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# The Differences in Levels of Job Satisfaction Burnout and Self-Efficacy Between Correctional and Community Psychologists: The Effect of Personality and Work Environment

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THE DIFFERENCES IN LEVELS OF JOB SATISFACTION BURNOUT AND SELF-EFFICACY BETWEEN CORRECTIONAL AND COMMUNITY PSYCHOLOGISTS:  
THE EFFECT OF PERSONALITY AND WORK ENVIRONMENT

by

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Bachelor of Science, University of North Dakota, 2003  
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A Dissertation

submitted to the Graduate Faculty

of the

University of North Dakota

in partial fulfillment of the requirements

for the degree of

Doctor of Philosophy

Grand Forks, North Dakota  
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2009

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## TABLE OF CONTENTS

LIST OF TABLES .....	ix
ACKNOWLEDGMENTS .....	xi
ABSTRACT.....	xii
CHAPTER	
I.    INTRODUCTION .....	1
Job Satisfaction .....	2
Burnout .....	3
Self-Efficacy .....	4
Work Environment.....	5
Correctional Psychology.....	6
Community Psychology.....	8
Purpose.....	9
II.   LITERATURE REVIEW .....	11
Correctional Psychology.....	11
Job Description .....	13
Mental Health in Corrections.....	16
Work Environment in Corrections.....	19
Training Requirements.....	20
Community Psychology.....	23

Job Description .....	24
Training Requirements.....	25
A Comparison of Correctional and Community Psychology .....	26
Job Satisfaction .....	31
Measures of Job Satisfaction .....	34
Models of Job Satisfaction.....	37
Job Satisfaction among Psychologists .....	43
Burnout .....	50
Definition.....	50
Measures of Burnout.....	51
Models of Burnout.....	53
Personal/Demographic Correlates of Burnout.....	58
Work-Related Correlates of Burnout .....	59
Interventions .....	64
Job Satisfaction and Burnout .....	66
Self-Efficacy .....	67
Factors Influencing Self-Efficacy .....	69
Benefits of Increased Self-Efficacy .....	74
Counselor Self-Efficacy.....	74
Measures of Self-Efficacy.....	75
Personality.....	78
The Five-Factor Model of Personality.....	79
Measures of Personality .....	81



	Personality and Job Satisfaction .....	83
	Personality and Burnout.....	85
	Work Environment.....	86
	Measures of Work Environment.....	88
	Work Environment and Burnout.....	90
	Purpose.....	93
	Main Hypotheses .....	95
III.	METHODS .....	97
	Participants.....	97
	Correctional Psychologists.....	97
	Community Psychologists .....	98
	Measures .....	99
	Minnesota Satisfaction Questionnaire-Short Form.....	99
	Maslach Burnout Inventory .....	100
	International Personality Inventory Pool-Five Factor Model .....	102
	Counseling Self-Estimate Inventory .....	103
	Work Environment Scale-10.....	105
	Procedures.....	107
IV.	RESULTS .....	109
	Preliminary Analysis.....	110
	Main Analysis .....	121
	Hypothesis I .....	121

	Hypothesis II.....	125
	Hypothesis III.....	127
	Hypothesis IV .....	130
	Hypothesis V.....	130
	Hypothesis VI .....	131
	Post-Hoc Analysis.....	139
	Job Satisfaction .....	139
	Burnout .....	142
	Salary .....	157
V.	DISCUSSION .....	160
	Preliminary Analysis.....	161
	Job Satisfaction and Demographic Characteristics.....	162
	Burnout and Demographic Characteristics .....	164
	Counselor Self-Efficacy and Demographic Characteristics ...	165
	Work Environment and Demographic Characteristics .....	168
	Main Analysis .....	171
	Hypothesis I .....	171
	Hypothesis II.....	174
	Self Realization and Burnout.....	175
	Workload and Burnout.....	176
	Work Environment Conflict and Burnout.....	176
	Work Environment Nervousness and Burnout .....	177
	Hypothesis III.....	178

Neuroticism and Emotional Exhaustion .....	178
Neuroticism and Depersonalization.....	179
Neuroticism and Personal Accomplishment.....	179
Hypothesis IV .....	180
Extraversion and Emotional Exhaustion.....	180
Extraversion and Depersonalization .....	181
Extraversion and Personal Accomplishment .....	181
Hypothesis V.....	182
Hypothesis VI .....	183
Post Hoc Analysis.....	184
Prediction of Job Satisfaction .....	184
Prediction of Burnout.....	185
Impact of Salary on Job Satisfaction .....	187
Limitations .....	187
Implications for Training, Research, and Practice.....	190
Recommendations for Future Research.....	193
Conclusions.....	194
REFERENCES .....	196

## LIST OF TABLES

Table	Page
1. Self-Reported Gender, Ethnicity, Relationship Status, Salary, Population Size, and Region by Setting.....	101
2. Self-Reported Age, Years of Work Experience, and Weekly Client Contact Hours by Setting.....	109
3. Raw Score Means (M), Standard Deviations (SD), and T-Test Results for All Total and Subscale Scores of State Prison, Federal Prison, and Combined Correctional Samples .....	111
4. Correlation Matrix of Demographic Information and All Scales and Subscales .....	116
5. Raw Score Means (M), Standard Deviation (SD), and ANOVA Results for All Total and Subscale Scores of Combined Correctional Sample, Community Sample, and Total Samples.....	123
6. Correlations between Measures of Job Satisfaction, Burnout, Counselor Self-Efficacy, Work Environment, and Personality of Total Sample.....	128
7. Correlations between Measures of Job Satisfaction, Burnout, Counselor Self-Efficacy, Work Environment, and Personality of State Prison Sample .....	133
8. Correlations between Measures of Job Satisfaction, Burnout, Counselor Self-Efficacy, Work Environment, and Personality of Federal Prison Sample.....	135
9. Correlations between Measures of Job Satisfaction, Burnout, Counselor Self-Efficacy, Work Environment, and Personality of Community Sample .....	137
10. Summary of Hierarchical Regression Analysis Predicting Job Satisfaction .....	141
11. Summary of Post Hoc Hierarchical Regression Analysis of Variables Predicting Job Satisfaction.....	146

12.	Summary of Post Hoc Hierarchical Regression Analysis of Variables Predicting Emotional Exhaustion .....	148
13.	Summary of Post Hoc Hierarchical Regression Analysis of Variables Predicting Depersonalization.....	150
14.	Summary of Post Hoc Hierarchical Regression Analysis of Variables Predicting Personal Accomplishment .....	152
15.	Summary of Hierarchical Regression Analysis Predicting Job Satisfaction .....	154

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## ABSTRACT

The purpose of the current study was to expand on research regarding levels of job satisfaction, burnout, and counselor self-efficacy within the field of psychology and particularly among correctional and community psychologists; explore the differences between correctional and community psychologists specifically in relation to levels job satisfaction, burnout, and self-efficacy; and examine difference and/or similarities in work environments and personality traits of correctional psychologists and community psychologists. The instruments used to measure job satisfaction, burnout, counselor self-efficacy, work environment, and personality were the Minnesota Satisfaction Questionnaire, Maslach Burnout Inventory, Counselor Self-Estimate Inventory, Work Environment Scale-10, and the International Personality Item Pool-Five Factor Model, respectively.

Participants included 137 doctoral level psychologists working in either correctional or community settings across the United States. The correctional psychologist participants consisted of 41 state prison psychologists and 36 federal prison psychologists. The community psychologist participants consisted of 60 doctoral level psychologists working in various community mental health settings. The hypotheses of the study were the following: (a) different levels of job satisfaction, burnout, counselor self-efficacy, and perceptions of work environment would be found between correctional

and community psychologists, (b) a moderate negative correlation would exist between burnout and perceptions of work environment, (c) a moderate positive correlation would be found between burnout and neuroticism, (d) a moderate negative correlation would exist between burnout and extraversion, (e) a moderate negative correlation would exist between counselor self-efficacy and burnout, and (f) in order of contributing variance, the following factors would add significantly to the prediction of job satisfaction – work environment, burnout, self-efficacy, and setting. The results of the current study indicated that correctional and community psychologists significantly differed in levels of depersonalization aspect of burnout and conflict aspects of work environment, but not in levels of job satisfaction, counselor self-efficacy, or personality traits. Additionally, several significant relationships were found among job satisfaction, burnout, counselor self-efficacy, work environment, and personality.



## CHAPTER I

### INTRODUCTION

In general, the main goal of a psychologist providing treatment to clients is to assist their clients in obtaining or maintaining an optimum level of mental health (Occupational Outlook Handbook, 2006). How this goal is achieved varies greatly among the many settings psychologist are employed. Each setting possesses their own unique set of challenges, which could potentially lead to burnout; and rewards, which could increase job satisfaction. Additionally, psychologists' perception of their abilities to deal with challenges their clients present, as well as the challenges inherent in their particular work environment, can influence their level of self-efficacy.

Research exploring the levels of job satisfaction, burnout, and counselor self-efficacy among psychologists is lacking. Empirical research specifically focused on the constructs of job satisfaction, burnout, and counselor self-efficacy among community psychologist and correctional psychologists is even less prevalent. The focus of this particular study was to explore differences in levels of job satisfaction, burnout, and counselor self-efficacy between community and correctional settings, as well as examining differences that may exist among psychologists (i.e., personality characteristics) in those various settings. The differences in the actual work environments in community versus correctional settings were also explored.

## Job Satisfaction

Job satisfaction has been defined as an affective response to occupational tasks and events (Locke, 1976). In an extensive review of job satisfaction literature, Locke (1976) reported that by 1972 there had been over 3,350 studies published on this topic. A majority of the research done on job satisfaction has examined the relationship between job satisfaction and job performance. In fact, the relationship between job satisfaction and job performance has been described as the "Holy Grail" of industrial psychology (Landy, 1989).

Due to the vast amount of research published on job satisfaction, many aspects of work life and job satisfaction have been thoroughly covered (Nord, 1977). However, there is only a limited amount of data available regarding job satisfaction among psychologists in general, and even less regarding both correctional and community psychologists in particular. Fagan, Ax, Liss, Resnick, and Moody (2007) investigated job satisfaction among a diverse group of psychologist interns, postdoctoral residents, and training directors as well as psychologists in private practice. Fagan et al. (2007) found an overall general satisfaction in the participants' training and career choices. However, a majority desired more training in work career and workplace issues, and several indicated a need for training in the biological bases of behavior. Financial commitments and time commitments were negative aspects of both becoming a psychologist and remaining in the profession of psychology that were found by some to outweigh the long term benefits of being a psychologist (Fagan et al., 2007).

Dollard and Winefield (1998) examined job satisfaction specifically among correctional officers and found that individuals with active jobs, which consist of high

demand and high levels of control, showed high levels of job satisfaction and effective coping abilities. Gerstein et al. (1987) found that correctional employees who contribute to the well being of the inmates not only report lower levels of stress, but also indicated that they were more satisfied than those who do not have those roles in the correctional environment.

### Burnout

While job satisfaction serves as an anchoring variable in most analyses of employment, several other factors are also frequently considered, including the constructs of burnout and self-efficacy. Maslach and Jackson (1986) defined burnout as “a syndrome of emotional exhaustion, depersonalization, and reduced personal accomplishments that can occur among individuals who ‘do people work’ of some kind” (p. 1). Most authors have agreed that burnout typically includes psychological and/or physiological exhaustion, negative styles of responding to others, negative responses to self and personal accomplishments, and a result of emotional strain of working with others who are troubled (Ackerley, Burnell, Holder, & Kurdek, 1988).

Burnout has been explored in a variety of occupations, including printing firms, research and development companies, hospitals, school systems, and social services agencies (Gerstein, Topp & Correll, 1987). There have been a small amount of studies on burnout within personnel in corrections conducted; however, those studies have not directly focused on factors contributing to burnout within correctional environments (Gerstein et al., 1987).

Research examining the impact of the prison environment on correctional psychologists in particular, as well as research on levels of burnout within correctional

psychologists working in a prison environment are absent and are areas that have been neglected within the field. Given the impact that the environment has on other correctional staff (Gerstein et al., 1987; Dembo & Dertke, 1986) investigation of the impact on correctional psychologists is warranted.

A variety of research investigating levels of burnout among other settings in psychology, including community psychology, has been done. Those studies have compared burnout among psychologists from a variety of settings such as school psychology (Huebner, 1993; Huebner, 1994; Sandoval, 1993), addiction psychologists (Elman & Dowd, 1997), community agency psychology, and private practice psychologists. Ackerley et al. (1988) found that psychologists in private setting experience lower levels of burnout than psychologists in community agency settings. Private practice psychologists were also found to be happier than those in academic positions (Boice & Myers, 1987). Boice and Myers (1987) suggest that practitioners report feeling better because they are not as pressured to complete projects and continue to increase their publication rates. On the other hand, academicians are likely concerned that they have not done enough in respect to research and publication (Boice & Meyers, 1987). Research has not yet been done to compare levels of burnout between correctional psychology and any other setting in the field, including community psychology.

#### Self-Efficacy

Self-efficacy has been defined as the degree to which individuals consider themselves capable of performing a particular activity (Bandura, 1982). According to Lent and Maddux (1997), self-efficacy theory proposes that people's beliefs about their behavioral capabilities as well as their ability to cope with environmental stress and

demands have an impact on whether particular behaviors are initiated and continue. Self-efficacy is a dynamic construct that changes over time with the attainment of new information and experiences (Gist & Mitchell, 1992). Past research on self efficacy has focused on work related performance, coping with difficult career-related tasks, career, choice, learning and achievement and adaptability to new technology (Gist & Mitchell, 1992).

Over the past two decades research on counselor self-efficacy has increased (Lent, Hoffman, Hill, Treistman, & Mount, Singley (2006). According to Lent et al. (2006), counselor self-efficacy refers to counselors' beliefs about one's capabilities to carry out certain behaviors specific to the counseling profession. Counselor self-efficacy research to this point has focused on basic skill development in counselors who are in their early stages of development (2006). Research investigating experienced counselor or psychologist self-efficacy does not exist. Additionally, research examining differences in levels of self-efficacy between various work settings has also been neglected.

#### Work Environment

Industrial/organizational psychologists have conducted vast amounts of research on work environment. In doing so, several variables have been used in the past to measure the perceptions of a variety of different work environments (James & James, 1989). Those variables include: perceptions of job characteristics, such as challenge and autonomy; characteristics of leaders and leadership processes; and workgroup characteristics, such as cooperation and motivation (James & James, 1989).

Past research has discovered a relationship between the constructs of the work environment and burnout (Gerstein, Topp, & Correll, 1987; Saviicki & Cooley, 1987) In

particular, the work environments resulting in lower levels of burnout were those in which (a) employees are committed strongly to their work, (b) supportive relationships between coworkers are encouraged, and (c) strong supervisory relationships exist. Work environments that have been associated with high levels of burnout are those that restrict employees' freedom and flexibility, have ambiguous job expectations, and minimal support for new ideas and creativity (Savicki & Cooley, 1987). Gerstein et al. concluded from their research that the nature of the correctional environment is a major contributor to burnout among correctional staff (Gerstein et al., 1987). Gerstein et al. (1987) also concluded correctional employees who contribute to the well being of the inmates and overall function of the institution reportedly feel less stress than those who do not maintain such roles. Although researchers have explored the impact of work environments within a variety of occupations, the work environments of psychologists in general is scarce.

### Correctional Psychology

According to the Bureau of Justice Statistics (1999), close to two million individuals are incarcerated in the United States, and the number of people incarcerated increases daily. As the number of mentally disordered inmates entering into the corrections system increases, the number of capable psychologists available to provide services for those individuals must also increase. Correctional psychologists, in addition to doing assessment, treatment, training, and consultations, work in an environment that requires coping with stressful and possibly dangerous conditions on a daily basis.

A majority of the research done in the prison setting has focused on the attitudes, behaviors, and demographics of the inmate population (Dembo & Dertke, 1986). Overall,

research addressing correctional staff and correctional psychologists in general has been widely neglected. Interestingly, Lombardo (1981) suggested that a reason correctional officers are typically not a focus of research is that they may appear unapproachable, or that we more easily identify with the prisoner rather than with those in control.

One important study that focused on correctional staff examined factors contributing to stress in a prison environment (Brodsky, 1982). Dangerousness of the work environment and the perceived powerlessness of the correctional officer role were found to be factors that significantly contribute to stress of those working in a correctional environment. In particular, disorder among inmates, threat of violence against staff by inmates, violence among inmates by staff, and the inability of staff to retaliate against inmates were all found to be significant factors contributing to correctional staff stress (Brodsky, 1982).

One issue in corrections is the high rate of recidivism. In fact, a study was conducted to examine the rates of re-arrest, reconviction, and re-incarceration of 272,111 prisoners from prisoners in 15 different states (Bureau of Justice Statistics, 2002). Results found that within 3 years from their release in 1994, 67.5% of prisoners were rearrested for a new offense, 46.9% were reconvicted for new crimes, 25.4% were resentenced to prison for a new crime, and 51.8% were already back in prison serving time for a new crime or violation of their release (Bureau of Justice Statistics, 2002). The re-arrests for new offenses were most often felonies or serious misdemeanors. The fact that an inmate re-offends after being in therapy during incarceration could affect the level of self-efficacy of some correctional psychologists.

## Community Psychology

Community mental health centers originated from the findings of the Joint Commission on Mental Illness and Health, which was established by Congress under the Mental Health Study Act of 1955 (Smith & Hobbs, 1966). The Community Mental Health Centers Act of 1963, which allotted federal funds for the construction of community mental health centers, resulted from the Mental Health Study Act of 1955 (Smith & Hobbs, 1966). After a detailed, five-year review of the national prevalence of mental illness, a recommendation was made to end construction of large mental hospitals, and provide services for mentally ill individuals within their communities. Utilizing community mental health center services rather than hospitalization allows mentally ill populations to better maintain social support systems and limit the disruption of their daily lives (Smith & Hobbs, 1966).

In a dated paper, Smith and Hobbs (1966) outlined the five “essential” services mandated by the Public Health Service in order for community mental health centers to qualify for federal funds, as stated in the Community Mental Health Centers Act of 1963. Those services include: (a) inpatient care, (b) outpatient care, (c) partial hospitalization, (d) emergency care, and (e) consultation and education for community agencies and professional personnel. Five other services were also recommended to be provided by community mental health centers in order to be considered a complete and comprehensive community mental health program. Those additional services include: (f) diagnostic services, (g) rehabilitative services, (h) pre-care and aftercare for patients requiring hospital admission, (i) training for mental health personnel, and (j) research and



evaluation of the effectiveness of programming and treatment of mental illness within the community.

A majority of the literature on community psychology discussed the development of the field of community mental health (Smith & Hobbs, 1966), goals and objectives (Biglan & Smolkowski, 2002), and daily tasks of community psychologists (Budman & Del Gaudio, 1979). However, little to no research exploring job satisfaction, burnout, or self-efficacy, specifically among community psychologists, has been conducted. Research comparing community and correctional psychology is lacking.

#### Purpose

The purpose of this study was to (1) expand on research regarding levels of job satisfaction, burnout, and self-efficacy within the field of psychology and particularly among correctional and community psychologists, (2) explore the differences between correctional and community psychologists specifically in relation to levels job satisfaction, burnout, and self-efficacy, and (3) examine difference and/or similarities in work environments and personality traits of correctional psychologists and community psychologists.

The hypotheses of this study are the following: (a) different levels of job satisfaction, burnout, counselor self-efficacy, and perceptions of work environment will be found between correctional and community psychologists, (b) a moderate negative correlation will exist between burnout and perceptions of work environment, (c) a moderate positive correlation will be found between burnout and neuroticism, (d) a moderate negative correlation will exist between burnout and extraversion, (e) a moderate negative correlation will exist between counselor self-efficacy and burnout, and (f) in

order of contributing variance, the following factors will add significantly to the prediction of job satisfaction -- work environment, burnout, counselor self-efficacy, and setting.

## CHAPTER II

### LITERATURE REVIEW

This chapter covers the important literature in the areas of correctional and community psychology. In addition, it also includes relevant research on the constructs of job satisfaction, burnout, self-efficacy, personality, and work environment within the field of psychology. This chapter also discusses how these constructs specifically impact professionals within community psychology and correctional psychology settings. Given the lack of research on correctional psychologists in general, as well as the absence of research comparing and contrasting differences between correctional and community psychology settings, research in these areas are warranted. Additionally, this particular line of research is important to pursue in order to gain a better understanding of the impact of work environment and personality traits on such constructs as job satisfaction, burnout, and self-efficacy.

#### Correctional Psychology

Historically, mental health professionals were extremely difficult to recruit and retain in correctional settings, due primarily to noncompetitive salaries, geographic locations of many correctional facilities, and dissatisfaction with mental health professional roles in corrections (Gormally & Brodsky, 1973). Research has since demonstrated a significant increase in the employment of psychologists within

correctional settings. A survey conducted by Otero, McNally, and Powitzky in 1981, found that approximately 600 master's and doctorate level psychologist worked in corrections in both the United States and Canada. More recent research has found that number has increased dramatically, with approximately 2,000 master's and doctorate level psychologists working in corrections in the United States alone (Boothby & Clements, 2000). In fact, the Federal Bureau of Prisons is one of the largest employers of psychologists in the United States (Federal Bureau of Prisons, 2006).

Boothby and Clements (2000) conducted a comprehensive profile of correctional psychology, examining the roles and duties of psychologists working in corrections. In order to do so, Boothby and Clements (2000) surveyed 830 correctional psychologists on the following topic areas: demographics, job duties and responsibilities, provision of mental health services, assessment practices, and training recommendations. Of the 830 respondents, 78% were employed in 48 state prison systems and 22% were employed by the U.S. Federal Bureau of Prisons. A majority (59%) of the participants were doctoral level psychologists with either a Ph.D. or Psy. D., while 37% were master's level graduates. All of the participants from the Federal Bureau of Prisons had doctorates, while state prisons employ both doctoral and master's level psychologists and counselors. According to Boothby and Clements (2000), the demographics of psychologists working in corrections are similar to those working in other areas, with the exception that fewer women psychologists work in corrections than in other settings.

Corresponding with the United States prison population which is 93% male, most correctional psychologists work exclusively with male prisoners and most generally work with inmates from all, and often a combination of, custody levels ranging from minimum

to maximum (Boothby & Clements, 2000). Correctional psychologists typically do not specialize in the treatment of any one problem area or single type of offender; rather they work with a variety of offenders and presenting concerns (Boothby & Clements, 2000). The following section will detail the many responsibilities of correctional psychologists, describe the types of treatment provided by correctional psychologists, and discuss the mental health issues most often presented by clients in correctional settings.

### *Job Description*

Psychologists working in the correctional system are often members of interdisciplinary healthcare teams. Psychological services departments in correctional institutions range in size from a single psychologist to as many as ten. Correctional psychologists have a wide range of responsibilities, of which the most time consuming was found to be administrative tasks (30%), followed by treatment (26%), assessment (18%), and research (6%), respectively (Boothby & Clements, 2000). On average, respondents reported an interest in spending much less time completing administrative tasks and more time conducting research, providing therapy, and receiving staff training.

According to Nietzel and Moss (1972), who conducted an extensive review of the roles of psychologists working within the various stages of the criminal justice system, the first task typically carried out by psychologists upon arrival of new prisoners is classification and diagnosis (Nietzel & Moss, 1972). This process is typically completed within the first month that the prisoner arrives at the institution. Classification and diagnosis involves a battery of tests and interviews and is concerned with assessing several areas to better handle the offender. The information gathered by the tests and interviews helps provide information about several areas include, but not limited to, the

prisoner's dangerousness, intelligence, parole-risk, appropriate living quarters, vocational and educational factors, personality profile, and past legal history. The classification process is intended also to provide information about which type or types of treatment might be most effective for the individual (Nietzel & Moss, 1972).

Psychologists' involvement in correctional treatment occurs in several forms including group therapy, individual therapy, vocational therapy, as well as other special programs and interventions (Nietzel & Moss, 1972). Research on the mode of treatment utilized by correctional psychologists is conflicting. Boothby and Clements (2000) reported that, although the prison population grows daily and the ratio of inmate to psychologist is approximately 750:1, a majority (60%) of the treatment done by correctional psychologists is individual therapy. Nietzel and Moss (1972), however, report that around the 1960's and 1970's there was a shift from individual treatment of offenders to group treatment. Of the 26% of time correctional psychologists spend doing therapy, 18% is spent facilitating psycho-educational groups and 15% is spent facilitating process groups. Although the proportion of time correctional psychologists spends providing treatment has not changed since 1981, the amount of time of services provided per inmate has greatly decreased (Boothby & Clements, 2000).

Boothby and Clements (2000) found that a majority of correctional psychologists used cognitive models of therapy (88%), followed by behavioral models (69%), rational emotive (40%), psychodynamic (23%), humanistic (19%), existential (15%), systems (14%), and other (13%). Boothby and Clements (2000) noted that most participants endorsed the use of one or more secondary theoretical orientations, suggesting an eclectic approach to psychotherapy. Overall, correctional psychologists are more likely than

psychologists in general to use cognitive and behavioral models of treatment (Boothby and Clements, 2000). The most prominent mental health problems treated by correctional psychologists were found to be depression, anger, psychoses, anxiety, adjustment issues, personality disorders, substance abuse, sexual behavior, and acting out/impulse control issues (Boothby & Clements, 2000).

Approximately 65% of the respondents in Boothby and Clement's (2000) previously mentioned survey of correctional psychologists indicated that they conducted various assessments. According to their results, a majority of psychological testing in the prison system is done to assess personality characteristics (42%), followed by intellectual assessment (19%), evaluation of risk (13%), symptom assessment (12%), neuropsychological assessment (5%), and behavior analysis (3%). The Minnesota Multiphasic Personality Inventory (MMPI-2) continues to be the most widely utilized psychological instrument in corrections (87%). Other personality instruments reportedly used in corrections include the Millon Clinical Multiaxial Inventory (MCMI) (30%), Rorschach (20%), projective drawings (14%), and the Personality Assessment Inventory (10%). The Wechsler Adult Intelligence Scale (WAIS) is the most widely used intelligence assessment instrument (69%) while the Psychopathy Checklist-Revised (PCL-R) was the most commonly used risk assessment instrument (11%) (Boothby & Clements, 2000).

Other daily tasks of correctional psychologists include crisis intervention, staff training, and consultation (Nietzel & Moss, 1972; Boothby & Clements, 2000). Correctional psychologist have also become involved in training line staff in group counseling techniques, as well as training ex-offenders as behavioral change agents

(Nietzel & Moss, 1972; Lombardo, 1981). Line staff, such as correctional officers, must often be a source of support for inmates and listen to inmates discuss personal and relational issues. Often they are expected to help inmates adjust to the prison environment and deal with self-destructive behaviors (Lombardo, 1981). Correctional officers are often the individuals who first encounter nearly every problem within the institution and are an important referral source for the psychologists (Lombardo, 1981). Ex-offenders are often used to inform new prisoners on what prison life is like and help them adjust to their new environment (Nietzel & Moss, 1972). Correctional psychologists are also often involved in research such as outcome evaluations of experimental treatment programs, system analyses, and assessing reliability and validity of classification procedures and prediction tables (Nietzel & Moss, 1972). The six major criteria mandated for mental health treatment within correctional institutions, a description of the ways in which clients are typically referred for mental health services, and a discussion of who is often referred for services within a correctional setting will be addressed in the following section.

#### *Mental Health in Corrections*

According to Diamond, Wang, Holzer, Thomas, and Cruser (2001), there were six criteria decided by *Ruiz v. Estelle* (1980) for mental health treatment practices in correctional institutions. Those criteria must be met by correctional institutions in order to be considered to have an adequate mental health care system. First, mental health departments in corrections must have a systematic program for screening and evaluating inmates to identify those with mental health needs. Second, active treatment programs must be provided beyond segregation and close supervision. Third, treatment must be



provided by trained mental health professionals, and there must be a sufficient number of providers able to identify and provide individualized treatment for those inmates amenable and suffering from serious mental disorders. Fourth, mental health providers must keep accurate, thorough, and confidential records of mental health treatment practices. The fifth criterion is the provision of appropriate medication practices by qualified professionals. The sixth and final criterion is providing protocol for the identification, treatment, and supervision of suicidal inmates. As a result of these established criteria, many states are required to provide basic screening, and provide treatment that meets specific standards in a timely manner (Diamond et al., 2001).

Inmate referrals for mental health services within the prison system can occur in a variety of ways. One of the more typical sources of referrals seen in corrections is the offenders themselves voluntarily presenting themselves for services. In order to determine who among the inmate population is more likely to seek mental health services while incarcerated, Diamond, Harzke, Magaletta, and Baxter (2008) conducted a study examining relationships between requests for psychological services and a number of offender characteristics such as demographics, medical condition, history of head injury, mental health history, drug and alcohol use in past two years, and current psychological symptoms. To conduct their study, Diamond et al. (2008), asked a sample of 2,674 male and female federal inmates from 14 different federal prisons in geographically diverse areas of the country to complete the Psychological Services Inmate Questionnaire (PSIQ). The PSIQ is a two-page self report survey that uses fill-in-the-blank format and is currently administered as part of the psychology services intake screening process within the Federal Bureau of Prisons (Diamond et al., 2008).

Diamond et al. (2008) reported approximately one-tenth of their sample made voluntary requests for psychological services. Their findings also revealed that the following characteristics were associated with psychological service requests while incarcerated: prior mental health treatment, sleeping problems, depression, racing thoughts, hopelessness, nervousness, current medical conditions, past head injuries, and suicidal thoughts and behaviors. Surprisingly, Diamond et al (2008) also found men were 60% more likely to request psychological services than women, when levels of symptoms, histories of past mental health services, and demographic profiles were similar.

One explanation for the high prevalence of self referrals of inmates during incarceration may simply be the fact that they have better access to mental health services in comparison to the communities from which they came. Many individuals likely had experienced barriers preventing them from accessing mental health services within their community prior to incarceration. Such barriers could include, but are not limited to, difficulties obtaining insurance, paying fees, or finding transportation (Diamond et al., 2008).

As mentioned previously, referrals also result equally as often from other correctional staff who have daily interactions with the inmates. Less often, a cellmate of a mentally ill inmate will make a referral for that inmate in order to make living with that individual more manageable (Diamond et al., 2008; Magaletta & Verdeyen, 2005). Other sources of referrals could include medical staff, administrative staff, work supervisors, and education staff (Diamond et al., 2008). Inmate referrals can also result from federal courts or parole boards advising treatment. Inmates have the right to accept or refuse

psychological services while incarcerated (Federal Bureau of Prisons, 2006). The following section provides a description of the correctional environment, as well as a discussion of research addressing the possible consequences of working in such an environment.

### *Work Environment in Corrections*

Corrections environments are usually considered harsh and hazardous places of employment (Morgan, Van Haveren, & Pearson, 2002; Cheek & Miller, 1983), and such perceptions may lead to the development of machismo attitudes. Evidence of the effects of prison environments on attitudes of correctional officers was provided by the well-known Stanford Prison Experiment (Haney, Banks, & Zimbardo, 1973). According to the Stanford Prison Experiment (Haney, Banks, & Zimbardo, 1973), prison environments contribute to aggressive, rigid, and power motivated behaviors. To conduct their study, Haney, Banks, and Zimbardo (1973) simulated a prison environment with the use of 21 male undergraduate students who role played prisoners and correctional officers over a one week period. Results indicated that at least one-third of the individuals who role played correctional officers displayed increasingly aggressive and dehumanizing behaviors over the duration of the simulation (Haney, Banks, & Zimbardo, 1973).

Cheek and Miller (1983) surveyed 143 correctional officers regarding perceptions of stress, perceptions of sources of stress, and the consequences of their stress on physical health. Findings from their research indicated the officer-inmate interactions and the task of rule enforcement, which requires a “macho” personality within the work environment, contributed significantly to correctional officers’ level of stress. The stress inherent in working in such an environment has led to cardiac difficulties (New York State

Department of Corrections, 1975; Wynne, 1977), substance abuse (New York State Department of Corrections, 1975; Svenson, Jarvis, & Campbell, 1995), cardiovascular and hypertension problems (Harenstam, Palm, & Theorell, 1988), and an increase in sick leave in correctional officers (Haranstam et al., 1988; New York State Department of Corrections, 1975).

Dollard and Winefield (1998) also examined the impact of work environment on correctional officers. In particular, they examined a model of work stress among a sample of 419 correctional officers. Subscales of the Work Environment Scale were used to measure demand and control within the work environment. The subscale of work pressure was used to measure demand. This subscale was used to examine the degree to which time pressures controlled work environment.

The autonomy subscale of the Work Environment Scale was used to measure the construct of control within the work environment. The autonomy subscale measures the extent to which employees can make their own decisions and be self-sufficient in their work environment. Dollard and Winefield (1998) found that the combination of high demands, low control, and low support within the correctional work environment leads to the highest level of stress for correctional officers. The next section details the training required for psychologists working in correctional settings. It also provides a discussion of additional specialized training recommended for psychologists preparing to work in a correctional environment.

#### *Training Requirements*

Training requirements vary depending on the prison setting (state versus federal). Educational requirements for state correctional facilities include both master and doctoral

level counselors and psychologists (Boothby & Clements, 2000). Qualifications for correctional psychologists seeking employment within the Federal Bureau of Prisons include completing a Ph.D. or equivalent degree directly related to full professional work in psychology (clinical or counseling psychology) from an accredited school.

Requirements of becoming a correctional psychologist include demonstrating knowledge of treatment methods relevant to a correctional setting, prior professional experience, knowledge of assessment and report writing, and knowledge of program administration. Individuals seeking employment within the Federal Bureau of Prisons are required to be under the age of 37 (Federal Bureau of Prisons, 2006).

Psychologists currently employed in a correctional setting have recommended that individuals interested in correction work gain experience through an internship or practicum placement in order to have a better understanding of job responsibilities and experience working with inmates in a security-oriented setting (Boothby & Clements, 2000). Other recommendations include gaining experience in psychological testing, diagnosis and treatment of personality disorders, experience with forensic issues (such as competency), training in crisis intervention, training in detection of malingering, substance abuse evaluation/treatment, and criminal justice and/or law related coursework (Boothby & Clements, 2000).

In general, academic training and knowledge about clinical practice in corrections is widely neglected in a number of graduate level psychology programs. Such programs often lack the time, budget, and/or resources required to provide training on effective clinical practices in correction settings (Kendig, 2004; Magaletta & Boothby, 2003). Additionally, very little text book knowledge is available that addresses the uniqueness of

the prison environment as well as the concerns of the inmates incarcerated in such environments (Magaletta, Patry, Dietz, & Ax, 2007).

Magaletta et al. (2007) examined which core bodies of knowledge correctional psychologists implement throughout their various roles and duties and where such knowledge was obtained. Some concerns more specific to working in a prison environment such as managing mentally ill in segregation, confrontation avoidance, and safety issues were reportedly areas typically not addressed in academic or continuing education training. Instead, training regarding such concerns was found to be primarily provided through on the job training. In fact, of the sample of 309 psychologists employed by the Federal Bureau of Prisons, less than 25% reported receiving experience during graduate school with any of the previously mentioned areas. Based on their results, Magaletta et al. (2007) suggested a majority of the knowledge required for clinical practice in corrections is learned experientially. As previously mentioned, one reason for the reliance on experiential learning is not only the uniqueness of the prison environment, but also the fact that very little formal textbook knowledge or research examining most effective clinical practices in correction environments exist (Magaletta et al., 2007).

Although research has previously explored the impact of a correctional environment on correctional officers, described the unique job characteristics of correctional psychologists, and discussed the training required and/or recommended for such a setting, several opportunities for continued research exist. In particular, the impact of the correctional work environment specifically on psychologists has not been explored. Additionally, research comparing the differences in job characteristics of correctional

psychologists to community psychologists, or psychologists in any other setting for that matter, is lacking. The following section discusses characteristics of community psychology and provides a comparison of correctional and community psychology.

### Community Psychology

In their theory paper describing the roles of community psychologists, Biglan and Smolkowski (2002), define the goal of community psychology as being “to assist communities in improving the well-being of the members of the community as defined by the incidence and prevalence of problems in the population of the community, where the problems to be targeted have been identified by the community through a process that involves input from a representative sample of community members” (no pagination). Although Biglan and Smolkowski (2002) acknowledge that this is not the universal goal for community psychologists, they suggest that it does address two of the main concerns articulated within the community psychology and public health literature. First, it addresses the need to involve more than identified clinical cases by emphasizing the need for prevention, which ultimately led to the creation of community psychology. Second, it addresses the respect for the autonomy of community members (Biglan & Smolkowski, 2002).

In order to be able to reduce incidence and prevalence of community specified problems, community psychologists must fulfill a number of roles including: helping the community establish specific goals, developing approaches to facilitate community change, monitoring community well-being, providing knowledge of empirical evidence about treatment and prevention of human behavior problems, and providing assistance to organizations in developing and evaluating programs (Biglan & Smolkowski, 2002). The

following section provides a more specific description of the typical daily tasks of psychologists working in a community setting, including the type of client issues commonly seen, the type of therapy provided, and some specific concerns of psychologists in community settings.

#### *Job Description*

Community psychologists provide therapy for individuals, families, and groups to address and treat mental and emotional disorders and help promote optimum mental health (Occupational Outlook Handbook, 2006). Community psychologists utilize a variety of therapeutic techniques to address a wide range of issues, including depression, addiction and substance abuse, suicidal impulses, stress management, problems with self-esteem, issues associated with aging, job and career concerns, educational decisions, issues related to mental and emotional health, and family, parenting, and marital or other relationship problems (Occupational Outlook Handbook, 2006). Community psychologists often work closely with other mental health specialists, such as rehabilitation and vocational psychologists, addictions counselors, psychiatrists, clinical social workers, psychiatric nurses, and school counselors (Occupational Outlook Handbook, 2006). Community psychologists typically work in a public health and human services or agency setting.

Budman and Del Gaudio (1979) conducted a survey of mental health professionals employed at 57 community mental health centers. The mental health professionals consisted of psychiatrists, psychologists, and social workers. Results from their survey found an average of 38 mental health professionals were employed at each of the various community mental health centers (CMHC); however detail was not provided



regarding the ratio of psychiatrists, psychologists, and social workers. Budman and Del Gaudio (1979) reported a majority of community mental health psychologists' time was devoted to direct clinical service (65.4%), followed by training (12%), supervisory functions (10%), research (2.5%), and "other" functions including consultative and administrative functions (10.1%). Regarding the type of treatment provided, CMHC psychologists reported spending more time facilitating group therapy than individual therapy. In fact, only 6.3% of the CMHC psychologists stated they were not involved in providing group therapy. A vast majority (75%) of CMHC employees surveyed expressed satisfaction with their salaries and their positions in general. One major concern of CMHC psychologists was the fact that the community mental health centers are generally public institutions operating on predetermined, and often diminishing, state and local budgets (Budman & Del Gaudio, 1979). Budman and Del Gaudio (1979) did not provide any detail about the instruments used in their study. The next section addresses the education and training required for psychologists working in community settings. Additionally, a brief discussion of training recommended for psychologists specifically seeking employment in a community setting is offered.

#### *Training Requirements*

A doctoral degree usually is required for employment as an independent licensed clinical or counseling psychologist. A doctoral degree generally requires five to seven years of graduate study. Psychologists with a Doctor of Psychology (Psy.D.) degree also qualify to work in clinical positions. The Ph.D. concludes with a dissertation based on original research. Courses in quantitative research methods, which include the use of computer-based analysis, are an integral part of graduate study and are necessary to

complete the dissertation. The Psy.D. may be based on practical work and examinations rather than a dissertation. In clinical or counseling psychology, the requirements for the doctoral degree include successful completion of a one to two year internship.

Training more specific to prospective community psychologist, as recommended by Biglan and Smolkowski (2002), includes gaining experience with, and becoming experts on, a variety of empirically supported programs and policies that would assist communities. Additional training beneficial to future community psychologists is learning how to identify community leaders, develop professional relationships with those leaders, and facilitate community meetings to address specific community needs and concerns. The next section provides a comparison of correctional and community settings. The similarities between the two settings are addressed in addition to a discussion the many differences that exist between the settings.

#### A Comparison of Correctional and Community Psychology

One major difference between treatments of clients in community agencies versus corrections is the goal of treatment. According to a theory paper discussing clinical practices of psychologists in corrections, Magaletta and Verdeyen (2005) suggest a desired outcome of treatment in the community setting might be symptom reduction. A main focus of treatment in corrections, on the other hand, is typically to help the offender adjust to prison life, increase the likelihood that inmates will follow the rules, and reduce the rate of reoffending. Research on treatment outcomes in corrections is typically focused on recidivism as an assessment of the effectiveness of a particular treatment (Magaletta & Verdeyen, 2005). Assuming that clinical practice in corrections is just practicing psychology with clients who just happen to be living in a prison can be

problematic due to the fact that approximately 1,600 offenders are released from jail and prison daily. As a result, community mental health providers will need to be aware that a large percentage of those released will require follow up services, which may initially be focused on offender's transition and adjustment to life in the community (Magaletta & Verdeyen, 2005).

Community psychologists practicing and living in rural areas are also presented with their own unique set of ethical dilemmas. In addition to a lack of resources in many rural areas, another such dilemma is the issue of dual relationships (Schank & Skovholt, 1997). Practice in rural areas result in overlapping of a variety of relationships such as social relationships, business or professional relationships, relationships within the psychologists' own families and individual clients, working with more than one member of clients' families and/or working with others who have friendships with individual clients (Schank & Skovholt, 1997).

Another difference between correctional psychology and community psychology is the prevalence of mental illness present in the clientele of both populations. Diamond, Wang, Holzer, Thomas, & Cruser (2001) conducted an extensive review of research examining mental illness in state prison populations and consequently reported that the early studies of mental illness within correctional settings found higher prevalence than in community samples. More specifically, prisons were found to have higher prevalence of mentally ill inmates than jails, and jails contain higher rates of mental illness than the community samples (Diamond et al., 2001). However, Karlin, Duffy, and Gleaves (2008) suggest that not only is mental illness largely underreported in community populations,

particularly among older adults, many individuals in a variety of communities are faced with barriers preventing them from accessing mental health services.

Although it is not surprising that prison psychologists need to be aware of the unique issues presented by inmates, psychologists in community settings would also benefit from such knowledge about the unique issues affecting inmates as well. Morgan, Rozycki, and Wilson (2004) surveyed 418 state prison inmates, and found that at least one-fourth of the inmates who participated in their study had previously participated in either voluntary or mandated therapy while not incarcerated. Based on their findings, it is likely that community psychologists will provide services to the offender population at various times during their career. As a result, it seems reasonable that correctional and community psychologists alike be familiar with the mental health experiences, attitudes, belief systems, culture, and perceptions of the inmate population (Morgan, Rozycki, & Wilson, 2004).

An issue particularly relevant to psychologists working in corrections is that of safety. Correctional psychologists not only need to be aware of their own safety, but also the safety of inmates, other staff, and the institution. As a result, the limits of confidentiality within a correctional setting are different from those in the community. More specifically, information shared by a client which suggests a risk to the security of the institution (such as an escape, riot, etc.) or safety of staff or other inmates must be reported to appropriate staff in order to maintain safety and security (Quijano & Logsdon, 1978). Psychologists' focus on behavior change or rehabilitation within a prison setting can only occur if adequate security is provided (Quijano, & Logsdon, 1978). Correctional psychologists can work toward progress in facilitating behavior change among their

clients; however, they must keep in mind the limitations inherent in maintaining security. Psychologists working in a correction setting cannot do or ask inmates to do anything that may contradict, weaken, or disregard the security measures instituted by the security authorities of the facility. Security measures include rules and regulations within individual cells, cell blocks, yard, treatment departments, and other various departments within the prison (Quijano, & Logsdon, 1978). Security measures also include the proper use of the chain of command of the appropriate prison officials such as the warden, deputy warden, and hierarchy of other security personnel. The enforced preoccupation with the security measures puts psychologists in prison settings at risk for losing sight of their role, which may lead to bias and viewing of inmates and inmate behavior strictly from a security standpoint rather than as a client (Quijano, & Logsdon, 1978).

While safety is no doubt a concern in correctional settings, correctional psychologists, for the most part, can be assured their clientele are monitored, and their whereabouts accounted for all hours of the day. Community psychologists, on the other hand, unfortunately may need to be aware of safety concerns not only while at the workplace, but also while at home when dealing with particularly threatening clients. Correctional psychologists most likely have access to extensive records of the inmates with whom they work, which allows them to predict to a certain degree inmates' potential for aggression and violence. Additionally, correctional psychologists work closely with correctional officers, potentially reducing the frequency and likelihood of being at risk of being attacked. Community psychologists often do not have access to detailed background information of new clients prior to initial sessions, making it difficult to immediately predict potential dangerousness of those clients. Community psychologists

also do not have the benefit of working with staff particularly tasked with ensuring safety of the work environment such as correctional officers in correctional environments.

While conducting a review of past literature, Guy, Brown, and Poelstra (1992) discovered nearly half of all psychotherapists are threatened, harassed, or physically attacked by a patient at some point in their careers. Guy et al. (1990) surveyed 340 psychologists about a number of demographic characteristics, as well as incidence, severity, and clinical factors associated with physical attacks on clinicians by their patients. They found male practitioners were somewhat more likely than females to be attacked, and a majority of attacks occurred during training years. Work setting was also found to be significantly related to frequency of physical attacks. In particular, public psychiatric hospitals were found to have the highest frequency of attacks (40.5%), followed by private practice (13.6%), outpatient clinics or counseling centers (11.3%), forensic settings (4.3%), and nonpsychiatric hospitals and clinics (4%; Guy et al., 1990).

Research has addressed a variety of aspects of community psychology including, but not limited to, how community mental health centers originated, the goals of a community psychologist, training required/recommended, and job characteristics of community psychologists. However, research exploring the prevalence and demographic characteristics of community psychologists is lacking. Little is known about the psychologists who provide valuable mental health services within communities around the nation. One factor undoubtedly important to most psychologists, regardless of setting, is that of job satisfaction. The following section provides a definition of job satisfaction, explores instruments used to measure job satisfaction, descriptions of models and theories

of job satisfaction, factors contributing to job satisfaction, factors that reduce job satisfaction, and research regarding the level of job satisfaction among psychologists.

### Job Satisfaction

Job satisfaction was widely undefined (Brayfield & Rothe, 1951) for some time within the field of psychology. In fact, in a scale development study conducted in 1951, Brayfield and Rothe assumed that job satisfaction was a construct inferred from the individual's attitude toward his or her work. Currently, many definitions of job satisfaction exist in the literature. Herzberg (1959) stated that job satisfaction results when the expectations, goals, and desires of the individual are met by his or her job. Job satisfaction has since been defined as an affective response to occupational tasks and events (Acker, 1999; Locke, 1976), and has been extensively researched in the area of industrial-organizational psychology (Judge, Thoresen, Bono, & Patton, 2001). The definition of job satisfaction used in the present study is an affective response to occupational tasks and events, due to its wide acceptance within the field and applicability to goals of the current study.

A majority of past research on job satisfaction has focused on the relationship between job satisfaction and job performance. Fewer studies have examined the relationship between job satisfaction and burnout, and fewer still have looked at the relationship between job satisfaction and work environment. In a review of job satisfaction research, Nord (1977) theorized a common set of assumptions that he argued have impacted the current knowledge about job satisfaction. The first assumption is the desirability of economic competition, growth, and utilitarianism. When gains in economic growth, technological advancement, and consumer satisfaction conflicts with

increasing job satisfaction, it is typically the former that will take precedence rather than the latter (Nord, 1977). Job satisfaction is often a secondary concern in relation to economic factors.

A second assumption identified by Nord (1977) is the idea that work is a central interest in life. In fact, much of the attempts to promote and increase job involvement with the intention of improving job satisfaction in the past had been based on this very assumption (Nord, 1977). Research has since shown that individuals whose self-concept is largely based on their career often experience negative consequences.

The next assumption identified by Nord (1977) is the assumption that human nature is individualistic. Nord (1977) argued that efforts to improve job satisfaction have been based on the premise that independence, individual achievement, recognition, and productivity (all of which are very individualistic focused ideals), are universal goals and are assumed to contribute to job satisfaction. Research has since indicated this assumption is inaccurate, however, and has provided knowledge regarding the differences between individualistic and collectivist cultures (Chiu & Kosinski, 1999; Triandis, McCusker, & Hui 1990; Triandis, Bontempo, Betancourt, Bond, Leung, Brenes, Georgas, Hui, Marin, Setiadi, Sinha, Verna, Spangenberg, Touzard, & de Montmollin, 1986). Individualism has been defined as a cultural value in which people are concerned with the welfare of themselves and their immediate families (Chiu & Kosinski, 1999). The concepts of "I" awareness, autonomy, emotional independence, and individual initiative, all of which are parallel with factors considered to increase job satisfaction, are defining characteristics of individualistic societies. Conversely, collectivist societies emphasize family integrity, community, and interdependence (Chiu & Kosinski, 1999). Emphasis in



collectivist societies is on awareness of “We”, collective identity, emotional dependence, and group unity.

Another assumption driving job satisfaction research, according to Nord (1977), is the concept of shared, superordinate goals. Not all employees will have the same shared goals, and individual goals may conflict and differ from those of the organizational goals. In order to reach individual goals, some destructive tactics such as lying, manipulating, and even sabotaging of other’s efforts may result (Nord, 1977).

The next assumption is that of the upholding of the existing allocation of power within an organization. Research on job satisfaction rarely, if ever, has considered changing the distribution of power to include those lower in the hierarchy in policy and decision making as a tool to increase job satisfaction. Having little to no control over the policies, goals, and structure of the organization likely has an impact on one’s level of job satisfaction within that organization (Nord, 1977). Not only do goals and policies of an organization dictate one’s behavior at work, Nord (1977) points out that organizations also control where people live, when they sleep, when they eat, when and whether they work, what they do at work, and even whether or not they take work home after hours.

Several factors have been found to contribute to, or be related to, job satisfaction. Those factors include core evaluations such as self-esteem, locus of control, and self-efficacy (Judge, Bono, Erez, & Locke, 2005; Judge, Locke, Durham, & Kluger, 1998), personality traits (Thomas, Buboltz, & Winkelspecht, 2004; Ilies & Judge, 2003; Heller, Judge, & Watson, 2002; Judge, Heller, & Mount, 2002; Judge & Larsen, 2001; Chiu & Kosinski, 1999; Staw, Bell, & Clausen, 1986), burnout (Bilge, 2006), and variety of job characteristics (Judge, Bono, & Locke, 2000). Research exploring each of these

relationships will be addressed later in detail. The next sections provide a description of some of the measures used within the field of psychology to assess levels of job satisfaction.

### *Measures of Job Satisfaction*

Several instruments for assessing job satisfaction have been developed within the field of psychology. In fact, in a detailed review of job satisfaction measures, O'Connor, Peters, and Gordon (1978) reported that at least 71 measures described in job satisfaction research appeared only once in five leading journals between 1973 to 1978. O'Connor, Peters, and Gordon argued that the continued use of non-replicated measures likely does a great disservice to the field of job research for two reasons. First, doing so fails to provide fair tests of theoretical propositions, and second, it prevents the incremental building of knowledge across studies (O'Connor, Peters, & Gordon, 1978). Contradictory findings are not unusual within many fields of applied psychology; however, O'Connor, Peters, and Gordon (1978) suggest a major factor contributing to inconsistent results is the variety of personalized measurement instruments developed. They further argue that the construct validity of newer measures of job satisfaction needs to be clearly established, which they stated cannot be done in a single study or by a single method. Due to the large number of measures, only the most widely used instruments, the Job Descriptive Index and the Minnesota Satisfaction Questionnaire, are addressed in this section.

*Job Descriptive Index.* The Job Descriptive Index (JDI; Smith, Kendall, & Hulin, 1969, 1975/1985) has been reported to be the most frequently used measure of job satisfaction (De Meuse, 1986; O'Connor, Peters, & Gordon, 1978; Yeager, 1981). The

JDI is comprised of 72 items and covers five facets (work, supervision, coworkers, pay, and promotion). In order to complete the JDI, respondents must indicate whether a list of adjectives or brief phrases describes his or her job by choosing yes, no, or a question mark.

Although the JDI is reported to be the most frequently used measure of job satisfaction, the length of time it would take participants to complete would likely result in greater levels of attrition than using a more concise measure (O'Connor, Peters, & Gordon, 1978). The JDI is not appropriate for the current study due to its length and limited number of facets addressed. Several limitations of the JDI have been discussed in past research (Kinicki, McKee-Ryan, Schriesheim, & Carson, 2002; O'Connor, Peters, & Gordon, 1978). In regards to construct validity, Kinicki, McKee-Ryan, Schriesheim, and Carson (2002), found the JDI to fare only moderately in comparison with the Minnesota Satisfaction Questionnaire (MSQ). Additionally, the JDI was shown to have less trait variance than the MSQ. Another limitation of the JDI is the use of a three-point response scale, which typically results in smaller inter-item correlations, and requires a relatively large number of items per subscale to obtain a given reliability (Kinicki, McKee-Ryan, Schriesheim, & Carson, 2002). Kinicki, McKee-Ryan, Schriesheim, and Carson (2002), even suggest not using the JDI when an overall measure of job satisfaction is necessary, and reported additional validation of the item content of the JDI is needed. In comparison, the MSQ was described as providing the ability to study broader conceptualizations of job satisfaction.

*Minnesota Satisfaction Questionnaire.* The Minnesota Satisfaction Questionnaire (MSQ; Weiss, Dawis, England, & Lofquist, 1967) is self-report measure of job

satisfaction. The long form of the MSQ is comprised of 100 items and covers twenty different facets. The twenty facets addressed by the MSQ include the following: ability utilization, achievement, activity, advancement, authority, company policies and practices, compensation, co-workers, creativity, independence, moral values, recognition, responsibility, security, social service, social status, supervision-human relations, supervision-technical, variety, working conditions.

The short form of the MSQ consists of 20 items which combine to form three scales: intrinsic satisfaction, extrinsic satisfaction, and general satisfaction. Intrinsic job satisfaction refers to satisfaction with certain factors in the job setting that offer prospects for activity, independence, variety, social status, moral values, security, social service, authority, ability utilization, responsibility, creativity, and achievement. Extrinsic job satisfaction is the extent to which employees are satisfied with supervision received, institution policies and practices, compensation, advancement, opportunities, and recognition. The two additional subscales that, in combination with Intrinsic and Extrinsic satisfaction, make up the General Satisfaction score are co-workers and work conditions (Weiss et al., 1967).

The long form of the MSQ takes approximately 15-30 minutes to complete, and the short form takes approximately five to ten minutes to complete. To complete both the long and short forms of the MSQ, respondents use a 5-point Likert scale, with responses ranging from very dissatisfied to very satisfied to respond to statements describing the above mentioned job facets. The MSQ addresses a larger number of job facets than the JDI. The MSQ short form has also been shown to be comparable to the long form in terms of reliability and validity (Weiss, Dawis, England, & Lofquist, 1967). The MSQ

short form will be used in the current study due to the concise yet thorough nature of the measure. The various models of job satisfaction that have shaped research in this area within the field of psychology are described in the following section.

### *Models of Job Satisfaction*

*Top-down Model of Job Satisfaction.* There are several models of job satisfaction discussed and researched within the job satisfaction literature. Brief (1998), cited in Judge, Bono, and Locke (2000), described two models of job satisfaction: top-down and bottom-up. In the top-down model of job satisfaction, it is assumed that job satisfaction results from how one interprets the environment. On the other hand, the bottom-up model of job satisfaction implies that job satisfaction results from the individual's experiences of positive job conditions. Research has supported both the top-down model (Judge, Locke, Durham, & Kluger, 1998) and the bottom-up model (Judge, Bono, & Locke, 2000; Sousa-Poza & Sousa-Poza, 2000) of job satisfaction.

Results from Judge, Locke, Durham, and Kluger's (1998) study exploring the impact of core self-evaluations, which they defined as self-esteem, generalized self-efficacy, locus of control, and nonneuroticism, on job satisfaction. In addition to collecting data from three separate samples (physicians, college business school graduates, and Israeli students enrolled at the Hebrew University), Judge et al. (1998) also collected data about the participants by surveying the participants' "significant others" regarding the participants' job satisfaction and dispositional characteristics. Their findings supported the top-down model of job satisfaction. In particular, they found that the way people view themselves affects how they experience their jobs and even their lives. In other words, people with more positive core evaluations (e.g. higher levels of

self-efficacy) view themselves as worthy and able to cope with life's demands, and possess more positive dispositions (Judge et al., 1998). As a result, those individuals view events and situations, including their job, in a more positive manner. On the other hand, people who do not see themselves as being worthy, or able, view situations and events with a more negative manner, often resulting in lower levels of job satisfaction or higher job dissatisfaction (Judge et al., 1998).

A limitation of their study is the instrument used to measure the various constructs. The measures of job satisfaction and perception of work characteristics used consisted of five-item adaptations of previously established instruments, while the measure of self-efficacy was an eight-item instrument they developed for the purpose of their study (Judge et al., 1998). As mentioned previously, O'Connor, Peters, and Gordon (1978) warned of the dangers of using non-replicated measures, as well as the need to clearly establish construct validity of newer measures of job satisfaction, which they argue cannot be done in a single study or by a single method.

*Bottom-up Model of Job Satisfaction.* As previously stated, the bottom-up model of job satisfaction implies that job satisfaction results from the individual's experiences of positive job conditions (Brief, 1998, as cited in Judge, Bono, & Locke, 2000). In other words, this model assumes that individuals have needs that must be met by their job, and having those needs met results in higher levels of job satisfaction. Results from research conducted by Judge, Bono, and Locke (2000) examining the relationship between core self-evaluations, job characteristics, and job satisfaction supported the bottom-up model of job satisfaction. In particular, using a sample of 384 of participants from a midsized Midwestern city, Judge, Bono, and Locke (2000), found that job complexity was an

important explanatory variable in the relationship between job satisfaction and core self-evaluations. However, the limitations of their study were similar to the limitations of the study conducted by Judge et al. (1998) mentioned above. More specifically, a limitation was the use of very brief, non-replicated measures for nearly all constructs explored (e.g. job satisfaction, perceived job characteristics, generalized self-efficacy, and locus of control) rather than relying on well-established instruments with high construct validity. Another limitation was the lack of diversity within the sample, which was drawn from a single city in the Midwest (Judge, Bono, Locke, 2000).

Sousa-Poza and Sousa-Poza (2000) also found support for the bottom-up model of job satisfaction. To conduct their research, Sousa-Poza and Sousa-Poza (2000) analyzed the levels and determinants of job satisfaction in 21 different countries (including the United States, several European countries, and Japan) by comparing work role input (e.g. effort) with work role output (e.g. salary). Sousa-Poza and Sousa-Poza (2000) used archival data focused on work orientations from a 1997 International Social Survey Program. Data consisted of information about general attitudes toward work and leisure, work organization, work content, and collective interests from 15,324 full and part-time workers. They found that countries with high work role outputs in comparison to work input have higher job satisfaction ranking than those with lower work role output (Sousa-Poza & Sousa-Poza, 2000). No information was provided about the specific instrument used to measure job satisfaction of participants.

*Range of Affect Theory of Job Satisfaction.* Another model of job satisfaction, and arguably the most well-know model, is Locke's (1976) range of affect theory. This theory basically suggests job satisfaction is determined by the discrepancy between what an

individual desires in a job, and what that individual actually has in a job. Additionally, this model suggests if an individual values a particular aspect, or facet, of a job, that individual's job satisfaction/dissatisfaction is impacted positively when expectations are met and negatively impacted when expectations regarding that particular job facet are not met (Locke, 1976). Research has also provided support for this theory (McFarlin, Coster, Rice, & Cooper, 1995).

McFarlin, Coster, Rice, and Cooper (1995) assessed the generalizability of the range of affect theory by using a sample of 122 South African employees of a large corporation in South Africa. Individual facet satisfactions of 12 job facets were explored using a seven-point scale with responses ranging from "delighted" to "terrible". Facet importance was measured using a nine-point scale ranging from "not at all important to me" to "extremely important to me", and the amount of each facet participants were experiencing on their jobs was measured using a five-point scale ranging from "none" to "an extraordinary amount". McFarlin et al. (1995) reported that all significant interactions displayed a pattern consistent with Locke's (1976) range of affect theory. An overall measure of job satisfaction was not used, and McFarlin et al. (1995) did not provide any information about the reliabilities or validities of the measures used in their study.

*Dispositional Theory of Job Satisfaction.* Another theory of job satisfaction is the dispositional theory. This theory suggests people naturally possess particular dispositions or personality traits. According to the dispositional theory, particular dispositions result in generally higher levels of job satisfaction, regardless of the job, while others result in generally lower levels of job satisfaction. Evidence for this theory is provided by the fact



that job satisfaction appears to remain stable over time across careers and jobs for certain “dispositions” (Staw & Ross, 1985). Research conducted by Staw and Ross (1985), discussed later in detail, provided support for the dispositional theory of job satisfaction.

Further evidence of the dispositional theory of job satisfaction is provided through research that has found identical twins raised apart possess similar levels of job satisfaction. (Arvey, Bouchard, Segal, & Abraham, 1989). The sample used in Arvey et al.’s (1989) study consisted of thirty four monozygotic twins, 25 female pairs and 9 male pairs, who were all separated from birth at an early age. Participants were administered the short form of the MSQ as part of a comprehensive work-history assessment. Findings from their study indicated that approximately 30% of the observed variance in general job satisfaction was due to genetic factors (Arvey et al., 1989). Limitations of Arvey et al.’s (1989) research include the small sample size and the fact that a majority of the sample was female, which suggests results may not be generalizable across populations.

Judge et al. (1998), previously described in detail, further refined the dispositional theory by specifying that it is core self-evaluations that determine one’s dispositions toward job satisfaction. Those four core self evaluations include: self-esteem, self-efficacy, locus of control, and neuroticism. Judge et al.’s (1998) model suggests that higher levels of self-esteem and self-efficacy lead to increased job satisfaction. Internal locus of control, the belief that one has control over his or her own life, was also found to contribute to increased job satisfaction. On the other hand, higher levels of neuroticism were found to relate to lower levels of job satisfaction.

*Herzberg’s Two Factor Theory of Job Satisfaction.* Herzberg’s two factor theory is another theory of job satisfaction. Herzberg’s theory, also referred to as the motivation-

hygiene theory, suggests that two groups of factors play an important role in job satisfaction. More specifically, Herzberg theorized that job satisfaction and job dissatisfaction operate on two separate continuums, with the job satisfaction continuum ranging from high to no satisfaction and the job dissatisfaction continuum ranging from no to high job dissatisfaction (Herzberg, 1959). The factors in the first group are motivating, or intrinsic, factors. Motivating factors, such as success, recognition, appreciation, taking responsibility, and possibilities for advancement, are all related to the job itself and inspire people to perform. The second group of factors is called hygienic, or extrinsic, factors. Hygienic factors are related to the environment and conditions of the job itself (Herzberg, 1959). Examples of hygienic factors include work conditions, organizational policies, supervision and interpersonal relationships.

Research findings have both supported (Maidani, 1991), and criticized (Ewen, 1964) Herzberg's two factor theory. Maidani (1991) used a sample of 350 participants from two organizations in Florida to test Herzberg's theory using a combination of two separate unidentified measures, the first of which addressed factor importance and the second which measured job satisfaction and dissatisfaction. Maidani (1991) found significant differences between satisfied employees who valued motivating factors more than dissatisfied employees. Additionally, both motivator factors and hygiene factors were found to be sources of job satisfaction rather than dissatisfaction. According to Maidani (1991), this finding was contradictory to Herzberg's theory which suggested that hygiene factors are sources of dissatisfaction rather than satisfaction. In a theoretical paper critiquing Herzberg's theory, Ewen (1964), provided early criticism of Herzberg's theory, which included the narrow range of jobs investigated, the use of only one measure

(a semi-structured interview) of job attitudes, the absence of reliability and validity data, and the absence of an overall job satisfaction measure.

Several models of job satisfaction exist, some of which are strongly supported by research, others which have limited empirical support. Limited empirical research relying on a variety of techniques and theories of job satisfaction, and most of which is now quite dated, has explored job satisfaction among psychologists in a variety of settings. The next section provides a detailed review of those studies.

#### *Job Satisfaction among Psychologists*

Fagan, Ax, Liss, Resnick, and Moody (2007) examined the satisfaction with undergraduate and graduate training experiences and career choices among 185 psychology interns, 35 postdoctoral residents, 61 directors of clinical training, and 216 psychologist in independent practice. Additionally they investigated the levels of satisfaction regarding the process of maintaining licensure (i.e., obtaining continuing education credits) among directors of clinical training, and psychologist in independent practice. Participants of their study were working in one of the following settings: independent practice (24%), medical school (12.1%), university counseling center (11.7%), community mental health (9.1%), correctional setting (7.5%), Veteran's Administration medical center (6.9%), private/state hospital (6.1%), school system (2.6%), military setting (2.4%), mental health consortium (1.2%), health maintenance organization (0.4%), and other (9.5%).

In order to conduct their research, Fagan et al., (2007) used a three part survey addressing (a), demographic information; (b) satisfaction with training, career choice, and continuing education requirements; and (c) information regarding the quantity of CE

credits required, the quality of CE programs previously attended, and the availability of funding to attend CE programs. Fagan et al. (2007) reported a 15.6% response rate for interns, 12.6% for postdoctoral residents, 18.3% for directors of training, and 43.2% for psychologists in independent practice. Results of their study indicated an overall general satisfaction in the participants' training and career choices. However, 68% desired more training in work career and workplace issues, and 44% indicated a need for training in the biological bases of behavior. Financial commitments and time commitments were negative aspects of both becoming a psychologist and remaining in the profession of psychology that were found by some to outweigh the long term benefits of being a psychologist (Fagan et al., 2007).

Fagan et al. (2007) noted a limitation of their study was the ambiguous definition used for the term satisfaction in regard to training (agreement or disagreement with a statement about a desire for more training on a certain topic). This definition could either measure satisfaction the training received on a certain topic or the need for more training in a certain area (Fagan et al., 2007). Other limitations of their research include the small response rate, which may have jeopardized the generalizability of the findings within the profession; and instruments used, of which the reliability and validity information was not provided. Several other studies have also found a generally high level of job satisfaction among psychologist (Hoppock, 1937; Moss, C. & Clark, J.F., 1961; Walfish, Polifka, & Stenmark, 1985; Walfish, Moritz, & Stenmark, 1991).

One of the earliest empirical studies on job satisfaction among psychologists was conducted by Hoppock (1937), who mailed job satisfaction surveys to 203 members and associates of the American Psychological Association. A total of 66 participants

completed the survey, resulting in a 33% response rate. The average length of employment in participants' job at the time of the study was eight years, and an average annual salary of \$3,261. No other demographic information about the participants was provided. Hoppock (1937) reported an average job satisfaction index among participants in the 64<sup>th</sup> percentile range. A limitation of Hoppock's (1937) study was the small sample size and response rate, resulting in questionable generalizability. Additionally, no information about the reliability or validity of the instrument used to measure job satisfaction was provided.

Moss and Clark (1961) attempted to identify factors influencing psychologists' level of satisfaction with their various roles. Participants in their study consisted of 71 psychologists from nine Midwestern states, 16 of which identified as chief psychologists, and 41 reported possessing a Master's degree or less. Three rating scales were utilized to assess levels of satisfaction (Moss & Clark, 1961). The various categories of activities addressed in the first rating scale included: psychological evaluation, individual psychotherapy, group psychotherapy, supervision and training, administration, and research. Respondents were asked to rate their level of satisfaction as well as amount of time involved in each activity. The second rating scale address participants satisfaction with the following factors: intellectual stimulation, salary, status and prestige, working conditions, security, professional freedom, patient progress, type of patient seen, manageability of workload, agreement with hospital objectives, and opportunities for advancement. The third rating scale addressed participants' satisfaction with various medical, social work, and administrative staff within the hospital setting (Moss & Clark, 1961).

Findings indicated that participants reporting longer state employment also reported higher levels of satisfaction. Master's level psychologists were found to have greater levels of job satisfaction than doctoral level psychologists. Participants reported having the most strained interprofessional relations with physicians. According to Moss and Clark (1961), participants reported the highest level of satisfaction while participating in supervision, training, and individual and group therapy. A moderate level of satisfaction was obtained from research, less satisfaction from psychological evaluations, and very limited satisfaction was obtained from administrative tasks (Moss & Clark, 1961). In decreasing order of importance, the factors contributing to job satisfaction among participants were professional freedom, intellectual stimulation, patient progress, opportunity for advancement, manageable workload, type of patient seen, status and prestige, and agreement with hospital objectives. Surprisingly, factors found to have the least influence on job satisfaction were working conditions, salary, and security (Moss & Clark, 1961).

A limitation of their study was the small sample size of participants all from Midwestern states, which may not be representative of psychologists in the field. Also, their finding that those who had been state employed longer reporting higher levels of satisfaction could indicate a sample bias. Dissatisfied psychologists may have sought new opportunities for employment in other settings or organizations in order gain job satisfaction. Finally, no information about the reliability or validity of rating scales used to measure job satisfaction were reported or discussed.

In a survey examining career satisfaction graduates of clinical psychology programs, Walfish, Polifka, and Stenmark (1985) found high levels of satisfaction with

career choice among clinical psychologists. In order to conduct their research, 179 graduates, were asked to complete a survey asking whether or not participants would choose a career in psychology if given the choice again, and if not, which field they would have preferred to pursue. Their sample consisted of males (38%) and females (62%) with an average age of 30.8 and 1.5 years of experience. Limitations of the study included the sample being primarily female, which may not have resulted in responses representative of professionals in the field. Also, the use of a two item survey to measure satisfaction likely had questionable reliability and validity, although not discussed in their article.

An eight year follow up survey using the participants from Walfish et al.'s (1985) study, was conducted by Walfish, Moritz, and Stenmark (1991). Their sample consisted of 87 participants, 46% female and 54% males. At the time of the follow up study, the most common work responsibility of participants was clinical practice (71%) followed by academic research (15%). The most common work setting was private practice (45%) followed by hospitals (19%) and universities (15%). The same survey used in Walfish et al.'s (1985) study was used in Walfish et al.'s (1991) research. Findings indicated that 89.4% of the respondents would choose a career in psychology if given the opportunity (Walfish et al., 1991). Given the same instrument to measure satisfaction was used in the follow up study, the limitations of Walfish et al.'s (1985) research described above apply.

Contradicting findings regarding the level of job satisfaction in general also exist (Jacobson, Rettig, & Pasamanick, 1959). In a now dated study, Jacobson, Retting, and Pasamanick (1959), described later in detail, reported finding that psychologists had the

lowest level of job satisfaction among a sample of psychologists, psychiatrist, social workers, teachers, and nurses.

Boothby and Clements (2002) examined job satisfaction among 830 master's and doctoral level correctional psychologists. Of the 830 participants, 78% worked in a state prison and 22% were employed in a federal prison. An eighteen item survey addressing a variety of job dimensions was developed for the purpose of their research. Items included such factors as relationships with coworkers, opportunities for recognition and advancement, professionalism, safety, and job security. Respondents were asked to rate how much they valued each dimension and their level satisfaction with each using a five-point Likert scale. Overall, a moderate level of job satisfaction was found, with job dimensions such as safety, job security, and relationships with clients marked as most satisfying. On the other hand, professional atmosphere and opportunities for advancement were ranked as the least satisfying aspects of employment in corrections among psychologists. Additionally, psychologists in federal prisons or less crowded correctional facilities reported higher levels of job satisfaction than those in state prisons or overcrowded facilities (Boothby & Clements, 2002). A limitation of their study was the survey used to measure satisfaction. As seen in several of the previously described studies of job satisfaction, their measure was developed specifically for this study, with no information about validities and reliability reported.

Surprisingly, researchers have not yet examined levels of job satisfaction specifically among community psychologists. As briefly mentioned before, Jacobson, Rettig, & Pasimanick (1959) compared levels of job satisfaction between psychologists from state institutional employees and non state institutional employees. More



specifically, the study involved 80 psychiatrists, 80 psychologists, 80 social workers, 80 teachers, and 80 nurses. As stated previously, psychologists were found to have the lowest level of job satisfaction among the different professionals in the sample used by Jacobson et al. (1959). Additionally, clinic, or non institution, psychologists were found to have higher levels of job satisfaction than institutional psychologists. However, it is recognized that the study conducted by Jacobson et al. (1959) is quite dated and they reported that the 5-item measure used to asses job satisfaction was “rather crude” (p. 148) and likely a limitation of their study.

Although several empirical studies have explored job satisfaction, factors that lead to increased or decreased job satisfaction, and examined models/theories of job satisfaction, only limited research exists regarding job satisfaction among psychologists, and even less research addressing job satisfaction specifically among correctional and community exist. Research has yet to investigate the similarities and/or differences between the levels of job satisfaction of correctional psychologists and community psychologists. The research that has been completed on job satisfaction has had a number of limitations, including small sample sizes, generalizability concerns, use of measures of job satisfaction with questionable validity and reliability, and use of non-replicated measures of job satisfaction. As addressed previously, the use of non-replicated measures has been criticized by researchers in the past, as the use of such measure fails to provide fair tests of theoretical propositions, prevents the incremental building of knowledge across studies, and contributes to the inconsistent and contradictory results in research (O'Connor, Peters, & Gordon, 1978). As mentioned earlier, a factor found repeatedly to be related to job satisfaction is burnout (Bilge, 2006; Tsigilis, Koustelios, & Togia, 2004;

Lee & Ashforth, 1996; Penn, Romano, & Foat, 1988). The following sections will address the construct of burnout in detail, including definitions of burnout offered by various researchers, instruments used to measure burnout, models of burnout proposed by various researchers, factors contributing to and correlating with burnout.

## Burnout

### *Definition*

Although the term “burnout” has been widely used in several professional fields, one of which is psychology, many definitions have been offered by past researchers. According to Ackerley, Burnell, Holder, and Kurdek (1988), the term was presumed to have been originated by Freudenberger (1975), who described it as “failing, wearing out, or becoming exhausted through excessive demands on energy, strength, or resources” (p. 73). Meir (1983) suggested that burnout is a “state in which individuals expect little reward and considerable punishment from work because of a lack of valued reinforcement, controllable outcomes, or personal competence” (p. 899). Maslach and Jackson (1986), define burnout as “a syndrome of emotional exhaustion, depersonalization, and reduced personal accomplishments that can occur among individuals who ‘do people work’ of some kind” (p. 1). Maslach and Jackson’s (1986) definition of burnout is used in the current study as it is the most widely utilized and accepted in recent research (Enzmann, Schaufeli, Janssen, & Rozeman, 1998).

An especially important reason to continue research in the area of burnout, factors contributing to burnout, and prevention of burnout, is the harmful consequences that can result from increased levels of burnout. The effects of burnout not only can be psychologically experienced by symptoms but can be physically manifested as well.

Psychological symptoms include, but are not limited to, feelings of depression, frustration, and low self-esteem (Raquepaw & Miller, 1989). Physiological symptoms of burnout include constant fatigue, insomnia, lingering colds, headaches, and gastrointestinal disturbances (Maslach and Jackson, 1981; Kyriacou & Sutcliffe, 1978; Maslach, 1976; Freudenberger, 1975).

### *Measures of Burnout*

*Burnout Measure.* The Burnout Measure (BM; Pines & Aronson, 1981) was reported by Schaufeli, Bakker, Hoogduin, Schapp, and Kladler (2001) to be the second most widely used instrument to assess burnout, with reported use in approximately 5% of all studies on burnout. The BM consists of 21 items rated using a 7-point Likert scale, ranging from 1 “never” to 7 “always”. A single burnout score is computed by summing the 21 items. Pines and Aronson (1981) also classified the items into three types of exhaustion: physical exhaustion, emotional exhaustion, and mental exhaustion. According to Pines and Aronson (1988), physical exhaustion is defined as low energy, chronic fatigue, and weakness. Emotional exhaustion involves a feeling of hopelessness, helplessness, and entrapment. Finally, mental exhaustion is described as the development of negative attitudes toward one’s self, work, and life itself (Pines & Aronson, 1988)

Several limitations of the Burnout Measure have been identified since its development. Enzmann, Schaufeli, Janssen, & Rozeman (1998) strongly criticized the factorial structure of the BM, stating that although the BM is supposed to address three different aspects of exhaustion, the internal consistency of the whole scale is rather high, ranging from .91 to .93. This observation suggests the three proposed scales are highly correlated, and in fact, are not measuring three separate aspects of burnout (Enzmann et

al., 1998). In particular, Enzmann et al. (1998) found the BM addressed non-specific negative feelings or thoughts about life in general, and measured a general well-being rather than burnout specifically.

*Maslach Burnout Inventory (MBI).* The Maslach Burnout Inventory (MBI) is undoubtedly the most widely used instrument in burnout research, implemented in over 90% of journal articles and dissertations exploring burnout (Schaufeli et al., 2001; Vredenburg, Carlozzi, & Stein, 1999; Raquepaw & Miller, 1989; Ackerly et al., 1988). The norms of the MBI are based on a heterogeneous group of mental health workers that included psychologists, psychotherapists, counselors, mental hospital staff, and psychiatrists. The Maslach Burnout Inventory consists of three subscales and is comprised of 22 total items. Those three subscales include Emotional Exhaustion (EE), Depersonalization (DP), and Personal Accomplishment (PA). The Emotional Exhaustion subscale contains nine items and addresses feelings of being emotionally drained and an inability to meet the interpersonal demands of one's work. The Depersonalization subscale is made up of five items used to assess for the development of negative, cynical attitudes toward the client. The Personal Accomplishment subscale consists of eight items intended to measure feelings of competence and successful achievement in one's work with people. Higher scores on Emotional Exhaustion and Depersonalization subscales and lower scores on the Personal Accomplishment subscale indicate a greater degree of burnout (Ackerly et al., 1988; Raquepaw & Miller, 1989).

Maslach and Jackson (1986) reported the test-retest reliability of the MBI, measured at two to four week intervals, as .82 for Emotional Exhaustion, .60 for Depersonalization, and .80 for Personal Accomplishment. The Cronbach's alpha measure

of internal consistency was reported as being .90 for Emotional Exhaustion, .79 for Depersonalization, and .71 for Personal Accomplishment (Maslach & Jackson, 1986). Several studies have demonstrated the convergent and discriminate validity of the MBI (Maslach & Jackson, 1986; Rafferty, Lemkau, Purdy, & Rudisill, 1986).

In a comparison of the Maslach Burnout Inventory and the Burnout Measure among a clinical population, Schaufeli et al. (2001) found the discriminant validity of the MBI to be greater than that of the BM. Unlike the BM, the MBI was found to clearly distinguish burnout from other mental health syndromes such as depression, anxiety, or somatic symptomatology due to its context-specific (i.e., work-related) nature. Schaufeli et al. (2001) discouraged the use of the BM for measuring burnout for clinical assessment of burnout due to its inability to distinguish burnout from other mental health diagnoses. Additionally, the MBI was found to be more sensitive to group differences than the BM (Enzmann et al., 1998). Enzmann et al. concluded the BM is not a suitable instrument to measure burnout, but would rather be more appropriate as a measure of general deterioration or well-being.

#### *Models of Burnout*

*Folk Models.* Although they did not reference the sources, Maslach, Schaufeli, and Leiter (2001) describe two “folk” models that surfaced from the earliest phases of research on burnout. One such theory suggests that it is the best and most idealistic employees who experience burnout. The belief, according to this theory, is that the dedicated individuals end up overburdening themselves in order to meet their ideals. Exhaustion and eventual cynicism result when their efforts were not enough to reach their goals (Maslach et al., 2001).

The second “folk” model described by Maslach et al. (2001) states the burnout occurs after long exposure to chronic job stressors. According to this theory, burnout would remain relatively stable if people remain the same job. Burnout also would be more likely to occur later in people’s careers rather than earlier (Maslach et al. 2001).

*Phase Model of Burnout.* Golembiewski (1999) proposed a phase model of burnout based on the three dimensions of burnout as defined by Maslach (1986), which include emotional exhaustion, depersonalization, and personal accomplishment. Using the phase model of burnout, individuals’ responses to the MBI result in a high or low categorization on each of the dimensions of burnout. According to the phase model, high emotional exhaustion contributes more to burnout than low personal accomplishment; and both contribute more than high depersonalization. The combinations of high and low scores on the three dimensions result in an eight-phase model, with the first phase consisting of low scores across all three dimensions of burnout and the following phases consisting of various combinations of high and low scores across dimensions.

Golembiewski (1999) clarified that personal accomplishment scores as measured on the MBI are reversed when used in the phase model. In other words, high levels of personal accomplishment in the phase model imply diminished personal accomplishment.

Golembiewski (1999) suggested that individuals do not experience each phase until reaching maximum burnout. Instead, individuals experiencing chronic burnout most commonly experience a progression from phase one (low levels across all three dimensions), to phase two (high level of depersonalization, low levels of personal accomplishment and emotional exhaustion), then phase four (high depersonalization,

high personal accomplishment, and low emotional exhaustion), and finally phase eight (high levels across all three dimensions).

A limitation of the model is the use of reverse scoring for the personal accomplishment dimension. Maslach, Jackson, and Leiter (1996) specifically recommend using direct computations of the personal accomplishment dimension rather than reverse scoring so as to avoid negatively impacting the validity and reliability of results obtained by the MBI.

*Developmental Model of Burnout.* Suran and Sheridan (1985) proposed a development model of burnout which describes four stages encountered by psychologists as they seek professional and personal life span integrity. Stage one is identity versus role confusion. Suran and Sheridan (1985) argued that psychologists first experience this stage early in their academic career. It is during their training and career decision making process that professional choices and initial development of a value system guiding those choices are encountered. Failure to resolve the first stage may result in individuals continually questioning their career choice and commitment to the profession. Stage two is competence versus inadequacy. It is during this stage that psychologists new to the field question the extent of their skills and makes a comparison of their skills to other psychologists (Suran & Sheridan, 1985). Stage three is productivity versus stagnation. Questions about the purpose of a psychologist's career often arise during this phase. The relationship between career and personal happiness results in decisions throughout this stage that may influence the balance between professional needs and personal needs (Suran & Sheridan, 1985). Finally, stage four is rededication versus disillusionment. It is throughout this stage that one may question their past career choices, experience

dissatisfaction in their career, and wish they had chosen a different career path. Boredom and burnout are a frequent result of the lack of novelty initially experienced as a new professional in the field (Suran & Sheridan, 1985). According to Suran and Sheridan's (1985) model, burnout not only results in the fourth stage of professional development, but can also result when unsatisfactory resolution of conflicts between each of the stages occurs. Empirical research either supporting or contradicting Suran and Sheridan's (1985) developmental theory of professional development of psychologists has yet to be completed.

*Three Factor Model of Burnout.* Maslach and Jackson (1981b) proposed a three factor model of burnout. The first factor, and a key aspect of burnout, is increased feelings of emotional exhaustion. As emotional resources diminish, human service employees can begin feeling as if they are no longer capable of giving of themselves emotionally. As a result, Maslach and Jackson (1981b) suggest emotional exhaustion is associated with psychological and physiological strain.

The second factor contributing to burnout is increased depersonalization (Maslach & Jackson, 1981b). Depersonalization is defined as negative, cynical attitudes and feelings toward one's clients. Depersonalization can lead to insensitive and uncaring or even dehumanized perception of others. As a result of depersonalization, staff can begin viewing clients as deserving of their troubles. Maslach and Jackson (1981b) suggest that depersonalization is used as a coping strategy. Through depersonalization, the individual attempts to prevent a further decrease of emotional energy by treating others, particularly clients, as objects.



The third and final factor contributing to burnout, as described by Maslach and Jackson (1981b), is decreased personal accomplishment. When people experience reduced personal accomplishment, a greater tendency to evaluate themselves in a more negative manner, particularly in relation to their work with clients, results. Consequently, a typical outcome of individuals who experience decreased personal accomplishment is increased unhappiness with themselves and dissatisfaction with their accomplishments on the job.

Lee and Ashforth (1990) found support for Maslach and Jackson's (1981b) model using a sample of 219 supervisor and managers from a large public welfare agency of a major metropolitan county in the Midwest. To conduct their research, participants completed the Maslach Burnout Inventory, a three-item psychological strain measure, a four-item physiological strain measure, a 17-item measure of control of stressful work situations, an 11-item measure of escape from stressful work situations, a six-item work-related helplessness measure, and a six-item measure of self-appraisal of performance in various aspects of work (e.g., ability to work effectively with others, quality of work, initiative). In addition to supporting the three factor model using confirmatory factor analyses, Lee and Ashforth (1990) also found all three dimensions (emotional exhaustion, depersonalization, and decreased personal accomplishment) to be closely related to aspects of strain, stress, coping, and self-efficacy. Emotional exhaustion and depersonalization were more strongly associated than personal accomplishment with psychological and physiological strain and helplessness. Personal accomplishment was more strongly associated with aspects of self-efficacy such as perceptions of performance and control (Lee & Ashforth, 1990).

### *Personal/Demographic Correlates of Burnout*

Several demographic characteristics such as age, gender, and marital status have been found to correlate with burnout. However, contradictory findings have also been found regarding each of those demographic characteristics. The research exploring the relationships between demographic characteristics and burnout are discussed in the following sections.

*Age.* Conflicting findings have been reached regarding the correlations of age with level of burnout. Studies have found that age was correlated to level of burnout (Rupert & Morgan, 2005; Vredenburg, Carlozzi, & Stein, 1999; Ackerley et al., 1988; Maslach, 1982). Younger psychologists were found to experience more emotional exhaustion than older psychologists. Ackerley et al. (1988) suggested that psychologists learn to conserve their energy over time and therefore have developed coping skills to prevent becoming emotionally drained. However, Raquepaw and Miller (1989) found no significant difference in level of burnout existed by age.

*Gender.* Research exploring burnout and gender has found that females scored higher on measures of emotional exhaustion (Maslach & Jackson, 1981) and males scored higher on measures of depersonalization (Vredenburg et al., 1999; Maslach & Jackson, 1981). Morgan, Van Haveren, & Pearson (2002) conducted a study examining correctional officer burnout and found that women were less likely to exhibit depersonalization when responding to inmates than males. Conversely, some studies have found no significant correlation between gender and level of burnout (Ackerley et al., 1988; McGee, 1989; Raquepaw & Miller, 1989). As of yet, the relationship between gender and burnout remains unclear.

In a study exploring burnout among different work settings described previously, Rupert and Morgan (2005) found gender differences to be related to burnout. They found that women in agency settings experienced higher levels of emotional exhaustion than women in either solo or group practice. Men in group and independent practice settings were found to report significantly higher levels of emotional exhaustion than men in agency settings. Comparisons between men and women found that men reported significantly greater emotional exhaustion than women in both solo and group independent practices. On the other hand, women in agency settings were found to report higher levels of emotional exhaustion than men in agency settings (Rupert & Morgan, 2005).

*Marital status.* Maslach (1982) found that marital status correlated with level of burnout. However, researchers have been unable to replicate those findings (Ackerley et al., 1988; Raquepaw & Miller, 1989; Vredenburgh et al., 1999).

#### *Work-Related Correlates of Burnout*

The impact of several different work variables on burnout has been investigated in many studies in the past. Due to the wide variety of work-related variables explored in past burnout research, only the work variables most commonly investigated in burnout research will be discussed in the following sections. Some of the work variables most commonly examined in burnout research include salary, length of employment/years of experience, work load, and work setting (Ackerley et al., 1988)

*Salary.* Personal accomplishment was found by Ackerley et al. (1988), to be positively related to income. The higher the income received, the greater the feelings of personal worth reported by participants (Ackerley et al., 1988). Jenaro, Flores, and Arias

(2007) also found a relationship between salary and burnout. Burnout among a sample of 211 human service practitioners consisting of child protection workers (30.3%) and in-home caregivers (69.7%) was measured using the MBI. Results indicated that not only was satisfaction with salary related to higher levels of personal accomplishment, Jenaro et al. (2007) also found satisfaction with salary to be related lower levels of emotional exhaustion.

*Experience.* Hellman, Morrison, and Abramowitz (1987) found that more experienced therapists reported work-related issues as being less stressful than inexperienced therapists. Similar findings were reported in a studies conducted by Rupert and Morgan (2005) and Ackerley et al. (1988), both described later in detail. In particular, the number of years of direct service was inversely related to levels of emotional exhaustion and depersonalization. Ackerley et al. (1988) suggest veteran psychologists not only learn to conserve energy, but also learn ways in which to view clients in a more positive manner.

*Work load.* In a study exploring the relationship between work load and burnout among 149 undergraduate students, Jacobs and Dodd (2003) found a difference between subjective and objective work load on burnout. More specifically, they found subjective work load (feeling one's academic and extracurricular work load was too large) to result in high levels of emotional exhaustion and depersonalization, and lower levels of personal accomplishment. Objective work load (actual load of academic, extracurricular activity, and employment) was found only to have a weak relationship with increased emotional exhaustion (Jacobs & Dodd, 2003).

A helping professional's workload is one of the most extensively researched correlates of burnout (Vredenburgh et al., 1999; Hellman et al., 1987). After having 110 female and 117 male licensed psychologists complete two stress rating scales along with a demographic questionnaire, Hellman et al. (1987) concluded that therapists with moderate case loads reported less stress than therapists with low or high case loads. Validities or reliabilities of the stress measures used, namely the Therapeutic Stresses Rating Scale and the Stressful Patient Behavior Rating Scale were not reported.

Vredenburgh et al. (1999) conducted research exploring burnout among a variety of settings, demographic characteristics and work related variables, which included workload, among 521 counseling psychologists using the MBI. In regards to workload, Vredenburgh et al. (1999) found a positive correlation between client load and personal accomplishment. A possible explanation for this relationship was offered by Vredenburgh et al. (1999), who stated as client load increases, psychologists perceive an increased opportunity to help others and, in certain settings, earn more income as a result. Ackerley et al. (1988), whose research is described in the next section, also found a positive relationship between client load and personal accomplishment.

*Work setting.* Raquepaw and Miller (1989) found that psychologists who worked at least part time in a community agency setting reported more frequent emotional exhaustion and less frequent personal accomplishment than psychologists who worked primarily in private practice. To conduct their research, Raquepaw and Miller (1988) surveyed 68 doctoral and master's level psychologists and social workers randomly selected from the Texas State Board of Examiners of Psychologists, and the 1985 Directory of Social Workers certified in Texas. Participants completed the MBI and a

demographic questionnaire. Differences in amounts of paperwork required, frequency of staff meetings, or nature of the clientele may be contributing factors to the discrepancy in levels of burnout between community agency mental health providers and those in private practice settings (Raquepaw & Miller, 1988). Although they hypothesized differences between the community and private practice settings, a comparison of the specific differences that exist between settings was not made or explored further.

Ackerley et al. (1988) did compare work settings of public sector psychologists and private practice psychologists, and found several differences. In particular, they found that private practice psychologists were older, earned a higher salary, and worked more hours per week providing direct service to clients via individual therapy. Public sector psychologists spent more time in group therapy, consultation, clinical supervision, research, and administration. Private practice psychologists addressed interpersonal and self-growth with clients and dealt less frequently with substance abuse, psychotic symptoms, domestic violence, and serious mental illness than public sector psychologists. Private practice psychologists also reported more frequent feelings of support and fewer feelings of a lack of control.

In addition to the differences explored between the two work settings, research conducted by Ackerley et al. (1988) found work setting to be significantly related to burnout. Participants consisted of a random sample of 562 doctoral-level, licensed practicing psychologists working 35 or more hours per week. The participants were employed in a variety of work settings including private practice, psychiatric hospitals, community centers, outpatient clinics, general hospitals, and other (not specified). Burnout among participants was measured using the MBI and the Psychologist's Burnout

Inventory (PBI) developed for the purpose of their study (Ackerley et al., 1988). The PBI consists of 15-items using a seven-point Likert scale format. Items of the PBI combine to form four subscales: aspects of control, support in the work setting, types of negative clientele, and over-involvement with the client. Validity and reliability information regarding the PBI was not provided.

Ackerley et al. (1988) made comparisons between private practice psychologist and combined all other work settings into a “public sector” comparison group. Results indicated that those in private practice experienced less emotional exhaustion and depersonalization and more personal accomplishment than those in the public sector. A limitation of their study was the fact that the public sector sample consisted of psychologists from a variety of different settings, which may have influenced their findings. For instance, responses from psychologists in a psychiatric hospital setting are likely not representative of those in a community center setting.

A sample of 261 males and 310 females were surveyed by Rupert and Morgan (2005) using the Maslach Burnout Inventory, an extended version of the Psychologist’s Burnout Inventory, and demographic questionnaire which included general questions about work characteristics. All participants were doctoral-level, licensed psychologists either working in solo independent practice (n=274), group independent practice (n=152), or agency (130). The agency sample was consisted of psychologists working in general hospitals, community centers, outpatient clinics, or counseling centers. Rupert and Morgan (2005) found overall less emotional exhaustion and greater levels of personal accomplishment in independent practice settings than agency settings. Both age and years of experience were found to relate to burnout. Specifically, older and more experienced

psychologists reported less emotional exhaustion and depersonalization of clients. Agency psychologists were found to have significantly less experience than both independent practice settings and significantly younger than solo practice psychologists, which Rupert and Morgan (2005) mentioned may have contributed to the differences in levels of burnout between agency psychologists and independent practice psychologist.

As mentioned previously, several studies conducted have examined burnout in the profession of psychology. Those studies have compared burnout among psychologists from a variety of settings such as school psychology (Huebner, 1994; Huebner, 1993; Sandoval, 1993), addiction psychologists (Elman & Dowd, 1997), community agency psychology (Ackerley et al., 1988), and private practice psychologists (Boice & Myers, 1987). Ackerley et al. (1988) found that psychologists in private setting experience lower levels of burnout than psychologists in community agency settings. Private practice psychologists were also found to be happier than those in academic positions (Boice & Myers, 1987). Research has not yet been done to compare levels of burnout between correctional psychology and any other setting in the field of psychology.

#### *Interventions*

In order to avoid burnout, one must take care of his or her own mental health. Evans and Villavisanis (1998) suggest some ways to do so, which include: utilizing other professionals/colleagues, sharing concerns and vulnerabilities, and develop social interests. Encouragement exchange, a technique using positive group dynamics to promote resiliency in psychologists, is one way of preventing or decreasing the level of burnout and involves a three-stage group process (Evans & Villavisanis, 1998). The first stage is the social exchange. In this stage, which lasts 90 minutes, group members



interact informally and get to know one another over a meal. The second stage is the group exchange, which lasts 45 minutes, and is the stage where the majority of the work is done. The group exchange stage involves encouragement, support, and constructive feedback for group members dealing with or wanting to prevent burnout. The third and final stage is the fun exchange. During this stage, conversation is meant for group members to get acquainted with each other and further build a support network. Focus is not on work issues, but rather on establishing relationships with other professionals in the field (Evans & Villavisanis, 1998). Research has not yet explored the effectiveness of encouragement exchange on preventing or treating burnout.

Hatinen, Kinnunen, Pekkonen, and Kalimo (2007) explored the effects of two rehabilitation interventions on burnout and perceived job conditions among female white-collar workers over the course of a year. A total of 20 women took part in a participatory intervention, while 32 women participated in a traditional intervention. According to Hatinen et al. (2007), the traditional intervention is mainly individually focused and strives to find ways of enabling individuals to cope better with occupational stress. The participatory approach, on the other hand focuses more on the individual-organizational level, and attempts to reduce job-person mismatches.

The individual-focused interventions used in both the traditional and participatory approaches include tests and examinations by physicians and physiotherapists; group discussions and lectures by physicians, psychologists, psychiatrists, and physiotherapists; physiological and occupational therapy, and physical exercise activities and relaxation. Individual-organizational techniques used in both traditional and participatory approaches include group discussions on work related issues, and two, one-hour individual

counseling sessions with psychologists focused on individual needs. A component included in the participatory intervention not included in the traditional intervention was a two day workplace workshop focused on discussion of specific causes of stress at work, and possible resolutions of the problematic aspects as identified by participants in the participatory sample. Both participatory and traditional interventions were conducted using groups of eight to ten clients/participants.

Hatinen et al. (2007) reported similar baseline levels of burnout, as measured by the MBI, across participants. During the first four month period and at one year, no changes in burnout symptoms were found among the traditional intervention group; however, emotional exhaustion and depersonalization decreased among the participatory intervention participants. A limitation of their study was the use of a nonrandomized sample, which may have negatively affected internal validity. Also, the fact that sample size was small and strictly comprised of females may have influenced the generalizability of their findings. The following section provides a discussion of past research exploring the relationship between job satisfaction and burnout.

#### *Job Satisfaction and Burnout*

Jenaro, Flores, and Arias, (2007) found that the level of job satisfaction had a significant relationship with levels of emotional exhaustion and personal accomplished among a sample of 211 human service practitioners. The MBI was used to measure burnout, but Jenaro et al. (2007) did not report how the variable of job satisfaction was measured. Those who were dissatisfied with their jobs reported higher levels of emotional exhaustion and lower levels of personal accomplishment. As briefly discussed previously, Jenaro et al. (2007) also examined the impact of salaries on job satisfaction

and burnout. They reported that participants who were dissatisfied with their salaries scored significantly higher on measures of emotional exhaustion and lower on personal accomplishment. Levels of depersonalization were not found to change significantly in relation to level of job satisfaction or satisfaction with salaries. However, depersonalization was related to length of employment. In particular, participants who had been employed by their current job for less than one year reported significantly lower levels of depersonalization. Jenaro et al. (2007) suggest that depersonalization may be a strategy used by some to keep distance from the job and clients after other strategies for dealing with everyday job stress have failed. Due to the specific sample used in Jenaro et al.'s (2007) study, it is unclear if results of their research are generalizable to other professionals in the broad field of human service, or more specifically, to psychologists. The fact that the authors did not report on how job satisfaction was measured also raises questions about the validity and reliability of their results.

#### Self-Efficacy

Self-efficacy has been widely researched across diverse areas of the field of psychology (Larson & Daniels, 1998). Several definitions of self-efficacy have been provided within the vast amount of research conducted on the construct. Bandura (1982) has defined self-efficacy as being "a generative capability in which component cognitive, social, and behavioral skills must be organized into integrated courses of action to serve innumerable purposes" (p. 122). Self-efficacy has also been defined as "the conviction that one can successfully execute the behavior required to produce the outcomes" (p. 193; Bandura, 1977). Bandura (1986) later defined self-efficacy as "people's judgments of

their capabilities to organize and execute courses of action required to attain designated types of performances" (p. 391).

According to Bandura (1977), the strength of people's confidence in their own effectiveness is likely to influence whether they will even try to deal with particular situations. One's perceived self-efficacy even influences which environments he or she chooses to be a part of. People generally participate in activities and experience higher levels of confidence when they view themselves as being capable of dealing with situations that would otherwise be threatening. On the other hand, people are fearful and avoidant of intimidating situations when they believe they do not possess the coping skills necessary (Bandura, 1977). Perceived self-efficacy, in addition to affecting activities one is involved in, also has an impact on coping efforts through expectations of future success. The level of self efficacy one possesses determines the amount of effort that people will apply and the length of time spent coping with difficult and aversive situations. The stronger the person's perceived self-efficacy, the more vigorous the efforts in those difficult and aversive situations (Bandura, 1977).

Self-efficacy expectations can vary on several levels. The first dimension of variance described by Bandura (1977) is magnitude. As previously mentioned, the magnitude of self efficacy one possesses will affect their decision to participate in certain tasks. Some individuals will be limited to simple tasks, others to moderately difficult tasks, and some willing to perform highly difficult tasks depending on the degree of self-efficacy they possess.

The second way in which self-efficacy expectation varies among individuals is the generality (Bandura, 1977). Some individuals are capable of generalizing and

extending their self-efficacy for certain tasks well beyond to other unrelated tasks. On the other hand, others may be restricted to the specific skills they feel they have mastered and do not, or cannot, carry their self-efficacy for those specific skills into other situations.

Lastly, self-efficacy expectations differ in strength among individuals (Bandura, 1977). Those with very limited self-efficacy expectations can easily diminish their self-efficacy expectations when they experience a situation that challenges or brings their abilities into question. Conversely, those with strong self-efficacy expectations are not as discouraged by such events, but persist despite experiencing an event that may lead them to doubt their abilities.

#### *Factors Influencing Self-Efficacy*

According to Bandura (1977), a major contributor to an individual's level of self-efficacy is the quality of the interaction between an individual and the environment. Those interactions with the environment that contribute to, and are major sources of self-efficacy include: performance accomplishments, vicarious experiences, verbal persuasion, and emotional and physiological arousal. Kavanagh and Bower (1985) also found mood to contribute to self-efficacy.

*Performance Accomplishments.* The first source of self-efficacy, performance accomplishments, is vital to increasing self-efficacy expectations because it is based on past personal success and mastery experiences. The more success one achieves in a certain area, the higher the self-efficacy expectations will become. The more failures one has while completing a certain task or coping with a particular situation, the lower the self-efficacy expectations will become (Bandura, 1977). This is especially true when the repeated failures occur early in the process of learning the skills in question. Once strong

self-efficacy expectations are developed through repeated successes, occasional failures will begin having increasingly less of a negative impact on self-efficacy expectations. In fact, depending on the timing and circumstances, those failures can contribute to an increase in self-efficacy expectations once the individual has overcome them through persistence, making it more likely that the individual will believe that he or she can master highly difficult situations with continued effort and self-motivation even after occasional failures (Bandura, 1977).

Empirical research conducted by Evers, Brouwers, and Tomic (2002) showed self-efficacy to be significantly related to personal accomplishment. A sample of 490 teachers from the Netherlands completed a Dutch version of the MBI and a measure of self-efficacy developed for the purpose of their study. Validity and reliability information for the measures used in their study was not reported. Results indicated that participants' level of perceived self-efficacy increased as their sense of personal accomplishment increased. Conversely, participants who reported low levels of personal accomplishment also reported lower levels of perceived self-efficacy (Evers et al., 2002). A limitation of their study was the use of the measure used to assess levels of self-efficacy. As mentioned previously, the use of non-replicated instruments can adversely influence the generalizability and validity of findings.

*Vicarious Experience.* The second source of self-efficacy expectations is that of vicarious experience (Bandura, 1977). People not only rely on their own experiences to shape their self-efficacy expectations, but also are impacted by the experiences of those around them. Many expectations of self-efficacy are obtained by observing others completing threatening or difficult activities without negative consequences. People who

observe others succeeding at such activities will often begin expecting that if they strengthen and persist in their own efforts, they too will also experience success (Bandura, 1977). In other words, the observers persuade themselves into thinking that if others can do it, they themselves might be able to improve their own performance on difficult tasks as well. Due to the fact that vicarious experience relies on social comparisons, it is a less reliable source of information about one's capabilities in comparison to direct experience of personal accomplishments. As a result, the self-efficacy expectations derived exclusively from modeling are generally weaker and more susceptible to change. However, observers can obtain a realistic basis for increasing their own self-efficacy when they observe a variety of other individuals with diverse characteristics succeeding (Bandura, 1977).

*Verbal Persuasion.* A third factor highly influential to self-efficacy expectations is verbal persuasion. Verbal persuasion is frequently used as a tool to influence human behavior due to its ease and availability. Verbal persuasion uses suggestion to influence people to believing that they are capable of coping successfully with a variety of experiences that may have been unable to cope with in the past (Bandura, 1977). Self-efficacy expectations resulting from verbal persuasion are likely to be weaker than those induced by one's own accomplishments due to the fact that the individual has not actually experienced success in the particular area or situation in question. As a result, self-expectations influenced by verbal persuasion are easily extinguished by future failures or disconfirming experiences (Bandura, 1977).

Research conducted by Hagen, Gutkin, Wilson, and Oats (1998) found support for the theory that both vicarious experience and verbal persuasion contribute to increased

self-efficacy. Participants consisted of 89 undergraduate students enrolled in educational psychology courses at a midsized, Midwestern state university pursuing careers as elementary teachers. Participants in the experimental group viewed video clips describing effective classroom management procedures, followed by testimonials from current teachers discussing the effectiveness of the procedures and research data presenting graphs depicting positive change that occurred in classroom behavior. Control group participants viewed a video discussing societal mistreatment of children and adults with various disabilities, but did not address effective methods of working with children with disabilities in school settings. Participants from both groups were then asked to complete the Teacher Efficacy Scale – Revised, which involves rating their level of agreement with 36 items using a six-point Likert scale. Additionally, they responded to seven vignettes describing common classroom problems by indicating their level of confidence in their ability to solve each problem using a five-point Likert scale. Hagen et al. (1998) reported finding significantly higher levels of self-efficacy among the experimental group in comparison to the control group.

*Emotional Arousal.* The fourth and final source of self-efficacy expectations is emotional arousal. People rely on their physiological arousal to determine their level of anxiety and stress. High states of arousal usually weaken performance and, as a result, lower self-efficacy expectations. Consequently, individuals are more likely to expect successes when they are not experiencing aversive arousal (Bandura, 1977).

Research conducted by Fisk and Warr (1996) found support for impact of emotional arousal on self-efficacy. In particular, using a sample of 61 volunteers from a research panel, a computer-based associative learning task was administered. In order to



assess arousal state, participants were presented with 12 adjectives, 6 of addressed anxiety and 6 addressed arousal and were asked to choose the response that best described their emotional state. Learning self-efficacy was measured by asking three questions of the participants about their expected performance. Overall, better learners reported significantly lower levels of arousal and significantly higher levels of self-efficacy (Fisk & Warr, 1996).

*Mood.* Interestingly, mood has also been found to be a contributor to self-efficacy (Bandura, 1986; Kavanagh & Bower, 1985). Kavanagh and Bower (1985) induced happy or sad moods through the use of hypnosis in 16 undergraduate participants in order to explore the impact of mood on self-efficacy. They found the participants who experienced induced positive, or happy, moods reported higher overall self-efficacy than those participants with whom no mood had been induced (Kavanagh & Bower, 1985). As a result of this line of research, Bandura (1986) theorized that positive mood may trigger thoughts of accomplishment, resulting in an increase of self-efficacy.

Further evidence of the impact of mood on self-efficacy was provided by Cervone, Kopp, Schaumann, and Scott (1994). Cervone et al. (1994) manipulated the moods of 90 participants, consisting of 45 male and 45 female undergraduate students enrolled in an introductory psychology course at the University of Illinois at Chicago. Mood induction was accomplished by having participants listen to one of three audiotapes instructing them to imagine a specific positive, negative, or neutral scenario. Participants were then asked to complete a mood self-report measure consisting of 14 adjective pairs rated using an eight-point Likert scale. Four domains of self-efficacy, including social skills, general academic performance, academic grade attainment, and

completion of class assignments, were also measured. However, the only information provided about the self-efficacy measure was the fact that consisted of a 10-point Likert scale for social skills and general academic performance items, and a five-point Likert scale to measure items of grade attainment. Cervone et al. (1994) found that negative mood resulted in participants' academic standards significantly exceeding their efficacy expectations. Conversely, groups with positive induced moods exhibited higher self-efficacy scores, which exceeded their reported academic performance standards.

#### *Benefits of Increased Self-Efficacy*

Past research has indicated that individuals with high levels of self-efficacy experience beneficial as well as therapeutic consequences (Gecas, 1989). In particular, high levels of self-efficacy have been related to more positive health-related behaviors, as well as overcoming phobias, anxiety (Bandura, 1980), eating disorders (Schneider & Agras, 1985), and increased pain tolerance (Neufeld & Thomas, 1977). High levels of self-efficacy has also been found to contribute to the setting of higher personal goals and improved task performance (Bandura, 1986; Wood & Bandura, 1989).

#### *Counselor Self-Efficacy*

More task specific self-efficacy has been defined as a person's assessment of his or her effectiveness and competence in a specified area (Gecas, 1989). Counselor self-efficacy, which will be the focus of this particular study, is defined as one's beliefs or judgments about his or her capabilities to effectively counsel a client in the near future (Larson & Daniels, 1998; Friedlander, Keller, Peca-Baker, & Olk, 1986; Sharpley & Ridgway, 1993). This latter definition of self-efficacy will be used in the current study, as one of the goals of this study is to examine and compare correctional and community

psychologists' assessment of their effectiveness and competence in their work with clients. The past twenty years has seen a significant increase in research related to counselor self-efficacy, including looking at how the construct is involved in counselor anxiety, counselor performance, and the supervision environment (Friedlander et al, 1986; Larson, & Daniels, 1998). However, researchers have not investigated the construct of self-efficacy among experienced counselors and psychologists providing treatment to a wide variety of clientele in various settings.

#### *Measures of Self-Efficacy*

Several measures, which contain various formats, have been developed for examining self-efficacy (Larson & Daniels, 1998; Gecas, 1989). Those measures generally fall into one of the following categories: task-specific measures, domain-specific measures, and general measures (Gecas, 1989). Task specific measures only focus on one particular task or competency and do not attempt to generalize to efficacy beliefs outside of that task (Gecas, 1989). Domain specific measures generalize to efficacy beliefs in a specified area, but not outside that specific domain. General measures of self-efficacy are measures of overall self-efficacy beliefs and do not focus on any one task or domain (Gecas, 1989). For the purpose of the current study a domain specific measure of self-efficacy, particularly a measure of psychologists' self-efficacy regarding their skills as a therapist, will be utilized.

According to Larson and Daniels (1998), approximately 10 different instruments have been published to measure self-efficacy, four of which were developed for the purpose of focusing exclusively on individual counseling skills. Two instruments included group counseling skills in addition to individual counseling skills, and three

instruments focus on specific content specialties such as school counseling, psychiatry, and career counseling (Larson & Daniels, 1998). As of yet, a counselor self-efficacy measure intended for experienced, practicing psychologists has not been developed (Larson & Daniels, 1998). Due to the many available measures used in self-efficacy research, and more particularly in counselor self-efficacy research, only two of the most widely used instruments developed to measure counselor self-efficacy will be reviewed.

*Counselor Self-Efficacy Scale.* The Counselor Self-Efficacy Scale (CSES; Melchert, Hays, Wiljanen, & Kilocek, 1996) measures knowledge and skill competencies related to the practice of individual and group therapy. The CSES consists of 20 items and use a five-point Likert scale measuring participants' level of agreement regarding their confidence in their counseling abilities. A sample of 138 individuals (74% female, 36% male) consisting of students enrolled in counseling psychology courses (34% first-year master's students, 22% second-year master's students, and 38% doctoral students with master's degree), as well as licensed psychologists (5%) working or consulting for a university counseling center. Internal consistency reliability of the CSES, computed using Cronbach alpha, was reported to be .91, and test-retest reliability coefficient of .85 was reported (Melchert et al., 1996).

Melchert et al. (1996) noted a major limitation of the CSES include the representativeness of the sample used. The sample was primarily comprised of counseling psychology students. As a result, it is unclear whether the CSES is appropriate for more experienced psychologists. Additionally, a majority of the participants were female, and race/ethnicity of the participants was not disclosed. The fact that participants were exclusively associated with counseling psychology from a single university also

presents concerns about the generalizability of the CSES to professionals employed in other settings within psychology.

*Counselor Self-Estimate Inventory.* The Counseling Self-Estimate Inventory (COSE; Larson, Suzuki, Gillespie, Potenza, Bechtel, & Toulouse, 1992) is a measure of counselor trainees' judgments of their capabilities to counsel clients successfully in therapy settings, and their expectancies for success in counseling situations. The COSE consists of 37 items rated using a six-point Likert scale with responses ranging from 1 (strongly disagree) to 6 (strongly agree) (Larson et al., 1992). A factor analysis revealed five dimensions that contribute to the total counselor self estimate score. Those five factors include: (1) the capability to execute microskills, (2) to attend to process, (3) to deal with difficult client behaviors, (4) to behave in a culturally competent manner, and (5) to be aware of one's own values. Higher scores indicate stronger perceptions of counselor self-efficacy (Larson et al., 1992).

Participants used for the development of the COSE consisted of 212 beginning counselor trainees enrolled in introductory pre-practicum courses at two Midwestern universities and one university in Hawaii. The age range of participants was 20 to 50 years, with 83% of the participants identifying as White, 14% Asian, and 3% other. Larson et al. (1992) reported a CSES total score internal consistency of  $\alpha=.93$ ; internal consistency of  $\alpha=.88$  for microskills;  $\alpha=.87$  for process;  $\alpha=.80$  for difficult client behaviors;  $\alpha=.78$  for cultural competence; and  $\alpha=.62$  for awareness of values. The 3-week test-retest reliabilities were reported to be the following: total COSE total,  $r=.87$ ; for microskills,  $r=.68$ ; for process,  $r=.74$ ; for difficult client behaviors,  $r=.80$ ; for cultural competence,  $r=.71$ ; and for awareness of values,  $r=.83$ . The COSE will be used in the

present study as it was found by Larson and Daniels (1998) to be the most widely used of the 10 measures of self-efficacy with the most adequate psychometric properties.

The relationship between counselor self-efficacy and level of training is unclear. Several studies have found that counselor self-efficacy is significantly higher for counselors with more advanced training (Friedlander & Snyder, 1983, Larson & Daniels, 1998). Conversely, other studies have found that the relationship between counselor self-efficacy and level of training is not a linear relationship during the course of training (Larson & Daniels, 1998). As mentioned previously, research that addresses self-efficacy of veteran psychologists, who have undoubtedly experienced a number of successes and failures in their career, does not exist. Therefore, the relationship between experience and counselor self-efficacy is unknown and will be explored in the current study.

#### Personality

Personality, as defined by Gelso and Fassinger (1992), is a group of robust characteristics that structure one's reactions to oneself and to the surrounding environment. The characteristics that make up one's personality include "traits, values, attitudes, beliefs, needs, and dispositions" (Gelso & Fassinger, 1992, p. 276). According to Loehlin (1992) approximately 40% of personality is genetically inherited while another portion is influenced by the environment. Research on personality dates back as far as the early 1900's, and the focus during that time was on examining the many ways personality was described in the English language (Hammond, 2001). The belief in the early 1900's was that if personality was important to effective functioning in society, the number of terms available to describe personality should be clearly indicated. According to Digman (1989, 1990), there are over 18,000 terms used in the English language to

describe people, and over the years, researchers have attempted to group and organize these terms into meaningful frameworks (Hammond, 2001). Personality descriptors have been placed in as few as three, to as many as 36 different categories (Hammond, 2001).

### *The Five-Factor Model of Personality*

Recent research on adult personality in particular has begun to generally accept five basic personality dimensions (Digman, 1989, 1990; Watson & Clark, 1992; Wiggins, 1996) that are replicable across age, gender, race, nationality, culture and language (Church & Katigbak, 1989; de Raad, Hendriks, & Hofstee, 1992). The five factor model of personality, also known as the Big Five personality factors, consists of five dimensions that are numbered based on their importance within the group of personality descriptors. In other words, the first dimension explains a larger portion of personality than all other dimensions, and dimension 2 explains more of personality than dimensions 3, 4, and 5.

Over the course of research in the area of the five factor model, a number of different terms have been used to describe the five different dimensions (Costa & McCrae, 1992; Fiske, 1949, Norman, 1963, Hammond, 2001). The first dimension has been labeled extraversion, surgency, sociability, assertiveness, social adaptability/activity/ambition, interpersonal involvement, and power. Terms such as agreeableness, likeability, socialization, conformity, psychoticism, paranoid disposition, friendly compliance, and love have all been used to label the second dimension. The variety of labels used for the third dimension include: conscientiousness, superego strength, dependability, task interest, thinking introversion, constraint, prudence, self-control, will to achieve, and work. The fourth dimension has been labeled neuroticism, emotional stability, emotional control, anxiety, emotionality, negative emotionality,

adjustment, and affect. The fifth and final dimension has been labeled openness to experience, culture, independence, inquiring intellect, and intelligence (Hammond, 2001). The traits depicted in the five dimensions in the five factor model of personality are normally distributed with extreme scores indicating a greater likelihood that a trait will be displayed by the individual (Hammond, 2001).

Individuals who score high on the extraversion dimension are typically described as talkative, frank, open, sociable, adventurous, energetic, cheerful and optimistic. Low scores on the extraversion dimension are suggestive of an individual who is silent, secretive, cautious, reclusive, mild, calm, and reserved. An individual who scores high on the agreeableness dimension are typically good-natured, not jealous, cooperative, trustful, kind, adaptable, and sympathetic. Low scores on the agreeableness dimension are indicative of an individual who is irritable, jealous, negativistic, assertive, egocentric, skeptical, and competitive. High scores on the conscientiousness dimension suggest an individual who is fussy, tidy, responsible, scrupulous, persevering, orderly, determined, punctual, and strong-willed. Individuals who score low on this dimension can often be described as careless, undependable, fickle, imaginative, hedonistic, and adaptable. High scores on the neuroticism dimension indicate traits such as nervousness, anxiety, excitability, hypochondriacal, dependent, and unstable. Individuals with low scores on this dimension can often be described as self-sufficient, placid, stable, poised, even-tempered, relaxed, adaptable, and unshakable. Finally, high scores on openness to experience are indicative of an individual who has broad interests, is imaginative, independent, socially poised, unpredictable, refined, cultured, reflective, and emotionally sensitive. Individuals who score low on this final dimension can often be described as



unreflective, narrow, crude, simple, direct, having narrow interests, and socially and politically conservative (Costa & McCrea, 1992; Hammond, 2001).

### *Measures of Personality*

*NEO Personality Inventory Revised.* The NEO Personality Inventory (NEO-PI-R) is a personality assessment that measures five broad personality dimensions that consist of emotional, interpersonal, experiential, attitudinal, and motivational styles (Costa & McCrae, 1992). In addition to measuring the five major domains of personality (neuroticism, extraversion, openness to experience, agreeableness, and conscientiousness), the NEO-PI-R also provides six facet scores which define each domain, and three items to assess for validity. The neuroticism facets include anxiety, angry hostility, depression, self-consciousness, impulsiveness, and vulnerability. Extraversion facets consist of warmth, gregariousness, assertiveness, activity, excitement-seeking, and positive emotions. Facets that compose the openness to experience domain include fantasy, aesthetics, feeling, action, ideas, and values. Agreeableness facets include trust, straightforwardness, altruism, compliance, modesty, and tender-mindedness. Finally, conscientiousness domain consist of competence, order, dutifulness, achievement striving, self-discipline, and deliberation (Costa & McCrae, 1992).

The NEO Personality Inventory, which consists of 240 items, requires a reading level of at least 6<sup>th</sup> grade and takes approximately 35-45 minutes to complete. The Revised NEO Personality Inventory (NEO PI-R) was developed explicitly to measure the five-factor model of personality (Costa & McCrae, 1992). Internal consistency coefficients were reported to range from .86 to .95 for domain scales (neuroticism,

extraversion, openness to experience, agreeableness, and conscientiousness), and from .56 to .90 for facet scales (Costa & McRae, 1992).

Although personality measures such as the NEO PI-R have been described as reliable and valid, a major criticism of such instruments are their cost and the lengthy process required to obtain permission for their use from the copyright holders (Goldberg, 1999). In fact, Goldberg (1999) suggested the cost and inconvenience of obtaining permission to use the measure have contributed to “dismally slow” (p. 7) progress within personality research and delayed progress of the development of personality inventories. In addition to the criticisms mentioned by Goldberg (1999), the NEO PI-R was not used for the current study due to its length, which would likely result in a higher attrition rate.

*International Personality Inventory Pool-Five Factor Model (IPIP-FFM)*. As a result of the cost and inconvenience of obtaining permission to use the NEO PI-R, Goldberg (1999) proposed an international collaboration to develop an easily accessible and widely available personality inventory. Items were subsequently developed and made available for no cost to researchers on an internet website.

The International Personality Inventory Pool-Five Factor Model (IPIP-FFM; Goldberg, 1999), which consists of 50-items, is a personality assessment that measures five broad personality dimensions of Extraversion, Agreeableness, Conscientiousness, Neuroticism, and Openness. Respondents to the IPIP-FFM use a five point Likert scale on which they determine how well each statement described them, with responses ranging from “very inaccurate” to “very accurate” (Goldberg, 1999). The IPIP-FFM has been found to correlate highly to the NEO-PI-R domain scores. The correlations between the IPIP and the NEO-PI-R domain scores range from .85 to .92 (Buchanan, Johnson,

Goldberg, 2005). The IPIP-FFM consists of five scales, which correspond to the five factors of personality. Coefficient alphas of the five scales are as follows, extraversion,  $\alpha=.87$ ; neuroticism,  $\alpha=.86$ ; conscientiousness,  $\alpha=.79$ ; agreeableness,  $\alpha=.82$ ; and openness to experience,  $\alpha=.84$  (Goldberg, 1999). The IPIP-FFM is easily accessible, provided free of cost, and convenient for researchers. Additionally, the IPIP-FFM is a valid and relatively brief instrument in comparison to other measures of personality, and thus will be utilized for this particular study.

Researchers have found various personality traits to be related to job satisfaction (Thomas, Buboltz, & Winkelspecht, 2004; Judge, Heller, & Mount, 2002; Staw, Bell, and Clausen, 1986), and burnout (Bakker, Van Der Zee, Lewig, & Dollard, 2006). The following sections address research demonstrating those relationships.

#### *Personality and Job Satisfaction*

Staw, Bell, and Clausen (1986) discovered a link between childhood personality and job satisfaction later in life, which Judge, Bono, and Locke (2000) suggest sparked the interest in further research regarding the relationship between job satisfaction and personality. In order to explain the relationship between job satisfaction and personality, Staw, Bell, and Clausen (1986), theorized that people possess either a positive or negative disposition, which they inherently bring to the work setting, process information about the job in a manner consistent with their disposition, and either experience job satisfaction or job dissatisfaction as a result. They gathered data from a preexisting longitudinal sample to measure affective disposition of participants over a time span of nearly fifty years. Results from their study indicated that affective disposition is a significant predictor of job satisfaction (Staw, Bell, & Clausen, 1986). Job satisfaction

was measured using a 14-item measure addressing various aspects of participants' job using a five-point Likert scale, ranging from "like it very much" to "dislike it very much." However, Staw, Bell, and Clausen (1986) did not report on the reliability or validity of the job satisfaction instrument utilized in their study. Limitations of their study were the fact that female participants were excluded from the analysis due to their limited work experience, and that relative few participants were assessed from across all five of the time periods in which data was initially obtained.

Judge, Heller, and Mount (2002) conducted a meta-analysis to investigate the relationship between the five-factor model of personality and job satisfaction. To conduct their research, Judge, et al. (2002) used archival data consisting of 163 independent samples from past research exploring the Big Five personality traits and job satisfaction. Sample sizes from the numerous studies included in their meta-analysis ranged from 5 to 2,900. A number of different measures of job satisfaction and the Big Five personality traits were used among the 163 different studies explored in their meta-analysis. The mean reliability for measures of job satisfaction was reported to be .83, and the mean reliabilities of each of the Big Five traits were the following: neuroticism=.82; extraversion=.72; openness to experience=.67; agreeableness=.66; and conscientiousness=.71 (Judge et al., 2002).

Judge, Heller, and Mount (2002) found that personality traits of neuroticism, extraversion, and conscientiousness factors of the five-factor model were found to be significantly correlated with job satisfaction. More specifically, the results of their meta-analysis indicated that neuroticism was the strongest and most consistent correlate of job satisfaction ( $r=-.29$ ). Conscientiousness was found to have the second strongest

correlation with job satisfaction ( $r=.26$ ). Extraversion was also found to correlate moderately with job satisfaction ( $r=.25$ ). To explain their findings, Judge et al. (2002) suggest personality traits influence how individuals interpret characteristics of their job, ultimately leading to increased or decreased job satisfaction, depending on the trait (e.g. extraversion and conscientiousness leading to higher levels of job satisfaction and neuroticism leading to decreased job satisfaction).

#### *Personality and Burnout*

Bakker, Van Der Zee, Lewig, and Dollard (2006) examined the relationship of five basic factors of personality with burnout in a sample of 80 volunteer counselors (75 female and 5 male) who cared for terminally ill patients. Burnout was measured with the Dutch version of the Maslach Burnout Inventory, which Bakker et al. (2006) adjusted to make suitable for their sample. The Big Five personality dimensions were measured with the Five Factor Personality Inventory. Bakker et al. (2006) reported the following internal consistency reliabilities for their version of the MBI: emotional exhaustion,  $\alpha=.87$ ; depersonalization,  $\alpha=.61$ ; and personal accomplishment,  $\alpha=.77$ . Internal consistency reliabilities for the Five Factor Personality Inventory were reported as follows: extraversion,  $\alpha=.82$ ; agreeableness,  $\alpha=.80$ ; conscientiousness,  $\alpha=.79$ ; neuroticism,  $\alpha=.78$ ; and openness,  $\alpha=.80$  (Bakker, et al., 2006).

Neuroticism and extraversion were found to be the most consistent predictors of burnout than any other personality factor examined. In fact, of the Big Five personality traits, neuroticism was found to be the sole predictor of the emotional exhaustion dimension of burnout. Bakker et al. (2006) also concluded that individuals had more negative attitudes toward patients (depersonalization) when they were less emotionally

stable (higher levels of neuroticism), more introverted, and less open to experience. A relationship was also found between extraversion, emotional stability and personal accomplishment. In other words, extraverted and emotionally stable individuals were more likely to report feeling competent in their work than introverted individuals and those who reported higher levels of neuroticism (Bakker et al., 2006).

Bakker et al. (2006) noted the small sample size in their study as a limitation, which did not allow for strong conclusions. Another limitation of their study was the use of primarily female volunteer counselors in measuring burnout. As a result of using a volunteer sample, results may not be generalizable to psychologists employed in the profession.

#### Work Environment

The work environment is the setting within which a person performs his or her work tasks and is made up of much more than just physical elements (Lambert, Hogan, & Barton, 2002). The work environment is comprised of a variety of factors and characteristics that are both tangible and intangible (Lambert, Hogan, & Barton, 2002). Industrial/organizational psychologists have used several variables to assess perceptions of the work environment in past research (James & James, 1989). Some of those variables include job attributes (e.g. job challenge, job autonomy), characteristics of leadership (e.g. support, facilitation, supervision), work characteristics and processes (e.g. group cooperation), and interaction between individuals and the organization (e.g. role ambiguity, fairness, reward system) (James & James, 1989).

James and James (1989) suggest that two principles are typically followed when examining work environment. The first principle is the idea that individuals respond to

environments based on how they perceive them. The second principle is the idea that most important component of perception is the meaning or meanings attributed to the environment by the individual.

Because of the numerous dimensions of the work environment, those dimensions are typically broken down into two categories (Lambert, Hogan, & Barton, 2002). The first of those categories is the organizational work environment as a whole, also described as the extrinsic job attributes. This category includes the organization of all departments and work areas, and is referred to as the structure of the organization. The organizational structure, and therefore, the work environment, is comprised of characteristics such as the way in which an organization structures, manages, and operates itself (Lambert, Hogan, & Barton, 2002). The techniques used to control and influence employee ties to the organization, which include employee participation in decision making, financial rewards, endorsement of group cohesion, mobility, promotion, and fairness of workload, rewards, and punishment are all factors that also fall into this category (Lincoln & Kalleberg, 1985).

The second category of work environment factors is the characteristics of the job itself, also referred to as intrinsic job attributes (Lambert, Hogan, & Barton, 2002). In particular, this category of factors refers to the actual work being done by an individual and includes job variety, skill variety, job stress, role conflict, role clarity, role ambiguity, task significance, task identity, and knowledge and skills. Unlike the organization factors, not all individuals of an organization experience the same type or degree of intrinsic job characteristics (Lambert, Hogan, & Barton, 2002).

### *Measures of Work Environment*

*Work Environment Scale.* The Work Environment Scale (WES; Moos, 1981) measures 10 different dimensions of an environmental characteristic referred to as social climate. A sample of over 3,000 workers was used to standardize the WES. Internal consistency reportedly ranged from .69 to .86 for the 10 scales, and the test-retest reliability measured after one month was reported to range from .69 to .83 (Moos, 1981).

The WES consists of 90 true-false items which comprise the following 10 nine-item subscales: involvement, peer cohesion, supervisor support, autonomy, task orientation, work pressure, clarity, control, innovation, and physical comfort. The involvement subscale measures the extent to which workers are concerned about and committed to their jobs. The peer cohesion subscale measures the amount of perceived friendliness and support of coworkers. The supervisor support subscale assesses the support of management and the extent to which management encourages workers to be supportive of each other. The autonomy subscale measures the extent to which employees are encouraged to be self-sufficient and make their own decisions. The work pressure subscale assesses the degree to which the pressure of work and deadlines dictate the work environment. The clarity subscale addresses the extent to which employees know what to expect in their daily routine and how clearly rules and policies are communicated. The control subscale measures the extent to which management uses rules and pressures to keep employees under control. The innovation subscale assesses the degree of emphasis on variety, changes, and new approaches present in the work environment. Finally, the physical comfort subscale measures the extent to which the



physical surroundings contribute to a pleasant work environment by addressing such aspects as the lighting, stylishness, colors, and décor of the office.

The WES does not appear to address aspects of perceived safety. Additionally, the length of the WES would likely contribute to higher attrition rates among participants. Another limitation of the WES is the costliness of its use. As a result, the WES was not appropriate for use in the current study.

*Work Environment Scale-10.* The Work Environment Scale-10 (WES-10; Rossberg, Eiring, & Friis, 2004) is a ten-item scale developed to study the work environment of mental health settings in a brief, user-friendly manner. According to the developers of the Work Environment Scale-10, Rossberg, Eiring, and Friis (2004), previously developed instruments intended to study the work environment were too large, complex, and difficult to use. The Work Environment Scale-10 uses a five-point Likert scale ranging from 1 (not at all or never) to 5 (very often or to a large extent), and is comprised of four subscales: Self Realization, Conflict, Workload, and Nervousness.

The Self Realization subscale measure the extent employees feel supported, whether they experience feelings of confidence, and the extent to which they are able to use their knowledge at the workplace. The Workload subscale assesses individual's perception of the number of tasks imposed on the employee, and extent to which they feel the need to be at several places at once to complete their tasks. The Conflict subscale measures the prevalence of conflict or loyalty issues among staff. The Nervousness subscale assesses the extent to which individuals are worried about going to work, and the level of nervousness or tension they experience while at work (Rossberg, Eiring, & Friis, 2004). Rossberg et al. (2004) pointed out that the Nervousness scale assess aspects

of the work environment often neglected in other work environment measures, and suggest this subscale is likely correlated with issues of safety and security, which are important factors of the work environment.

Participants used in the development of the WES-10 consisted of 640 total staff members employed in 42 different mental health wards that completed the WES-10 over a period of ten years (1990 to 2000). No participant demographic information was provided. The Cronbach's alphas for the subscales were the following: Self Realization, .85; Workload, .84; Conflict, .69; and Nervousness, .66 (Rossbert, Eiring, & Friis, 2004). Test-retest reliability for the Work Environment Scale-10 was not conducted and is a limitation of the measure. The WES-10 was used in the current study as it was a brief measure; addressed several core aspects of the work environment, including issues related to perceived safety; and developed specifically for use with mental health professionals.

#### *Work Environment and Burnout*

As discussed previously, work environment, or perceived work environment, has been found to be related to levels of burnout (Gerstein et al., 1987; Dembo & Dertke, 1986). Savicki and Cooley (1987) investigated the relationship between the work environment, client contact, and burnout using the MBI and the WES described previously. The sample used by Savicki and Cooley (1987) consisted of 94 mental health workers from 10 different agencies in northwestern Oregon. The agencies from which their sample was drawn included two residential treatment facilities for severely emotionally disturbed children and adolescents, a residential treatment center for delinquent boys, two day treatment programs for severely emotionally disturbed children

and adolescents, four community mental health centers, and one domestic court conciliation staff. Participants in their study possessed the following job titles: child-youth worker (29), mental health specialist (24), supervisor-administrator (17), family worker (6), psychologist (5), nurse (2), psychiatrist (2), and paraprofessional (5).

Savicki and Cooley (1987) found the work environments associated with low levels of burnout are those in which (a) employees are committed strongly to their work, (b) supportive relationships between coworkers are encouraged, and (c) strong supervisory relationships exist. Work environments that have been associated with high levels of burnout are those that restrict employees' freedom and flexibility, have ambiguous job expectations, and minimal support for new ideas and creativity (Savicki & Cooley, 1987). A limitation of their study was the sample used. Participants were primarily from northwestern Oregon, and majority of them worked with children and adolescent populations. As a result, it is unclear whether their results would be generalizable to other professionals from different regions, or those working primarily with adult clients.

In a study that has a great deal of relevance to the current project, Gerstein, Topp and Correll (1987) conducted an investigation of the impact of the work environment and staff's personal qualities on burnout within correctional personnel. More specifically, Gerstein et al. (1987) examined demographic characteristics (such as age and length of time on the job), as well as work environment characteristics (such as degree of support and role clarity), and the impact of characteristics on level of burnout. Two particular indices of burnout were investigated by Gerstein et al. (1987), total exhaustion and number of bad days at work. Participants completed a 93-item, self-report instrument

generated from a literature review and the researchers' previous experience with correctional personnel. The 93-item self-report instrument consisted of questions about length of employment, self-efficacy, role ambiguity, relationships with inmates, feelings about job, number of bad work days, powerlessness, meaninglessness, and self-estrangement.

Overall, findings of their study indicated both the environmental and personal qualities mentioned above accounted for a significant amount of variance in total exhaustion and number of bad days reported. Interestingly, the environmental variables, such as degree of support and role clarity, explained twice as much variance in level of burnout in comparison to person variables, such as age and time on the job. These results suggested that the nature of the correctional environment is a major contributor to burnout among correctional staff (Gerstein et al., 1987). Gerstein et al. (1987) also concluded correctional employees who contribute to the well being of the inmates and overall function of the institution reportedly feel less stress than those who do not maintain such roles.

A limitation of the study conducted by Gerstein et al (1987) is the fact that participants completed a 93-item, self-report instrument generated from a literature review and the researchers' previous experience with correctional personnel. The validity and reliability information for this instrument was not reported. As a result, it is unknown whether this instrument was either reliable and/or valid. Research in this area using valid and reliable measures appears to be lacking and would be beneficial.

Although researchers have explored the impact of work environments within a variety of occupations, the work environments of psychologists in general is scarce. The

work environment within correctional settings has been examined among correctional officers (Gerstein, Topp, & Correll, 1987), but has yet to be explored in detail among psychologists working in correctional settings. Additionally, a comparison of work environments between various settings in the field of psychology is lacking.

#### Purpose

Research investigating job satisfaction among psychologists is limited (Hoppock, 1937; Moss, C. & Clark, J.F., 1961; Walfish, Polifka, & Stenmark, 1985; Walfish, Moritz, & Stenmark, 1991), with even fewer studies addressing job satisfaction specifically among correctional psychologists (Boothby and Clements, 2002).

Researchers have yet to investigate the similarities and/or differences between the levels of job satisfaction of correctional psychologists and community psychologists. The research that has been completed on job satisfaction has had a number of limitations, including small sample sizes, generalizability concerns, use of measures of job satisfaction with questionable validity and reliability, and use of non-replicated measures of job satisfaction.

In addition to the paucity of information regarding job satisfaction among psychologist, a lack of research examining burnout in the profession of psychology also exists. The studies that have been conducted have compared burnout among psychologists from a variety of settings such as school psychology (Huebner, 1994; Huebner, 1993; Sandoval, 1993), addiction psychologists (Elman & Dowd, 1997), community agency psychology (Ackerley et al., 1988), and private practice psychologists (Boice & Myers, 1987). Research comparing community psychologists with other settings included psychologists employed in general and psychiatric hospitals within the

community psychology samples (Ackerley et al., 1988). Research exploring burnout within psychologist employed exclusively in a community mental health center is lacking. Research has not yet been done to compare levels of burnout between correctional psychology and any other setting in the field of psychology.

The work settings of correctional psychologists and community psychologists both present a unique set of safety concerns (Magaletta & Verdeyen, 2005; Guy, Brown & Poelstra, 1992), treatment goals (Magaletta & Verdeyen, 2005; Biglan & Smolkowski, 2002), and ethical issues (Schank & Skovholt, 1997; Quijano & Logsdon, 1978). Although not formally compared and contrasted through empirical research, the physical work environments (Boothby & Clements, 2000; Budman & Del Gaudio, 1979), daily tasks (Boothby & Clements, 2000; Budman & Del Gaudio, 1979), and clientele (Diamond et al., 2008; Diamond et al., 2001) also appear to vary between correctional psychologists and community psychologists. Research comparing the correctional and community settings is warranted given the relationships found between the constructs of work environment, job satisfaction, burnout, self-efficacy, and personality traits in past research (Jenaro et al., 2007; Bakker et al., 2006; Judge et al., 2002; Judge et al., 1998; Gerstein et al., 1987; Savicki & Cooley, 1987; Dembo & Dertke, 1986; Staw et al., 1986). As a result of the relationships found among those constructs in past research, it was assumed that differences in job satisfaction, burnout, self-efficacy, and personality traits would exist between of psychologists working in a correctional setting, and those working in a community setting, given the many differences that exist between the work environments of the two settings.

The purpose of this study was to (1) expand on research regarding levels of job satisfaction, burnout, and counselor self-efficacy within the field of psychology and particularly among correctional and community psychologists, (2) explore the differences between correctional and community psychologists specifically in relation to levels job satisfaction, burnout, and self-efficacy, and (3) examine difference and/or similarities in work environments and personality traits of correctional psychologists and community psychologists.

#### Main Hypotheses

- 1) Different levels of job satisfaction, burnout, counselor self-efficacy and perceptions of work environment will be found between correctional and community psychologists, as measured by the Minnesota Satisfaction Questionnaire, Maslach Burnout Inventory, and Counselor Self Estimate Inventory
- 2) A moderate negative correlation will exist between burnout and perceptions work environment, as measured by the Maslach Burnout Inventory and the Work Environment Scale-10
- 3) A moderate positive correlation will be found between burnout and neuroticism, as measured by the Maslach Burnout Inventory and the International Personality Item Pool.
- 4) A moderate negative correlation will exist between burnout and extraversion, as measured by the Maslach Burnout Inventory and the International Personality Item Pool.

- 5) A moderate negative correlation will exist between counselor self-efficacy and burnout, as measured by the Counselor Self Estimate Inventory and the Maslach Burnout Inventory.
- 6) In order of contributing variance, the following factors will add significantly to the prediction of job satisfaction – work environment, burnout, counselor self-efficacy, and setting.



## CHAPTER III

### METHODS

In line with the hypotheses of this study, this chapter reviews the demographics of the participants. Descriptions of all of the measures implemented are also offered. Additionally, a description and review of the specific procedures utilized in this study is provided.

#### Participants

##### *Correctional Psychologists*

Participants in the correctional psychologist sample consisted of a total of 77 doctoral level psychologists employed in a correctional setting. More specifically, 41 were employed in state prisons (53.2%) and 36 were employed in federal prisons (46.8%) across the United States. Correctional psychologists reported working in rural settings (45.5%) and urban settings (54.5%), and most of the correctional sample were living in the Midwest (66.2%), followed by the Southwest (15.6%), Southeast (9.1%), Northeast (6.5%), and Northwest (2.6%). A majority of the correctional sample reported being licensed (74%), while the remaining individuals (26%) indicated they were currently working in a license exempt agency. The correctional psychologist sample consisted of 26 males (33.8%), 50 females (64.9%), and one respondent who did not indicate gender (1.3%). The ages of the correctional psychologist sample ranged from 27 to 72, with a mean age of 41.2 and median age of 38.5. A majority of the correctional sample

identified as White (89.6%), followed by African American (3.9%), Latino/Latina (2.6%), Asian American (2.6%), and one respondent in the correctional sample identified as other (1.3%). Relationship status of the correctional sample consisted of the following: Married/committed partner (72.7%), divorced (9.1%), not in a relationship (7.8%), dating (6.5%), and cohabitating (3.9%). The amount of experience providing therapy among the correctional psychologist sample ranged from 2 to 46 years, with a mean of 14.8 years, and a median of 15 years. Weekly contact with clients ranged from 5 to 49 hours per week, with a mean of 19.8 hours per week and median of 20 hours per week. Reported salaries of correctional psychologists were as follows: Less than \$25,000 (7.8%), \$25,000 to \$50,999 (11.7%), \$51,000 to \$75,999 (20.8%), \$76,000 to \$100,000 (39.0%), and more than \$100,000 (20.8%). (See Table 1).

#### *Community Psychologists*

Participants in the community psychologist sample consisted of a total of 60 licensed, doctoral level psychologists employed in community mental health settings across the United States. Community psychologists reported working in rural settings (28.3%) and urban settings (70.0%), and most of the community sample were living in the Southwest (33.3%), followed by the Midwest (30.0%), Northeast (13.3%), Southeast (13.3%), and Northwest (10.0%). The community psychologist sample consisted of 27 males (45.0%) and 33 females (55.0%). The ages of the community psychologist sample ranged from 26 to 65, with a mean age of 44.3 and median age of 45. A majority of the community sample identified as White (83.3%), followed by Asian American (6.7%), and Latino/Latina (3.3%). Four community psychology participants responded as "other" and further indicated identifying as biracial (6.7%). Relationship status of the community

sample consisted of the following: Married/committed partner (86.7%), not in a relationship (8.3%), cohabitating (3.3%), and dating (1.7%). The amount of experience providing therapy among the community psychologist sample ranged from 2 to 38 years, with a mean of 16.9 years, and a median of 16 years. Weekly contact with clients ranged from 4 to 60 hours per week, with a mean of 23.8 and median of 20 hours per week. Reported salaries of community psychologists were as follows: less than \$25,000 (13.3%), \$25,000 to \$50,999 (13.3%), \$51,000 to \$75,999 (21.7%), \$76,000 to \$100,000 (25.0%), and more than \$100,000 (23.3%) (See Table 1).

## Measures

### *Minnesota Satisfaction Questionnaire-Short Form*

The Minnesota Satisfaction Questionnaire (MSQ) short form is a 20-item self report measure designed to measure an employee's job satisfaction. The MSQ short form utilizes a five-point Likert response scale with responses varying from 1 (very dissatisfied) to 5 (very satisfied) (Weiss, Dawis, England, & Lofquist, 1967). Respondents indicate how satisfied or dissatisfied they feel about several aspects of their job including "being able to keep busy all the time," "the chance to do things for other people," and "the working conditions." The items of the MSQ short form are combined to produce three scores, an Intrinsic Satisfaction score (12 items), Extrinsic Satisfaction, (6 items), and General Satisfaction (20 items, inclusive of Intrinsic and Extrinsic scales plus 2 added items) (Weiss et al., 1967).

Intrinsic job satisfaction refers to satisfaction with certain factors in the job setting that offer prospects for activity, independence, variety, social status, moral values, security, social service, authority, ability utilization, responsibility, creativity, and

achievement. Extrinsic job satisfaction is the extent to which employees are satisfied with supervision received, institution policies and practices, compensation, advancement, opportunities, and recognition. The two additional subscales that, in combination with Intrinsic and Extrinsic satisfaction, make up the General Satisfaction score are co-workers and work conditions (Weiss et al., 1967). High scores indicate higher levels of intrinsic, extrinsic, and overall job satisfaction. Low scores reflect job dissatisfaction. Reliability coefficients were reported as follows: Intrinsic Satisfaction, .84 to .91; Extrinsic Satisfaction, .77 to .82; General Satisfaction, .87 to .92 (Weiss, Dawis, England, & Lofquist, 1964). The reliability coefficients found for the current study were .85 for Intrinsic Satisfaction; .79 for Extrinsic Satisfaction; and .90 for the MSQ Total Score.

#### *Maslach Burnout Inventory*

The Maslach Burnout Inventory (MBI) is an instrument widely used in burnout research (Ackerly et al., 1988; Raquepaw & Miller, 1989; Vredenburg, Carlozzi, & Stein, 1999), the norms of which are based on a heterogeneous group of mental health workers that included psychologists, psychotherapists, counselors, mental hospital staff, and psychiatrists. The Maslach Burnout Inventory is a 22-item measure that consists of three subscales, and utilizes a six-point Likert response scale ranging from 0 (never) to 6 (every day). Sample items include “I feel used up at the end of the workday,” “I don’t really care what happens to some recipients,” and “I have accomplished many worthwhile things in this job.” The three subscales that comprise the Maslach Burnout Inventory include Emotional Exhaustion (EE), Depersonalization (DP), and Personal Accomplishment (PA).

Table 1. Self-Reported Gender, Ethnicity, Relationship Status, Salary, Population Size, and Region by Setting.

Demographic	State Prison Psychologist		Federal Prison Psychologists		Community Psychologists		Total	
	<i>N</i>	(%)	<i>n</i>	(%)	<i>n</i>	(%)	<i>N</i>	(%)
Male	12	(29.3)	14	(38.9)	27	(45.0)	53	(38.7)
Female	29	(70.7)	21	(58.3)	33	(55.0)	83	(60.6)
No Report	0	(00.0)	1	(02.8)	0	(00.0)	1	(00.7)
White	38	(92.7)	31	(86.1)	50	(83.3)	119	(86.9)
African American	0	(00.0)	3	(08.3)	0	(00.0)	3	(02.2)
Latino/Latina	1	(02.4)	1	(02.8)	2	(03.3)	4	(02.9)
Asian American	2	(04.9)	0	(00.0)	4	(06.7)	6	(04.4)
Biracial	0	(00.0)	0	(00.0)	4	(06.7)	4	(02.9)
Other	0	(00.0)	1	(02.8)	0	(00.0)	1	(00.7)
Married/Committed	24	(58.5)	32	(88.9)	52	(86.7)	108	(78.8)
Cohabiting	2	(04.9)	1	(02.8)	2	(03.3)	5	(03.6)
Dating	4	(09.8)	1	(02.8)	1	(01.7)	6	(04.4)
No Relationship	5	(12.2)	1	(02.8)	5	(08.3)	11	(08.0)
Divorced	6	(14.6)	1	(02.8)	0	(00.0)	7	(05.1)
Less than \$25,000	5	(12.2)	1	(02.8)	8	(13.3)	14	(10.2)
\$25,000 - \$50,999	8	(19.5)	1	(02.8)	8	(13.3)	17	(12.4)
\$51,000 - \$75,999	9	(22.0)	7	(19.4)	13	(21.7)	29	(21.2)
\$76,000 - \$100,000	19	(46.3)	11	(30.6)	15	(25.0)	45	(32.8)
More than \$100,000	0	(00.0)	16	(44.4)	14	(23.3)	30	(21.9)
No Report	0	(00.0)	0	(00.0)	2	(03.3)	2	(01.5)
Rural	19	(46.3)	16	(44.4)	17	(28.3)	52	(38.0)
Urban	22	(53.7)	20	(55.6)	42	(70.0)	84	(61.3)
No Report	0	(00.0)	0	(00.0)	1	(01.7)	1	(00.7)
Northeast US	4	(09.8)	1	(02.8)	8	(13.3)	13	(09.5)
Southeast US	3	(07.3)	4	(11.1)	8	(13.3)	15	(10.9)
Midwest US	30	(73.2)	21	(58.3)	18	(30.0)	69	(50.4)
Northwest US	1	(02.4)	1	(02.8)	6	(10.0)	8	(05.8)
Southwest US	3	(07.3)	9	(25.0)	20	(33.3)	32	(23.4)

The Emotional Exhaustion subscale contains nine items and addresses feelings of being emotionally drained and an inability to meet the interpersonal demands of one's work. Scores of 16 or lower, 17 to 26, and 27 or greater indicate low, average, and high levels of emotional exhaustion, respectively. The Depersonalization subscale is made up of five items used to assess for the development of negative, cynical attitudes toward the

client. Scores of 6 or lower, 17 to 12, and 13 or higher on this scale indicate low, average, and high levels of depersonalization, respectively. The Personal Accomplishment subscale consists of 8 items intended to measure feelings of competence and successful achievement in one's work with people. Scores of 31 or lower, 32 to 38, and 39 or greater indicate low, average, and high levels of personal accomplishment, respectively. Higher scores on Emotional Exhaustion and Depersonalization subscales and lower scores on the Personal Accomplishment subscale indicate a greater degree of burnout (Ackerly et al., 1988; Raquepaw & Miller, 1989).

Maslach and Jackson (1986) reported the test-retest reliability of the MBI, measured at two to four week intervals, as .82 for Emotional Exhaustion, .60 for Depersonalization, and .80 for Personal Accomplishment. The Cronbach's alpha measure of internal consistency was reported as being .90 for Emotional Exhaustion; .79 for Depersonalization; and .71 for Personal Accomplishment (Maslach & Jackson, 1986). The alpha coefficients obtained for the current study are as follows: Emotional Exhaustion, .89; Depersonalization, .69; and Personal Accomplishment, .76. Several studies have demonstrated the convergent and discriminate validity of the MBI (Maslach & Jackson, 1986; Rafferty, Lemkau, Purdy, & Rudisill, 1986).

#### *International Personality Inventory Pool-Five Factor Model*

The International Personality Inventory Pool-Five Factor Model (IPIP-FFM), which consists of 50-items, is a personality assessment that measures the five broad personality dimensions of extraversion, agreeableness, neuroticism, conscientiousness, and openness to experience, described previously. Respondents to the IPIP-FFM use a five point scale on which they determine how well each statement describes them, with

responses ranging from “very inaccurate” to “very accurate” (Goldberg, 1999). Sample items include “am the life of the party,” “feel little concern for others,” and “get easily stressed out.” High scores on each of five factors indicate a greater prevalence of the previously discussed personality traits represented by each of the individual factors. Low scores on the scales measuring the five factors indicate the absence of the personality traits represented by those factors.

The IPIP-FFM has been found to correlate highly to the NEO-PI-R domain scores. The correlations between the IPIP and the NEO-PI-R domain scores range from .85 to .92 (Buchanan, Johnson, Goldberg, 2005). The IPIP-FFM consists of five scales, which correspond to the five factors of personality. Alpha coefficients of the five scales are as follows, Extraversion, .87; Neuroticism, .86; Conscientiousness, .79, Agreeableness, .82, and Openness to Experience, .84. Alpha coefficients obtained in the current study for each scale were as follows: Extraversion, .89; Neuroticism, .89; Conscientiousness, .78; Agreeableness, .70, and Openness to Experience, .70. One controversial aspect of the IPIP is the fact that no norms are available. Goldberg (1999) argues that most “norms” are misleading, and should not be used. More specifically, Goldberg (1999) suggests that people should be cautious when using “canned norms” because it is questionable that one could ever find a sample that is truly representative of the population from which it is drawn.

#### *Counseling Self-Estimate Inventory*

The Counseling Self-Estimate Inventory (COSE; Larson et al., 1992) consists of 37 items and was developed to measure counseling trainees’ judgment of their clinical capabilities and expectancies for success. The Counseling Self-Estimate Inventory

contains five subscales: Microskills, Process, Difficult Client Behaviors, Cultural Competence, and Awareness of Values (Larson et al., 1992). The Microskills subscale addresses respondents' perception of their capability to execute microskills in therapy. The Process subscale focuses on respondents' perception of their ability to attend to process in therapy sessions. The third subscale, Difficult Client Behaviors, addresses respondents' perceived ability to effectively deal with difficult clients and client behaviors such as unmotivated, silent, suicidal and indecisive clients, and self-harm behaviors of clients. The Cultural Competence subscale focuses on respondents' perceptions of their ability to work with clients in a culturally competent manner when working with diverse clients. Finally, the Awareness of Values subscale addresses respondents' perception of their ability to be aware of their clients' values, their own values, and difference and/or similarities that may exist between them (Larson et al., 1992).

The COSE implements a six-point Likert response scale ranging from 1 (strongly disagree) to six (strongly agree). Sample items include "I feel confident that I will appear competent and earn the respect of my client," and "I am unsure as to how to deal with clients who appear noncommittal and indecisive." Negatively worded items of the COSE are reverse scored. Higher scores on each of the subscales indicate stronger perceptions of counselor self-efficacy in the skills addressed by each particular subscale (Larson et al., 1992).

The COSE was normed on 212 beginning counselor trainees enrolled in introductory pre-practicum courses at two Midwestern universities and one university in Hawaii. The ages of participants used in the development of the COSE ranged from 20 to



50, with 83% of the participants identifying as White, 14% Asian, and 3% other (Larson et al., 1992). Research has not yet been done to address counseling self-efficacy among experienced psychologists providing treatment to clients, nor has an instrument to measure counselor self-efficacy of experienced psychologists been developed.

Internal consistency reliability for the COSE total was reported to be  $\alpha = .93$ , with subscale internal consistency reliabilities as the following: Microskills,  $\alpha = .88$ ; Process,  $\alpha = .86$ ; Difficult Client Behaviors,  $\alpha = .87$ ; Cultural Competence,  $\alpha = .80$  and Awareness of Values,  $\alpha = .78$  (Larson, Suzuki, Gillespie, Potenza, Bechtel, & Toulouse, 1992). The current research resulted in the following alpha coefficients: COSE total, .91; Microskills, .79; Process, .86; Difficult Client Behaviors, .76; Cultural Competence, .67; and Awareness of Values, .48.

#### *Work Environment Scale-10*

The Work Environment Scale-10 is a ten-item scale developed to study the work environment specifically in a mental health setting (Rossberg & Friis, 2004). According to the developers of the Work Environment Scale-10, Rossberg & Friis (2004), previously developed instruments intended to study the work environment were too large, complex, and difficult to use. Unlike previously developed measures, the Work Environment Scale-10 is a brief, user-friendly instrument. Sample items of the WES-10 include "How often does it happen that you are worried about going to work," "To what extent do you find that the patient treatment is complicated by conflicts among the staff members," and "What do you think about the number of tasks imposed on you?" The Work Environment Scale-10 uses a five-point Likert scale ranging from 1 (not at all or

never) to 5 (very often or to a large extent), and is comprised of four subscales: Self Realization, Conflict, Workload, and Nervousness.

The Self Realization subscale measure the extent employees feel supported, whether they experience feelings of confidence, and the extent to which they are able to use their knowledge at the workplace. High scores on the Self Realization subscale indicate greater feelings of perceived support, confidence, and ability to use their knowledge at work. Low scores on the Self Realization subscale suggest low levels of perceived support, confidence, and a lack of ability to use their knowledge at work.

The Workload subscale assesses individual's perception of the number of tasks imposed on the employee, and extent to which they feel the need to be at several places at once to complete their tasks. High scores indicate a feeling of having too many tasks, and an overall greater workload. Low scores suggest a feeling of few tasks and a manageable workload.

The Conflict subscale measures the prevalence of conflict or loyalty issues among staff. High scores indicate a greater extent of conflict and loyalty issues experienced by the respondent. Low scores indicate an absence or minimal experience of conflict within the work environment.

The Nervousness subscale assesses the extent to which individuals are worried about going to work, and the level of nervousness or tension they experience while at work (Rossberg, Eiring, & Friis, 2004). High scores on the Nervousness subscale indicate a greater degree of concern about going to work and experiencing feelings of nervousness while at work. Low scores indicate the absence or minimal experience of nervousness about going to work, or feeling tense at work.

Participants used in the development of the WES-10 consisted of 640 total staff members employed in 42 different mental health wards that completed the WES-10 over a period of ten years (1990 to 2000). No participant demographic information was provided. Cronbach's alphas for the subscales were the following: Self Realization, .85; Workload, .84; Conflict, .69; and Nervousness, .66. Rossberg and Friis (2004) did not conduct test-retest reliability for the Work Environment Scale-10. Alpha coefficients obtained in the current study were the following: Self Realization, .73; Workload, .76; Conflict, .70; and Nervousness, .76.

#### Procedures

Doctoral level correctional and community psychologists were recruited by electronically sending an information packet including a recruitment letter providing information about the study, a copy of the consent form, and Internet website link to the online surveys to the American Psychological Association (APA) Division 12 and Division 41 listservs. That information was then dispersed via listservs to APA members of Division 12 and Division 41. Division 12 is the Society of Clinical Psychology, and Division 41 is the American Psychology-Law Society. Due to the low response rate from the APA listservs, the snowballing sampling technique, developed by Goodman (1961), was also used for participant recruitment. The snowballing sampling technique involves recruitment of participants by selecting an individual who is eligible to take part in the study and requesting them to nominate other individuals who would also qualify to participate. Those individuals also nominate other potential participants for the study. For the current study, initial contact was made with training directors and psychologists from state and federal prisons, and a community mental health agency in the Midwest region

of the United States. These contacts precipitated a process of “snowball” or chain referral sampling, which resulted in a number of eligible participants from the current study. The snowball sampling technique resulted in participants from all regions of the United States.

Questionnaires used for this study were accessible via the Internet using [www.surveymonkey.com](http://www.surveymonkey.com). All participant information and responses were kept confidential by use of a password known only to the principal investigator. The data was in no way linked to participants identifying information. Participants did not have access to the questionnaires on the website unless they indicate that they consent to participating on the first link to the questionnaires. Informed consent was obtained by having the participant mark that they agree to participate on the website link to the survey. If they chose not to participate, they were not able to gain access to the questionnaires. After consenting, participants were asked to complete the online Internet surveys, which, in the order administered, consisted of a demographics questionnaire, the Counseling Self Estimate Inventory (COSE), the Work Environment Scale-10 (WES-10), the International Personality Item Pool-Five Factor Model (IPIP-FFM), the Maslach Burnout Inventory (MBI), and the Minnesota Satisfaction Questionnaire (MSQ) short form. Participation took approximated 15 to 30 minutes. Participants were entered into four separate drawings for \$50.

## CHAPTER IV

### RESULTS

The results of the current study are presented in the following sections. The first section reports the results of the preliminary analyses. The second section reports the results of the main analyses regarding the main hypotheses of the study. The third section is a report on the post hoc exploration of regression models predicting job satisfaction and job burnout, respectively (see Table 2).

Table 2. Self-Reported Age, Years of Work Experience, and Weekly Client Contact Hours by Setting.

Demographic	<i>M</i>	<i>SD</i>	Range	<i>N</i>
<b>Age</b>				
Total	42.63	10.45	26-72	114
State	42.23	12.38	27-72	31
Federal	40.26	8.47	28-59	31
Community	44.29	10.17	26-65	52
<b>Years Work Experience</b>				
Total	15.71	9.66	2-46	137
State	15.57	10.42	2-46	41
Federal	13.94	8.05	2-31	36
Community	16.87	9.98	2-38	60
<b>Weekly Client Contact</b>				
Total	21.53	10.80	4-60	137
State	20.44	7.71	10-45	41
Federal	19.03	10.48	5-49	36
Community	23.77	12.39	4-60	60

### Preliminary Analysis

An independent-samples *t* test was conducted to determine whether significant differences existed in the responses on the measures of job satisfaction (as measured by the Minnesota Satisfaction Questionnaire), burnout (as measured by the Maslach Burnout Inventory), counselor self-efficacy (as measured by the Counselor Self Estimate Inventory), work environment characteristics (as measured by the Work Environment Scale-10), and personality (as measured by the International Personality Item Pool-Five Factor Model) between the prison psychologist and federal psychologist samples (see Table 3).

Results revealed that the state prison sample and federal prison sample did not significantly differ in levels of job satisfaction,  $t(75) = -.33$ ,  $p = .75$ ; emotional exhaustion,  $t(75) = .41$ ,  $p = .68$ ; depersonalization,  $t(75) = .56$ ,  $p = .58$ ; personal accomplishment,  $t(75) = .82$ ,  $p = .41$ ; counselor self-efficacy  $t(75) = -1.01$ ,  $p = .32$ ; extraversion,  $t(75) = 1.85$ ,  $p = .07$ ; neuroticism,  $t(75) = -.37$ ,  $p = .71$ ; and conscientiousness  $t(75) = -.34$ ,  $p = .73$ . Additionally, no significant differences existed in work environment self realization,  $t(75) = 1.11$ ,  $p = .27$ ; workload,  $t(75) = .68$ ,  $p = .50$ ; work environment nervousness,  $t(75) = -.41$ ,  $p = .68$ ; or work environment conflict,  $t(135) = -1.75$ ,  $p = .08$ , between the two correctional samples. The only significant differences found between state prison and federal prison psychologist samples were the levels of openness,  $t(75) = 2.24$ ,  $p = .03$ ; and agreeableness  $t(75) = 2.24$ ,  $p = .03$ . Due to the overwhelming similarities between the responses of participants in both the state and federal samples, the main analysis was completed using the combination of the state prison and federal prison samples to form the total correctional sample.

Table 3. Raw Score Means (*M*), Standard Deviations (*SD*), and T-Test Results for All Total and Subscale Scores of State Prison, Federal Prison, and Combined Correctional Samples.

	State Prison Psychologists n = 41		Federal Prison Psychologists n = 36		Combined Correctional Psychologists n = 77		<i>t</i>	<i>p</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
MSQ Total	75.48	12.85	76.35	10.18	75.89	11.61	-.33	.75
COSE Total	180.38	22.34	185.24	19.76	182.65	21.18	-1.01	.32
COSE Microskills	60.71	5.73	61.64	5.76	61.14	5.73	-.71	.48
COSE Process	47.97	9.17	50.05	7.29	48.94	8.35	-1.09	.28
COSE Difficult Behaviors	33.96	6.14	34.75	5.34	34.33	5.76	-.60	.55
COSE Cultural Competence	20.01	0.43	20.31	0.46	20.19	2.73	-.33	.74
COSE Awareness of Values	17.63	2.91	18.50	3.41	18.04	3.16	-1.20	.23
WES-10 Self Realization	16.05	3.31	15.27	2.78	15.69	3.08	1.11	.27
WES-10 Conflict	5.17	1.94	4.60	1.42	4.90	1.73	1.46	.15
WES-10 Nervousness	4.32	1.69	4.47	1.61	4.39	1.65	-.41	.68
WES-10 Workload	6.90	1.62	6.67	1.37	6.79	1.51	.68	.50

Table 3. cont.

	State Prison Psychologist n = 41		Federal Prison Psychologists n = 36		Combined Correctional Psychologists n = 77		<i>t</i>	<i>p</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
MBI Personal Accomplishment	48.84	6.10	47.78	5.06	48.35	5.63	.82	.41
MBI Emotional Exhaustion	29.60	9.73	28.61	11.24	29.14	10.41	.41	.68
MBI Depersonalization	13.10	5.40	12.39	5.75	12.77	5.54	.56	.58
IPIP Neuroticism	23.83	7.48	24.51	8.55	24.15	7.95	-.37	.71
IPIP Extraversion	32.20	7.45	28.97	7.85	30.69	7.76	1.85	.07
IPIP Agreeableness	43.89	4.34	41.61	4.60	42.83	4.58	2.24*	.03
IPIP Openness	42.36	4.73	40.08	4.03	41.29	4.53	2.24*	.03
IPIP Conscientiousness	39.09	5.81	40.61	5.36	39.80	5.62	-1.89	.24

Note. MSQ=Minnesota Satisfaction Questionnaire; COSE=Counselor Self Estimate Inventory; WES-10=Work Environment Scale-10; MBI=Maslach Burnout Inventory; IPIP=International Personality Item Pool.

\**p* < .05.



Several two-way contingency table analyses (Chi-Square) were conducted to obtain a clearer composition of the participants and to evaluate whether there was a setting (state prison, federal prison, and community) difference across self-reported gender (male and female), ethnicity (White, African American, Latino/Latina, Asian American, and other), relationship status (not in a relationship, dating, cohabitating, married/committed partner, and divorced), licensure status (licensed and not licensed in an exempt agency), salary (less than \$25,000; \$25,000 to \$50,999; \$51,000 to \$75,999; \$76,000 to \$100,000; and more than \$100,000), location (rural or urban), and region (Northeast, Southeast, Midwest, Northwest, and Southwest). Significant differences were not found among setting and gender, as the Pearson Chi Square test was not significant ( $\chi^2[2, N = 136] = 2.56, p = .28$ ). Significant differences were also not found among setting and location ( $\chi^2[2, N = 136] = 3.95, p = .14$ ). Significant differences were found among setting and race/ethnicity ( $\chi^2[10, N = 137] = 18.99, p = .04$ ); setting and relationship status, ( $\chi^2[8, N = 137] = 20.12, p = .01$ ); setting and salary, ( $\chi^2[8, N = 135] = 27.61, p = .00$ ); and among setting and geographic region ( $\chi^2[8, N = 137] = 23.36, p = .00$ ). Specifically, a greater percentage of the state prison psychologist sample (92.7%) reported their race as White, than federal prison psychologists (86.1%) and community psychologists (83.3%), respectively. In comparison to state prison psychologists (58.5%), a significantly higher percentage of federal prison psychologists (88.9%) and community psychologists (86.7%) were married. Federal prison psychologist Federal prison psychologist reported receiving significantly higher salaries than community psychologists and state prison psychologists, respectively. Finally, a significantly larger percentage of state prison psychologists

(73.2%) than federal prison psychologists (58.3%) and community psychologists (30.0%) reported being from the Midwest.

Between group differences between setting and age, setting and years of experience, and setting and weekly client contact hours were also analyzed for differences using a series of one-way ANOVAs. No significant differences were found among setting and age,  $F(2, 111) = 1.49, p = .23$ ; setting and years of experience,  $F(2, 134) = 1.04, p = .36$ ; or setting and weekly client contact hours,  $F(2, 134) = 2.52, p = .08$ .

Additionally, differences were explored between setting and personality characteristics. Two of the five personality trait dimensions were found to be significantly different among settings. Specifically, the IPIP Openness dimension was found to differ significantly ( $F [2, 134] = 4.39, p = .01$ ) among community psychologists, ( $M = 42.66, SD = 4.12$ ); state prison psychologists, ( $M = 42.35, SD = 4.73$ ); and federal prison psychologists ( $M = 40.08, SD = 4.03$ ), with the means of the community psychologists and state prison psychologists statistically higher than those of the federal prison psychologist sample. A follow up ANOVA comparing the combined correctional sample (state and federal) with the community sample was not significant ( $F [1, 135] = 3.33, p = .07$ ). (See Table 5 for an overview of means and standard deviations of constructs by group).

The IPIP Agreeableness personality trait dimension was also found to differ significantly ( $F [2, 134] = 3.82, p = .02$ ) among state prison psychologists, ( $M = 43.89, SD = 4.34$ ); federal prison psychologists, ( $M = 41.61, SD = 4.60$ ); and community psychologists, ( $M = 43.87, SD = 3.90$ ), with the means of the community psychologists

and state prison psychologists statistically higher than those of the federal prison psychologist sample. A follow up ANOVA was completed to compare the combined correctional samples (state and federal) to the community sample. The results of the follow up were not significant ( $F [1, 135] = 1.98, p = .16$ ).

In addition to setting differences, a correlation matrix was completed to determine whether any unexpected relationships existed that may impact the main analysis. The Pearson product moment correlation coefficient ( $r$ ) was used to evaluate the relationship between all continuous demographic variables (age, years of experience, hours of weekly client contact, and salary) and the constructs explored in the current study including overall job satisfaction (MSQ Total), intrinsic job satisfaction (MSQ Intrinsic), extrinsic job satisfaction (MSQ Extrinsic), personal accomplishment (MBI PA), emotional exhaustion (MBI EE), depersonalization (MBI DEP), counselor self-efficacy (COSE Total), microskills self-efficacy, (COSE Microskills), process self-efficacy (COSE Process), self-efficacy for addressing difficult client behaviors (COSE Difficult Client Behaviors), cultural competence self-efficacy (COSE Cultural Competence), self-efficacy of awareness of one's own values (COSE Awareness of Values), neuroticism (IPIP Neuroticism), extraversion (IPIP Extraversion), conscientiousness (IPIP Conscientiousness), openness to experience (IPIP Openness), agreeableness (IPIP Agreeableness), work environment self realization (WES Self Realization), conflict within the work environment (WES Conflict), workload (WES Workload), and nervousness in the work environment (WES Nervousness). See Table 4 for an overview of the correlations between demographic characteristics and variables.

Table 4. Correlation Matrix of Demographic Information and All Scales and Subscales.

	Age	Years Experience	Weekly Contact	Salary	<i>N</i>	<i>M</i>	<i>SD</i>
MSQ Total	.24**	.32**	-.00	.23**	137	77.35	11.14
State	.20	.24	-.12	.25	41	75.48	12.85
Federal	.12	.15	.01	.34*	36	76.35	10.18
Community	.30*	.46**	-.00	.23	60	79.21	10.29
MSQ Intrinsic	.29**	.34**	.03	.22**	137	49.42	6.22
State	.21	.25	-.08	.24	41	49.25	6.85
Federal	.18	.22	.08	.31	36	48.62	6.06
Community	.38**	.46**	.03	.25	60	50.01	5.90
MSQ Extrinsic	.10	.19*	-.05	.22*	137	20.59	4.83
State	.12	.17	-.11	.28	41	19.60	5.82
Federal	-.04	-.00	-.10	.24	36	20.69	4.53
Community	.13	.31*	-.03	.16	60	21.21	4.18
COSE Total	.15	.25**	.05	.20*	137	181.92	19.17
State	.23	.35*	-.06	.32*	41	180.38	22.34
Federal	.01	.15	.36*	-.05	36	185.24	19.76
Community	.20	.26*	-.03	.21	60	180.99	16.36
COSE Microskills	.05	.16	-.02	.05	137	60.70	5.90
State	.09	.19	-.07	.13	41	60.70	5.73
Federal	-.07	.06	.32	-.15	36	61.64	5.76
Community	.16	.23	-.13	.04	60	60.13	6.11
COSE Process	.26**	.33**	.02	.32**	137	48.78	7.71
State	.33	.43**	-.10	.46**	41	47.97	9.17
Federal	.04	.17	.34*	.11	36	50.05	7.29
Community	.35**	.36**	-.07	.30*	60	48.57	6.87
COSE Diff. Beh	.17	.25**	.07	.25**	137	34.07	5.16
State	.23	.40**	-.05	.35*	41	33.96	6.14
Federal	.14	.29	.29	.12	36	34.75	5.34
Community	.18	.11	.05	.25	60	33.74	4.30
COSE Cultural Competence	.12	.13	.15	.02	137	20.20	2.74
State	.21	.21	.04	.20	41	20.10	2.94
Federal	.11	.13	.20	-.08	36	20.31	2.52
Community	.04	.08	.20	-.07	60	20.22	2.77

Table 4. cont.

	Age	Years Experience	Weekly Contact	Salary	N	M	SD
COSE Aware of Values	-.24*	-.10	.06	-.05	137	18.17	3.13
State	-.17	-.07	.04	-.16	41	17.63	2.91
Federal	-.22	-.12	.19	-.37*	36	18.50	3.41
Community	-.30*	-.12	.00	.08	60	18.34	3.10
WES-10 Self Realization	.26**	.24**	.01	.15	137	15.79	2.85
State	.32	.35*	-.10	.25	41	16.05	3.31
Federal	.39*	.36*	.06	.33*	36	15.27	2.78
Community	.11	.06	.01	.12	60	15.92	2.56
WES-10 Conflict	-.18	-.31**	-.11	-.07	137	4.12	1.79
State	-.05	-.11	.21	.12	41	5.17	1.94
Federal	-.02	-.29	-.06	-.38*	36	4.60	1.42
Community	-.28*	-.52**	-.17	-.11	60	3.12	1.33
WES-10 Nervousness	-.22*	-.22**	.04	-.03	137	4.44	1.59
State	-.14	-.27	.06	-.18	41	4.32	1.69
Federal	-.19	-.13	.04	-.02	36	4.47	1.61
Community	-.30*	-.25	.03	.03	60	4.49	1.53
WES-10 Workload	-.13	-.07	-.06	-.09	137	6.69	1.67
State	.13	.13	-.09	.12	41	6.90	1.62
Federal	-.22	-.15	-.02	-.18	36	6.67	1.37
Community	-.28*	-.17	-.04	-.14	60	6.55	1.85
MBI Personal Accomplishment	.08	.17*	.12	-.02	137	49.10	5.34
State	.16	.15	-.05	.03	41	48.84	6.10
Federal	.06	.18	.02	-.06	36	47.78	5.06
Community	-.03	.15	.22	.07	60	50.08	4.81
MBI Emotional Exhaustion	-.30**	-.28**	.11	-.18*	137	28.17	10.36
State	-.09	-.25	.17	-.34*	41	29.60	9.73
Federal	-.34	-.27	.08	-.21	36	28.61	11.24
Community	-.41**	-.30*	.14	-.11	60	26.94	10.25
MBI Depersonalization	-.17	-.18*	-.03	.03	137	11.42	4.99
State	-.44**	-.38*	.16	-.03	41	13.10	5.40
Federal	.01	-.07	.02	.17	36	12.39	5.75
Community	.05	-.05	-.04	-.03	60	9.70	3.51

Table 4. cont.

	Age	Years Experience	Weekly Contact	Salary	N	M	SD
IPIP Neuroticism	-.14	-.13	.00	-.22*	137	24.19	7.68
State	-.24	-.37*	.07	-.44**	41	23.83	7.48
Federal	.04	.01	.27	.04	36	24.51	8.55
Community	-.17	-.03	-.19	-.29*	60	24.23	7.39
IPIP Extraversion	.13	.16	-.04	.08	137	31.10	7.79
State	.18	.15	-.08	.28	41	32.20	7.45
Federal	.06	.02	-.35*	.13	36	28.97	7.85
Community	.08	.20	.08	.08	60	31.62	7.87
IPIP Agreeableness	-.04	.01	-.04	-.37**	137	43.28	4.31
State	.05	.02	-.25	-.25	41	43.89	4.34
Federal	-.12	.03	-.06	-.29	36	41.61	4.60
Community	-.15	-.07	.00	-.39**	60	43.87	3.90
IPIP Openness	.15	.21*	-.02	-.09	137	41.89	4.39
State	.19	.22	-.00	.17	41	42.36	4.73
Federal	.32	.38*	-.26	-.18	36	40.08	4.03
Community	-.06	.08	.01	-.07	60	42.66	4.11
IPIP Conscientious	.03	.12	.04	-.06	137	39.95	5.83
State	-.09	-.03	.08	-.26	41	39.09	5.81
Federal	-.19	.01	.21	-.10	36	40.61	5.36
Community	.21	.28*	-.05	-.02	60	40.15	6.13

Note. MSQ=Minnesota Satisfaction Questionnaire; COSE=Counselor Self Estimate Inventory; WES-10=Work Environment Scale-10; MBI=Maslach Burnout Inventory; IPIP=International Personality Item Pool.

\* $p < .05$ . \*\* $p < .01$

The results for the total sample indicate that 7 out of the 84 correlation coefficients were statistically significant at  $p < .05$  level and were either negatively or positively equal to or above .30 (a moderately strong relationship). Years of work experience was found to positively correlate with overall job satisfaction ( $r = .32$ ), intrinsic job satisfaction ( $r = .34$ ), and “processing” aspects of counselor self-efficacy ( $r = .33$ ), and negatively correlate with conflict within the work environment ( $r = -.31$ ). Salary positively correlated with “processing” aspects of counselor self-efficacy and negatively correlated with agreeableness. Age negatively correlated with emotional exhaustion ( $r = -.30$ ).

Because some differences were noted by state and federal prison samples, and between the overall (state and federal) correctional sample and community sample, these same correlations were also run individually for each setting. The state prison psychologist sample resulted in 12 statistically significant correlation coefficients out of the 84 correlations conducted, all of which were  $p < .05$ , and were either negatively or positively equal to or above .30. Within the state prison psychologist sample, years of experience positively correlated with counselor self-efficacy ( $r = .35$ ), “processing” aspects of counselor self-efficacy ( $r = .43$ ), managing difficult client behaviors aspect of counselor self-efficacy ( $r = .40$ ), and the self realization aspect of work environment ( $r = .35$ ); and negatively correlated with depersonalization ( $r = -.38$ ) and neuroticism ( $r = -.37$ ). Salary was found to positively correlate with counselor self-efficacy ( $r = .32$ ), processing aspects of counselor self-efficacy ( $r = .46$ ), and counselor self-efficacy regarding the management of difficult client behavior ( $r = .35$ ), and was found to

negatively correlate with emotional exhaustion ( $r = -.34$ ) and neuroticism ( $r = -.44$ ). Age negatively correlated with depersonalization ( $r = -.44$ ) among state prison psychologists.

Of the 84 coefficients among the federal prison psychologist sample, 10 were significant at  $p < .05$  level, and were either negatively or positively equal to or above .30. Years of experience were positively correlated with openness to experience ( $r = .38$ ) and self realization ( $r = .36$ ). Salary was positively correlated with overall job satisfaction ( $r = .34$ ) and self realization ( $r = .33$ ), and negatively correlated with the awareness of values aspect of counselor self-efficacy ( $r = -.37$ ) and work environment conflict ( $r = -.38$ ). Hours of weekly client contact was found to positively correlate with overall counselor self-efficacy ( $r = .36$ ), and processing aspects of counselor self-efficacy ( $r = .34$ ), and negatively correlate with extraversion ( $r = -.35$ ). Age was found to positively correlate with self realization ( $r = .39$ )

The correlations conducted for the community psychologist sample produced 15 out of 84 statistically significant correlation coefficients at  $p < .05$ , all of which were either negatively or positively equal to or above .30. Years of work experience among the community psychologist sample was positively correlated with overall job satisfaction ( $r = .46$ ), intrinsic job satisfaction ( $r = .46$ ), extrinsic job satisfaction ( $r = .31$ ), and processing aspects of counselor self-efficacy ( $r = .36$ ), and negatively correlated with work environment conflict ( $r = -.52$ ) and emotional exhaustion ( $r = -.30$ ). Salary was found to positively correlate to processing aspects of counselor self-efficacy ( $r = .30$ ), and negatively correlate with agreeableness ( $r = -.39$ ). Age was positively correlated with overall job satisfaction ( $r = .30$ ), intrinsic job satisfaction ( $r = .38$ ), and processing aspects of counselor self-efficacy ( $r = .35$ ), and negatively correlated with counselor self-



efficacy regarding awareness of values ( $r = -.30$ ), nervousness within the work environment ( $r = -.30$ ), and emotional exhaustion ( $r = -.41$ ).

### Main Analysis

The following sections provide a detailed description of the results of the main analyses. Specifically, results regarding the relationships among job satisfaction, burnout, counselor self-efficacy, work environment, and personality are described. Additionally, the differences and similarities that were found to exist between correctional and community psychologists are also addressed.

### *Hypothesis I*

The first hypotheses stated that different levels of job satisfaction, burnout, self-efficacy and perceptions of work environment will be found between correctional and community psychologists. A series of one-way analysis of variance (ANOVA) was conducted to evaluate the relationship between setting (correctional psychologists versus community psychologists) and overall job satisfaction. (See Table 5). The relationship between setting and overall job satisfaction was not significant,  $F(1,135) = 3.05, p = .08$ . Similarly, there was no significant difference between settings on the intrinsic job satisfaction subscale ( $F[1,135] = .97, p = .33$ ), or the extrinsic job satisfaction subscale ( $F[1,135] = 1.75, p = .19$ ).

Another series of one-way analysis of variance (ANOVA) was conducted to explore the relationship between setting (correctional psychologists versus community psychologists) and the three dimensions of burnout (emotional exhaustion, depersonalization, and personal accomplishment, as measured by the respectful scale of the Maslach Burnout Inventory [MBI]). See Table 5 for an overview of means and

standard deviations by group. The relationship between setting and emotional exhaustion was not significant,  $F(1,135) = 1.52, p = .22$ . Similarly, there was no significant relationship between setting and personal accomplishment ( $F[1,135] = 3.62, p = .06$ ). A significant relationship was found between setting and depersonalization,  $F(1,135) = 13.97, p < .01$ , suggesting that there are statistically significant differences between groups regarding the level of depersonalization experienced, with correctional psychologists ( $M = 12.77, SD = 5.54$ ) reporting higher levels of depersonalization than community psychologists ( $M = 9.70, SD = 3.51$ ). The partial  $\eta^2 = .09$ , indicating that the strength of the relationship between setting and depersonalization was moderate.

A series of one-way analysis of variance (ANOVA) was also conducted to investigate the relationship between setting and counselor self-efficacy (as measured by the Counselor Self-Estimate Inventory; COSE) (See Table 5). No significant differences were found between setting and counselor self-efficacy,  $F(1,135) = .25, p = .62$ . Similarly, no significant differences were found between setting and any of the specific counseling skills self-efficacies (as measured by the following COSE subscales: Microskills, Process, Difficult Client Behaviors, Cultural Competence, and Awareness of Values). Specifically, significant relationships were not found between setting and microskills aspects of counselor self-efficacy,  $F(1,135) = .98, p = .32$ ; setting and processing aspects of counselor self-efficacy,  $F(1,135) = 4.79, p = .78$ ; setting and counselor self-efficacy regarding the management of difficult client behavior,  $F(1,135) = .44, p = .51$ ; setting and cultural competency aspects of counselor self-efficacy,  $F(1,135) = .00, p = .97$ ; and setting and awareness of values aspects of counselor self-efficacy,  $F(1,135) = .31, p = .58$ .

Table 5. Raw Score Means (*M*), Standard Deviations (*SD*), and ANOVA Results for All Total and Subscale Scores of Combined Correctional Sample, Community Sample, and Total Samples.

	Correctional Psychologist n = 77		Community Psychologists n = 60		Total Groups n = 137		<i>F</i>	Partial $\eta^2$
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
MSQ Total	75.89	11.61	79.21	10.29	77.35	11.14	3.05	.02
COSE Total	182.65	21.18	181.00	16.36	181.92	19.17	.25	.00
COSE Microskills	61.14	5.73	60.13	6.11	60.70	5.90	.98	.01
COSE Process	48.94	8.35	48.57	6.87	48.78	7.71	.08	.00
COSE Difficult Behaviors	34.33	5.76	33.74	4.30	34.07	5.16	.44	.00
COSE Cultural Competence	20.19	2.73	20.22	2.77	20.20	2.74	.00	.00
COSE Awareness of Values	18.04	3.16	18.34	3.10	18.17	3.13	.31	.00
WES-10 Self Realization	15.69	3.08	15.92	2.56	15.79	2.85	.22	.00
WES-10 Conflict	4.90	1.73	3.12	1.33	4.12	1.79	43.72**	.25
WES-10 Nervousness	4.39	1.65	4.49	1.53	4.44	1.59	.14	.00
WES-10 Workload	6.79	1.51	6.55	1.85	6.69	1.67	.71	.01

Table 5. cont.

	Correctional Psychologist n = 77		Community Psychologists n = 60		Total Groups n = 137		F	Partial $\eta^2$
	M	SD	M	SD	M	SD		
MBI Personal Accomplishment	48.35	5.63	50.08	4.81	49.10	5.34	3.62	.03
MBI Emotional Exhaustion	29.14	10.41	26.94	10.25	28.17	10.36	1.52	.01
MBI Depersonalization	12.77	5.54	9.70	3.51	11.42	4.99	13.97**	.09
IPIP Neuroticism	24.15	7.95	24.23	7.39	24.19	7.68	.00	.00
IPIP Extraversion	30.69	7.76	31.62	7.87	31.10	7.79	.48	.00
IPIP Agreeableness	42.83	4.58	43.87	3.90	43.28	4.31	1.96	.01
IPIP Openness	41.29	4.53	42.66	4.11	41.89	4.39	3.33	.02
IPIP Conscientiousness	39.80	5.62	40.15	6.13	39.95	5.83	.12	.00

Note. MSQ=Minnesota Satisfaction Questionnaire; COSE=Counselor Self Estimate Inventory; WES-10=Work Environment Scale-10; MBI=Maslach Burnout Inventory; IPIP=International Personality Item Pool.

\* $p < .05$ . \*\* $p < .01$

A final series of one-way analysis of variance was conducted to examine the relationship between setting and work environment (See Table 5). No significant relationships were found between setting and self realization,  $F(2,134) = .82, p = .44.$ ; setting and workload,  $F(2,134) = .55, p = .58.$ ; or setting and work environment nervousness,  $F(2,134) = .16, p = .85.$  A strong significant relationship was found between setting and work environment conflict,  $F(2,134) = 56.70, p < .01,$  partial  $\eta^2 = .25,$  which indicates setting accounted for 25% of the variance of the dependent variable, work environment conflict. These results indicate that there are statistically significant differences between groups regarding the amount of work environment conflict reported, with correctional psychologists ( $M = 4.90, SD = 1.73$ ) reporting higher levels of work environment conflict than community psychologists ( $M = 3.12, SD = 1.33$ ). With the exception of significant relationships between setting and depersonalization and setting and work environment conflict, the overall hypotheses that differences would exist in levels of job satisfaction, burnout, self-efficacy, and work environment was not supported.

### *Hypothesis II*

The second hypothesis addressed the relationship between the dimensions of burnout and work environment. In particular, the second hypothesis stated that a moderate negative correlation would exist between the emotional exhaustion and depersonalization dimensions of burnout and work environment self realization (WES-10 Self Realization subscale); and a moderate positive correlation would exist between the emotional exhaustion and depersonalization dimensions of burnout and the workload, work environment conflict, and work environment nervousness, as measured by the

subscales of the WES-10. Additionally, a moderate positive correlation between the personal accomplishment dimension of burnout and the self realization subscale of the WES-10, as well as a moderate negative correlation between the personal accomplishment dimension of burnout and workload, work environment conflict, and work environment nervousness (WES-10 Workload, Conflict, and Nervousness subscales) was hypothesized. See Tables 6, 7, 8, and 9 for an overview of correlations for the total sample, state prison psychologist sample, federal psychologist sample, and community psychologist sample, respectively.

Correlation coefficients were computed among the three dimensions of burnout (emotional exhaustion, depersonalization, and personal accomplishment) and self realization, workload, work environment conflict, and work environment nervousness. As hypothesized, a moderate negative correlation was obtained between emotional exhaustion and self realization ( $r = -.36, p < .01$ ). A statistically significant negative correlation was also found between depersonalization and self realization; however, the correlation was small ( $r = -.20, p < .01$ ). Emotional exhaustion was also found to correlate moderately with workload ( $r = .34, p < .01$ ), work environment conflict ( $r = .35, p < .01$ ), and work environment nervousness ( $r = .52, p < .01$ ). Depersonalization was found to moderately correlate with work environment conflict ( $r = .39, p < .01$ ) and work environment nervousness ( $r = .38, p < .01$ ); however, depersonalization did not correlate significantly with workload ( $r = .10, p < .12$ ). As hypothesized, a moderate positive correlation was found between personal accomplishment and self realization ( $r = .53, p < .01$ ). A moderate negative correlation was found between personal accomplishment and work environment nervousness ( $r = -.35, p < .01$ ), and a small

negative correlation was found between personal accomplishment and work environment conflict ( $r = -.26, p < .01$ ). Personal accomplishment did not correlate with workload ( $r = .08, p = .18$ ). With the exception of the relationships between depersonalization and workload, and between personal accomplishment and workload, this hypothesis was supported.

In general, these findings suggest that increases in the work environment characteristics of nervousness and conflict are related to increases in feelings of emotional exhaustion and depersonalization, and decreased feelings of personal accomplishment. Additionally, these findings suggest that an increase in the work environment characteristic of self realization related to lower levels of emotional exhaustion and depersonalization, and an increase in feelings of personal accomplishment.

### *Hypothesis III*

The third hypothesis stated that a moderate positive correlation would be found between neuroticism (as measured by the IPIP Neuroticism subscale) and the emotional exhaustion and depersonalization dimensions of burnout (as measured by the MBI Emotional Exhaustion and MBI Depersonalization subscales) moderate negative correlation would be found between personal accomplishment dimension of burnout and neuroticism. These hypotheses were supported (See Tables 6, 7, 8, and 9). Neuroticism was positively related to emotional exhaustion ( $r = .35, p < .00$ ) and depersonalization ( $r = .55, p < .01$ ). Additionally, neuroticism was negatively related to personal accomplishment ( $r = -.39, p < .01$ ).

Table 6. Correlations between Measures of Job Satisfaction, Burnout, Counselor Self-Efficacy, Work Environment, and Personality of Total Sample.

Variable	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
1. MSQ	.26*	.20	.30*	.26*	.18	-.11	.70*	-.51*	-.39*	.07	.53*	-.48*	-.24*	-.29*	.17	.00	.17	.11
2. COSE Tot	-	.80*	.92*	.82*	.62*	.45*	.43*	-.08	-.32*	-.13	.29*	-.19	-.20	-.23*	.04	.18	.16	.23*
3. COSE MS	-	-	.66*	.47*	.36*	.31*	.20*	-.02	-.20*	-.11	.25*	-.08	-.15	-.14	-.01	.23*	.09	.28*
4. COSE P	-	-	-	.75*	.50*	.28*	.47*	-.09	-.31*	-.13	.25*	-.21*	-.15	-.22*	.07	.06	.14	.20
5. COSE DB	-	-	-	-	.50*	.17	.48*	-.08	-.29*	-.09	.18	-.17	-.09	-.19	.06	.11	.15	.14
6. COSE CC	-	-	-	-	-	.21*	.38*	-.11	-.22*	.02	.32*	-.15	-.13	-.15	.16	.30*	.23*	.08
7. COSE AV	-	-	-	-	-	-	-.01	-.00	-.16	-.14	.14	-.08	-.32*	-.17	-.16	.08	-.00	.07
8. WES SR	-	-	-	-	-	-	-	-.24*	-.49*	.03	.53*	-.36*	-.20*	-.27*	.09	.14	.17	.13
9. WES C	-	-	-	-	-	-	-	-	.206	.93	.53	.35*	.39*	.11	.03	-.07	-.17	-.16
10. WES N	-	-	-	-	-	-	-	-	-	.13	-.35*	.52*	.38*	.53*	.00	.01	.04	-.18
11. WES WL	-	-	-	-	-	-	-	-	-	-	.08	.34*	.10	.13	.14	.13	.26*	.05
12. MBI PA	-	-	-	-	-	-	-	-	-	-	-	-.32*	-.31*	-.38*	.31*	.28*	.27*	.28*
13. MBI EE	-	-	-	-	-	-	-	-	-	-	-	-	.42*	.55*	-.07	.08	.07	-.01
14. MBI DP	-	-	-	-	-	-	-	-	-	-	-	-	-	.35*	-.06	-.21*	-.14	-.15



Table 6. cont.

Variable	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	
15. IPIP N																			
16. IPIP E																			
17. IPIP A																			
18. IPIP O																			
19. IPIP C																			

Note: MSQ=Minnesota Satisfaction Questionnaire; COSE Tot=Counselor Self Estimate Inventory; COSE MS=Counselor Self Estimate Inventory-Microskills Subscale; COSE P=Counselor Self Estimate Inventory-Process Subscale; COSE DB=Counselor Self Estimate Inventory-Difficult Client Behaviors Subscale; COSE CC=Counselor Self Estimate Inventory-Cultural Competence Subscale; COSE AV=Counselor Self Estimate Inventory-Awareness of Values Subscale; WES SR=Work Environment Scale-10-Self Realization Subscale; WES C=Work Environment Scale-10-Conflict Subscale; WES N=Work Environment Scale-10-Nervousness Subscale; WES WL=Work Environment Scale-10-Workload Subscale

\*  $p < .01$

current study supported this hypothesis as counselor self-efficacy was found to significantly correlate with personal accomplishment, ( $r = .29, p < .001$ ); and negatively correlate, although weakly, with emotional exhaustion, ( $r = -.19, p = .01$ ); and depersonalization, ( $r = -.20, p = .01$ ). See Tables 6, 7, 8, and 9 for an overview of the correlations between constructs for the total sample, state prison psychologist, federal prison psychologist, and community psychologist samples, respectively.

#### *Hypothesis VI*

The last hypothesis of the study stated that in order of contributing variance, the following factors that would add significantly to the prediction of job satisfaction: work environment (as measured by the Work Environment Scale-10 subscales: Self realization, Conflict, Nervousness, and Workload), burnout (as measured by the three scales of the Maslach Burnout Inventory: Emotional Exhaustion, Depersonalization, and Personal Accomplishment), self-efficacy (as measured by the Counselor Self Estimate Inventory), and setting (state prison, federal prison, and community).

To test this hypothesis, a hierarchical multiple regression analysis was conducted to predict overall job satisfaction from work environment characteristics, burnout, counselor self-efficacy, and setting. In the hierarchical regression, work environment characteristics (self realization, conflict, nervousness, and workload) were entered as a block in the first step of the regression; dimensions of burnout (emotional exhaustion, depersonalization, and personal accomplishment) were then entered as a block in the second step of the regression; counselor self efficacy was entered as a block in the third step of the regression; and setting was entered as a block in the fourth step of the regression (see Table 10). This analysis allowed for the examination of the direct

associations of work environment characteristics, dimensions of burnout, counselor self-efficacy, and setting with job satisfaction.

The results of this analysis indicated that work environment characteristics accounted for 62% of the variance in job satisfaction,  $F(4, 132) = 54.50, p < .01$  (See Table 10). Work environment self realization ( $\beta = .61, sr^2 = .27, p < .001$ ) and work environment conflict ( $\beta = -.37, sr^2 = .13, p < .001$ ) were found to significantly predict job satisfaction. However, workload ( $\beta = .09, sr^2 = .01, p = .12$ ) and work environment nervousness ( $\beta = -.00, sr^2 = .00, p = .96$ ) failed to predict job satisfaction.

In Step 2, burnout significantly added additional variance in job satisfaction over and beyond the effects of the work environment,  $\Delta R^2 = .06, \Delta F(3, 129) = 7.95, p < .001$ . (See Table 10). Work environment self realization ( $\beta = .51, sr^2 = .15, p < .001$ ), workload ( $\beta = .15, sr^2 = .02, p < .01$ ), work environment conflict ( $\beta = -.33, sr^2 = .09, p < .001$ ), emotional exhaustion ( $\beta = -.27, sr^2 = .04, p < .001$ ), and personal accomplishment ( $\beta = .14, sr^2 = .01, p < .05$ ) were all found to significantly predict job satisfaction. However, work environment nervousness ( $\beta = .08, sr^2 = .00, p = .24$ ) and depersonalization ( $\beta = .11, sr^2 = .01, p = .07$ ) failed to predict job satisfaction.

In Step 3, counselor self-efficacy did not significantly add additional variance to job satisfaction over and beyond work environment characteristics and burnout,  $\Delta R^2 = .00, \Delta F(1, 128) = .08, p = .78$ . Finally, in Step 4, setting (dummy coded) did not significantly add additional variance to job satisfaction over and beyond work environment characteristics, burnout, and counselor self-efficacy,  $\Delta R^2 = .00, \Delta F(1, 127) = .20, p = .66$ . (See Table 10)

Table 7. Correlations between Measures of Job Satisfaction, Burnout, Counselor Self-Efficacy, Work Environment, and Personality of State Prison Sample.

Variable	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
1. MSQ	.39*	.26	.37*	.41*	.33	.08	.83*	-.54*	-.57*	-.02	.70*	-.63*	-.33	-.50*	.32	.08	.23	.11
2. COSE Tot	-	.85*	.93*	.88*	.75*	.47*	.52*	-.08	-.55*	-.14	.26	-.30	-.34	-.56*	.34	.19	.36	.05
3. COSE MS	-	-	.70*	.61*	.66*	.37*	.35	.04	-.40*	-.17	.13	-.14	-.27	-.37*	.28	.36	.18	.13
4. COSE P	-	-	-	.80*	.62*	.30	.49*	-.09	-.50*	-.10	.18	-.33	-.32	-.55*	.30	.07	.36	-.11
5. COSE DB	-	-	-	-	.59*	.31	.53*	-.18	-.32	-.19	.31	-.31	-.25	-.52*	.29	-.00	.37*	.10
6. COSE CC	-	-	-	-	-	.28	.41*	-.06	-.22*	.02	.32*	-.12	-.18	-.40*	.53*	.27	.30	.12
7. COSE AV	-	-	-	-	-	-	.19	.01	-.40*	-.01	.16	-.17	-.36*	-.33*	-.08	.26	.19	.12
8. WES SR	-	-	-	-	-	-	-	-.41*	-.69*	.09	.73*	-.58*	-.50*	-.49*	.37*	.19	.27	.22
9. WES C	-	-	-	-	-	-	-	-	.51*	.18	-.32	.53*	.34	.21	.20	-.23	-.07	-.14
10. WES N	-	-	-	-	-	-	-	-	-	.22	-.43*	.58*	.52*	.57*	.03	-.15	-.05	-.38*
11. WES WL	-	-	-	-	-	-	-	-	-	-	-.02	.15	.23	.12	-.04	-.03	.17	-.05
12. MBI PA	-	-	-	-	-	-	-	-	-	-	-	-.40*	-.29*	-.39*	.49*	.19	.25	.32
13. MBI EE	-	-	-	-	-	-	-	-	-	-	-	-	.43*	.71*	-.11	.08	.06	-.07
14. MBI DP	-	-	-	-	-	-	-	-	-	-	-	-	-	.51*	-.05	-.33	-.04	.04

Table 7. cont.

Variable	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
15. IPIP N															-.24*	-.04	-.12	.07
16. IPIP E																.14	.24	-.05
17. IPIP A																	.17	.06
18. IPIP O																		-.06
19. IPIP C																		

Note: MSQ=Minnesota Satisfaction Questionnaire; COSE Tot=Counselor Self Estimate Inventory; COSE MS=Counselor Self Estimate Inventory-Microskills Subscale; COSE P=Counselor Self Estimate Inventory-Process Subscale; COSE DB=Counselor Self Estimate Inventory-Difficult Client Behaviors Subscale; COSE CC=Counselor Self Estimate Inventory-Cultural Competence Subscale; COSE AV=Counselor Self Estimate Inventory-Awareness of Values Subscale; WES SR=Work Environment Scale-10-Self Realization Subscale; WES C=Work Environment Scale-10-Conflict Subscale; WES N=Work Environment Scale-10-Nervousness Subscale; WES WL=Work Environment Scale-10-Workload Subscale

\*  $p < .01$

Table 8. Correlations between Measures of Job Satisfaction, Burnout, Counselor Self-Efficacy, Work Environment, and Personality of Federal Prison Sample.

Variable	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
1. MSQ	.08	.00	.18	.20	.00	-.21	.72*	-.37	-.28*	.10	.32	-.51*	-.07	-.23	.10	-.20	-.11	.08
2. COSE Tot	-	.83*	.95*	.87*	.73*	.46*	.32	-.19	-.03	.25	.23	.09	-.11	.17	-.11	.40*	.25	.32*
3. COSE MS		-	.75*	.62*	.48*	.19	.06	-.16	-.03	.23	.15	.17	-.04	.17	-.29	.32	.08	.33
4. COSE P			-	.83*	.64*	.32	.41*	-.15	-.01	.18	.26	.03	-.09	.17	-.02	.35	.25	.28
5. COSE DB				-	.60*	.23	.44*	-.28	.06	.34	.05	.09	-.06	.19	.02	.35	.31	.25
6. COSE CC					-	.41*	.32	-.09	-.16	.38	.27	.14	-.02	.13	.01	.42*	.25	.22
7. COSE AV						-	-.03	.01	-.07	-.12	.25	-.08	-.28	-.05	-.11	.16	.14	.17
8. WES SR							-	-.05	-.39*	.24	.43*	-.58*	-.50*	-.49*	.37*	.19	.27	.22
9. WES C								-	.05	.04	.09	.53*	.34	.21	.20	-.23	-.07	-.14
10. WES N									-	-.25	-.53*	.58*	.52*	.57*	.03	-.15	.05	-.38*
11. WES WL										-	.05	.15	.23	.12	-.04	-.03	.17	-.05
12. MBI PA											-	-.49*	-.50*	-.46*	.03	.37	.26	.50*
13. MBI EE												-	.57*	.56*	-.32	.12	-.09	-.23

Table 8. cont.

Variable	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
14. MBI DP														.46*	-.10	-.31	-.37	-.55*
15. IPIP N															-.32	-.17	-.28	-.29
16. IPIP E																.19	.30	-.03
17. IPIP A																	.63*	.33
18. IPIP O																		.13
19. IPIP C																		

Note: MSQ=Minnesota Satisfaction Questionnaire; COSE Tot=Counselor Self Estimate Inventory; COSE MS=Counselor Self Estimate Inventory-Microskills Subscale; COSE P=Counselor Self Estimate Inventory-Process Subscale; COSE DB=Counselor Self Estimate Inventory-Difficult Client Behaviors Subscale; COSE CC=Counselor Self Estimate Inventory-Cultural Competence Subscale; COSE AV=Counselor Self Estimate Inventory-Awareness of Values Subscale; WES SR=Work Environment Scale-10-Self Realization Subscale; WES C=Work Environment Scale-10-Conflict Subscale; WES N=Work Environment Scale-10-Nervousness Subscale; WES WI=Work Environment Scale-10-Workload Subscale

\*  $p < .01$

Table 9. Correlations between Measures of Job Satisfaction, Burnout, Counselor Self-Efficacy, Work Environment, and Personality of Community Sample.

Variable	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
1. MSQ	.26	.29	.32*	.16	.13	-.24	.57*	-.57*	-.31*	.16	.46*	-.34*	-.18	-.17	.11	.04	.25	.11
2. COSE Tot		.77*	.90*	.68*	.44*	.42*	.46*	-.08	-.32*	-.33*	.44*	-.32*	-.18	-.27*	-.08	.08	-.03	.32*
3. COSE MS			.59*	.26	.10	.35*	.18	-.11	-.16	-.23	.47*	-.21	-.24	-.20	-.01	.15	.10	.34*
4. COSE P				.63*	.33*	.22	.53*	-.11	-.32*	-.29	.35*	-.33*	-.32	-.55*	.30	.07	.36	-.11
5. COSE DB					.35*	-.00	.48*	.09	-.30*	-.33	.15	-.32	-.25	-.52*	.29	-.00	.37*	.10
6. COSE CC						.04	.41*	-.21	-.18	.01	.39*	-.12	-.18	-.40*	.53*	.27	.30	.12
7. COSE AV							-.15	.09	-.06	-.21	.07	-.17	-.36	-.33	-.08	.26	.19	.12
8. WES SR								-.25	-.38*	.01	.37*	-.23	-.03	-.17	-.26	.13	.02	.13
9. WES C									.30*	-.05	-.31*	.31*	.36*	.04	-.12	.10	-.29	-.09
10. WES N										.26	-.17	.50*	.33*	.48*	.09	.19	.21	.04
11. WES WL											.19	.47*	-.09	.24	.30*	.18	.46	.12
12. MBI PA												-.13	-.07	-.34*	.30*	.24	.23	.15
13. MBI EE													.24	.46*	.12	.08	.22	.17



Table 9. cont.

Variable	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
14. MBI DP														.16	-.00	.07	.05	.01
15. IPIP N															-.14	.21	.33*	.05
16. IPIP E																.02	.19	.28
17. IPIP A																	.28*	.27
18. IPIP O																		.08
19. IPIP C																		

Note: MSQ=Minnesota Satisfaction Questionnaire; COSE Tot=Counselor Self Estimate Inventory; COSE MS=Counselor Self Estimate Inventory-Microskills Subscale; COSE P=Counselor Self Estimate Inventory-Process Subscale; COSE DB=Counselor Self Estimate Inventory-Difficult Client Behaviors Subscale; COSE CC=Counselor Self Estimate Inventory-Cultural Competence Subscale; COSE AV=Counselor Self Estimate Inventory-Awareness of Values Subscale; WES SR=Work Environment Scale-10-Self Realization Subscale; WES C=Work Environment Scale-10-Conflict Subscale; WES N=Work Environment Scale-10-Nervousness Subscale; WES WL=Work Environment Scale-10-Workload Subscale

\*  $p < .01$

## Post-Hoc Analysis

In order to have a more complete analysis of the constructs predicting job satisfaction and burnout, a series of hierarchical regressions were completed. In particular, a hierarchical multiple regression analysis was conducted to predict overall job satisfaction from work environment characteristics (e.g., self realization, conflict, nervousness, and workload), burnout (e.g. emotional exhaustion, depersonalization, and personal accomplishment), personality traits (e.g., conscientiousness, agreeableness, extraversion, openness to experience, and neuroticism), counselor self-efficacy, and demographic characteristics (years of experience, setting, age, weekly client contact, and salary).

### *Job Satisfaction*

In the hierarchical regression exploring job satisfaction, work environment characteristics were entered as a block in the first step of the regression. Emotional exhaustion, depersonalization, and personal accomplishment were then entered as a block in the second step of the regression. Personality traits were entered in the third step of the regression, and counselor self efficacy was entered as a block in the fourth step of the regression. Finally, demographic characteristics were entered as a block in the fifth step of the regression (See Table 11). This analysis allowed for the examination of the direct associations of work environment characteristics, dimensions of burnout, personality traits, counselor self-efficacy, and demographics with job satisfaction.

The results of this analysis indicated that work environment characteristics accounted for 59% of the variance in job satisfaction,  $F(4, 107) = 38.27, p < .01$ . Similar to the findings of the main analysis, work environment self realization ( $\beta = .58, sr^2 = .26$ ,

$p < .01$ ) and work environment conflict ( $\beta = -.35, sr^2 = .11, p < .01$ ) were found to significantly predict job satisfaction. However, workload ( $\beta = .09, sr^2 = .01, p = .16$ ) and work environment nervousness ( $\beta = -.02, sr^2 = .00, p = .76$ ) failed to predict job satisfaction.

In Step 2, burnout significantly added additional variance in job satisfaction over and beyond the effects of the work environment,  $\Delta R^2 = .08, \Delta F(3, 104) = 7.93, p < .001$ . Work environment self realization ( $\beta = .47, sr^2 = .14, p < .01$ ), workload ( $\beta = .17, sr^2 = .02, p < .01$ ), work environment conflict ( $\beta = -.31, sr^2 = .07, p < .01$ ), emotional exhaustion ( $\beta = -.32, sr^2 = .05, p < .01$ ), depersonalization ( $\beta = .15, sr^2 = .02, p < .05$ ) and personal accomplishment ( $\beta = .15, sr^2 = .01, p < .05$ ) were all found to significantly predict job satisfaction. However, work environment nervousness ( $\beta = .06, sr^2 = .00, p = .47$ ) failed to predict job satisfaction (See Table 11).

In Step 3, personality traits did not significantly add additional variance to job satisfaction over and beyond work environment characteristics and burnout,  $\Delta R^2 = .03, \Delta F(5, 99) = 2.02, p = .08$ . In Step 4, counselor self-efficacy did not significantly add additional variance to job satisfaction over and beyond work environment characteristics, burnout, and personality traits,  $\Delta R^2 = .00, \Delta F(1, 98) = .01, p = .93$ . Finally, in Step 5, demographic characteristics did not significantly add additional variance to job satisfaction over and beyond work environment characteristics, burnout, personality traits, and counselor self-efficacy,  $\Delta R^2 = .01, \Delta F(5, 93) = .34, p = .89$  (See Table 11).

Table 10. Summary of Hierarchical Regression Analysis Predicting Job Satisfaction.

Variable	$R^2$	Adjusted $R^2$	$\Delta R^2$	$\Delta F$	$df$	$B$	$SE B$	$\beta$	$t$	$p$	$r_{\text{partial}}$
Step 1 – Work Environment	.62	.61	.62	54.50**	4,132						
Self Realization						2.37	.24	.61	9.75	.00	.65
Workload						.58	.36	.09	1.59	.12	.14
Conflict						-2.31	.35	-.37	-6.65	.00	-.50
Nervousness						-.02	.44	-.00	-.05	.96	-.01
Step 2 – Burnout	.68	.66	.06	7.95**	3,129						
Self Realization						1.98	.25	.51	7.85	.00	.57
Workload						.97	.36	.15	2.27	.01	.23
Conflict						-2.07	.35	-.33	-5.96	.00	-.47
Nervousness						.53	.45	.08	1.19	.23	.10
Emotional Exhaustion						-.29	.07	-.27	-4.07	.00	-.34
Depersonalization						.24	.13	.11	1.82	.07	.16
Personal Accomplishment						.29	.13	.14	2.23	.03	.19
Step 3 – Counselor Self-Efficacy	.68	.66	.00	.08	1,128						
Self Realization						2.00	.27	.51	7.54	.00	.56
Workload						.95	.37	.14	2.57	.01	.22
Conflict						-2.06	.35	-.33	-5.90	.00	-.46
Nervousness						.52	.45	.07	1.15	.25	.10
Emotional Exhaustion						-.29	.07	-.27	-4.01	.00	-.33
Depersonalization						.24	.13	.11	1.77	.08	.16
Personal Accomplishment						.29	.13	.14	2.24	.03	.19
Counselor Self-Efficacy						-.01	.03	-.02	-.28	.78	-.03
Step 4 - Setting	.68	.66	.00	.20	1,127						
Self Realization						1.99	.27	.51	7.47	.00	.55
Workload						.94	.37	.14	2.52	.01	.22
Conflict						-2.14	.40	-.35	-5.42	.00	-.43
Nervousness						.56	.46	.08	1.21	.23	.11
Emotional Exhaustion						-.29	.07	-.27	-3.97	.00	-.33
Depersonalization						.22	.14	.10	1.64	.10	.14
Personal Accomplishment						.29	.13	.14	2.25	.03	.20
Counselor Self-Efficacy						-.01	.03	-.02	-.28	.78	-.03
Setting						-.35	.79	-.03	-.44	.66	-.04

Note: \*  $p < .05$ , \*\*  $p < .01$

### *Burnout*

In order to explore the constructs predicting burnout, another series of hierarchical regressions were completed. In particular, a series of hierarchical multiple regression analysis was conducted to predict emotional exhaustion, depersonalization, and personal accomplishment from work environment characteristics (e.g., self realization, conflict, nervousness, and workload), job satisfaction, personality traits (e.g., conscientiousness, agreeableness, extraversion, openness to experience, and neuroticism), counselor self-efficacy, and demographic characteristics (years of experience, setting, age, weekly client contact, and salary).

In the first hierarchical regression exploring the emotional exhaustion dimension of burnout, work environment characteristics were entered as a block in the first step of the regression. Job satisfaction was then entered as a block in the second step of the regression. Personality traits were entered in the third step of the regression, and counselor self efficacy was entered as a block in the fourth step of the regression. Finally, demographic characteristics were entered as a block in the fifth step of the regression (see Table 12). This analysis allowed for the examination of the direct associations of work environment characteristics, job satisfaction, personality traits, counselor self-efficacy, and demographics with emotional exhaustion.

The results of this analysis indicated that work environment characteristics accounted for 43% of the variance in emotional exhaustion,  $F(4, 107) = 20.06, p < .01$ . Workload ( $\beta = .27, sr^2 = .07, p < .01$ ), work environment conflict ( $\beta = .24, sr^2 = .05, p < .01$ ), and work environment nervousness ( $\beta = .38, sr^2 = .10, p < .01$ ) were found to

significantly predict emotional exhaustion. However, self realization ( $\beta = -.16, sr^2 = .02, p = .07$ ) failed to predict emotional exhaustion (see Table 12).

In Step 2, job satisfaction significantly added additional variance in emotional exhaustion over and beyond the effects of the work environment,  $\Delta R^2 = .07, \Delta F(1, 106) = 15.22, p < .01$ . Workload ( $\beta = .31, sr^2 = .09, p < .01$ ), work environment nervousness ( $\beta = .37, sr^2 = .10, p < .01$ ), and job satisfaction ( $\beta = -.42, sr^2 = .07, p < .01$ ) were all found to significantly predict emotional exhaustion. However, work environment self realization ( $\beta = .13, sr^2 = .01, p = .22$ ) and work environment conflict ( $\beta = .10, sr^2 = .01, p = .24$ ) failed to predict emotional exhaustion (see Table 12).

In Step 3, personality traits significantly added additional variance in emotional exhaustion over and beyond the effects of the work environment and job satisfaction,  $\Delta R^2 = .08, \Delta F(5, 101) = 4.01, p < .01$ . Workload ( $\beta = .25, sr^2 = .05, p < .01$ ), job satisfaction ( $\beta = -.35, sr^2 = .04, p < .01$ ), and neuroticism ( $\beta = .37, sr^2 = .07, p < .01$ ) were all found to significantly predict emotional exhaustion. However, work environment self realization ( $\beta = .05, sr^2 = .00, p = .59$ ), work environment conflict ( $\beta = .11, sr^2 = .01, p = .16$ ) work environment nervousness ( $\beta = .14, sr^2 = .01, p = .15$ ), extraversion ( $\beta = .02, sr^2 = .00, p = .82$ ), agreeableness ( $\beta = .00, sr^2 = .00, p = .98$ ), conscientiousness ( $\beta = .01, sr^2 = .00, p = .86$ ) and openness to experience ( $\beta = .07, sr^2 = .00, p = .40$ ) failed to predict emotional exhaustion (see Table 12).

In Step 4, counselor self-efficacy did not significantly add additional variance to emotional exhaustion over and beyond work environment characteristics, job satisfaction, and personality traits,  $\Delta R^2 = .00, \Delta F(1, 100) = .71, p = .40$ . Finally, in Step 5,

demographic characteristics did not significantly add additional variance to emotional exhaustion over and beyond work environment characteristics, job satisfaction, personality traits, and counselor self-efficacy,  $\Delta R^2 = .04$ ,  $\Delta F(5, 95) = 1.89$ ,  $p = .10$  (see Table 12).

In the second hierarchical regression exploring the depersonalization dimension of burnout, work environment characteristics were entered as a block in the first step of the regression. Job satisfaction was then entered as a block in the second step of the regression. Personality traits were entered in the third step of the regression, and counselor self efficacy was entered as a block in the fourth step of the regression. Finally, demographic characteristics were entered as a block in the fourth step of the regression (see Table 13). This analysis allowed for the examination of the direct associations of work environment characteristics, job satisfaction, personality traits, counselor self-efficacy, and demographics with depersonalization.

The results of this analysis indicated that work environment characteristics accounted for 28% of the variance in depersonalization,  $F(4, 107) = 10.38$ ,  $p < .01$ . Work environment conflict ( $\beta = .29$ ,  $sr^2 = .07$ ,  $p < .01$ ), and work environment nervousness ( $\beta = .40$ ,  $sr^2 = .12$ ,  $p < .01$ ) were found to significantly predict depersonalization. However, self realization ( $\beta = .03$ ,  $sr^2 = .00$ ,  $p = .76$ ) and workload ( $\beta = -.08$ ,  $sr^2 = .01$ ,  $p = .34$ ) failed to predict depersonalization (see Table 13).

In Step 2, job satisfaction did not significantly add additional variance in depersonalization over and beyond the effects of the work environment,  $\Delta R^2 = .00$ ,  $\Delta F(4, 107) = .59$ ,  $p = .45$ . However, work environment conflict ( $\beta = .32$ ,  $sr^2 = .06$ ,  $p < .01$ ), and

work environment nervousness ( $\beta = .41, sr^2 = .12, p < .01$ ) were both found to significantly predict depersonalization, while work environment self realization ( $\beta = -.03, sr^2 = .00, p = .81$ ), work load ( $\beta = -.09, sr^2 = .01, p = .30$ ), and job satisfaction ( $\beta = .10, sr^2 = .00, p = .45$ ) failed to predict depersonalization (see Table 13).

In Step 3, personality traits significantly added additional variance in depersonalization over and beyond the effects of the work environment and job satisfaction,  $\Delta R^2 = .10, \Delta F(5, 101) = 3.30, p < .01$ . Work environment conflict ( $\beta = .25, sr^2 = .04, p = .01$ ), work environment nervousness ( $\beta = .26, sr^2 = .03, p < .05$ ), agreeableness ( $\beta = -.18, sr^2 = .03, p < .05$ ) and neuroticism ( $\beta = .30, sr^2 = .05, p < .01$ ) were all found to significantly predict depersonalization. However, work environment self realization ( $\beta = .03, sr^2 = .00, p = .80$ ), workload ( $\beta = -.07, sr^2 = .00, p = .41$ ), job satisfaction ( $\beta = .03, sr^2 = .00, p = .81$ ), extraversion ( $\beta = .13, sr^2 = .01, p = .18$ ), conscientiousness ( $\beta = -.02, sr^2 = .00, p = .86$ ), and openness to experience ( $\beta = -.13, sr^2 = .01, p = .17$ ) failed to predict depersonalization (see Table 13).

In Step 4, counselor self-efficacy did not significantly add additional variance to depersonalization over and beyond work environment characteristics, job satisfaction, and personality traits,  $\Delta R^2 = .00, \Delta F(1, 100) = .23, p = .64$ . Finally, in Step 5, demographic characteristics did not significantly add additional variance to emotional exhaustion over and beyond work environment characteristics, job satisfaction, personality traits, and counselor self-efficacy,  $\Delta R^2 = .06, \Delta F(5, 95) = 2.08, p = .07$  (see Table 13).



Table 11. Summary of Post Hoc Hierarchical Regression Analysis of Variables Predicting Job Satisfaction.

Variable	$R^2$	Adjusted $R^2$	$\Delta R^2$	$\Delta F$	$df$	$B$	$SE B$	$\beta$	$t$	$p$	$r_{\text{partial}}$
Step 1 – Work Environment	.59	.57	.59	38.27**	4,107						
Self Realization						2.20	.27	.58	8.14	.00	.62
Workload						.62	.44	.09	1.42	.16	.14
Conflict						-2.26	.42	-.35	-5.41	.00	-.46
Nervousness						-.16	.51	-.02	-.31	.76	-.03
Step 2 – Burnout	.67	.64	.08	7.93**	3,104						
Self Realization						1.79	.28	.47	6.47	.00	.54
Workload						1.17	.44	.17	2.69	.01	.26
Conflict						-1.98	.41	-.31	-4.80	.00	-.43
Nervousness						.39	.53	.06	.73	.47	.07
Emotional Exhaustion						-.33	.08	-.32	-4.09	.00	-.37
Depersonalization						.35	.16	.15	2.18	.03	.21
Personal Accomplishment						.31	.14	.15	2.14	.04	.21
Step 3 - Personality	.70	.66	.03	2.02	5,99						
Self Realization						1.81	.28	.48	6.50	.00	.55
Workload						1.06	.44	.15	2.43	.02	.24
Conflict						-2.01	.41	-.31	-4.88	.00	-.44
Nervousness						.25	.58	.04	.43	.67	.04
Emotional Exhaustion						-.30	.09	-.28	-3.41	.00	-.32
Depersonalization						.20	.17	.09	1.18	.24	.12
Personal Accomplishment						.35	.16	.17	2.22	.03	.22
Extraversion						.17	.09	.12	1.79	.08	.18
Agreeableness						-.39	.16	-.16	-2.47	.02	-.24
Conscientiousness						-.07	.11	-.04	-.59	.56	-.06
Openness						-.04	.17	-.02	-.23	.82	-.02
Neuroticism						.12	.12	.08	.97	.33	.10
Step 4 – Counselor Self-Efficacy	.70	.66	.00	.01	1,98						
Self Realization						1.82	.30	.48	6.12	.00	.53
Workload						1.05	.45	.15	2.36	.02	.23
Conflict						-2.01	.41	-.31	-4.86	.00	-.44
Nervousness						.25	.58	.04	.43	.67	.04
Emotional Exhaustion						-.30	.09	-.28	-3.37	.00	-.32
Depersonalization						.20	.17	.09	1.18	.24	.12

Table 11. cont.

Variable	$R^2$	Adjusted $R^2$	$\Delta R^2$	$\Delta F$	$df$	$B$	$SE B$	$\beta$	$t$	$p$	$r_{\text{partial}}$
Personal Accomplishment						.35	.16	.17	2.21	.03	.22
Extraversion						.17	.09	.12	1.78	.08	.18
Agreeableness						-.39	.16	-.16	-2.45	.02	-.24
Conscientiousness						-.07	.12	-.03	-.57	.57	-.06
Openness						-.04	.17	-.02	-.22	.83	-.02
Neuroticism						.12	.13	.08	.94	.35	.09
Counselor Self-Efficacy						-.00	.04	-.01	-.09	.93	-.01
Step 5 – Demographic Characteristics	.70	.64	.01	.34	5,93						
Self Realization						1.81	.31	.48	5.74	.00	.51
Workload						.99	.46	.14	2.14	.04	.22
Conflict						-2.16	.53	-.34	-4.06	.00	-.39
Nervousness						.23	.63	.03	.37	.71	.04
Emotional Exhaustion						-.27	.10	-.26	-2.84	.01	-.28
Depersonalization						.19	.18	.08	1.07	.29	.11
Personal Accomplishment						.40	.17	.20	2.37	.02	.24
Extraversion						.15	.10	.11	1.56	.12	.16
Agreeableness						-.35	.18	-.14	-1.92	.06	-.20
Conscientiousness						-.07	.12	-.04	-.60	.55	-.06
Openness						-.04	.18	-.01	-.20	.84	-.02
Neuroticism						.11	.13	.08	.86	.39	.09
Counselor Self-Efficacy						-.02	.04	-.03	-.40	.69	-.04
Years of Experience						.02	.17	.02	.13	.90	.01
Setting						-.39	1.03	-.03	-.38	.71	-.04
Age						-.02	.15	-.01	-.10	.92	-.01
Weekly Client Contact						-.07	.07	-.07	-1.11	.27	-.12
Salary						.44	.71	.05	.62	.54	.06

Note. \*  $p < .05$ , \*\*  $p < .01$

Table 12. Summary of Post Hoc Hierarchical Regression Analysis of Variables Predicting Emotional Exhaustion.

Variable	$R^2$	Adjusted $R^2$	$\Delta R^2$	$\Delta F$	$df$	$B$	$SE B$	$\beta$	$t$	$p$	$r_{\text{partial}}$
Step 1 – Work Environment	.43	.41	.43	20.01**	4,107						
Self Realization						-.43	.30	-.12	-1.41	.16	-.14
Workload						1.75	.49	.27	3.56	.00	.33
Conflict						1.48	.47	.24	3.18	.00	.29
Nervousness						2.49	.57	.38	4.34	.00	.39
Step 2 – Job Satisfaction	.50	.48	.07	15.22**	1,106						
Self Realization						.45	.36	.13	1.24	.22	.12
Workload						2.00	.47	.31	4.28	.00	.38
Conflict						.59	.50	.10	1.19	.24	.12
Nervousness						2.42	.54	.37	4.51	.00	.40
Job Satisfaction						-.40	.10	-.42	-3.90	.00	-.35
Step 3 - Personality	.58	.54	.08	4.01**	5,101						
Self Realization						.19	.36	.05	.54	.59	.05
Workload						1.66	.46	.25	3.60	.00	.34
Conflict						.69	.49	.11	1.43	.16	.14
Nervousness						.90	.62	.14	1.45	.15	.14
Job Satisfaction						-.34	.10	-.35	-3.28	.00	-.31
Extraversion						.02	.10	.02	.23	.82	.02
Agreeableness						.01	.17	.00	.03	.98	.00
Conscientiousness						.02	.12	.01	.18	.86	.02
Openness						.16	.18	.07	.86	.40	.09
Neuroticism						.51	.12	.37	4.23	.00	.39
Step 4 – Counselor Self-Efficacy	.59	.54	.00	.71	1,100						
Self Realization						.10	.37	.03	.26	.80	.03
Workload						1.72	.47	.26	3.68	.00	.35
Conflict						.68	.49	.11	1.40	.17	.14
Nervousness						.89	.62	.14	1.43	.16	.14
Job Satisfaction						-.33	.10	-.35	-3.24	.00	-.31
Extraversion						.03	.10	.02	.26	.80	.03

Table 12. cont.

Variable	$R^2$	Adjusted $R^2$	$\Delta R^2$	$\Delta F$	$df$	$B$	$SE B$	$\beta$	$t$	$p$	$r_{\text{partial}}$
Agreeableness						.01	.17	-.00	-.03	.98	-.00
Conscientiousness						.01	.13	.00	.06	.96	.01
Openness						.13	.18	.06	.72	.48	.07
Neuroticism						.53	.12	.38	4.30	.00	.40
Counselor Self-Efficacy						.04	.04	.06	.84	.40	.08
Step 5 – Demographic Characteristics	.62	.56	.04	1.89	5,95						
Self Realization						.07	.38	.02	.20	.86	.02
Workload						1.55	.47	.24	3.33	.00	.32
Conflict						.52	.59	.09	.88	.38	.09
Nervousness						.96	.64	.14	1.50	.14	.15
Job Satisfaction						-.29	.10	-.31	-2.89	.01	-.29
Extraversion						.03	.10	.03	.34	.74	.04
Agreeableness						-.03	.19	-.01	-.17	.86	-.02
Conscientiousness						.01	.13	.01	.07	.94	.01
Openness						.19	.19	.08	1.01	.32	.10
Neuroticism						.53	.12	.38	4.25	.00	.40
Counselor Self-Efficacy						.04	.04	.08	.98	.33	.10
Years Work Experience						-.02	.18	-.02	-.12	.90	-.01
Setting						-.99	1.05	-.08	-.94	.35	-.10
Age						-.11	.16	-.11	-.71	.48	-.07
Weekly Client Contact						.14	.07	.14	2.05	.04	.21
Salary						-.10	.74	-.01	-.14	.89	-.01

Note. \* $p < .05$ , \*\* $p < .01$

Table 13. Summary of Post Hoc Hierarchical Regression Analysis of Variables Predicting Depersonalization.

Variable	$R^2$	Adjusted $R^2$	$\Delta R^2$	$\Delta F$	$df$	$B$	$SE B$	$\beta$	$t$	$p$	$r_{\text{partial}}$
Step 1 – Work Environment	.28	.25	.28	10.38**	4,107						
Self Realization						.05	.16	.03	.30	.76	.03
Workload						-.25	.26	-.08	-.96	.34	-.09
Conflict						.81	.24	.29	3.33	.00	.31
Nervousness						1.23	.30	.40	4.15	.00	.37
Step 2 – Job Satisfaction	.28	.25	.00	.59	1,106						
Self Realization						-.05	.20	-.03	.24	.81	-.02
Workload						-.27	.26	-.09	-1.05	.30	-.10
Conflict						.91	.27	.32	3.30	.00	.31
Nervousness						1.24	.30	.41	4.17	.00	.38
Job Satisfaction						.04	.06	.10	.77	.45	.07
Step 3 – Personality	.38	.32	.10	3.30**	5,101						
Self Realization						.05	.20	.03	.26	.80	.03
Workload						-.22	.26	-.07	-.83	.41	-.08
Conflict						.72	.27	.25	2.63	.01	.25
Nervousness						.79	.35	.26	2.26	.03	.22
Job Satisfaction						.01	.06	.03	.24	.81	.02
Extraversion						.08	.06	.13	1.34	.18	.13
Agreeableness						-.20	.10	-.18	-2.04	.04	-.20
Conscientiousness						-.01	.07	-.02	-.18	.86	-.02
Openness						-.14	.10	-.13	-1.40	.17	-.14
Neuroticism						.19	.07	.30	2.78	.01	.27
Step 4 – Counselor Self-Efficacy	.39	.32	.00	.23	1,100						
Self Realization						.02	.21	.01	.10	.92	.01
Workload						-.20	.26	-.07	-.75	.46	-.07
Conflict						.71	.27	.25	2.60	.01	.25
Nervousness						.79	.35	.26	2.24	.03	.22
Job Satisfaction						.02	.06	.03	.25	.80	.03
Extraversion						.08	.06	.13	1.35	.18	.13

150

Table 13. cont.

Variable	$R^2$	Adjusted $R^2$	$\Delta R^2$	$\Delta F$	$df$	$B$	$SE B$	$\beta$	$t$	$p$	$r_{\text{partial}}$
Agreeableness						-.20	.10	-.19	-2.06	.04	-.20
Conscientiousness						-.02	.07	-.02	-.25	.80	-.03
Openness						-.15	.10	-.14	-1.34	.15	-.14
Neuroticism						.20	.07	.30	2.81	.01	.27
Counselor Self-Efficacy						.01	.02	.04	.48	.64	.05
Step 5 – Demographics	.45	.35	.06	2.08	5,95						
Self Realization						.02	.21	.01	.11	.91	.01
Workload						-.28	.26	-.09	-1.09	.28	-.11
Conflict						.45	.33	.16	1.36	.18	.14
Nervousness						.88	.36	.29	2.47	.02	.25
Job Satisfaction						.02	.06	.04	.33	.74	.03
Extraversion						.07	.06	.11	1.21	.23	.12
Agreeableness						-.14	.11	-.13	-1.33	.19	-.14
Conscientiousness						-.02	.07	-.02	-.28	.78	-.03
Openness						-.13	.10	-.12	-1.25	.21	-.13
Neuroticism						.20	.07	.31	2.84	.01	.28
Counselor Self-Efficacy						.00	.03	-.00	-.01	1.00	-.00
Years Work Experience						.07	.10	.14	.68	.50	.07
Setting						-1.32	.59	-.22	-2.25	.03	-.23
Age						-.08	.09	-.17	-.88	.38	-.09
Weekly Client Contact						.05	.04	.11	1.34	.18	.14
Salary						.43	.41	.11	1.04	.30	.11

Note. \*  $p < .05$ , \*\*  $p < .01$

Table 14. Summary of Post Hoc Hierarchical Regression Analysis of Variables Predicting Personal Accomplishment.

Variable	$R^2$	Adjusted $R^2$	$\Delta R^2$	$\Delta F$	$df$	$B$	$SE B$	$\beta$	$t$	$p$	$r_{\text{partial}}$
Step 1 – Work Environment	.31	.29	.31	12.17**	4,107						
Self Realization						.83	.17	.45	4.84	.00	.42
Workload						.39	.28	.12	1.41	.16	.14
Conflict						-.22	.27	-.07	-.82	.41	-.08
Nervousness						-.48	.33	-.14	-1.46	.15	-.14
Step 2 – Burnout	.34	.31	.03	4.44*	1,106						
Self Realization						.55	.22	.30	2.56	.01	.24
Workload						.31	.28	.09	1.13	.26	.11
Conflict						.07	.29	.02	.24	.81	.02
Nervousness						-.46	.32	-.13	-1.42	.16	-.14
Job Satisfaction						.13	.06	.26	2.11	.04	.20
Step 3 – Personality	.51	.46	.17	7.07**	5,101						
Self Realization						.47	.20	.25	2.33	.02	.23
Workload						.08	.26	.02	.32	.75	.03
Conflict						.16	.27	.05	.57	.57	.06
Nervousness						.04	.35	.01	.12	.91	.01
Job Satisfaction						.12	.06	.25	2.15	.03	.21
Extraversion						.08	.06	.12	1.41	.16	.14
Agreeableness						.20	.10	.16	2.07	.04	.20
Conscientiousness						.12	.07	.13	1.74	.08	.17
Openness						.16	.10	.13	1.59	.11	.16
Neuroticism						-.19	.07	-.26	-2.78	.01	-.19
Step 4 – Counselor Self-Efficacy	.51	.46	.00	.00	1,100						
Self Realization						.47	.21	.25	2.21	.03	.53
Workload						.08	.26	.02	.32	.75	.03
Conflict						.16	.27	.05	.57	.57	.06
Nervousness						.04	.35	.01	.12	.91	.01
Job Satisfaction						.12	.06	.25	2.13	.04	.21
Extraversion						.08	.06	.12	1.40	.17	.14
Agreeableness						.20	.10	.16	2.05	.04	.20

Table 14. cont.

Variable	$R^2$	Adjusted $R^2$	$\Delta R^2$	$\Delta F$	$df$	$B$	$SE B$	$\beta$	$t$	$p$	$r_{\text{partial}}$
Conscientiousness						.12	.07	.13	1.72	.09	.17
Openness						.16	.10	.13	1.57	.12	.16
Neuroticism						-.19	.07	-.26	-2.73	.01	-.26
Counselor Self-Efficacy						.00	.02	.00	.01	.99	.00
Step 5 – Demographic Characteristics	.55	.48	.04	1.84	5,95						
Self Realization						.48	.21	.26	2.29	.02	.23
Workload						.07	.26	.02	.28	.78	.03
Conflict						.50	.33	.16	1.50	.14	.15
Nervousness						.01	.36	.00	.03	.97	.00
Job Satisfaction						.14	.06	.29	2.48	.02	.25
Extraversion						.09	.06	.13	1.53	.13	.16
Agreeableness						.13	.11	.10	1.17	.25	.12
Conscientiousness						.10	.07	.11	1.47	.15	.15
Openness						.15	.10	.12	1.44	.15	.15
Neuroticism						-.19	.07	-.27	-2.76	.01	-.27
Counselor Self-Efficacy						.01	.03	.04	.47	.64	.05
Years of Experience						.10	.10	.17	.98	.33	.10
Setting						.78	.59	.12	1.33	.19	.14
Age						-.11	.09	-.10	-1.18	.24	-.12
Weekly Client Contact						.07	.04	.12	1.73	.09	.18
Salary						-.78	.41	-.18	-1.89	.06	-.19

Note. \*  $p < .05$ , \*\*  $p < .01$



Table 15. Summary of Hierarchical Regression Analysis Predicting Job Satisfaction.

Variable	$R^2$	Adjusted $R^2$	$\Delta R^2$	$\Delta F$	$df$	$B$	$SE B$	$\beta$	$t$	$P$	$r_{\text{partial}}$
Step 1 – Salary	.05	.05	.05	7.64	1,133	2.08	.75	.23	2.76	.01	.23
Step 2 – Work Environment	.64	.63	.59	53.03**	4,129						
Salary						1.12	.48	.13	2.34	.02	.20
Self Realization						2.26	.24	.58	9.28	.00	.63
Workload						.61	.36	.09	1.69	.09	.15
Conflict						-2.35	.35	-.38	-6.80	.00	-.51
Nervousness						-.11	.44	-.02	-.25	.80	-.02
Step 3 – Burnout	.69	.67	.05	6.74**	3,126						
Salary						.95	.46	.11	2.07	.04	.18
Self Realization						1.89	.25	.48	7.42	.00	.55
Workload						.96	.37	.14	2.64	.01	.23
Conflict						-2.07	.35	-.33	-5.92	.00	-.47
Nervousness						.43	.45	.06	.95	.34	.08
Emotional Exhaustion						-.26	.07	-.24	-3.52	.00	-.30
Depersonalization						.21	.13	.09	1.59	.12	.14
Personal Accomplishment						.31	.13	.15	2.42	.02	.21
Step 4 – Counselor Self-Efficacy	.69	.67	.00	.52	1,125						
Salary						1.02	.47	.11	2.17	.03	.19
Self Realization						1.94	.27	.50	7.32	.00	.55
Workload						.91	.37	.14	2.46	.02	.22
Conflict						-2.05	.35	-.33	-5.84	.00	-.46
Nervousness						.38	.46	.06	.84	.40	.08
Emotional Exhaustion						-.25	.07	-.23	-3.37	.00	-.29
Depersonalization						.20	.13	.09	1.49	.14	.13
Personal Accomplishment						.32	.13	.15	2.48	.01	.22
Counselor Self-Efficacy						-.02	.03	-.04	-.72	.47	-.06

Table 15. cont.

Variable	$R^2$	Adjusted $R^2$	$\Delta R^2$	$\Delta F$	$df$	$B$	$SE B$	$\beta$	$t$	$P$	$r_{\text{partial}}$
Step 5 - Setting	.69	.67	.00	.37	1,124						
Salary						1.04	.47	.12	2.20	.03	.19
Self Realization						1.93	.27	.49	7.24	.00	.56
Workload						.90	.37	.13	2.40	.02	.21
Conflict						-2.16	.40	-.34	-5.47	.00	-.44
Nervousness						.44	.47	.06	.94	.35	.08
Emotional Exhaustion						-.25	.08	-.23	-3.32	.00	-.29
Depersonalization						.18	.14	.08	1.32	.19	.12
Personal Accomplishment						.33	.13	.16	2.51	.01	.22
Counselor Self-Efficacy						-.02	.03	-.04	-.72	.47	-.07
Setting						-.48	.79	-.04	-.61	.54	-.06

Note. \*  $p < .05$ , \*\*  $p < .01$

In the third and final hierarchical regression exploring the personal accomplishment dimension of burnout, work environment characteristics were entered as a block in the first step of the regression. Job satisfaction was then entered as a block in the second step of the regression. Personality traits were entered in the third step of the regression, and counselor self efficacy was entered as a block in the fourth step of the regression. Finally, demographic characteristics were entered as a block in the fourth step of the regression (see Table 14). This analysis allowed for the examination of the direct associations of work environment characteristics, job satisfaction, personality traits, counselor self-efficacy, and demographics with personal accomplishment.

The results of this analysis indicated that work environment characteristics accounted for 29% of the variance in personal accomplishment,  $F(4, 107) = 12.17, p < .01$ . Work environment self realization ( $\beta = .45, sr^2 = .15, p < .01$ ) was found to significantly predict personal accomplishment. However, workload ( $\beta = .12, sr^2 = .01, p = .16$ ), work environment conflict ( $\beta = -.07, sr^2 = .00, p = .41$ ), and work environment nervousness ( $\beta = -.14, sr^2 = .01, p = .15$ ) failed to predict personal accomplishment (see Table 14).

In Step 2, job satisfaction significantly added additional variance in personal accomplishment over and beyond the effects of the work environment,  $\Delta R^2 = .03, \Delta F(1, 106) = 4.44, p < .05$ . Work environment self realization ( $\beta = .30, sr^2 = .04, p < .05$ ) and job satisfaction ( $\beta = .26, sr^2 = .03, p < .05$ ) were both found to significantly predict personal accomplishment. However, workload ( $\beta = .09, sr^2 = .01, p = .26$ ), work

environment conflict ( $\beta = .02, sr^2 = .00, p = .81$ ), and work environment nervousness ( $\beta = -.13, sr^2 = .01, p = .16$ ) failed to predict personal accomplishment (see Table 14).

In Step 3, personality traits significantly added additional variance in personal accomplishment over and beyond the effects of the work environment and job satisfaction,  $\Delta R^2 = .17, \Delta F(5, 101) = 7.07, p < .01$ . Work environment self realization ( $\beta = .25, sr^2 = .03, p < .05$ ), job satisfaction ( $\beta = .25, sr^2 = .03, p < .05$ ), agreeableness ( $\beta = .16, sr^2 = .03, p < .05$ ) and neuroticism ( $\beta = -.26, sr^2 = .04, p < .01$ ) were all found to significantly predict personal accomplishment. However, workload ( $\beta = .02, sr^2 = .00, p = .75$ ), work environment conflict ( $\beta = .05, sr^2 = .00, p = .57$ ), work environment nervousness ( $\beta = .01, sr^2 = .00, p = .91$ ), extraversion ( $\beta = .12, sr^2 = .01, p = .16$ ), conscientiousness ( $\beta = .13, sr^2 = .01, p = .08$ ), and openness to experience ( $\beta = .13, sr^2 = .01, p = .11$ ) failed to predict personal accomplishment (see Table 14).

In Step 4, counselor self-efficacy did not significantly add additional variance to personal accomplishment over and beyond work environment characteristics, job satisfaction, and personality traits,  $\Delta R^2 = .00, \Delta F(1, 100) = .00, p = .99$ . Finally, in Step 5, demographic characteristics did not significantly add additional variance to personal accomplishment over and beyond work environment characteristics, job satisfaction, personality traits, and counselor self-efficacy,  $\Delta R^2 = .04, \Delta F(5, 95) = 1.84, p = .11$  (see Table 14).

### *Salary*

A hierarchical regression was completed in order to explore the impact of salary on the prediction of job satisfaction. Salary was entered as a block in the first step of the

regression, and work environment characteristics were entered as a block in the second step of the regression. Emotional exhaustion, depersonalization, and personal accomplishment were then entered as a block in the third step of the regression. Counselor self-efficacy was entered as a block in the fourth step of the regression, and setting was entered as a block in the fifth step of the regression (see Table 15). This analysis allowed for the examination of the direct associations of salary, work environment characteristics, dimensions of burnout, personality traits, counselor self-efficacy, and setting with job satisfaction.

The results of this analysis indicated that salary accounted for 5% of the variance in job satisfaction,  $F(1, 133) = 7.64, p < .01$ . In step 2, work environment characteristics significantly added additional variance in job satisfaction over and beyond the effects of salary,  $\Delta R^2 = .59, \Delta F(4, 129) = 53.03, p < .001$ . Salary ( $\beta = .13, sr^2 = .01, p < .05$ ) was found to significantly predict job satisfaction. Similar to the findings of the main analysis, work environment self realization ( $\beta = .58, sr^2 = .24, p < .01$ ) and work environment conflict ( $\beta = -.38, sr^2 = .13, p < .01$ ) were also found to significantly predict job satisfaction. However, workload ( $\beta = .09, sr^2 = .01, p = .09$ ) and work environment nervousness ( $\beta = -.02, sr^2 = .00, p = .80$ ) failed to predict job satisfaction (see Table 15).

In Step 3, burnout significantly added additional variance in job satisfaction over and beyond the effects of salary and work environment,  $\Delta R^2 = .05, \Delta F(3, 126) = 6.74, p < .001$ . Salary ( $\beta = .11, sr^2 = .01, p < .05$ ), work environment self realization ( $\beta = .48, sr^2 = .13, p < .01$ ), workload ( $\beta = .14, sr^2 = .02, p < .01$ ), work environment conflict ( $\beta = -.33, sr^2 = .09, p < .01$ ), emotional exhaustion ( $\beta = -.23, sr^2 = .03, p < .01$ ), and

personal accomplishment ( $\beta = .15, sr^2 = .01, p < .05$ ) were all found to significantly predict job satisfaction. However, work environment nervousness ( $\beta = .06, sr^2 = .00, p = .34$ ) and depersonalization ( $\beta = .09, sr^2 = .01, p = .12$ ) failed to predict job satisfaction (see Table 15).

In Step 4, counselor self-efficacy did not significantly add additional variance to job satisfaction over and beyond salary, work environment characteristics, and burnout,  $\Delta R^2 = .00, \Delta F(1, 125) = .52, p = .47$ . In Step 5, setting did not significantly add additional variance to job satisfaction over and beyond salary, work environment characteristics, burnout, and counselor self-efficacy,  $\Delta R^2 = .00, \Delta F(1, 124) = .37, p = .54$  (see Table 15).

## CHAPTER V

### DISCUSSION

Despite the abundance of literature on job satisfaction, burnout, and self-efficacy among various occupations, research exploring those constructs among psychologists, and particularly among correctional and community psychologists, is greatly lacking. Research examining the differences and similarities of work environments of correctional psychologists and community psychologists, and investigating the impact of those work environments on levels of job satisfaction, burnout, and counselor self-efficacy has also remained unexplored.

The purpose of this study was to specifically investigate and compare community psychologists' and correctional psychologists' levels of job satisfaction, burnout, and counselor self-efficacy. Additionally, a goal of this study was to explore the work environments of both settings and examine how those work environments influence those constructs. The influence of personality traits of the participants on level of job satisfaction, burnout, and counselor self-efficacy was also investigated. It was expected that relationships would be found among each of the constructs explored. The following is a discussion of the findings of the present study.

### Preliminary Analysis

A comparison of the two correctional samples (state prison psychologists versus federal prison psychologists) was conducted in the preliminary analysis to determine whether the two groups possessed significant differences. A comparison of the means between the two groups revealed that the two groups did not significantly differ on reported levels of job satisfaction (as measured by the Minnesota Satisfaction Questionnaire; MSQ), burnout (as measured by the Maslach Burnout Inventory; MBI), counselor self-efficacy (as measured by the Counselor Self Estimate Inventory; COSE), or work environment characteristics (as measured by the Work Environment Scale-10; WES-10). The only significant differences found between the two correctional samples were the agreeableness and openness personality traits, as measured by the International Personality Item Pool-Five Factor Model (IPIP-FFM) Agreeableness and Openness subscales (See Table 3 for an overview of means and standard deviations by correctional groups). Specifically, state prison psychologists reported higher levels of both agreeableness and openness than federal prison psychologists. Because of the lack of overall differences between state and federal psychologists, the main analysis was completed with a combined correctional psychologist group, rather than examining state and federal psychologists separately. However, the state prison psychologist and federal prison psychologist samples were examined separately in the preliminary analysis in order to allow for a more thorough exploration of the composition of the participants.

The preliminary analysis revealed a strong positive correlation between years of work experience and age ( $r = .89$ ), and a moderate positive correlation between years of



work experience and salary ( $r = .38$ ). These relationships were not surprising, as people typically earn raises in salary as they gain experience in their job over time.

Several significant relationships were also discovered between job satisfaction and several demographic characteristics, burnout and various demographic characteristics, counselor self-efficacy and demographic characteristics, and between work environment and demographic characteristics (see Table 4). Each of the significant correlations discussed in the following sections were moderate (ranging from  $r = .30$  to  $r = .52$ ).

#### *Job Satisfaction and Demographic Characteristics*

Overall job satisfaction (as measured by the Minnesota Satisfaction Questionnaire; MSQ) was found to significantly relate to a number of different demographic characteristics, including years of work experience, salary, and age (see Table 4). The following sections provide a discussion of the specific relationships between job satisfaction and those demographic characteristics.

*Years of Work Experience.* Among the total sample and the community psychologist sample, overall job satisfaction was found to moderately correlate to years of work experience. This finding is consistent with past research of Moss and Clark (1961) who found state employed psychologists who had been employed the longest reported the highest levels of job satisfaction. A possible explanation for the relationship between job satisfaction and years of work experience may be that a majority of individuals who remain in their job are those who are satisfied, while many individuals dissatisfied with their job ultimately find different employment.

*Salary.* Boothby and Clements (2002) reported finding a small direct relationship between job satisfaction and salary among a sample of correctional psychologists. Within the federal prison psychologist sample of the current study, a moderate direct correlation was found between overall job satisfaction and salary. In other words, as salary increases, reported levels of job satisfaction also increase. In their dated review of job satisfaction among state institution and clinic psychologists, Jacobson et al. (1959) also found a relationship between job satisfaction and salary. In particular, they found that the psychologists earning higher salaries were more likely to report overall higher levels of job satisfaction. In the current study, federal prison psychologists reported receiving overall higher salaries than both state prison psychologists and community psychologists, which may explain why the federal prison psychologist sample was the only group to demonstrate a relationship between salary and job satisfaction.

*Age.* In the community psychologist sample, job satisfaction was found to positively and moderately correlate with age. This finding is not surprising, given that years of work experience was also found to moderately correlate with job satisfaction among the community sample, and a strong relationship was found between age and years of work experience. In a study exploring the relationship between social workers' job satisfaction and burnout and the degree of involvement with clients, Acker (1999) found that younger and more inexperienced social workers were less likely to remain on the job than those who were older, more experienced, and better trained. Contradicting findings regarding the relationship between age and job satisfaction has also been reported (Boothby & Clements, 2002).

### *Burnout and Demographic Characteristics*

Burnout, as measured by the Maslach Burnout Inventory, consists of three dimensions: emotional exhaustion, depersonalization, and personal accomplishment. High levels of emotional exhaustion and depersonalization and low levels of personal accomplishment are indicative of burnout. No significant relationship was found between personal accomplishment and demographic characteristics. However, emotional exhaustion and depersonalization were found to relate to several demographic characteristics including years of work experience, salary, and age (see Table 4). The next sections discuss the relationships between emotional exhaustion and depersonalization and those demographic characteristics.

*Years of Work Experience.* As found in previous research (Rupert & Morgan, 2005; Ackereley et al., 1988; Hellman et al., 1987), the years of work experience reported by state prison psychologists was found to inversely and moderately correlate with the depersonalization dimension of burnout. According to these results, as these psychologists gain experience in their work with clients, they are less likely to experience depersonalization at work. As noted by Ackereley et al. (1988), this finding suggests that experienced psychologists learn ways in which to view clients in a more positive manner, reducing the likelihood of experiencing increased feelings of depersonalization.

*Salary.* Within the state prison psychologist sample, salary was negatively correlated with emotional exhaustion. Based on these findings, the results suggest that as the salaries of state prison psychologists increase, the levels of reported emotional exhaustion decrease. These results support the previous findings of Jenaro et al. (2007), who also found that those content with the income they were receiving reported lower

levels of emotional exhaustion. Interestingly, the state prison psychologist sample reported receiving an overall lower salary than psychologists in federal prisons or community settings. Psychologists earning higher incomes within the state prison system may possess different job responsibilities than those earning lower incomes (administrative roles versus direct client care). Consequently, the relationship between salary and emotional exhaustion among state prison psychologists may be mediated by differences in job responsibilities.

*Age.* Among the total sample and the community psychologist sample, age was found to be inversely and moderately related to the emotional exhaustion dimension of burnout. Within the state prison psychologist sample, age negatively and moderately correlated with depersonalization. Although only weak relationships were reported, past researchers have also found a significant relationship between the emotional exhaustion and depersonalization dimensions of burnout and age (Ackerley et al., 1988; Vredenburgh et al., 1999). In order to explain the negative relationship between age and emotional exhaustion, Ackereley et al. (1988) proposed that psychologists learn to conserve their energy over time, and consequently develop coping skills to prevent emotional exhaustion and depersonalization.

#### *Counselor Self-Efficacy and Demographic Characteristics*

Counselor Self-Efficacy (as measured by the Counselor Self-Estimate Inventory and comprised of Microskills, Process, Difficult Client Behavior, Cultural Competence, and Awareness of Values subscales) was found to moderately correlate with a number of different demographic characteristics. Those demographic characteristics include years of

work experience, age, salary, and hours of weekly client contact (see Table 4). Each of the relationships discovered are discussed in detail in the following sections.

*Years of Work Experience.* A significant, moderate, direct relationship was found between counselor self-efficacy and years of work experience among the state prison psychologist sample. Among the total sample, the only aspect of counselor self-efficacy found to be significantly related to years of work experience was attending to process in session. An exploration of the relationship between counselor self-efficacy and training and experience of counselor trainees conducted by Melchert, Hays, Wiljanen, and Kolocek (1996) also revealed a moderate direct relationship between counselor self-efficacy and experience among graduate level trainees. The relationship was further reflected in the results of a regression analysis, which found trainees' level of training and amount of clinical experience to contribute significantly to levels of counselor self-efficacy (Melchert et al., 1996). As psychologists gain experience and continue achieving successes in their treatment with clients, their sense of personal accomplishment likely increase. Consequently, an increase sense of counselor self-efficacy overall, or in counselor self-efficacy of specific therapy skills is likely to result. However, past research has generally found that after gaining some experience and initially receiving supervision, the relationship between experience and counselor self-efficacy diminishes in counselor trainees (Larson & Daniels, 1998). Based on past findings, it appears that one's level of counselor-self efficacy plateaus after a certain amount of experience is obtained.

*Age.* The present study revealed a significant positive relationship between "processing" aspects of counselor self-efficacy and age within the community

psychologist sample. Interestingly, in that same sample, a significant inverse relationship was discovered between age and “awareness of values” aspects of counselor self-efficacy. Gecas (1989) reviewed general self-efficacy literature and found a curvilinear pattern of self-efficacy over the life span. Specifically, self-efficacy was found to increase through childhood and early adulthood, reaching a plateau in middle age, and decreasing gradually in late adulthood (Gecas, 1989). Results of the current study support past findings in respect to the awareness of values aspect of counselor self-efficacy. Current findings suggest that as psychologists get older, they experience lower levels of counselor self-efficacy specifically regarding the ability to remain aware of their own values when working with clients. As discussed in a previous chapter, a significant source of general self-efficacy is personal accomplishment (Bandura, 1977). If, after time, psychologists no longer make an effort to recognize successful experiences with clients in which they were able to maintain an awareness of their own values and how those values might dictate the treatment of their clients, their perceived awareness of values aspect of counselor self-efficacy may begin to decrease.

*Salary.* A significant relationship between counselor self-efficacy and salary was found among the state prison sample. No significant relationship was found between counselor self-efficacy and salary in the total sample; however, a significant relationship was found between perceived self-efficacy specifically for attending to process in session and salary in both the total sample and community psychologist sample. In general, these results suggest that as salary increases, counselor self-efficacy in state prison psychologists, and “processing” aspects of counselor self-efficacy in community psychologists increases. Additionally, a significant inverse relationship was discovered

between the perceived counselor self-efficacy for the ability to be aware of one's own values and salary within the federal prison sample. According to these results, as salary increase, the perceived counselor self efficacy regarding the ability to be aware of one's own values diminishes among federal prison psychologists. These relationships are understandable given the relationship that was found to exist between the demographic characteristics of salary and years of work experience, and salary and age. In other words, the relationship between salary and counselor self-efficacy may be mediated by experience and/or age.

*Hours of Weekly Client Contact.* A significant moderate relationship between counselor self-efficacy and the amount of weekly client contact was discovered within the federal prison sample. As the amount of time spent with clients increases, the number of successes in treatment and sense of personal accomplishment also likely increases, which could result in an increase in counselor self-efficacy (Bandura, 1977). In an extensive review of counselor self-efficacy literature, Larson and Daniels (1998) reported weak direct correlations have been found in previous research between counselor self-efficacy and hours of weekly client contact among trainees.

#### *Work Environment and Demographic Characteristics*

Work environment characteristics (as measured by the Work Environment Scale-10) explored in the current study included self realization (the perceived support from colleagues, feelings of confidence, and ability to apply one's knowledge at work), work environment conflict (conflict between coworkers and loyalty issues at work), work environment nervousness (feelings of nervousness while at work, and worry about going to work), and workload (the perceived number of tasks imposed on the individual). Three

aspects of the work environment were found to be significantly related to the demographic characteristics of years of work experience, age, and salary (see Table 4). Those three characteristics of the work environment include self realization, nervousness, and conflict. The following sections describe and discuss the relationships between the work environment characteristics and demographic characteristics listed above.

*Years of Work Experience.* Self realization was found to be significantly related to years of experience within both the state and federal prison psychologist samples. These results suggest that more experienced correctional psychologist perceive a greater degree of support at work, experience a greater degree of confidence in the work environment, and report feeling a greater opportunity to use their knowledge and skills at the workplace than correctional psychologists who are less experienced. It is possible that more experienced psychologists within the correctional setting receive more support from colleagues as they are likely perceived by their colleagues as being knowledgeable and competent in their work with clients. As a result of the support they experience, they may feel an increased sense of confidence and ability to apply their knowledge more frequently than a more inexperienced psychologist.

A significant inverse relationship was also discovered between conflict in the work environment and years of work experience among both the total sample and the community psychologist sample. The correlation was moderate and significant for the total sample, but upon closer inspection, most, if not all, of the variance in the relationship between these two variables occurred within the community sample, and not the correctional samples. Based on this finding, more experienced psychologists report fewer conflicts with colleagues. A possible explanation for this finding may be that



experienced psychologists receive a greater degree of respect and support. It could also simply mean that as psychologists gain experience in their work, they also learn to avoid or prevent conflict with their colleagues.

The final work environment characteristic found to significantly relate to years of work experience among the community psychologist sample is nervousness. In particular, results indicate that as years of work experience increases, feelings of nervousness while at work, and worrying about going to work, diminish among community psychologists. Perhaps experienced psychologists are more confident in their abilities to manage client behavior, which reduces their feelings of worry about going to work, and ultimately, their feelings of nervous while at work.

*Age.* A significant inverse relationship was found between age and nervousness within the community psychologist sample. These results suggest that older psychologists experience less nervousness while at work, and less worry about having to go work than younger psychologists. Similar to the previously discussed relationship between years of experience and nervousness, it is possible that older psychologists have more years of work experience, given the strong relationship found between age and years of work experience. Consequently, they may feel more confident with the abilities to manage client behaviors than younger psychologist.

A significant relationship was also found between age and self-realization among the federal prison psychologist sample. This finding was not surprising given the strong relationship between age and years of work experience. Older psychologists may experience a greater degree of respect and support from colleagues, which may result in

increased confidence, and an increased feeling of opportunity to apply their knowledge at work.

### Main Analysis

The following sections provide a discussion of the results of the main analyses of the current study. Specifically, results regarding the relationships among job satisfaction, burnout, counselor self-efficacy, work environment, and personality are discussed. Additionally, the differences and similarities that were found to exist between correctional and community psychologists are also addressed.

### *Hypothesis I*

The first hypotheses stated that different levels of job satisfaction, burnout, self-efficacy and perceptions of work environment would be found between correctional and community psychologists. No significant differences were found in levels of job satisfaction between correctional and community psychologists. Although several studies have examined job satisfaction among psychologists (Boothby & Clements, 2002; Hoppock, 1937; Moss & Clark, 1961; Walfish, Moritz, & Stenmark, 1991), the measurement of job satisfaction ranged from simply asking participants if they were satisfied with their jobs to utilizing unstandardized, one-time-use measures. Therefore, directly comparing results of past studies exploring job satisfaction of psychologists to the results of the current study is not feasible. However, based on the discussion of findings from past research (Boothby & Clements, 2002; Hoppock, 1937; Moss & Clark, 1961; Walfish, Moritz, & Stenmark, 1991), the levels of job satisfaction observed in the current study were similar to previous findings, which indicate psychologists in general report experiencing moderately high levels of job satisfaction.

No significant differences were found in levels of emotional exhaustion or personal accomplishment between correctional psychologists and community psychologists. A significant difference in levels of depersonalization between correctional and community psychologists was discovered (see Table 5). In particular, correctional psychologists reported experiencing higher levels of depersonalization than community psychologists.

The total sample of the current study reported higher levels of emotional exhaustion ( $M = 28.17$ ,  $SD = 10.36$ ), and higher levels of depersonalization ( $M = 11.42$ ,  $SD = 4.99$ ), than those reported by Ackerely et al. (1988), who explored the prevalence of burnout among 562 licensed, doctoral level psychologists from a variety of settings (e.g., private practice, psychiatric hospitals, community centers, outpatient clinics, and medical hospitals). Ackerely et al. (1988) reported a mean score of 19.44 ( $SD = 9.31$ ) for emotional exhaustion, and a mean score of 6.31 ( $SD = 4.48$ ) for depersonalization. Boothby and Clements (2002) proposed that the demanding and harsh work environments that correctional psychologists encounter on a daily basis often result in apathy among correctional psychologists. As a result, psychologists work in such environments may experience feelings of indifference and depersonalization toward inmates and even possibly experience those feelings of indifference and depersonalization toward colleagues as well.

One factor unique to the correctional setting that could potential contribute to increased levels of depersonalization is that of overcrowding within both state and federal prisons. In fact, Cox, Paulus, and McCain (1984) found that overcrowding in prisons was related to increased disciplinary infractions by inmates, inmate on inmate assaults,

suicide attempts, and inmate self mutilation. Individuals lacking the appropriate coping skills necessary to work in such an environment are at increased risk for relying on depersonalization of inmates in dealing with their work environment.

Prior to this study, no one had examined counselor self-efficacy among experienced psychologists. According to the results of the current study, no significant difference in levels of counselor self-efficacy exist between correctional and community psychologists. More specifically, high levels of counselor self-efficacy were reported across all groups. One possible explanation for these findings may be that as psychologists gain experience and are successful in their work with clients, counselor self-efficacy increases regardless of setting or work environment. In a paper discussing general self-efficacy, Gecas (1989) suggested that as individuals experience greater freedom at work and more complex and challenging task, they are more likely to experience increased self-efficacy. Perhaps the correctional and community settings both provide a certain degree of autonomy and present psychologists with similar challenges in respect to clients' presenting issues, which would explain the similarities found in levels of counselor self-efficacy between the two groups. Further research exploring counselor self-efficacy among experienced psychologists in various work settings is needed.

No significant differences in self realization, workload, or work environment nervousness were found between correctional psychologists and community psychologists. The lack of significant differences between these work environment characteristics may be accounted for by similarities in the type of clients, clients' presenting concerns, and client caseload. As noted by Morgan, Rozycki, and Wilson

(2004), an increasingly large number of the inmates have either previously participated in either voluntary or mandated therapy in a community setting prior to incarceration, or after being released from prison. This trend suggests that community psychologists likely provide services to the offender population at various times during their career.

Significant differences between correctional psychologists and community psychologists were reported regarding the amount of work environment conflict experienced, with correctional psychologists reporting higher levels of conflict among staff and issues of loyalty within the work environment than community psychologists (see Table 5). On a speculative note, the difference in work environment conflict may partly be explained by the previously discussed difference in levels of depersonalization found between correctional and community psychologists. It is possible that correctional psychologists' feelings of indifference or depersonalization result in increased conflict with colleagues. The findings of the current study are inconsistent with extant findings regarding work environment. In a previous study exploring job satisfaction of correctional psychologist using an unstandardized measure they developed for the purpose of their study, Boothby and Clements (2002) found that correctional psychologists rated satisfaction with coworkers as one of the most satisfying job dimensions (Boothby & Clements, 2002).

#### *Hypothesis II*

The second hypothesis addressed the relationship between the dimensions of burnout (emotional exhaustion, depersonalization, and personal accomplishment; as measured by the MBI Emotional Exhaustion, Depersonalization, and Personal Accomplishment subscales) and work environment (as measured by the Work

Environment Scale-10 subscales). In particular, the second hypothesis stated that a moderate negative correlation would exist between the emotional exhaustion and depersonalization dimensions of burnout and work environment self realization (WES-10 Self Realization subscale), and a moderate positive correlation would exist between the emotional exhaustion and depersonalization dimensions of burnout and the workload, work environment conflict, and work environment nervousness, as measured by the subscales of the WES-10. Additionally, a moderate positive correlation between the personal accomplishment dimension of burnout and the self realization subscale of the WES-10, as well as a moderate negative correlation between the personal accomplishment dimension of burnout and workload, work environment conflict, and work environment nervousness (WES-10 Workload, Conflict, and Nervousness subscales) was hypothesized. With the exception of the relationships between depersonalization and workload, and between personal accomplishment and workload, this hypothesis was supported (see Tables 6, 7, 8, and 9). The following sections discuss the specific findings regarding the relationships between various work environment characteristics and the dimensions of burnout.

#### *Self Realization and Burnout*

Self realization within the work place refers to the extent to which individuals feel supported by colleagues, experience feelings of confidence at work, and an ability to apply their knowledge at the workplace. Past research has found a link between perceptions of support from coworkers and decreases in emotional exhaustion and depersonalization (Hatinen, Kinnunen, Pekkonen, and Kalimo, 2007; Evans & Villavisanis, 1998). In fact, a major component of intervention programs developed to

address burnout among mental health professionals is that of support (Hatinen, Kinnunen, Pekkonen, and Kalimo, 2007; Evans & Villavisanis, 1998).

#### *Workload and Burnout*

Workload was found in the current study to be significantly related to emotional exhaustion, but was not found to influence feelings of depersonalization. According to this finding, as psychologists' workload increases, feelings of emotional exhaustion also increase. As Jacobs and Dodd (2003) observed, the manner in which burnout is impacted by workload depends on if one is referring to objective workload (actual workload) versus subjective workload (one's perception of the size of their workload). According to James and Dodd (2003), subjective workload was found to influence both emotional exhaustion and depersonalization, while objective workload was found only to influence feelings emotional exhaustion. One explanation for depersonalization not being found significantly related to workload in the current study may be that participants referred to objective workload when responding to questions about workload. Past research has found a direct relationship between workload and personal accomplishment (Vredenburgh et al., 1999; Ackereley et al., 1988). It has been suggested that psychologists perceive a greater opportunity to help clients and experiences successes with a larger workload. However, no significant relationship was found to exist between personal accomplishment and workload in the current study.

#### *Work Environment Conflict and Burnout*

The current findings suggest work conflict and burnout are significantly related. In particular, as psychologists experience increased work environment conflict, an increase in emotional exhaustion and depersonalization, and a decrease in feelings of

personal accomplishment result. Support from colleagues was found to decrease feelings of burnout (Hatinen, et al, 2007; Evans & Villavisanis, 1998), so it is understandable that the reverse relationship between conflict and increased burnout exists.

#### *Work Environment Nervousness and Burnout*

A significant relationship between work environment nervousness and burnout was discovered in the present study. More specifically, a strong positive relationship was discovered between emotional exhaustion and work environment nervousness, a moderate positive relationship was found between depersonalization and work environment nervousness, and moderate inverse relationship was discovered between personal accomplishment and work environment nervousness.

Surprisingly, prior to the current study, research had not explored the relationship between feelings of work environment nervousness and burnout. In fact, research exploring work safety concerns in general have also not been examined in relation to burnout. Although limited research exists regarding safety concerns among psychologists, Guy, Brown, and Poelstra (1992) stated that nearly half of all psychologists are verbally threatened, harassed, or physically attacked by patient/client at some point in their career. However, little is known about the extent of nervousness or worry that exists within the field as a result, as research addressing psychologists' nervousness is lacking. However, it is understandable that over time, as individuals experiencing nervousness at work or feelings of worry about going to work, they develop increasingly more negative and cynical attitudes about work, clients, and colleagues. Consequently, they then experience feelings of being emotionally drained and an inability



to meet the interpersonal demands of work, which is a significant concern among psychologists whose work mainly involves interpersonal interactions with clients.

### *Hypothesis III*

The third hypothesis stated that a moderate positive correlation would be found between neuroticism (as measured by the IPIP Neuroticism subscale) and the emotional exhaustion and depersonalization dimensions of burnout (as measured by the MBI Emotional Exhaustion and MBI Depersonalization subscales) moderate negative correlation would be found between the personal accomplishment dimension of burnout (as measured by the MBI Personal Accomplishment subscale) and neuroticism. The results of the current study supported this hypothesis (see Tables 6, 7, 8, and 9). The following sections will discuss the relationships found between neuroticism and each of the dimensions of burnout.

#### *Neuroticism and Emotional Exhaustion*

Consistent with the hypothesis of the current study, higher levels of neuroticism were found to strongly relate to higher levels of emotional exhaustion. These results support previous findings regarding the relationship between neuroticism and emotional exhaustion (Bakker, Van Der Zee, Lewig, & Dollard, 2006; Zellars, Perrewe, & Hochwarter, 2000). In fact, of the five personality traits included in the five factor model of personality, neuroticism has been found to be one of the most consistent predictors of burnout (Bakker, Van Der Zee, Lewig, & Dollard, 2006; Zellars, Perrewe, & Hochwarter, 2000). A moderate relationship between neuroticism and emotional exhaustion was reported by Bakker et al. (2006), while Zellars et al. (2000) reported finding only a small relationship between them. To explain the relationship found, Bakker et al. (2006)

proposed that individuals with higher levels of neuroticism are less emotionally stable and consequently more vulnerable to experiencing emotional exhaustion when work stressors are encountered.

#### *Neuroticism and Depersonalization*

Although a majority of research exploring personality and burnout has only found neuroticism to relate to emotional exhaustion, the current study and few past studies have also found a significant relationship between neuroticism and depersonalization (Bakker et al., 2006). While the present study found a moderate relationship between neuroticism and depersonalization, previous studies have reported finding weak relationships between them (Bakker et al., 2006; Zellars et al., 2000).

Individuals with higher levels of neuroticism tend to be more emotionally reactive to negative situations, are more likely to exhibit poor inhibition of impulses, and are more likely to utilize ineffective coping strategies to deal with stress (McCrae & Costa, 1986). As a result, psychologists with greater levels of neuroticism are more likely to emotionally react to work stressors by using depersonalization, or by developing negative, cynical attitudes toward clients.

#### *Neuroticism and Personal Accomplishment*

A moderate inverse relationship was found between neuroticism and personal accomplishment. Similar findings were reported in past research conducted by Zellars et al. (2000), however the relationship they found between neuroticism and personal accomplishment was weak. The current study found that individuals with higher levels of neuroticism reported lower levels of personal accomplishment. According to Costa and McCrae (1987), individuals with high levels of neuroticism possess low self-esteem. In

general, more neurotic individuals tend to set extremely high goals for themselves while also possessing a tendency to underestimate their own performance (Costa & McCrae, 1987). As a result, even though their job performance may be comparable to that of their colleagues, individuals with higher levels of neuroticism may not recognize or take credit for their own successes at work, thus experiencing lower levels of perceived personal accomplishment.

#### *Hypothesis IV*

The fourth hypothesis stated that a moderate negative correlation would exist between the emotional exhaustion (as measured by the IPIP Extraversion subscale) and depersonalization dimensions of burnout and extraversion, and a moderate positive correlation would exist between the personal accomplishment dimension of burnout and extraversion. The following section provides a discussion of the current findings regarding the relationships between extraversion and emotional exhaustion, extraversion and depersonalization, and extraversion and personal accomplishment (see Tables 6, 7, 8, and 9).

#### *Extraversion and Emotional Exhaustion*

Extraversion has been found to be negatively related to emotional exhaustion in past research (Ghorpade, Lackritz, Singh, and Gangaram, 2007). The Mini-Markers Inventory, an instrument consisting of 40 adjectives representing various personality traits was implemented in Ghorpade et al.'s (2007) study. Ghorpade et al. (2007) reported finding weak negative relationship between extraversion and emotional exhaustion. However, results of the current study did not support Ghorpade et al.'s (2007) findings, as a significant relationship was not obtained between extraversion and emotional

exhaustion. The discrepancy between the findings of the present study and that of Ghorpade et al. may possibly be accounted for by the differences in the instruments used to measure personality.

#### *Extraversion and Depersonalization*

Conflicting findings have been reported in the literature regarding the relationship between extraversion and depersonalization. Past researchers have reported a link between extraversion and depersonalization (Bakker et al., 2006; Zellars et al., 2000). The relationship between extraversion and depersonalization found by Bakker et al. (2006) and Zellars et al. (2000) were both described as weak. On the other hand, other researchers (Ghorpade et al., 2007) suggest no significant relationship exists between extraversion and depersonalization. The findings of the current study are in line with the latter, as no significant relationship was found between extraversion and depersonalization.

#### *Extraversion and Personal Accomplishment*

Results of the present study found a moderate significant relationship between extraversion and personal accomplishment. Psychologists with higher levels of extraversion were more likely to report higher levels of personal accomplishment than psychologists reporting low levels of extraversion. Previous research has also found significant relationships between personal accomplishment and extraversion (Bakker et al., 2006; Zellars et al., 2000). However, Zellars et al. (2000) found only a small relationship between personal accomplishment and extraversion.

Extraverted individuals have been described as self-confident and optimistic, and often reevaluate problems in a positive manner (Costa & McCrae, 1992). Extraverts'

optimistic temperaments lead them to focus on the positive aspects of their experiences more than the negative aspects (Bakker et al., 2006). Given those unique character traits, individuals with higher levels of extraversion are more likely to recognize their successes, and therefore, report higher levels of personal accomplishment than individuals possessing lower levels of extraversion.

#### *Hypothesis V*

The fifth hypothesis of the study stated that a moderate negative correlation would exist between counselor self-efficacy and the emotional exhaustion and depersonalization dimensions of burnout, and a moderate positive correlation would exist between counselor self-efficacy and the personal accomplishment dimension of burnout. The current study found a moderate positive relationship between counselor self-efficacy and personal accomplishment, and weak inverse relationships between emotional exhaustion and depersonalization (see Tables 6, 7, 8, and 9). These findings are especially important as the present study is the first to explore the relationship between counselor self-efficacy and the dimensions of burnout. Bandura (1977) proposed that one of the major contributors to self-efficacy is the experience of past successes or accomplishments. Thus, as psychologist experience success in their work with clients, or experience increased personal accomplishment, counselor self-efficacy would also be expected to increase. Additionally, Bandura (1977) suggested that individuals with low levels of self-efficacy tend to engage in fewer effective coping skills, give up easily under adversity, and report decreased levels personal accomplishment.

### *Hypothesis VI*

The last hypothesis of the study stated that in order of contributing variance, the following factors that would add significantly to the prediction of job satisfaction: work environment (as measured by the Work Environment Scale-10 subscales: Self realization, Conflict, Nervousness, and Workload), burnout (as measured by the three scales of the Maslach Burnout Inventory: Emotional Exhaustion, Depersonalization, and Personal Accomplishment), counselor self-efficacy (as measured by the Counselor Self Estimate Inventory) , and setting.

Results of the multiple regression found that work environment characteristics contributed to 62% of the variance in job satisfaction (see Table 10). The predictive variance of the dimensions of burnout, though still significant, was substantially lower, accounting for 6% of variance. However, neither counselor self-efficacy nor setting contributed additional variance to job satisfaction beyond that of work environment characteristics and burnout.

Upon closer examination, the work environment characteristics of self realization and work environment conflict were found to predict job satisfaction; whereas workload and work environment nervousness did not predict job satisfaction. However, when the dimensions of burnout were entered into the regression equation, workload was then found to predict job satisfaction. Emotional exhaustion and personal accomplishment were also found to predict job satisfaction.

Savicki and Cooley (1987) found the work environments associated with low levels of burnout are those in which (a) employees are committed strongly to their work, (b) supportive relationships between coworkers are encouraged, and (c) strong

supervisory relationships exist. Work environments that have been associated with high levels of burnout are those that restrict employees' freedom and flexibility, have ambiguous job expectations, and minimal support for new ideas and creativity (Savicki & Cooley, 1987). Past research exploring the work environment has been inconsistent. In particular, the specific aspects of work environment explored in past studies have greatly varied. On a speculative note, given the inverse relationship between the burnout dimensions of emotional exhaustion and depersonalization, work environments that provide freedom and flexibility, clear job roles and expectations, and strong support from coworkers and supervisors would likely result in higher levels of job satisfaction.

#### *Post Hoc Analysis*

In order to further explore the factors predicting job satisfaction, emotional exhaustion, depersonalization, and personal accomplishment, a series of hierarchical multiple regressions were completed. The first regression equation explored whether personality traits predicted job satisfaction, while a series of three regression equations were completed to determine which factors predicted emotional exhaustion, depersonalization, and personal accomplishment.

#### *Prediction of Job Satisfaction*

A similar regression equation to one completed in the main analysis was conducted. However, personality traits (extraversion, agreeableness, conscientiousness, openness to experience, and neuroticism), and demographic characteristics (years of work experience, setting, age, weekly client contact, and salary) were added to the equation in order to explore their prediction of job satisfaction. Parallel to findings of the main analysis, work environment characteristics were determined to contribute 59% of the

variance in job satisfaction (see Table 11). The predictive variance of the dimensions of burnout, though still significant, was again substantially lower, accounting for 9% of variance. However, personality traits, counselor self-efficacy, and demographic characteristics did not contribute any additional variance to job satisfaction beyond that of work environment characteristics and burnout.

These results are similar to those found by Thomas, Buboltz, and Winkelspecht (2004), who reported that knowing an individual's personality type does not aide in predicting satisfaction after job characteristics are already known. One possible explanation that personality traits were not found to predict job satisfaction is that personality may not have a direct relationship with job satisfaction. Although past studies (Thomas, Buboltz, & Winkelspecht, 2004; Ilies & Judge, 2003; Heller, Judge, & Watson, 2002; Judge, Heller, & Mount, 2002; Judge & Larsen, 2001; Chiu & Kosinski, 1999; Staw, Bell, & Clausen, 1986), as well as the current study, have found significant correlations between job satisfaction and personality traits, causal relationships cannot be inferred from those relationships. Potentially, the relationship among personality traits and job satisfaction may be mediated by other variables such as emotional exhaustion or personal accomplishment. Another possibility is the presence of an interaction effect between work environment and personality traits. With the use of a hierarchical regression, the variance that might be attributed to personality in this interaction was accounted for in work environment as it was entered first.

#### *Prediction of Burnout*

A series of regression equations were also conducted to explore the prediction of emotional exhaustion, depersonalization, and personal accomplishment. Work



characteristics were found to contribute 43% of the variance of emotional exhaustion (see Table 12). Job satisfaction accounted for 7% of variance beyond that of work characteristics; and personality characteristics contributed to 8% of the variance beyond that of work characteristics and job satisfaction.

In the exploration of the prediction of depersonalization, work characteristics were found to contribute to 31% of the variance of depersonalization (see Table 13). Although significant, job satisfaction only added to 3% of the variance of depersonalization beyond that of job characteristics. Personality traits added to 17% of the variance beyond that of job characteristics and job satisfaction.

Finally, an exploration of the factors predicting personal accomplishment revealed that work characteristics contributed 31% of the variance of personal accomplishment (see Table 14). Very similar to the regression equation exploring predictors of depersonalization, job satisfaction added 2% of variance of personal accomplishment beyond that of job characteristics, and personality traits contributed 17% of the variance beyond that of job characteristics and job satisfaction. It is possible an interaction effect existed between job satisfaction and work environment, and as a result of the hierarchical analysis, the variance that might be attributed to job satisfaction in this interaction was accounted for in work environment, as it was entered first.

Past researchers have also examined the relationship between job satisfaction and burnout (Bilge, 2006). However, rather than investigating overall job satisfaction, Bilge (2006) examined the relationship between both intrinsic and extrinsic job satisfaction and burnout, and found intrinsic job satisfaction to be most significant predictor of the three factors of burnout. In particular, Bilge (2006) found intrinsic job satisfaction to contribute

to 23% of the variance of emotional exhaustion, 12% of the variance of depersonalization, and 11% of the variance of personal accomplishment.

#### *Impact of Salary on Job Satisfaction*

Due to the speculation in the literature suggesting a relationship between job satisfaction and salary, the relationship between those two variables was explored further. A significant small direct relationship was found between salary and job satisfaction among the total sample and the federal prison psychologist sample (see Table 4). As previously mentioned the relationship between salary and job satisfaction was also found in prior research (Boothby & Clements, 2002; Jacobson et al., 1959).

A multiple regression was conducted to further explore the relationship between salary and job satisfaction. More specifically, a regression equation was completed in order to assess the amount of variance accounted for by salary in the prediction of job satisfaction (see Table 15). Although only 5% of variance of job satisfaction was accounted for, salary was found to be a significant predictor of job satisfaction. Results of the regression also indicated that salary did not significantly influence the predictive ability of work environment and burnout on job satisfaction or change the amount of variance explained by work environment characteristics and burnout. In fact, work environment explained 59% of the variance in job satisfaction beyond that of salary, while burnout explained an additional 5% of the variance in job satisfaction.

#### Limitations

Interpretation of these data must be made somewhat cautiously in light of the sample characteristics, self-report nature of the findings, quasi-experimental design, and measures used. One major limitation to this study is the manner in which participants

were recruited. First, the use of American Psychological Association (APA) listservs limited recruitment to psychologists who were (a) members of APA, and (b) members of either Division 41 (American Psychology-Law Society) or Division 12 (Society of Clinical Psychology). As a result, the generalizability of the findings to psychologist who are not members of APA, or those who do not (or choose not to) have access to information provided via Internet listservs is questionable. Relatedly, the response rate was not controlled due to the use of snowball sampling. Consequently, the amount of sampling bias that resulted is unknown.

Additionally, due to the quasi-experimental (passive) design of the current study, participants were not randomly assigned to groups. As a result, the internal validity of the findings was most certainly impacted. In other words, it is likely that extraneous variables that were unaccounted for may have influenced the results of the current study, rather than differences being attributed to setting. However, it is also worth noting that there were very few differences between the two populations (supporting the null hypothesis), so risks related to Type I error are unlikely.

Due to the fact that this study was reliant on self-report, it is possible that an accurate estimate of participants' levels of job satisfaction, burnout, and self-efficacy; or accurate descriptions of personality traits and work environment characteristics were not obtained. Participants may not have responded accurately regarding their levels of job satisfaction, burnout, and self efficacy due to possibly feeling evaluated. Participants may have responded in ways that presented themselves in a positive manner, downplaying their levels of burnout, job satisfaction, and reporting greater self-efficacy than they actually experience. They may also have described their personality traits in a manner

that makes them appear more favorable. Conversely, participants may also have exaggerated their symptoms of burnout, dissatisfaction in their job, and described their personality in a more negative manner.

Another limitation to this study was the fact that no information was gathered from non-respondents. It is possible that the individuals who chose not to participate are those with higher levels of burnout, who perceived the questionnaires as an additional burden. However, this is a common limitation shared with many other studies of burnout.

The current study was cross-sectional, which resulted in further limitations. It is not possible to make causal inferences from cross-sectional designs. By using a cross-sectional design, results are based on a specific “snapshot” of the participants. Consequently, a number of immediate factors such as the environment, respondent’s mood, and significant events occurring at the time of participation, may have influenced the way in which they responded to the questionnaires. It is possible that a change in the immediate environmental or situational factors may have resulted in different findings.

The instruments used may have created confounds within the study. There is a significant lack of brief, reliable, and standardized instruments to measure work environment characteristics; and a reliable and standardized instrument to measure counselor self-efficacy among experienced psychologists has not yet been developed. The use of the Counselor Self-Estimate Inventory (Larson, Suzuki, Gilliespie, Potenza, Bechtel, & Toulouse, 1992) may likely have negatively influenced the findings of the study, as it was intended to measure counselor trainees’ (rather than experience psychologists’) judgments of their capabilities to counsel successfully.

As pointed out by Rossberg and Friis (2004), many of the measures used to assess work environment have been lengthy, complex, and difficult to use. The Work Environment Scale-10 (Rossberg & Friis, 2004) was originally developed to assess the work environment of mental health employees working in inpatient settings in a brief, user-friendly manner. However, the results of the current study may have been negatively affected by using the WES-10, due to the fact that the WES-10 was intended for use within inpatient settings.

A similar dilemma was faced in attempting to find a brief, reliable, and standardized measure of personality for use in the current study. The more widely used, reliable, and standardized measures of personality are quite costly, time-consuming to gain access to, and lengthy. As a result, the International Personality Item Pool-Five Factor Model (IPIP-FFM; Goldberg, 1999) was used in the present study. However, as discussed in a previous chapter, the norms on which this instrument was developed were not provided. Consequently, it is questionable whether the findings of the current study are representative of findings that would be obtained if a different personality measure would have been used.

#### Implications for Training, Research, and Practice

The primary implication of the present study for community and correctional psychologists is the influential role of the work environment/setting on experiences of depersonalization and work environment conflict. Based on the findings of this study, psychologists particularly working in correctional environments would likely benefit from additional training and education regarding the impact of the correctional work environment. More specifically, correctional psychologist would particularly benefit from

learning appropriate and effective coping skills in dealing with work stress, given the high levels of depersonalization found in this study among the correctional sample. Additionally, the development of programs for correctional psychologists focused on teambuilding, and developing supportive relationships among staff would be warranted.

Another important implication is the impact of work environment, and more specifically work environment self realization and work environment conflict, on job satisfaction and burnout. Work environment self realization, as defined by Rossberg and Friis (2004), is the extent to which staff feel supported by colleagues and supervisors, gain confidence in their abilities to perform their job, and are able use their knowledge at work. Based on the results of the current study, relationship skills training to teach supervisory personnel how to effectively engage with, and provide support to staff would allow for a more supportive work environment, resulting in higher levels of job satisfaction and lower levels of burnout among staff. A supportive supervisory relationship would allow staff to discuss concerns and work stressors, ultimately preventing them from experiencing burnout. Additionally, the supportive supervisory relationship could be an effective intervention strategy in addressing staff experiencing symptoms of burnout. Further research exploring the use of social support as an intervention for burnout is warranted.

Further implications also result from the relationship found between burnout and work environment. Although research exploring the relationship between workplace multicultural sensitivity and burnout is nonexistent, work environments in which multicultural insensitivity is present undoubtedly results in higher levels of burnout (and ultimately job dissatisfaction), as well as work environment conflict among staff.

Consequently, training programs and employers should consider providing further education regarding multicultural issues, and how to appropriately address and prevent multicultural insensitivity (e.g., racism, sizism, and homophobia) in the workplace.

An additional implication of the current study is the relationship found between personality traits and levels of burnout and job satisfaction. According to these findings, a focus in the training and education of perspective or novice psychologists should be one of self-awareness. In particular, those individuals intending on pursuing a career as a psychologist, or those new to the field should possess a clear awareness of their personality characteristics and how their personality characteristics may relate to, and increase their risk of experiencing feelings of burnout, and/or job satisfaction or dissatisfaction during their careers as psychologists. Education and training should be provided regarding effective strategies for preventing burnout, as well as for reducing symptoms of burnout.

Additionally, an implication of current study is the benefit and importance of vocational counseling. Through vocational counseling, individuals can experience an in-depth exploration of their individual skills, interests, and aptitudes. By doing so, they will gain a better understanding of which types of careers, job settings, and tasks would be the best fit for the individual. Finding the best person-environment fit could contribute to future job satisfaction as well as preventing future burnout.

Another implication of the current study is the relationship found between salary and job satisfaction. Given the finding from the current study that salary contributed to increased job satisfaction, as well as the inverse relationship found between job satisfaction and burnout, supervisors and employers should consider implementing

incentive programs in order to increase job satisfaction and decrease burnout among staff. Not only would increased job satisfaction benefit staff on an individual level, but given the finding from previous research that job satisfaction is related to job performance (Judge, Thoresen, Bono, & Patton, 2001), increases in staff job satisfaction would also be beneficial at the company or agency level.

#### Recommendations for Future Research

The current study provided a starting point for future research where empirical research is currently lacking or nonexistent. In particular, little is known about counselor self-efficacy among experienced psychologists, as a majority of research on counselor self-efficacy is focused on psychology trainees or novice psychologists. It is important to gain a better understanding of factors influencing counselor self-efficacy among experienced psychologists as it was found in the current study to be related to all dimensions of burnout. Determining the factors contributing to counselor self-efficacy among experienced psychologists could ultimately aid in the prevention of burnout, as higher levels of counselor self-efficacy was found to be related to lower levels of burnout.

Given the small sample size and uncontrolled response rate of the current study, future research should replicate the study using a larger and more diverse sample of community and correctional psychologists using random sampling and controlling the response rate. Additionally research exploring job satisfaction, burnout, and counselor self-efficacy within correctional environments should take into account the type of institutions from which the correctional sample is drawn. The security levels of the institutions from which correctional sample were drawn for the current study was not



taken into consideration. Future research should explore the impact of security level of the institution on levels of burnout and job satisfaction among correctional psychologists, as well as on the differences in perceptions of the work environments in the various security levels. Additionally, it would be interesting to examine any differences that may exist among the personality traits of psychologists who chose to work in high security institutions versus those who chose to work in camps or low security institutions.

Future research comparing the work environment of the community and correctional environments using a more comprehensive measure of work environment would allow for a more thorough exploration of the similarities and differences that exist between the two settings. Current research of work environment uses a variety of different measure of work environment, many of which address completely different aspects of work environment than the next. This may be due, in part, to a lack of a clear definition of work environment within the literature.

Additionally, future research should explore the amount of variance of burnout in community and correctional settings explained by the lack of resources. Rural communities are especially affected by a lack of resources, high rates of poverty, and lack of access to employment (Helbok, 2003). As a result, psychologists in rural communities must be flexible and resourceful in finding ways to use natural resource that already exist within communities (e.g. community members, churches, etc.). State and federal settings are also affected by a lack of resources resulting from existing state and federal budgets.

### Conclusions

Findings of this study suggest no differences in levels of job satisfaction, emotional exhaustion or personal accomplishment dimensions of burnout, or counselor

self-efficacy exist between correctional and community psychologists. In addition, various work environment characteristics did not differ between settings. However, important differences were found between correctional and community psychologists, including feelings of depersonalization and experience of work environment conflict. Additionally, several relationships were found to exist among personality traits, burnout, work environment characteristics, and job satisfaction.

Several suggestions for training and education follow from the results of the current study, including the need for (1) training on the prevention of burnout and development of effective coping skills to address burnout, (2) the development of teambuilding programs and education regarding conflict resolution skills, and (3) development of multicultural awareness and multicultural sensitivity within the workplace.

The results of the current study also revealed several areas that warrant further exploration within job satisfaction, burnout, counselor self-efficacy, and work environment research. Most importantly, further research is needed in the areas of counselor self-efficacy among experienced psychologists it is currently nonexistent. Additional research exploring correctional and community psychologists' work environments and the implications of working in those settings is also warranted, as research of correctional and community psychology settings in general has been widely neglected.

## REFERENCES

- Acker, G. M. (1999). The impact of clients' mental illness on social workers' job satisfaction and burnout. *Health and Social Work, 24*, 112-119.
- Ackerley, G. D., Burnell, J., Holder, D. C., & Kurdeck, L. A. (1988). Burnout among licensed psychologists. *Professional Psychology: Research and Practice, 19*, 624-631.
- Arvey, R. D., Bouchard, T. J., Segal, N. L., & Abraham, L. M. (1989). Job satisfaction: Environmental and genetic components. *Journal of Applied Psychology, 74*, 187-192.
- Bakker, A. B., Van Der Zee, K., Lewig, K. A., & Dollard, M. F. (2006). The relationship between the Big Five personality factors and burnout: A study among volunteer counselors. *The Journal of Social Psychology, 146*, 31-50.
- Bandura, A. (1977). Self-efficacy: toward a unifying theory of behavioral change. *Psychology Review, 84*, 191-215.
- Bandura, A. (1982). Self-efficacy mechanisms in human agency. *American Psychologist, 37*, 191-215.
- Bandura, A., Adams, N. E., Hardy, A. B., Howells, G. N. (1980). Tests of the generality of self-efficacy theory. *Cognitive Therapy Research, 4*, 39-66.
- Biglan, A. & Smolkowski, K. (2002). The role of the community psychologist in the 21<sup>st</sup> century. *Prevention & Treatment, 5*, no pagination.

- Bilge, F. (2006). Examining the burnout of academics in relation to job satisfaction and other factors. *Social Behavior and Personality*, *34*, 1151-1160.
- Boice, R. & Myers, P. E. (1987). Which setting is healthier and happier, academe or private practice? *Professional Psychology: Research and Practice*, *18*, 526-529.
- Boothby, J. L. & Clements, C. B. (2000). A national survey of correctional psychologists. *Criminal Justice and Behavior*, *27*, 716-732.
- Boothby, J. L. & Clements, C. B. (2002). Job satisfaction of correctional psychologists: Implications for recruitment and retention. *Professional Psychology: Research and Practice*, *33*, 310-315.
- Brayfield, A. H. & Rothe, H. F. (1951). An index of job satisfaction. *Journal of Applied Psychology*, *35*, 307-311.
- Brodsky, C.M. (1982). Work stress in correctional institutions. *Journal of Prison and Jail Health*, *2*, 74-102.
- Buchanan, T., Johnson, J. A., & Goldberg, L. R. (2005). Implementing a five-factor personality inventory for use on the Internet. *European Journal of Psychological Assessment*, *21*, 115-127.
- Budman, S. H. & Del Gaudio, A. C. (1979). A survey of psychologists at health maintenance organizations and community mental health centers. *Professional Psychology*, *10*, 244-248.
- Bureau of Justice Statistics. (1999) *Prisoners in 1998* (NJC 175687). Washington, DC: Department of Justice.
- Bureau of Justice Statistics. (2002) *Recidivism of Prisoners Released in 1994*. (NCJ 193427). Washington, DC: Department of Justice.

- Butler, B. B. (1990). Job satisfaction: Management's continuing challenge. *Social Work, 35*, 112-117.
- Cervone, D., Kopp, D. A., Schaumann, L., & Scott, W. D. (1994). Mood, self-efficacy, and performance standards: Lower moods induce higher standards for performance. *Journal of Personality and Social Psychology, 67*, 499-512.
- Chiu, R. K. & Kosinski, F. A. (1999). The role of affective dispositions in job satisfaction and work strain: Comparing collectivist and individualist societies. *International Journal of Psychology, 34*, 19-28.
- Church, T. A. & Katigbak, M. S. (1989). Internal, external, and self-report structure of personality in a non-Western culture: An investigation of cross-language and cross-cultural generalizability. *Journal of Personality and Social Psychology, 57*, 857-872.
- Costa, P. T., Jr. & McCrae, R. R. (1987). Neuroticism, somatic complaints, and disease: Is the bark worse than the bite? *Journal of Personality, 55*, 299-316.
- Costa, P. T., Jr. & McCrae, R. R. (1992). NEO PI-R professional manual. Odessa, FL: Psychological Assessment Resources.
- Cox, V. C., Paulus, P. B., & McCain, G. (1984). Prison crowding research: The relevance for prison housing standards and a general approach regarding crowding phenomena. *American Psychologist, 39*, 1148-1160.
- Daubert, S. D. & Metzler, A. E. (2000). The detection of fake-bad and fake-good Responding on the Millon Clinical Multiaxial Inventory III. *Psychological Assessment, 12*, 418-424.

- Dembo, R. & Dertke, M. (1986). Work environment correlates of staff stress in a youth detention facility. *Criminal Justice and Behavior*, 13, 328-344.
- De Raad, B., Hendriks, A. A. J. & Hofstee, W. K. B. (1992). Towards a refined structure of personality traits. *European Journal of Personality*, 6, 301-319.
- Diamond, P. M., Magaletta, P. R., Harzke, A. J., & Baxter, J. (2008). Who requests psychological services upon admission to prison? *Psychological Services*, 5, 97-107.
- Diamond, P. M., Wang, E. W., Holzer, C. E., Thomas, C. R., & Cruser, D. A. (2001). The prevalence of mental illness in prison: Review and policy implications. *Administration and Policy in Mental Health*, 29, 21-40.
- Digman, J. M. (1989). Five robust trait dimensions: development, stability, and utility. *Journal of Personality*, 57, 195-214.
- Digman, J. M. (1990). Personality structure: Emergence of the five-factor model. *Annual Review of Psychology*, 41, 417-440.
- Dollard, M.F. & Winefield, A.H. (1998). A test of the demand-control/support model of work stress in correctional officers. *Journal of Occupational Health Psychology*, 3, 243-264.
- Elman, B. D. & Dowd, E. T. (1997). Correlates of burnout: inpatient substance abuse therapists. *Journal of Addictions and Offender Counseling*, 17, 56-65.
- Enzmann, D., Schaufeli, W. B., Janssen, P., & Rozeman, A. (1998). Dimensionality and validity of the Burnout Measure. *Journal of Occupational and Organizational Psychology*, 71, 331-351.

- Evans, T. D. & Villavisanis, R. (1998). Encouragement exchange: avoiding therapist burnout. *The Family Journal: Counseling and Therapy for Couples and Families*, 5, 342-345.
- Evers, W. J. G., Brouwers, A., & Tomic, W. (2002). Burnout and self-efficacy: A study on teachers' belief when implementing an innovative educational system in the Netherlands. *British Journal of Educational Psychology*, 72, 227-243.
- Fagan, T. J., Ax, R. K., Liss, M., Resnick, R. J. & Moody, S. (2007). Professional education and Training: how satisfied are we? *Training and Education in Professional Psychology*, 1, 13-25.
- Farber, B. A. & Heifetz, L. J. (1981). The satisfactions and stresses of psychotherapeutic work: a factor analytic study. *Professional Psychology*, 12, 621-630.
- Farber, B. A. & Heifetz, L. J. (1982). The process and dimensions of burnout in psychotherapists. *Professional Psychology*, 13, 293-301.
- Federal Bureau of Prisons. (2006). Mental health care careers: psychology services in the Federal Bureau of Prisons. Retrieved March 26, 2006, from [www.bop.gov](http://www.bop.gov)
- Fisk, J. E. & Warr, P. (1996). Age-related impairment in associative learning: The role of anxiety, arousal, and learning self-efficacy. *Personality and Individual Differences*, 21, 675-686,
- Fiske, D. W. (1949). Consistency of the factorial structures of personality from different sources. *Journal of Abnormal and Social Psychology*, 44, 329-344.
- Friedlander, M. L., Keller, K. E., Peca-Baker, T. A., & Olk, M. E. (1986). Effects of role conflict on counselor-trainees' self-statements, anxiety level, and performance. *Journal of Counseling Psychology*, 33, 73-77.

- Friedlander, M. L. & Snyder, J. (1983). Trainees' expectations for the supervisory process: testing a developmental model. *Counselor Education and Supervision, 16*, 107-116.
- Friesen, P. & Sarros, J. C. (1989). Sources of burnout among educators. *Journal of Organizational Behavior, 10*, 179-188.
- Freudenberger, H. J. (1975). The staff burn-out syndrome in alternative institutions. *Psychotherapy: Theory, Research and Practice, 12*, 73-82.
- Gecas, V. (1989). The social psychology of self-efficacy. *Annual Review of Sociology, 15*, 291-316.
- Gelso, C. J. & Fassinger, R. E. (1992). Personality, development, and counseling psychology: Depth, ambivalence, and actualization. *Journal of Counseling Psychology, 39*, 275-298.
- Gerstein, L. H., Topp, C. G., & Correll, G. (1987). The role of the environment and person when predicting burnout among correctional personnel. *Criminal Justice and Behavior, 14*, 352-369.
- Ghorpade, J., Lackritz, J., & Singh, G. (2007). Burnout and personality: Evidence from academia. *Journal of Career Assessment, 15*, 240-256.
- Gist, M. E. & Mitchell, T. R. (1992). Self-efficacy: a theoretical analysis of its determinants and malleability. *Academy of Management Review, 17*, 183-211.
- Goldberg, L. R. (1992). The development of markers for the Big-Five factor structure. *Psychological Assessment, 4*, 26-42.



- Goldberg, L. R. (1999). A broad-bandwidth, public domain, personality inventory measuring the lower-level facets of several five-factor models. In I. Mervielde, I. Deary, F. De Fruyt, & F. Ostendorf (Eds.), *Personality Psychology in Europe*, Vol. 7 (pp 1-28). Tillburg, The Netherlands: Tillburg University Press.
- Golembiewski, R. T. (1999). Next stage of burnout research and applications. *Psychological Reports*, 84, 443-446.
- Goodman, L. A. (1961). Snowball sampling. *Annals of Mathematical Statistics*, 32, 148-170.
- Gormally, J. & Brodsky, S. L. (1973). Utilization and training of psychologists for the criminal justice system. *American Psychologist*, 28, 926-928.
- Guy, J. D., Brown, C. K., Poelstra, P. L. (1992). Safety concerns and protective measures used by psychotherapists. *Professional Psychology: Research and Practice*, 23, 421-423.
- Hagen, K. M., Gutkin, T. B., Wilson, C. P., & Oats, R. G. (1998). Using vicarious experience and verbal persuasion to enhance self-efficacy in pre-service teachers: 'Priming the pump' for consultation. *School Psychology Quarterly*, 13, 169-178.
- Hammond, M. S. (2001). The use of the five-factor model of personality as a therapeutic tool in career counseling. *Journal of Career Development*, 27, 153-165.
- Haney, C., Banks, W., & Zimbardo, P. (1973). Interpersonal dynamics in a simulated prison. *International Journal of Criminology and Penology*, 1, 69-97.
- Harenstam, A., Palm, U. B., & Theorell, T. (1988). Stress, health, and the working environment of Swedish prison staff. *Work and Stress*, 2, 281-290.

- Hatinen, M., Kinnunen, U., Pekkonen, M., Kalimo, R. (2007). Comparing two burnout interventions: Perceived job control mediates decreases in burnout. *International Journal of Stress Management, 14*, 227-248.
- Helbok, C. M. (2003). The practice of psychology in rural communities: Potential ethical dilemmas. *Ethics and Behavior, 13*, 367-384.
- Hellman, I. D., Morrison, T. L., & Abramowitz, S. I. (1986). The stresses of psychotherapeutic work: a replication and extension. *Journal of Clinical Psychology, 42*, 197-205.
- Hoppock, R. (1937). Job satisfaction of psychologists. *Journal of Applied Psychology, 21*, 300-303.
- Huebner, E. S. (1993). Burnout among school psychologists in the USA: further data related to its prevalence and correlates. *School Psychology International, 14*, 99-109.
- Huebner, E. S. (1994). Relationships among demographics, social support, job satisfaction and burnout among school psychologists. *School Psychology International, 15*, 181-186.
- International Personality Item Pool: A Scientific Collaboratory for the Development of Advanced Measures of Personality Traits and Other Individual Differences (<http://ipip.ori.org/>). Internet Web Site.
- Jacobson, F. N., Rettig, S. & Pasamanick, B. (1959). Status, job satisfaction, and factors of job satisfaction of state institution and clinic psychologists. *American Psychologist, 14*, 144-150.

- James, L. A. & James, L. R. (1989). Integrating work environment perceptions: explorations into the measurement of meaning. *Journal of Applied Psychology, 74*, 739-751.
- Jayaratne, S. & Chess, W. A. (1984). Job satisfaction, burnout, and turnover: A national study. *Social Work, 29*, 448-452.
- Jenaro, C., Flores, N., & Arias, B. (2007). Burnout and coping in human service practitioners. *Professional Psychology: Research and Practice, 38*, 80-87.
- Judge, T. A., Bono, J. E., & Locke, E. A. (2000). Personality and job satisfaction: The mediating role of job characteristics. *Journal of Applied Psychology, 85*, 237-249.
- Judge, T. A., Heller, D. & Mount, M. K. (2002). Five-factor model of personality and job satisfaction: A meta-analysis. *Journal of Applied Psychology, 87*, 530-541.
- Judge, T. A., Locke, E. A., Durham, C. C., & Kluger, A. N. (1998). Dispositional effects on job and life satisfaction: The role of core evaluations. *Journal of Applied Psychology, 83*, 17-34.
- Karlin, B. E., Duffy, M., & Gleaves, D. H. (2008). Patterns and predictors of mental health service use and mental illness among older and younger adults in the United States. *Psychological Services, 5*, 275-294.
- Kendig, N. E. (2004). Correctional health care systems and collaboration with academic medicine. *Journal of the American Medical Association, 292*, 501-503.
- Kinicki, A. J., McKee-Ryan, F. M., Schriesheim, C. A., & Carson, K. P. (2002). Assessing the construct validity of the Job Descriptive Index: A review and meta-analysis. *Journal of Applied Psychology, 87*, 14-32.

- Koeske, G. F. & Koeske, R. D. (1989). Work load and burnout: Can social support and perceived accomplishments help? *Journal of Social Work, 34*, 243-248.
- Kyriacou C. & Sutcliffe, J. (1978). Teacher stress: prevalence, sources, and symptoms. *British Journal of Educational Psychology, 48*, 159-167.
- Landy, F. J. (1989) *Psychology of work behavior*. Pacific Grove, CA: Brooks/Coles.
- Larson, L. M., Suzuki, L. A., Gillespie, K. N., Potenza, M. T., Bechtel, M. A., & Toulouse, A. L. (1992). Development and validation of the Counseling Self-Estimate Inventory. *Journal of Counseling Psychology, 39*, 105-120.
- Lee, R. T. & Ashforth, B. E. (1996). A meta-analytic examination of the correlates of the three dimensions of job burnout. *Journal of Applied Psychology, 81*, 123-133.
- Leiter, M. P. (2005). Perceptions of risk: An organizational model of occupational risk, burnout, and physical symptoms. *Anxiety, Stress, and Coping: An International Journal, 18*, 131-144.
- Lent, R. W., Hoffman, M., Hill, C. E., Treistman, D., Mount, M. & Singley, D. (2006). Client-specific counselor self-efficacy in novice counselors: relation to perception of session quality. *Journal of Counseling Psychology, 53*, 453-463.
- Lent, R. W. & Maddux, J. E. (1997). Self-efficacy: Building a sociocognitive bridge between social and counseling psychology. *The Counseling Psychologist, 25*, 240-255.
- Locke, E. A. (1976). The nature and causes of job satisfaction. In M. D. Dunnette (Ed.), *Handbook of industrial and organizational psychology* (pp. 1,297-1,349). Chicago: Rand McNally.

- Loehlin, J. C. (1992). *Genes and environment in personality development*. Newbury Park, CA: Sage Publications.
- Lombardo, L.X. (1981) *Guards Imprisoned: Correctional Officers at Work*. New York, NY: Elsevier Science Publishing Company, Inc.
- Magaletta, P. R. & Boothby, J. L. (2003). Correctional mental health professionals. In T. J. Fagan & R. K. Ax. (Eds.), *Correctional mental health handbook* (pp. 21-38). Thousand Oaks, CA: Sage.
- Magaletta, P. R., Patry, M. W., Dietz, E. F., & Ax, R. K. (2007). What is correctional about clinical practice in corrections? *Criminal Justice and Behavior*, 34, 7-21.
- Magaletta, P. R. & Verdeyen, V. (2005). Clinical practice in corrections: A conceptual framework. *Professional Psychology: Research, and Practice*, 36, 37-43.
- Manderscheid, R. W., Gravesande, A., & Goldstrom, I. D. (2004). Growth of mental health services in state and adult correctional facilities, 1988-2000. *Psychiatric Services*, 55, 869-872.
- Maslach, C. (1976). Burned-out. *Human Behavior*, 5, 16-22.
- Maslach, C. (1982). *Burnout – The Cost of Caring*. Englewood Cliffs, NJ: Prentice-Hall.
- Maslach, C. & Jackson, S. E. (1981). *The Maslach Burnout Inventory*. Palo Alto, CA: Consulting Psychologists.
- Maslach, C. & Jackson, S. E. (1981b). The measurement of experienced burnout. *Journal of Occupational Behavior*, 2, 99-113.
- Maslach, C. & Jackson, S. E. (1986). *The Maslach Burnout Inventory* (2<sup>nd</sup> ed.). Palo Alto, CA: Consulting Psychologists.

- Maslach, C., Jackson, S. E., & Leiter, M. P. (1996). *The Maslach Burnout Inventory* (3<sup>rd</sup> ed.). Palo Alto, CA: Consulting Psychologists.
- McCrae, R. R. & Costa, P. T., Jr. (1986). Personality and coping, and coping effectiveness in an adult sample, *Journal of Personality*, 54, 385-405.
- McFarlin, D. B., Coster, E. A., Rice, R. W., & Cooper, A. T. (1995). Facet importance and job satisfaction: Another look at the range of affect hypothesis. *Basic and Applied Social Psychology*, 16, 489-502.
- McGee, R. A. (1989). Burnout and professional decision making: an analogue study. *Journal of Counseling Psychology*, 36, 345-351.
- Meir, S. T. (1983). Toward a theory of burnout. *Human Relations*, 6, 899-910.
- Melchert, T. P., Hays, V. L., Wiljanen, L. M., & Kolocek, A. K. (1996). Testing models of counselor development with a measure of counseling self-efficacy. *Journal of Counseling and Development*, 74, 640-655.
- Morgan, R. D., Rozycki, A. T., Wilson, S. (2004). Inmate perceptions of mental health services. *Professional Psychology: Research and Practice*, 35, 389-396.
- Morgan, R. D., Van Haveren, R. A. & Pearson, C. A. (2002). Correctional officer burnout further analysis. *Criminal Justice and Behavior*, 29, 144-160.
- Moss, C. & Clark, J. F. (1961). Role satisfaction of psychologists in state hospitals. *American Psychologist*, 16, 523-528.
- Neufeld, R. W. J., Thomas, P. (1977). Effects of perceived efficacy of a prophylactic controlling mechanism on self-control under pain stimulation. *Canadian Journal of Behavioral Science*, 9, 224-232.

- New York State Department of Corrections. (1975). *For a more humane approach to employee disabilities*. Albany: State of New York.
- Nietzel, M. T. & Moss, C. S. (1972). The psychologist in the criminal justice system. *Professional Psychology, 3*, 259-270.
- Nord, W. R. (1977). Job satisfaction reconsidered. *American Psychologist, 32*, 1026-1035.
- Norman, W. T. (1963). Toward an adequate taxonomy of personality attributes: Replicated factor structure in peer nomination personality ratings. *Journal of Abnormal and Social Psychology, 66*, 574-583.
- Occupational Outlook Handbook (2006). Retrieved June 27, 2006, from <http://www.bls.gov/oco/ocos056.htm>
- O'Connor, E. J., Peters, L. H., & Gordon, S. M. (1978). The measurement of job satisfaction: Current practices and future considerations. *Journal of Management, 4*, 17-26.
- Otero, R. F., McNally, D., & Powitzky, R. (1981). Mental health services in adult correctional systems. *Corrections Today, 43*, 8-18.
- Penn, M., Románo, J. L., & Foat, D. (1988). The relationship between job satisfaction and burnout: A study of human service professionals. *Administration in Mental Health, 15*, 157-165.
- Pines, A. M. & Aronson, E. (1981). *Burnout. From Tedium to Personal Growth*. New York: Free Press.
- Pines, A. M. & Aronson, E. (1988). *Career Burnout: Causes and Cures*. New York: Free Press.

- Rafferty, J. P., Lemkau, J. P., Purdy, R. R., & Rudisill, J. R. (1986). Validity of the Maslach Burnout Inventory for family practice physicians. *Journal of Clinical Psychology, 42*, 488-492.
- Raquepaw, J. M. & Miller, R. S. (1989). Psychotherapist burnout: a componential analysis. *Professional Psychology: Research and Practice, 20*, 32-36.
- Rosberg, J. I., Eiring, O., & Friis, S. (2004). Work environment and job satisfaction: A psychometric evaluation of the Working Environment Scale -10. *Social Psychiatry and Psychiatric Epidemiology, 39*, 576-580.
- Sandoval, J. (1993). Personality and burnout among school psychologists. *Psychology in the Schools, 30*, 321-326.
- Savicki, V. & Cooley, E. (1987). The relationship of work environment and client contact to burnout in mental health professionals. *Journal of Counseling and Development, 65*, 249-252.
- Schank, J. A. & Skovholt, T. M. (1997). Dual-relationship dilemmas of rural and small-community psychologists. *Professional Psychology: Research and Practice, 28*, 44-49.
- Schaufeli, W. B., Bakker, A. B., Hoogduin, K., Schaap, C., & Kladler, A. (2001). On the clinical validity of the Maslach Burnout Inventory and the Burnout Measure. *Psychology and Health, 16*, 565-582.
- Schneider, J.A., & Agras, W. S. (1985). A cognitive behavioral group treatment of bulimia. *British Journal of Psychiatry, 146*, 66-69.
- Smith, M. B. & Hobbs, N. (1966). The community and the community mental health center. *American Psychologist, 21*, 499-509.



- Sousa-Poza, A. & Sousa-Poza, A. A. (2000). Well-being at work: a cross-national analysis of the levels and determinants of job satisfaction. *Journal of Socio-Economics, 29*, 517-538.
- Staw, B. M., Bell, N. E., & Clausen, J. A. (1986). The dispositional approach to job attitudes: A lifetime longitudinal test. *Administrative Science Quarterly, 31*, 56-77.
- Staw, B. M. & Ross, J. (1985). Stability in the midst of change: a dispositional approach to job attitudes. *Journal of Applied Psychology, 70*, 469-480.
- Suran, B. G. & Sheridan, E. P. (1985). Management of burnout: Training psychologists in professional life span perspectives. *Professional Psychology: Research and Practice, 16*, 741-752.
- Svenson, L. W., Jarvis, G. K., & Campbell, R. L. (1995). Past and current drug use among Canadian correctional officers. *Psychological Reports, 76*, 977-978.
- Thomas, A., Buboltz, W. C., & Winkelspecht, C. S. (2004). Job characteristics and personality as predictors of job satisfaction. *Organizational Analysis, 12*, 205-219.
- Triandis, H. C., Bontempo, R., Betancourt, H., Bond, M., Leung, K., Brenes, A., Georgas, J., Hui, C. H., Marin, G., Setiadi, B., Sinha, J. B. P., Verna, J., Spangenberg, J., Touzard, H., & de Montmollin, G. (1986). The measurement of ethic aspects of individualism and collectivism across cultures. *Australian Journal of Psychology, 38*, 257-267.

- Triandis, H. C., McCusker, C., & Hui, C. H. (1990). Multimethod probes of individualism and collectivism. *Journal of Personality and Social Psychology, 59*, 1006-1020.
- Tsigilis, N., Koustelios, A., & Togia, A. (2004). Multivariate relationship and discriminant validity between job satisfaction and burnout. *Journal of Managerial Psychology, 19*, 666-675.
- Vredenburg, L. D., Carlozzi, A. F., & Stein, L. B. (1999). Burnout in counseling psychologists: type of practice setting and pertinent demographics. *Counseling Psychology Quarterly, 12*, 293-302.
- Walfish, S., Moritz, J. L., & Stenmark, D. E. (1991). A longitudinal study of career satisfaction of clinical psychologists. *Professional Psychology: Research and Practice, 22*, 253-255.
- Walfish, S., Polifka, J. A., & Stenmark, D. E. (1985). Career satisfaction in clinical psychology: A survey of recent graduates. *Professional Psychology: Research and Practice, 16*, 576-580.
- Watson, D. & Clark, L. A. (1992). On traits and temperament: general and specific factors of emotional experience and their relation to the five-factor model. *Journal of Personality, 60*, 441-476.
- Weiss, D. J., Dawis, R. V., England, G. W., & Lofquist, L. H. (1967). *Construct validation studies of the Minnesota Satisfaction Questionnaire*. Minneapolis: University of Minnesota, Industrial Relations Center, 1964.

Weiss, D. J., Dawis, R. V., England, G. W., & Lofquist, L. H. (1967). *Manual for the Minnesota Satisfaction Questionnaire*. Minneapolis, MN: Industrial Relations Center, University of Minnesota.

Wiggins, J. S. (1996). *The five-factor model of personality: theoretical perspectives*. New York, NY: The Guilford Press.

Wynne, J. M. (1977). *Prison employee unionism: The impact on correctional administration and Program*. Sacramento, CA: American Justice.

Zellars, K. L., Perrewe, P. L., & Hochwarter, W. A. (2000). Burnout in health care: The role of the five factors of personality. *Journal of Applied Social Psychology, 30*, 1570-1598.