhus, D. L., & Reid, D. B. (1991). Enhancement and denial in socially desirable responding. *Journal of Personality and Social Psychology, 60*(2), 307-317.

Pervin, L. A. (1989). Persons, situations, interactions: The history of a controversy and a discussion of theoretical models. *Academy of Management Review, 14*, 350-360.

Peters, C. L., Yates, J. L., & Glisson, C. (1997, April). *The influence of organizational culture on job satisfaction and burnout*. Poster session presented at the annual meeting of Society of Industrial Organizational Psychology, St. Louis.

Pfeffer, J. (1983). Organizational demography. *Research in Organizational Behavior, 5*, 299-357.

Prediger, D. J., Vansickle, T. R. (1992). Locating occupations on Holland's hexagon: Beyond RIASEC. *Journal of Vocational Behavior, 40*, 111-128.

Raskin, R. N., & Hall, C. S. (1979). A narcissistic personality inventory. *Psychological Reports, 45*, 590.

Raskin, R. N., & Hall, C. S. (1981). The narcissistic personality inventory: Alternate form reliability and further evidence of construct validity. *Journal of Personality Assessment, 45*(2), 159-162.

Raskin, R., Novacek, J., & Hogan, R. (1991). Narcissism, self-esteem, and defensive self-enhancement. *Journal of Personality, 59*(1), 19-38.

Raskin, R., & Terry, H. (1988). A principal-components analysis of the narcissistic personality inventory and further evidence of its construct validity. *Journal of Personality and Social Psychology, 54*(5), 890-902.

Rezler, A. G., & Buckley, J. M. (1977). A comparison of personality types among female student health professionals. *Journal of Medical Education, 52*(6), 475-477.

Robinson, S. L., & Bennett, R. J. (1995). A typology of deviant workplace behaviors: A multi-dimensional scaling study. *Academy of Management Journal, 38*, 555-572.

Robinson, S. L., & Bennett, R. J. (1997). Workplace deviance: Its definition, its manifestations, and its causes. In R. J. Lewicki & R. J. Bies (Eds.), *Research on Negotiation in Organizations, 6* (pp.3-27). Greenwich: Jai Press, Inc.

Sackett, P., Burris, L., & Callahan, C. (1989). Integrity testing for personnel selection: An update. *Personnel Psychology, 42*, 491-528.

Sackett, P. R., Gruys, M. L., & Ellingson, J. E. (1998). Ability-personality interactions when predicting job performance. *Journal of Applied Psychology, 83*(4), 545-556.

Sackett, P. R., & Harris, M. M. (1984). Honesty testing for personnel selection: A review and critique. *Personnel Psychology, 37*, 221-245.

Schein, V. E., & Diamante, T. (1988). Organizational attraction and the person-environment fit. *Psychological Reports, 62*, 167-173.



Schmidt, F. L., & Hunter, J. E. (1998). The validity and utility of selection methods in personnel psychology: Practical and theoretical implications of 85 years of research findings. *Psychological Bulletin*, *124*(2), 262-274.

Schneider, B. (1987). The people make the place. *Personnel Psychology*, *40*, 437-453.

Schneider, B. (1996). Whither goest personality at work: Overview of the special issue on "work and personality". *Applied Psychology: An International Review*, *45*(3), 289-296.

Schneider, B., Goldstein, H. W., & Smith, D. B. (1995). The ASA framework: An update. *Personnel Psychology*, *48*, 747-773.

Schneider, B., & Schneider, J. L. (1994). Biodata: An organizational focus. In G. S. Stokes, M. Mumford, & W. A. Owens (Eds.), *Biodata Handbook* (pp. 423-450). Palo Alto, CA: Consulting Psychologists Press.

Sedge, S. K. (1985). A comparison of engineers pursuing alternate career paths. *Journal of Vocational Behavior*, *27*, 56-70.

Semmer, N. & Schallberger, U. (1996). Selection, socialization, and mutual adaptation: Resolving discrepancies between people and work. *Applied Psychology: An International Review*, *45*(3), 263-288.

Smith, M. (1994). A theory of the validity of predictors in selection. *Journal of Occupational and Organizational Psychology*, *67*, 13-31.

Strack, S. (1994). Relating Millon's basic personality styles and Holland's occupational types. *Journal of Vocational Behavior*, *45*, 41-54.

Sutker, P. B., & Allain, A. N. (1983). Behavior and personality assessment in men labeled adaptive sociopaths. *Journal of Behavioral Assessment, 5*(1), 65-79.

Tokar, D. M., & Swanson, J. L. (1995). Evaluation of the correspondence between Holland's vocational personality typology and the five-factor model of personality. *Journal of Vocational Behavior, 46*, 89-108.

Topol, M. T., & Gable, M. (1988). Job satisfaction and Machiavellian orientation among discount store executives. *Psychological Reports, 62*, 907-912.

Wertheim, E. G., Widom, C. S., & Wortzel, L. H. (1978). Multivariate analysis of male and female professional career choice correlates. *Journal of Applied Psychology, 63*(2), 234-242.

Widiger, T. A., & Frances, A. (1987). Interviews and inventories for the measurement of personality disorders. *Clinical Psychology Review, 7*, 49-75.

Widom, C. S. (1977). A methodology for studying noninstitutionalized psychopaths. *Journal of Consulting and Clinical Psychology, 45*(4), 674-683.

Yukl, G., & Tracey, J. B. (1992). Consequences of influence tactics used with subordinates, peers, and the boss. *Journal of Applied Psychology, 77*(4), 525-535.

Table 1

*Items in the Psychopathy Checklist-Revised (Hare, 1991)*

Description
Factor 1 (Primary Psychopathy): Personality variables- An insensitivity to others
<ul style="list-style-type: none"> <li>Glibness/superficial charm</li> <li>Egocentricity/grandiose sense of self-worth</li> <li>Pathological lying and deception</li> <li>Conning/lack of sincerity</li> <li>Lack of remorse or guilt</li> <li>Lack of affect and emotional depth</li> <li>Callous/lack of empathy</li> <li>Failure to accept responsibility for own actions</li> <li>Drug or alcohol not direct cause of antisocial behavior</li> </ul>
Factor 2 (Secondary Psychopathy): Overt social deviancy and unstable life-style
<ul style="list-style-type: none"> <li>Proneness to boredom/low frustration tolerance</li> <li>Parasitic life-style</li> <li>Short-tempered/poor behavior controls</li> <li>Early behavior problems</li> <li>Lack of realistic long-term plans</li> <li>Impulsivity</li> <li>Irresponsible behavior as a parent</li> <li>Frequent marital relationships</li> <li>Juvenile delinquency</li> <li>Poor probation or parole risk</li> </ul>
Extra items loading on both factors
<ul style="list-style-type: none"> <li>Sex life impersonal &amp; poorly integrated</li> <li>Criminal versatility/many types of offense</li> <li>Many short-term marital relationships</li> </ul>

Table 2

*Final Interpersonal and Organizational Deviance Scale Items (Bennett & Robinson, 2000)*

Item	Measure
Interpersonal Deviance	
Made fun of someone at work	
Said something hurtful to someone at work	
Made an ethnic, religious, or racial remark at work	
Cursed at someone at work	
Played a mean prank on someone at work	
Acted rudely toward someone at work	
Publicly embarrassed someone at work	
Organizational Deviance	
Taken property from work without permission	
Spent too much time fantasizing or daydreaming instead of working	
Falsified a receipt to get reimbursed for more money than you spent on business expenses	
Taken an additional or longer break than is acceptable at your workplace	
Come in late to work without permission	
Littered your work environment	
Neglected to follow your boss's instructions	
Intentionally worked slower than you could have worked	
Discussed confidential company information with an unauthorized person	
Used an illegal drug or consumed alcohol on the job	
Put little effort into your work	
Dragged out work in order to get overtime	

Table 3

*Dimensions Often Reported in Factor Analyses of Integrity Tests*

- 
1. Perceived incidence of dishonesty: Less honest individuals are likely to report a higher incidence of dishonest behavior.
  2. Leniency toward dishonest behavior: Less honest individuals are more likely to forgive or excuse dishonest behavior.
  3. Theft rationalization: Less honest individuals are likely to come up with more excuses or reasons for theft.
  4. Theft Temptation or rumination: Less honest individuals are likely to think about theft.
  5. Norms regarding dishonest behavior: Less honest individuals are likely to view dishonest behavior as acceptable.
  6. Impulse control: Less honest individuals are likely to act on their impulses.
  7. Punitiveness toward self or others: Less honest individuals are likely to have more punitive attitudes.
- 

Table Reprinted from Murphy (1993)

Table 4

*Integrity Testing and the Validity Base-Rate Problem*

Validity of Procedure Base Rate	# Tested	Applicants w/Behavior	Applicants True w/o	True (+)s	False (+)s	% Correct	
0.90	0.01	10000	100	9900	90	990	8.3%
0.75	0.01	10000	100	9900	75	2475	2.9%
0.50	0.01	10000	100	9900	50	4950	1.0%
0.25	0.01	10000	100	9900	25	7425	0.3%
0.90	0.05	10000	500	9500	450	950	32.1%
0.75	0.05	10000	500	9500	375	2375	13.6%
0.50	0.05	10000	500	9500	250	4750	5.0%
0.25	0.05	10000	500	9500	125	7125	1.7%
0.90	0.10	10000	1000	9000	900	900	50.0%
0.75	0.10	10000	1000	9000	750	2250	25.0%
0.50	0.10	10000	1000	9000	500	4500	10.0%
0.25	0.10	10000	1000	9000	250	6750	3.6%
0.90	0.15	10000	1500	8500	1350	850	61.4%
0.75	0.15	10000	1500	8500	1125	2125	34.6%
0.50	0.15	10000	1500	8500	750	4250	15.0%
0.25	0.15	10000	1500	8500	375	6375	5.6%

Table Reprinted from Dalton & Metzger (1993)

Table 5

*Correlations of Variables*

Variable	Mean	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1) ASP	6.25	2.03	1.0													
2) Mach	54.1	6.34	<u>.21</u>	1.0												
3) SAT-T	1183.4	116.1	.01	.07	1.0											
4) SAT-V	587.3	69.6	.02	.04	<u>.85</u>	1.0										
5) SAT-M	596.1	67.3	.00	.08	<u>.84</u>	<u>.44</u>	1.0									
6) HSGPA	3.54	.35	<b>-.10</b>	<u>-.14</u>	<b>.12</b>	<b>.11</b>	.09	1.0								
7) Holl-R	18.5	10.3	<b>.11</b>	.09	-.01	-.07	.05	<u>-.14</u>	1.0							
8) Holl-I	23.6	8.8	.07	.04	<u>.17</u>	.05	<u>.23</u>	<u>.14</u>	<u>.32</u>	1.0						
9) Holl-A	23.7	11.0	.01	.08	<u>.20</u>	<u>.30</u>	.04	.00	.01	.07	1.0					
10) Holl-S	30.4	8.8	-.08	<u>-.15</u>	-.03	.08	<b>-.12</b>	-.01	<u>-.14</u>	-.03	<u>.35</u>	1.0				
11) Holl-E	28.4	10.7	.00	.03	-.01	-.02	-.01	-.03	<u>.24</u>	-.08	.04	<u>.27</u>	1.0			
12) Holl-C	18.9	8.4	-.05	-.04	.00	-.05	.05	.05	<u>.20</u>	.07	-.04	.09	<u>.51</u>	1.0		
13) Sex			<u>-.20</u>	<u>-.24</u>	<u>-.14</u>	-.02	<u>-.22</u>	<b>.11</b>	<u>-.56</u>	<u>-.18</u>	<b>.10</b>	<u>.38</u>	<b>-.13</b>	.03	1.0	
14) Degree Sought			.08	.04	<u>.19</u>	<u>.18</u>	<u>.15</u>	-.07	-.09	<u>-.38</u>	<b>.11</b>	.01	<u>.24</u>	.09	.04	1.0

Note: N = 369-400 due to missing data. Bold indicates  $p < .05$ . Underscore indicates  $p < .01$  (2-tailed test).

Table 6

*Correlations of Holland Scores*

Holland Type	Mean	SD	R	I	A	S	E	C
Realistic	18.5	10.3	-					
Investigative	23.6	8.8	<u>.32</u>	-				
Artistic	23.7	11.0	.01	.07	-			
Social	30.4	8.8	<u>-.14</u>	-.03	<u>.35</u>	-		
Enterprising	28.4	10.7	<u>.24</u>	-.08	.04	<u>.27</u>	-	
Conventional	18.9	8.4	<u>.20</u>	.07	-.04	.09	<u>.51</u>	-

Note: N = 399-400 due to missing data. Bold indicates  $p < .05$ . Underscore indicates  $p < .01$ .



Table 7

*Correlations of Holland Scores with Machiavellian and Aberrant Self-Promotion*

Holland Score	ASP	Machiavellianism
Realistic	<b>.11</b>	<b>.09</b>
Investigative	.07	.04
Artistic	.01	.08
Social	-.08	<u>-.15</u>
Enterprising	.00	.03
Conventional	-.05	-.04

Note: N = 399-400 due to missing data. Bold indicates  $p < .05$ . Underscore indicates  $p < .01$ .

Table 8

*Correlations of GPA scores (self-report and actual)*

GPA Type	Mean	SD	1	2	34
1) high school self-report	3.67	.32	-		
2) high school actual	3.55	.35	<u>.82</u>	-	
3) college self-report	3.15	.48	<u>.30</u>	<u>.39</u>	-
4) college actual	3.11	.53	<b>.13</b>	<b>.12</b>	<u>.27</u>

Note: N = 298-386 due to missing data. Bold indicates  $p < .05$ . Underscore indicates  $p < .01$  (2-tailed test).

Table 9

*Correlations of SAT scores (self-report and actual)*

SAT Type	Mean	SD	1	2	3	4	5	6
1) SAT total self-report	1191	120	-					
2) SAT total actual	1183	116	<u>.90</u>	-				
3) SAT math self-report	606	71	<u>.77</u>	<u>.74</u>	-			
4) SAT math actual	596	67	<u>.72</u>	<u>.84</u>	<u>.92</u>	-		
5) SAT verbal self-report	599	75	<u>.80</u>	<u>.77</u>	<u>.26</u>	<u>.35</u>	-	
6) SAT verbal actual	587	70	<u>.78</u>	<u>.85</u>	<u>.35</u>	<u>.44</u>	<u>.95</u>	-

Note: N = 295-385 due to missing data. Bold indicates  $p < .05$ . Underscore indicates  $p < .01$  (2-tailed test).

Table 10

*Summary of Regression Analyses for Variables Predicting ASP Scores*

Variable	<i>b</i>	<i>SE<sub>b</sub></i>	$\beta$	<i>p</i>	<i>R</i> <sup>2</sup>
1) Holl-R	.008	.015	.041	.59	
2) Holl-I	.02	.016	.081	.22	
3) Holl-A	.0006	.011	.003	.96	
4) Holl-S	.006	.016	.027	.67	
5) Holl-E	-.007	.014	-.035	.64	
6) Holl-C	-.01	.016	-.052	.43	
7) HS GPA	-.377	.328	-.067	.25	
8) SAT total	-.00004	.001	-.002	.97	
9) Machiavellianism	<u>.052</u>	.018	<u>.164</u>	<u>.006</u>	
10) Sex	-.57	.312	-.138	.07	
11) Degree	.425	.268	.103	.11	
					<u>.094</u>

Note: N = 315 due to missing data. Underlined *p* < .01.

Table 11

## The Bivariate and Partial Correlations of the Predictors with ASP

Predictors	Correlation between each predictor and ASP	Correlation between each predictor and ASP controlling for all other predictors
Holland R	.14	.03
Holland I	.08	.07
Holland A	.03	.00
Holland S	-.07	.02
Holland E	.01	-.03
Holland C	-.06	-.05
Actual HS GPA	-.11	-.07
Actual SAT total	.05	-.00
Machiavellianism	<u>.22</u>	.16
Sex	<b>-.22</b>	-.10
B.S./B.A. degree sought	.07	.09

Bold indicates  $p < .05$ . Underscore indicates  $p < .01$  (2-tailed test).

Table 12

*Summary of Regression with Variables entered in Groups.*

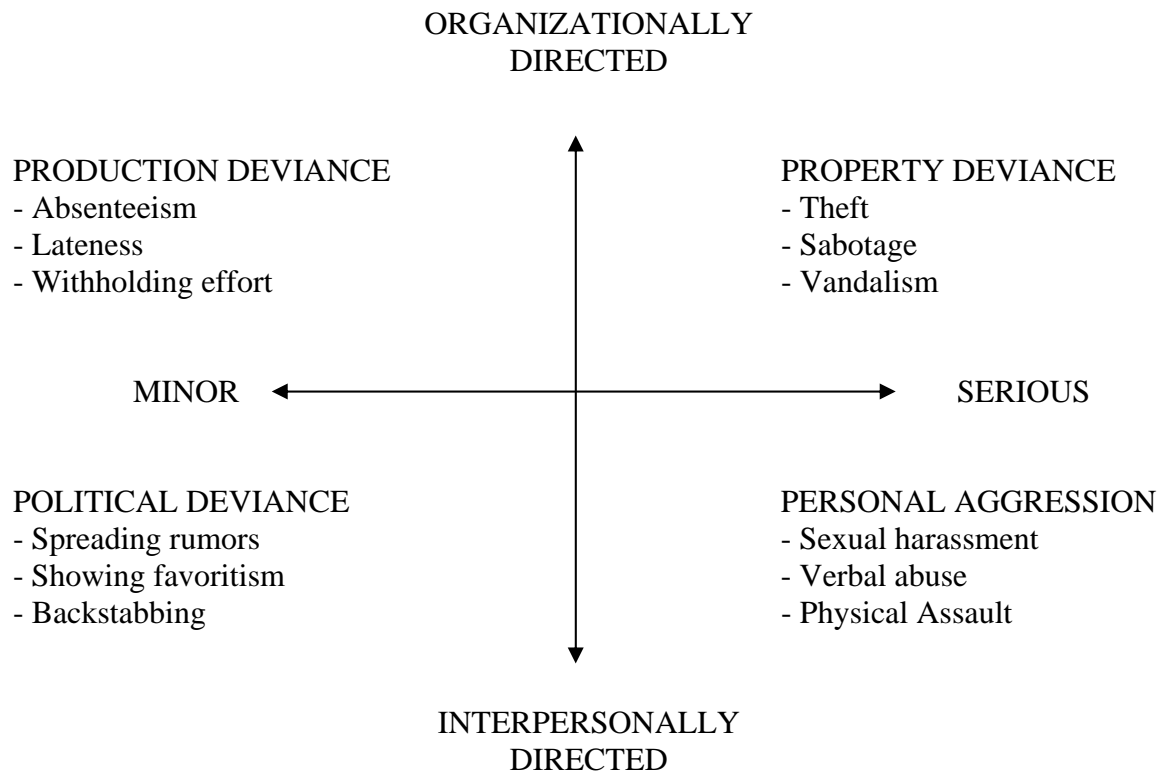
Variable	<i>b</i>	<i>SE<sub>b</sub></i>	$\beta$	<i>p</i>	<i>R</i> <sup>2</sup>
<b>Model 1</b>					
1) Holl-R	<b>.025</b>	.012	<b>.128</b>	<b>.05</b>	
2) Holl-I	.011	.014	.045	.46	
3) Holl-A	.008	.011	.043	.48	
4) Holl-S	-.017	.015	-.074	.26	
5) Holl-E	.009	.014	.049	.50	
6) Holl-C	-.023	.016	-.097	.14	
					.034
<b>Model 2</b>					
1) Holl-R	.004	.015	.021	.78	
2) Holl-I	.022	.016	.094	.16	
3) Holl-A	.005	.011	.029	.64	
4) Holl-S	-.0003	.016	-.001	.98	
5) Holl-E	-.001	.014	-.006	.94	
6) Holl-C	-.016	.016	-.067	.31	
7) HS GPA	-.512	.328	-.090	.12	
8) SAT total	-.00001	.001	-.001	.99	
9) Sex	<b>-.735</b>	.310	<b>-.180</b>	<b>.02</b>	
10) Degree	.392	.271	.095	.15	
					.071
<b>Model 3</b>					
1) Holl-R	.008	.015	.041	.59	
2) Holl-I	.019	.016	.081	.22	
3) Holl-A	.0006	.011	.003	.96	
4) Holl-S	.006	.016	.027	.70	
5) Holl-E	-.006	.014	-.035	.64	
6) Holl-C	-.012	.016	-.052	.43	
7) HS GPA	-.377	.328	-.066	.25	
8) SAT total	-.00004	.001	-.002	.97	
9) Sex	-.566	.312	-.138	.07	
10) Degree	.425	.268	.103	.11	
11) Machiavellianism	<u>.052</u>	.018	<u>.164</u>	<u>.01</u>	
					.094

Note: N = 316 due to missing data. Bold =  $p < .05$ . Underlined =  $p < .01$ .

Figure 1

A Typology of Types of Deviance

---

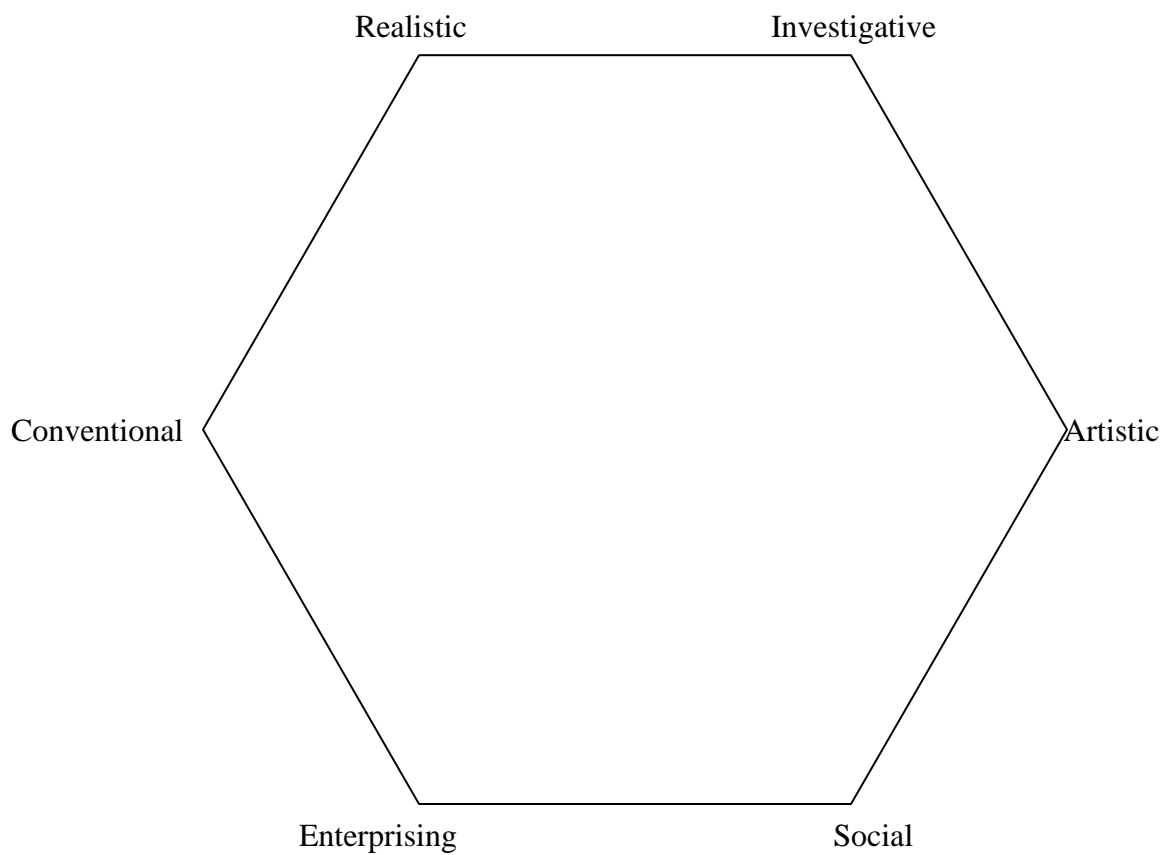


---

Reproduced from Robinson and Bennett (1997, p. 8)

Figure 2

A Hexagon Summarizing Relations Among Environmental and Personality Types.



---

Reproduced from the Dictionary of Holland Occupational Codes (Gottfredson & Holland, 1996, p. 7).



Figure 3

Types of Integrity Tests and Criteria Used for Validation

---

		Test Type	
		Overt integrity (e.g., Reid Report, Stanton Survey, London House Personnel Selection Inventory I)	Personality-based (e.g., Personnel Reaction Blank, Hogan Reliability Scale, PDI Employment)
Criterion Type (Narrow vs. Broad)			
Criterion Type (Narrow vs. Broad)	Narrow Criterion	1 Narrow (e.g., theft)	2 Narrow (e.g., theft)
	Broad Criterion	3 Broad (e.g., performance)	4 Broad (e.g., performance)

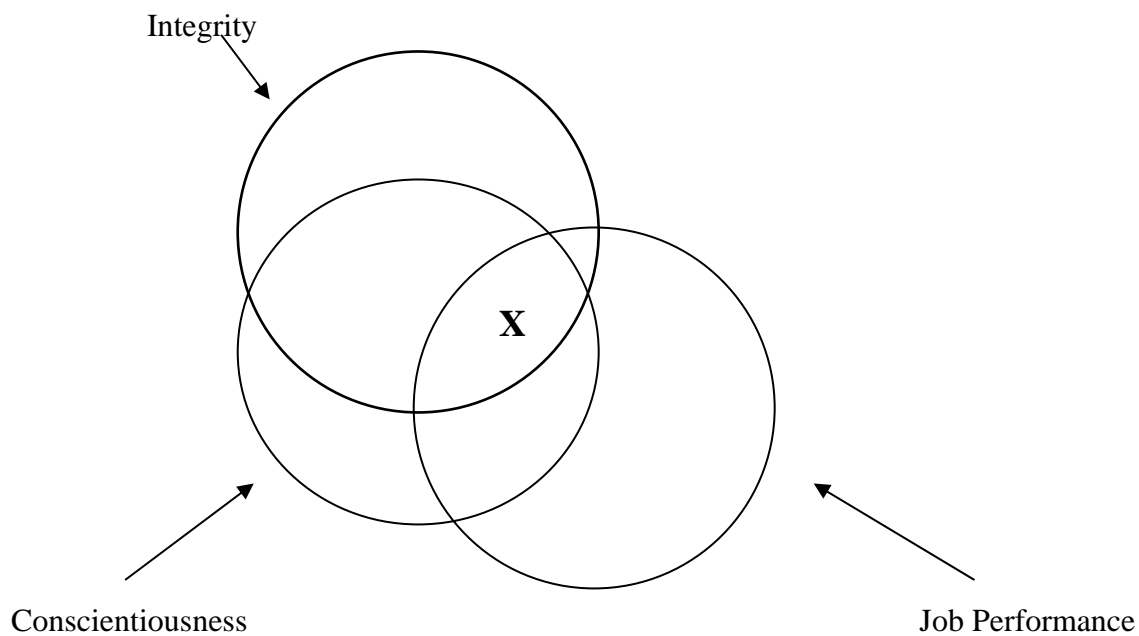
---

Figure reprinted from Sackett, Buris, & Callahan (1989)

Figure 4

Relationships among Integrity, Conscientiousness, and Job Performance

---



---

Note: The portion of the figure with the "X" represents the overlap between integrity and the performance that may be explainable in terms of conscientiousness.  
Figure reprinted from Murphy (1993)

Figure 5

Potential Relationship between ASP and GPA, Moderated by type of Degree (B.S. vs. B.A.)

---

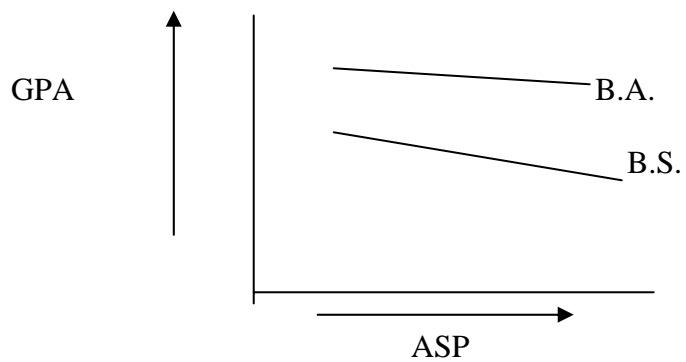
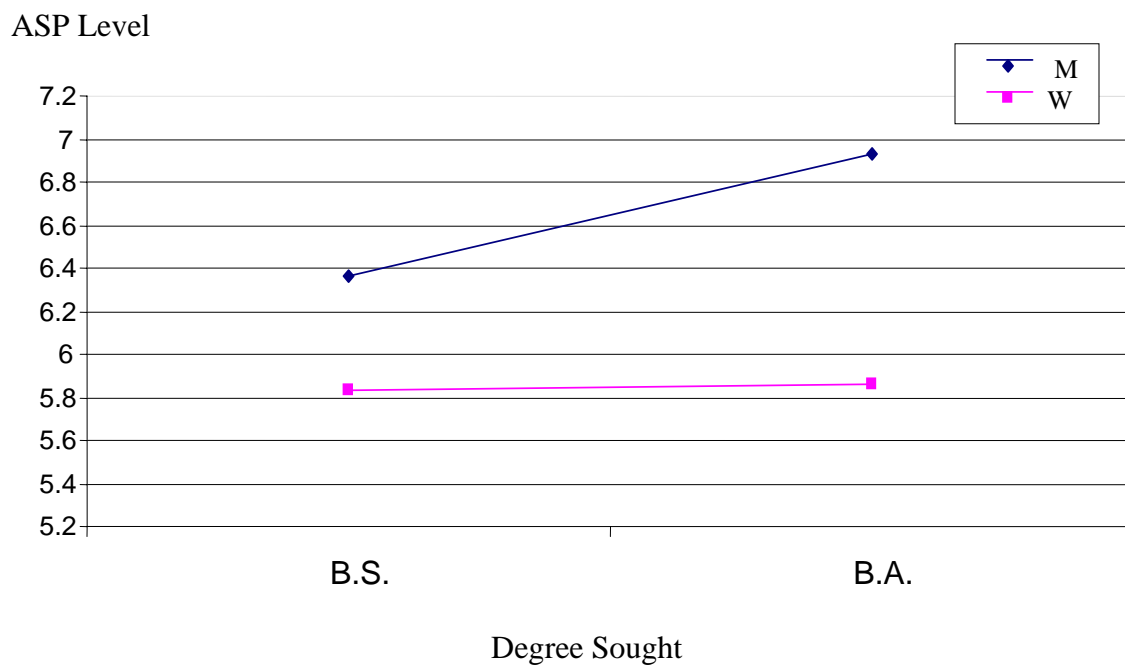


Figure 6

Aberrant Self-Promotion Levels for Men and Women Related to the Degree They are Seeking.

---



APPENDICES

## APPENDIX A

### OCCUPATIONAL STEREOTYPES

Research has demonstrated that people attribute distinct personalities to individuals in various occupations (cf., Holland, 1963a, 1963b, 1963c, 1963d). A stereotype has been defined as “a socially shared set of beliefs about traits that are characteristic of members of a social category” (Greenwald & Banaji, 1995, p.14). People classify their impressions of occupations in a highly stereotyped, socially-learned manner (Glick, Wilk, & Perreault, 1995). This finding is supported by Gottfredson (1981), who found that men and women, regardless of varying demographic variables, view occupations similarly. Holland (1997) supports that occupational stereotypes have important and reliable information, but recognizes the intrinsic inaccuracy in them. Researchers (e.g., Judd and Park, 1993; Damarin, 1998) have defined different types of inaccuracy in stereotypes (halo effects, etc); however, these inaccuracies seem to be consistent across social class and gender(Gottfredson, 1981).

## APPENDIX B

### WORKPLACE DEVIANCE

Although research into P-E fit, job success, and vocational choice is typically studied in terms of positive attributes, recently dysfunction in the workplace has been studied. Workplace deviance describes some of the counterproductive practices that some individuals engage in that put their company or their coworkers at risk (Bennett & Robinson, 2000; Hollinger, 1986). This phenomenon has been studied recently under a number of terms that include behavior that is: dysfunctional (Griffin, O’Leary-Kelly, & Collins, 1998a; Griffin, O’Leary-Kelly, & Collins, 1998b); deviant (Hollinger, 1986); or counterproductive (Collins & Griffin, 1998). Robinson and Bennett (1997) provide a working definition of workplace deviance as “voluntary behavior of organizational members that violates significant organizational norms and, in so doing, threatens the well-being of the organization and/or its members” (p. 7). These dysfunctional behaviors include absenteeism, sexual harassment, theft, political behavior, aggression, and violence against co-workers (Robinson & Bennett, 1995). This range of behaviors was integrated into a typology of forms of deviance (Bennett & Robinson, 2000) (see Table 2). The types of deviance have been organized according to type of deviance (production or property); the seriousness of the offense, and the target of the offense (the company or co-workers) (Hollinger, 1986) (see Figure 1).

Production deviance includes counter-productive behaviors such as illegal union strikes, missing work, and negligence. Property deviance focuses on employee theft and other tangible manifestations of worker rule-breaking (e.g., industrial espionage). While

theft, employee taking (e.g., small amounts of office supplies), and rumor mongering are in line with this demarcation of workplace deviance, other researchers have added another category aimed at investigating workplace violence (Mack, Shannon, Quick, & Quick, 1998; Martinko, & Zellars, 1998; Paetzold, 1998). Some of these negative traits are similar to traits exhibited by individuals high in Machiavellianism and sub-clinical psychopathy (Aberrant Self-Promotion).

Machiavellianism and Aberrant Self-Promotion have many similarities to some of the behavioral aspects of workplace deviance. Collins and Griffin (1998) examined covert and overt counterproductive job performance including spreading malicious rumors, taking credit unfairly, and peer sabotage. Deviant work practices can include sexual harassment, sabotage of work, power brokering, and violence. Although violence has a low base rate it is still a concern in the modern workplace. Violence and intimidation are not out of range of potential actions of ASPs (Griffin, O'Leary-Kelly, & Collins, 1998a; Griffin, O'Leary-Kelly, & Collins, 1998b). Nonetheless, this connection between negative personality characteristics and workplace deviance has not been drawn fully in the literature. Most research into workplace deviance revolves around causes and motivations (Collins & Griffin, 1998), not underlying personality propensities to commit such acts. This difference in the research of deviance and Aberrant Self-Promotion (as well as Machiavellianism) make this framework unwieldy in the present study. Additionally, with the low base-rate of behavioral measures of workplace deviance it is difficult to behaviorally study. The negative behavioral manifestations of workplace deviance support issues pertaining to Aberrant Self-Promotion as well as Machiavellianism. Workplace deviance is of consequent importance and the implications



of the current research will have (behavioral) ramifications that complement nicely with this literature. The focus of the current study is on some negative personality traits that may be related to workplace deviance or hostile work environments. A method that has been used to test for workplace deviance is integrity testing.

## APPENDIX C

### INTEGRITY TESTING

A significant development in the past few years has been the emergence of measures professed to measure the honesty or integrity of individuals in the workforce (Ones, Viswesvaran & Schmidt, 1993; Sackett, Burris, & Callahan, 1989; Sackett & Harris, 1984). Although concerns have been raised about what exactly integrity tests are measuring (Dalton & Metzger, 1993; Sackett et al., 1989), other researchers have found that integrity tests are predictive of a wide range of counterproductive job behaviors (Ones et al., 1993; Sackett & Harris, 1984). Tests that were developed to assess the dependability, integrity, and honesty of employees and future employees are referred to collectively as “integrity tests” (Ones & Viswesvaran, 1998; Sackett & Harris, 1984; Sackett et al., 1989). Ones and Viswesvaran (1998) highlight three elements that define integrity tests. First, they are paper and pencil measures. Second, these scales are developed for use with a non-clinical population. Consequently, clinical instruments (e.g., the MMPI) are not integrity tests. Finally, although honesty scales were originally designed to predict theft and other dishonest behaviors, the role has expanded to predict other criteria (Ones & Viswesvaran, 1998). Other criteria include job performance, job training, accidents, property damage, training success, and supervisory ratings (Ones & Viswesvaran, 1998; Schmidt & Hunter, 1998).

#### *Paper-and-Pencil Integrity Measures*

Integrity tests are paper-and-pencil scales developed to measure the integrity and honesty of job applicants and employees (Gatewood & Feild, 1998). Dalton and Mezger

(1993) define written integrity tests as “any commercially available test which purports to assess the integrity of prospective employees for the purposes of selection” (p. 147).

These tests measure counterproductive behavioral tendencies. Counterproductive behaviors can also be classified into two types: covert and overt performance (Collins & Griffin, 1998; Sackett et al., 1989). Covert counterproductive behaviors may include spreading rumors, taking undeserved credit, or failing to give credit where credit is due. Overt counterproductive behaviors mainly consist of theft (Ones & Viswesvaran, 1998). Both overt and covert counterproductive work behaviors are tested for by paper-and-pencil integrity tests (Ones et al., 1993).

Two types of paper-and-pencil integrity tests have been developed for selection (Sackett, Burris, & Callahan, 1989). The two types of measures are personality-based integrity measures (hidden purpose) and self-report measures (overt). The first types, personality-based measures, propose to predict a broad range of counterproductive behaviors that are not solely theft-related (Ones, Viswesvaran, & Schmidt, 1993). The second type of measure, self-report style, are designed to directly assess attitudes regarding dishonest behaviors (Ones & Viswesvaran, 1998). The overt measures sometimes, but not always, include items that specifically ask about the respondent’s past dishonest activities. The important distinction is that covert measures are personality-based tests and overt tests focus on past counterproductive behaviors (Ones & Viswesvaran, 1998). To get a feel for what paper-and-pencil integrity tests measure, please see Table 3 (Murphy, 1993). One important consideration for selecting the type of integrity test to use is the criteria that are of most interest.

### *Criterion Type for Integrity Tests*

Criterion type is linked to the usefulness of different tests as determined by what they measure. A broad criterion involves general performance. Conversely, a narrow criterion involves specific behaviors such as theft (Sackett et al., 1989). It is therefore in the scientist's interests to choose the correct type of scale depending upon the criteria of interest. Figure 3 rests on the premise that when one is interested in predicting broad behaviors, one should use a broad, personality-based scale. Cell 4 would be preferred to Cell 3 (Sackett et al., 1989). Alternatively, when one is interested in predicting a relatively narrow set of behaviors, one should select a relatively narrow scale as in an overt, self-report measure. In this case Cell 1 is preferred to Cell 2. This diagram provides a heuristic for this type of decision-making.

### *Integrity Tests and Personality Dimensions*

Both overt and covert integrity tests correlate with a variety of Big Five personality measures (Gatewood & Feild, 1998). Although both types of integrity tests correlate with Big Five dimensions, personality-based tests (covert) correlate more highly than the self-report (overt) tests. This may be attributed to a construct overlap between integrity and conscientiousness (please see Figure 4). Other Big Five dimensions that integrity may overlap with are agreeableness and emotional stability (Ones, Viswesvaran, & Schmidt, 1995). Ones et al. (1995) postulated that previous research might be too focused on narrow criteria (e.g., theft). The contention is that the integrity construct is more encompassing than a Big Five dimension, and that this broad construct is more useful (Ones et al., 1993). Camara and Schneider (1995) disagree and note that the

common marketing for these tests focuses upon the prediction of specific criterion behavior (e.g., theft). Regardless of marketing, it has been demonstrated strongly that there is substantial overlap between integrity and Big Five dimensions. However, integrity testing many times focuses on narrow criteria (e.g., theft) and less on theory. Additionally, it focuses on the de-selection of individuals rather on how they may fit into some environments better than others. The examination of negative personality traits and how they relate to environmental fit would possibly be a rich area of future research.

## APPENDIX D

### CLINICAL PSYCHOPATHY

The role of an individual's personality traits (outside the Big 5) has been studied broadly in the past, not necessarily in the realm of how well an individual performs in an organization. Some examples of constructs studied were charisma, Machiavellianism, and a general need for power. It appears that each trait is linked to leadership; however, they are also linked to personality disorders and traits such as narcissism and psychopathy (Babiak, 1995; Carroll, 1987; Kets de Vries, 1991; McHoskey, 1995; McHoskey, Worzel, & Szyarto, 1998). An excessive amount or an imbalance of these personality variables can be detrimental to not only the individual, but also the organization if that individual is in power (Kets de Vries, 1991). Some of the organizational repercussions of a worker having excessive amounts of these negative personality traits are poor morale, excessive turnover, and a decrease in productivity (Hogan, Raskin, & Fazzini, 1990, pg. 348). A principal personality disorder that is commonly mentioned in the clinical psychological literature, in the realm of aberrant and dangerous activities, is that of psychopathy and sociopathy.

Sociopathy and psychopathy have been used interchangeably since conceptualization (Cleckley, 1955). These terms, as well as antisocial personality disorder, have both been used to describe individuals on the extreme end of the antisocial continuum. For the purposes of this research, the term psychopathy will be separated from the terms sociopathy and antisocial personality. The impetus for this typological distinction is that the psychopath is often seen as one of average to high intelligence and

middle to upper socioeconomic status (Heilbrun, 1982). These individuals can express their recalcitrant behavior in a socially skillful and crafty manner that is not necessarily criminal in nature (Heilbrun, 1982; Kets de Vries, 1991). The sociopath, on the other hand, is one who may have low intelligence and is lacking in social skills, may be low in socioeconomic background, and expresses antisocial behavior in a criminal manner. These descriptions are clinical in nature, but if it is assumed that psychopathy is a personality trait like openness or introversion/extroversion, then an individual with a sub-clinical but still above average level would fall on a continuum.

Psychopaths are arguably the most charming of all clinical populations. Their gregariousness and manipulations coupled with the narcissistic drive for prestige and power often secure them leadership positions (Kets de Vries, 1991). This matches well with Holland's theory, specifically with E-types of individuals who do well manipulating situations and people. Psychopaths also enjoy manipulating people. It is not a coincidence that the humorous refer to them as the "used car salesmen" of the psychological community. Psychopaths differ from narcissistic individuals as they have the ability to hide their manipulations, and are charming (Babiak, 1995).

Psychopathy is generally thought to contain two distinct, yet complimentary areas. The first, is personality (Factor 1), and the second is antisocial acts (Factor 2) (Forth, Brown, Hart, & Hare, 1996). These two areas correlate highly, but are theoretically distinct in the research of Cleckley (1976) (see Table 1).

Cleckley (1976) described 16 characteristics that distinguish the clinical psychopath from others. Among these are superficial charm, lack of guilt, insincerity, shallow affect, narcissism, dishonesty, callousness, lack of forethought, and low anxiety.

The demonstration of criminal behavior was never purported to be a diagnostic tool by Cleckley (1955, 1976), arguably the father of psychopathy theory. Criminality, or the exhibiting of psychopathic tendencies through antisocial behaviors, has been overused in lieu of the personality that has been purported to underlie psychopathy (Forth et al., 1996; Gacono & Hutton, 1994; Harpur, Hare, & Hakstian, 1989). Hare (1991), the foremost contemporary researcher into psychopathy, has separated the personality aspect of psychopathy from the behavioralistic tendencies, and this two-factor model is summarized in Table 1. Lilienfeld and Andrews (1996), researchers who have come up with a self-report measure of psychopathic personality traits, have also focused their measure on the personality side of psychopathy. And, as Harpur et. al (1989) conclude, current personality instruments based on the Big Five model may not be adequate in identifying the psychopath. Compounding this weakness in current personality instruments is the emphasis on behavioral symptoms when diagnosing psychopathy.

The emphasis on the behavioral symptoms with regards to assessing individuals prevents the diagnosis of those that either have not been caught yet, or only perform unsavory, but legal acts that impact others negatively. The assessment of psychopathy in a normal population has been hampered by recent versions of the Diagnostic and Statistical Manual of Mental Disorders (DSM IV). In the 1980 as well as the 1987 version, the diagnosis of psychopathy hinged on antisocial and criminal behavior. This change from previous DSM's was due to the difficulty in diagnosing the disorder. Psychopaths have been referred to as having a "Mask of Sanity" (Cleckley, 1976). They have the ability to mask antisocial traits when necessary; their manipulations are devious and deliberate. Psychopaths are unlike other clinical populations; they are basically



suffering from a lack of conscience. This focus on documented, overt activities allows for the opinion of some that not all psychopaths have been caught. It assumes that psychopathy is a dichotomous variable, and that all psychopaths have been incarcerated, or will be, due to their actions. There is a need for further research into individuals who score high on psychopathic personality traits, are skilled socially, and who employ manipulative tactics (McHoskey, 1995; Raskin & Hall, 1981). The current study attempts to examine some of these negative personality traits as they relate to an individual's vocational interest.

In a study of three psychopaths who were classified "successful", Babiak (1995), observed similarities in their interactive behavior with co-workers in work settings. He noted that they each:

(a) began by building a network of one-to-one relationships with powerful and useful individuals, (b) avoided virtually all group meetings where maintaining multiple facades may have been too difficult, and (c) created conflicts which kept co-workers from sharing information about him. Once their power bases were established, (d) co-workers who were no longer useful were abandoned and (e) detractors were neutralized by systematically raising doubts about their competence and loyalty. In addition, unstable cultural factors, inadequate measurement systems, and general lack of trust typical of organizations undergoing rapid, chaotic change may have provided an acceptable cover for psychopathic behavior. (p. 185-86)

It becomes obvious that organizations that are downsizing or expanding rapidly, or have numerous office sites which individuals may "flow" between, allow those persons possessing these traits to remain hidden, and possibly in damaging positions (Babiak, 1995). Additionally, it is of substantial importance to note that the aforementioned traits define a psychopath's personality (see Table 1). These manipulations again resemble some of the methods employed by E-type individuals, and perhaps differ in degree not kind. A psychopath, especially one termed as "successful," can, and will, delay gratification of the "dark wishes" and hide these traits (Widom, 1977). Therefore, an individual that rates high may not always exhibit the tendencies when a reward is perceived to be worth waiting for (Sutker & Allain, 1983). "Successful" (non-criminal) or "industrial" psychopaths need to be studied in the workplace (Sutker & Allain, 1983; Widom, 1977). "Success" in this case refers to being able to stay out of jail and function in society. The need to study this type of individual transcends the academic when organizational well-being, co-worker well-being, and ethics are taken into consideration.

An important note is that although some organizations employ the Minnesota Multiphasic Personality Inventory (MMPI) to guard against hiring individuals with psychotic attributes, the MMPI's discriminating attributes may be compromised because it measures the social deviance factor of psychopathy and not the personality factor (Hare, 1991). This inability to detect psychopathy is in addition to the legal and ethical considerations faced by an organization when clinical measures are used for predictive purposes in "normal" populations. Consequently, a scale refined enough to make accurate predictions about job candidates, which addresses these negative personality traits and

behaviors would be optimal. Gustafson's (1995) conditional reasoning personality measure on Aberrant Self-Promotion provides a scale for this use.