Antecedents and Consequences of Burnout Among Professional Psychologists

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ANTECEDENTS AND CONSEQUENCES OF BURNOUT AMONG PROFESSIONAL PSYCHOLOGISTS

A DISSERTATION SUBMITTED TO THE FACULTY OF THE GRADUATE SCHOOL IN CANDIDACY FOR THE DEGREE OF DOCTOR OF PHILOSOPHY

PROGRAM IN CLINICAL PSYCHOLOGY

BY

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# TABLE OF CONTENTS

ACKNOWLEDGEMENTS iii

LIST OF TABLES vi

LIST OF FIGURES vii

ABSTRACT viii

CHAPTER ONE: INTRODUCTION 1

CHAPTER TWO: REVIEW OF RELATED LITERATURE 4
  Development of the Burnout Construct 4
  Theoretical Models of Burnout 8
    Job Demands-Control Model 9
    Job Demands-Control-Support Model 10
    Job Demands-Resources Model 11
  Burnout Among Professional Psychologists 16
    Antecedents of Burnout 18
    Consequences of Burnout 22
  Summary and the Present Study 29
    Aim One 32
    Aim Two 32
    Aim Three 33

CHAPTER THREE: METHOD 35
  Participants 35
  Procedure 36
  Measures 36
    Demographic Questions 36
    Caseload Demand 37
    Psychologist Burnout Inventory-Revised 37
    Opportunities for Professional Development-Short Form 38
    Maslach Burnout Inventory-Human Services Survey 38
    Working Alliance Inventory-Short Form 40
    Intent to Quit 41
    Absenteeism 41

CHAPTER FOUR: RESULTS 42
  Preliminary Analyses 43
    Outliers 43
    Missing Data 44
    Descriptive Statistics and Correlations 45
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Confirmatory Factor Analysis and Item Parceling</td>
<td>48</td>
</tr>
<tr>
<td>Aim One: Job Demands, Resources, and Burnout</td>
<td>52</td>
</tr>
<tr>
<td>Aim Two: Resources as a Buffer</td>
<td>55</td>
</tr>
<tr>
<td>Aim Three: Consequences of Burnout</td>
<td>57</td>
</tr>
<tr>
<td>CHAPTER FIVE: DISCUSSION</td>
<td>63</td>
</tr>
<tr>
<td>Differential Relationship of Job Demands and Resources with Burnout</td>
<td>65</td>
</tr>
<tr>
<td>Measurement of Demands and Resources</td>
<td>65</td>
</tr>
<tr>
<td>Patterns of Relationships</td>
<td>67</td>
</tr>
<tr>
<td>Resources as a Buffer</td>
<td>70</td>
</tr>
<tr>
<td>Consequences of Burnout</td>
<td>73</td>
</tr>
<tr>
<td>Measurement of Impairment</td>
<td>74</td>
</tr>
<tr>
<td>Predicting Impairment</td>
<td>75</td>
</tr>
<tr>
<td>Limitations and Directions for Future Research</td>
<td>78</td>
</tr>
<tr>
<td>Conclusions and Implications</td>
<td>81</td>
</tr>
<tr>
<td>REFERENCE LIST</td>
<td>84</td>
</tr>
<tr>
<td>VITA</td>
<td>101</td>
</tr>
</tbody>
</table>
LIST OF TABLES

Table 1. Descriptive Statistics and Correlations for Study Variables ...................................................... 47
Table 2. Model Fit Indices for Path Invariance Tests .................................................................................. 54
Table 3. Scaled Difference Test Statistics for Path Invariance Tests ....................................................... 55
LIST OF FIGURES

Figure 1. Hypothesized latent variable path model of job demands, job resources, emotional exhaustion, client depersonalization, and professional impairment. 34

Figure 2. Three-factor measurement model of job demands, job resources, and professional impairment. 51

Figure 3. Baseline latent variable structural model for path invariance testing. 53

Figure 4. Latent variable moderation model testing moderating impact of job resources on the effect of job demands on emotional exhaustion. 56

Figure 5. Latent variable path model of job demands, job resources, emotional exhaustion, client depersonalization, and professional impairment. 59

Figure 6. Latent variable mediation model testing the effect of job demands on professional impairment via emotional exhaustion. 61
ABSTRACT

Mental health professionals are thought to be uniquely at risk for burnout due to the personal nature of their work and the types of clients with whom they work. But, while the phenomenon of burnout has received attention in the general occupational health literature, research focused on the predictors and outcomes of burnout among professional psychologists remains relatively limited. This study focused on the antecedents and consequences of the emotional exhaustion and client depersonalization components of burnout and, guided by the job demands-resources model, had three main aims: a) examine job demands and job resources as predictors of emotional exhaustion and client depersonalization, b) examine the role of job resources in buffering the impact of job demands on emotional exhaustion, and c) examine the role of emotional exhaustion and client depersonalization in leading to professional impairment. These aims were addressed via latent variable path modeling using self-report data from psychologists licensed in the state of Illinois (n = 362). Results indicated that job demands and resources were both unique and significant predictors of emotional exhaustion and client depersonalization, however, the predictive strength of job demands was significantly stronger. Additionally, exhaustion was significantly related to professional impairment and there was evidence that it mediated the relationship between job demands and professional impairment. Theoretical implications are discussed, as well as practical implications for the ethical practice of psychology.
CHAPTER ONE
INTRODUCTION

Human service providers may experience professional burnout due to the emotionally demanding, interpersonal nature of their work. The term burnout refers to a chronic state of job stress. It is a multifaceted syndrome, typically characterized by high levels of emotional exhaustion, high levels of client depersonalization, and low feelings of personal accomplishment (Maslach & Jackson, 1981). Hence, individuals who are burned out may feel emotionally depleted, have a callous or cynical attitude towards their clients, and may be unable to see positive aspects of their work. Emotional exhaustion and client depersonalization are often considered the core features of the syndrome.

The concept of burnout originated from the experiences of human service providers, and mental health professionals are believed to be uniquely at risk for burnout due to the personal nature of their work and the types of clients with whom they work (Freudenberger, 1975; Maslach, 1976). But, while the phenomenon of burnout has received attention in the general occupational health literature as well as the specific professional literatures focused on teachers and nurses, research focused on burnout among professional psychologists remains relatively limited. Research to date has focused on identifying various correlates of the three facets of burnout, but has been largely atheoretical and there is a paucity of research on the occupational consequences of burnout among psychologists.

The Job Demands-Resources (JD-R) model, the most comprehensive theoretical model of
burnout to date, provides a framework for investigating potential antecedents and consequences of the core features of burnout as experienced by professional psychologists. This model suggests that job characteristics, categorized as either a demand or a resource, lead to burnout and, in turn, burnout leads to negative work outcomes (Demerouti, Bakker, Nachreiner, & Schaufeli, 2001). While various versions of the theory have been postulated, there are three main assumptions or propositions that build on each other in a stepwise manner to form a model of the predictors and outcomes of burnout. Firstly, the model suggests that job demands and resources are differentially related to exhaustion and client depersonalization. Specifically, the model suggests that job demands predict emotional exhaustion and job resources predict client depersonalization. Secondly, it suggests that job resources moderate the relationship between demands and exhaustion such that resources have a protective or buffering role. Thirdly, the JD-R model proposes that emotional exhaustion and client depersonalization both lead to negative work outcomes. Thus, the full JD-R model describes two mediational processes by which work characteristics impact professional impairment via the two core facets of burnout—(1) job demands tax individuals and lead to emotional exhaustion, which negatively impacts professional functioning and (2) a lack of job resources impedes individuals’ ability to successfully do their job and leads to depersonalization, which also negatively impacts professional functioning.

Guided by the JD-R model, this study had three main aims: a) examine job demands and job resources as predictors of burnout, b) examine the role of job resources in buffering the impact of job demands on burnout, and c) examine the role of burnout in leading to impaired professional functioning. Specifically, burnout was examined as a linking mechanism between
job characteristics and professional functioning. These aims were examined in a step-wise fashion; the first two aims, which concern the antecedents of burnout, were each examined and then, incorporating these findings, a model that included both antecedents and consequences was tested in order to examine the role of burnout as a linking mechanism.

Latent variable path modeling was utilized in order to better capture the general constructs of job demands, job resources, and professional impairment as well as allow for investigation of the pattern of relationships among the constructs. Based on previous research with psychologists, hours worked, negative client behaviors, caseload demand, and overinvolvement with clients were examined as indicators of job demands. Control, workplace social support, and opportunities for professional development were examined as indicators of job resources. Lastly, absenteeism, intent to quit, and therapist rated working alliance were examined as indicators of professional impairment.

The following sections include a review of the relevant literature pertaining to the aims of this study. Specifically, the literature review presents an overview of the burnout construct, influential theoretical models of burnout, and the research on burnout among professional psychologists. Next, methods are discussed, including descriptions of the participants, data collection procedure, and measures used. Data analytic procedures that address the hypotheses of this study are explained. Finally, results are reported and conclusions, theoretical implications, and future directions are discussed.
CHAPTER TWO

REVIEW OF RELATED LITERATURE

Development of the Burnout Construct

The construct of professional burnout was first introduced into the psychotherapy practice literature by Freudenberger (1975), a psychiatrist working in a community mental health agency. Based on his personal experience as well as observations of coworkers, he noted that human service work often involves a great deal of stress and strain. He wrote, “[the professional] feels from without himself the pressure of the needs of the population he is trying to serve . . . The emotional demands of all these needs upon us is tremendous.” (p. 74). Further, he suggested that positions that involve emotional caretaking, such as providing mental health services, are particularly taxing as the work involves being “constantly open and in touch with other people’s needs and wants” (p. 75).

Freudenberger (1975) believed that this stress, compounded by an unfulfilling personal life and other potential workplace stressors (e.g., conflict with administrators), can lead to the development of professional burnout. Per his observations, professionals who are burned out may be emotionally fatigued, show signs of anger/frustration, question their effectiveness, have a cynical view of their clients, withdraw from other professionals, make risky treatment decisions, and/or experience physical symptoms. Additionally, Freudenberger believed that the symptoms of burnout could lead to decreased professional effectiveness and increased staff turnover.

Soon after, Maslach (1976), a social psychologist studying emotions in the workplace,
more formally defined the construct of burnout. She published findings from interviews she conducted with a wide range of human service providers about occupational stress. In this work, she highlighted several themes. First, she noted it was not uncommon for participants to report feelings of exhaustion and emotional fatigue in response to the demands of direct human service provision. Second, it seemed some providers moderated their compassion for clients to protect themselves from intense emotions and function more effectively. But, high levels of emotional distancing could lead providers to view clients in a callous and/or dehumanizing way. Lastly, Maslach noted that participants often reported the provider-client relationship was rewarding and the source of positive feelings, however, some clinicians reported no longer feeling positively about their work. Based on these qualitative findings, Maslach suggested that burnout be defined as a multifaceted construct, characterized by high feelings of emotional exhaustion and client depersonalization and low feelings of personal accomplishment. She later published the Maslach Burnout Inventory (MBI; Maslach & Jackson, 1981), a self-report measure for human service providers that assesses these three markers of burnout, and it has played a major role in shaping research aimed at understanding the burnout phenomena.

The original conceptualization of burnout is rooted in the experiences of human service providers, and thus the facets of burnout reflect the emotional nature of the work and the centrality of the provider-client relationship (Freudenberger 1975; Maslach, 1976; Maslach & Jackson, 1981). However, as the field of organizational psychology became active in burnout research, the construct quickly expanded to be understood as a form of job stress that individuals in any occupation could experience. As a result, new burnout measures were developed to more adequately capture the experience of these workers. Most notably, Maslach and colleagues
developed a MBI-General Survey (Schaufeli, Leiter, Maslach, & Jackson, 1996), which reconceptualized the three components of the burnout construct in broader terms so that it could be used with a general employee population. Emotional exhaustion was broadened to the more general exhaustion subscale. The dimension of client depersonalization, which is very specific to those working directly with clients, was broadened to cynicism, referring to a distant and/or negative view of the job. In addition, the personal accomplishment dimension was expanded and renamed professional efficacy, referring to positive feelings about one’s abilities in the workplace.

As the body of research on burnout continued to grow, debate developed around the role of personal accomplishment in burnout. Specifically, some researchers have questioned the importance of personal accomplishment to the experience of professional burnout, noting the inconsistent relationship it has with the other facets of burnout as well as the relatively weak relationship it has to key antecedents and consequences (Green, Walkey, & Taylor, 1991; Lee & Ashforth, 1996; Leiter, 1991, 1993; Schaufeli & Enzmann, 1998). It has been suggested that feelings of personal accomplishment actually reflect work engagement, a separate construct, rather than burnout (Gonzalez-Roma, Schaufeli, Bakker, & Llort, 2006; Schaufeli & Taris, 2005). Partly in response to these concerns, other burnout measures emerged that were based on slightly different conceptualizations of burnout. For example, The Oldenburg Burnout Inventory (OLBI; Demerouti, 1999; Demerouti et al., 2001) assesses only two dimensions of burnout: overall exhaustion and disengagement (which corresponds to Maslach’s cynicism dimension).

A second area where researchers have worked to develop the burnout construct involves understanding the developmental trajectory of the burnout markers. Leiter and Maslach (1988)
hypothesized that emotional exhaustion is the first marker of burnout. They posit that once emotionally exhausted, professionals may limit their involvement with others and distance themselves psychologically from their clients (client depersonalization), which in turn creates a sense of inadequacy of their ability to relate to people and to perform their jobs (low personal accomplishment). This developmental trajectory closely relates to earlier qualitative findings on burnout (Freudenberger, 1975; Maslach, 1976) and, as is predicted by this phased model, empirical studies often report a strong positive relationship between emotional exhaustion and client depersonalization. But, depersonalization has not consistently related to personal accomplishment as the model suggests it would (Cordes, Dougherty, & Blum, 1997; Lee & Ashforth, 1993, 1996; Leiter & Maslach, 1988; Leiter, 1991). Furthermore, much of the work in this area has been cross-sectional in nature, making it difficult to draw conclusions about how burnout components develop over time.

In sum, the past several decades have seen an explosion of research aimed at understanding and refining the burnout construct. Theoretical and empirical work on this topic frequently highlights the primacy of emotional exhaustion and client depersonalization to the experience of burnout (Maslach, Schaufeli, & Leiter, 2001; Maslach & Leiter, 2008). In fact, noting the strong and consistent relationship between these two dimensions of burnout, Maslach and Leiter (2008) have emphasized that these two dimensions “go together” and reinforce each other. Thus, the current study focuses on the development of these two aspects of burnout. Because longitudinal studies are needed to determine the exact nature of the relationship between exhaustion and depersonalization, in the current study they are conceptualized as correlated experiences that, from a developmental standpoint, share a close temporal relationship.
Interestingly, although the concept of burnout is rooted in the literature on human service providers, much of the theoretical work aimed at understanding burnout has emerged from the general occupational health literature. Drawing from this literature, the following section discusses theoretical models of burnout. Subsequent sections discuss the literature examining burnout among psychologists and the specific aims and hypotheses of the present study.

**Theoretical Models of Burnout**

Theoretical models of burnout have largely arisen out of the general occupational health literature and have almost exclusively focused on organizational or job related variables to explain the development of burnout. One of the most studied models is the Job Demands-Control model, which proposes that burnout results from too many job demands and too little job control. This model was later revised in light of research highlighting the importance of social support to well-being. Coined the Job Demands-Control-Support model, this expanded model suggests that burnout results from too many job demands, too little job control, and not enough workplace support. Most recently, the Job Demands-Resources model of burnout has been proposed. This model proposes that burnout is the result of two parallel processes, one rooted in job demands and one rooted in job resources. Job demands are theorized to lead to increased exhaustion, while a lack of job resources is theorized to lead to increased disengagement. Both exhaustion and disengagement are predicted to lead to negative organizational outcomes. These three influential models and the relevant empirical research from the general occupational literature are discussed in more detail in the following sections.
Job Demands-Control Model

Karasek (1979) introduced a model of work strain that has become known as the Job Demands-Control model (JD-C). This model posits that strain can be predicted by two workplace characteristics—job demands and decision latitude. Demands are defined as the psychological stressors related to “accomplishing the workload, stressors related to unexpected tasks, and stressors of job related personal conflict” (p. 291). Decision latitude, most frequently shortened to “control,” is defined as an individual’s “potential control over his tasks and his conduct during the working day” (p. 289). The JD-C model proposes that high strain jobs have high demand and low control, passive jobs have low demand and low control, active jobs have high demand and high control, and low strain jobs have low demand and high control. In predicting levels of job strain, Karasek postulated a “relative excess” pattern where strain equals the excess of demands over control. According to this model, new skills will develop in professional situations in which demands and control are equally high, however, strain will result in situations in which the demands are above the control allowed. Hence, this model emphasizes the role of workplace control in modulating strain.

Many researchers have used the JD-C model as theoretical background when studying the effects of job demands and the resource of control on burnout (Hausser, Mojzich, Nielson, & Schulz-Hardt, 2010). Job demands have consistently been shown to have a strong relationship with burnout. For example, in a large-scale meta-analysis (Lee & Ashforth, 1996), the relationship between seven different types of job demands (role ambiguity, lack of role clarity, role conflict, role stress, stressful events at work, workload, work pressure, and physical discomfort) and the three facets of burnout were investigated. Five of the seven were significant
correlates of emotional exhaustion (role ambiguity, lack of role clarity, role conflict, stressful events at work, and workload), four of the seven were significant correlates of client depersonalization (role ambiguity, role conflict, stressful events at work, and workload), and six of the seven were significant correlates of personal accomplishment (role ambiguity, lack of role clarity, role conflict, role stress, stressful events at work, workload, and work pressure).

Additionally, perceived lack of control in work activities is frequently investigated as a correlate to burnout. Higher levels of control has consistently shown to relate to lower levels of emotional exhaustion (de Jonge, Janssen, & van Breukelen, 1996; de Jonge, Mulder, & Nijhuis, 1999; de Rijk, le Blance, Scheufeli, & de Jonge 1998; Fernet, Guay, & Senecal, 2004; Marchand & Durang, 2011; Rafferty, Friend, & Landsbergis, 2001; Wood et al., 2011) and client depersonalization (Fernet et al., 2004; Marchand & Durang, 2011; Rafferty et al., 2001). However, the majority of these studies found a direct relationship between job control and burnout. The empirical support for an interaction between demands and control has been inconsistent. For example, in a review of 35 studies aimed at testing the JD-C model, only four provided full support for the buffer hypothesis (Hausser et al., 2010). Furthermore, researchers have not been able to empirically demonstrate the four types of jobs (high strain, low strain, passive, active) originally postulated by Karasek (e.g., Igic, Keller, Elfering, Tschan, Kalin, & Semmer, 2017; Mauno, Makikangas, & Kinnunen, 2016).

**Job Demands-Control-Support Model**

The original JD-C model was later expanded to include workplace social support as an important resource on the basis of empirical work highlighting the relationship between support and physical health (Johnson & Hall, 1988, 1994; Johnson, Hall, & Theorell, 1989). The Job
Demands-Control-Support (JD-C-S) model suggests there are interactive effects between job demands, workplace control, and workplace support in predicting burnout. However, as pointed out by de Jonge and Kompier (1997), the JD-C-S model is vague on the nature of this interaction other than predicting the most unfavorable combination is a job with high demands, low control, and low workplace support.

Two meta-analytic studies provide evidence for the notion that social support is an important correlate of burnout. In Lee and Ashforth’s 1996 meta-analysis, supervisor support, coworker support, and having work friends emerged as significant correlates of lower emotional exhaustion, and supervisor support and coworker support emerged as significant correlates of less client depersonalization. Additionally, a significant relationship between social support and burnout was found in a meta-analysis conducted by Halbesleben (2006), with work-related support more strongly related to exhaustion than depersonalization and nonwork support more strongly related to depersonalization than exhaustion.

Several studies have investigated a possible interaction between support and demands. Additionally, a limited number have tested for a three-way interaction between support, control, and demands. Similar to empirical studies of the JD-C model, interaction findings have been inconsistent and only partially support these hypotheses (e.g., Burke & Greenglass, 1995; Elman & Dowd, 1997; Galek, Flannelly, Greene, & Kudler, 2011; Hamama, 2012; Huebner, 1992; Marchand & Durang, 2011; Melamed, Kushnir, & Meir, 1991; Rafferty et al., 2001; Wood et al., 2011).

**Job Demands-Resources Model**

The Job Demands-Resources (JD-R) model has been proposed to explain how job
characteristics lead to burnout, specifically exhaustion and disengagement, and negative work outcomes (Bakker & Demerouti, 2007; Demerouti et al., 2001). Similar to the JD-C model and the JD-C-S model, the JD-R model emphasizes the role of job demands and job resources in the development of burnout. However, the JD-R model extends previous models by broadening the definition of demands and resources. A basic assumption of the model is that while every occupation may have its own unique characteristics associated with burnout, these characteristics can be classified as either a job demand or a job resource. Job demands are defined as “physical, psychological, social, or organizational aspects of the job that require sustained physical and/or psychological effort and are thus associated with certain physiological and/or psychological costs” (Demerouti et al., 2001, p. 501). Job resources, on the other hand, are characteristics that reduce job demands, stimulate personal growth, or aid in achieving work goals. Potential job demands are shift work requirements, physical workload, mental strain, workplace harassment, bureaucracy, interpersonal conflict, work overload, and time pressure. On the other hand, potential job resources are opportunities for professional development, performance feedback, job control, job security, supervisor support, coworker support, fair pay, organizational justice, and engaged leadership (Schaufeli, 2017).

It is particularly noteworthy that the JD-R model expands what constitutes a professional resource as previous models were limited by their exclusive focus on workplace control and support. One job resource that has gained attention in the literature is opportunity for professional development (OPD). OPD refers to the extent individuals feel their position provides opportunities to learn new things and grow professionally. A series of studies utilizing the JD-R model of burnout have included OPD as a type of job resource that may be related to
burnout (Bakker & Bal, 2010; Bakker, Demerouti, Taris, Scheufeli, & Schruers, 2003; Bakker, Demerouti, & Verbeke, 2004; Bakker & Xanthopoulou, 2013; Scheufeli, Bakker & Van Rhenen, 2009; Xanthopoulou, Bakker, Demerouti, & Schaufeli, 2007; Xanthopoulou, Bakker, Demerouti, & Schaufeli, 2009). These studies have consistently found OPD to be negatively related to burnout and positively related to other key variables, such as work dedication, feelings of vigor while on the job, and professional absorption.

The JD-R model focuses solely on the development of exhaustion and disengagement (as defined and measured by the Oldenberg Burnout Inventory). Most importantly, the JD-R model makes specific predictions on how demands, resources, exhaustion, and disengagement systematically relate. Previous models assumed that all demands and resources were equally related to all facets of burnout (or made no predictions to the contrary). The JD-R model adds to the literature by hypothesizing that demands and resources may have relatively different importance in predicting exhaustion and disengagement. It proposes that high levels of job demands lead to feelings of being overtaxed, which eventually results in exhaustion, whereas a lack of resources leads to frustration and eventually disengagement from work. In other words, demands (not resources) are primarily and positively related to exhaustion, whereas resources (not demands) are primarily and negatively related to disengagement.

In addition to predicting a direct effect of resources on disengagement, the model also predicts that resources may impact exhaustion by buffering the impact of demands. This prediction is similar to the JD-C and JD-C-S model in suggesting an interaction effect. However, it expands these models in indicating that many different resources may interact with demands to reduce the risk for exhaustion. Additionally, it is a more nuanced and specific prediction as
previous models did not specify what aspect of burnout an interaction between demands and resources might impact.

Finally, the JD-R model also makes predictions about pathways through which demands and resources may impact performance outcomes. This is particularly noteworthy in that other models focus solely on the prediction of job strain or burnout. The JD-R model supposes that negative outcomes are the result of two parallel mediational pathways. In the first process, taxing and demanding aspects of work lead to exhaustion, which in turn leads to negative outcomes. In the second process, a lack of job resources impede an individual’s ability to successfully do their job and lead to disengagement, which in turn leads to negative outcomes. Thus, the JD-R provides a comprehensive framework for understanding both antecedents and consequences of exhaustion and disengagement.

Initial studies testing the JD-R model have been promising. Demerouti et al. (2001) studied a group of German professionals and found support for the notion that job demands are primarily related to exhaustion, while job resources are primarily related to disengagement. The relationship between job demands (as measured by physical workload, time pressure, demanding contact, shift work requirements, and unfavorable physical environment) and exhaustion was highly positive and significant. On the other hand, the relationship between job resources (as measured by performance feedback, control, participation in decision making, job security, and supervisor support) and disengagement was highly negative and significant. Additionally, the coefficients of the paths from job demands to disengagement and from job resources to exhaustion were nonsignificant and the alternative model—that job resources are related to
exhaustion and that job demands are related to disengagement—did not achieve a better fit to the data.

Studies utilizing the JD-R model have also investigated possible interactions between job resources and job demands in predicting exhaustion. Findings have been inconsistent. Some studies have found support for the notion that job resources buffer the impact of job demands on exhaustion (e.g., Bakker, Demerouti, & Euwema, 2005; Bakker, Demerouti, Taris, Schaufeli, & Schreurs, 2003; Demerouti, Bouwman, & Sanz-Vergel, 2011; Xanthopoulou, Bakker, Dollard, Demerouti, Schaufeli, Taris, & Schreurs, 2007). However, other studies have failed to find a buffering effect of job resources (Bakker, Demerouti, de Boer, & Schaufeli, 2003; Bakker, Demerouti, & Schaufeli, 2003; Bakker et al., 2004; Xanthopoulou, Bakker, Demerouti, & Schaufeli, 2007). It seems more research is needed to determine if and when job resources buffer against the negative impact of job demands on emotional exhaustion.

Several studies have provided evidence for the ability of the JD-R model to explain work-related outcomes, such as absenteeism, organizational commitment, and performance, via job characteristic and burnout. For example, Bakker, Demerouti, Boer, and Schaufeli (2003) used the JD-R model to examine the relationships between job demands, job resources, burnout, organizational commitment, and absence from work. They found that higher job demands (as measured by workload and problems with reorganization) was related to higher burnout, which in turn was related to more days missed from work. Additionally, they found that higher job resources (as measured by control and participation in decision making) were related to higher levels of commitment, which resulted in fewer days absent from work. Bakker et al. (2004) also used the JD-R model to examine the relationship between job characteristics, burnout, and
performance ratings. They hypothesized and found that job demands (as measured by work pressure and emotional demands) were the most important antecedents of the exhaustion component of burnout, while job resources (as measured by autonomy and social support) were the most important predictors of disengagement. Additionally, they found that exhaustion mediated the relationship between job demands and completion of job required activities. Disengagement mediated the relationship between job resources and completion of extra, discretionary professional activities.

Since these initial studies detailed above, the JD-R model has been utilized in numerous studies (e.g., deLange, De Witte, & Notalaers, 2008; Hakanen, Bakker, & Jokisaari, 2011; Schaufelli et al., 2009). Overall, the studies have supported the dual pathways model and linked demands, resources, and burnout to important organizational outcomes. While the model has yet to be applied to a population of professional psychologists, it provides the most comprehensive and nuanced framework for understanding how work demands and resources may influence emotional exhaustion and client depersonalization and, in turn, how these facets of burnout may impact professional functioning. Hence, the JD-R model provided the guiding framework for investigating antecedents and consequences of emotional exhaustion and client depersonalization among professional psychologists in the present study.

**Burnout among Professional Psychologists**

The specialized demands of psychological work put professional psychologists at risk of developing burnout (e.g., Darongkamas, Burton, & Cushway, 1994; Fahy, 2007; Farber & Heifetz, 1982; Miller, Birkholt, Scott, & Stage, 1995; Miller, Stiff, & Ellis, 1988; Radeke & Mahoney, 2000; Radey & Figley, 2007; Smith & Moss, 2009). But while there is a relatively
large empirical literature on burnout in the general occupational health literature, research on
this topic among professional psychologists is limited in breadth and depth. To date, studies have
not been theoretically grounded and have largely focused on correlating specific job
characteristics with emotional exhaustion, client depersonalization, and personal
accomplishment. While this has provided valuable information about specific professional
factors that are associated with burnout among professional psychologists, it provides limited
insight into how job demands and resources systematically relate to the different facets of
burnout. An additional limitation of the literature is the dearth of research investigating the
professional outcomes of burnout. While burnout has been theorized to relate to professional
distress and impairment (e.g., Freudenberger, 1975), very few empirical studies on this have
been completed and no studies examining the relationships between work characteristics,
burnout, and professional impairment have been completed. To this end, the current study
advances the literature in this field by using the JD-R model of burnout as a theoretical
framework for examining the antecedents and consequences of emotional exhaustion and client
depersonalization among professional psychologists.

To provide background, the following section highlights the small body of research that
has been conducted on burnout among practicing psychologists. First, the research on how
specific job demands and job resources relate to emotional exhaustion and client
depersonalization, the primary facets of burnout, is reviewed. Next, the research on the
professional outcomes of burnout among practicing psychologists is discussed and the construct
of therapist-client working alliance is introduced as a potential consequence of burnout.
Antecedents of Burnout

Much of the research on burnout among practicing psychologists has focused on identifying job characteristics that may influence burnout. Particularly, the research has focused on identifying job stressors or demands that put psychologists at risk for burnout. Hours worked, time spent on administrative tasks, caseload, working with difficult clients, and overinvolvement with clients all have been identified in the literature as job demands that are correlated with higher levels of burnout. A smaller number of studies have also examined potential job resources associated with lower levels of burnout, with the most attention given to the variables of workplace control and support.

In general, research indicates that the total number of hours worked is positively related to burnout; psychologists who work more hours typically report higher feelings of both emotional exhaustion and depersonalization of clients (Rosenberg & Pace, 2006; Rupert & Kent, 2007; Rupert & Morgan, 2005; Rupert, Stevanovic, & Hunley, 2009). A small recent meta-analysis on burnout among psychotherapists, including professional psychologists, echoed these findings; hours worked per week had a significant positive relationship with both emotional exhaustion and client depersonalization (Lim, Kim, Kim, Yang, & Lee, 2010). This finding is similar to work highlighting the positive relationship between therapist rated work-load and emotional exhaustion and client depersonalization (Cushway & Tylet, 1994; LaSalvia et al., 2009; Steel, Macdonald, Schroder, Mellor-Clark, 2015).

Time spent on specific work activities, not just the gross measure of hours worked, has also been investigated. For example, the amount of time spent working directly with clients has been examined as a potential predictor of burnout. Results tend to suggest that hours of client
contact per week is not significantly related to emotional exhaustion or client
depersonalization, but is positively associated with feelings of personal accomplishment
(Ackerley, Burnell, Holder, & Kurdek, 1988; Rupert & Morgan, 2005; Skorupa & Agresti, 1993;
Vredenburgh, Carlozzi, & Stein, 1999). Although, Skorupa and Agresti (1993) did report a
significant relationship between contact hours and depersonalization. Time spent on
administrative duties, such as paperwork and other office tasks, has also been investigated as a
potential correlate of burnout and has been found to relate to increased feelings of emotional
exhaustion and client depersonalization (Rupert & Kent, 2007; Rupert & Morgan, 2005; Rupert
et al., 2009). This suggests that in addition to the general measure of hours worked per week,
how the time is spent may also be important.

A therapist’s satisfaction with his or her caseload has emerged as another workload
variable associated with job stress and burnout. In an early study of psychotherapist burnout,
Raquepaw and Miller (1989) found that a therapist’s satisfaction with their caseload was
associated with burnout. Therapists who indicated that their ideal caseload would be smaller than
their current caseload scored higher on the emotional exhaustion and client depersonalization
subscales of the MBI than did those who indicated that their ideal caseload would be the same or
greater than their current caseload. In a study of school psychologists, Huebner (1992) also found
that psychologists who were unhappy with their caseload reported that they were more
emotionally exhausted and reported higher levels of client depersonalization.

Type of client seen may also influence burnout. In particular, working with the seriously
mentally ill (Acker, 2012), working with difficult clients (Skorupa & Agresti, 1993), and
working with clients who exhibit more negative client behaviors (Ackerley et al., 1988; Rupert &
Kent, 2007; Rupert & Morgan, 2005; Rupert et al., 2009), such as aggressive, dangerous, or threatening behaviors, have been linked with increased feelings of emotional exhaustion and client depersonalization. There is also some longitudinal evidence that therapist self-reported level of burnout can be predicted by client’s self-reported motivation to participate in therapy and view of therapist (Linehan, Cochran, Mar, Levensky, & Comtois, 2000). Specifically, working with clients who are unmotivated to participate in therapy and hold more negative views about their therapist emerged as risk factors for increased burnout, while controlling for prior levels of burnout. Taken together, these findings suggest that some clients are more difficult for therapists to work with than others. For therapists, seeing a high percentage of difficult clients may be associated with increased feelings of burnout.

Finally, a series of studies have indicated that overinvolvement with clients, characterized by feelings of working harder for change than the client or feeling personally responsible for client’s progress, is related to emotional exhaustion and client depersonalization (Ackerley et al., 1988; Rupert & Kent, 2007; Rupert & Morgan, 2005; Steel et al., 2015). Indeed, in a meta-analytic review of studies, overinvolvement was found to relate to higher levels of both emotional exhaustion and depersonalization among psychotherapists (Lee, Lim, Yang, & Lee, 2011). This is similar to findings that suggest therapists may feel overwhelmed, exhausted, worried, and irritated when they work harder for change than their clients (Crowley & Avdi, 1999).

Workplace control and social support are the two most well researched job resources. Control has consistently been linked with emotional exhaustion and client depersonalization, such that clinicians who report having less control over their work duties and schedule tend to
report experiencing greater levels of burnout (Ackerley et al., 1988; Ben-Zur & Michael, 2007; LaSalvia et al., 2000; Rupert & Kent, 2007; Rupert & Morgan, 2005; Rupert et al., 2009; Steel et al., 2015). And, in a meta-analysis control was significantly negatively related to both emotional exhaustion and client depersonalization (Lee et al., 2011).

The relationship of support to emotional exhaustion and client depersonalization has received less attention, and results have been less consistent. Only two studies have found a significant relationship between workplace support and lower emotional exhaustion among professional psychologists (Acker, 2012; Ackerley et al., 1988) and no studies to date have found a relationship between workplace support and client depersonalization among this population. Although, in a sample of health care providers, some of which were professional psychologists, work group cohesion did relate to client depersonalization. And, in a study of school psychologists, Huebner (1992) reported that interpersonal conflict on the job was related to greater experience of emotional exhaustion and client depersonalization. Additionally, advisor support and a sense of community has been shown to relate to burnout and career choice satisfaction among doctoral level counseling psychology trainees (Kovach-Clark, Murdock, & Koetting, 2009); support was not, however, a protective buffer to the negative impact of stress on burnout and career choice satisfaction.

Other possible work-related resources have also been examined in isolated studies. One study has investigated the relationship between opportunities for professional development and emotional exhaustion among a sample of mental health workers, a portion of which were clinical psychologists (Acker, 2012). This study found that opportunities for professional development was significantly negatively related to emotional exhaustion. However, Rosenberg and Pace
(2006) investigated attending work-related seminars, case consultation, and engaging in personal therapy as potential resources and did not find evidence that these activities were related to either emotional exhaustion or client depersonalization. Research does suggest, however, that some professional psychologists report peer support, supervision, continuing education, and personal therapy as important to professional well-functioning (Coster & Schwebel, 1997).

Overall, research indicates that both demands and resources are important in predicting the experience of burnout. Demands, such as hours worked per week, dissatisfaction with caseload, negative client behaviors, and overinvolvement with clients have been linked with increased emotional exhaustion and client depersonalization. Resources such as control and, to a lesser extent, support and professional development, have also been linked with emotional exhaustion and client depersonalization, such that individuals who report more resources tend to report less burnout. However, there are still many unanswered questions. Studies have not investigated the impact of demands and resources simultaneously nor addressed whether they differentially predict emotional exhaustion or client depersonalization. Further, only one study has investigated how demands and resources may interact in predicting burnout (Kovach Clark et al., 2009). Utilizing the Job Demands-Resource model of burnout, the present study attempted to address these gaps in the literature by examining how demands and resources relate to burnout simultaneously and statistically comparing the relationships.

**Consequences of Burnout**

In the general occupational literature, burnout has been consistently linked to physiological and affective outcomes (Burke & Greenglass, 1995; Cherniss, 1990; Lee & Ashforth, 1993; Maslach & Leiter, 1998; Melamed, Shirom, Toker, Berliner, & Shapira, 2006)
as well as with professional consequences such as increased turnover, absenteeism, increased intention to leave the job, negative work attitudes, reduced levels of performance, reduced job satisfaction, and fewer citizenship behaviors that benefit the organization as a whole (Burke & Greenglass, 1995; Cameron, Horsburgh, & Armstrong-Stassen, 1994; Cropanzano, Rupp, & Byrne, 2002; Elman & Dowd, 1997; Jackson, Schwab, & Schuler, 1986; Lee & Ashforth, 1996; Penn, Romano, & Foat, 1988; Taris, 2006; Wolpin, Burke, & Greenglass, 1991; Wright & Bonett, 1997; Wright & Cropanzano, 1998).

While few studies have examined the consequences of burnout among mental health providers, their results have largely been consistent with the notion that burnout is associated with negative outcomes. Similar to findings in the general occupational health literature, burnout has been found to relate to turnover intention. In their study of practicing psychotherapists, Raquepaw and Miller (1989) found that intent to leave the profession of psychology was correlated with all three facets of burnout such that psychologists who reported more feelings of emotional exhaustion and client depersonalization and fewer feelings of personal accomplishment also tended to report more intention to leave. Similarly, Acker (2012) found that among a variety of mental health professionals, a portion of who were practicing psychologists, emotional exhaustion was related to intent to quit. In a small meta-analysis of studies on psychotherapists, some of whom were professional psychologists, Lee et al. (2011) found that emotional exhaustion and client depersonalization were both related to lower job satisfaction and turnover intention.

Unfortunately, research on the effects of therapist burnout on client care is scant. A series of three studies provides preliminary evidence that burnout may lead to sub-standard care. In a
study on professional decision-making, McGee (1989) found that among caseworkers working in child protection services, higher burnout scores predicted deciding that there was no risk to a child in an actual case of chronic neglect. The author concluded that burned-out mental health workers might deny the need for involvement in particularly demanding cases. More recently, in a study of Iranian mental health workers, self-reported levels of emotional exhaustion and client depersonalization were significantly associated with self-reported levels of job performance (Ashtari, Farhady, & Khodaee, 2009). Lastly, McCarthy and Frieze (1999) asked undergraduate students with past and/or present experience with therapy to report their perceptions of their therapists’ level of burnout as well as answer questions on the outcome of therapy. In this study, 40% of participants reported on their work with professional psychologists (others reported on psychiatrists, social workers, or counselors). Overall, findings suggested a significant negative relationship between client-rated therapist burnout and client-rated therapist effectiveness.

One study has examined the impact of stressful work factors on professional impairment among psychologists without explicitly measuring burnout. Studying a random sample of APA members, Sherman and Thelen (1998) studied a number of stressful work factors, including difficult clients, too much paperwork, inadequate time for all obligations, restrictions imposed by managed care companies, and countertransference issues. Clinicians who experienced more stressful work conditions reported feeling less satisfied with their work. Moreover, they reported having more canceled, late, and missed therapy sessions. The authors concluded that psychotherapists' ability to function adequately in terms of certain basic requirements of their role (e.g., promptness, availability, and conscientiousness) might be compromised when they are under significant stress at work.
**Working alliance and burnout.** One aspect of professional functioning that may be impacted by burnout is a therapist’s ability to develop a strong therapeutic alliance with clients. Broadly defined, the therapeutic alliance is the collaborative bond between therapist and patient (Krupnick et al., 1996). It is hypothesized to be a general factor common to all psychotherapies that accounts for a great deal of the therapeutic change process (e.g., Luborsky, Singer, & Luborsky, 1975; Krupnick et al., 1994, 1996; Smith & Glass, 1977; Stiles, Shapiro, & Elliot, 1986). This section provides an overview of the alliance construct and then reviews the available literature on the association between burnout and therapist-client working alliance.

There have been numerous theories of the therapeutic alliance proposed (e.g., Sterba, 1934; Zetzel, 1956; Greenson, 1965). Luborsky’s theory of a two-phase alliance and Bordin’s theory of a working alliance seem to be the most influential. Luborsky (1976) proposed that the alliance between therapist and client develops in two phases. The first phase involves the client’s belief in the therapist as a potent source of help, and the therapist’s provision of a warm, supporting, and caring relationship. This level of alliance results in a secure holding relationship within which the work of the therapy can begin. The second phase, Type II alliance, involves the client’s investment and faith in the therapeutic process itself, a commitment to the core concepts undergirding the therapy (e.g., nature of the problem, value of the exploratory process) as well as a willing investment of her or himself to share the ownership for the therapy process.

Bordin (1975, 1979, 1989, 1994) proposed a somewhat different pan-theoretical alliance concept that he named the *working alliance*. For Bordin, the alliance was the achievement of a collaborative stance in therapy and its development was fostered by three processes: agreements on the therapeutic goals; consensus on the tasks that make up therapy; and a bond between the
client and the therapist. He predicted that different therapies would emphasize different aspects of the alliance. Bordin also proposed that, as therapy progresses, the strength of the working alliance would build and ebb in the normal course of events, and that the repair of these stresses in the alliance offers potent therapeutic possibilities and make a direct contribution to clients’ change.

Both Luborsky’s (1976) and Bordin’s (1975) theories suggest that the therapeutic alliance is a necessary component of effective psychotherapy. In other words, for change to happen there must be an alliance between the client and therapist. And indeed, recent meta-analyses suggests that the therapeutic alliance is related to treatment outcome across a variety of treatment protocols (Horvath & Bedi, 2002; Horvath, Del Re, Fluckiger, & Symonds, 2011), leading some to conclude that a strong alliance is a core ingredient of psychotherapy (e.g., Norcross, 2011).

DeRubeis, Brotman, and Gibbons (2005) identified four competing hypotheses regarding what predicts the quality of the therapeutic alliance--client, therapist, client x therapist, or treatment outcome. The first factor is related to the client and draws from research indicating that patient’ attachment styles and social competencies may affect their approach to relationships (Mallinckrodt, 2000). From this perspective, the variability in alliance is due to client factors as some may be better able to form a collaborative relationship than others. The second possible factor is related to the therapist. From this perspective, some therapists may be better able to engage clients in a collaborative, meaningful working relationship than others. This hypothesis draws from early work by Rogers (1957), who discussed therapists’ capacity to be genuine and empathic and to show unconditional positive regard towards clients. The third possible influence is related to the interaction between patients and therapists. For example, some therapists may be
able to form strong alliances with their clients regardless of their patients’ abilities to form an alliance, whereas other therapists may be able to form a strong alliance only with those clients who come to therapy able to form strong alliances. Finally, the fourth hypothetical predictor of the alliance is related to the hypothesis that the alliance is a consequence of good outcomes. That is, change in therapy produces strong alliances, not the other way around.

While more research is needed to untangle the role of each of these factors on the therapeutic alliance, Baldwin, Wampold, and Imel (2007) statistically compared their roles in accounting for the relationship between a strong working alliance and positive change. The results of their study indicated that therapist variability in the patient-rated alliance accounted for the alliance–outcome correlation. That is, therapists who, on average, formed stronger alliances with their patients showed statistically significant better outcomes than therapists who did not form as strong of alliances. Furthermore, there was no evidence of a patient X therapist interaction.

Supporting the notion that therapist behavior is an important influence on the working alliance, Ackerman and Hilsenroth (2003) completed a review of the literature and were able to identify a number of therapist attributes and intervention techniques that have been correlated with strong alliances. Attributes include being flexible, experienced, honest, respectful, trustworthy, confident, interested, alert, friendly, warm, and open. Interventions include reflection, supportive statements, noting past therapy success, interpretations, facilitating emotional expression, active involvement in session, and being affirming. Overall, a therapist who is engaged in a warm manner with therapy will be better equipped to form a working alliance with clients. On the other hand, an emotionally exhausted and detached therapist may
A few studies provide some support for the notion that burnout may impact the therapeutic working alliance. Two experimental studies have provided evidence that individuals may react negatively to a therapist who is displaying signs of burnout. Renjilian, Baum, and Landry (1998) exposed observers to one of two client/therapist interactions: one depicting a therapist with severe burnout (characterized by serious inattention, impatience, and irritability), the other without. As expected, the therapist displaying signs of burnout was liked significantly less by the participants and was rated as less empathetic and less attentive to the client. Renjilan and Stites (2002) followed up with a similar study. Participants watched a tape of a therapist exhibiting moderate signs of burnout and one where the same therapist exhibited no signs of burnout. Specifically, in the burnout condition the therapist displayed fatigue (evidenced by yawning), brief inattention and clock watching. The therapist in the burnout condition was rated as less likable, less competent, and less concerned about the client. Additionally, observers had a lack of confidence that the client should continue in therapy with the therapist in the burnout condition.

McCarthy and Frieze (1999) examined the relationship between therapist burnout, negative therapist behaviors, and the outcome of therapy using client self-reports. They hypothesized and found that participants who perceived their therapist as displaying higher levels of burnout also tended to report that the therapist exhibited more negative interpersonal behaviors, such as frowning, disinterest, avoiding eye contact, cold demeanor, cancelling appointments frequently, ending appointments early, and irritability. In turn, these negative behaviors were associated with a decrease in client-rated therapy effectiveness and negative
therapist behaviors partially mediated the relationship between therapist burnout and the outcome of therapy.

There has been one study that has directly assessed the relationship between burnout and therapeutic alliance. In a study of therapists who worked with male clients who committed a sexual offense, Carmel and Friedlander (2009) asked therapists to report on their own level of emotional exhaustion as well as the therapeutic alliance between themselves and one of their clients. Results suggested that therapists who rated themselves as more emotionally fatigued and exhausted also tended to rate themselves as developing a weaker working alliance with their clients.

In sum, limited research suggests that burnout in professional psychologists may relate to turnover intention, job dissatisfaction, client satisfaction with treatment, and cancelled/missed therapy sessions. Additionally, research suggests that clients react negatively to therapists whom they perceive as being burned out and therapists who feel burned out report having a harder time connecting with clients. A working alliance, or a bond between therapist and client, seems integral to effective therapeutic work. Research suggests that it is the therapist’s ability to form a strong alliance—not the client’s ability or an interaction of the two—that creates the most change. For therapists to create a strong alliance, they must be fully engaged with their client. Emotional exhaustion and client depersonalization are two states that may interfere with the development of a therapeutic alliance.

Summary and the Present Study

The term burnout is traditionally used to refer to a chronic job strain that may be experienced by human service professionals, or those in helping professions, due to the
emotionally demanding, interpersonal nature of their work. Human service professionals who are burned out may feel emotionally fatigued, have a callous or cynical attitude towards their clients, and may be unable to see the positive aspects of their work (Maslach & Jackson, 1981). Thus, burnout is a multifaceted construct defined by emotional exhaustion, client depersonalization, and low feelings of personal accomplishment.

Burnout research in the general occupational health literature has flourished, where it is often reconceptualized as exhaustion, disengagement, and professional efficacy. These facets are analogous to emotional exhaustion, client depersonalization, and personal accomplishment, but are not based on a provider-client relationship. Developed from this literature, the Job Demands-Resources model provides a comprehensive theoretical framework for investigating the antecedents and consequences of burnout. The model has three main assumptions or propositions that build on each other in a stepwise manner to form a model of the predictors and outcomes of burnout (Demerouti et al., 2001). Firstly, job demands and resources are thought to be differentially related to exhaustion and disengagement, the two facets of burnout the model focuses on. Specifically, the model suggests that job demands primarily predict exhaustion and job resources primarily predict disengagement. Secondly, the model posits that job resources moderate the relationship between demands and exhaustion such that resources have a protective or buffering role. Thirdly, the JD-R model proposes that exhaustion and disengagement lead to negative work outcomes. Specifically, exhaustion and disengagement are theorized to mediate the relationship between job characteristics and negative work outcomes. Thus, the full JD-R model describes two mediational processes by which work characteristics impact professional impairment via burnout—(1) job demands tax individuals and lead to exhaustion, which
negatively impacts professional functioning and (2) a lack of job resources impedes individuals’ ability to successfully do their job and leads to disengagement, which also negatively impacts professional functioning. Research assessing each of the key propositions as well as the model as a whole has been promising. Unfortunately, the theoretical developments on burnout in the general occupational health literature, such as the JD-R model, have not been applied in the professional psychology literature.

As human service providers, psychologists are at risk for burnout; however, the research with this population is limited in scope. A handful of studies have provided information on how individual job characteristics correlate with the three facets of burnout and hours worked, negative client behaviors, caseload satisfaction, overinvolvement with clients, control, workplace social support, and opportunities for professional development have been identified as key correlates. Additionally, three studies have examined the outcomes of burnout in this group (Acker, 2012; McCarthy & Frieze, 1999; Raquepaw & Miller, 1989), providing some evidence that burnout is associated with lower job satisfaction, intent to quit, and weaker therapeutic alliance. But, as this research has been atheoretical, it provides limited insight into the pattern of relationships between job demands, resources, emotional exhaustion, client depersonalization, and professional impairment.

The current study adds to the literature by using the JD-R (Demerouti et al., 2001) model of burnout as a theoretical framework from which to examine the antecedents and consequences of burnout among practicing psychologists. Job demands and resources were examined as antecedents of emotional exhaustion and client depersonalization and professional impairment was examined as a consequence. Latent variable path modeling was utilized in order to more
fully capture the general constructs of job demands, job resources, and professional impairment via latent variables as well as allow for the simultaneous investigation of multiple relationships. Based on previous research with psychologists, hours worked, negative client behaviors, caseload demand, and overinvolvement with clients were examined as indicators of the latent variable job demands. Control, workplace social support, and opportunities for professional development were examined as indicators of the latent variable job resources. Lastly, absenteeism, intent to quit, and therapist-client working alliance were examined as indicators of the latent variable professional impairment.

Using the JD-R model as a guiding framework, the present study had three aims. These aims and corresponding hypotheses directly paralleled the three key propositions of the JD-R model and thus build on each other in a stepwise fashion.

Aim 1

The first aim of the present study was to examine the role of job demands and job resources in predicting burnout. As predicted by the JD-R model, it was hypothesized that:

Hypothesis 1a. Job demands, and not job resources, would be the strongest predictor of emotional exhaustion.

Hypothesis 1b. Job resources, and not job demands, would be the strongest predictor of client depersonalization

Aim 2

The second aim of the present study was to examine the role of job resources in buffering the impact of job demands on burnout. As predicted by the JD-R model, it was hypothesized that:
Hypothesis 2. There would be a significant interaction of job resources and job demands in predicting emotional exhaustion. A buffering effect was expected, such that the relationship between demands and exhaustion would be significantly weaker for individuals with high resources as compared to individuals with low resources.

Aim 3

The third and final aim of the present study was to examine the role of burnout in leading to impaired professional functioning. More specifically, this study examined burnout as a linking mechanism between job characteristics and professional impairment. As predicted by the JD-R model, it was hypothesized that there would be two mediational pathways (see Figure 1):

Hypothesis 3a. Emotional exhaustion would mediate the relationship between job demands and professional impairment. Increased job demands would lead to increased emotional exhaustion, which would be associated with increased professional impairment.

Hypothesis 3ba. Depersonalization would mediate the relationship between job resources and professional impairment. Decreased job resources would lead to increased client depersonalization, which would be associated with increased professional impairment.
Figure 1. Hypothesized latent variable path model of job demands, job resources, emotional exhaustion, client depersonalization, and professional impairment

Note. NCB = Negative client behaviors; OWC = Overinvolvement with clients; OPD = Opportunities for professional development; EE = Emotional exhaustion; DP = Client depersonalization; ITQ = Intent to quit; WAI = Working alliance inventory; Abst = Absenteeism.
CHAPTER THREE

METHOD

Participants

Participants were a random sample of licensed clinical psychologists in Illinois. Names and mailing addresses for approximately 5,000 psychologists were obtained from the Illinois Department of Financial & Professional Regulation. From this list, 1,500 psychologists were randomly selected to receive the survey. A total of 403 psychologists returned the survey for a 27.5% response rate. Twenty-eight participants were excluded because they left the survey blank or indicated they were not engaged in clinical practice (i.e., retired, research psychologist). An additional 12 participants who did not provide information or did not provide complete information regarding weekly hours worked were also excluded to create a sample of working professional psychologists.

The final sample of 362 participants was overwhelmingly comprised of individuals who self-identified as White (87.2% White, 4.7% Asian, 2.0% Latino, 2.3% Black or African American, .3% American Indian or Alaskan native) and female (71.4% female, 28.6% male). The average age was 51.4 (SD = 13.1) and the group had an average of 18.13 years of professional experience (SD = 11.9). A large proportion of the sample worked in a solo private practice (37.2%) or a group private practice (26.8%); 11% worked in a hospital, 2% in community mental health, 6.3% in an outpatient clinic, and 16.7% in some sort of other setting. In addition, 37.2% of participants worked in a secondary setting. The total average hours worked
per week (summed across work settings if applicable) was 36.10 (SD = 12.40). Psychologists in this in the study spent about 20.54 hours/week in direct treatment hours, 3.13 hours/week conducting assessments, and 9.89/week on administrative tasks.

**Procedure**

Loyola University Chicago’s Institutional Review Board approved the study via exemption. The randomly selected sample of Illinois licensed psychologists was first sent a pre-notification postcard, notifying them to expect a survey regarding burnout and professional well-being. A packet containing a cover letter, a survey entitled “Professional Well-Being Survey,” and a prepaid return envelope was sent one week later. The cover letter explained the purpose of the survey and provided information necessary for informed consent. Specifically, the cover letter explained that the survey was completely anonymous, participation was voluntary, they could choose to skip any items or stop at any time, and the data would be securely stored and used only for scholarly purposes. Psychologists willing to participate were instructed to complete the survey and return it in the prepaid envelope. Two weeks after the survey, a reminder postcard was sent to all psychologists in the sample to increase response rate and to provide potential participants with the opportunity to request another copy.

**Measures**

**Demographic Questions**

The survey included questions regarding the following demographics: gender, age, number of years of professional experience, hours worked per week, work setting, time spent in specific professional duties, degree held, racial/ethnic background, and marital status.
Caseload Demand

As a measure of caseload demand, participants were asked to rate how “overtaxed or overwhelmed” they felt by their current caseload on a scale of (1) Not at all overwhelmed to (7) Extremely overwhelmed.

Psychologist Burnout Inventory-Revised

The Psychologist Burnout Inventory-Revised (PBI-R; Morgan, Rupert & Bryant, 2004) was included to measure the job demands of overinvolvement with clients and negative client behaviors as well as the job resources of control and support. The PBI-R is a self-report questionnaire that asks participants to rate the frequency different events occur in their practice from (0) Never to (6) Every day. Four items assess control over work activities and decisions (e.g., “I have control over decisions that affect the services I provide”). Four items assess workplace support (e.g., “I enjoy the company of my colleagues and coworkers”). Four items assess the experience of aggressive, dangerous, or threatening client behaviors (e.g., “I work with clients who act out aggressively or threaten to harm others”). Lastly, three items assess signs of overinvolvement with clients (e.g., I find myself thinking about my clients a lot outside of work”).

The original version of the scale, developed by Ackerley et al. (1988), was revised by Rupert and colleagues (Morgan et al., 2004; Rupert & Morgan, 2005). It has demonstrated significant relationships with other key variables and adequate internal reliability when used with groups of psychologists (Rupert & Baird, 2004; Rupert & Morgan, 2005; Rupert & Kent, 2007). In the present study, the internal consistency of the control (α = .73), support (α = .73), and
negative client behaviors ($\alpha = .80$) subscales were adequate. The internal consistency of the overinvolvement subscale was borderline ($\alpha = .58$).

**Opportunities for Professional Development-Short Form**

The Opportunities for Professional Development Scale-Short Form (OPD-SF) was used to measure opportunities for professional development (Bakker, Demerouti, Taris, Schaufeli, & Schreurs, 2003). The scale is a self-report scale that asks participants to rate their level of agreement with three items from (1) *I totally disagree* to (5) *I totally agree*. A sample item is “In my work, I have the opportunity to develop my strong points.” The measure is scored by summing all responses, with higher scores representing more opportunities for professional development. It has been used in a number of studies among a wide variety of professionals and has been found to have adequate internal reliability (e.g., Bakker et al., 2004; Bakker & Xanthopoulou, 2013; Xanthopoulou et al., 2009). The measure showed good internal reliability in the present study ($\alpha = .88$).

**Maslach Burnout Inventory—Human Services Survey**

The Maslach Burnout Inventory-Human Services Survey (MBI-HSS; Maslach & Jackson, 1981) was used to measure burnout. The MBI-HSS is a twenty-two item self-report questionnaire that asks participants to rate the frequency of feelings associated with each item on a seven-point scale, ranging from (0) *Never* to (6) *Every day*. The measure has three subscales: a nine-item emotional exhaustion subscale, a five-item client depersonalization subscale, and an eight-item personal accomplishment subscale. Each subscale is scored independently—there is no total score. Possible scores range from 0-54 on emotional exhaustion range, 0-30 on client depersonalization, and 0-48 on personal accomplishment.
The MBI Manual (Maslach, Jackson, & Leiter, 1996) provides normative data based on 730 mental health workers, including psychologists, counselors, psychotherapists, psychiatrists, and mental hospital staff. The manual suggests that subscale scores can be considered “high” if in the upper third of the normative distribution, average if in the middle third, and low if in the lower third. Per this guideline, emotional exhaustion scores are: high if greater than or equal to 21, average if 14 through 20, and low if less than or equal to 13. Client depersonalization scores are: high if greater than or equal to 8, average if 5 through 7, and low if less than or equal to 4. Personal accomplishment scores are high if less than or equal to 28, average if 33 through 29, and low if greater than or equal to 34.

The psychometric properties of the MBI-HSS are well researched and generally quite strong. Maslach et al. (1996) reported high internal consistencies (with alphas ranging from .70 to .90) and good test-retest reliability (ranging from 0.60 to 0.82). It has been used to measure burnout among a wide variety of human service providers, including psychologists (e.g., Rupert & Kent, 2007; Rupert & Morgan, 2005; Rupert et al., 2009). In addition, the MBI has demonstrated significant relationships with other measures of burnout; including other burnout scales (e.g., the Burnout Measure; Pines, Aronson, & Kafry, 1981), peer ratings of burnout, and work related attitudes, suggesting high construct validity (Maslach et al., 1996).

In the current study, the emotional exhaustion and client depersonalization subscales were utilized. The internal consistency of the exhaustion subscale was good (α = .91) and the depersonalization subscale was adequate (α = .73).
Working Alliance Inventory-Short Form

The therapist version of the Working Alliance Inventory-Short Form (WAI-S; Tracey & Kokotovic, 1989), a shortened version of the WAI (Horvath & Greenberg, 1986), was used to measure therapeutic alliance. Participants are instructed to think of a specific client and respond to items in terms of their relationship with that client using a seven-point fully anchored response scale from (1) Never to (7) Always. In the present study, participants were instructed to think about their most recent client when completing the items. This direction was chosen in an effort to reduce social desirability (Carmel & Friedlander, 2009).

The measure has three, four-item subscales. The Goals subscale measures the extent to which patient and therapist agree on the overall treatment goals (e.g., “We agree about what is important for my client to work on”). The Tasks subscale measures the extent to which client and therapist agree on the tasks that are relevant for achieving these goals (e.g., “My client and I agree on the steps to be taken to improve his/her situation”). Lastly, the Bond subscale measures the extent of emotional bonding between patient and therapist in terms of trust and attachment (e.g., “My client and I have built a mutual trust”). The questionnaire provides three subscale scores and an aggregate overall score, the latter of which was utilized in the present study. The total score ranges from 12 to 84, with higher scores reflecting a stronger working alliance.

The WAI and the WAI-S have shown good reliability and validity (Busseri & Tyler, 2003; Horvath & Greenberg, 1986; Tracey & Kokotovic, 1989). For example, the WAI-S significantly predicts client improvement and symptoms ratings (Busseri & Tyler, 2003). Reported internal consistencies range from .91-.95 (Busseri & Tyler, 2003; Horvath &
Greenberg, 1986; Tracey & Kokotovic, 1989). In the present study, the internal consistency was strong (.90).

**Intent to Quit**

The scale used to measure intent to quit was originally developed for use with staff employed in psychiatric units at Veterans Affair Medical Centers (Lichtenstein, Alexander, McCarthy, & Wells, 2004). It asks participants to rate three statements from (1) *Agree* to (7) *Disagree*. A sample item is “I frequently think of quitting this job.” This measure has previously been used in samples of mental health professionals (Acker, 2012). In the present study, internal reliability was good ($\alpha = 86$).

**Absenteeism**

Absenteeism was measured with a single item (Johns, 1994) that read, “Approximately how many days of scheduled work have you missed in the past 12 months? Please count all absences, including both unavoidable and avoidable absences. Count each day, even in a long-term absence, separately. For example, if you missed three consecutive days, count this as three times.”
CHAPTER FOUR

RESULTS

The goal of the present study was to conduct a theoretically grounded investigation of the antecedents and consequences of burnout. Specifically, the study focused on emotional exhaustion and client depersonalization, the core negative facets of burnout. Guided by the Job-Demands Resources (JD-R) model of burnout, there were three aims. The first aim was to examine the role of job demands and job resources in predicting burnout. The second aim was to examine the role of job resources in buffering the impact of job demands on burnout. Lastly, the third aim was to examine the role of burnout in leading to professional impairment. Emotional exhaustion and client depersonalization, the core negative facets of burnout, Latent variable path modeling was utilized in order to more fully capture the general constructs of job demands, job resources, and professional impairment as well as allow for the simultaneous investigation of multiple relationships.

To achieve these aims, several sets of analyses were conducted in a stepwise fashion. First, a set of preliminary analyses were run to identify outliers, deal with missing data, compute descriptive statistics and intercorrelations, and determine the appropriateness of the proposed latent variables. Second, a set of analyses addressed the first aim and compared the predictive power of job demands and job resources in predicting emotional exhaustion and client depersonalization. Third, a set of analyses addressed the second aim and assessed job resources as a potential buffer for the impact of job demands on emotional exhaustion. The fourth, and last,
set of analyses addressed the third aim and investigated professional impairment as a consequence of emotional exhaustion and client depersonalization. Specifically, a model was investigated in which these facets of burnout served as a linking mechanism between job characteristics and professional impairment. The model was specified such that job demands led to emotional exhaustion, which in turn led to professional impairment and job resources led to client depersonalization, which in turn also led to professional impairment. SPSS Version 22 was used to identify outliers, impute missing data, and calculate descriptives and correlation coefficients. Structural equation modeling (SEM) via LISREL 8.8 was used for all other analyses.

SEM was the preferred approach for this study for several reasons. First, it allowed for latent variables comprised of multiple measures to be used, which partials out measurement error. Second, SEM allowed for dependent variables to also be examined as independent variables (Kline, 2005), which was a necessary method for testing the hypothesized mediation models. Finally, SEM allowed for testing proposed associations amongst multiple variables within a single model, thus controlling for possible influences of one variable on the others. This allowed simultaneous examination of demands and resources as predictors of emotional exhaustion and client depersonalization, which was central to Aim 1, and allowed examination of a full model of antecedents and consequences burnout when assessing Aim 3.

**Preliminary Analyses**

**Outliers**

As recommended by Anguinis, Gottfredson, and Joo (2013), outlying observations were identified using a visual approach as well as a standard deviation analysis. Outliers were
identified in one study variable—absenteeism. Eight participants reported an unusually high number of days absent from work. These individuals were more than three standard deviations above the mean, reporting between 70 and 122 days absent from work in the past year, and a visual inspection of the data suggested they were removed from the general mass of data. It is possible that these respondents experienced an illness, job change, or another significant life event that led to missing a large amount of work. As it is uncertain to what extent their professional experiences would be generalizable to the greater population of professional psychologists, these participants were excluded from the data set.

Thus, the final sample was comprised of 355 participants. Following the N:q rule, which suggests there should be 10 participants per parameter estimated, this sample size was deemed adequate to investigate the aims of the current study (Jackson, 2003).

Missing Data

While the majority of respondents answered each question, there was a small amount of missing data. The 355 participants were missing 1.28% of responses across all items (i.e., 228 of 17,750 individual responses). The data point with the highest rate of missing data was item 11 from the Psychologist Burnout Inventory (I meet with supportive colleagues or supervisors to discuss cases or professional issues). Of the 355 surveys, 18 participants left this item blank (i.e., 337 of the 355 responded to the item). Therefore, the smallest proportion of data for any individual item in the data set was 94.9%.

Little’s (1988) test of data missing completely at random (MCAR) was utilized to evaluate possible missing data patterns in order to assess to what extent missing data could potentially bias the results. Results were nonsignificant, $\chi^2 (1,310, N = 355) = 1,360.68, p =$
.161, indicating that data were missing completely at random. In other words, the likelihood of missing data was not related to levels of other measured variables (e.g., individuals high in emotional exhaustion did not systematically skip answering items about their working alliance and so forth).

As missing data may impact results (Allison, 2002), reduce reliability of factor subscale scores (Enders, 2003), and limit statistical power (Roth, Switzer, & Switzer, 1999), missing data were subsequently imputed at the item level using the Expectation Maximization function of SPSS (for other examples of the use of this imputation methodology, see Hopkins, Lavigne, Gouze, & Bryant, 2014; Hopkins, Lavigne, Gouze, LeBailly, & Bryant, 2013). This is an iterative procedure in which the observed values are used to estimate a missing value. This estimated value is then checked as to whether it is the most likely value, and, if not, re-imputed with a more likely value until the most likely value for the missing data point is determined (Allison, 2012). The maximum likelihood procedure was chosen over multiple imputation as it is more efficient, always produces the same result, and is more definitive (Allison, 2012; Schafer & Graham, 2002).

**Descriptive Statistics and Correlations**

Descriptive statistics and correlations for measured variables used in all models are presented in Table 1. Of note, per the normative data on mental health professionals provided by Maslach et al. (1996), the mean level of emotional exhaustion reported was “average” and the mean level of client depersonalization reported was “low.”

The job demand variables of hours worked, over taxed by caseload, negative client behaviors, and overinvolvement with clients were all significantly and positively related to
emotional exhaustion. Additionally, the job resource variables of control at work and
opportunities for professional development were significantly and negatively related to client
depersonalization. However, there was no significant relationship between workplace support
and client depersonalization. Additionally, both emotional exhaustion and client
depersonalization were significantly correlated with the three outcome measures of missed work
days, intent to quit, and working alliance. As expected, higher levels of emotional exhaustion and
client depersonalization were associated with missing more days of work, having a greater
intention to quit, and having a weaker therapist-client relationship.

Also of note, all four job demand variables were significantly correlated with one
another. Of the three job resource variables, opportunities for professional development was
correlated with both support and control, but control and support were not related. Similarly, two
of the three professional impairment variables were correlated. Working alliance and intent to
quit were significantly related to each other, however, missed work days was not significantly
related to either of these variables.
Table 1. Descriptive Statistics and Correlations for Study Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>M</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Hours worked</td>
<td>36.06</td>
<td>12.44</td>
<td>–</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>2. Overtaxed</td>
<td>2.90</td>
<td>1.63</td>
<td>.25*</td>
<td>–</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>3. Negative client behaviors</td>
<td>5.30</td>
<td>4.32</td>
<td>.32*</td>
<td>.28*</td>
<td>–</td>
<td></td>
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<tr>
<td>4. Overinvolvement with clients</td>
<td>8.70</td>
<td>3.64</td>
<td>.16*</td>
<td>.25*</td>
<td>.16*</td>
<td>–</td>
<td></td>
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</tr>
<tr>
<td>5. Workplace support</td>
<td>12.81</td>
<td>5.45</td>
<td>.36*</td>
<td>.06</td>
<td>.31*</td>
<td>.08</td>
<td>–</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>6. Workplace control</td>
<td>21.03</td>
<td>3.77</td>
<td>-.11*</td>
<td>-.30*</td>
<td>-.20*</td>
<td>-.06</td>
<td>-.01</td>
<td>–</td>
<td></td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>7. Opportunities for professional</td>
<td>12.57</td>
<td>2.49</td>
<td>.04</td>
<td>-.16*</td>
<td>-.10</td>
<td>-.09</td>
<td>.15*</td>
<td>.41*</td>
<td>–</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>development</td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>8. Emotional exhaustion</td>
<td>17.51</td>
<td>10.04</td>
<td>.35*</td>
<td>.58*</td>
<td>.34*</td>
<td>.37*</td>
<td>.14*</td>
<td>-.35*</td>
<td>-.26*</td>
<td>–</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Client depersonalization</td>
<td>4.63</td>
<td>4.26</td>
<td>.19*</td>
<td>.22*</td>
<td>.31*</td>
<td>.18*</td>
<td>.03</td>
<td>-.17*</td>
<td>-.13*</td>
<td>.49*</td>
<td>–</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Missed work days</td>
<td>13.88</td>
<td>11.02</td>
<td>.20*</td>
<td>.21*</td>
<td>.16*</td>
<td>.09</td>
<td>.12*</td>
<td>-.11*</td>
<td>-.01</td>
<td>.20*</td>
<td>.14*</td>
<td>–</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Intent to quit</td>
<td>6.47</td>
<td>4.82</td>
<td>.06</td>
<td>.18*</td>
<td>.18*</td>
<td>.10</td>
<td>.04</td>
<td>-.37*</td>
<td>-.41*</td>
<td>.45*</td>
<td>.18*</td>
<td>.08</td>
<td>–</td>
<td></td>
</tr>
<tr>
<td>12. Working alliance</td>
<td>67.22</td>
<td>7.70</td>
<td>-.08</td>
<td>-.22*</td>
<td>-.27*</td>
<td>-.09</td>
<td>-.07</td>
<td>.32*</td>
<td>.26*</td>
<td>-.36*</td>
<td>-.36*</td>
<td>-.05</td>
<td>-.29*</td>
<td>–</td>
</tr>
</tbody>
</table>

Note. *p < .05
Confirmatory Factor Analysis and Item Parceling

To determine the appropriateness of the indicators of the latent variables proposed for inclusion in the structural models, LISREL 8.8 (Jöreskog & Sörbom, 1993) was utilized to test the fit of the measurement model to the data. The measurement model was specified in order to model the latent variables of job demands, job resources, and professional impairment. Demands was modeled to be composed of number of hours worked per week, caseload demand, negative client behaviors, and overinvolvement with clients. Resources was modeled to be comprised of workplace support, professional control, and opportunities for professional development. Lastly, professional impairment was modeled to be comprised of missed work days, intent to quit, and working alliance. In constructing this measurement model, the measured variable of working alliance was reverse-scored in order to align it with the direction of the other two indicators of impairment (i.e., so that higher scores would reflect a poorer working alliance, parallel to higher scores reflecting more missed work days and greater intent to quit). Thus, higher scores on the latent variable of professional impairment indicate more impairment in this and all subsequent models. For this and all subsequent analyses, model parameters were estimated using Satorra-Bentler scaled maximum likelihood chi-square values (SB-ML $\chi^2$; Satorra & Bentler, 1994) and robust standard errors, thus adjusting for distortion in fit indices and standard errors due to multivariate nonnormality.

The statistical significance of a model’s SB-ML $\chi^2$ value was not used as an index of fit, however, because this test is considered “too strong to be realistic” (Hu & Bentler, 1998, p. 425) and is not typically used in applied research (Brown, 2006). Rather, guided by Hu and Bentler’s (1998) recommendations, model fit was assessed using two indices of absolute fit (root mean
square error of approximation [RMSEA] and standardized root mean square residual [SRMR]) and two indices of relative fit (comparative fit index [CFI] and non-normed fit index [NNFI]). Models were considered to have acceptable fit that met the following standards: RMSEA < .08 (Browne & Cudeck, 1993), SRMR < .08 (Hu & Bentler, 1998), and CFI and NNFI > .90 (Bentler & Bonett, 1980). This methodology aligns with other contemporary empirical studies that have used similar structural equation modeling approaches (e.g., Travers, Randall, Bryant, Conley, & Bohnert, 2015).

Model fit indices indicated that the measurement model did not provide adequate fit to the data, SB-ML $\chi^2(32, N = 155) = 144.50$, RMSEA = 0.099, SRMR = 0.089, CFI = 0.822, NNFI = 0.750, suggesting that the observed variables did not map onto their respective latent variables as prescribed. Thus, factor loadings were examined to identify observed variables that were statistically poor indicators. Two weak indicators were identified: workplace support and absenteeism. While support is a frequently studied job resource in the occupational health literature, in the present study it did not emerge as a statistically significant indicator of the construct of job resources. The relationship between support and burnout has been inconsistent in previous research with psychologists (Rupert, Miller, & Dorociak, 2015) and it may be that it is not a particularly relevant resource for psychologists, who often work independently. Given this theoretical justification, it was dropped as an indicator. Absenteeism was also identified as a relatively weak indicator. While employee absenteeism has in the past been understood as a measure of professional impairment, no studies have utilized this in a sample of professional psychologists. Earlier correlations indicated that it was not related to the other two outcome variables as expected, suggesting that it may not fit well with intent to quit and poor working
alliance. For doctoral level psychologists, many of whom create their own schedule, it may not be a relevant measure and thus it was dropped.

Lastly, it was decided at this stage that the “overtaxed by caseload” indicator of job demands shared too much conceptual overlap with the construct of emotional exhaustion, which would be included in subsequent analyses as an outcome of job demands. This item asked participants to rate to what extent they felt overwhelmed or overtaxed by the number of clients on their caseload and was very similar to items on the emotional exhaustion scale of the MBI, which asks respondents to rate how frequently they feel emotionally drained, used up, strained, stressed, etc. In this way, the feelings of being overtaxed/overwhelmed may have more theoretical overlap with emotional exhaustion than to job demand variables.

Following these changes, a measurement model was estimated to specify the same latent variable configuration as the previous model, but with caseload demand, workplace support, and missed work days no longer included as indicators. Job demands was modeled to be comprised of number of hours worked per week, negative client behaviors, and overinvolvement with clients. Job resources was modeled to be comprised of workplace control and opportunities for professional development. Professional impairment was modeled to be comprised of intent to quit and working alliance. The resulting model provided excellent fit to the data, SB-ML $\chi^2(11, N = 355) = 19.93$, RMSEA = 0.046, SRMR = 0.039, CFI = 0.978, NNFI = 0.958. This measurement model, which provided the configuration for the latent variables of job demands, job resources, and professional impairment to be used in all subsequent structural models, is presented in Figure 2 with standardized factor loadings.
Figure 2. Three-factor measurement model of job demands, job resources, and professional impairment.

Next, as the two additional variables of emotional exhaustion and client depersonalization were also to be included in subsequent latent variable structural models, these aspects of burnout were reconstituted into latent variables via item parceling. Specifically, a set of three item-parcel indicators of emotional exhaustion (each including three items) and a set of two item-parcel
indicators of client depersonalization (one including three items and one including two items) were constructed via random assignment of subscale items to each parcel, as per recommendations by Landis, Beal and Tesluk (2000). The resulting item parcels were used as indicators of emotional exhaustion and client depersonalization in all subsequent analyses.

**Aim One: Job Demands, Resources, and Burnout.**

The first aim of the present study concerned examining job demands and job resources as predictors of burnout. Specifically, it was predicted that (H1a) job demands, not job resources, would be the strongest predictor of emotional exhaustion and that (H1b) job resources, not job demands, would be the strongest predictor of client depersonalization.

A series of three latent variable structural models were estimated to test these hypotheses. First, a baseline model was specified to freely estimate the effects of both job demands and job resources as predictors of both emotional exhaustion and client depersonalization. Next, two nested path-invariant models were estimated: one in which the predictive paths from job demands and job resources to emotional exhaustion were constrained to be equivalent and one in which the predictive paths from job demands and job resources to client depersonalization were constrained to be equivalent. To test Hypothesis 1a, scaled difference chi-square testing approach (Bryant & Satorra, 2012; Satorra & Bentler, 2001) utilizing Bryant and Satorra’s (2013) Excel macro file designed for this purpose was utilized to compare the fit of the baseline model to that of the model where the predictive paths to emotional exhaustion were constrained to be equal. A similar procedure was used to test Hypotheses 1b, this time comparing the baseline model to the nested model estimated to constrain as equal the paths from job demands and job resources to client depersonalization.
The baseline latent variable model with standardized path coefficients is depicted in Figure 3. Results indicated that this model provided excellent fit to the data (see Table 2) and explained 83.5% of the variance in emotional exhaustion and 44.6% of the variance in client depersonalization. Further, job demands and job resources were each a statistically significant predictor of both emotional exhaustion and client depersonalization. At this stage, job demands appeared to be a stronger predictor of both emotional exhaustion and client depersonalization, based solely on appraisals of standardized path coefficients for these predictive effects.

Figure 3. Baseline latent variable structural model for path invariance testing.

Note. Coefficients represent standardized factor loadings and standardized path coefficients. NCB = Negative client behaviors; OWC = Overinvolvement with clients; OPD = Opportunities for professional development; EEp1 = Emotional exhaustion item-parcel #1, etc. \( ^* p < .05 \). Statistical significance not tested as this loading was used to establish variance units for its corresponding latent factor.
Table 2. Model Fit Indices for Path Invariance Tests

<table>
<thead>
<tr>
<th>Model</th>
<th>ML Scaled $\chi^2$</th>
<th>$df$</th>
<th>RMSEA</th>
<th>SRMR</th>
<th>CFI</th>
<th>NNFI</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Baseline model</td>
<td>87.40</td>
<td>30</td>
<td>0.071</td>
<td>0.049</td>
<td>0.972</td>
<td>0.958</td>
</tr>
<tr>
<td>2. Invariance predicting EE</td>
<td>123.64</td>
<td>31</td>
<td>0.087</td>
<td>0.062</td>
<td>0.956</td>
<td>0.936</td>
</tr>
<tr>
<td>3. Invariance predicting DP</td>
<td>124.35</td>
<td>31</td>
<td>0.086</td>
<td>0.619</td>
<td>0.957</td>
<td>0.938</td>
</tr>
</tbody>
</table>

Note. EE = Emotional exhaustion; DP = Client Depersonalization.

Model fit statistics for the path-invariant model wherein the predictive paths from job demands and job resources to emotional exhaustion were constrained to be equivalent are presented in Table 2. Results of a model comparison test demonstrated that the path-invariant model predicting emotional exhaustion provided significantly worse fit to the data than did the baseline model, indicating that job demands and job resources constituted non-equivalent predictors of emotional exhaustion (see Table 3 for further details concerning this model comparison). Given the larger path coefficient for job demands as compared with job resources in predicting emotional exhaustion, it was concluded that, consistent with Hypothesis 1a, job demands represented the stronger predictor of this component of burnout.

Model fit statistics for the path-invariant model wherein the predictive paths from job demands and job resources to client depersonalization were constrained to be equivalent are presented in Table 2. Results of the model comparison test demonstrated that the path-invariant model predicting client depersonalization once again provided significantly worse fit to the data than did the unconstrained model, indicating that job demands and job resources were non-equivalent predictors of client depersonalization (see Table 3 for further details regarding this model comparison). Given the apparently larger path coefficient for job demands as compared...
with job resources in predicting client depersonalization, it was concluded that, contrary to Hypothesis 1b, job demands constituted the stronger predictor of client depersonalization.

Table 3. Scaled Difference Test Statistics for Path Invariance Tests

<table>
<thead>
<tr>
<th>Contrast</th>
<th>Scaled $\Delta X^2$</th>
<th>$\Delta df$</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model 1 vs. Model 2</td>
<td>30.17*</td>
<td>1</td>
<td>&lt; .001</td>
</tr>
<tr>
<td>Model 1 vs. Model 3</td>
<td>28.76*</td>
<td>1</td>
<td>&lt; .001</td>
</tr>
</tbody>
</table>

**Aim Two: Resources as a Buffer**

The second aim of the current study was to investigate job resources as a potential buffer. It was hypothesized (H2) that job resources would moderate the impact of job demands on emotional exhaustion. To investigate this, a latent variable interaction model was run assessing for a significant job demands X job resources interaction in predicting emotional exhaustion. The model was estimated utilizing the *double-mean centering* procedure for testing latent variable interactions outlined by Lin, Wen, Marsh, and Lin (2010). The latent variable interaction indicators are created by first separately centering indicators of the latent independent variables (i.e., measured indicators of the two predictors hypothesized to interact), then computing interaction terms using these centered measured variables, and then finally re-centering the computed interaction terms prior to using them as indicators of the latent variable interaction. Independent variable indicators to be used for this procedure were assigned via the *matched pairs* method recommended by Marsh, Wen, and Hau (2004). As there were three indicators of job demands and only two indicators of job resources, the two best indicators of job demands (based on factor loadings) were randomly matched with the two indicators of job resources. Hence, the latent variable representing the interaction of job demands with job resources was
indicated by the measured variable interactions of (a) hours worked with workplace control and (b) negative client behaviors with opportunities for professional development.

Results of this moderation model (see Figure 4) indicated that job demands and job resources did not interact in predicting emotional exhaustion and, as such, that job resources did not moderate the impacts of job demands on emotional exhaustion, β = -.15, p > .05.

Figure 4. Latent variable moderation model testing the moderating impact of job resources on the effect of job demands on emotional exhaustion.

Note. Coefficients represent standardized factor loadings and standardized path coefficients. NCB = Negative client behaviors; OWC = Overinvolvement with clients; OPD = Opportunities for professional development; EE = Emotional exhaustion; EEp1 = Emotional exhaustion item-parcel #1, etc. *p < .05. XStatistical significance not tested as this loading was used to establish variance units for its corresponding latent factor.
Aim Three: Consequences of Burnout

The third aim of the current study was to investigate the role of burnout in leading to impaired professional functioning. Specifically, burnout was examined as a linking mechanism between job characteristics and professional impairment. A dual parallel process was hypothesized, such that emotional exhaustion would mediate the relationship between job demands and professional impairment and that client depersonalization would mediate the relationship between job resources and professional impairment. To examine this, a latent variable path model was specified that included both the paths from demands to exhaustion and resources to depersonalization as well as the paths from exhaustion and depersonalization to impairment. Additionally, given the previously described results, predictive paths from job demands to client depersonalization and job resources to emotional exhaustion were also included in this model. However, a path representing the hypothesized (but nonsignificant) interaction between job resources and job demands in predicting emotional exhaustion was not included.

Model fit statistics indicated that this model provided adequate fit to the data according to three out of four indices of model fit, with the fourth (RMSEA) approaching its cutoff for acceptable fit, SB-ML $\chi^2(48, N = 355) = 193.41$, RMSEA = 0.091, SRMR = 0.070, CFI = 0.943, NNFI = 0.921. To improve fit, a second model was run. This revised model retained all relationships specified in the original model and, additionally, accounted for the relationship between emotional exhaustion and client depersonalization. While a relationship between the facets of burnout was not a core principle in the original presentation of the JD-R model, at times the relationship has been included in the model (e.g., Bakker et al., 2003; Bakker et al., 2004;
Bakker, van Emmerik, & van Riet, 2008). Additional justification comes from the literature on burnout among professional psychologists, where it has been well established that emotional exhaustion and client depersonalization are strongly correlated (Maslach & Leiter, 2008; Rupert & Kent, 2007; Rupert & Morgan, 2005; Rupert et al., 2009). Because emotional exhaustion and client depersonalization were endogenous (i.e., dependent) variables in the model, they could not be specified to correlate directly and so instead their unique error terms were specified to correlate with one another. The revised model also provided adequate fit to the data according to three out of four indices of model fit, $\chi^2(46, N = 355) = 179.25$, RMSEA = 0.092, SRMR = 0.067, CFI = 0.946, NNFI = 0.922. Results of a model comparison test demonstrated that including the relationship between emotional exhaustion and client depersonalization increased model fit near significance, scaled $\Delta \chi^2(1, N = 355) = 3.83, p = .05$, and thus the revised model was retained as the final working model and is illustrated in Figure 5 with standardized path coefficients. This model explains 69.7% of the variance in emotional exhaustion, 32.5% of the variance in client depersonalization, and 66.4% of the variance in professional impairment.
Figure 5. Latent variable path model of job demands, job resources, emotional exhaustion, client depersonalization and professional impairment.

Note. Coefficients represent standardized factor loadings and standardized path coefficients. NCB = Negative client behaviors; OWC = Overinvolvement with clients; OPD = Opportunities for professional development; EE = Emotional exhaustion; DP = Client Depersonalization; EEp1 = Emotional exhaustion item-parcel #1, etc. *p < .05. \( X \)Statistical significance not tested as this loading was used to establish variance units for its corresponding latent factor.
Hypothesis 3a stated that emotional exhaustion would mediate the relationship between job demands and professional impairment, while 3b stated that client depersonalization would mediate the relationship between job resources and professional impairment. The joint test of significance (Fritz & MacKinnon, 2007; Hayes & Sharkow, 2013) suggests that mediation is likely when both the path from the predictor to the mediator and the path from the mediator to the outcome are significant. Thus, path coefficients for job demands to emotional exhaustion and emotional exhaustion to professional impairment and job resources to client depersonalization and client depersonalization to professional impairment were examined for joint significance. If both paths were not significant, it was concluded that there was no support for mediation. As Fritz, Taylor, and MacKinnon (2012) suggest utilizing a second test of the indirect effect in conjunction with the joint significance test, if both paths were significant then LISREL’s test of the indirect effect was utilized as a second, more conservative, test of mediation.

In support of Hypothesis 3a, the significant relationships between work demands and emotional exhaustion and emotional exhaustion and professional impairment was suggestive of mediation. To more fully test whether this constituted a significant mediation, a targeted mediation model was specified to test the predictive effect of job demands on professional impairment via emotional exhaustion. This model is represented visually in Figure 6, along with standardized path coefficients. Results indicated that this model provided adequate fit to the data according to three out of four indices of model fit, with the fourth (RMSEA) nearing its cutoff for acceptable fit, SB-ML $\chi^2(17, N = 355) = 93.48$, RMSEA = 0.096, SRMR = 0.052, CFI = 0.959, NNFI = 0.932. LISREL’s test of the indirect effect of job demands on professional impairment via emotional exhaustion returned a statistically significant value, $z = 2.93$, $p = .003,$
indicating that emotional exhaustion significantly mediated the effect of job demands on professional impairment. Notably, with the indirect effect included, the direct path from job demands to professional performance was not statistically significant, $p = 0.197$, indicating full mediation.

Figure 6. Latent variable mediation model testing the effect of job demands on professional performance via emotional exhaustion.

Note. Coefficients represent standardized factor loadings and standardized path coefficients. NCB = Negative client behaviors; OWC = Overinvolvement with clients; EE = Emotional exhaustion; EEp1 = Emotional exhaustion item-parcel #1, etc.; ITQ = Intent to quit; WAI = Working alliance. *$p < .05$. $^x$Statistical significance not tested as this loading was used to establish variance units for its corresponding latent factor.

As predicted by Hypotheses 3b, work resources did significantly predict client depersonalization; however, no relationship between client depersonalization and professional
impairment was found. Thus, as criteria were not met for the joint significance test, it was determined that hypothesis 3b was not supported.

Overall, results suggest that job demands and, to a lesser extent, job resources are important predictors of emotional exhaustion and client depersonalization. Additionally, professional impairment can be explained by a mediational process by which job demands lead to increased emotional exhaustion, which in turn leads to increased impairment.
CHAPTER FIVE
DISCUSSION

The construct of burnout was developed to reflect the work strain associated with provider-client relationships that can be experienced by helping professionals, particularly those in the mental health field. Traditionally, burnout has been defined as a multifaceted construct, marked by high feelings of emotional exhaustion and client depersonalization and low feelings of personal accomplishment. Emotional exhaustion and client depersonalization are considered the core features. In the wider organizational health literature, burnout is often defined by a generalized exhaustion facet and a disengagement/cynicism facet, which reflects negative views about work.

Research on burnout in the occupational health literature has flourished and numerous theoretical models of burnout have been developed. However, these models have not been utilized in the professional literature for psychologists. Rather, previous research on burnout among professional psychologists has been focused on documenting correlations between various stressful work factors and the three facets of burnout and, to a lesser extent, examining the association between job resources and burnout. Additionally, although the impact of burnout on the professional functioning of psychologists is one of the primary reasons the construct is important, only three studies could be located that investigated job related outcomes. These studies provide preliminary evidence that certain job demands and job resources are linked with
burnout and that burnout may have a negative impact on professional functioning. This research, however, has been largely atheoretical and has not utilized an overarching framework to more systematically understand the pattern of relationships between job demands, job resources, burnout, and professional impairment.

The current study addressed this limitation by conducting a theoretically grounded examination of the antecedents and consequences of burnout. The JD-R model was utilized as a theoretical framework. Based on this theory, this study had three main objectives: a) investigate the role of job resources and job demands in predicting burnout; b) investigate the role of job resources as buffering the impact of job demands on burnout and; c) examine the role of burnout in leading to professional impairment. The first and second objectives concern developing a deeper understanding of the antecedents of burnout by identifying the pattern of relationships between job demands, job resources, emotional exhaustion, and client depersonalization. The third objective concerns the consequences of emotional exhaustion and client depersonalization and assessing them as linking mechanisms between job characteristics and professional impairment.

Overall, results provide strong evidence for the role of both job demands and resources in predicting emotional exhaustion and client depersonalization as well as the role of emotional exhaustion in mediating the relationship between job demands and therapists’ professional impairment. A more in-depth discussion of the theoretical and practical implications of the results of the present study follows.
Differential Relationship of Job Demands and Resources with Burnout

As noted above, the first aim of the present study was to examine the role of job demands and resources in predicting burnout. The JD-R model suggests that job demands cause strain, which ultimately leads to exhaustion and that a lack of job resources may impede an individual's ability to do their job and cause frustration, leading to disengagement (Demerouti et al., 2001). Thus, the pattern of relationships between job resources, demands, emotional exhaustion, and client depersonalization was investigated and the predictive strength of job demands and job resources in predicting the two facets of burnout was statistically compared. It was hypothesized that job demands, and not job resources, would most strongly relate to emotional exhaustion and that job resources, and not job demands, would most strongly relate to client depersonalization.

Measurement of Demands and Resources

The latent variable of job demands was indicated by negative client behaviors, hours worked per week, and overinvolvement with clients (Ackerley et al., 1988; Huebner, 1992; Raquepaw & Miller, 1989; Rupert & Kent, 2007; Rupert & Morgan, 2005; Rupert et al., 2009). Although the item relating to feeling overwhelmed and overtaxed by one’s caseload was removed from the measurement model due to its similarity to items on the emotional exhaustion subscale, the remaining three indicators captured many key features of job demands as discussed in the literature (e.g., Karasek, 1979; Demerouti et al., 2001). They reflected a general workload demand (hours worked), client demands (negative client behaviors), and the emotional cost of psychological work (overinvolvement with clients).

The latent variable of job resources was indicated by control and opportunities for professional development (Ackerly et al., 1988; Huebner, 1992; Rupert & Kent, 2007; Rupert &
Morgan, 2005; Rupert et al., 2009). Although there were only two indicators of resources, they reflected some key features of resources as discussed in the literature (e.g., Demerouti et al., 2001). Control, which has been understood to be an important professional resource for psychologists (Rupert et al., 2015), has been consistently emphasized as a key resource in models of burnout (Karasek, 1979). Further, opportunities for professional development represents a resource that may stimulate personal growth or aid in achieving work goals, two characteristics of resources emphasized by Demerouti et al. (2001).

It is noteworthy that workplace support did not seem to be a good indicator of the latent variable of job resources. While support is a commonly studied workplace resource in the general occupational health literature, findings for a support-burnout relationship among psychologists are actually quite limited (Rupert et al., 2015). For example, Stevanovic and Rupert (2004) report that participating in peer support groups and having regular supervision were rated as some of the least important strategies to maintain ability to function effectively by a sample of professional psychologists. In fact, only “using substances to relax” was rated as less important. One possible explanation for this is that a large number of professional psychologists do not have coworkers or supervisors. For example, in the present study more than 50% of participants were in private practice whereas only 19% worked in a hospital or agency setting. Assuming that participants have some degree of choice over their work setting and are able to build resources (e.g., Weigl et al., 2010; Tims, Bakker, & Derks, 2012), this seems to imply that having coworkers may not be seen as a crucial resource for a large number of professional psychologists. Notably, in both this study as well as Stevanovic and Rupert’s work, the participants were all doctoral-level psychologists and were, on average, fairly experienced. Thus
for this group, having supervisors and supportive colleagues may not be as critical as it might be for mental health professionals with less training or experience.

Patterns of Relationships

Results of latent variable path modeling showed that job demands was significantly related to both emotional exhaustion and client depersonalization. Job resources was also significantly related to emotional exhaustion and client depersonalization. The strengths of these relationships were statistically compared to further explore the pattern of relationships between demands, resources, and the facets of burnout. Consistent with predictions, the demands-exhaustion relationship was significantly stronger than the resources-exhaustion relationship. But, contrary to expectations, job demands also emerged as the stronger predictor of client depersonalization. These findings diverge from previous JD-R model research supporting the notion that job demands and job resources initiate relatively independent processes, with exhaustion being primarily predicted by job demands and disengagement being primarily predicted by low job resources (Demerouti et al., 2001; Bakker et al., 2003; Bakker et al., 2004; Hakanen, Bakker, & Schaufeli, 2006; Llorens, Bakker, Schaufeli, & Salanova, 2006; Schaufeli & Bakker, 2004). Rather, findings suggest that work demands are the primary predictor of both emotional exhaustion and client depersonalization.

A possible explanation for this concerns the difference between the constructs of client depersonalization as measured by the MBI, the burnout measure typically used among mental health providers, and disengagement as measured by the OLBI, the burnout measure typically used in research on the JD-R model. The JD-R model was developed using the OLBI, but the present study utilized the MBI. In measure development studies published on the OLBI,
disengagement is often posited to measure the same general construct of client depersonalization without the language specific to provider-client relationships (e.g., Halbesleben & Demerouti, 2005). And indeed, the two measures do strongly correlate. However, the differences between them may be more meaningful than typically recognized.

The client depersonalization subscale of the MBI refers to having a negative, callous, and excessively detached response to clients; while the disengagement subscale in the OLBI refers to distancing oneself from one's work and experiencing negative attitudes toward the work content or one's work in general. To state it another way, the depersonalization scale measures negative attitudes (e.g., becoming impersonal, callous, hardening) towards a person (the recipient) and the disengagement scale refers to negative attitudes (e.g., uninteresting, not challenging) toward the work tasks or job. It seems plausible that client depersonalization among psychologists is a unique phenomenon—somewhat different emotionally from the disengagement construct that has emerged from the occupational health literature—and thus is not predicted by the same factors.

A second possibility is that, as suggested by Goering, Shimazu, Zhou, Wada, and Sakai (2017), job demands are primarily related to all facets of burnout and job resources are primarily related to engagement. Engagement is often defined as a positive motivational state of fulfillment that is characterized by three dimensions: vigor, dedication, and absorption (Schaufeli, Salanova, Gonzalez-Roma, & Bakker, 2002). The construct is understood to be related to, but distinct from, burnout. And indeed, some researchers have found that the dual process of the JD-R model is best represented as a health impairment or energy depleting process (job demands → burnout) and a motivational process (job resources → engagement), where job resources foster employees’ growth, learning, and development; satisfy needs for autonomy and competence; and
increase willingness to dedicate one’s efforts and abilities to the work task (de Beer, Pienaar, Rothmann, 2016; Georing et al., 2017).

That being said, results of the present study highlight the overarching importance of job demands in predicting both emotional exhaustion and client depersonalization. This is consistent with past studies in the general burnout literature that have found work demands to be an important predictor of burnout (e.g., Lee & Ashforth, 1996) and with studies that have examined the particular demands of negative client behaviors, overinvolvement with clients, and hours worked among professional psychologists (Ackerley et al., 1988; Huebner, 1992; Raquepaw & Miller, 1989; Rupert & Kent, 2007; Rupert & Morgan, 2005; Rupert et al., 2009). Notably, this finding is also consistent with past meta-analytic work. In Lee and Ashforth’s (1996) meta-analysis, demand variables showed a consistently strong relationship with emotional exhaustion and client depersonalization, but the relationships between resource variables and the dimensions of burnout were smaller in magnitude and less consistent. Replicating this finding, a recent large scale meta-analysis also found the demands-burnout relationship to be stronger than the resources-burnout relationship (Goering et al., 2017).

It is significant that the present findings are also consistent with past theoretical writings by Maslach suggesting the primacy of demands in predicting burnout among human service providers (Maslach, 1982). Per this work, a high level of client demands leads to emotional exhaustion, which in turn may cause therapists to take a defensive strategy of withdrawal through client depersonalization. In this way, depersonalization is a form of coping or self-protection from emotional stressors and strain. So while the JD-R model suggests that a lack of resources leads to difficulty completing work and thus disengagement, it may be that, as Maslach
originally suggested, overwhelming demands and emotional exhaustion trigger client depersonalization.

The primacy of loss argument made by the Conservation of Resources theory of stress (Hobfoll, 1988, 1989) suggests individuals are more sensitive to the stressors they face than the resources they receive. Applied to burnout, this theory would predict that demands should be the strongest predictor of burnout, with resources having secondary importance. Indeed, while results of the current study emphasize demands in the development of emotional exhaustion and client depersonalization, resources were certainly not inconsequential. Even with demands in the model, resources emerged as unique and significant predictors of exhaustion and depersonalization. This bolsters past findings correlating control (Ackerley et al., 1988; Rupert & Kent, 2007; Rupert & Morgan, 2005; Rupert et al., 2009) and professional development opportunities (Acker, 2012; Coster & Schwebel, 1997) with facets of burnout. Additionally, by examining resources and demands as simultaneous predictors, the present findings extend prior research and demonstrate that both demands and resources are important predictors of burnout. That is, increased demands combined with decreased resources may place psychologists at increased risk for burnout.

**Resources as a Buffer**

The second aim of this study was to determine if job resources might moderate the relationship between demands and burnout. It was hypothesized, as suggested by the JD-R model, that job resources would serve a protective role and buffer the impact of job demands on emotional exhaustion. However, this hypothesis was not supported--job demands impacted exhaustion regardless of the level of resources. While this finding is not in line with JD-R theory,
past research investigating the buffering role of job resources has been inconsistent both in studies utilizing the JD-R model (Bakker et al., 2003; Bakker et al., 2005; Marchand, Juster, Durand, & Lupian, 2016; Molino, Bakker, Ghislieri, 2016) and those testing the JD-C or JD-C-S models (Hausser et al., 2010; Wood et al., 2011).

One possible reason for these inconsistent findings is the various ways demands, resources, and burnout have been measured throughout the literature. In reviewing resource and demand interaction findings in the occupational literature, both Hausser et al., (2010) and van der Doef and Maes (1999) note that significant interactions are found most often when there is a match between the demand, resource, and strain outcome.

This perspective is often referred to as the Triple Match Principle or TMP (Chrisopoulos, Dollard, Winefield, & Dormann, 2010; de Jonge & Dormann, 2003, 2006; de Jonge, le Blanc, Peeters, & Noordam, 2008). Inherent within TMP is the multidimensionality of concepts. Job demands, job resources, and strain are conceptualized as being composed of three dimensions: cognitive, emotional, and physical. As described by de Jonge and Dormann (2006), cognitive demands impinge primarily on the brain processes involved in information processing, emotional demands relate to the effort required to conform to organizationally desired emotions during interpersonal interactions, and physical demands are primarily related to the musculoskeletal system. For resources, a colleague providing informational support and workplace control are examples are cognitive resources; friends in the workplace is an example of an emotional resource; and instrumental support is an example of a physical resource. Finally, low feelings of professional efficacy are an example of a cognitive strain; high feelings of emotional exhaustion are an example of an emotional strain; and a high degree of somatic symptoms is an example of a
physical strain. Triple match principle suggests that the strongest interactive effects of job demands and job resources should be observed when demands, resources, and strain are based on qualitatively similar psychological dimensions. In other words, the probability of finding an interaction increases as the level of match between demands, resources, and strain increases.

In the present study, the latent variable of demands was comprised of one cognitive demand variable (hours worked) and two emotional demand variables (negative client behaviors and overinvolvement with clients), the resource variable was comprised of two primarily cognitive variables (opportunities for professional development and control at work), and the strain variable was emotional (emotional exhaustion). The mismatch between the emotional demands, cognitive resources, and emotional strain may be one reason the current study did not find a significant interaction. TMP suggests that emotional resources are most likely to buffer the effects of emotional demands on emotional strain.

Traditionally, burnout research has paid much more attention to resources in the workplace versus resources that lay within the person. However, quite recently there has been a growing interest in the role of personal resources in the occupational health literature (e.g., Rhee, Hur, & Kim, 2017; Sonnentag, Binnewies, & Mojza, 2010). Personal resources refer to the psychological capacities that enable individuals to be flexible and adaptable to resource-draining circumstances (Hobfoll, 2002). Specifically, optimism and feelings of self-efficacy have been identified as important constructs and successfully added to the JD-R model (Bakker & Demerouti, 2018; van den Tooren & Rutte, 2016). Individuals who are high in optimism and self-efficacy believe that good things will happen to them and that they are capable of handling unforeseen events. Such beliefs help employees to actively approach their job demands and deal
with them in an effective way. For example, research has shown that health care nurses who feel optimistic and self-efficacious can translate emotionally demanding interactions with their patients into challenges so that they feel engaged in their work (Bakker & Sanz-Vergel, 2013).

The literature on professional competence and well being among psychologists has historically emphasized the development of personal resources. Specifically, coping and self-care strategies have been emphasized as important for maintaining professional functioning (e.g., Barnett, Baker, Elman, & Schoener, 2007; Barnett & Cooper, 2009; Mahoney, 1997; Norcross & Guy, 2007). In fact, self-care has been described as an ethical imperative, essential for meeting the unique challenges of psychological work and preventing distress that may undermine a therapist’s ability to provide competent, effective services. Indeed, a handful of studies have been published that provide support for the notion that personal resources may be important for professional psychologists. Self-care, particularly monitoring one’s emotional state and maintaining a balanced life, has been correlated to emotional exhaustion and client depersonalization among professional psychologists (Dorociak, Rupert, Bryant, & Zahniser, 2017). And among doctoral level psychology trainees, self-care has been shown to significantly buffer the impact of stress on overall wellbeing (Zahniser, Rupert, & Dorociak, 2017). While in the present study cognitively-oriented workplace resources did not buffer the impact of demands on emotional exhaustion, it may be that resources that are more personal in nature are better able to mitigate the demands of psychotherapeutic work.

**Consequences of Burnout**

The third objective of this study was to investigate the role of burnout in leading to professional impairment. Guided by the JD-R model, burnout was conceptualized to be a linking
mechanism between job characteristics and professional functioning. Thus, a model of the indirect effects of job characteristics on professional impairment via emotional exhaustion and client depersonalization was examined.

**Measurement of Impairment**

The task of selecting indicators of the latent variable of professional impairment was complicated by a lack of empirical research regarding the markers of well or ill professional functioning among professional psychologists. Leiter (1991, 1993) has suggested that impaired professional functioning can be seen in withdrawal type behaviors, such as low job involvement and a desire to quit. Consistent with this, intent to leave the profession and missed or cancelled sessions have been indicated as possible signs of impairment among psychologists (Sherman & Thelen, 1998). Additionally, patient-centeredness has been identified as an important aspect of quality mental health treatment (e.g., Institute of Medicine, 2001), and it may be that reduced therapist-client working alliance is also an example of withdrawal behavior. In other words, impaired professional psychologists may withdraw both from their job commitments and the profession as well as from their client relationships.

In the present study, working alliance and intent to quit were both found to be good indicators of professional impairment, supporting the notion that withdrawal type behaviors are indicators of professional impairment. However, absenteeism was not correlated with the other two manifest variables and proved to be a weak indicator of impairment. One possible explanation for this is that professional psychologists are likely to have a variable work schedule week to week depending on client intake, discharge, cancellations, rescheduling, etc., which may
make what constitutes a missed work day somewhat unclear. A standard measure of absenteeism may not be an appropriate way to measure missed work for this group.

**Predicting Impairment**

As outlined by the JD-R model (Demerouti et al., 2001), it was expected that two parallel processes would predict professional impairment. Specifically, it was expected that increased job demands would lead to increased emotional exhaustion, which would in turn lead to increased impairment. Additionally, it was expected that decreased job resources would lead to increased client depersonalization, which would in turn lead to increased impairment. Hence, as part of this model, both emotional exhaustion and client depersonalization were expected to significantly and positively predict professional impairment. Additionally, paths accounting for the relationship between demands and depersonalization, resources and exhaustion, and exhaustion and depersonalization were also included in final the model.

In accordance with previous research testing the full JD-R model (e.g., Bakker, Demerouti, & Schaufeli, 2003; Bakker et al., 2004), the model fit reasonably well, suggesting that the hypothesized pattern of relationships was consistent with the data. Hence, results are consistent with the notion that increased job demands and decreased job resources predict emotional exhaustion and client depersonalization, which in turn lead to increased professional impairment.

The relationships between emotional exhaustion and professional impairment as well as client depersonalization and impairment were of primary interest in this study. Based on the JD-R model, both facets of burnout were expected to have a significant positive relationship to professional impairment. Consistent with expectations, emotional exhaustion was significantly
and positively related to professional impairment. However, inconsistent with expectations, client depersonalization did not emerge as a significant unique predictor of professional impairment. This finding is inconsistent with previous work utilizing the JD-R model that has demonstrated exhaustion and disengagement to simultaneously predict negative work outcomes (e.g., Bakker et al., 2004). Rather, findings from this study highlight the role of emotional exhaustion in predicting professional impairment.

This is surprising given the very nature of client depersonalization would seem to lead to impaired professional functioning. As noted by Negash and Sahin (2011), there are numerous areas of treatment that can be impacted when depersonalization takes place. A therapist may have difficulty examining a client’s experience, thoughts, and feelings without bias, leading to inaccurate assessment. Creating and following through with service goals that are in the best interest of the client may prove to be difficult. In addition, depersonalization may lead therapists to choose ineffective, contraindicated, or inappropriate intervention strategies. And while the professional impact of client depersonalization in psychologists has not been examined prior to the current study, client depersonalization has been shown to negatively relate to client-rated satisfaction with care in a community mental health setting (Garman, Corrigan, & Morris, 2002). In the present study, professional impairment was indicated by intent to quit and working alliance. It is rather counterintuitive to think that having a negative and cynical view of clients would not impact a psychologist’s ability to bond with clients or their desire to leave their job.

It is possible, however, that client depersonalization does not relate to professional impairment as one might expect. If client depersonalization is a form of self-protection against the overwhelming demands of emotional exhaustion, it may be that low amounts might actually
be protective against the negative impact of client demands and emotional exhaustion. And it may, in fact, allow psychologists to avoid overinvolvement, which might lead to further exhaustion. Similar to other studies on professional psychologists (Rupert & Kent, 2007; Rupert & Morgan, 2005; Rupert et al., 2009), participants in the current study reported on average a “low” level of client depersonalization per normative data on mental health workers provided in the MBI manual (Maslach et al., 1996). It could be that depersonalization becomes problematic only at high levels. A second possible explanation for the non-significant relationship between depersonalization and professional impairment relates to the strong predictive impact of emotional exhaustion, which accounted for a large amount of the variance in impairment.

Indeed, consistent with past work linking exhaustion to a variety of performance indicators utilizing the JD-R model (Bakker & Heuven, 2006; Demerouti, Bakker, & Leiter, 2014; Demerouti, Verbeke, & Bakker, 2005), the present results highlight the role of emotional exhaustion in leading to professional impairment. The relationship between emotional exhaustion and professional impairment is a particularly noteworthy finding of the current study. The significance of burnout research for both psychologists and service recipients lies in the links to its outcomes. Yet, in comparison to the work on the predictors of burnout, there is a surprising scarcity of evidence on burnout’s consequences. Preliminary studies have linked burnout among psychologists to intent to leave the profession (Raquepaw & Miller, 1989), intent to quit (Acker, 2012), and negative therapist behaviors (McCarthy & Frieze, 1999). Results of the current study are consistent with these findings and suggest that even at moderate levels, emotional exhaustion can lead therapists to withdraw from their professional duties as well as the therapist-client relationship.
To more fully understand the role of emotional exhaustion in predicting professional impairment, a targeted path analyses that included the direct effect of job demands on professional impairment as well as the indirect effect through emotional exhaustion was investigated. Results indicated that emotional exhaustion completely mediated the impact of job demands on professional impairment, suggesting that the impact of professional stressors on professional performance can be explained by emotional exhaustion. This is important as it suggests that it is not job demands in itself, but rather responding to these demands with emotional exhaustion that impacts professional functioning. Hence, this finding has many practical implications.

**Limitations and Directions for Future Research**

The present study provides valuable information about the relationships between job characteristics, burnout, and professional impairment. Additionally, findings suggest several practical action points. However, there are important limitations that must be considered in drawing conclusions and that have implications for future research.

The survey response rate is one limitation. The survey response rate for the present study was about 27%, similar to other recent surveys of licensed professional psychologists (Dorociak et al., 2017). While the relatively low response rate raises concerns about the generalizability of results, it is noteworthy that sample demographics of the present study are quite similar to those found by large scale national surveys of professional psychologists with higher response rates (Rupert & Kent, 2007; Rupert & Morgan, 2005; Rupert et al., 2009). It is possible, however, that there may be differences between those who responded and those who did not. For example,
participants may have a greater interest in professional issues or be less burned out than those who chose not to respond.

The demographic makeup of the sample also limits the generalizability of the results. The population sampled was a group of licensed professional psychologists in the state of Illinois. The majority of respondents worked in private practice, were fairly experienced, and identified as white and female. It should not be assumed that results of this study apply to all professional psychologists or to other mental health professionals. For example, less experienced professionals and/or those with less education/training may find support to be an important resource. Or, the working alliance may not be a relevant indicator of professional functioning for those doing short-term crisis management. Each unique professional situation will have its own relevant demands and resources. Moreover, the pattern of results may differ as well. For example, early career psychologists may be more sensitive to workplace resources than those with decades of experience. Further research with more diverse populations is needed to increase generalizability of these findings.

It is also worth noting that any conclusions about the role of job demands, resources, and burnout in leading to professional impairment are limited by how the latent variables representing these were constructs were measured. Specifically, the latent variables of job resources and professional impairment were each only indicated by two measured variables and perhaps did not capture the full breadth of the resource and impairment constructs, respectively. While the significant findings of the present study are noteworthy given the somewhat limited measurement of job resources and professional impairment, it is possible that the pattern of results may change as better measurement models are developed.
Another limitation relates to the reliance on self-report measures. Using exclusively self-report measures increases the possibility that the observed relationships might be due to common method variance. That is, the strengths of the relationships might have been inflated due to the variance shared by the common measurement method. While the differentiated pattern of relationships and the consistency of findings with past theory indicate that common method variance does not completely account for significant relationships, future research may benefit from the inclusion of other methodologies for data collection. For example, colleague or family ratings of psychotherapist burnout or biological markers of stress are options. Utilizing mixed measurement methods and multiple sources of information may reduce the possibility of inflated correlations due to common method variance, thus potentially providing a more accurate description of how the variables of interest are related.

Self-report measures are also potentially problematic due to the potential for reporting bias. In the current study, the reliance on therapist ratings of working alliance is a particular limitation. Therapists, particularly those experiencing burnout, may not have accurate insight into the quality of the therapist-client relationship. Additionally, they may be hesitant to report on their professional duties in a negative light. Although this study represents an important first step in linking burnout to professional functioning, future research should include other types of assessments such as, client ratings or coding of session transcripts/videotapes.

A final limitation relates to the use of a cross-sectional methodology, which is particularly problematic in testing mediational models (Maxwell & Cole, 2007). Although the findings here have been interpreted within the context of theoretical and conceptual models that assume causal links, the cross-sectional and correlational nature of the study makes it impossible
to draw conclusions about causality. For example, the present study conceptualized burnout as a causal factor leading to professional impairment. Instead, it may be that professional impairment, particularly poor therapeutic alliances with clients, leads to more work demands and burnout. Over time, it is also likely the relationship between job characteristics and burnout as well as the relationship between burnout and professional impairment is reciprocal. There is some support for this notion in the general occupational literature. Bakker, Schaufeli, Sixma, Bosveld, and Van Dierendonck (2000) found that general practitioners who had lost their enthusiasm and were more cynical towards their patients at the first wave of data collection faced more patient demands (complaints, threats) at the second wave five years later. Additionally, Reis, Hoppe and Schröder (2015) followed psychotherapists over a period of five months, and found that work engagement was a predictor and outcome of job resources such as autonomy, task variety, and learning opportunities. Future research should use longitudinal designs in order to more thoroughly and completely understand the relationship between job characteristics, burnout, and professional outcomes.

**Conclusions and Implications**

The present study used the job demands-resources model as a conceptual framework for investigating the antecedents and consequences of burnout among professional psychologists. Overall, results were supportive of the notion that demands and resources influence the development of burnout, which ultimately impacts professional functioning. Findings highlighted the significant and unique contribution that both job demands and resources, albeit to a lesser degree, make in explaining emotional exhaustion and client depersonalization. Additionally, job demands were found to indirectly impact professional impairment via
emotional exhaustion, thus underscoring the potential for emotional exhaustion to impact professional functioning in a negative way. While future research is certainly needed, the present findings have some meaningful implications for practicing psychologists.

The professional code of ethics encourages psychologists to “be aware of the possible effect of their own physical and mental health on their ability to help those with whom they work.” (APA, 2002, p.3). The current results suggest that feelings of emotional exhaustion, even at moderate levels, can negatively impact a provider’s ability to help their clients. Thus, it might be important for therapists to actively monitor or maintain self-awareness of their level of emotional exhaustion.

The ethics code also mandates that “When psychologists become aware of personal problems that may interfere with their performing work-related duties adequately, they take appropriate measures, such as obtaining professional consultation or assistance, and determine whether they should limit, suspend, or terminate their work-related duties.” (APA, 2002, p. 5). To this end, results of the present study provide some insight into steps psychologists can take to prevent or reduce burnout. Results suggest that as much as possible it is important for therapists to keep job demands at a manageable level. For example, therapists might find it helpful to be mindful of the number of hours worked per week, the frequency of working with high risk or challenging clients, and the mental energy spent outside of the therapeutic hour thinking about clients and adjust their workload accordingly. Results also suggest that building resources in the workplace may be important. In working with clients, there are many areas that psychologists cannot control (client symptoms, insurance companies, people in client’s life, etc.). But, cultivating areas of work life that are under a psychologist’s control may be helpful in reducing
burnout. Additionally, results suggest that looking for professional development opportunities may also be helpful. Participating in informal learning opportunities, attending conferences, and continuing education may all decrease burnout. In building resources, psychologists may find it particularly helpful to try and “match” the types of resources they seek out to the demands they experience.
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