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Assessing Burnout in Mental Health Providers of Chronic Clients: An Exploration of Predictors

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**ASSESSING BURNOUT IN MENTAL HEALTH PROVIDERS
OF CHRONIC CLIENTS:
AN EXPLORATION OF PREDICTORS**

by

Jessica Karle

Dissertation Presented to the Center for Psychological
Studies of Nova Southeastern University
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DISSERTATION APPROVAL SHEET

This dissertation was submitted by Jessica Karle under the direction of the Chairperson of the dissertation committee listed below. It was submitted to the School of Psychology and approved in partial fulfillment of the requirements for the degree of Doctor of Philosophy in Clinical Psychology at Nova Southeastern University.

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ABSTRACT

ASSESSING BURNOUT IN MENTAL HEALTH PROVIDERS OF CHRONIC CLIENTS: AN EXPLORATION OF PREDICTORS

by

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Working in health care professions involves many emotional and interpersonal job stressors. Difficulties in handling such stressors commonly lead to a distinctive combination of emotional exhaustion (EE), depersonalization (DP), and reduced personal accomplishment (RPA), a syndrome known as burnout. Although most helping professionals contend with similar demands, mental health workers are faced with many unique pressures. The problem addressed by the proposed research was burnout of mental health providers. More specifically, the current study sought to identify organizational and individual factors that may lead to less—or more—burnout in providers who report having a majority of clients with long-term mental illness and/or substance use disorders (LTMI). Several hypotheses were tested. It was proposed that each of the organizational and personality characteristics would be significantly associated with all three dimensions of burnout and that the majority of the assessed variables would significantly contribute to the prediction of burnout. Exploratory moderation analyses were also conducted. Participants were recruited from regional community mental health centers, social service agencies, and chemical dependency programs. Participants included direct care staff who reported that the majority of work

performed was face-to-face with clients diagnosed with LTMI. Demographic information was assessed in addition to three self-report measures. Results of this investigation demonstrated that, contrary to a priori hypotheses, levels of burnout in social services workers serving mostly LTMI clients were generally low. Most of the occupational and personality variables did not account for as much variance of each burnout dimension as expected. However, the full sets of chosen demographic, organizational, and personality variables significantly predicted each dimension of burnout. Psychological demands were most predictive of EE, job insecurity and agreeableness accounted for a significant portion of variance of DP, and none of the organizational or personality variables uniquely contributed to the prediction of RPA. The lack of significance of the proposed predictors may be attributed to several factors, especially the uniqueness of the current sample, nonrandom selection, and potential socially desirable responding. Additional empirical research including a burnout intervention for larger samples of social services workers who work with LTMI is indicated. Practical implications are discussed.

CHAPTER I: STATEMENT OF THE PROBLEM

Working in health care professions involves many emotional and interpersonal job stressors. Difficulties in handling such stressors commonly lead to a distinctive combination of emotional exhaustion, depersonalization, and reduced personal accomplishment, a syndrome known as burnout (Maslach, 1982). Although most helping professionals contend with similar demands, mental health workers are faced with many unique pressures (Jenkins & Elliott, 2004). In fact, research has demonstrated that the level of emotional exhaustion in mental health professionals was higher than that of police officers, teachers, managers, and journalists when using an identical measure of burnout (Oginska-Bulik, 2006a, 2006b). Moreover, similar rates of burnout were found between mental health workers and the relatives of persons with schizophrenia or depression (Angermeyer, Bull, Bernert, Dietrich, & Kopf, 2006). The majority of mental health-related research of burnout, however, is lacking in that the investigators have focused on professionals who are typically trained in a field other than social services.

Untreated burnout typically leads to job withdrawal, including: decreased contact with clients and less willingness to help (Rose, Horne, Rose, & Hastings, 2004); lower productivity and effectiveness at work (Maslach, 2001); and turnover, absenteeism, and decreased morale (Edwards & Burnard, 2003). In addition, burnout has been shown to facilitate hopelessness, anger, cynicism, and inappropriate risk-taking (Karnis, 1981; Pompili et al., 2006). The effects of staff burnout can be detrimental to the quality of care of clients (Maslach, 1982; Prosser et al., 1996; Rowe & Sherlock, 2005). Therefore, identifying the risk factors and protective factors of burnout is essential, not only to assure the proper care for clients with long-term mental illness and chronic substance use

disorders (LTMI¹) but also to develop interventions and hiring practices to reduce the amount of staff burnout.

Many researchers have concluded that the genesis of burnout lies in organizational factors (Burisch, 1993; Cherniss, 1980; Lance, 1991; Schaubroeck & Jennings, 1991). Further exploration into the workplace climate has identified several risk factors for increased burnout: lack of job clarity (Fawzy, Wellisch, Pasnau, & Leibowitz, 1983; Sullivan, 1993); work overload (Maslach & Leiter, 1997; Sullivan, 1993); and lack of social support (Oginska-Bulik & Kaflik-Pierog, 2006). Conversely, the lowest burnout levels have been found in settings where social cohesion (Sundin, Hochwalder, Bildt, & Lisspers, 2007), goal congruence (Schultz, Greenley, & Brown, 1995), autonomy (Finlay, Martin, Blum, & Roman, 1995; Mortimer & Lorence, 1995), and feelings of job efficacy (Shoptaw, Stein, & Rawson, 2000) are present. In addition to workplace climate, staff burnout has been associated with specific client variables. High levels of staff burnout have been linked to having clients with poor prognosis (Maslach, 1978); schizophrenia, psychosis, and chronic mental illness (Beck, 1987; Finch & Krantz, 1991; A. Pines & Maslach, 1978); substance use (Knudsen, Ducharme, & Roman, 2006; Shoptaw, Stein, & Rawson, 2000); and frequent exhibition of negative, aggressive, or stressful behaviors (Ackerley, Burnell, Holder, & Kurdek, 1988; Kandolin, 1993; Skorupa & Agresti, 1993). Although many studies have related the context and client variables of psychiatric hospitals with staff burnout, very few have focused solely on LTMI providers in an outpatient setting.

¹ In order to be concise, “LTMI” will be used to refer to long-term mental illness and/or chronic substance use disorders throughout the rest of this document.

There has been much exploration into the individual precursors of occupational stress and staff burnout. The majority of recent studies have related high burnout rates with neuroticism and introversion (e.g., Cano-Garcia, Padilla-Munoz, & Carrasco-Ortiz, 2005; Gandoy-Crego, Clemente, Mayan-Santos, & Espinosa, 2009). Extraversion, agreeableness, and openness, on the other hand, appear to be buffers against emotional exhaustion, depersonalization, and reduced personal accomplishment (Bakker, Van der Zee, Lewig, & Dollard, 2006; Zellars, Perrewe, & Hochwarter, 2000). Although many of the investigators of burnout and personality reached similar conclusions, many different types of professionals were assessed, different personality measures were used, and most failed to assess for any additional variables such as perceived job stressors.

There are differing views about what types of variables are the best predictors of burnout. Even when controlling for personality and client characteristics, Schultz and colleagues (1995) report that contextual variables and management process variables influence burnout rates. On the contrary, Mills & Huebner (1998) claimed that the dimensions of burnout are more attributable to personality variables than contextual variables. Yet another proposition has been suggested that the interaction between individual and situational variables results in burnout (Cano-Garcia, et al., 2005; Shirom, 1993). These discrepancies need to be addressed.

The current research addresses the problem of burnout in mental health providers from regional community mental health centers, social service agencies, and chemical dependency programs who work with LTMI. More specifically, this research examines the factors that may lead to less—or more—burnout in providers who report having a majority of LTMI clients. The aim is to identify critical factors with the ultimate goal of

developing burnout prevention programs to address and minimize those barriers to optimal staff functioning.

CHAPTER II: REVIEW OF THE LITERATURE

Introduction

An historical review of the phenomenon of job burnout and such empirical literature is necessary in order to understand how social workers and case managers develop this type of occupational stress. An exploration into the types of precursors and correlates of the three dimensions of burnout may be a guide to understanding not only how to protect such social services workers from burnout but also how to intervene with burned out employees. This critical analysis of burnout research findings concentrates on the purported preventative and risk factors associated with burnout and present future directions which could add to the present knowledge of such factors.

History of Burnout

Herbert Freudenberger is considered to be the founder of the burnout syndrome. As an unpaid psychiatrist at a free clinic in New York City, Freudenberger observed in volunteers and in himself a gradual depletion of emotional, cognitive, and physical resources. In his influential paper ‘Staff burn-out’ (1974), he painted a detailed picture of this particular type of occupational stress, including feelings of emptiness, cynicism, and fatigue that resulted from pressures in the work environment. He introduced the term “burnout” in his paper, and the phenomenon was quite easily recognized by fellow professionals in the human service sector.

During the same decade, a social psychologist, Christina Maslach, also recognized the chronic symptoms of exhaustion and loss of motivation and commitment on the job. In collaboration with other colleagues, Maslach (1976, 1982, 1993) interviewed a wide range of “helping” professionals, with the intention of developing an

operational definition of the burnout syndrome described by Freudenberger. Three areas of interest emerged from these interviews, providing a foundation with which burnout could be defined and assessed.

Definition of Burnout

The phenomenon of burnout is usually defined and studied as an extreme state of psychological fatigue in response to chronic emotional and interpersonal stressors at work. Burnout typically begins with a worker in the human services sector who perceives work demands as stressful. Then, the worker experiences stress and fatigue. When usual coping mechanisms fall short of relieving the stress, the employee takes on a defensive stance marked by pathological changes in work-related behavior and attitudes towards patients.

The most widely accepted working definition of burnout is a combination of both state and process definitions from many different researchers (e.g., Cherniss, 1980; Maslach & Jackson, 1986; A. M. Pines & Aronson, 1998). Schaufeli and Enzmann (1998) formulated the following description of the burnout syndrome:

Burnout is a persistent, negative, work-related state of mind in 'normal' individuals that is primarily characterized by exhaustion, which is accompanied by distress, a sense of reduced effectiveness, decreased motivation, and the development of dysfunctional attitudes and behaviours at work. This psychological condition develops gradually but may remain unnoticed for a long time by the individual involved. It results from a misfit between intentions and

reality in the job. Often burnout is self-perpetuating because of inadequate coping strategies that are associated with the syndrome (p. 36).

The Schaufeli and Enzmann definition incorporates not only all of the specific components of burnout symptoms but also the gradual onset and chronic nature of the syndrome. This description also specifies the domain of the symptoms, in that they are only related to the workplace. Moreover, possible antecedents to the development of burnout and possible factors related to the maintenance of the symptoms are included.

Three Dimensions of Burnout

As occupational stressors deplete biopsychosocial resources over a prolonged period of time, a distinctive combination of emotional exhaustion, depersonalization, and reduced personal accomplishment can develop. Maslach, Jackson, and Leiter (1996) contend that burnout consists of these three distinct, yet interrelated, core aspects which should be considered separately within the burnout syndrome.

Emotional exhaustion (EE). EE is the most easily recognized aspect of the burnout syndrome. EE describes a state of being emotionally drained by one's contact with other people, which leads to feeling irritable, frustrated, and worn out. An emotionally overextended worker lacks the energy to complete day-to-day tasks, especially those consisting of emotional labor, and therefore dreads the thought of going to work each day.

Depersonalization (DP). DP is characterized by cynicism, negative job attitude, and the dehumanization of clients, where the employee becomes indifferent about client outcomes, detaches from the client-provider relationship, and blames the client for his or

her problems. Creating a mental distance is considered to be a coping strategy in response to EE and can be adaptive when used in response to acute stress. However, when DP becomes a persistent approach towards one's work, the effect on relationships with coworkers and clients can be detrimental.

Reduced personal accomplishment (RPA²). RPA is evident when an individual perceives one's own performance at work as insufficient. Such a worker feels dissatisfied and incompetent, which subsequently hinders one's ability to provide efficacious services to clientele. As the employee's negative expectations are realized, this maladaptive cycle persists.

Differential Identification

Critics have argued that the burnout syndrome is just a new term for an old concept (Maslach & Schaufeli, 1993). A plethora of research has been conducted to reconcile the 'conceptual confusion' and determine if burnout is, in fact, a distinctive syndrome in its own right (see Schaufeli & Enzmann, 1998). Considering the broad and elusive nature of the stress construct, a definitive conclusion is impossible to achieve. However, powerful arguments have been made in respect to three similar constructs—occupational stress, depression, and chronic fatigue syndrome.

Occupational stress. The Merriam-Webster dictionary (2009) describes the term stress as 'a physical, chemical, or emotional factor that causes bodily or mental tension and may be a factor in disease causation.' Occupational stress typically results from the imbalance between job demands and resources. The key aspect to the stress construct,

² The author has chosen to use the dimension of reduced personal accomplishment in order to be consistent with the other two burnout variables, whereby high scores indicate more distress. However, many researchers have used personal accomplishment (PA) instead. Therefore, specific studies cited will include statistics with either RPA or PA.

especially in the organizational context, is the temporary nature of it (Brill, 1984). Job stress is expected to subside as an employee adjusts to the new job situation and locates adaptive resources.

Burnout, on the other hand, is characterized by its chronicity. Several empirical studies (Halbesleben & Demerouti, 2005; Kristensen, Borritz, Villadsen, & Christensen, 2005; Taris, Le Blanc, Schaufeli, & Schreurs, 2005) report burnout to have high temporal stability regardless of demographics of sample or length of follow-up period. Schaufeli and Enzmann (1998) report strong stability coefficients for EE (28-83%), DP (16-93%), and PA (25-86%) and describe the syndrome as “a chronic problem rather than a transient state” (p. 97). Thus, the permanence of burnout differentiates its symptoms from that of occupational stress.

Depression. Because the symptoms of burnout so closely resemble those of depression (e.g., helplessness, loss of energy, feelings of worthlessness, markedly diminished interest), many investigators have sought to distinguish the two. Factor-analytic studies demonstrate that when items from burnout and depression self-report measures are pooled, different burnout and depression factors are extracted (Leiter & Durup, 1994; McKnight, 1993). A meta-analytic review of 18 studies comparing the two constructs suggests that, although the two may share common risk factors (e.g., job strain, perceived uncontrollability), a distinction does exist (Glass & McKnight, 1996).

When compared to burned out individuals, individuals who endorse symptoms of depression indicate having significantly more anhedonia, suicidal ideation, psychomotor retardation, unrealistic feelings of guilt, and sleep and appetite disturbances (Brenninkmeyer, Van Yperen, & Buunk, 2001). Furthermore, Brenninkmeyer and

colleagues (2001) proposed that burnout is not directly associated with depression. Instead, a combination of burnout and perceived defeat lead to reduced feelings of superiority, which increases the likelihood of developing depressive symptoms. Thus, burnout may be a precursor to depressive symptomology.

Perhaps the best distinction between the two was made by Warr (1987). In his extensive study of occupational stress, he concluded that burnout's core feature is its relatedness to the work setting. Depression is global and 'context-free', affecting all aspects of the depressed individual's life. Burnout, on the other hand, only occurs while at work. Should this be the case, burned out individuals who are symptom-free when not acting in the work role can be distinguished from depressed individuals who report experiencing symptoms in all types of settings.

Chronic fatigue syndrome (CTS). Criteria for CTS and burnout can appear quite similar. Both can be debilitating syndromes and affect one's ability to complete activities of daily living. Schaufeli and Enzmann (1998) argue that the difference between CTS and burnout is etiological in nature. In CTS, the fatigue is unexplained, with no specific cause to be determined. CTS is global, affecting nearly all organ systems in the body, including endocrine, immune, nervous, digestive, and musculoskeletal systems (Jason et al., 1995). Burnout symptoms are generally psychological in nature with only some physical consequences. In contrast to CTS's intractability, both physical and psychological symptoms are easily attributed to job-related stress. Accordingly, despite the similarities, differential identification between the two appears to be straightforward.

Consequences of Burnout

EE, DP, and RPA have been related to many negative consequences for the burned out worker. Staff who report moderate to high levels of burnout typically endorse recurrent bouts of flu, headaches, fatigue, and a variety of other psychosomatic illnesses (Cherniss, 1980; Freudenberger, 1975). Honkonen and colleagues (2006) report that—even when controlling for demographics, physical strenuousness of work, nicotine and alcohol consumption, physical activity, body mass index, and depressive symptoms—the higher the level of reported burnout, the higher the risk for cardiovascular disease and musculoskeletal disorders. In fact, the National Institute of Occupational Safety and Health (NIOSH) named occupational stress as one of most prevalent job-related diseases nationwide (Harwood, Naolitano, Kristiansen, & Collins, 1984, as cited in Santos & Cox, 2000; Sauter, Murphy, & Hurrell, 1990, as cited in Santos & Cox, 2000).

Although burnout is distinguishable due to its relatedness to work, the experience of burnout can be a risk factor for other types of distress and risky behaviors. Burnout has been shown to engender hopelessness, anger, cynicism, and inappropriate risk-taking in human service professionals (Karnis, 1981; Pompili, et al., 2006). Researchers contend that burned out employees are more likely to engage in alcohol and drug use or abuse as a means of coping with the affective, cognitive, and physical symptoms of burnout (Maslach & Jackson, 1986; A. Pines & Maslach, 1978). Burnout has been associated with marital and family conflict (Maslach, 1978) as well as depression and anxiety (Ahola et al., 2005; Virtanen et al., 2007).

Quality of care or services to consumers is also affected by the presence of burnout. All three components of burnout have been associated with decreased contact

with clients and less willingness to help (Rose, et al., 2004). As previously mentioned, burned out service providers tend to be hopeless, frustrated, and pessimistic. Not surprisingly, poor client outcomes are likely result when workers are experiencing such symptoms. Perry and Markowitz (1986) found that burned out counselors were more likely to prematurely refer clients to other services as a result of the negative effects of the syndrome.

From a systems approach, staff burnout can be damaging to the organization as well. Untreated burnout typically leads to job withdrawal, including lower productivity and effectiveness at work (Maslach, 2001); impairment in performance (Wright & Bonnett, 1997; Wright & Cropanzano, 1998); and lower organizational commitment (Leiter & Maslach, 1988). Burnout is associated with negative job outcomes, especially poor morale among coworkers, absenteeism, intentions to quit, and voluntary job turnover (Edwards & Burnard, 2003; 2005). Investigators note that burnout may even be contagious and spread throughout the organization as burned out employees informally interact with their coworkers (Bakker, Schaufeli, Sixma, & Bosveld, 2001; Halbesleben & Buckley, 2004). Thus, not only for the individual's physical and mental health but also to protect that of the consumers and the overall organization, the causes of burnout need to be substantiated.

Burnout and Social Service Work

In the empirical literature, burnout has been consistently reported in the 'helping' professions. From the very early stages of burnout research, investigators have brought to light reports from social welfare workers and other mental health professionals that the

longer they worked in the field, the more they disliked contact with patients and the less efficacious they felt (A. Pines & Maslach, 1978).

Among mental health professions, social work, in particular, has been recognized as a high risk occupation (Pottage & Huxley, 1996, p. 1). Norms in the Maslach Burnout Inventory (MBI) manual (Maslach, et al., 1996) are consistent with this assumption. When compared to burnout rates of teachers, professors, nurses, and mental health practitioners, social services workers (e.g., social workers, case managers) have the highest DP and RPA scores and EE scores second only to teachers. These norms, however, are extracted from data including convenience samples and, therefore, cannot be considered to be externally valid (Schaufeli & Enzmann, 1998).

Jones and colleagues (1991) found that despite reports of feeling overloaded with job demands and nearly breaking down during the previous year, close to 40% of the social workers surveyed expressed no interest in changing jobs. If workers were burned out, one may assume that they would report intentions to leave the position. Nevertheless, as of yet, only one burnout study has documented that EE, DP, and RPA are minimal in mental health workers (Harper & Minghella, 1997, as cited in Ogresta, Rusac, & Zorec, 2008).

As of 1998, only 7% of burnout studies focused solely on social work while the majority of investigators surveyed employees in the health and education sectors or did not specify the population studied at all. This lack of systemic studies is contradictory to the widespread assumption among occupational stress researchers that burnout is common in social work (Soderfeldt, Soderfeldt, & Warg, 1995). Further research is

needed in order to reconcile the discrepancies in findings and to clarify the burnout correlates and causes specific to work in the social services.

Organizational Precursors of Burnout

The majority of burnout research has focused on situational factors associated with burnout. One major theory driving such exploratory research is that of Robert Karasek (1979). Karasek's job-strain model purports that as high job demands are matched with perceived lack of control, an individual begins to feel strained and thereby unable to handle physical or emotional pressures. Karasek's theory spurred a surfeit of studies focused on the physical consequences of job strain, especially cardiovascular disease and hypertension (e.g., Karasek, 1979; Shirom, Westman, Shamai, & Carel, 1997). As several researchers continued to explore the outcomes of job strain, mental health effects—including occupational stress and burnout—were brought to light as well (e.g., Karasek & Theorell, 1990; Seligman, 1975).

The following occupational features have been studied repeatedly over the years to determine their predictive quality when considering burnout as an outcome in human services occupations. Each job factor is discussed in general and in relation to social services workers.

Job Demands

The logical scapegoat to which burnout researchers have frequently turned is the amount and type of work providers have to face. The presence of excessive job demands, especially psychological demands, has been repeatedly documented as a vital factor associated with developing burnout, most significantly EE (Duquette, Kerouac, Sandhu, & Beaudet, 1994; Farber, 1983; Jenkins & Elliott, 2004; Sundin, et al., 2007). Lack of

adequate staffing (Carson, Leary, de Villiers, Fagin, & Radmall, 1995; Cushway, Tyler, & Nolan, 1996); feeling tense and pressured on the job (Bahner & Berkel, 2007; Brown & O'Brien, 1998; Kandolin, 1993; Oyefeso, Clancy, & Farmer, 2008); work overload (Garrosa, Moreno-Jimenez, Liang, & Gonzalez, 2008; Leiter, 1991; McVicar, 2003; Sullivan, 1993) and physical burdens (Oginska-Bulik, 2006a) are noteworthy job demands associated with burnout. Overinvolvement, a common psychological job demand where a provider becomes exceedingly emotionally invested in a client's outcome, has also been significantly related to EE ($r = .30$), DP ($r = .15$), and PA ($r = .18$) (Rupert & Morgan, 2005).

Role ambiguity, where psychological stress develops as a result of uncertainty about how to carry out one's job duties, is defined in the literature as a psychological job demand (Abramis, 1994). In a meta-analysis of 39 studies, results suggest that role ambiguity is significantly and negatively associated with job performance and job satisfaction. A more recent study is consistent with Abramis' results, where role ambiguity was found to be a positive and significant predictor of one of the burnout dimension (i.e., RPA [$\beta = .184$]) (Garrosa, et al., 2008). In addition to ambiguity, conflicting demands at work have been associated with workers' burnout (Balloch, Pahl, & McLean, 1998; Jones & Fletcher, 1996). Role conflict is typically inherent in human service professions and has been purported as one of the key factors in burnout of employees, especially those in psychiatric settings (Melchior, Bours, Schmitz, & Wittich, 1997).

Job Demands and Social Services Workers

A psychological job demand unique to social services work involves reining in personal thoughts and feelings while helping those who may not be motivated to help themselves. When comparing burnout rates of employees in ‘people work’ to that of service employees, sales workers, physical laborers, office staff, and executives, Brotheridge and Grandey (2002) report that human service professionals endorse “the highest levels of frequency, variety, intensity, and duration of emotional display and expectations for control over emotional expressions” (p. 31). Nevertheless, when compared to other occupational groups, employees in ‘people work’ demonstrated lower levels of DP, higher levels of PA, and comparable levels of EE. Further inquiry into job demands within the social services realm may offer a better understanding of how this type of pressure can lead to not only overwhelming stress but also a positive view of one’s performance.

Decision Latitude

Decision latitude has been defined as a combination of a worker’s ability to apply skills and learn new things on the job (i.e., skill discretion) and the power to make decisions and feel influential in the company (i.e., decision authority). To put it briefly, having decision latitude is equated with feeling in control of one’s job. Job control has been associated with burnout in that the more individuals perceive themselves to lack autonomy on the job, the greater their perception of occupational stress (Moore & Cooper, 1996).

Skill Discretion

Interviews with individuals working in the human services professions revealed that “one of the major signs of burn-out was the transformation of a person with creativity and commitment into a mechanical, petty bureaucrat who goes by the book” (Maslach, 1978, p. 118). Not surprisingly, job satisfaction is associated with having a range of job duties and having important and challenging job tasks (Butler, 1990; Himle, Jayaratne, & Thyness, 1989; Jayaratne & Chess, 1986; Tracy, Bean, Gwatkin, & Hill, 1992). Skill discretion has been shown to be most closely related to PA ($r = .37$) when compared to EE ($r = -.28$) and DP ($r = -.22$) (Rafferty, Friend, & Landsbergis, 2001). Thus, research as of yet indicates that the less one is encouraged to utilize one’s resourcefulness and ingenuity on the job, the greater the likelihood of developing negative perceptions of not only one’s work environment but also one’s performance within that environment.

Decision Authority

Individualistic society cultivates a yearning for autonomy in all aspects of one’s life. One would assume that feeling in control while at work would be necessary in order to avoid feeling stressed at work. With this assumption in mind, Ackerley and colleagues (1988) studied job control and how it is associated with burnout. Perceived lack of control was found to account for a significant amount of variance of EE (5%), DP (5%), and RPA (2%) over and above demographic variables, work setting, income, number of hours of direct client service, and tenure in human service position.

Further examination of the relationship between decision authority and burnout reveals an effect of one’s position in the organization (Rees & Cooper, 1990). Despite

having comparable levels of autonomy on the job, professionals in hospitals who are higher up on the organizational ladder (e.g., doctors) rate their individual influence as stronger when compared to those who are lower in the hierarchy (e.g., nurses). One could conclude that professionals who are unable break through the ‘glass ceiling’ of the workplace may be more likely to develop burnout, but such a claim should be confirmed outside of the hospital setting.

Decision Latitude and Social Services Workers

Due to the complex nature of social work and case management, many employees in formal organizations struggle to balance their own needs with those of the organization. When one is forced to withdraw from direct contact from clients and complete a disproportionate amount of administrative work, the employee may be vulnerable to behaving passively and working less than his or her actual ability (Pedler, Boydell, & Burgoyne, 1998; Pottage & Huxley, 1996). Likewise, Maslach (1978) noted the importance of the inability to make decisions about clients to be served. She expressed how feeling out of control about which clients to work with could lead to feeling “trapped” (p. 118), frustrated, and therefore burned out.

The nature of working with managed care billing can also affect burnout rates (Pottage & Huxley, 1996). Social workers and case managers can no longer spend the majority of their time providing engagement services. Instead, employees are expected to complete the maximum amount of billable services within a day, and therefore they must assist the largest number of clients in the shortest amount of time. Such circumstances most likely breed the largest amount of job strain and therefore the highest levels of burnout (Karasek, 1979).

Social Support

Social support is considered to be a valuable resource to have while on the job. Support can include both tangible (e.g., making phone calls for a coworker) and intangible (e.g., reassurance of worth) assistance (Fenlason & Beehr, 1994), and sources include not only supervisors but coworkers as well. A workplace culture that provides social support has been associated with peer cohesion, goal congruence, job clarity, and therefore effective coping with job stress (Cameron & Freeman, 1991). Hence, determining how social support leads to positive outcomes has been the focus of many burnout researchers. Two different theories have driven the exploration of the relationship between burnout and social support.

Main-Effects Model

The main-effects model purports that there is a linear relationship between social support and burnout, indicating that feeling supported and secure in the company of others protects an individual from developing poor health outcomes (House, 1981). In a meta-analysis of over 60 burnout studies, Lee and Ashforth (1996) found social support to account for a significant amount of variance of EE (1.8%), DP (7%), and PA (11.8%). However, several idiosyncratic covariates, most notably demographics and dispositional factors, were not included in the analyses. Therefore, potential confounding effects may have been present and could have altered the reported findings had they been taken into account. Indeed, in a later investigation, Ben-Zur and Michael (2007) found that a significant association between social support and burnout was eliminated when the occupational variable was entered into the overall regression model. Such an inconsistency needs to be addressed.

Buffering Hypothesis

According to the buffering hypothesis, the relationship between occupational stressors and burnout is moderated by the level of support one receives at work (Wheaton, 1985). Results of studies testing this hypothesis have been contradictory. Some have found that the relationship is stronger for people with low levels of support (Chappell & Novak, 1992; Constable & Dougherty, 1993; Duquette, et al., 1994). A more recent investigation indicated the opposite effect (Jenkins & Elliott, 2004), where occupational stressors lead to more burnout in workers who receive high levels of social support. Beehr (1985) took into consideration the high incidence of negative perceptions and poor health outcomes in most human service professionals when developing an explanation for results similar to those of Jenkins and Elliot. Troubled workers may seek empathy and assistance from staff who are already depersonalized. The workers are more likely to receive unconstructive feedback and therefore develop negative appraisals of the stressful situation after receiving the so-called beneficial support.

Investigation into the accuracy of Beehr's hypothesis has been inconclusive. More specifically, some studies have confirmed the reverse buffering effect (Fried & Tiegs, 1993; Kirmeyer & Dougherty, 1988) while others have refuted it (Beehr & McGrath, 1992; Burke & Greenglass, 1995; Kaufmann & Beehr, 1986), and none looked at mental health workers in particular. Furthermore, most studies since Beehr's 1985 investigation have not elucidated what type of support (i.e., emotional, instrumental, or both) acts as a buffer and, instead, have grouped support into one construct. When the construct has been separated and emotional support was identified as the type of support that leads to a reverse buffering effect, specific occupational groups were not studied

(Kickul & Posig, 2001). Therefore, social support may be beneficial for some types of professionals but detrimental to others. Further studies delineating the differences among a variety of occupational groups is needed to make valid conclusions.

Social Support and Social Services Workers

Considering the unique quality of social work, perhaps the only support that can be the most effective comes from other human service professionals (Jenkins & Elliott, 2004). The hectic schedules of social services staff hamper their ability to receive an adequate amount of support if they do not seek it from each other. Consequently, a conundrum exists in that a social services worker may be able to receive valuable support from a coworker, but his or her coworker probably has comparable levels of stressors and feelings of distress and does not have time or resources to provide effective support. Whether social support is directly or indirectly related to burnout, the construct appears to be associated with burnout in social services employees and should be studied further.

Work Setting

Although the work setting can be categorized in many different ways, the majority of burnout research has compared public and private types of organizations. Therapists employed by public community mental health centers report significantly more EE than those who are employed elsewhere (van der Ploeg, van Leeuwen, & Kwee, 1990). Cano-Garcia and colleagues (2005) found levels of PA to significantly differ between public and private school teachers, with the public employees endorsing lesser feelings of self efficacy. Other studies (e.g., Ackerley, et al., 1988), however, have revealed opposing findings, with work setting as a nonsignificant predictor of all three dimensions of burnout.

Additionally, Rupert and Morgan (2005) demonstrated that females report the highest levels of EE in agency settings and males report the highest levels of EE in independent settings. In a cross-sectional study, Schwartz and others (2007) found work setting to have a significant effect on the relationship between age and burnout, where burnout levels appeared to decrease as experience increased in private settings but remained relatively stable across ages in public settings. Thus, gender, tenure, and possibly many other types of variables may affect how an employee experiences his or her type of work setting.

Work Setting and Social Services Work

Contrary to the findings above, Mack (2001) reported turnover rates of social work positions to be twice as high in the private sector (40%) when compared to the public sector (20%). Perhaps public settings have more bureaucratic hiring and firing practices, which hinder supervisors' abilities to terminate unproductive staff. Notwithstanding, in a sample of 63 social workers who provided services in a variety of settings, only one participant indicated having minimal enthusiasm about his or her current work setting while the remaining participants indicated feeling quite enthusiastic about their place of work (Stasny, 2008). Accordingly, even if work setting is significantly associated with reported burnout rates, burned out social workers may not attribute their EE, DP, and RPA to the type of setting in which they work.

Client Variables

Working in health care professions involves many emotional and interpersonal job stressors. Although most helping professionals contend with similar demands, human service providers in the mental health realm are faced with many unique pressures

(Jenkins & Elliott, 2004). In fact, when using an identical measure of burnout, research has demonstrated that the level of EE in mental health professionals was higher than that of police officers, teachers, managers, and journalists (Oginska-Bulik, 2006a, 2006b).

Direct contact with chronic clients with more complex issues has been identified as more distressing and undesirable than contact with other types of individuals (Farber, 1983; Maslach, 1978). Staff burnout has been associated with having clients with a poor prognosis (Maslach, 1978); schizophrenia, psychosis, and chronic mental illness (Beck, 1987; Finch & Krantz, 1991; A. Pines & Maslach, 1978); substance use (Knudsen, Ducharme, & Roman, 2006; Shoptaw, et al., 2000); and frequent exhibition of negative, aggressive, or stressful behaviors (Ackerley, et al., 1988; Kandolin, 1993; Rupert & Morgan, 2005; Skorupa & Agresti, 1993). In fact, similar rates of burnout have been found between mental health workers and the relatives of persons with schizophrenia or depression (Angermeyer, et al., 2006).

Several theorists have determined that—in people who work with LTMI—high burnout rates are attributable to one's initial expectations when entering the field of human services. Freudenberger (1981) claimed that burnout consists of a combination of idealistic expectations and negative client outcomes. Such a situation is quite common in most human services, but with chronic clients, in particular, consistent progress or improvement often goes unnoticed. When an employee is faced with a client who does not appear to change despite the worker's interventions, a sense of failure—a documented precursor of burnout—may follow (Maslach, 1978; Raquepaw & Miller, 1989; Ratliff, 1988).

Client Variables and Social Services Work

Many researchers have claimed that people are drawn to work in social services due to their need to be helpful (Acker, 1999; Borland, 1981; Egan, 1993). Thus, they tend to be quite sensitive and emotionally affected by clients' difficulties, even more so than other human service professionals (e.g., A. Pines & Kafry, 1978). Despite this general postulation, most studies that have focused on burnout of social workers or case managers fail to take client variables into consideration or have found weak associations (e.g., Acker, 1999; Boyer, 1991).

Job Insecurity

Job insecurity has been described as a "perception of a potential threat to continuity in his or her current job" (Heaney, Israel, & House, 1994, p. 1431). The current empirical literature has reported this anticipation of involuntary job loss as a common work stressor (Ashford, Lee, & Bobko, 1989; Barling & Kelloway, 1996; Fox & Chancey, 1998; Mauno, Leskinen, & Kinnunen, 2001). When an employee subjectively experiences job insecurity, his level of job satisfaction as well as his physical and emotional health may be negatively affected. A meta-analysis utilizing 37 study samples (Sverke, Hellgreen, & Naswall, 2002) reported that there is a moderate, inverse relationship between job insecurity and mental health ($r = -.237$), which was stronger than that between job insecurity and physical health. A study more specific to burnout which surveyed staff from the health sector revealed small but significant associations between job insecurity and EE ($r = .17$) and between job insecurity and RPA ($r = .22$) but a nonsignificant association between job insecurity and DP (Landsbergis, 1988). Another investigation sampling hospital workers (Greenglass & Burke, 2002) found job insecurity

to be a significant predictor of EE ($\beta = .15$) and cynicism (i.e., DP; $\beta = .17$) but did not add unique contribution to the model predicting professional efficacy, which is similar to PA.

Job Insecurity and Social Services Work

Given the current economy and associated fiscal restraint within organizations, especially mental health settings, social services workers are at a real risk for losing their jobs (National Mental Health Association, 2008). During such difficult times, social services workers are expected to perform more work in less amount of time, which can lead them to feeling stressed and insecure about job continuity (Pottage & Huxley, 1996). Interestingly, however, some published studies (De Witte, 1999; Westman, Etzion, & Danon, 2001) indicated that the effect of job insecurity on burnout was significant for men but not for women. Given that the field of social services is dominated by women, this finding may be indicative of how minor the effect of job insecurity is on burnout in these staff. Furthermore, in an attempt to demonstrate that certain types of workers experience different levels of burnout, Sverke and colleagues' (2002) meta-analysis failed to demonstrate that manual and nonmanual workers reported significantly different levels of job insecurity. In fact, there is a paucity of research focusing on mental health workers that includes job insecurity as a variable associated with burnout. Such research is indicated in order to clarify the effect of this occupational stressor on burnout in these staff.

Conclusion

Social services workers with excessive psychological job demands, minimal decision latitude, poor social support, and perceived job insecurity appear to be the most

at-risk for burnout. Such a risk is also increased for those who work with difficult or chronic populations. Moderation effects appear to be salient when considering the relationship between the context in which one works and burnout. The need to investigate job-related factors associated with burnout in social services workers is necessary in order to address discrepancies in the literature and to delineate factors associated with this subgroup.

Individual Precursors of Burnout

There has been much exploration into the demographic and characterological antecedents of occupational stress and staff burnout. In fact, many researchers have applied well-known psychological theories to conceptualize the development of the phenomenon. Whether the literature relates burnout to ‘grandiose narcissism’ (Fischer, 1983), ‘depressive narcissism’ (Glickauf-Hughes & Mehlman, 1995), or a drive to realize existential significance from work (A. Pines, 1996), individual factors are often assessed in burnout research in order to substantiate the most reliable correlates and causes of EE, DP, and RPA. Although attention to demographics is important given their significance in prevention efforts, this section focuses on the empirical findings in relation to personality variables and burnout.

Demographic Factors

As is the case in all types of research, burnout investigators almost always report the demographic characteristics of the sample studied. These variables are typically used in statistical analyses as control variables but—at times—have turned out to be moderately significant predictors of EE, DP, and RPA. The demographics cited most often in the literature, age and gender, are discussed.

Age

By and large, younger human service providers report more elevated levels of burnout (e.g., Salyers & Bond, 2001; Sundin, et al., 2007). The literature makes reference to the commonality of idealistic expectations when entering the workforce and how burnout may be related to young professionals learning the reality of working in a 'helping' profession (Schultz, et al., 1995). Making definitive conclusions about the predictive quality of age in reference to burnout, however, has been problematic. Lower levels of burnout found in older professionals may be a result of premature resignation of all of the burned out professionals, leaving the most resilient workers as representative of the higher age bracket (Gomez & Michaelis, 1995; Van Humbeeck, Van Audenhove, & Declercq, 2004). Furthermore, the moderating effects of other variables such as tenure and number of direct contact hours cannot be ignored when interpreting a negative relationship between age and burnout (Beck, 1987; Maslach, 2001; Naisberg-Fennig, Fennig, Keinan, & Elizur, 1991).

Gender

Gender differences in burnout are unclear. Several studies report that males suffer from more EE (Hoeksma, Guy, Brown, & Brady, 1993; van der Ploeg, et al., 1990) and turnover intention (Knudsen, et al., 2006) but less DP (LeCroy & Rank, 1987) and RPA (Hoeksma, et al., 1993). Others indicate that females reported slightly higher scores on all three burnout components, more physical pathology including vegetative symptoms and loss of libido, and more absenteeism due to illness (Rees & Cooper, 1990; Sundin, et al., 2007). Maslach's extensive review of burnout literature (2001), however, concluded that no gender differences are apparent, with the exception of males scoring

higher on scales of cynicism. Nonetheless, this general supposition is deficient in that possible differences between occupational groups are not considered. In fact, studying burnout factors in relation to gender may illuminate how prevention and intervention efforts in mental health settings may reduce burnout in some (e.g., offering time to vent in staff meetings to bring about a sense of relief) but lead to more burnout in others (e.g., hearing about others' problems in staff meetings intensifies feelings of stress and pressure).

Personality Factors

Personality can be defined as an individual's typical pattern of thinking, feeling, and acting. These biological and learned traits are considered to be ego-syntonic and stable across different situations (Choca, 2004). More than 150 burnout studies have assessed personality characteristics with the intention of improving insight into the development and maintenance of burnout. Researchers have explored many different individual traits such as defense mechanisms (e.g., Pompili, et al., 2006) and locus of control (e.g., Buhler & Land, 2003) and how they relate to burnout. Due to the valid and comprehensive nature of factor-analyzed variables, the focus of contemporary burnout research has turned towards the 'Big-Five' model (Goldberg, 1993). According to the model, personality can be reduced to five diverse factors: (1) neuroticism, (2) extraversion, (3) openness to experience, (4) agreeableness, and (5) conscientiousness. Each is described and discussed in relation to its connection with burnout.

Neuroticism

A tendency to be overly emotional, anxious, worrisome, irritable, distressed, and nervous characterizes neuroticism (Burisch, 1994, as cited in Buhler & Land, 2003;

George, 1989). Larsen (1992) proposed that neuroticism may intensify negative responses to distressing stimuli in the environment. With a combination of heightened responsiveness to negative experiences and inherent avoiding and distracting coping strategies, a neurotic individual is more vulnerable to suffering from low self-esteem, feelings of guilt and frustration, sleep disturbance, and a variety of psychosomatic symptoms (Bolger, 1990; Eysenck & Eysenck, 1991; Heppner, Cook, Wright, & Johnson, 1995; McCrae, 1991).

Not surprisingly, the strongest empirical connections between personality and burnout are those involving neurotic traits. Neurotic staff have a propensity to set excessively high goals for themselves (Eysenck, 1947); are less able to perform their job tasks efficiently (Drebing, McCarty, & Lombardo, 2002; Gandoy-Crego, et al., 2009); and are more likely to focus on negative aspects of conversations even when receiving social support from coworkers (Zellars & Perrewe, 2001). Thus, human service providers with neuroticism endorse higher levels of EE, DP, and RPA (Bakker, et al., 2006; Deary et al., 1996; Francis, Loudon, & Rutledge, 2004; Mills & Huebner, 1998; Zellars & Perrewe, 2001). In fact, Cano-Garcia and colleagues (2005) found neuroticism to be the strongest predictor of EE ($\beta = .72$) when various contextual and individual variables were also included in the regression model.

Extraversion

Extraversion consists of sociable, sanguine, and assertive traits (Block, 1961; Botwin & Buss, 1989). Extraverts are considered to be active sensation-seekers who generally appraise their environment as positive (Bakker, et al., 2006; Costa & McCrae, 1992). Extraverts' optimistic temperament may give rise to their tendency to engage in

many activities, seek social support, and use logical problem-solving skills as means of coping with stressful situations (Dorn & Matthews, 1992; Watson & Hubbard, 1996).

In numerous studies of human service professionals, extraversion has been negatively and significantly related to all three dimensions of burnout and found to be most predictive of PA (e.g., Bakker, et al., 2006; Francis, et al., 2004; Zellars & Perrewe, 2001). For school psychologists, extraversion accounts for 10% of the variance of EE and 24% of the variance of PA over and above occupational stressors and other personality variables, where those who reported high EE and high RPA endorsed introverted tendencies (Mills & Huebner, 1998). Extraversion has even been described as a protective factor in the burnout literature (Costa & McCrae, 1980). Eastburg and colleagues (1994), however, found that this personality attribute buffers one's chances of developing burnout only when extraverts also perceived their social support as adequate. Thus, although extraverts opt to socialize with others and seek social support, conceivably the support must be reciprocated in order to reduce the chances of EE, DP, and RPA.

Openness to Experience

A curious, ingenious, creative, and flexible person is definitive of someone open to experience (John, 1990; Watson & Hubbard, 1996). Instead of focusing on the negative, an open person is likely to convert a taxing experience into an opportunity to expand one's knowledge and to grow as a person in the process (Barrick & Mount, 1991). Moreover, an open person is sensitive to the affect of others and commonly utilizes humor as a coping mechanism (McCrae & John, 1992).

Openness to experience has been found to be positively related to EE and RPA (Deary, et al., 1996; Zellars, et al., 2000). In a longitudinal burnout study, Burisch's (2002) results indicate that openness is a positive significant predictor of DP ($\beta = .24$). Other researchers, however, have asserted that openness to experience has nonsignificant associations with all three burnout dimensions (Michielsen, Willemsen, Croon, De Vries, & van Heck, 2004; Piedmont, 1993). Whether the association between openness and burnout is positive or nonsignificant, the literature indicates that, despite their flexibility and humor, open individuals seem to be susceptible to occupational stress due to their empathic and sensitive qualities. This conclusion appears to be intuitive in that those who have the propensity to be open in all interpersonal relationships are likely to have less clear boundaries with clients. If this is the case, working with difficult and taxing populations may lead open individuals to be more vulnerable to emotional consequences of mental health service.

Agreeableness

An agreeable person can be described as modest, straightforward, and trustworthy (Bakker, et al., 2006; John & Srivastava, 1999). Agreeableness reflects a tendency to provide nurturance and aid to others and has been associated with humanitarianism (Digman, 1990). Agreeable persons are likely to be guided by their emotions and their sympathetic nature (McCrae & Costa, 1989). As a result, others typically view agreeable individuals as pleasant and benevolent (McCrae, Costa, & Busch, 1986).

Having traits of agreeableness appears to buffer an employee's chances of developing at least two of the components of burnout. Due to their tendermindedness, agreeable helping professionals are significantly less likely to depersonalize consumers of

their services (Bahner & Berkel, 2007; Mills & Huebner, 1998; Zellars, et al., 2000). With a drive to engage in altruistic behaviors, those who endorse traits of agreeableness tend to report high levels of PA (Bakker, et al., 2006; Zellars & Perrewe, 2001). In a meta-analysis of 163 studies of the Five-Factor model of personality, Judge, Heller, and Mount (2002) report a positive and significant correlation between agreeableness and job satisfaction ($r = .17$). However, their comprehensive review did not delineate the differences between occupational groups or subgroups.

Conscientiousness

Reliable, responsible, and organized are adjectives researchers have used to define the conscientiousness personality trait (e.g., McCrae & John, 1992). Due to their tendency to be deliberate in their actions and quite self-disciplined, conscientious people are driven to accomplish tasks efficiently (Bakker, et al., 2006). Strong knowledge of adaptive and effective problem-solving skills is also associated with conscientiousness (Watson & Hubbard, 1996).

Research demonstrating a strong relationship between conscientiousness and burnout is limited. A few studies have reported this personality trait to be significantly associated with PA (Deary, et al., 1996; Deary, Watson, & Hogston, 2003; Piedmont, 1993). Mills and Huebner (1998) demonstrated that in school psychologists conscientiousness was negatively related to EE ($r = -.37$). Rogerson and Piedmont (1998) found that clergymen who have the trait are less likely to endorse EE or DP. However, among volunteer counselors caring for terminally ill patients, Bakker and colleagues (2006) observed no significant correlations between conscientiousness and

any of the three burnout dimensions. Hence, discrepancies within the literature are apparent and need to be addressed.

Conclusion

Overall, neuroticism, extraversion, and agreeableness appear to be the most salient individual factors in the prediction of burnout. These variables appear to be more closely related to EE and RPA than DP. Investigations into biological characteristics, openness to experience, and conscientiousness and how they relate to burnout have been less conclusive. Researchers have argued that specific personality types are driven to work in the social services realm (for a review, see Lloyd, King, & Chenoweth, 2002). Nevertheless, given that burnout is not inevitable for workers in social services, individual differences appear to be significant in the exploration of the mitigation of burnout.

Which Variables Are the “Best” Predictors?

As indicated above, the current burnout literature has put much emphasis on determining the factors associated with more—or less—burnout. Many different types of multiple regression models with dozens of individual and environmental factors, specifically those of the employee and the workplace, have been presented. The following presents different views about which types of variables account for the most amount of variance of each of the three dimensions of burnout. A comparison of the predictive value of contextual versus personality aspects is followed by a discussion about a prospective interactional model of predicting job burnout.

Studies Favoring Contextual Predictors

An overwhelming number of studies have deduced that burnout is strongly associated with the context in which it develops. When compared to demographics, Billingsley and Cross (1992) found contextual variables to account for more variance in each of the three dimensions of burnout. The results from Zellars and colleagues (2000) indicate that contextual factors are stronger predictors of burnout than personality traits. Moreover, Schultz and collaborators (1995) report that—even when controlling for demographics, level of professional behavior (i.e., the number of professional meetings attended which were not mandated by the organization), and client characteristics—contextual variables and management process variables influence reported job satisfaction and burnout rates. In Maslach's 2001 review of burnout literature, she described contextual variables (i.e., work overload and personal conflict at work) as primary antecedents of burnout.

Studies Favoring Personality Predictors

A multitude of studies that assessed both individual and contextual variables contend that job burnout can be most appropriately attributed to personality factors. Oyefeso and others (2008) contend that individual dimensions such as personality, attitudes, need for achievement, and motivation are stronger risk factors for psychological morbidity than conditions in the workplace. Thompson and colleagues (1993) found dispositional variables to account for a significant amount of variance over and above work-related variables. Other researchers (Burisch, 2002; Cano-Garcia, et al., 2005) demonstrate findings that indicate personality traits as more appropriate predictors of PA and DP but not EE. As Burisch (2002) so simply put it: "Personality matters" (p. 15).

An Interactional Model

Many studies incorporate a combination of both individual and contextual variables to provide the most explanatory power of burnout. Even as early as 1976, moderation effects of personality on the relationship between contextual variables (i.e., role ambiguity) and job satisfaction were examined and found to be significant (Beehr, Walsh, & Taber, 1976, as cited in Abramis, 1994; Brief & Aldag, 1976, as cited in Abramis, 1994). Following this transactional speculation, more recent researchers have examined the possibility that personality aspects affect the way in which a worker adaptively utilizes available resources such as social support, which, in turn, affects one's chances of developing burnout (Fagin et al., 1996; Watson, David, & Sula, 1999; Zellars & Perrewe, 2001). Another group of researchers discuss findings that indicate that the presence of negative experiences at work moderated the relationship between personality and dimensions of burnout (Bakker, et al., 2006). For example, neurotic participants who reported minimal negative experiences also denied symptoms of EE. On the whole, it is possible that many different types of interactions contribute to the prediction of the burnout dimensions.

In other exploratory studies, researchers (e.g., Ablett & Jones, 2007; Bahner & Berkel, 2007; Cherniss, 1980) have discussed the hypothesis that the interaction between an employee's disposition and the context in which s/he works is predictive of burnout. Bakker and others (2006) described personality factors as "burnout buffers against known risk factors in human service work" (p. 46). Such a statement appears to make logical sense. Considering the fact that only a certain percentage of employees develop burnout despite working in the same organization, one may conclude that individual differences,

specifically those concerning demographics and personality characteristics, may account for the way in which burnout develops under stressful conditions. Bakker and colleagues (2006) explain the phenomenon in a practical way: “Individual differences in relation to burnout do not reflect an inborn tendency to develop the symptoms typically associated with burnout but rather differential reactions to stressful situations” (p. 45).

Purpose of the Study

The effects of staff burnout can be detrimental to the quality of care of clients (Maslach, 1982; Prosser, et al., 1996; Rowe & Sherlock, 2005), and many argue that providing services to consumers while burned out is a violation of ethical standards (e.g., Skorupa & Agresti, 1993). Thus, the consequences of staff burnout are what typically drive exploratory investigation into the causes and correlates of burnout. Identifying the risk factors and protective factors of burnout in specific occupational groups is essential, not only to assure the proper care for clients but also to develop interventions and hiring practices to reduce the amount of staff burnout in each type of professional setting.

Pottage and Huxley (1996) assert that despite personality factors and a negative work environment, social workers in general tend to be resilient and more able to resist developing occupational stress. Nevertheless, Lloyd and colleagues (2002) contend, “The quantity and quality of the empirical research is weak but there is some evidence that social workers experience high levels of stress and consequent burnout” (p. 261). Moderate to severe levels of burnout have been found in the majority of burnout studies to date focusing on mental health workers (Harper & Minghella, 1997, as cited in Ogrresta, et al., 2008). Thus, a focus on social services workers appears to be necessary to verify the risk factors for burnout in this vulnerable population.

Differences between occupational groups have been documented in the burnout literature (e.g., Maslach, et al., 1996), but less emphasis has been placed on differences within an occupational group. Considering that the few studies that have analyzed client variables have attributed high burnout rates to the more difficult and chronic consumers (e.g., Farber, 1983; Maslach, 1978), an examination of the predictors of burnout in a subset of social services workers (i.e., those who serve clients with LTMI) appears to be sensible as well.

In sum, the current research addresses the problem of burnout in social services workers who work with LTMI. This research will help to identify individuals who are likely to develop burnout as well as the organizational factors that foster more EE, DP, and RPA. The aim of the study is to identify critical factors in this occupational subgroup with the ultimate goal of developing burnout prevention programs to address and minimize those barriers to optimal staff functioning. A series of multiple regression models were structured to test the following theoretically derived hypotheses.

Hypotheses

The following table illustrates the hypothesized relationships between the three burnout dimensions and the personality and organizational variables. It was proposed that each of the personality and organizational characteristics would be significantly associated with all three dimensions of burnout. Neuroticism, openness, excessive psychological demands, and job insecurity would be positive and significant predictors of all three dimensions of burnout. Extraversion, agreeableness, conscientiousness, decision latitude, and perceived coworker and supervisor support would be inversely related to all burnout dimensions. Individuals who often work in direct contact with clients and those

who work with LTMI would report higher levels of EE, DP, and RPA. Furthermore, exploratory analyses were conducted to ascertain if the effects of organizational variables on burnout vary as a function of specific personality variables.

Table 1

Hypothesized Strength and Direction of Relationships among Predictors and Burnout Dimensions

	EE	DP	RPA
Extraversion	-	-	--
Agreeableness	-	--	--
Conscientiousness	-	-	-
Neuroticism	+++	++	++
Openness	+	+	+
Decision Latitude	--	--	---
Psychological Demands	+++	++	++
Job Insecurity	+	+	+
Coworker Support	--	-	---
Supervisor Support	---	-	---
% LTMI	+++	++	+++
Direct Contact	++	++	+

EE = Emotional Exhaustion, DP = Depersonalization, RPA = Reduced Personal Accomplishment

+/- = weak/small magnitude

++/-- = moderate magnitude

+++/-- = large magnitude

CHAPTER III: METHOD

Participants

Sample Size and Composition

Participants were 114 English-speaking staff members (18.4% male) ages 24 to 77 years ($M = 42.62$, $SD = 11.630$). The sample included predominately Caucasian adults (63.2%). Fewer participants described themselves as being African-American or Black, non-Hispanic (22.8%), Hispanic or Latino (9.6%), or “Other” (4.4%). The largest percentage of respondents identified themselves as married (43.9%) and reported having obtained graduate-level education (71.1%).

Participants were recruited from 16 mental health facilities in South Florida (e.g., community mental health centers, chemical dependency programs). The participating locations were described as either private not for profit (69.3%), public (14.9%), or private for profit (7.9%). Participants included mental health counselors (37.7%), social workers (30.7%), case managers (9.6%), psychologists (7.0%), mental health technicians (3.5%), and “Other” mental health professionals (8.8%) who have worked an average of 9.60 years ($SD = 8.423$) in their profession and an average of 4.52 years ($SD = 5.255$) at their current place of employment.

Subject Selection, Recruitment, and Eligibility Requirements

Directors of prospective agencies were sent letters in order to introduce the project (See Appendix A). Follow-up phone calls were made and letters of approval from the agencies that agreed to participate were gathered. Inclusion criteria required that participants: (a) are direct contact staff from regional community mental health

centers, social service agencies, and chemical dependency programs; and (b) are English-speaking.

Measures

Demographic information was assessed, including information about age, gender, marital status, ethnicity, and education. Moreover, the questionnaire included items about one's job, specifically about job title, tenure, work setting, percentage of clients with one or more chronic diagnoses (i.e., recurrent Major Depressive Disorder, Bipolar Disorder, Obsessive Compulsive Disorder, Schizophreniform Disorder, Schizoaffective Disorder, Schizophrenia, Borderline Personality Disorder, chronic Substance Abuse, and chronic Substance Dependence), and weekly direct contact hours, counseling hours, and concrete case management hours. Staff were also queried about whether s/he had had thoughts of seeking mental health treatment due to job-related stress and if s/he had experienced a variety of physical conditions (i.e., flu, common cold, headaches, chronic fatigue, musculoskeletal disorder, sleep disturbance, gastro-intestinal disorder or digestive disease, sexual dysfunction, cardiovascular disease, Type II Diabetes, high blood pressure, high cholesterol, and respiratory disease). Additional standardized self-report measures were also included in the questionnaire to measure organizational variables, personality domains, and burnout.

Job Content Questionnaire

The Job Content Questionnaire (JCQ; Karasek et al., 1985) is a self-report inventory of eight dimensions of occupational stress. The most commonly job stress assessment utilized (Hurrell, Nelson, & Simmons, 1998), the JCQ assesses several job stress domains including (1) decision latitude (i.e., skill discretion and decision

authority), (2) psychological job demands, (3) job insecurity, (4) supervisor social support, and (5) coworker social support. Karasek and colleagues (1998; 1990) report reliability coefficients for each of the scales in the recommended 49-item version to range from .58 to .86 and test-retest reliabilities to be higher than .90.

Big Five Inventory

The Big Five Inventory (BFI; John, Donahue, & Kentle, 1991) assesses the five global dimensions of personality with 44 items using a Likert scale. The self-report measure uses short phrases in order to measure for an individual's propensity for (1) neuroticism, (2) extraversion, (3) openness to experience, (4) agreeableness, and (5) conscientiousness. Reliability coefficients of the BFI scales range from .75 to .90, and test-retest reliabilities average above .85 (John & Srivastava, 1999). Ratings of convergent and divergent validities with other Big Five measures have been reported as "substantial" (p. 22).

Maslach Burnout Inventory

The Maslach Burnout Inventory—Human Services Survey (MBI—HSS; Maslach, et al., 1996) is a self-report survey developed to measure the three dimensions of burnout in human services professionals. The MBI—HSS consists of 22 Likert-scale items and is considered among researchers to be the gold standard of burnout assessment (Schaufeli & Enzmann, 1998). Alpha coefficients for internal consistency range from .70 to .90 and test-retest reliabilities range from .60 to .82. Convergent validity appears to be strong, and divergent validity is "reasonably well established" (p. 53).

Procedures

With approval from the Institutional Review Board at Nova Southeastern University, questionnaires were distributed in person to each of the consenting agencies. Questionnaires were either handed out to each potential participant during work hours, placed in mailboxes, or left with the director of the agency who distributed the questionnaires to staff at a later time. Filling out the questionnaire took approximately 10 to 15 minutes. Once the questionnaire was completed, each participant mailed the participation letter and the questionnaire in an addressed and stamped envelope. A second participation letter for the participant to retain for his or her own records was provided. No compensation was provided for participation. Of note, if a potential participant chose not to participate, an empty box was left at each agency for blank questionnaires. Refer to Appendices B and C for a complete copy of the participation letter and the paper and pencil questionnaire that was presented to the participant.

Analyses

A series of Pearson's product-moment correlational analyses and multiple regression models were estimated to examine the hypotheses of interest. Analyses of variance (ANOVAs) and t tests were used to explore group differences. Regression models were structured such that the unique variance attributed to two sets of theoretical predictors (i.e., personality factors and organizational variables) was evaluated. Furthermore, exploratory analyses of interaction effects were conducted with multiple regression models. For all regression analyses, standardized regression coefficients, exact probability values, and a relevant measure of effect size (e.g., R^2 change statistics) were examined.

CHAPTER IV: RESULTS

Data analysis was completed utilizing the Statistical Package for the Social Sciences (SPSS), Version 16.0.

Participants

Participants were 114 English-speaking staff members (18.4% male) ages 24 to 77 years ($M = 42.62$, $SD = 11.630$) recruited from 16 mental health facilities in South Florida. The sample included predominately Caucasian adults (63.2%). The largest percentage of respondents identified themselves as married (43.9%) and reported having obtained graduate-level education (71.1%). Participants included mostly mental health counselors (37.7%) and social workers (30.7%).

Burnout Dimensions and Related Constructs

Respondents' levels of the three dimensions of burnout (i.e., Emotional Exhaustion [EE], Depersonalization [DP], and Reduced Personal Accomplishment [RPA]) were assessed utilizing the Maslach Burnout Inventory—Human Services Survey (MBI-HSS). In comparison to normative data from the MBI manual (Maslach, et al., 1996), average levels of the three burnout dimensions were in the low to moderate range (Table 2), with participants reporting more EE than the other two dimensions. Of note, the scale for each item was 0 (“Never”) to 6 (“Everyday”).

Table 2

Descriptive Statistics of the Three Dimensions of Burnout

	<i>n</i>	<i>Mean</i> <i>Total</i>	<i>SD</i> <i>Total</i>	<i>Mean</i> <i>Item</i>	<i>SD</i> <i>Item</i>	Low	Moderate	High
EE	111	17.68	9.692	1.97	1.075	0-16	17-26	27-56
DP	110	3.60	3.841	.72	.772	0-6	7-12	13-30
RPA	111	7.96	5.826	1.04	.869	0-9	10-16	17-48

A series of one-way analysis of variance (ANOVA) models and independent samples t tests were analyzed to explore potential differences in burnout based on demographic characteristics. Results indicated that levels of RPA in the sample varied as a function of ethnicity, $F(3, 107) = 3.361, p = .022$, with Black or African American respondents reporting significantly higher RPA than Hispanic or Latino participants and Caucasian participants. Additionally, levels of RPA varied as a function of level of education, $F(3, 106) = 3.132, p = .029$, with college graduates reporting significantly higher RPA than individuals who attended “some college.” Results from post hoc comparisons from ANOVAs can be found in Table 3. Lastly, results of a Pearson product-moment correlational analysis demonstrated that age and EE were weakly and significantly associated ($r = -.196, p = .040$), meaning that as age increased, EE decreased. However, the relationships between age and DP ($r = -.151, p = .117$) as well as age and RPA ($r = -.158, p = .099$) were not significantly related, indicating that levels of DP and RPA were consistent regardless of age.

In order to gather more candid information about work-related stress levels, participants were also asked about their thoughts on seeking mental health treatment due to their job-related stress. Of those surveyed, 22.8% of staff indicated having thought about seeking mental health treatment due to work-related stress, 61.4% denied having thought about seeking treatment for such stress, and 15.8% chose not to answer the questionnaire item. Furthermore, participants were queried about a number of possible health problems to assess for potential physical consequences of work-related stress. On average, respondents acknowledged having experienced 1 to 2 health conditions ($SD = 1.554$); the most common physical ailments reported were sleep disturbance (33.3%),

Table 3

Results from Post Hoc Pairwise Comparisons Testing Differences in Burnout based on Demographics

	<i>t</i>	<i>p</i>	<i>d</i>
RPA*Ethnicity			
Black or African-American – Hispanic or Latino	2.376	.116	.802
Black or African-American – Caucasian	2.526	.078	.573
Black or African-American – Other	-0.425	1.000	-.182
Hispanic or Latino – Caucasian	-0.846	1.000	-.308
Hispanic or Latino – Other	-1.854	.399	-1.193
Caucasian – Other	-1.572	.713	-.836
RPA*Education			
High School Grad – Some College	1.268	1.000	1.266
High School Grad –College Grad	-0.307	1.000	-.174
High School Grad – Graduate School	0.341	1.000	.256
Some College – College Graduate	-1.268	.022	-1.085
Some College –Graduate School	-2.978	.262	-.830
College Graduate – Graduate School	1.953	.321	.462

recurrent headaches (24.6%), chronic fatigue (16.7%), gastro-intestinal disorder or digestive disease (16.7%), high cholesterol (15.8%), and high blood pressure (12.3%).

Results of independent samples *t* tests indicated that participants who disclosed that they had thought about seeking mental health treatment about work-related stress reported higher EE ($t(91) = -1.989, p = .050, d = -.438$) and lower RPA ($t(91) = 2.216, p = .029, d = .511$). Of note, levels of burnout did not significantly vary as a function of agency, gender, marital status, type of job, type of job setting, or total number of endorsed health conditions. Furthermore, results of a Pearson product-moment correlational analysis demonstrated that LTMI was not significantly related to EE ($r = -.107, p = .262$), DP ($r = .098, p = .309$), or RPA ($r = -.046, p = .635$), indicating that burnout levels were consistent regardless of the number of LTMI clients in one's caseload.

Organizational Variables

Organizational stressors were assessed using both standardized (i.e., the Job Content Questionnaire [JCQ]) as well as nonstandardized questions (i.e., percentage of clients with long-term mental illness and/or chronic substance use disorders [LTMI] and number of direct contact hours, counseling hours, and concrete case management hours). Staff reported having a majority of clients with LTMI ($M = 72.07\%, SD = 36.000$) and spending an average of 21.97 hours ($SD = 12.428$) in direct contact with consumers each week. On average, respondents engaged in more counseling hours ($M = 14.36, SD = 9.157$) than concrete case management hours ($M = 9.51, SD = 12.562$).

Using one-sample *t* tests, respondents' scores on the JCQ dimensions were compared to the norms of similar professionals (i.e., social workers) reported in the JCQ

manual (Karasek, et al., 1985). As indicated in Table 4, surveyed staff indicated significantly lower decision latitude ($t(108) = -3.843, p < .001, d = -.346$) and coworker support ($t(111) = -3.995, p < .001, d = -.353$). In contrast, participants reported having experienced similar levels of psychological demands ($t(106) = -.222, p = .825, d = -.021$) and supervisor support ($t(108) = -1.898, p = .060, d = -.179$) and significantly higher levels of job insecurity ($t(110) = 2.952, p = .004, d = .270$), when compared to the normative sample. Despite the statistically significant differences between the groups, the effect sizes are small to moderate in magnitude.

Individual Variables

In addition to demographics, personality characteristics were measured utilizing the Big Five Inventory (BFI). As illustrated in Table 5, results of one-sample t tests indicated that surveyed staff demonstrated significantly lower neurotic tendencies ($t(112) = -9.530, p < .001, d = -.666$) and openness ($t(112) = -3.750, p < .001, d = -.332$) when compared to a normative sample (Srivastava, John, Gosling, & Potter, 2003). In contrast, participants reported significantly higher characteristics of extraversion ($t(112) = 6.755, p < .001, d = .536$), agreeableness ($t(112) = 15.487, p < .001, d = .821$), and conscientiousness ($t(112) = 15.146, p < .001, d = .816$) than the normative sample.

Correlations among Predictor Variables

With the exception of demographics, which were used as covariates in this study, 12 predictor variables were measured, including five personality dimensions and seven organizational variables (i.e., five JCQ dimensions, percent LTMI, and direct contact hours). To assess the degree of inter-correlation among these predictors, the magnitudes

Table 4

Descriptive Statistics of Current Sample, Scale Scores, and Results of One-Sample t Tests Comparing Sample Means with Scale Scores for Organizational Variables Derived from Job Content Questionnaire (JCQ)

	Current Sample		Scale Scores for Social Workers from JCQ manual		<i>t</i>	<i>df</i>	<i>p</i>	<i>d</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>				
Decision Latitude	69.05	7.773	71.90	10.020	-3.834	108	<.001	-.346
Psych. Demands	31.88	5.668	32.00	8.360	-.222	106	.825	-.021
Job Insecurity	5.38	1.743	4.89	2.250	2.952	110	.004	.270
Coworker Support	13.02	1.781	13.69	2.110	-3.995	111	<.001	-.353
Supervisor Support	12.62	3.000	13.16	3.090	-1.898	108	.060	-.179

Table 5

Descriptive Statistics of Current Sample, Normative Scores, and Results of One-Sample t Tests Comparing Sample Statistics with Normative Scores for Personality Dimensions Derived from the Big Five Inventory (BFI)

	Current Sample		BFI Norms		t	df	p	d
	M	SD	M	SD				
Extraversion	3.60	.650	3.18	.904	6.755	112	<.001	.536
Agreeableness	4.35	.475	3.66	.720	15.487	112	<.001	.821
Conscientiousness	4.31	.530	3.55	.732	15.146	112	<.001	.816
Neuroticism	2.39	.720	3.04	.876	-9.530	112	<.001	-.666
Openness	3.78	.552	3.98	.656	-3.750	112	<.001	-.332

of correlations were analyzed using Pearson product-moment correlational analyses. Results revealed several significant associations, most of which were small to moderate in strength (Table 6). Consistent with correlational analyses, tolerance levels derived from entering the full set of covariates and predictors into a linear regression model ranged from .786 to .133 for EE, from .865 to .549 for DP, and from .791 to .130 for RPA.

Prediction of Burnout

Prior to testing regression models to ascertain significant predictors of burnout, potential clustering of scores within the agencies was explored. Participants were mental health providers from 16 different agencies. Intra-agency response ranged from a low of two respondents (from four different agencies) to a high of 20 respondents (from a single agency). The average number of respondents per agency was 7.13 ($SD = 5.540$). As participants were clustered within an agency—a possible violation of the independent observations assumption of ordinary least squares regression—a series of random effects regression models were estimated to evaluate the degree of clustering. For the emotional exhaustion outcome, the intraclass correlation was trivially small ($r = .008$). For the other outcomes, the intraclass correlation could not be properly estimated because the between-agency variability was estimated at or near zero, resulting in model estimation problems. These data suggest that data clustering (i.e., the independent observations violation) was not a problem in the present study. As such, all analyses that follow were conducted using standard fixed effects ordinary least squares regression models.

Once the type of regression analysis was determined, the covariates and hypothesized variables that were to be used in each of the three prediction models—one

Table 6

Pearson's Product-Moment Correlations among Predictor Variables

	1	2	3	4	5	6	7	8	9	10	11	12
1. Extraversion	1											
2. Agreeableness	.202*	1										
3. Conscientiousness	.194*	.268**	1									
4. Neuroticism	-.067	-.346**	-.325**	1								
5. Openness	.070	.224*	.117	-.344**	1							
6. Decision Latitude	.393**	.198*	.292**	-.113	.123	1						
7. Psych. Demands	-.068	-.025	-.099	.139	-.009	.001	1					
8. Job Insecurity	-.133	-.022	-.066	.140	-.128	-.220*	-.005	1				
9. Coworker Support	.106	.088	.001	-.149	.212*	.375**	-.316**	-.317**	1			
10. Supervisor Support	-.021	.079	.001	-.058	-.014	.187	-.252*	-.263**	.363**	1		
11. % LTMI	.098	.150	.137	-.126	-.070	-.010	-.018	-.265**	-.131	-.009	1	
12. Direct Contact	.037	-.021	-.188*	-.036	.028	-.081	.101	.000	-.115	-.127	.223*	1

**Significant at the 0.01 level (2-tailed)

*Significant at the 0.05 level (2-tailed)

for each burnout dimension—were selected. Given the large number of variables assessed in this study, the following procedure was used to reduce the number of variables in each block of the regression analysis. Each burnout dimension was separately regressed on each covariate and hypothesized predictor to determine the strength of unique prediction of each variable (Table 7). In order to eliminate variables that were not meaningfully contributing to the prediction of burnout, the variables that accounted for less than 2% of the variance of a dimension were removed from the prediction model for that dimension.

For the sake of this research, some of the demographic variables (i.e., gender, marital status, ethnicity, education, job description, setting, and seeking mental health treatment) were considered to be qualitative rather than quantitative. In order to identify group membership without giving inherent meaning to the value assigned to a group, the variables were dummy-coded. Of note, there were two categories for gender with female as the reference group, five categories for marital status with “Single” as the reference group, four categories for ethnicity with the Black or African-American respondents as the reference group, five categories for education with “Some High School” as the reference group, six categories for job description with social workers as the reference group, three categories for work setting with the public setting as the reference group, and two categories for the “Seek Mental Health (MH) Treatment” question with “No” as the reference group. Moreover, given that the researcher was more interested in the total number of health conditions endorsed—as opposed to which individual conditions were endorsed—a “Composite Health” variable was created by summing the number of health conditions endorsed by each participant.

Table 7

R² Statistics from Several Separate Regression Models Predicting Burnout Dimensions

	EE	DP	RPA
Covariates			
Age	.038*	.023*	<.000
Gender	.019	.017	.025*
Marital	.018	.014	.012
Ethnicity	.019	.022*	.086*
Education	.045*	.010	.049*
Job Description	.056*	.039*	.056*
Setting	.002	.005	.020*
Total Tenure	.001	<.000	.029*
Current Tenure	.001	.012	.033*
Seek MH Treatment	.042*	.001	.051*
Composite Health	.017	.019	.011
Personality			
Extraversion	.014	.006	.089*
Agreeableness	.051*	.138*	.026*
Conscientiousness	.035*	.032*	.014
Neuroticism	.078*	.051*	.016
Openness	.051*	.049*	.107*
Organizational			
Decision Latitude	.009	<.000	.042*
Psychological Demands	.177*	.039*	.001
Job Insecurity	.016	.043*	.008
Coworker Support	.085*	.012	.055*
Supervisor Support	.129*	<.000	.002
% LTMI	.012	.010	.002
Direct Contact	<.000	.028*	.003

*Variable to be kept in the model

For all three burnout dimensions, demographics for the individual and the organization as well as the “Seek MH Treatment” and “Composite Health” variables that met the aforementioned cutoff criteria were treated as covariates and were therefore in the first block of the regression model. The second block in each model included the BFI personality dimensions that met the cutoff criteria. The third and final block was made up of the hypothesized organizational stressors that met the cutoff criteria. The following three tables offer the reader estimates of effect sizes relative to the variable’s scale (i.e., the unstandardized beta value [b]) and relative to the other predictor variables (i.e., the semi-partial correlation [r_{sp}]).

As demonstrated in Table 8, results from a hierarchal multiple regression model indicated that the entire set of predictor variables significantly predicted EE, $F(16, 70) = 2.963, p < .001, R^2 = .404$. The set of covariates and the set of personality variables did not account for a significant amount of variance of EE ($F(9, 77) = 1.821, p = .078, R^2 = .175$, and $\Delta F(4, 73) = 1.316, p = .272, \Delta R^2 = .055$, respectively), while organizational variables did contribute significant incremental variance to the model ($\Delta F(3, 70) = 6.763, p < .001, \Delta R^2 = .173$). Psychological demands was the only predictor that contributed a unique amount of variance of EE (6.0%) over and above the other predictors in the full model.

Results from another hierarchal regression model demonstrated that the full set of predictor variables significantly predicted DP, $F(16, 84) = 2.807, p = .001, R^2 = .348$ (Table 9). The set of covariates did not significantly predict DP ($F(9, 91) = 1.239, p = .282, R^2 = .109$) whereas the addition of the set of personality variables and the subsequent addition of the set of organizational variables offered significant incremental

Table 8

Results of Hierarchical Multiple Regression Predicting Emotional Exhaustion (EE)

	<i>b</i>	<i>SE</i>	<i>p</i>	<i>r_{sp}</i>
Set 1: Covariates				
$F(9, 77) = 1.821, p = .078, R^2 = .175$				
Age	-.137	.088	.125	.020
College Graduate	-.064	4.762	.989	.000
Graduate School	-.272	4.934	.956	.000
Social Worker	.685	3.321	.837	.000
MHC	.246	2.054	.905	.000
MHT	-7.323	6.290	.248	.011
Psychologist	-.195	3.444	.955	.000
“Other” Job Description	2.801	3.588	.438	.005
Seeking MH Treatment	2.393	2.080	.254	.011
Set 2: Personality				
$\Delta F(4, 73) = 1.316, p = .272, \Delta R^2 = .055$				
Agreeableness	.539	2.122	.800	.000
Conscientiousness	-1.056	1.747	.547	.003
Neuroticism	1.893	1.413	.185	.015
Openness	-1.366	1.774	.444	.005
Set 3: Organizational				
$\Delta F(3, 72) = 7.080, p < .001, \Delta R^2 = .176$				
Psychological Demands**	.434	.164	.010	.060
Coworker Support	-.678	.529	.204	.014
Supervisor Support	-.604	.319	.063	.031

MHC = Mental Health Counselor, MHT = Mental Health Technician

All coefficients are from final model

**Significant at the 0.01 level

Table 9

Results of Hierarchical Multiple Regression Predicting Depersonalization (DP)

	<i>b</i>	<i>SE</i>	<i>p</i>	<i>r_{sp}</i>
Set 1: Covariates				
$F(9, 91) = 1.239, p = .282, R^2 = .109$				
Age	-.029	.035	.415	.005
Hispanic	-1.008	1.316	.446	.005
Caucasian	-.259	.937	.783	.000
“Other” Ethnicity	1.322	1.987	.508	.003
Social Worker	1.410	1.249	.262	.010
MHC	-.719	.832	.390	.006
MHT	-1.372	1.999	.494	.004
Psychologist	-.073	1.502	.961	.000
“Other” Job Description	-.679	1.345	.615	.002
Set 2: Personality				
$\Delta F(4, 87) = 4.122, p = .004, \Delta R^2 = .142$				
Agreeableness**	-2.749	.877	.002	.076
Conscientiousness	-.911	.767	.239	.011
Neuroticism	.259	.581	.657	.002
Openness	-.627	.684	.362	.006
Set 3: Organizational				
$\Delta F(3, 84) = 4.179, p = .008, \Delta R^2 = .097$				
Psychological Demands	.088	.063	.164	.015
Job Insecurity*	-.488	.208	.021	.042
Direct Contact	.059	.032	.064	.027

MHC = Mental Health Counselor, MHT = Mental Health Technician

All coefficients are from final model

**Significant at the 0.01 level

*Significant at the 0.05 level

variance to the model ($\Delta F(4, 87) = 4.122, p = .004, \Delta R^2 = .142$, and $\Delta F(3, 84) = 4.179, p = .008, \Delta R^2 = .097$, respectively). While controlling for the other variables in the model, agreeableness and job insecurity accounted for a respective 7.6% and 4.2% of the variance of DP. Of note, job insecurity's relationship with DP was not in the predicted direction.

Table 10 illustrates the results of the third hierarchal regression model, where the full set of assessed variables significantly predicted RPA, $F(21, 67) = 2.454, p = .003, R^2 = .435$. The first two sets of variables (i.e., covariates and personality) significantly contributed to the model ($F(16, 72) = 2.212, p = .012, R^2 = .330$, and $\Delta F(3, 69) = 4.074, p = .010, \Delta R^2 = .101$, respectively), but organizational variables did not add significant incremental variance to the model ($\Delta F(2, 67) = .255, p = .776, \Delta R^2 = .004$). Relative to the Black or African-American group, Hispanic or Latino participants reported lower levels of RPA, accounting for 6.6% of the variance. Similarly, Caucasian participants reported lower levels of RPA than Black or African-American respondents, accounting for 10.5% of the variance.

Interactions

In order to test the investigator's final hypothesis, several personality-by-organizational interactions as well as organizational-by-organizational interactions were tested using hierarchal multiple regression models. Results indicated that none of the proposed interactions were significant. Values of R^2 change statistics ranged from less than .001 to .019 for EE, from less than .001 to .018 for DP, and from .001 to .012 for RPA.

Table 10

Results of Hierarchical Multiple Regression Predicting Reduced Personal Accomplishment (RPA)

	<i>b</i>	<i>SE</i>	<i>p</i>	<i>r_{sp}</i>
Set 1: Covariates				
$F(16, 72) = 2.212, p = .012, R^2 = .330$				
Gender	2.723	1.740	.122	.021
Hispanic or Latino**	-5.973	2.147	.007	.066
Caucasian**	-5.361	1.519	.001	.105
“Other” Ethnicity	-.764	3.507	.828	.000
High School Graduate	3.947	3.082	.205	.014
Some College and higher	3.906	3.257	.235	.012
Social Worker	4.435	2.481	.078	.027
MHC	.372	1.348	.784	.001
MHT	5.395	3.766	.157	.017
Psychologist	-1.018	2.276	.656	.002
“Other” Job Description	-.614	2.416	.800	.000
Private for profit	-2.672	2.334	.256	.011
Private not for profit	-.474	1.463	.747	.001
Total Tenure	-.022	.090	.805	.000
Current Tenure	-.086	.135	.528	.003
Seeking MH Treatment	-1.388	1.378	.317	.009
Set 2: Personality				
$\Delta F(3, 69) = 4.074, p = .010, \Delta R^2 = .101$				
Extraversion	-1.403	1.071	.194	.014
Agreeableness	-1.976	1.420	.169	.016
Openness	-1.860	1.130	.104	.023
Set 3: Organizational				
$\Delta F(2, 67) = .255, p = .776, \Delta R^2 = .004$				
Decision Latitude	-.017	.092	.850	.000
Coworker Support	-.212	.387	.585	.002

MHC = Mental Health Counselor, MHT = Mental Health Technician

All coefficients are from final model

**Significant at the 0.01 level

CHAPTER V: DISCUSSION

Burnout Dimensions and Related Constructs

This study sought to identify the relationships among individual factors, organization variables, and the three burnout dimensions—Emotional Exhaustion (EE), Depersonalization (DP), and Reduced Personal Accomplishment (RPA). Results of this study revealed that levels of burnout in the studied sample were relatively low. Although levels of burnout have been documented to be consistent across most demographic groups (Maslach, Schaufeli, & Leiter, 2001), this investigation revealed that EE may be somewhat higher in younger staff and RPA may tend to be higher in college graduates and Black or African American staff.

Perhaps individuals of these demographics have different expectations for how to achieve occupational goals. Younger employees may enter the workforce with optimistic views about helping others and making a difference through their work. When they begin counseling and managing clients on a day-to-day basis, these young professionals may be unable to handle the continuous emotional labor of the work and may be more prone to developing EE when compared to their older counterparts. Additionally, lower levels of burnout found in older, tenured professionals may be indicative of their resilience and ability to remain in the profession while those who had become too burned out resigned prematurely (Gomez & Michaelis, 1995; Van Humbeeck, et al., 2004).

Differences among persons with various educational backgrounds may be indicative of the type of job that coincides with the degree that the employee holds (Schaufeli & Enzmann, 1998). For instance, a respondent with a Bachelor's degree may have very idealistic views about what his or her helping profession entails while someone

who attended but did not complete postsecondary school and has been in the field longer has realistic ideas about working as a mental health staff. Such a conclusion has been documented in previous research (Salyers & Bond, 2001; Schultz, et al., 1995; Sundin, et al., 2007) and proves to be a reasonable explanation for these group differences in burnout which could be studied further.

Research on ethnicity and burnout is lacking. One group of researchers (Evans, Bryant, Owens, & Koukos, 2004) proposed that ethnic differences in RPA may be related to sexism, racism, or low socioeconomic status. However, these authors demonstrated that RPA in helping professionals did not differ between races and that ethnicity did not significantly predict levels of RPA in their sample. It is possible that these authors' deductions about sexism, racism, or low socioeconomic status are in fact correct in the current sample. Ultimately, further research with a larger sample is needed to ascertain if RPA does in fact vary as a function of ethnicity in this unique subgroup of mental health workers.

It is important to note that levels of burnout did not vary as a function of agency, gender, marital status, type of job, type of job setting, total number of endorsed health conditions, or percentage of clients diagnosed with long-term mental illness and/or chronic substance use disorders (LTMI). Most of these results are not too surprising because previous research that has analyzed these differences has been inconsistent. Conversely, countless articles dating back to the beginning of burnout research have illustrated that mental health staff who work with so-called 'difficult' populations are at risk for developing burnout (see Maslach, 1978); therefore, it was strongly suspected that the more LTMI clients a worker serves, the more burned out the employee would be.

However, in contrast to expectations, this sample did not indicate that burnout increases as the number of persons with LTMI served increases. Although the hypothesis was rejected, the lack of association between client severity and burnout in this sample could be perceived as a positive finding and could be used to challenge arguments for why prospective social services workers may choose to avoid working with an LTMI population. If this nonsignificant association between burnout and LTMI can be replicated with larger, more diverse samples, these results demonstrate that burnout is not inevitable based on the fact that staff work with LTMI and imply that staff can choose to work with LTMI clients without concern that they may be at more risk of burnout than those who do not work with more severe clients. Furthermore, this finding is promising for burnout prevention and intervention plans because the type of clients served is usually not an organizational factor that can be manipulated in order to alleviate symptoms of burnout. Therefore, managers and administrators should not feel helpless and blame burnout on client severity but should instead prevent burnout by focusing on other aspects of the organization and by teaching effective stress management techniques to staff.

In order to gather more candid information about work-related stress levels, participants in this study were asked if they had thought about seeking mental health treatment due to their job-related stress. More than one out of every five staff members surveyed indicated having thought about seeking mental health treatment due to work-related stress. Assuming that stress levels would most likely be very high in order to lead someone to think about seeking professional help, these reports conflict with the low to moderate average burnout scores. One possible explanation is that these reported

thoughts of seeking treatment may have occurred during extreme levels of stress that have since subsided. The literature indicates that burnout is typically chronic in nature and that its chronicity is what differentiates it from general stress (Halbesleben & Demerouti, 2005; Kristensen, et al., 2005; Schaufeli & Enzmann, 1998; Taris, et al., 2005). Therefore, it may be that the endorsed thoughts of seeking treatment were related to temporary stress as opposed to burnout. Nevertheless, prevention and intervention measures related to general job-related stress may be indicated in order to avoid such thoughts or to help those who have them and may be more susceptible to burnout.

Respondents who indicated that they had thought about seeking mental health treatment reported higher EE but lower RPA when compared to those who denied having thoughts about seeking said treatment. Higher levels of EE in this subgroup may reveal that those who were open to revealing thoughts about seeking treatment were also those who were more willing to endorse symptoms of EE. Moreover, the people who said that they had thought about seeking treatment may have actually received professional help or sought alternative ways to cope with the stressors, thereby reducing personal responsibility for occupational stress and subsequently reducing feelings of failure in the workplace.

To assess for potential physical consequences of work-related stress, participants in this study were also queried about a number of possible health conditions. Participants most often reported diagnoses of sleep disturbance, headaches, fatigue, and gastrointestinal problems. Although measured burnout dimensions were overall low in this sample, the commonality of seemingly somatic symptoms may be indicative of occupational stress and possibly burnout, particularly EE. In fact, all four of these

endorsed health problems are frequently found to be correlates of burnout (see Schaufeli & Enzmann, 1998). Given the stigma associated with admitting psychological and occupational difficulties, participants in the current study may have felt more comfortable endorsing physical rather than emotional symptoms, which would have led to lower scores on the MBI. Even so, more than one in five respondents were willing to indicate that s/he had thought about seeking mental health treatment for work-related problems. Taken as a whole, the mean levels of EE, DP, and RPA levels in the sample may be lower than expected, but the stress perceived by several participants is taxing enough to lead them to think about seeking psychological services and to experience physical symptoms of burnout. This conclusion demonstrates the need for burnout intervention and prevention services to be implemented in the workplace, especially those that include modifying organizational factors and teaching a variety of coping techniques that have been shown to reduce burnout.

Organizational Variables

All organizational variables, except job insecurity, were related to burnout in the predicted direction. Results of analyses indicated that as perceived job insecurity worsens, burnout improves. It could be proposed that staff who worry about the continuity of their jobs take overt steps to prevent being emotionally affected by their work, either as a way to try to be better helping professionals and salvage their jobs or as a way to start emotionally removing themselves from the workplace in order to prepare themselves for job loss. Another possible explanation is that these insecure staff questioned the anonymity of the surveys, leading them to deny experiencing symptoms of burnout on the questionnaire in order to present themselves as efficacious to those who

were analyzing the results. Further study in this realm is needed to clarify the relationship.

When compared to a normative sample of social services workers cited in the literature, this study's respondents reported lower decision latitude and coworker support, similar levels of psychological demands and supervisor support, and higher levels of job insecurity. These results indicate that the average respondent feels as if s/he does not have enough control over decisions made in the workplace, feels somewhat at risk for losing his or her job, and does not receive optimal support from fellow staff members. Furthermore, the average participant indicated that three out of four clients served have been diagnosed with LTMI, a population that has been commonly associated with burned out staff (Ackerley, et al., 1988; Angermeyer, et al., 2006; Beck, 1987; Finch & Krantz, 1991; Kandolin, 1993; Knudsen, et al., 2006; Maslach, 1978; A. Pines & Maslach, 1978; Shoptaw, et al., 2000; Skorupa & Agresti, 1993). Despite the reported presence of occupational stressors that have been associated with burnout in previous empirical studies, the levels of burnout in the current sample fell into the low to moderate criterion ranges. This discrepancy may be due to the fact that, although the levels of many organizational resources in this sample may be significantly lower than similar professionals, they may still be in a range that does not lead to considerable burnout (See Appendix D). For example, the mean level of decision latitude in the sample is 69.05. Although this mean is statistically "worse" than the normative sample, it—along with the other occupational variables—is far from the worst possible score in its dimension (i.e., 36). Therefore, as hypothesized, the current sample may be somewhat more stressed than

their peers who do not work with LTMI, but they may not be experiencing enough occupational stressors to be prone to burnout.

Individual Variables

Considering the overall low levels of burnout in this sample, the findings that surveyed staff were lower on neuroticism and openness and endorsed higher levels of extraversion, agreeableness, and conscientiousness were in fact consistent with a priori hypotheses. Four of the five personality dimensions were related to each of the burnout dimensions in the predicted direction. Accordingly, the less neurotic and more conscientious, extraverted, and agreeable the staff report to be, the less likely they are to be burned out. Therefore, suggestions in burnout intervention literature (e.g., Swider & Zimmerman, 2010) to administer personality questionnaires to potential staff in order to target staff who fit these types of personalities may be helpful in implementing burnout prevention techniques within the organization (Maslach & Leiter, 2008).

Openness, however, was unexpectedly found to be negatively correlated with all three dimensions of burnout, meaning that as levels of openness increase, the levels of burnout decrease. The incongruity between the hypothesized relationship and the one found within the sample was not too surprising given the paucity of research on the relationship between openness and burnout. It may be possible that, similar to the current sample, open individuals who work with LTMI are able to avoid burnout because, although they are empathic and sensitive, they do not experience emotional fatigue because they have very little in common with their clients. In contrast, open individuals who do not work with LTMI, similar to the samples studied by other burnout researchers (Burisch, 2002; Deary, et al., 1996; Zellars, et al., 2000), may initiate deep emotional

connections with their clients because they may have more characteristics and/or historical backgrounds in common with them. The ability to connect more easily with clients who are similar to them may lead to more EE in these staff and cause them to depersonalize their clients in order to reduce this type of work-related stress.

Correlational, Regression, and Interaction Analyses

Organizational Variables

In order to avoid losing statistical power by including all 23 assessed variables in the regression models, each burnout dimension was separately regressed on each organizational variable to assess the strength of the relationship between each predictor and burnout. These analyses illustrated that most of the occupational variables did not account for as much variance of each burnout dimension as expected. In fact, only three organizational variables for EE and DP and only two organizational variables for RPA demonstrated strong enough effect sizes to be considered for inclusion in the regression models. When the chosen sets of covariates, personality variables, and occupational variables were entered into regression models, most of the occupational variables that contributed a substantial amount of variance in one-predictor models did not turn out to be individually significant predictors in the full models. More specifically, psychological demands was the only significant predictor of EE; job insecurity was the only significant organizational predictor of DP; and neither the set of organizational variables nor organizational variables by themselves were significant in the model predicting RPA.

The lack of organizational variables that met criteria to be included in the prediction models as well as the lack of numerous significant organizational predictors for EE and DP contrast sharply with conclusions from Lee and Ashforth's (1996) meta-

analysis analyzing the effect of workplace stressors on burnout. These authors demonstrated that not only psychological demands but also the level of supervisor and coworker support are the strongest predictors of EE and that the level of supervisor and coworker support accounted for a large portion of variance of DP. However, many of the studies referenced in this meta-analysis did not include personality variables. Therefore, all of the potential variance shared by organizational and personality variables was all attributed to the organizational variables in these studies, leading one to assume that the relationship between organizational variables and burnout is stronger than it actually is. Furthermore, more than 48 of the 61 studies utilized in the meta-analysis surveyed human service providers; however, the type of clients that these professionals served were not clarified. It is possible that the current sample participants, who on average serve more than 70% LTMI, were quite different from those referenced in Lee and Ashforth's paper. This sample may develop burnout in an alternative manner, and therefore, the assessed organizational variables—other than psychological demands and job insecurity—were not the factors related to burnout found in this study. As such, additional studies including samples similar to those in this study are needed in order to guide interventions to prevent or alleviate burnout in this specific subgroup.

These results indicate that focusing on reducing one specific job stressor (e.g., encouraging social gatherings to facilitate coworker support) may not be the best way to prevent potential burnout precursors. Considering that the group of occupational stressors helped to predict two out of the three burnout dimensions, supervisors and administrators may instead need to look at the organization as a whole and make systemic changes in order to reduce the level of stress in the workplace and therefore decrease the

chances of the development of burnout. A comprehensive review of the current job-stress intervention research is consistent with these conclusion as it demonstrates that interventions that take organizationally-focused approaches including changes such as job redesign, workload reduction, and conflict management skills development have favorable impacts on both the organization and the person (Lamontagne, Keegel, Louie, Ostry, & Landsbergis, 2007).

Personality Variables

As described above in relation to organizational variables, each burnout dimension was also separately regressed on each personality variable to assess the strength of the relationship between each predictor and burnout. The strengths of the relationships between personality and burnout were not as strong as predicted, but most of the personality variables (i.e., four for EE, four for DP, and three for RPA) were still included in the models. The subsequent full regression analyses demonstrated that the set of personality variables significantly predicted DP and RPA but did not add significant incremental variance to the model predicting EE. Agreeableness was the only significant personality predictor of DP, and there were no unique personality predictors of EE or RPA. These results were inconsistent with a recent meta-analysis (Swider & Zimmerman, 2010), which demonstrated that personality dimensions accounted for 33%, 21%, and 27% of the variance of EE, DP, and RPA, respectively, and that many of the individual dimensions were unique predictors. Again, differences between the meta-analytic samples and the current sample may account for the lack of significance of the same personality predictors. Additionally, Swider and Zimmerman's meta-analysis included some but not all organizational variables measured in this study; thus, the

strength of the relationship between personality and burnout may be less substantial had they controlled for more organizational characteristics.

Another explanation for the lack of significant personality predictors could be respondents' attempts at social desirability, where staff answered personality questions according to who they would like to be—or who they believe their supervisors want them to be—as opposed to who they truly are (Holden, 2007). Regardless of which explanation is accurate, staff dispositions cannot be overlooked when studying burnout. Supervisors and administrators must consider the individual when developing prevention and intervention methods, which can include a variety of coping techniques that allow for advantageous outcomes (Awa, Plaumann, & Walter, 2010).

Correlational and Full Regression Analyses

On the whole, all of the full sets of chosen variables significantly predicted EE, DP, and RPA, and at least one of the blocks of predictors added significant incremental variance to each of the models. However, very few variables uniquely contributed to the models (i.e., very few coefficients were significant in the full models). One possible explanation for the lack of significant unique predictors is the number of variables in the models. Although variables that were deemed to be less predictive were eliminated from the analyses, there were still 16 predictors in the EE model, 16 in the DP model, and 21 in the RPA model. Within each set of predictors, the inter-correlations among the predictors may have prevented the predictors from providing unique contribution to the models. Perhaps eliminating the demographics or raising the cutoff used to eliminate variables from the models in future analyses would allow for more unique predictors to demonstrate significance.

Interactions

The hypothesis that personality acts as a moderator in the relationship between occupational stressors and burnout was not supported. In fact, none of the interaction effects tested even approached significance. With these results in mind, the lack of published studies indicating personality as a moderator may be due, in part, to the inability of other researchers to achieve results that support such a hypothesis. Maybe social services workers tend to have similar personalities and respond to organizational stressors similarly. Should this proposition be true, then the effect of job stress on burnout would be comparable across these individual staff members, leading to the conclusion that the personality-as-moderator hypothesis is inaccurate for social services workers. In order to confirm this conclusion, moderation effects could be tested again once this investigator is able to survey more social services staff, especially those who chose not to participate in the study.

Limitations and Future Directions

Given the practical nature of this cross-sectional, quasi-experimental study, there are limitations that need to be considered when making conclusions about the results.

Validity Considerations

There were extraneous factors which may have contributed to the results of this study. Three measures utilized in this study (i.e., the JCQ, BFI, and MBI) had standardization in non-clinical populations. Standardization and reliability for other questions (e.g., percentage of clients with LTMI) have yet to be established. As such, these measures may have contributed as threats to the construct validity of the study. For example, the questions about diagnoses of clients and number of direct contact hours

provide subjective information. Answers to these questions may be indicative of how overwhelmed the participant feels instead of how many difficult consumers are in his or her caseload or how much time is spent with consumers. Therefore, these reported quantities, among others, may need to be interpreted with caution.

Similarly, all data was obtained from self-report questionnaires. Therefore, data may be positively skewed given that participants may have wanted to present themselves in a positive light. Empirical studies have consistently reported that employees tend to rate themselves higher on surveys that query them about their professional behavior (Donaldson & Grant-Valione, 2002; Koslowsky & Dishon-Berkovits, 2001). Additionally, Holden (2007) demonstrated that participants' socially desirable responding negatively affected the validity of personality measures. Perhaps future studies using more reliable, objective sources of information (e.g., progress notes, billing statements) or an additional assessment of social desirability could offer more accurate information.

An influential threat to the external validity of this study is the nonrandom selection of participants. Social service staff were chosen for this study based on their employment within a convenient sample of mental health facilities in South Florida. Selecting staff in this manner does not allow for one to make the conclusion that the sample is representative of the social service population in South Florida. A large portion of the studied sample was Caucasian, middle-aged, and married with graduate-level education, which is not representative of a variety of backgrounds. Additionally, this sample's characteristics were different from what was expected (i.e., younger, less education, and less time spent working in their profession). Therefore, further research is needed to quantify burnout levels in more diverse samples. Moreover, participation in

the study was voluntary, which significantly affected the response rate of the staff. Although participants did not appear to be vulnerable to coercion (i.e., they were not penalized or rewarded for participating in the study), only approximately one in four surveys (27.9% response rate) that were given to potential participants were filled out. Consequently, it is possible that persons who completed and submitted the questionnaires were those staff who were the least overwhelmed by their job duties and/or the least burned out. With the above considerations in mind, the generalizability of these results is limited.

Future Research

This study has illuminated the many possibilities for future research. To start, similar future studies should attempt to improve response rates, with the aim of obtaining a larger, more representative sample and, thus, more statistical conclusion validity (e.g., more statistical power). Incorporating incentives for participation may be one feasible tactic to obtain more completed surveys. Another way to obtain more conclusive findings is to consider utilizing a variety of data collection methods. In addition to having participants complete self-report measures, future research should gather more information about supervisor perceptions of their staff as well as absenteeism and turnover rates. This would not only illustrate a distinction between the staff's views of organizational functioning and those of the supervisor but would also help to control for defensive responses on the part of the participant. Furthermore, adding a social desirability scale to the questionnaire could help to identify those who may have attempted to present themselves in a positive light. Analyzing the relationships between

the hypothesized predictors and burnout while controlling for social desirability may produce more valid and reliable results.

Considering the low mean on all three dimensions of burnout, it would be interesting to learn how mental health professionals who are low on burnout dimensions compare to those who actually are burned out, especially on personality dimensions and perceptions of their respective organizations. Likewise, future studies with larger samples sizes within each demographic category should analyze the differences in the demographic characteristics of those with low burnout compared to those who endorse higher levels. Doing so would provide an even better idea about who is more at risk and how interventions can be targeted.

Lastly, longitudinal research including a burnout intervention is needed. A recent review of related literature (Awa, et al., 2010) reported that 80% of burnout intervention programs were successful in reducing levels of burnout in a variety of locations. An intervention that included foci on both the person and the organization appeared to have the most long-lasting benefits. A future investigation utilizing both subjective and objective measures at baseline, the end of the burnout intervention, and at several follow-up points would provide an abundance of information about how to not only reduce but also prevent this detrimental, work-related problem called burnout.

Conclusions

This investigation demonstrated that, contrary to a priori hypotheses, levels of burnout in social services workers serving mostly LTMI clients were generally low. Most of the occupational and personality variables did not account for as much variance of each burnout dimension as expected. However, the full sets of chosen demographic,

organizational, and personality variables significantly predicted each dimension of burnout.

Feelings of emotional exhaustion may be higher in social services workers who report experiencing high levels of psychological job demands and those who report thinking about seeking professional help for their job-related stress. Staff who lack agreeable tendencies and those who worry about potential job loss may be more likely to depersonalize clients. Low feelings of professional efficacy may be particularly low in younger staff, college graduates, African Americans, and persons who do not endorse thinking about seeking mental health treatment due to job-related stress. Although the current literature led this investigator to hypothesize that personality may act as a moderator in the relationship between organizational stressors and burnout, this presumption was far from supported by the data. Despite the lack of significant unique predictors in the regression models as well as the potentially incorrect personality-as-moderator hypothesis, future investigations must consider both individual and organizational factors when exploring how burnout develops in vulnerable populations in order to account for all possible precursors and correlates. Furthermore, longitudinal research testing burnout prevention and intervention methods should be conducted.

The lack of significance of the proposed predictors in this study may be attributed to several factors, especially the uniqueness of the current sample, nonrandom selection, and potential socially desirable responding. Despite limitations of the data, there are many possible practical implications that can be derived from the current results. Supervisors and administrators should be cognizant of potential burnout in their staff as well as the stigma and concern associated with admitting that s/he is burned out. This

investigator assumes that many of the burned out individuals who were offered the chance to participate in the study did not choose to do so. However, regardless of that assumption, the study results clearly indicate that the average respondent feels as if s/he does not have enough control over decisions made in the workplace, feels somewhat at risk for losing his or her job, and does not receive optimal support from fellow staff members. Given that this study demonstrates that the prediction of burnout is complex, burnout interventions should focus on systemic, rather than simplistic, change. Additionally, the use of screening tools such as personality questionnaires may help to target professionals who are less neurotic and more open, conscientious, extraverted, and agreeable and, therefore, less likely to be a candidate for burnout in the future.

REFERENCES

- Ablett, J. R., & Jones, R. S. (2007). Resilience and well-being in palliative care staff: a qualitative study of hospice nurses' experience of work. *Psychooncology, 16*(8), 733-740. doi: 10.1002/pon.1130
- Abramis, D. J. (1994). Work role ambiguity, job satisfaction, and job performance: Meta-analysis and review. *Psychological Reports, 75*, 1411-1433. Retrieved from <http://www.pr-pms.com/>.
- Acker, G. M. (1999). The impact of clients' mental illness on social workers' job satisfaction and burnout. *Health & Social Work, 24*(2), 112-119. Retrieved from <http://www.naswpress.org/publications/journals/hsw.html>.
- Ackerley, G. D., Burnell, J., Holder, D. C., & Kurdek, L. A. (1988). Burnout among licensed psychologists. *Professional Psychology: Research and Practice, 19*, 624-631. doi: 10.1037/0735-7028.19.6.624
- Ahola, K., Honkonen, T., Isometsa, E., Kalimo, R., Nykyri, E., Aromaa, A., et al. (2005). The relationship between job-related burnout and depressive disorders--results from the Finnish Health 2000 Study. *Journal of Affective Disorders, 88*(1), 55-62. doi: 10.1016/j.jad.2005.06.004
- Angermeyer, M. C., Bull, N., Bernert, S., Dietrich, S., & Kopf, A. (2006). Burnout of caregivers: a comparison between partners of psychiatric patients and nurses. *Archives of Psychiatric Nursing, 20*(4), 158-165. doi: 10.1016/j.apnu.2005.12.004
- Ashford, S. J., Lee, C., & Bobko, P. (1989). Content, cause, and consequences of job insecurity: A theory based measure and substantive test. *Academy of Management Journal, 32*, 803-829. doi: 10.2307/256569
- Awa, W. L., Plaumann, M., & Walter, U. (2010). Burnout prevention: A review of intervention programs. *Patient Education and Counseling, 78*, 184-190. doi: 10.1016/j.pec.2009.04.008
- Bahner, A. D., & Berkel, L. A. (2007). Exploring burnout in batterer intervention programs. *Journal of Interpersonal Violence, 22*(8), 994-1008. doi: 10.1177/0886260507302995
- Bakker, A. B., Schaufeli, W. B., Sixma, H. J., & Bosveld, W. (2001). Burnout contagion among general practitioners. *Journal of Social and Clinical Psychology, 20*, 82-98. doi: 10.1521/jscp.20.1.82.22251
- Bakker, A. B., Van der Zee, K. I., Lewig, K. A., & Dollard, M. F. (2006). The relationship between the Big Five personality factors and burnout: a study among volunteer counselors. *Journal of Social Psychology, 146*(1), 31-50. doi: 10.3200/SOCP.146.1.31-50

- Balloch, S., Pahl, J., & McLean, J. (1998). Working in the social services: Job satisfaction, stress and violence. *British Journal of Social Work, 28*, 329-350. Retrieved from <http://bjsw.oxfordjournals.org/>.
- Barling, J., & Kelloway, E. K. (1996). Job insecurity and health: The moderating role of workplace control. *Stress Medicine, 12*, 253-259. doi: 10.1002/(SICI)1099-1700(199610)12:4<253::AID-SMI710>3.3.CO;2-U
- Barrick, M. R., & Mount, M. K. (1991). The Big Five personality dimensions and job performance: A meta-analysis. *Personnel Psychology, 44*, 1-26. doi: 10.1111/j.1744-6570.1991.tb00688.x
- Beck, D. F. (1987). Counselor burnout in family service agencies. *Social Casework, 68*(1), 3-15. doi: 10.1606/0037-7678.2224
- Beehr, T. A. (1985). The role of social support in coping with organizational stress. In T. A. Beehr & R. S. Bhagat (Eds.), *Human stress and cognition in organizations: An integrated perspective* (pp. 375-398). New York: Wiley.
- Beehr, T. A., & McGrath, J. E. (1992). Social support, occupational stress, and anxiety. *Anxiety Research: An International Journal, 5*, 7-19. doi: 10.1080/10615809208250484
- Ben-Zur, H., & Michael, K. (2007). Burnout, social support, and coping at work among social workers, psychologists, and nurses: The role of challenge/control appraisals. *Social Work in Health Care, 45*(4), 63-82. doi: 10.1300/J010v45n04_04
- Billingsley, B. S., & Cross, L. H. (1992). Predictors of commitment, job satisfaction, and intent to stay in teaching: A comparison of general and special educators. *The Journal of Special Education, 25*, 453-471. doi: 10.1177/002246699202500404
- Block, J. (1961). *The Q-sort method in personality assessment and psychiatric research*. Springfield, IL: Charles C. Thomas.
- Bolger, N. (1990). Coping as a personality process: A prospective study. *Journal of Personality & Social Psychology, 59*(3), 525-537. doi: 10.1037/0022-3514.59.3.525
- Borland, J. J. (1981). Burnout among workers and administrators. *Health & Social Work, 6*(1), 73-78. Retrieved from <http://www.naswpress.org/publications/journals/hsw.html>.
- Botwin, M. D., & Buss, D. M. (1989). Structure of act-report data: Is the five-factor model of personality recaptured? *Journal of Personality & Social Psychology, 56*(6), 988-1001. doi: 10.1037/0022-3514.56.6.988
- Boyer, S. L. (1991). *A comparison of assertive community case management and traditional case management on burnout and job satisfaction*. Purdue University, West Lafayette, IN.

- Brenninkmeyer, V., Van Yperen, N. W., & Buunk, B. P. (2001). Burnout and depression are not identical twins: Is decline of superiority a distinguishing feature? *Personality and Individual Differences*, *30*, 873-880. doi: 10.1016/S0191-8869(00)00079-9
- Brill, P. L. (1984). The need for an operational definition of burnout. *Family & Community Health*, *6*(4), 12-24. Retrieved from <http://journals.lww.com/familyandcommunityhealth/pages/default.aspx>.
- Brotheridge, C. M., & Grandey, A. A. (2002). Emotional labor and burnout: Comparing two perspectives of "people work". *Journal of Vocational Behavior*, *60*, 17-39. doi: 10.1006/jvbe.2001.1815
- Brown, C., & O'Brien, K. (1998). Understanding stress and burnout in shelter workers. *Professional Psychology: Research and Practice*, *29*, 383-385. doi: 10.1037/0735-7028.29.4.383
- Buhler, K. E., & Land, T. (2003). Burnout and personality in intensive care: An empirical study. *Hospital Topics*, *81*(4), 5-12. doi: 10.1080/00185860309598028
- Burisch, M. (1993). In search of a theory: Some ruminations on the nature and etiology of burn-out. In W. B. Shaufeli, C. Maslach & T. Marek (Eds.), *Professional burn-out: Recent developments in theory and research* (pp. 75-93). London: Taylor and Francis.
- Burisch, M. (2002). A longitudinal study of burnout: The relative importance of dispositions and experiences. *Work & Stress*, *16*, 1-17. doi: 10.1080/02678370110112506
- Burke, R. J., & Greenglass, E. R. (1995). A longitudinal study of psychological burnout in teachers. *Human Relations*, *48*, 187-198. doi: 10.1177/001872679504800205
- Butler, B. B. (1990). Job satisfaction: Management's continuing challenge. *Social Work*, *35*, 112-117. Retrieved from <http://www.naswpress.org/publications/journals/sw.html>.
- Cameron, K., & Freeman, S. J. (1991). Cultural congruence, strength, & type: Relationship to effectiveness. In R. W. Woodman & W. A. Passmore (Eds.), *Research in organization change and development: An annual series featuring advances in theory, methodology, and research* (Vol. 5, pp. 23-58). Greenwich, CT: JAI Press.
- Cano-Garcia, F. J., Padilla-Munoz, E. M., & Carrasco-Ortiz, M. A. (2005). Personality and contextual variables in teacher burnout. *Personality and Individual Differences*, *38*, 929-940. doi: 10.1016/j.paid.2004.06.018
- Carson, J., Leary, J., de Villiers, N., Fagin, L., & Radmall, J. (1995). Stress in mental health nurses: Comparison of ward and community staff. *British Journal of*

- Nursing*, 4(10), 579-582. Retrieved from <http://www.britishjournalofnursing.com/>.
- Chappell, N. L., & Novak, M. (1992). The role of support in alleviating stress among nursing assistants. *Gerontologist*, 32(3), 351-359. Retrieved from <http://gerontologist.oxfordjournals.org/>.
- Cherniss, C. (1980). *Professional burnout in the human service organizations*. New York: Praeger.
- Choca, J. P. (2004). *Interpretive guide to the Millon Clinical Multiaxial Inventory* (3rd ed.). Washington, DC: American Psychological Association.
- Constable, C. L., & Dougherty, T. W. (1993). A review and an integration of research on job burnout. *Academy of Management Review*, 18, 621-656. doi: 10.2307/258593
- Costa, P. T., Jr., & McCrae, R. R. (1980). Influence of extraversion and neuroticism on subjective well-being: Happy and unhappy people. *Journal of Personality & Social Psychology*, 38(4), 668-678. doi: 10.1037/0022-3514.38.4.668
- Costa, P. T., Jr., & McCrae, R. R. (1992). *Revised NEO Personality Inventory (NEO-PI-R) and NEO Five Factor Inventory (NEO-FFI) professional manual*. Odessa, FL: Psychological Assessment Resources.
- Cushway, D., Tyler, P. A., & Nolan, P. (1996). Development of a stress scale for mental health professionals. *British Journal of Clinical Psychology*, 35(2), 279-295. Retrieved from <http://www.bpsjournals.co.uk/journals/bjcp/>.
- De Witte, H. (1999). Job insecurity and psychological well-being: review of the literature and exploration of some unresolved issues. *European Journal of Work and Organizational Psychology*, 8(2), 155-177. doi: 10.1080/135943299398302
- Deary, I. J., Blenkin, H., Agius, R. M., Endler, N. S., Zealley, H., & Wood, R. (1996). Models of job-related stress and personal achievement among consultant doctors. *British Journal of Psychology*, 87 (Pt 1), 3-29. Retrieved from <http://bjp.rcpsych.org/>.
- Deary, I. J., Watson, R., & Hogston, R. (2003). A longitudinal cohort study of burnout and attrition in nursing students. *Journal of Advanced Nursing*, 43, 71-81. doi: 10.1046/j.1365-2648.2003.02674.x
- Digman, J. M. (1990). Personality structure: Emergence of the five-factor model. *Annual Review of Psychology*, 41, 417-440. doi: 10.1146/annurev.psych.41.1.417
- Donaldson, S. I., & Grant-Valione, E. J. (2002). Understanding self-report bias in organizational behavior research. *Journal of Business and Psychology*, 17(2), 245-260. doi: 10.1023/A:1019637632584

- Dorn, L., & Matthews, G. (1992). Two further studies of personality correlates of driver stress. *Personality and Individual Differences, 13*, 949-951. doi: 10.1016/0191-8869(92)90014-G
- Drebing, C., McCarty, E. F., & Lombardo, N. B. (2002). Professional caregivers for patients with dementia: Predictors of job and career commitment. *American Journal of Alzheimer's Disease and Other Dementias, 17*(6), 357-366. doi: 10.1177/153331750201700604
- Duquette, A., Kerouac, S., Sandhu, B. K., & Beaudet, L. (1994). Factors related to nursing burnout: A review of empirical knowledge. *Issues in Mental Health Nursing, 15*(4), 337-358. doi: 10.3109/01612849409006913
- Eastburg, M. C., Williamson, M., Gorusch, R., & Ridley, C. (1994). Social support, personality and burnout in nurses. *Journal of Applied Social Psychology, 24*, 1233-1250. doi: 10.1111/j.1559-1816.1994.tb00556.x
- Edwards, D., & Burnard, P. (2003). A systematic review of stress and stress management interventions for mental health nurses. *Journal of Advanced Nursing, 42*(2), 169-200. Retrieved from <http://www.journalofadvancednursing.com/>.
- Egan, M. (1993). Resilience at the front lines: Hospital social work with AIDS patients and burnout. *Social Work in Health Care, 18*(2), 109-125. doi: 10.1300/J010v18n02_07
- Evans, G. D., Bryant, N. E., Owens, J. S., & Koukos, K. (2004). Ethnic differences in burnout, coping, and intervention acceptability among childcare professionals. *Child & Youth Care Forum, 33*(5), 349-371. doi: 10.1023/B:CCAR.0000043040.54270.dd
- Eysenck, H. J. (1947). *Dimensions of personality*. London: Hunt, Barnard, and Co.
- Eysenck, H. J., & Eysenck, S. B. G. (1991). *Manual of the Eysenck personality scales*. London: Hodder and Stoughton.
- Fagin, L., Carson, J., Leary, J., De Villiers, N., Bartlett, H., O'Malley, P., et al. (1996). Stress, coping and burnout in mental health nurses: Findings from three research studies. *International Journal of Social Psychiatry, 42*(2), 102-111. doi: 10.1177/002076409604200204
- Farber, B. A. (1983). Psychotherapists' perceptions of stressful patient behaviors. *Professional Psychology: Research and Practice, 14*, 696-705. doi: 10.1037/0735-7028.14.5.697
- Fawzy, F. I., Wellisch, D. K., Pasnau, R. O., & Leibowitz, B. (1983). Preventing nursing burnout: A challenge for liaison psychiatry. *General Hospital Psychiatry, 5*(2), 141-149. doi: 10.1016/0163-8343(83)90114-7

- Fenlason, K. J., & Beehr, T. A. (1994). Social support and occupational stress: Effects of talking to others. *Journal of Organizational Behavior, 15*, 157-175. doi: 10.1002/job.4030150205
- Finch, E. S., & Krantz, S. R. (1991). Low burnout in a high-stress setting: A study of staff adaptation at Fountain House. *Psychosocial Rehabilitation Journal, 14*, 15-26. Retrieved from <http://prj.metapress.com/app/home/main.asp>.
- Finlay, W., Martin, J. K., Blum, T. C., & Roman, P. M. (1995). Organizational structure and job satisfaction: Do bureaucratized organizations produce more satisfied employees? *Administration and Society, 27*, 427-450. doi: 10.1177/009539979502700306
- Fischer, H. J. (1983). A psychoanalytic view of burnout. In B. A. Farber (Ed.), *Stress and burnout in the human service professions* (pp. 40-45). New York: Pergamon.
- Fox, G. L., & Chancey, D. (1998). Sources of economic distress: Individual and family outcomes. *Journal of Family Issues, 19*, 725-749. doi: 10.1177/019251398019006004
- Francis, L. J., Louden, S. H., & Rutledge, C. J. F. (2004). Burnout among Roman Catholic parochial clergy in England and Wales: Myth or reality? *Review of Religious Research, 46*, 5-19. doi: 10.2307/3512249
- Freudenberger, H. J. (1974). Staff burnout. *Journal of Social Issues, 30*, 159-165. doi: 10.1111/j.1540-4560.1974.tb00706.x
- Freudenberger, H. J. (1975). The staff burnout syndrome in alternative institutions. *Psychotherapy: Theory, Research and Practice, 12*, 73-82.
- Freudenberger, H. J. (1981). *How to beat the high cost of success*. New York: Bantam Books.
- Fried, Y., & Tiegs, R. B. (1993). The main effect model versus buffering model of shop steward social support: A study of rank-and-file auto workers in the U.S.A. *Journal of Organizational Behavior, 14*(5), 481-493. doi: 10.1002/job.4030140509
- Gandoy-Crego, M., Clemente, M., Mayan-Santos, J. M., & Espinosa, P. (2009). Personal determinants of burnout in nursing staff at geriatric centers. *Archives of Gerontology and Geriatrics, 48*(2), 246-249. doi: 10.1016/j.archger.2008.01.016
- Garrosa, E., Moreno-Jimenez, B., Liang, Y., & Gonzalez, J. L. (2008). The relationship between socio-demographic variables, job stressors, burnout, and hardy personality in nurses: An exploratory study. *International Journal of Nursing Studies, 45*(3), 418-427. doi: 10.1016/j.ijnurstu.2006.09.003
- George, J. (1989). Mood and absence. *Journal of Applied Psychology, 74*, 317-324. doi: 10.1037/0021-9010.74.2.317

- Glass, D. C., & McKnight, J. D. (1996). Perceived control, depressive symptomatology, and professional burnout: A review of the evidence. . *Psychology and Health, 11*, 25-48. doi: 10.1080/08870449608401975
- Glickauf-Hughes, C., & Mehlman, E. (1995). Narcissistic issues in therapists: Diagnostic and treatment considerations. *Psychotherapy: Theory, Research, Practice, Training, 32*(2), 213-221. Retrieved from <http://www.apa.org/pubs/journals/pst/index.aspx>.
- Goldberg, L. R. (1993). The structure of phenotypic personality traits. *American Psychologist, 48*(1), 26-34. doi: 10.1037/0003-066X.48.1.26
- Gomez, J. S., & Michaelis, R. C. (1995). An assessment of burnout in human service providers. *The Journal of Rehabilitation, 61*, 23-26.
- Greenglass, E. R., & Burke, R. J. (2002). Hospital restructuring and burnout. *Journal of Health and Human Services Administration, 25*, 89-114. Retrieved from <http://www.spaef.com/jhhsa.php>.
- Halbesleben, J. R., & Buckley, M. R. (2004). Burnout in organizational life. *Journal of Management, 30*, 859-879. doi: 10.1016/j.jm.2004.06.004
- Halbesleben, J. R., & Demerouti, E. (2005). The construct validity of an alternative measure of burnout: Investigating the English translation of the Oldenburg Burnout Inventory. *Work & Stress, 19*, 208-220. doi: 10.1080/02678370500340728
- Heaney, C. A., Israel, B. A., & House, J. S. (1994). Chronic job insecurity among automobile workers: Effects on job satisfaction and health. *Social Science & Medicine, 38*, 1431-1437. doi: 10.1016/0277-9536(94)90281-X
- Heppner, P. P., Cook, S. W., Wright, D. M., & Johnson, W. C., Jr. (1995). Progress in resolving problems: A problem-focus style of coping. *Journal of Counseling Psychology, 42*, 279-293. doi: 10.1037/0022-0167.42.3.279
- Himle, D. P., Jayaratne, S., & Thyness, P. (1989). The effects of emotional support on burnout, work stress and mental health among Norwegian and American social workers. *Journal of Social Service Research, 13*, 27-45. doi: 10.1300/J079v13n01_02
- Hoeksma, J. H., Guy, J. D., Brown, C. K., & Brady, J. L. (1993). The relationship between psychotherapist burnout and satisfaction with leisure activities. *Psychotherapy in Private Practice, 12*, 51-57. Retrieved from <http://www.informaworld.com>.
- Holden, R. R. (2007). Socially desirable responding does moderate personal scale validity in experimental and nonexperimental contexts. *Canadian Journal of Behavioural Science, 39*(3), 184-201. doi: 10.1037/cjbs2007015

- Honkonen, T., Ahola, K., Pertovaara, M., Isometsa, E., Kalimo, R., Nykyri, E., et al. (2006). The association between burnout and physical illness in the general population--Results from the Finnish Health 2000 Study. *Journal of Psychosomatic Research*, *61*(1), 59-66. doi: 10.1016/j.jpsychores.2005.10.002
- House, J. S. (1981). *Work, stress, and social support*. Reading, MA: Addison-Wesley.
- Hurrell, J. J., Jr., Nelson, D. L., & Simmons, B. L. (1998). Measuring job stressors and strains: Where we have been, where we are, and where we need to go. *Journal of Occupational Health Psychology*, *3*(4), 368-389. doi: 10.1037/1076-8998.3.4.368
- Jason, L. A., Wagner, L., Taylor, R., Ropacki, M. T., Shlaes, J., Ferrari, J. R., et al. (1995). Chronic fatigue syndrome: A new challenge for health care professionals. *Journal of Community Psychology*, *23*, 143-164. doi: 10.1002/1520-6629(199504)23:2<143::AID-JCOP2290230205>3.0.CO;2-7
- Jayarathne, S., & Chess, W. A. (1986). Job stress, job deficit, emotional support, and competence: Their relationship to burnout. *Journal of Applied Social Sciences*, *10*, 135-155.
- Jenkins, R., & Elliott, P. (2004). Stressors, burnout and social support: Nurses in acute mental health settings. *Journal of Advanced Nursing*, *48*(6), 622-631. doi: 10.1111/j.1365-2648.2004.03240.x
- John, O. P. (1990). The Big Five factor taxonomy: Dimensions of personality in the natural language and in questionnaires. In L. A. Pervin (Ed.), *Handbook of personality: Theory and research* (pp. 66-100). New York: Guilford.
- John, O. P., Donahue, E. M., & Kentle, R. L. (1991). *The Big Five Inventory-Versions 4a and 54*. Berkeley: University of California, Berkeley, Institute of Personality and Social Research.
- John, O. P., & Srivastava, S. (1999). The Big-Five trait taxonomy: History, measurement, and theoretical perspectives. In L. Pervin & O. P. John (Eds.), *Handbook of personality: Theory and research* (2nd ed., pp. 102-139). New York: Guilford.
- Jones, F., & Fletcher, B. (1996). Job control and health. In M. J. Schabracq, J. A. M. Winnubst & C. L. Cooper (Eds.), *Handbook of work and health psychology* (pp. 33-50). Chichester, UK: Wiley.
- Jones, F., Fletcher, B., & Ibbetson, K. (1991). Stressors and strains amongst social workers: Demands, constraints, and psychological health. *British Journal of Social Work*, *21*, 443-469. Retrieved from <http://bjsw.oxfordjournals.org/>.
- 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*(3), 530-541. doi: 10.1037/0021-9010.87.3.530
- Kandolin, I. (1993). Burnout of female and male nurses in shiftwork. *Ergonomics*, *36*(1-3), 141-147. doi: 10.1080/00140139308967865

- Karasek, R. A. (1979). Job demands, job decision latitude, and mental strain: Implications for job redesign. *Administration Science Quarterly*, 24, 285-307. doi: 10.2307/2392498
- Karasek, R. A., Brisson, C., Kawakami, N., Houtman, I., Bongers, P., & Amick, B. (1998). The Job Content Questionnaire (JCQ): An instrument for internationally comparative assessments of psychosocial job characteristics. *Journal of Occupational Health Psychology*, 3(4), 322-355. doi: 10.1037/1076-8998.3.4.322
- Karasek, R. A., Gordon, G., Pietrokovsky, C., Frese, M., Pieper, C., Schwartz, J., et al. (1985). *Job Content Questionnaire: Questionnaire and user's guide*. Lowell: University of Massachusetts.
- Karasek, R. A., & Theorell, T. (1990). *Healthy work*. New York: Basic Books.
- Karnis, E. (1981). Staff burnout: An epidemiological analysis. In J. W. Jones (Ed.), *The burnout syndrome: Current research, theory, interventions* (pp. 54-67). Park Ridge, IL: London House Press.
- Kaufmann, G. M., & Beehr, T. A. (1986). Interactions between job stressors and social support: Some counterintuitive results. *Journal of Applied Psychology*, 71, 522-526. doi: 10.1037/0021-9010.71.3.522
- Kickul, J., & Posig, M. (2001). Supervisory emotional support and burnout: An explanation of reverse buffering effects. *Journal of Managerial Issues*, 328-344. Retrieved from <http://www322.pittstate.edu/econ/jmi.html>.
- Kirmeyer, S. L., & Doughtrey, T. W. (1988). Work load, tension, and coping: Moderating effects of supervisor support. *Personnel Psychology*, 41, 125-139. doi: 10.1111/j.1744-6570.1988.tb00635.x
- Knudsen, H. K., Ducharme, L. J., & Roman, P. M. (2006). Counselor emotional exhaustion and turnover intention in therapeutic communities. *Journal of Substance Abuse Treatment*, 31(2), 173-180. doi: 10.1016/j.jsat.2006.04.003
- Koslowsky, M., & Dishon-Berkovits, M. (2001). Self-report measures of employee lateness: Conceptual and methodological issues. *European Journal of Work and Organizational Psychology*, 10(2), 145-159. doi: 10.1080/13594320143000609
- Kristensen, T. S., Borritz, M., Villadsen, E., & Christensen, K. B. (2005). The Copenhagen Burnout Inventory: A new tool for the assessment of burnout. *Work & Stress*, 119, 192-207. doi: 10.1080/02678370500297720
- Lamontagne, A. D., Keegel, T., Louie, A. M., Ostry, A., & Landsbergis, P. A. (2007). A systematic review of the job-stress intervention evaluation literature, 1990-2005. *International Journal of Occupational and Environmental Health*, 13(3), 268-280. Retrieved from <http://www.ijoeh.com/index.php/ijoeh/index>.

- Lance, C. E. (1991). Evaluation of a structural model relating job satisfaction, organizational commitment, and precursors to voluntary turnover. *Multivariate Behavioral Research, 26*, 137-162. doi: 10.1207/s15327906mbr2601_7
- Landsbergis, P. A. (1988). Occupational stress among health care workers: A test of the job demands-control model. *Journal of Organizational Behavior, 9*, 217-239. doi: 10.1002/job.4030090303
- Larsen, R. J. (1992). Neuroticism and selective encoding and recall of symptoms: Evidence from a combined concurrent-retrospective study. *Journal of Personality & Social Psychology, 62*(3), 480-488. doi: 10.1037/0022-3514.62.3.480
- LeCroy, C. W., & Rank, M. R. (1987). Factors associated with burnout in the social services: An exploratory study. Special Issue: Burnout and social workers. *Journal of Social Service Research, 10*, 23-29. doi: 10.1300/J079v10n01_04
- 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*(2), 123-133. doi: 10.1037/0021-9010.81.2.123
- Leiter, M. P. (1991). Coping patterns as predictors of burnout: The function of control and escapist coping patterns. *Journal of Organizational Behavior, 81*, 123-133. doi: 10.1002/job.4030120205
- Leiter, M. P., & Durup, M. J. (1994). The discriminant validity of burnout and depression: A confirmatory factor analytic study. *Anxiety, Stress, and Coping, 7*, 357-373. doi: 10.1080/10615809408249357
- Leiter, M. P., & Maslach, C. (1988). The impact of interpersonal environment on burnout and organizational commitment. *Journal of Organizational Behavior, 9*(297-308). doi: 10.1002/job.4030090402
- Lloyd, C., King, R., & Chenoweth, L. (2002). Social work, stress and burnout: A review. *Journal of Mental Health, 11*, 255-265. doi: 10.1080/09638230020023642
- Mack, K. (2001). Working around a crisis. *Children's Voice, 10*, 20-22. Retrieved from <http://www.cwla.org/voice/>.
- Maslach, C. (1976). Burned out. *Human Behavior, 5*, 16-22.
- Maslach, C. (1978). The client role in staff burnout. *Journal of Social Issues, 34*, 111-124. doi: 10.1111/j.1540-4560.1978.tb00778.x
- Maslach, C. (1982). *Burnout: The cost of caring*. Englewood Cliffs, NJ: Prentice Hall.
- Maslach, C. (1993). Burnout: A multidimensional perspective. In W. B. Schaufeli, C. Maslach & T. Marek (Eds.), *Professional burnout: Recent developments in theory and research* (pp. 19-32). Bristol, PA: Taylor and Francis.

- Maslach, C. (2001). Psychology of burnout. In N. J. Smelser & P. B. Baltes (Eds.), *International encyclopedia of the social and behavioral sciences* (pp. 1415-1418). Oxford: Pergamon.
- Maslach, C., & Jackson, S. E. (1986). *Maslach Burnout Inventory: Manual* (2nd ed.). Palo Alto, CA: Consulting Psychologists' Press.
- Maslach, C., Jackson, S. E., & Leiter, M. P. (1996). *Maslach Burnout Inventory. Manual* (3rd ed.). Palo Alto, CA: Consulting Psychologists' Press.
- Maslach, C., & Leiter, M. P. (1997). *The truth about burnout*. San Francisco: Josey Bass Publishers.
- Maslach, C., & Leiter, M. P. (2008). Early predictors of job burnout and engagement. *Journal of Applied Psychology, 93*(3), 498-512. doi: 10.1037/0021-9010.93.3.498
- Maslach, C., & Schaufeli, W. B. (1993). Historical and conceptual development of burnout. In W. B. Schaufeli, C. Maslach & T. Marek (Eds.), *Professional burnout: Recent developments in theory and research* (pp. 1-16). Bristol, PA: Taylor and Francis.
- Maslach, C., Schaufeli, W. B., & Leiter, M. P. (2001). Job burnout. *Annual Review of Psychology, 52*, 397-422. doi: 10.1146/annurev.psych.52.1.397
- Mauno, S., Leskinen, E., & Kinnunen, U. (2001). Multiwave multi-variable models of job insecurity: Applying different scales in studying the stability of job insecurity. *Journal of Organizational Behavior, 22*, 919-937. doi: 10.1002/job.122
- McCrae, R. R. (1991). The five-factor model and its assessment in clinical settings. *Journal of Personality Assessment, 57*(3), 399-314. doi: 10.1207/s15327752jpa5703_2
- McCrae, R. R., & Costa, P. T., Jr. (1989). The structure of interpersonal traits: Wiggins's circumplex and the five-factor model. *Journal of Personality & Social Psychology, 56*(4), 586-595. doi: 10.1037/0022-3514.56.4.586
- McCrae, R. R., Costa, P. T., Jr., & Busch, C. M. (1986). Evaluating comprehensiveness in personality systems: The California Q-set and the five-factor model. *Journal of Personality, 54*, 430-446. doi: 10.1111/j.1467-6494.1986.tb00403.x
- McCrae, R. R., & John, O. P. (1992). An introduction to the five-factor model and its applications. *Journal of Personality, 60*(2), 175-215. doi: 10.1111/j.1467-6494.1992.tb00970.x
- McKnight, J. D. (1993). Perceived job control, burnout and depression in hospital nurses: Longitudinal and cross-sectional studies. *Dissertation Abstracts International, 54*, 6499B.

- McVicar, A. (2003). Workplace stress in nursing: A literature review. *Journal of Advanced Nursing*, 44(6), 633-642. Retrieved from <http://www.journalofadvancednursing.com/>.
- Melchior, M. E., Bours, G. J., Schmitz, P., & Wittich, Y. (1997). Burnout in psychiatric nursing: A meta-analysis of related variables. *Journal of Psychiatric Mental Health Nursing*, 4(3), 193-201. doi: 10.1046/j.1365-2850.1997.00057.x
- Michielsen, H. J., Willemsen, T. M., Croon, M. A., De Vries, J., & van Heck, G. L. (2004). Determinants of general fatigue and emotional exhaustion: A prospective study. *Psychology and Health*, 19, 223-235. doi: 10.1080/08870440310001627135
- Mills, L., & Huebner, E. (1998). A prospective study of personality characteristics, occupational stressors, and burnout among school psychology practitioners. *Journal of School Psychology*, 36, 103-120. doi: 10.1016/S0022-4405(97)00053-8
- Moore, K. A., & Cooper, C. L. (1996). Stress in mental health professionals: A theoretical overview. *International Journal of Social Psychiatry*, 42(2), 82-89. doi: 10.1177/002076409604200202
- Mortimer, J. T., & Lorence, J. (1995). Social psychology of work. In K. S. Cook, G. A. Fine & J. S. House (Eds.), *Sociological perspectives on social psychology* (pp. 497-523). Boston: Allyn and Bacon.
- Naisberg-Fennig, S., Fennig, S., Keinan, G., & Elizur, A. (1991). Personality characteristics and proneness to burnout: A study among psychiatrists. *Stress Medicine*, 7, 201-205. doi: 10.1002/smi.2460070402
- National Mental Health Association (2008). Last Bush budget bashes mental health: Proposed cuts jeopardize the lives of millions of Americans with mental illness. Retrieved June 21, 2010, from <http://www.nmha.org/index.cfm?objectid=E67E2A98-1372-4D20-C8FED5AD42940C8F>.
- Oginska-Bulik, N. (2006a). Occupational stress and its consequences in health care professionals: The role of Type D personality. *International Journal of Occupational Medicine and Environmental Health*, 19, 113-122. doi: 10.2478/v10001-006-0016-7
- Oginska-Bulik, N. (2006b). *Stress in human service professions*. Warsaw: Diffin.
- Oginska-Bulik, N., & Kaflik-Pierog, M. (2006). *Occupational stress in emergency services*. Lodz: Academy of Humanities and Economics.
- Ogresta, J., Rusac, S., & Zorec, L. (2008). Relation between burnout syndrome and job satisfaction among mental health workers. *Croatian Medical Journal*, 49(3), 364-374. doi: 10.3325/cmj.2008.3.364

- Oyefeso, A., Clancy, C., & Farmer, R. (2008). Prevalence and associated factors in burnout and psychological morbidity among substance misuse professionals. *BMC Health Services Research*, 8, 39. doi: 10.1186/1472-6963-8-39
- Pedler, M., Boydell, T., & Burgoyne, J. (1998). *The learning company project report*. UK: The Training Agency.
- Perry, S. W., & Markowitz, J. (1986). Psychiatric interventions for AIDS-spectrum disorders. *Hospital & Community Psychiatry*, 37(10), 1001-1006. Retrieved from <http://ps.psychiatryonline.org/index.dtl>.
- Piedmont, R. L. (1993). A longitudinal analysis of burnout in the health care setting: The role of personal dispositions. *Journal of Personality Assessment*, 61(3), 457-473. doi: 10.1207/s15327752jpa6103_3
- Pines, A. (1996). *Couple burnout: Causes and cures*. New York: Routledge.
- Pines, A., & Kafry, D. (1978). Occupational tedium in the social services. *Socail Work*, 23(6), 499-507. Retrieved from <http://www.naswpress.org/publications/journals/sw.html>.
- Pines, A., & Maslach, C. (1978). Characteristics of staff burnout in mental health settings. *Hospital & Community Psychiatry*, 29(4), 233-237. Retrieved from <http://ps.psychiatryonline.org/index.dtl>.
- Pines, A. M., & Aronson, E. (1998). *Career burnout: Causes and cures*. New York: Free Press.
- Pompili, M., Rinaldi, G., Lester, D., Girardi, P., Ruberto, A., & Tatarelli, R. (2006). Hopelessness and suicide risk emerge in psychiatric nurses suffering from burnout and using specific defense mechanisms. *Archives of Psychiatric Nursing*, 20(3), 135-143. doi: 10.1016/j.apnu.2005.12.002
- Pottage, D., & Huxley, P. (1996). Stress and mental health social work: A developmental perspective. *The International Journal of Social Psychiatry*, 42, 124-131. doi: 10.1177/002076409604200206
- Prosser, D., Johnson, S., Kuipers, E., Szmukler, G., Bebbington, P., & Thornicroft, G. (1996). Mental health, 'burnout' and job satisfaction among hospital and community-based mental health staff. *British Journal of Psychiatry*, 169(3), 334-337. doi: 10.1192/bjp.169.3.334
- Rafferty, Y., Friend, R., & Landsbergis, P. A. (2001). The association between job skill discretion, decision authority and burnout. *Work & Stress*, 15, 73-85. doi: 10.1080/02678370110064627
- Raquepaw, J. M., & Miller, R. S. (1989). Psychological burnout: A componential analysis. *Professional Psychology: Research and Practice*, 20, 32-36. doi: 10.1037/0735-7028.20.1.32

- Ratliff, N. (1988). Stress and burnout in the helping professions. *Social Casework*, 69(3), 147-154. Retrieved from <http://www.familiesinsociety.org/default.asp>.
- Rees, D. W., & Cooper, C. L. (1990). Occupational stress in health service employees. *Health Services Management Research*, 3(3), 163-172. Retrieved from <http://hsmr.rsmjournals.com/>.
- Rogerson, T. E., & Piedmont, R. L. (1998). Assessing the incremental validity of the religious problem-solving scale in the prediction of clergy burnout. *Journal for the Scientific Study of Religion*, 37, 517-527. doi: 10.2307/1388058
- Rose, D., Horne, S., Rose, J. L., & Hastings, R. P. (2004). Negative emotional reactions to challenging behavior and staff burnout: Two replication studies. *Journal of Applied Research in Intellectual Disabilities*, 17, 219-223. doi: 10.1111/j.1468-3148.2004.00194.x
- Rowe, M. M., & Sherlock, H. (2005). Stress and verbal abuse in nursing: Do burned out nurses eat their young? *Journal of Nursing Management*, 13(3), 242-248. doi: 10.1111/j.1365-2834.2004.00533.x
- Rupert, P. A., & Morgan, D. J. (2005). Work setting and burnout among professional psychologists. *Professional Psychology: Research and Practice*, 36, 544-550. doi: 10.1037/0735-7028.36.5.544
- Salyers, M. P., & Bond, G. R. (2001). An exploratory analysis of racial factors in staff burnout among assertive community treatment workers. *Community Mental Health Journal*, 37(5), 393-404. doi: 10.1023/A:1017575912288
- Santos, S. R., & Cox, K. (2000). Workplace adjustment and intergenerational differences between matures, boomers, and xers. *Nursing Economics*, 18(1), 7-13. Retrieved from <http://www.nursingeconomics.net/cgi-bin/WebObjects/NECJournal.woa>.
- Schaubroeck, J., & Jennings, K. (1991). A longitudinal investigation of factors mediating the participative decision-making job satisfaction linkage. *Multivariate Behavioral Research*, 26, 49-68. doi: 10.1207/s15327906mbr2601_3
- Schaufeli, W. B., & Enzmann, D. (1998). *The burnout companion to study and practice: A critical analysis*. Philadelphia: Taylor & Francis.
- Schultz, R., Greenley, J. R., & Brown, R. (1995). Organization, management, and client effects on staff burnout. *Journal of Health & Social Behavior*, 36(4), 333-345. doi: 10.2307/2137323
- Schwartz, R. H., Tiarniyu, M. F., & Dwyer, D. J. (2007). Social worker hope and perceived burnout: The effects of age, years in practice, and setting. *Administration in Social Work*, 31, 103-119. doi: 10.1300/J147v31n04_08
- Seligman, M. E. P. (1975). *Helplessness: On depression, development, and health*. San Francisco: Freeman.

- Shirom, A. (1993). Burnout in work organizations. In W. B. Schaufeli, C. Maslach & T. Marek (Eds.), *Professional burnout: Recent developments in theory and research* (pp. 25-48). Bristol, PA: Taylor & Francis.
- Shirom, A., Westman, M., Shamai, O., & Carel, R. S. (1997). Effects of work overload and burnout on cholesterol and triglycerides levels: The moderating effects of emotional reactivity among male and female employees. *Journal of Occupational Health Psychology, 2*(4), 275-288. doi: 10.1037/1076-8998.2.4.275
- Shoptaw, S., Stein, J. A., & Rawson, R. A. (2000). Burnout in substance abuse counselors. Impact of environment, attitudes, and clients with HIV. *Journal of Substance Abuse Treatment, 19*(2), 117-126. Retrieved from <http://www.elsevier.com>.
- Skorupa, J., & Agresti, A. A. (1993). Ethical beliefs about burnout and continued professional practice. *Professional Psychology: Research and Practice, 24*, 281-285. doi: 10.1037/0735-7028.24.3.281
- Soderfeldt, M., Soderfeldt, B., & Warg, L. E. (1995). Burnout in social work. *Social Work, 40*, 638-646. Retrieved from <http://www.naswpress.org/publications/journals/sw.html>.
- Srivastava, S., John, O. P., Gosling, S. D., & Potter, J. (2003). Development of personality in early and middle adulthood: Set like plaster or persistent change? *Journal of Personality & Social Psychology, 84*(5), 1041-1053. doi: 10.1037/0022-3514.84.5.1041
- Stasny, K. (2008). *How do clinical social workers stay enthusiastic about their work?* , Smith College School for Social Work, Northampton, MA.
- Stress (2009). *Merriam Webster online dictionary*. Retrieved January 25, 2009: from <http://www.merriam-webster.com/dictionary/stress>
- Sullivan, P. J. (1993). Occupational stress in psychiatric nursing. *Journal of Advanced Nursing, 18*(4), 591-601. doi: 10.1046/j.1365-2648.1993.18040591.x
- Sundin, L., Hochwaller, J., Bildt, C., & Lisspers, J. (2007). The relationship between different work-related sources of social support and burnout among registered and assistant nurses in Sweden: a questionnaire survey. *International Journal of Nursing Studies, 44*(5), 758-769. doi: 10.1016/j.ijnurstu.2006.01.004
- Sverke, M., Hellgreen, J., & Naswall, K. (2002). No security: A meta-analysis and review of job insecurity and its consequences. *Journal of Occupational Health Psychology, 7*(3), 242-264. doi: 10.1037/1076-8998.7.3.242
- Swider, B. W., & Zimmerman, R. D. (2010). Born to burnout: A meta-analytic path model of personality, job burnout, and work outcomes. *Journal of Vocational Behavior, 76*(3), 487-506. doi: 10.1016/j.jvb.2010.01.003

- Taris, T. W., Le Blanc, P. M., Schaufeli, W. B., & Schreurs, P. J. (2005). Are there causal relationships between the dimensions of the Maslach Burnout Inventory? A review and two longitudinal tests. *Work & Stress, 19*, 238-255. doi: 10.1080/02678370500270453
- Tekleab, A., Takeuchi, R., & Taylor, M. S. (2005). Extending the chain of relationships among organizational justice, social exchange, and employee reactions: The role of contract violations. *Academy of Management Journal, 48*, 146-157. doi: 10.2307/20159646
- Thompson, M. S., Page, S. L., & Cooper, C. L. (1993). A test of Carver and Scheier's self-control model of stress in exploring burnout among mental health nurses. *Stress Medicine, 9*, 221-235. doi: 10.1002/smi.2460090405
- Tracy, E. M., Bean, N., Gwatkin, S., & Hill, B. (1992). Family preservation workers: Sources of job satisfaction and job stress. *Research on Social Work Practice, 2*(465-478). doi: 10.1177/104973159200200403
- van der Ploeg, H. M., van Leeuwen, J. J., & Kwee, M. G. (1990). Burnout among Dutch psychotherapists. *Psychological Reports, 67*(1), 107-112. doi: 10.2466/PRO.67.5.107-112
- Van Humbeeck, G., Van Audehove, C., & Declercq, A. (2004). Mental health, burnout and job satisfaction among professionals in sheltered living in Flanders. A pilot study. *Social Psychiatry and Psychiatric Epidemiology, 7*, 569-575. Retrieved from <http://www.springerlink.com>.
- Virtanen, M., Honkonen, T., Kivimaki, M., Ahola, K., Vahtera, J., Aromaa, A., et al. (2007). Work stress, mental health and antidepressant medication findings from the Health 2000 Study. *Journal of Affective Disorders, 98*(3), 189-197. doi: 10.1016/j.jad.2006.05.034
- Warr, P. (1987). *Work, unemployment and mental health*. Oxford: Oxford University Press.
- Watson, D., David, J. P., & Sula, J. (1999). Personality, affectivity, and coping. In C. R. Snyder (Ed.), *Coping: The psychology of what works*. Oxford: Oxford University Press.
- Watson, D., & Hubbard, B. (1996). Adaptational style and dispositional structure: Coping in the context of the five-factor model. *Journal of Personality, 64*, 737-774. doi: 10.1111/j.1467-6494.1996.tb00943.x
- Westman, M., Etzion, D., & Danon, E. (2001). Job insecurity and crossover of burnout in married couples. *Journal of Organizational Behavior, 22*, 467-481. doi: 10.1002/job.91
- Wheaton, B. (1985). Models for the stress-buffering functions of coping resources. *Journal of Health & Social Behavior, 26*(4), 352-364. doi: 10.2307/2136658

- Wright, T. A., & Bonnett, D. G. (1997). The contributions of burnout to work performance. *Journal of Organizational Behavior, 18*, 491-499. doi: 10.1002/(SICI)1099-1379(199709)18:5<491::AID-JOB804>3.0.CO;2-I
- Wright, T. A., & Cropanzano, R. (1998). Emotional exhaustion as a predictor of job performance and voluntary turnover. *Journal of Applied Psychology, 83*(3), 486-493. doi: 10.1037/0021-9010.83.3.486
- Zellars, K. L., & Perrewe, P. L. (2001). Affective personality and the content of emotional social support: Coping in organizations. *Journal of Applied Psychology, 86*(3), 459-467. doi: 10.1037/0021-9010.86.3.459
- 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. doi: 10.1111/j.1559-1816.2000.tb02456.x

APPENDICES

A: Solicitation Letter to Providers

January 13, 2009

Dear Ms. X,

I am writing you in order to introduce Jessica Karle, a third-year Ph.D. student who I am currently supervising with her dissertation research project. The problem addressed by the proposed research is burnout of mental health providers. More specifically, Jessica is interested in identifying factors that may lead to less (or more) burnout in providers who work primarily with individuals who suffer from severe and persistent mental illness, chronic substance abuse, or both. She plans to identify critical factors with the goal of developing burnout prevention programs to address and minimize those barriers to optimal staff functioning.

Jessica anticipates recruiting case managers and social workers from regional community mental health centers, social service agencies, and chemical dependency programs. Participants would be asked to provide demographic information in addition to an assessment of burnout, a job climate survey, and a personality inventory. Filling out the questionnaires will take approximately 20-30 minutes, and all information gathered, including that of the individual and the agency, will be completely confidential and anonymous.

I believe that identifying the risk factors and protective factors of burnout is essential to assure the proper care for clients, especially those with chronic mental health issues. I am writing in support of Jessica's research, asking that you provide her an opportunity to explain in more detail how she hopes to conduct her study. She will be contacting you by telephone in the very near future, and I would be most appreciative if you would be willing to discuss her work and consider allowing her to conduct her study in your facility. If I can address any concerns you might have, do not hesitate to contact me at (954) 262-5710 or at dorfman@nova.edu.

Best Regards,

William I. Dorfman, Ph.D., ABPP
Diplomate in Clinical Psychology
Professor of Psychology and Associate Director of Clinical Training
Director, Long-Term Mental Illness Concentration

B: Participation Letter

Adult/General Informed Consent (Rev. 01/29/2009)

Letter for Participation in the Research Study Entitled
Assessing Burnout in Mental Health Providers of Chronic Clients:
An Exploration of Predictors

Funding Source: None.

IRB approval #

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What is the study about?

You are invited to participate in a research study. The intention is to identify critical factors that lead to less (or more) burnout with the goal of developing burnout prevention and intervention programs.

Why are you asking me?

Working in direct contact with clients as a health care professional involves many job stressors. In determining what variables lead to the most stress, prevention programs and stress reduction trainings can be created and implemented.

What will I be doing if I agree to be in the study?

You will be asked to fill out a questionnaire that asks you to provide demographic information in addition to completing an assessment of job stress, a job climate survey, and a personality inventory. Filling out the questionnaires will take approximately 10-15 minutes.

What are the dangers to me?

Risks include: (1) feeling coerced into filling out the questionnaire; (2) feeling as if filling out the questionnaire is inconvenient, tedious, or time-consuming; and (3) feeling anxious or uncomfortable as a result of filling out the questionnaire. Risks to you are minimal, meaning they are not thought to be greater than other risks you experience every day. If you have any concerns about the risks or benefits of participating in this study, you can contact either Jessica Karle, Dr. William Dorfman, or the IRB office at the numbers indicated above.

Are there any benefits to me for taking part in this research study?

There are no direct benefits.

Will I get paid for being in the study? Will it cost me anything?

There are no costs to you or payments made for participating in this study.

How will you keep my information private?

All information obtained in this study, not only your personal information but that of your agency, is strictly confidential unless disclosure is required by law. You will not be required to provide your name on the questionnaire or this letter, and no identifying information will be entered into the database. The IRB and other government agencies may review research records, but they would be unable to ascertain your identity given the lack of identifying information collected.

What if I want to leave the study?

You have the right to refuse to participate or to withdraw at any time, without penalty. If you do withdraw, it will not affect your status at the agency in any way. After mailing your questionnaire, investigators will not be able to destroy your data as it will be impossible to distinguish your questionnaire from the others. Data that is collected will be kept for 3 years after the study has ended.

Other Considerations:

If significant new information relating to the study becomes available, which may relate to your willingness to continue to participate, this information will be provided to you by the investigators.

Voluntary Consent by Participant:

I have read the preceding participation letter, or it has been read to me, and I fully understand the contents of this document and voluntarily consent to participate in the research study entitled Assessing Burnout in Mental Health Providers of Chronic Clients: An Exploration of Predictors. All of my questions concerning the research have been answered. I hereby agree to participate in this research study. If I have any questions in the future about this study they will be answered by Jessica Karle. A copy of this letter has been given to me.

I understand that completion and submission of the following questionnaire is evidence that I am agreeing to participate in this study. This consent ends at the conclusion of this study.

C: Study Questionnaire

Please answer each question in a way that best describes **you and your job characteristics**. Sometimes none of the answers fit exactly. **Please choose the answer that comes closest.**

Age _____

Gender (Please circle one) Female Male

Marital Status Single Married Partnered Divorced/Separated Widowed

How do you describe yourself?

- Asian
- Black or African-American
- Hispanic or Latino
- Caucasian
- Other

What is your education?

- Some High School
- High School Graduate
- Some College
- College Graduate
- Graduate School

How do you describe your job?

- Social Worker
- Case Manager
- Mental Health Counselor
- Mental Health Technician
- Psychologist

How long have you worked in this type of job? _____ years

How do you describe your work setting?

- Public
- Private, for profit
- Private, not for profit

How long have you worked at your place of employment? _____ years

_____ % of your clients are diagnosed with **one or more** of the following disorders:

Major Depressive Disorder, recurrent
 Bipolar Disorder
 Obsessive Compulsive Disorder
 Schizophreniform Disorder
 Schizoaffective Disorder
 Schizophrenia
 Borderline Personality Disorder
 Substance Abuse, chronic
 Substance Dependence, chronic

On average, I spend _____ hours per week direct contact with clients.

(Note: The next two questions **DO NOT** need to total the number from above.)

On average, I spend _____ hours per week counseling clients.

On average, I spend _____ hours per week providing concrete case management services to clients.

Have you ever thought about seeking mental health treatment due to your job-related stress?

- Yes
- No

Have you ever suffered from the following? (Please check all that apply)

- Recurrent Bouts of Flu
- Recurrent Bouts of Common Cold
- Recurrent Headaches
- Chronic Fatigue
- Musculoskeletal Disorder (e.g., tendinitis, carpal tunnel syndrome)
- Sleep Disturbance
- Gastro-Intestinal Disorder or Digestive Disease
- Sexual Dysfunction
- Cardiovascular Disease
- Type II Diabetes
- High Blood Pressure
- High Cholesterol
- Respiratory Disease

3. My job requires that I learn new things.

Strongly Disagree Disagree Agree Strongly Agree

4. My job involves a lot of repetitive work.

Strongly Disagree	Disagree	Agree	Strongly Agree
----------------------	----------	-------	-------------------

5. My job requires me to be creative.

Strongly Disagree	Disagree	Agree	Strongly Agree
----------------------	----------	-------	-------------------

6. My job allows me to make a lot of decisions on my own.

Strongly Disagree	Disagree	Agree	Strongly Agree
----------------------	----------	-------	-------------------

7. My job requires a high level of skill.

Strongly Disagree	Disagree	Agree	Strongly Agree
----------------------	----------	-------	-------------------

8. On my job, I have very little freedom to decide how I do my work.

Strongly Disagree	Disagree	Agree	Strongly Agree
----------------------	----------	-------	-------------------

9. I get to do a variety of different things on my job.

Strongly Disagree	Disagree	Agree	Strongly Agree
----------------------	----------	-------	-------------------

10. I have a lot of say about what happens on my job.

Strongly Disagree	Disagree	Agree	Strongly Agree
----------------------	----------	-------	-------------------

11. I have an opportunity to develop my own special abilities.

Strongly Disagree	Disagree	Agree	Strongly Agree
----------------------	----------	-------	-------------------

12. How many people are in your work group or unit?

- I work alone
- 2-5 people
- 6-10 people
- 10-20 people
- More than 20 people

13a. I have significant influence over decisions in my work group or unit.

I work Alone	Strongly Disagree	Disagree	Agree	Strongly Agree
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13b. My work group or unit makes decisions democratically.

I work Alone	Strongly Disagree	Disagree	Agree	Strongly Agree
--------------	----------------------	----------	-------	-------------------

14. I have at least some chance that my ideas will be considered about company policy (e.g., hiring, firing, wage levels, office closings, new purchases, etc.).

Strongly Disagree	Disagree	Agree	Strongly Agree
----------------------	----------	-------	-------------------

15. I supervise other people as part of my job.

- No
- Yes, 1-4 people
- Yes, 5-10 people
- Yes, 11-20 people
- Yes, more than 20 people

16. I am a member of a union or employee association.

- Yes
- No

17. My union or employee association is influential in affecting company policy.

I Am Not a Member	Strongly Disagree	Disagree	Agree	Strongly Agree
----------------------	----------------------	----------	-------	-------------------

18. I have influence over the policies of the union or employee association.

I Am Not a Member	Strongly Disagree	Disagree	Agree	Strongly Agree
----------------------	----------------------	----------	-------	-------------------

19. My job requires working very fast.

Strongly Disagree	Disagree	Agree	Strongly Agree
----------------------	----------	-------	-------------------

20. My job requires working very hard.

Strongly Disagree	Disagree	Agree	Strongly Agree
----------------------	----------	-------	-------------------

21. My job requires lots of physical effort.

Strongly Disagree	Disagree	Agree	Strongly Agree
----------------------	----------	-------	-------------------

22. I am not asked to do an excessive amount of work.

Strongly Disagree	Disagree	Agree	Strongly Agree
----------------------	----------	-------	-------------------

23. I have enough time to get the job done.

Strongly Disagree	Disagree	Agree	Strongly Agree
----------------------	----------	-------	-------------------

24. I am often required to move or lift very heavy loads on my job.

Strongly Disagree	Disagree	Agree	Strongly Agree
----------------------	----------	-------	-------------------

25. My work requires rapid and continuous physical activity.

Strongly Disagree	Disagree	Agree	Strongly Agree
----------------------	----------	-------	-------------------

26. I am free from conflicting demands that others make.

Strongly Disagree	Disagree	Agree	Strongly Agree
----------------------	----------	-------	-------------------

27. My job requires long periods of intense concentration on the task.

Strongly Disagree	Disagree	Agree	Strongly Agree
----------------------	----------	-------	-------------------

28. My tasks are often interrupted before they can be completed, requiring attention at a later time.

Strongly Disagree	Disagree	Agree	Strongly Agree
----------------------	----------	-------	-------------------

29. My job is very hectic.

Strongly Disagree	Disagree	Agree	Strongly Agree
----------------------	----------	-------	-------------------

30. I am often required to work for long periods with my body in physically awkward positions.

Strongly Disagree	Disagree	Agree	Strongly Agree
----------------------	----------	-------	-------------------

31. I am required to work for long periods with my head or arms in physically awkward positions.

Strongly Disagree	Disagree	Agree	Strongly Agree
----------------------	----------	-------	-------------------

32. Waiting on work from other people or departments often slows me down on my job.

Strongly Disagree	Disagree	Agree	Strongly Agree
----------------------	----------	-------	-------------------

33. How steady is your work?

- Regular and steady
- Seasonal
- Frequent layoffs
- Both seasonal and frequent layoffs
- Other

34. My job security is good.

Strongly Disagree Disagree Agree Strongly Agree

35. During the past year, how often were you in a situation where you faced job loss or layoff?

- Never
- Faced the possibility once
- Faced the possibility more than once
- Constantly
- Actually layed off

36. Sometimes people permanently lose jobs they want to keep. How likely is it that during the next couple of years you will lose your present job with your employer?

- Not at all likely
- Not too likely
- Somewhat likely
- Very likely

37. My prospects for career development and promotions are good.

Strongly Disagree Disagree Agree Strongly Agree

38. In five years, my skills will still be valuable.

Strongly Disagree Disagree Agree Strongly Agree

39. My supervisor is concerned about the welfare of those under him.

Strongly Disagree Disagree Agree Strongly Agree I have no supervisor

40. My supervisor pays attention to what I am saying.

Strongly Disagree Disagree Agree Strongly Agree I have no supervisor

41. I am exposed to hostility or conflict from my supervisor.

Strongly Disagree Disagree Agree Strongly Agree I have no supervisor

42. My supervisor is helpful in getting the job done.

Strongly Disagree Disagree Agree Strongly Agree I have no supervisor

43. My supervisor is successful in getting people to work together.

Strongly Disagree Disagree Agree Strongly Agree I have no supervisor

44. People I work with are competent in doing their jobs.

Strongly Disagree Disagree Agree Strongly Agree

45. People I work with take a personal interest in me.

Strongly Disagree Disagree Agree Strongly Agree

46. I am exposed to hostility or conflict from the people I work with.

Strongly Disagree Disagree Agree Strongly Agree

47. People I work with are friendly.

Strongly Disagree Disagree Agree Strongly Agree

48. The people I work with encourage each other to work together.

Strongly Disagree Disagree Agree Strongly Agree

49. The people I work with are helpful in getting the job done.

Strongly Disagree Disagree Agree Strongly Agree

Here are a number of characteristics that may or may not apply to **YOU**. Please choose a number below each statement to indicate the extent to which you agree or disagree with each statement. There are 44 items. It's important that you respond to all statements...

Disagree Strongly	Disagree a little	Neither disagree nor agree	Agree a little	Agree Strongly
1	2	3	4	5

1. _____ Is talkative
2. _____ Tends to find fault with others
3. _____ Does a thorough job
4. _____ Is depressed, blue
5. _____ Is original, comes up with new ideas
6. _____ Is reserved
7. _____ Is helpful and unselfish with others
8. _____ Can be somewhat careless

Disagree Strongly	Disagree a little	Neither disagree nor agree	Agree a little	Agree Strongly
1	2	3	4	5

9. _____ Is relaxed, handles stress well
10. _____ Is curious about many different things
11. _____ Is full of energy
12. _____ Starts quarrels with others
13. _____ Is a reliable worker
14. _____ Can be tense
15. _____ Is ingenious, a deep thinker
16. _____ Generates a lot of enthusiasm
17. _____ Has a forgiving nature
18. _____ Tends to be disorganized
19. _____ Worries a lot
20. _____ Has an active imagination
21. _____ Tends to be quiet
22. _____ Is generally trusting
23. _____ Tends to be lazy
24. _____ Is emotionally stable, not easily upset
25. _____ Is inventive
26. _____ Has an assertive personality
27. _____ Can be cold and aloof
28. _____ Perseveres until the task is finished
29. _____ Can be moody
30. _____ Values artistic, aesthetic experiences
31. _____ Is sometimes shy, inhibited
32. _____ Is considerate and kind to almost everyone
33. _____ Does things efficiently
34. _____ Remains calm in tense situations
35. _____ Prefers work that is routine
36. _____ Is outgoing, sociable
37. _____ Is sometimes rude to others
38. _____ Makes plans and follows through with them
39. _____ Gets nervous easily
40. _____ Likes to reflect, play with ideas
41. _____ Has few artistic interests
42. _____ Likes to cooperate with others
43. _____ Is easily distracted
44. _____ Is sophisticated in art, music, or literature

Because persons in a wide variety of occupations will answer this survey, it uses the term recipients to refer to the people for whom you provide your service, care, treatment, or instruction. When answering this survey, please think of these people as recipients of the service you provide, even though you may use another term in your work.

Below there are 22 statements of job-related feelings. Please read each statement carefully and decide if you ever feel this way about your job. If you have never had this feeling, write a "0" in the space before the statement. If you have had this feeling, indicate how often you feel it by writing the number (from 1 to 6) that best describes how frequently you feel that way.

How often:	0	1	2	3	4	5	6
	Never	A few times a year or less	Once a month or less	A few times a month	Once a week	A few times a week	Every day

How Often 0-6	Statements
1. _____	I feel emotionally drained from my work.
2. _____	I feel used up at the end of the workday.
3. _____	I feel fatigued when I get up in the morning and have to face another day on the job.
4. _____	I can easily understand how my recipients feel about things.
5. _____	I feel I treat some recipients as if they were impersonal objects.
6. _____	Working with people all day is really a strain for me.
7. _____	I deal very effectively with the problems of my recipients.
8. _____	I feel burned out from my work.
9. _____	I feel I'm positively influencing other people's lives through my work.
10. _____	I've become more callous toward people since I took this job.
11. _____	I worry that this job is hardening me emotionally.
12. _____	I feel very energetic.
13. _____	I feel frustrated by my job.
14. _____	I feel I'm working too hard on my job.
15. _____	I don't really care what happens to some recipients.
16. _____	Working with people directly puts too much stress on me.
17. _____	I can easily create a relaxed atmosphere with my recipients.
18. _____	I feel exhilarated after working closely with my recipients.
19. _____	I have accomplished many worthwhile things in this job.
20. _____	I feel like I'm at the end of my rope.
21. _____	In my work, I deal with emotional problems very calmly.
22. _____	I feel recipients blame me for some of their problems.

D: Range of Possible Scores on Job Content Questionnaire

	Most Stressed Score	Least Stressed Score
Decision Latitude	36	84
Psychological Demands	48	12
Job Insecurity	15	3
Coworker Support	4	16
Supervisor Support	4	16