Role of Cognitive Distortions and Dysfunctional Attitudes in Nurses Experiencing Burnout

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The Role of Cognitive Distortions and Dysfunctional Attitudes in Nurses Experiencing Burnout

By Cynthia A. Diefenbeck

Submitted in Partial Fulfillment of the Requirements for the Degree of Doctor of Psychology

December 2005
PHILADELPHIA COLLEGE OF OSTEOPATHIC MEDICINE
DEPARTMENT OF PSYCHOLOGY

Dissertation Approval

This is to certify that the thesis presented to us by Cynthia A. Diefenbeck on the 7th day of December, 2005 in partial fulfillment of the requirements for the degree of Doctor of Psychology, has been examined and is acceptable in both scholarship and literary quality.

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How do you put into words the appreciation felt for all of those who have helped me arrive at this place both personally and professionally? Sincere thanks to Dr. Bruce Zahn, Committee Chairperson, who has been there to help pull my head out of the clouds and put my feet on the ground. Your humor has helped make this process more enjoyable. Much gratitude is extended to committee member Dr. Robert DiTomasso for his valuable statistical assistance and advice on the project. Special thanks to Dr. Thomas Hardie for his support, guidance, and insights during this project. I always know I can count on you as a mentor and friend.

Many thanks are extended to all of the PCOM faculty and staff who have shared so much of themselves to help mold us into expert practitioner-scholars.

I am indebted to the hundreds of nurses who gave their time to make this study a success. I hope my findings touch nurses at all phases of the career span.

To all family, friends, and co-workers who supported me throughout this process, I thank you from the bottom of my heart. Without that network of support and encouragement, this process would have been a much lonelier one.

My deepest thanks is extended to my husband, David, who has taken this journey with me. You were always there with a word of encouragement. I appreciate the behind-the-scenes work you did to help me on this project – from photocopying to stuffing envelopes, you always took care of it – “service with a smile,” as they say. You understand this drive I have to achieve certain goals and are patient with me as I follow my various pursuits. You are a wonderful husband and my very best friend!
DEDICATION

I dedicate this work to my son, Evan, who was born during this project. You have added so much joy and fulfillment to my life. Seeing your sweet face and hearing your playful giggle (not to mention your use of my previous drafts as scrap paper on which to color) has helped me put all of this in its proper perspective. “Mommy coming back,” you have recently and proudly exclaimed. Yes, sweetheart, you don’t know how right you are!
Abstract

As a means of gathering more data to support the utility of cognitive-behavioral therapy with individuals experiencing burnout, this current study is designed to identify whether or not distorted thinking and dysfunctional attitudes are present in registered nurses who are experiencing burnout and whether or not they differ in registered nurses not experiencing burnout. A mail survey to a random sample of certified critical care registered nurses working in hospital settings was conducted. Participants provided basic demographic data and completed the Maslach Burnout Inventory, the Inventory of Cognitive Distortions, and the Dysfunctional Attitudes Scale. In addition, participants completed measures of intent to leave or to stay, job satisfaction, and the work environment. A descriptive correlation design was employed. Results supported the relationship between burnout, cognitive distortions, and dysfunctional attitudes. Moreover, results demonstrate that magnification is the distortion most strongly linked with burnout. Job satisfaction, intent to leave or to stay, and various measures of the workplace environment by and large were shown to be significantly correlated with burnout, cognitive distortions, and dysfunctional attitudes. Finally, results support the validity and reliability of the Inventory of Cognitive Distortions.
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CHAPTER 1
INTRODUCTION

Occupational burnout has been occurring for as long as mankind has been toiling in the fields and heading to the office. The labels used to describe burnout have evolved, but the symptoms have remained the same. Although officially designated “burnout” in the mid-1970’s, researchers had been describing this phenomenon earlier.

One of the more famous illustrations of burnout was conducted by Schwartz and Will (1953). Using the experiences of one nurse, “Miss Jones,” who worked on an inpatient psychiatric unit, they described a process of deterioration of morale and mutual withdrawal. Schwartz and Will (1953) recognized that “patients are in continuous, inescapable, and emotionally important relationships with nurses” (p. 338). Thus, studying alterations in the therapeutic relationship was deemed important. They noted that “it is inevitable in the course of working with [chronically mentally ill] patients that ward personnel will become discouraged at times and that the burden of caring for these patients will sometimes be too heavy to bear” (Schwartz & Will, 1953, p. 339).

Miss Jones’ low morale was characterized by feelings of failure, anger and resentment, guilt and blame, discouragement and indifference, constriction of perspective, and isolation and withdrawal. In terms of failure, Schwartz and Will (1953) noted:

As Miss Jones had more difficulty with patients, she began to conceive of herself as a failure. Her self-esteem as a nurse was related in part to having satisfactory and constructive relationships with patients…Her feelings of being unworthy and
a failure reflected her lowered self-esteem and contributed to an increased inability to function effectively; as she became more discouraged with herself she continued to fail with patients; as she continued to fail with patients, she became more discouraged. (p. 340)

Anger, resentment, and guilt also increased in a cyclical fashion:
The more ‘difficult’ and ‘resistant’ patients were, the more irritating and demanding she saw them to be. This hostility reached the point at which she felt she could not stand patients. She then developed strong guilt feelings about this hostility. These served only to increase her withdraw; at this time the source was guilt. (Schwartz & Will, 1953, p. 341)

The combined feelings of failure, anger, resentment, and guilt gave way to discouragement and indifference (“Nobody cares, so why should I?”). Schwartz and Will (1953) asserted that low morale was accompanied by attentional bias as “the nurse selectively focused on the negative” (p. 343). This negative attentional bias was directed at patients as she began to deem their conditions hopeless. It was also directed at co-workers and the institution which she saw as uncaring and unsupportive. Miss Jones’ behavioral responses to low morale included isolation and withdrawal from patients.

Schwartz and Will noted that the very process of interviewing Miss Jones and allowing her the opportunity to vent her feelings to the investigator, who had no formal authority over her in the institution, was therapeutic. Using a psychodynamic formulation, they intervened to help Miss Jones be more aware of the overt and covert processes of low morale and their impact on patients.

* * *
Burnout, a psychological phenomenon hypothesized to occur in human service professionals, is characterized by emotional exhaustion, depersonalization, and decreased personal satisfaction in one’s work. Burnout leads to attrition, but it also affects employee performance and patient outcomes before one ever decides to leave his or her job. The number of nurses who are experiencing burnout is not exactly clear, but it is suspected that burnout has contributed to the historic shortage of nurses this country is currently facing.

In attempting to devise strategies to intervene with and (ideally) prevent burnout in professional caregivers, it is imperative that one understands the nature of the phenomenon. Much has been done to understand burnout, yet much work remains. Many studies have been done which further the conceptualization of burnout as a construct. A myriad of factors which contribute to burnout in professional caregivers has been suggested. In addition, measures of burnout have been devised. Several theoretical paradigms have been postulated to explain the development and perpetuation of burnout, including social psychological, psychodynamic-existential, social exchange, and conservation of loss. However, no comprehensive cognitive-behavioral explanation has been posited.

Given the burnout phenomenon’s overlap with depressive symptomatology, and given cognitive-behavioral therapy’s (CBT’s) effectiveness with other disorders, namely depression, it is expected that CBT would provide great contributions to the prevention and treatment of burnout in professional caregivers. Because there is no cognitive-behavioral conceptualization of burnout yet developed, there is little guiding evidence for research in this area. As a means of gathering more data to support the utility of
cognitive-behavioral therapy with individuals experiencing burnout, this current study
was designed to identify whether or not distorted thinking and dysfunctional attitudes
were present in registered nurses who are experiencing burnout and whether or not
thinking and attitudes differ in registered nurses who are not experiencing burnout. The
relationship between cognitive distortions and dysfunctional attitudes as well as other
measures of work life (including job satisfaction, intents to leave and stay, and
perceptions of support) were also explored. Exploration of these concepts serves to
inform the development of a cognitive-behavioral conceptualization of the burnout
phenomenon which would likely extend to all human service professionals, not just
nurses. Ultimately, the development of cognitive-behavioral prevention and intervention
strategies would hopefully follow.

This study also attempted to replicate findings of previous studies which
demonstrate a correlation between job satisfaction and burnout, between intent to
leave/stay and burnout, and perceptions of workplace support and burnout. Finally, the
study sought to determine the validity and reliability of the Inventory of Cognitive
Distortions with this population.
CHAPTER 2
LITERATURE REVIEW

Historical Background

The concept of burnout first emerged in the middle 1970s. Freudenberger was the first to use the term “burnout,” at the time a popular term in the addictions field (Maslach & Schaufeli, 1993). Freudenberg, a psychiatrist who ran a free clinic for drug addicts in New York City, staffed his clinics with volunteers. Although the volunteers were initially idealistic and motivated, he noticed a gradual decrease in their motivation, commitment, and idealism over the course of a year of working with the drug addicted population. This was followed by mental and physical symptoms similar to those noted in the current conceptualization of burnout (Freudenberger, 1974; Maslach & Schaufeli, 1993; Shaufeli & Enzmann, 1998). Initially burnout was identified as a social and clinical issue, and academicians dismissed the concept as ‘pop’ psychology (Maslach & Schaufeli, 1993). It was not until the 1980s that researchers also embraced the concept.

At the same time that Freudenberger articulated the concept of burnout, Maslach, a social psychology researcher, was studying occupational coping. Following extensive interviews with various health care professionals, she identified three themes which eventually came to characterize the most widely used conceptualization of the burnout phenomenon to date. Specifically, burnout became defined as “a syndrome of emotional exhaustion, depersonalization, and reduced personal accomplishment that can occur among individuals who do ‘people work’ of some kind” (Maslach & Jackson, 1986, p. 1).
Maslach and Jackson specifically limited the construct to those in the human service professions. Schaufeli, Maslach, and Marek (1993) explain that “…the major cause of burnout has been the emotionally demanding interpersonal relationships of professional caregivers with their recipients. By definition, these relationships are asymmetric” (p. 17). Later Maslach and Jackson developed a self-report inventory, the Maslach Burnout Inventory (MBI), based on their multidimensional model of burnout. It remains the most widely used tool to assess burnout.

Farber (1983) suggests that burnout is a relatively new phenomenon in our society. As society becomes more fragmented and less tied to social and religious institutions, individuals receive less personal fulfillment from these sources. Instead, individuals have increasingly sought the bulk of their fulfillment and personal satisfaction from work. By placing emphasis on one source, the potential for disappointment, and in severe cases, burnout, increases. Cherniss (1980) adds that there is an increase in burnout in human service professions due to the increased demand for these types of services. These services are increasingly sought by individuals because their needs are less likely to be met by family and community institutions; simultaneously, funding for services is nearly always perceived as insufficient for the demand. These factors coupled with duplication of services and other forms of inefficient bureaucratic functioning serve to increase the workload of individual employees, hence, the propensity for burnout to occur.

Schaufeli and Enzmann (1998) posit seven reasons for the increased incidence of burnout in recent decades. First, American society has seen a shift from industry to service occupations which are inherently founded upon the presence of a helping
relationship. Second, the service sector expansion comes with an increase in the mental and emotional workload of various jobs. The third and fourth reasons for the increase in burnout rates revolve around the fact that there has been a gradual erosion of authority and respect for professionals, with a corresponding increase in service recipients’ attitudes of entitlement and unrealistic expectations of professionals. Fifth, the individualization of society has resulted in a smaller social network to buffer stress. Sixth, individuals tend to label their problems of living as “stress,” so the acceptance of the phenomenon of burnout is greater. The last reason that Schaufeli and Enzmann (1998) posit for the recent increase in burnout is that the psychological contract with one’s employer has changed over the decades, with an increasing emphasis on ‘doing more with less.’

Farber (2000a) suggests that burnout is changing with the generations. “Once a phenomenon linked to the failure of one’s idealistic goals, burnout now seems to reflect the failure to achieve one’s self-interested goals” (Farber, 2000a, p. 593). Burnout emerged in the 1970s, when social unrest bred activism and idealism. This has been followed by an era of selfish excess, which may reflect the change in the burnout phenomenon that Farber notes. He continues,

The point, though, is that the burnout we often saw a decade or two ago was one that typically was based on a sense of internal disappointment – of not meeting the goals at work (most often about helping others) that one had established as personally and socially meaningful. The burnout of today is generated more often than not by the pressure of others in the same organization or firm, or by the drive
to make ever more money, or by the sense that one is being deprived of something one clearly deserves. (Farber, 2000a, p. 592)

It is unclear how the changing face of burnout will impact on the identification and treatment of burned out individuals.

**Definition of Burnout**

Maslach and Jackson’s (1986) definition of burnout remains the most widely used. They conceptualize burnout as being composed of three dimensions: emotional exhaustion, depersonalization, and personal accomplishment. The first two increase in intensity with burnout, but the third decreases with the progression of burnout. They suggest that the phenomenon is seen exclusively in human service professions because burnout occurs within the context of a professional helping relationship.

Emotional exhaustion, the first of three dimensions of burnout, is the most strongly correlated with the overall construct of burnout (Maslach & Jackson, 1986). Emotional exhaustion is presumed to occur as the supply of caregiver’s emotional resources is depleted. As helping relationships are defined by a unilateral giving and receiving, the caregiver experiencing burnout has emotionally overextended himself or herself and more is given than is received. The result is a general sense of fatigue and dysphoria. Vague physical symptoms are commonly associated with this dimension. In compiling 73 US studies on burnout across occupations, Schaufeli and Enzmann (1998) found that teachers, as a profession, experience the highest levels of emotional exhaustion.
The second of Maslach and Jackson’s (1986) three dimensions of burnout is depersonalization. Burned out individuals tend to become increasingly detached from their work and from the recipients of their care. They may display cognitive or physical distancing and withdraw. Individuals experiencing burnout tend to see recipients of their care as objects instead of humans, a phenomenon known as dehumanization. Caregivers with burnout tend to be increasingly cynical, negative, and callous. They may have inappropriate attitudes toward their clients. They have lost the idealism that led so many of them to seek the career in the first place (Maslach, 1993). Social workers and teachers experience the highest levels of depersonalization of all professions included in 73 US burnout studies reviewed (Schaufeli & Enzmann, 1998).

The final dimension of burnout, according to Maslach and Jackson (1986), is a reduced sense of personal accomplishment. The individual experiencing burnout tends to be significantly dissatisfied with his or her job. Feelings of helplessness in efforts with clients (who are often in lose-lose situations) and a lack of demonstrated appreciation from clients or superiors for the caregiver’s efforts leads to decreased feelings of success and achievement. Some individuals with burnout feel incompetent and feel unable to be of assistance to their clients. They may demonstrate decreased productivity, low morale, and they withdraw. Whereas emotional exhaustion and depersonalization are considered the burned out individual’s response to clientele, this final dimension of burnout is considered the burnout response to one’s self (Maslach, 1993). Decreased personal accomplishment is least correlated with the overall dimension of burnout (Maslach & Jackson, 1986). Social service workers, nurses, and police, probation, and correctional
officers experience the highest levels of reduced personal accomplishment according to Schaufeli and Enzmann (1998).

As opposed to conceptualizing burnout as an endpoint or as a dichotomous variable which is either present or absent, some theorists prefer viewing it as a process (Hallsten, 1993). Golembiewski, Munzenrider, and Stevenson (1986) suggest that the process of burnout begins as the professional experiences depersonalization; this is followed by decreased personal accomplishment, culminating in emotional exhaustion. Leiter and Maslach (1998), on the other hand, posit the idea that emotional exhaustion is the first step in the burnout process, followed by depersonalization then a decreased sense of personal accomplishment.

Some skeptics argue that burnout is nothing more than the stress response or a manifestation of depression (Hallsten, 1993; Burisch, 1993). “Presumably, the basic problem is that burnout does not have a sufficiently distinctive character in comparison with such related concepts as depression, stress, and alienation” (Hallsten, 1993, p. 96). In fact, Hallsten (1993) argues that “Emotional exhaustion has perhaps the same status as fever and headache as being a definite symptom of a disease but insufficient as a distinguishing criterion for a certain phenomenon” (p. 98). Burisch (1993) believes that the concept of burnout has been over explained, and sees it as a “fuzzy set,” meaning the concept shares characteristics with many other phenomena, so much so that it is difficult to distinguish it exactly (p. 76). Meier (1984) also considers burnout a fuzzy word, “precisely because they are primarily feeling states and relatively immune to precise definition” (p. 217). He continues,
The overlap between burnout and depression scores may occur as individual attempt to translate their global feelings into responses to test items. The precognitive feelings cannot, for many people, be expressed in terms of distinct items that aim to distinguish between feelings of burnout and feelings of depression. (Meier, 1984, p. 217)

Most, however, argue that burnout is a legitimate construct that is particularly important to understand because it contributes to a great deal of distress and impairment in the workplace and beyond for numerous individuals. Glass and McKnight (1996) argue that depression and burnout share only about one quarter of their variance. Through the use of structural equation modeling, they posit the theory that burnout leads to depression via perceived lack of job control, as opposed to being a manifestation or consequence of depression (Glass & McKnight, 1996; Glass, McKnight, & Valdimarsdottir, 1993). In their review of the literature, Glass and McKnight (1996) conclude that measures of burnout (specifically, emotional exhaustion) and measures of depression correlated on the order of .4 to .5, indicating relatedness, but not isomorphism. Smaller amounts of variance (~9%) are explained by the other subscales of burnout, Depersonalization and Personal Accomplishment. Furthermore, factor analysis of the most widely used burnout and depression measures (the Maslach Burnout Inventory and the Beck Depression Inventory) revealed that items from each inventory almost exclusively loaded on separate factors (Glass, McKnight, & Valdimarsdottir, 1993), again suggesting separate theoretical constructs. Other related terms often seen in the burnout literature are presented in Table 1.
Table 1

**Definition of Terms**

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job or Occupational Stress</td>
<td>The resultant state when occupational demands exceed an individual’s adaptive capacity (Schaufeli &amp; Buunk, 2003). It is accompanied by physical and mental symptoms identical to those seen in the classic stress response. Job stress is not necessarily associated with negative attitudes and behaviors towards recipients, the job itself, or the organization.</td>
</tr>
<tr>
<td>Job satisfaction</td>
<td>The resultant state when one appraises one’s work in terms of one’s needs and values in light of the possibilities of meeting these needs (Locke, 1976). Important factors related to job satisfaction include:</td>
</tr>
<tr>
<td></td>
<td>• Workload challenging, yet manageable</td>
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<tr>
<td></td>
<td>• Work is personally interesting</td>
</tr>
<tr>
<td></td>
<td>• Rewards from work fit one’s aspirations</td>
</tr>
<tr>
<td></td>
<td>• Working conditions are conducive to satisfactory completion of work</td>
</tr>
<tr>
<td></td>
<td>• Self-esteem</td>
</tr>
<tr>
<td></td>
<td>• Personal values consistent with corporate values</td>
</tr>
<tr>
<td>Burnout</td>
<td>“A syndrome of emotional exhaustion, depersonalization, and reduced personal accomplishment that can occur among individuals who do ‘people work’ of some kind” (Maslach &amp; Jackson, 1986, p. 1). Some consider burnout to be the result of chronic job stress (Schaufeli &amp; Buunk, 2003). Numerous individual, interpersonal, and environmental variables have been linked to burnout.</td>
</tr>
<tr>
<td>Compassion fatigue</td>
<td>“The natural behavior and emotion that arises from knowing about traumatizing events experienced by a significant other, the stress resulting from helping or wanting to help a traumatized person” (Figley, 1995, p. 7).</td>
</tr>
</tbody>
</table>
Manifestations of burnout are innumerable, and can be separated into the following categories: affective, cognitive, physical, behavioral, and motivational (Schaufeli & Enzmann, 1998). The categories exist on each of three levels: individual, interpersonal, and organizational.

**Individual Level Manifestations**

At the individual level, affective symptoms include depressed mood and increased tension and anxiety. The individual may be moved to frustration and anger more quickly than usual. Hostility and suspiciousness may also be present (Schaufeli & Buunk, 2003). Cognitive symptoms include helplessness, hopelessness, loss of meaning, powerlessness, a sense of being trapped or of being a failure, a decreased ability to concentrate or make decisions, and forgetfulness. Individual level physical symptoms include headaches, gastrointestinal disturbances, muscle aches, cardiovascular ailments, sleep disturbances, fatigue, decreased appetite, and exacerbations of pre-existing health problems (e.g., skin conditions, diabetes). Behaviors engaged in by burned out individuals include hyperactivity, impulsivity, risky and/or compulsive behaviors, exacerbation of addiction, increased accidents or mistakes, decreased leisure pursuits, and excessive complaining. Motivationally, individuals experience a loss of idealism, as well as disillusionment, disappointment, resignation, boredom, and demoralization.
Interpersonal Level Manifestations

At an interpersonal level, affective symptoms of burnout include irritability and anger, increased sensitivity, being cold and unemotional, and experiencing decreased empathy for clients. Cognitive symptoms include cynical or dehumanizing attitudes, negativism, pessimism, stereotyping, victim-blaming, and a sense of superiority over clients. Behavioral symptoms existing at an interpersonal level include violence or aggression, conflictual relationships, social isolation and withdrawal, mechanized responses to clients, off-color jokes, excessive bonding or detachment from coworkers, and compartmentalization. Motivational symptoms at an interpersonal level include loss of interest, indifference, over involvement, and using clients to meet personal or social needs (Shaufeli & Enzmann, 1998).

Organizational Level Manifestations

Affective burnout symptoms as they exist at an organizational level include job dissatisfaction. Cognitive symptoms include cynicism, distrust of peers and supervisors, and feelings of not being appreciated. Behavioral burnout symptoms include reduced efficiency, productivity, and effectiveness, tardiness, turnover, absenteeism, increased use of sick leave or disability claims, theft, resistance to change, increased accidents, and increased rigidity. Motivationally, at the organizational level individuals with burnout experience a loss of motivation to fulfill work obligations, low morale, and resistance to even go to work (Shaufeli & Enzmann, 1998).
Consequences of Burnout

It is difficult to separate the consequences of burnout from those of occupational stress, in general. It is presumed that burnout leads to even more serious manifestations and consequences than does job stress. Burnout tends to be stable over time and leads to physical and psychological illness, absenteeism, disability, job turnover, decreased productivity, decreased job satisfaction, and decreased organizational commitment. Both the employee and the employer feel the effects of burnout.

Current reviews of the literature suggest the correlation between work stress and combined physical and mental health is on the order of 0.20 and 0.30 (Semmer, 2003). Elkin and Rosch (1990) estimated that over one-half of the 550 million days of absenteeism each year are, in origin, stress-related. Sickness absence has been linked to occupational stress and to unsupportive management style (Michie & Williams, 2003). Even if not out on sick leave, those workers who are present may have decreased levels of productivity, a function of decreased work commitment or job satisfaction. Pines (2000a) found that burnout in nurses is associated with a perception of decreased productivity, although there was no corresponding objective measure. Future studies will bear this out.

Burnout-related physical or mental illness may result in an employee being placed on short or long-term disability. Presently in Western Europe, disability due to mental disorders is second only to musculoskeletal disorders (Shaufeli & Enzmann, 1998). This could even be an underestimate, because many musculoskeletal and cardiovascular conditions often have stress-related causation or contribution (Shaufeli & Enzmann,
1998). In the United States in the 1980s, “the frequency of mental health claims for every 1000 covered workers increased by 540%, whereas the incidence of all disabling injuries declined by 8%” according to the California Workers’ Compensation Institute (Shaufeli & Enzmann, 1998, p. 11). Nationally, stress-related work claims have increased, leading to over 200 billion dollars per year in direct and indirect costs to employers, employees, and taxpayers (Shaufeli & Enzmann, 1998). Public-sector service employees including teachers and police officers have the highest rates of stress-related claims, and these claims tend to be twice as expensive (Shaufeli & Enzmann, 1998). Findings are similar in other industrialized countries as well as in fast-developing countries (e.g., India and Brazil; Shaufeli & Enzmann, 1998). Kahill (1988) suggests that burnout is linked with turnover, absenteeism, decreased job performance, and altered health status. Certainly, burnout is a threat to productive and effective occupational functioning.

In their review of all of the related research until 1996, Schaufeli and Enzmann (1998) identify three types of concomitants and possible consequences of burnout: individual level, work orientation, and organizational level. Because of the methodology of most burnout studies, they use caution in labeling these phenomena as absolute causes. Depression and psychosomatic complaints are positively correlated with burnout. Job satisfaction and commitment to the organization are negatively correlated with burnout, whereas intention to leave one’s job is positively correlated. Modestly, yet positively correlated are absenteeism and sick-leave use and job turnover.
Causes and Correlates of Burnout

The variables posited as influencing the development and progression of burnout are nearly infinite and include demographic, psychological, interpersonal, and environmental/organizational.

Demographic Variables

In terms of demographic characteristics, research shows conflicting findings. Some suggest that individuals tend to burn out earlier in their careers and burnout is negatively correlated with work experience (Schaufeli & Enzmann, 1998). It is hypothesized that the reality shock of the profession or the failure to socialize to the profession leads to burnout (Schaufeli & Enzmann, 1998; Cherniss, 1980). Balevre (2001) found similar findings in a study of nurses; those under 40 years of age demonstrated more burnout behaviors than their older counterparts. In their study of long-term care staff members in Japan, Nagatomo et al. (2001) found no relationship between burnout and age and work schedule. Although statistically significant, one study found that only an additional 2.8% of the variance could be explained by age (Gueritault-Chalvin, Kalichman, Demi, & Peterson, 2000). Schaufeli and Buunk (2003) caution against putting too much weight into the finding that burnout tends to occur in younger employees, because selective dropout may have resulted, leaving behind the remaining group of relatively healthier older workers (“the survivors”). In other countries, burnout
tends to occur in older workers due to a culturally-mediated reluctance to change jobs (Schaufeli & Buunk, 2003).

In terms of gender, the results appear mixed, with women tending to have higher emotional exhaustion scores and men tending to have higher depersonalization scores, but it remains unclear which gender, if either, has a higher overall rate of burnout (Schaufeli & Enzmann, 1998). Balevre (2001) found no difference in burnout rates in nurses when gender was considered. Shaddock, Hill, and van Limbeek (1998) found no difference between sexes in terms of burnout among intellectual disability staff. Some argue that gender is closely tied with occupation and position, both of which are independently linked to burnout (Schaufeli & Buunk, 2003).

Unmarried individuals tend to have higher rates of burnout (Schaufeli & Enzmann, 1998). Shaddock, Hill, and van Limbeek (1998) found that divorced or cohabitating individuals had the highest rates of burnout and those who were widowed had the lowest. Correspondingly, those individuals who identified their families as sources of support had lower burnout scores (Shaddock, Hill, & van Limbeek, 1998).

Schaufeli and Enzmann (1998) report there appears to be no racial or ethnic differences in burnout rates. Balevre (2001) reported no differences in burnout thoughts or behaviors in non-white subjects. However, systematic studies of other ethnic groups have not been performed. Shaddock, Hill, and van Limbeek (1998) did find that respondents who identified themselves with a particular religious group had significantly lower burnout scores than nonaffiliates, although degree of religiosity was not a factor.

Maslach and Jackson (1986) found that elevations of certain MBI scales differ depending on educational level, with more educated individuals experiencing greater
levels of burnout than less educated individuals. This seems counterintuitive because some think burnout occurs in low-wage, low-prestige positions. The link between burnout and higher levels of education, however, may be due to the fact that individuals with higher levels of education have higher expectations of fulfillment from their careers. Balevre (2001) did not find any statistically significant findings related to education, although he noted trends in the data suggesting that more highly educated nurses score more highly on measures of perfection and control, which he later found correlated with burnout thoughts and behaviors.

Psychological Variables

Hardiness

Jenkins and Maslach (1994) alluded to the fact that individuals who enter helping professions may differ in some fundamental way from those who do not:

In particular, it is unclear whether these jobs pose special stresses, whether job incumbents are unusually vulnerable, or whether there may be poor person-environment fit…Aspiration to, and entry into, an interpersonally demanding job might stem from different needs and serve different psychological functions in individuals at different levels of maturity and experience. (p. 103)

A variety of psychological factors have been investigated for their contributions to the development and perpetuation of burnout. Personality characteristics such as hardiness have been posited as contributing (Maslach & Schaufeli, 1993). The concept of hardiness refers to involvement in day to day activities, a feeling of control over life
events, and a posture of openness to change (Schaufeli & Enzmann, 1998). Kobasa (1979), who initially proposed the concept of hardiness, suggested that individuals who possess this trait have the ability to resist the effects of stress and remain healthy. Three characteristics of hardy individuals are control (perceived ability to influence events), commitment (getting involved), and challenge (change as an opportunity for growth). On average, burnout and hardiness share about 10-25% of their variance, with emotional exhaustion being most highly correlated with hardiness (Schaufeli & Buunk, 2003).

In studying a group of hospital nurses, Pines (2000a) found that hardiness was negatively correlated with burnout (r = -.44). Topf (1989) also suggests that a greater degree of hardiness is correlated with lower job stress and burnout levels in critical care nurses. Hardiness was the strongest predictor of burnout in a study of geriatric nurses, explaining 22% of the variance in burnout scores (Duquette, Kerouac, Sandhu, Ducharme, & Saulnier, 1995). Boyle, Grap, Younger, and Thornby (1991) also found that a lesser degree of personality hardiness and the use of emotion-focused coping style were related to burnout in critical care nurses. Jansen, Kerkstra, Abu-Saad, and van der Zee (1996) suggest, “Hardy persons have a higher sense of commitment to work and self and feel a greater sense of control over their lives, viewing stressors as potential opportunities for change” (p. 411).

In a study of over 1,000 nurses, Boey (1999) found that stress resistant (hardy) nurses tend to have a significantly greater sense of internal locus of control and self esteem than non-hardy nurses. Boey (1999) also found that hardy nurses were significantly more likely than non-hardy nurses to use “change of perspective” when coping with occupational stress. Change of perspective is “a cognitive coping strategy of
looking at the positive aspect of events. It involved accepting what cannot be changed and looking for other alternatives, which could be more satisfying” (p. 40). In addition, hardy nurses were more likely than non-hardy nurses to have more family support (Boey, 1999).

*Locus of Control*

Another psychological variable that has been linked with burnout is locus of control. Glass and McKnight (1996) reviewed 32 studies related to the role of locus of control in burnout. On average, they found correlations between .2 and .4. They argue that an external locus of control, in general, is not a significant contributor to burnout. Rather, more job-specific lack of control, such as lack of autonomy and lack of participation in organizational decision-making, is contributing to the association between the constructs. Glass and McKnight (1996) report that lack of perceived autonomy and lack of decision-making participation are correlated with the Emotional Exhaustion subscale of the Maslach Burnout Inventory on the order of .3 and .2 to .3, respectively. Measures that combine autonomy and decision-making result in .4 correlations with the MBI-EE subscale. They suggest that the significance of job control might be underrepresented in these studies because measures of perceived control are not situation- or job-specific and may fail to detect important aspects of the construct.
Self-esteem

Self-esteem has been linked to burnout. Buunk and Schaufeli (1993) have noted a variety of interaction effects with regard to psychological factors contributing to burnout as measured by the MBI. Low self-esteem has been correlated with decreased feelings of personal accomplishment in environments perceived either as high or low in control. High self-esteem appears to buffer decreased feelings of personal accomplishment, but only in high control environments. Those with low self-esteem tend to respond to stress by avoiding others, rather than by seeking out social support. This tends to reinforce their beliefs that they are the only ones experiencing these feelings (social psychologists refer to this as ‘pluralistic ignorance’).

The “Big Five”

The “Big Five” personality factors have been explored in terms of their relationship with burnout and particular patterns have emerged. Schaufeli and Enzmann (1998) reported that emotional exhaustion is positively correlated with neuroticism and openness, sharing a variance of 33%. Depersonalization is positively correlated with neuroticism and inversely correlated with agreeableness, sharing a variance of 20%. Lack of personal accomplishment is positively correlated with neuroticism, extraversion and openness, and negatively correlated with conscientiousness, with a shared variance of 25%.
In a study of nurses, Zellars, Perrewê, and Hochwarter (2000) demonstrated that emotional exhaustion was predicted by neuroticism, depersonalization by extraversion and agreeableness, and personal accomplishment by openness and extraversion. In their study of nursing students, Deary, Watson, and Hogston (2003) found a significant correlation between burnout and the personality trait of neuroticism and the use of emotion-oriented coping. Both neuroticism and emotion-oriented coping increased when students were measured a second time, one year into the nursing program. Attrition was significantly and negatively related to the personality traits of agreeableness and conscientiousness (Deary, Watson, & Hogston, 2003).

Buunk and Schaufeli (1993) suggest that individuals who tend to be highly reactive (neuroticism) and are placed in a situation of high uncertainty tend to experience the greatest degree of emotional exhaustion. Iacovides, Fountoulakis, Moysidou, and Ierodiakonou (1997) suggest that individuals prone to burnout have “a relatively low ability to receive satisfaction from their work…, traits of loneliness, hostility, and isolated affect, and…find it difficult to function in a demanding professional environment” (p. 427). They believe that personality may play a greater role in the development of burnout than demographics.

Coping Style

Gueritault-Chalvin et al. (2000) demonstrated that coping style was related to burnout. They examined the difference between what they termed “external” and “internal” coping, which is based on locus of control. Gueritault-Chalvin et al. (2000)
external coping strategies include fatalism, pessimism, religiosity, and denial; internal coping strategies include optimism, self-expression, vigilance (patience, persistence, waiting), and time-out strategies (escape or self-preservation). They found that external coping was directly related to burnout, whereas internal coping was inversely related to burnout. They found that external coping contributed to 13.6% of the variance over and above the variance contributed by perceived workload, age, and locus of control.

Type A Behavior Pattern

Type A behavior pattern has been extensively discussed in the job strain literature (Cooper, Dewe, & O’Driscoll, 2001). This highly competitive, driven, time-sensitive, aggressive, and achievement-oriented personality can lead one to great success; it is commonly found in high level executives. However, the behavior pattern may directly or indirectly (via interaction with other variables such as perceived control) create a high degree of job strain and (potentially) an increased risk for burnout. Unfortunately, much of this is speculation because research on this area has been fraught with methodological concerns (Cooper, Dewe, & O’Driscoll, 2001).

Exchange Orientation

Social exchange theories posit the idea that individuals evaluate their relationships in terms of rewards, costs, investments, and profits. These factors can be tangible or
intangible, intrinsic or extrinsic. VanYperen, Buunk, and Schaufeli (1992) examined the role of exchange orientation (specifically, communal orientation) on the degree of burnout. Communal orientation “refers to the desire to give and receive benefits in response to the needs and out of concern for others” (VanYperen, Buunk, & Schaufeli, 1992, p. 176). They found that individuals low in communal orientation who perceived their relationship with patients as imbalanced were more susceptible to burnout than others. They were also more likely to experience feelings of depersonalization. In relation to how communal orientation impacts nurses, VanYperen, Buunk, and Schaufeli report the following:

A characteristic feature of the relationships between nurses and patients is that they are basically complimentary: nurses are supposed to give, while patients are supposed to receive. Hence, nurses may feel underbenefitted in their relationships with patients, because they put more into these relationships than they receive. Intrinsic rewards, including positive feedback from patients, health improvement of the patient, and appreciation and gratitude are variable and unpredictable. In addition, extrinsic rewards, including career advancement, salary, and administrative approval are meager at the lower level of health profession positions. (p. 174-175)

Having a high degree of communal orientation and a low degree of perceived relational inequity with the patients results in the lowest burnout rate.
A Final Word on Personality Variables

Although the association between work stress and health has been repeatedly demonstrated (on the order of 0.20 to 0.30), Semmer (2003) suggests that individual differences result in varying degrees of relationship. That is, extent to which one’s individual personality traits makes one more or less vulnerable to burnout is dependent on how those traits impact one’s interpersonal skills, one’s appraisals, and one’s coping style. He suggests that individual differences in work stress include differences in one’s likelihood of encountering stressors (e.g., interpersonal problems with coworkers secondary to poor social skills), differences in one’s appraisal of stressors (e.g., catastrophic versus manageable), and differences in one’s ability to cope with stressors (e.g., use of adaptive versus maladaptive strategies).

Interpersonal Variables

Social support may be the most important interpersonal variable associated with burnout. The amount of support at home and at work, including significant others, family members, co-workers, and superiors, may be a critical factor. In a survey of nurses, Kalliath and Beck (2001) found that a lack of supervisory support was indeed correlated with emotional exhaustion and intention to quit as measured by the MBI. Using structural equation modeling, they found that low supervisory support had both direct and indirect effects on burnout. Specifically, supervisory support was negatively correlated with emotional exhaustion (r = -.18, p < .01), depersonalization (r = -.15, p < .01), and
intent to quit ($r = -0.30, p < .01$). In addition, there were indirect effects of supervisory support on depersonalization ($r = 0.39, p < .01$) and intention to quit ($r = 0.21, p < .05$) through emotional exhaustion. Others have demonstrated similar effects of social support on burnout (Eastburg, Williamson, Gorsuch, & Ridley, 1994; Leiter & Maslach, 1988).

Lee and Ashforth (1996) conducted a meta-analysis of burnout correlates and found that lack of supervisory support was, to a significant degree, negatively correlated with emotional exhaustion ($r = -0.37, p \leq .001$) and depersonalization ($r = -0.24, p \leq .01$), and was significantly correlated with personal accomplishment ($r = 0.14, p \leq .001$). In addition, social support (family and friends) correlated with the subscales of burnout on the order of $0.20$ to $0.30$ (Lee & Ashforth, 1996).

Cooper, Dewe, and O’Driscoll (2001) agree that research appears to suggest that social support from personal as well as occupational sources provides an important buffering effect from job stress and burnout. They argue, however, that there is little known about exactly what constitutes social support and what specific types of activities provide the greatest degree of social support. Furthermore, is there a difference between perceived support and actual support, and how would that be measured? In addition, there is no evidence about the quality and quantity of social support needed to ameliorate job stress and burnout. Finally, the availability of social support does not necessarily equate to the utilization of social support, another methodological hurdle for occupational stress and burnout researchers.
Environmental / Organizational Variables

Nearly every aspect of the work environment has been scrutinized for its role in the development and perpetuation of burnout. Organizational factors including organizational structure, staff participation in the decision making process, agency policies, type of position, and degree of autonomy inherent to the position are only a few of many (Pines, 1993). Specific aspects of one’s position may increase the propensity for burnout; these may involve workload, role conflict and ambiguity, and job satisfaction (Maslach & Schaufeli, 1993).

In an attempt to organize the enormous amount of research on the subject, Maslach (2003) has developed six key domains of work life which include workload, control, reward, community, fairness, and values. Workload involves quantity, quality, and complexity of tasks. To an organization, workload is productivity, whereas to an employee it is time and energy. Workload does not end when the work day ends; individuals and families are busier than ever with other demands and commitments. This inability to escape and to refuel is hypothesized to be large contributor to burnout (Maslach & Leiter, 1997).

Maslach’s second domain, control, involves the ability to set one’s priorities, to manage time, and to participate in decision-making. Others have extensively researched the relationship between key areas of control (such as autonomy and participation in decision-making). Participation in decision-making was related to lower burnout scores in a study by Shaddock, Hill, and van Limbeek (1998). Lee and Ashforth (1996) evaluated the relationships between participation in decision making, autonomy, and
burnout. Independently, both were found to be negatively correlated with emotional exhaustion and depersonalization, -.31 and -.15 and -.17 and -.13, respectively. Significant positive correlations were found between decision making and autonomy and personal accomplishment (r = .30 and .07, respectively).

The third of Maslach’s six key domains of work life, rewards, is also used to explain burnout. Rewards come in many tangible and intangible ways; security, prestige, money, and recognition are but a few. Fourth, a sense of community (teamwork and collaboration) with one’s colleagues and with the organization buffers against burnout. Trust, openness, and respect give rise to a sense of fairness in the workplace, according to Maslach and Leiter (1997). The sixth and final domain, values, refers to the fact that both individuals and organizations hold certain values, but they may not always be congruent.

Maslach is a strong proponent of the position that it is organizational, rather than individual factors that contribute to burnout. Like Maslach, Cherniss (1993) believes that organizational factors play a greater role than individual factors in the development of burnout. However, Cherniss does concede that individual factors must be at work if an individual decides to remain in a position that is clearly leading to burnout. It can be argued that all workplaces are inherently stress-provoking, but it is ultimately a person’s perception and management of that stressful environment that is more or less adaptive.

Schulz, Greenley, and Brown (1995) studied the staffs and clients of 42 organizations that serve those with severe and persistent mental illness. They found that organization and management characteristics accounted for 45% of the variance in burnout scores, whereas staff characteristics accounted for only 24%. These results need
to be viewed with caution, however, because the only staff characteristics they evaluated were numbers of professional meetings attended outside of the organization per year (termed “professionalization”), age, sex, education, years of tenure at the organization, and degree of job involvement.

Interestingly, stressors specific to dealing with clients (e.g., managing difficult clients, exposure to suffering or death) do not top the list of correlates of burnout even though Maslach’s definition of burnout is based on this premise (Schaufeli & Buunk, 2003). However, some have suggested that particular client characteristics could increase the risk of burnout (Cooper, Dewe, & O’Driscoll, 2001). These include the client’s type of illness (e.g., mental versus physical, acute versus chronic condition), the potential personal relevance of the client’s illness to the worker (e.g., worker’s parent also suffered from same illness as client), and the client’s personality and interpersonal approach (e.g., excessive dependency).

For nurses, some have suggested that burnout rates vary by type of position (staff versus administrator) and by type of unit worked. Both of these variables (type of position and unit) are complex, inasmuch as many subcomponents are subsumed within them. Staffing levels, patient complexity, degree of patient and family interaction, amount of and quality of staff interactions are just a few of the things that vary with type of position and unit. Balevre (2001) found that critical care nurses demonstrated higher levels of burnout than non-critical care nurses. Perceived workload was shown to contribute approximately 6% to the variance in burnout scores for a group of HIV/AIDS nurses (Gueritault-Chalvin, Kalichman, Demi, & Peterson, 2000). Conversely, Iacovides et al. (1997) found no differences in burnout level between units.
Duquette et al. (1995) found that following hardiness, work stressors, namely physician relationship and workload, contributed to a large proportion of the variance in nurse burnout scores (21%). Jansen et al. (1996) studied a group of community nurses and found that “time pressure increases feelings of burnout, whereas burnout is decreased by autonomy, skill variety and task significance” (p. 419). Jansen et al. (1996) conducted a regression analysis that revealed, “Burnout is more a result of individual characteristics” (p. 419), which they defined as “preferences, coping strategies, experienced social support and biographical characteristics” (p. 412).

Theories of Burnout

Although theorists cannot agree on specifics, there is common agreement that a more elaborate and empirically validated theory of burnout is necessary in order to distinguish it is a legitimate psychological construct. There are several emerging theories of burnout, including the psychodynamic-existential, the conservation of resources, the social exchange and social comparison, the social psychological, and the reality shock frameworks. The existing theoretical frameworks fall into one of three categories (Schaufeli & Buunk, 2003). Individual approaches focus on intra-psychic processes, specifically on the mismatch between expectations and reality. Interpersonal approaches focus on the imbalance in relationship between provider and recipient, between provider and co-workers, and/or between provider and superiors. Organizational approaches focus on the larger context in which employees exist with minimal emphasis on the individual’s contribution.
Despite their differences, Schaufeli and Buunk (2003) assert:

…the three approaches agree that similar organizational factors (e.g., qualitative and quantitative job demands, lack of autonomy or control, lack of rewards, incongruent institutional goals or values, and lack of social support or community) are important correlates of burnout. Moreover, they point to the fact that burnout not only has negative effects for the individual but that it is also detrimental to the organization in terms of lowered productivity and efficiency, and poor quality of service. (p. 414)

The degree to which a given theory stresses any given variable differs. Elsewhere, Schaufeli and Enzmann (1998) write:

Three recurrent themes run through many approaches: a strong initial motivation is a necessary condition for developing burnout; burnout is associated with an unfavorable job environment; the burnout process is self-perpetuating because of the use of inadequate coping strategies. (p. 140)

It appears that an integrative, overarching conceptualization of burnout is emerging.

_Psychodynamic-Existential_

At the heart of the psychodynamic-existential theory of burnout are the ideas that individuals seek meaning in their occupational pursuits and that childhood experiences largely drive career selection. Given the breakdown of extended families and the loss of tight knit community institutions such as churches, psychodynamic-existential theorists argue that current generations seek more meaning than ever from their work. More than
“just a job,” many consider their professions a calling, entering with high aspirations and expectations that do not always match reality. Pines (2000b) found that the overwhelming majority of nurses who were studied entered the profession with “the expectation…that work would provide a sense of existential significance” (p. 29). Burnout emerges “when they feel that they have failed, that their work is insignificant, [or] that they make no difference in the world” (Pines, 2000b, p. 25).

Pines (2000a) combines psychoanalytic formulations with existential underpinnings to make sense of the unconscious forces that drive career choice. “People choose an occupation that enables them to replicate significant childhood experiences, gratify needs that were ungratified in their childhood, and actualize occupational dreams and professional expectations passed on to them by their family heritage” (Pines, 2000a, p. 634). Pines (2000a) goes on to suggest that career choice motivated by unresolved childhood issues will be accompanied by the greatest degree of passion as one attempts to undo or rework past hurts. A sense of occupational success helps to heal childhood wounds, suggests Pines (2000a), and a sense of occupational failure further compounds childhood wounds and leads to burnout.

According to Pines (2000a), treatment of occupational burnout from a psychodynamic-existential perspective would include three steps. The first step involves uncovering conscious and unconscious motivations for choosing one’s career and determining how the individual was supposed to have derived existential significance from it. The second step involves identifying reasons for one’s failure to derive existential significance from one’s work and relate this to the syndrome of burnout. The
final step involves identifying changes that will restore the individual’s ability to achieve existential significance from one’s career.

Conservation of Resources

The conservation of resources theory is rooted in basic motivational theory which asserts that stress results when resources are threatened or lost, or when investment in resources fails to pay dividends (Hobfoll & Freedy, 1993). Resources are any number of valuable animate or inanimate objects, characteristics, energies, etc.

In a work situation, some of the major resources available to workers are social support (from their colleagues, supervisors, and others), personal control over their job, involvement in important decision-making processes, and appropriate reward systems. Major demands that might bring about resource loss include role ambiguity and conflict, role overload, inadequate resources to perform the job, and unremitting demands from clients or other people in the work environment.

(Cooper, Dewe, & O’Driscoll, 2001, p. 93)

Burnout results when resources are depleted; burnout is more likely to develop when resources are lost rather than when resources are not gained. Hobfoll and Freedy (1993) suggest that loss is more salient than is failure to gain, thus is a more common trigger of burnout.
Social Comparison and Social Exchange Theories

Social Comparison

Social comparison concepts have been used to understand the process of burnout. Some suggest that an emotional contagion of burnout exists and that this contagion is either unconsciously or consciously transmitted to others (Bakker, Schaufeli, Sixma, & Bosveld, 2001). Certain individuals may be more prone to the burnout contagion depending on personality characteristics, such as a strong need for social comparison. Groenestijn, Buunk, and Schaufeli demonstrated the fact that nurses with this particular personality characteristic were more likely to report higher levels of burnout when they perceived their colleagues as more burned out (as cited in Bakker et al., 2001). Bakker et al. (2001) confirmed these findings in a group of general practitioners. Using structural equation modeling, they demonstrated the fact that 26% of the variance in emotional exhaustion could be explained by susceptibility to emotional contagion, perceived burnout of colleagues, and the interaction between the two. It remains unclear how often or how intense the exposure to the contagion must be to produce the effect.

Social Exchange

Equity theory, a social exchange theory, is based on the fact that people attempt to achieve equity in their relationships. Individuals working in the human services profession are obviously in imbalanced relationship with patients. They can tolerate the
disequilibrium for a period of time or they can restore equilibrium by changing themselves, changing the client, or leaving the profession. Changes to themselves might involve changes in perceptions that would allow them to count certain intangibles as rewards when they otherwise had not done so. An individual might view very small client improvements as large successes. For instance, instead of viewing a client’s inpatient psychiatric readmission as a failure, one views the client’s ability to remain out of the hospital for three months a success. In a different attempt to reestablish equilibrium, one might change his or her relationship with the client. For example, a nurse experiencing disequilibrium might decrease his or her contribution to the relationship by interacting with the patient less and providing only the minimal, basic care. Finally, some individuals unable to achieve equilibrium or tolerate disequilibrium leave the profession altogether (VanYprenen, Buunk, & Schaufeli, 1992).

A Combined View

Schaufeli and Buunk (2003) combine social comparison and social exchange theories to make sense of the burnout process. They stress the fact that burnout develops within the social context of the work setting. Schaufeli and Buunk (2003) assert,

In order to understand burnout, attention has to be paid to the way in which individuals evaluate their psychological outcomes of, and investments in, the relationships with the recipients, the way in which individuals compare their own responses and feelings with those of others at work, and the way in which they are influenced by the burnout symptoms of their colleagues. p. 408
Therefore, burnout is the result of a chronic lack of reciprocal relationships with clients and with the organization. Moreover, individuals tend to compare themselves with others and may mirror symptoms of burnout experienced by other employees. Some have found this theory to be compatible with the principles and techniques of cognitive theory (Van Dierendonck, Schaufeli, & Buunk, 1998).

Social Psychological

At the heart of the broader social psychological model of burnout is that it derives from a poor fit between the worker and the environment. It is a multidimensional and interactional model that embeds the individual’s stress experience within a social context (Maslach, 2003). Specifically, Maslach, Jackson, and Leiter (1996) define burnout as resulting from an imbalance in work demands and employee resources. Excessive work demands such as work overload, conflict with supervisors or colleagues, and difficult or draining relationships with clients can place a heavy burden on employees. Diminished employee resources (coping style, social support, autonomy, decision involvement) prevent adequate buffering of the occupational demands, leading to burnout. In addition, recognition (rewards), fairness, and value congruence also play a part in the development of burnout (Maslach & Leiter, 1997).

According to Maslach (2003), “It is worthy of note that the primary researchers in the burnout field have come from social and organizational psychology, and that their theoretical perspectives have shaped the contextual framework of the research to a large
degree” (p. 191). The disadvantage is that perhaps it has stifled research in other theoretical domains.

Burnout as Reality Shock

Cherniss (1980) proposed a model of burnout that relies heavily on particular stress-inducing characteristics of the work setting. He suggested that poor orientation programs, high workload, lack of stimulation, limited scope of client contact, low autonomy, discrepant organizational and personal values, inadequate leadership and supervision, and social isolation were organizational stressors that could induce burnout in human service professionals early in their careers. Cherniss (1980) acknowledged the role of individual factors in the development of burnout, as well. He identified social support and career orientation (reason or motivation for being in one’s career; i.e., idealistic values, money, etc.) as two other factors that interacted with work characteristics and resulted in certain stressors. Stressors leading to burnout include doubts about one’s competency, difficulties with clients, bureaucratic interference, lack of fulfillment and stimulation, and lack of collegiality. Cherniss (1980) defined burnout as a process of disengagement from one’s work.
Toward a Cognitive-Behavioral Theory of Burnout

No Cognitive-Behavioral Theory for Burnout Exists

Although cognitive-behavioral techniques are commonly employed with burned out individuals, no comprehensive cognitive-behavioral therapy (CBT) formulation of burnout exists. Schaufeli and Buunk (2003) suggest, “A cognitively oriented approach is relevant because burnout often involves ‘wrong’ cognitions such as unrealistic expectations and false hopes” (p. 415). In addition, relaxation training, time management, and assertiveness training have all been employed with success in this population (Schaufeli & Buunk, 2003). Despite reliance of CBT techniques, no CBT theory is in place.

Some have alluded to the potential role that perception and cognition may play in the development and perpetuation of burnout, whereas others include cognition as one aspect of a larger theoretical model. Maslach and Schaufeli (1993) report:

…one must be cautious in interpreting empirical data. For example…higher burnout has been correlated with poor job conditions of various kinds, and a common conclusion is that these job conditions have caused people to burn out. However, it may be that people who are experiencing burnout begin to see everything in a negative light and report that the job conditions are poor (whether they are or not). Both interpretations are interesting in terms of our basic understanding of burnout, but their conceptual implications, as well as their implications for intervention, are very different. (p. 7-8)
Maslach, a leading researcher of the burnout phenomenon, has been adamant in her belief that social and organizational factors play a larger role than individual factors in the development of burnout. “In general,” Maslach and Schaufeli (1993) stated, “job factors are more strongly related to burnout than are biographical or personal factors” (p. 7). However, Maslach is aware that her conceptual framework of origin might color her conceptualization of the construct as she discusses in the following:

One consequence of my social psychological framework has been that I have not done extensive research on the role of personality variables and individual differences in burnout. This is not to say that I think these variables are unimportant but rather that I think the social factors are the most critical ones to address. That may be a particular bias on my part, which may have had the (unintended) effect of directing other researchers away from the study of personality and burnout. The general finding that situational factors are more predictive of burnout than individual factors may reflect this bias rather than a true state of affairs with regard to burnout. (Maslach & Schaufeli, 1993, p. 29-30)

Certainly, most of the research done in this area has utilized the Maslach Burnout Inventory which differs little from its initial formulation in the mid-1970s. The dearth of studies exploring the role of personality or cognition may be a direct result of the type of measures available to examine the construct.

Pines (1993), who characterizes burnout using a psychodynamic-existential perspective, acknowledges the role of individual perception:

A moment’s reflection makes it clear that the environment – like all other elements in the [psychodynamic-existential] model – is to a large extent
subjective….Overload is a negative environmental feature, yet the same amount of work can be overload for one person but not for another. Challenge is a positive feature, yet the same task can be challenging for one person but not for another. Consequently in the same environment one person may feel successful and another may not….These individual differences reflect the subjective component of the environment that is the result of an interaction between the individual and the objective world. That interaction is at the heart of the burnout model. (p. 45-46)

Regardless of orientation, burnout theorists, researchers and clinicians cannot underestimate the role of subjective experience on the development and perpetuation of burnout. Therefore, it is clear that cognitive theory would provide a unique contribution to the conceptualization of the burnout phenomenon.

_A Brief Overview of Cognitive-Behavioral Theory_

Cognitive-Behavioral Therapy has one of the largest empirical foundations of all forms of therapy, including support from large-scale, randomized clinical trials. CBT has been effectively used with almost every major mental disorder. Given the theorized and demonstrated overlap between burnout and depression (regardless of etiology), it is of interest whether or not cognitive theory would be a useful paradigm within which to conceptualize burnout. Although burnout is a complex problem resulting from an interaction between individual and occupational characteristics, cognitive theory may be of some benefit in making sense about the reasons that one worker develops burnout
whereas the coworker right next to him or her (existing in the same occupational context) does not.

The cognitive theories of emotional disturbances include, among others, Beck’s Cognitive Therapy and Ellis’ Rational Emotive Therapy. In general, cognitive theories assert that emotional disorders are initiated and/or maintained by thought processes. More specifically, distortions in perception (e.g., attentional bias) and information processing (e.g., cognitive distortions or irrational beliefs) lead to unpleasant affective states. Most cognitive therapies have since expanded to include behavioral principles and techniques, leading to today’s formulation of Beck’s Cognitive Behavioral Therapy (CBT) and Ellis’ Rational Emotive Behavioral Therapy (REBT). The behavioral aspect of the models is grounded in learning theory and supports change through the use of reinforcements and contingencies. Both cognitions and behaviors are influenced by, and themselves influence, emotion. Decreasing emotional distress, therefore, will include interventions geared to different aspects of this triad.

According to Beck (1976) and later Alford and Beck (1997), all individuals perceive reality slightly (often imperceptibly) differently. He asserted that internal processes (including underlying beliefs or schema) interact with external sensory input to construct one’s perception of reality. These imbedded beliefs, assumptions, and attitudes are the result of a lifetime of experiences. In any given individual, they can be more or less adaptive. Beliefs, assumptions, or attitudes that may once have been adaptive to the individual may prove no longer effective. Beliefs, assumptions, or attitudes may lead to individual dysfunction if they are held too inflexibly or are not consistent with objective reality, resulting in cognitive distortions.
Cognitive distortions, a form of faulty information processing, are consistently found in individuals with emotional disorders. In fact, specific types of cognitive distortions are presumed to be related to specific types of Axis I and II pathology. Cognitive interventions are rooted in the assumption that individuals can learn to recognize and remediate their distorted thinking, resulting in more adaptive cognitions and, subsequently, decreased symptomatology. Beck (1976) noted that depressed individuals engaged in systematic, albeit erroneous, cognitive processing patterns, and that these distortions in cognition led to emotional and behavioral alterations. Originally, Beck (1976) suggested six cognitive distortions: dichotomous thinking, arbitrary inference, minimization and magnification, overgeneralization, personalization, and selective abstraction. These were further elaborated on by others; Burns (1990, 1999) proposed 10 cognitive distortions in his best-selling self-help books; these include: all-or-nothing thinking, discounting the positive, emotional reasoning, jumping to conclusions, labeling, magnification, mental filtering, overgeneralization, blaming and personalizing, and use of “should” statements. Using expert validation and factor analysis, Yurica’s (2002) work supports the existence of the 11 cognitive distortions defined below:

1. Externalization of self-worth – “…the development and maintenance of self-worth based almost exclusively on how the external world views one” (Yurica, 2002, p. 107). Individuals employing this type of distortion tend to have an external locus of control, engage in self-comparison, and seek approval and recognition as a means of validating their self-worth. This distortion “…most significantly distinguished between the psychiatric outpatient and comparison
control groups in this study…this finding suggests that Externalization of Self-worth may be the most important distortion to clinically treat” (Yurica, 2002, p. 107-108).

2. Fortune-telling – “…the tendency of one to foretell or predict negative outcomes of future events for themselves” (Yurica, 2002, p. 108). Individuals employing this type of distortion tend to expect the worst outcome or consequence in spite of a lack of objective evidence to support the belief.

3. Magnification – “…the tendency to exaggerate or magnify either the positive or negative importance or consequence of some personal trait, event, or circumstance” (Yurica, 2002, 109). Individuals employing this particular distortion tend to enlarge problems or attribute greater significance than warranted to problems. This type of thinking leads to catastrophizing.

4. Labeling – “…the tendency to label oneself or others using derogatory names” (Yurica, 2002, p. 109). Because labels employed are usually extreme or absolute, this distortion has an overlap with other distortions including Dichotomous thinking, Disqualifying the positive, and Should statements.

5. Perfectionism – “…a constant striving to live up to some internal or external representation of perfection” (Yurica, 2002, p. 110). Individuals employing this particular distortion tend to hold unreasonable standards for themselves.

6. Comparison to others – “…a tendency to compare themselves to others and reach negative conclusions about themselves; such as, they are inferior or less than others in some meaningful way” (Yurica, 2002, p. 110). Instead of being a fair
and valid appraisal, individuals employing this distortion tend always to fall short in comparison with others.

7. Emotional reasoning – Individuals employing this distortion “…tend to use emotional states to form conclusions about themselves, others or situations” (Yurica, 2002, p. 110). That is, an individual “feels” a certain way; therefore, it must be true.

8. Arbitrary inference/Jumping to conclusions – Individuals employing this distortion “…tend to draw negative conclusions, in the absence of specific evidence to support those conclusions” (Yurica, 2002, p. 110). Individuals employing this distortion manage to form negatively biased appraisals of a situation, particularly in ambiguous situations.

9. Emotional reasoning and decision-making – This factor emerged as a new, unanticipated factor in Yurica’s study (2002). Individuals employing this distortion “…tend to rely on their emotions to make decisions” (Yurica, 2002, p. 111).

10. Minimization – Individuals employing this distortion “…tend to minimize or discount the importance of some event, trait or circumstance” (Yurica, 2002, p. 111). Typically, individuals minimize their positive attributes or accomplishments, thereby reducing their appraisal of self-worth.

11. Mind reading – Individuals employing this distortion “…tend to believe they know what others are thinking about them, and arbitrarily conclude it is negative without specific evidence to support that conclusion” (Yurica, 2002, p. 111).
Farber (2000a) supports the efficacy of cognitive interventions with burned out teachers. Farber (2000a) suggests,

…but burnout is essentially about ‘inconsequentiality’ – a perception on the part of human-service professionals that their efforts to help others have been ineffective, that the task is endless, and the personal payoffs for their work (in terms of accomplishment, recognition, advancement, or appreciation) have not been forthcoming. (p. 589)

Farber (2000a) suggests that cognitive distortions related to success and to failure in one’s role are common. Magnifying failure and minimizing success or engaging in black or white thinking can lead to burnout. As one spirals into burnout, more time might be spent fixating on the negative aspects of one’s job. Selective attention or seeking out like-minded colleagues might fuel this downward spiral, as well. Farber (2000a) sees cognitive work with burned out teachers as similar to Beck’s work with depressed clients. He assigns homework which includes journaling successes or pleasant occupational events. In addition, Farber (2000a) suggests examining one’s initial expectations upon entering the profession and one’s assumptions about gratitude and appreciation in the workplace. Behavioral interventions such as relaxation training and assertiveness training also prove beneficial (Farber, 2000a).

Azar (2000) has proposed a cognitive-behavioral supervision framework for those who perform child-maltreatment work. Azar (2000) asserts her CBT-grounded supervision model assists supervisees in preventing burnout. She suggests this
framework is in accord with other formulations of burnout, almost all of which highlight the role of subjective experience. Azar (2000) writes:

This approach focuses on the idea that violated expectancies lead to negative attributions (to self, others, and to one’s profession), and negative affect, both of which may contribute to burnout. …when the individuals we serve violate our expectancies regarding how they “should” behave, especially in response to our interventions, we may have strong negative emotional reactions that can lead to maladaptive interpretations and responses (blaming responses – both of our own skill and their potential negative intent) and interfere with our working collaboratively with them. (p. 649)

She sees cognition, and more specifically violated role expectancies and negative misattributions, as the “major bridge” in the development of maladaptive responses to clients. Azar (2000) asserts that schemas regarding one’s role as a helping professional are imbued with assumptions which may give rise to unrealistic expectations and, ultimately, failure. Some of these assumptions include, “Family problems are always manageable and we have the tools to be helpful;” “Parents and children want my help and will view my efforts positively;” “As a mental-health practitioner, I should always be empathic with any client;” “I am engaged in activities that are valued by others;” and “I always will receive the support of my colleagues.” (p. 652-653)

In addition to providing the CBT-based supervision, Azar (2000) argues that fundamental beliefs about supervision need to be explored and challenged. She suggests actively challenging the expectations and misattributions of supervision. Supervision has to be considered a safe place wherein it is healthy to share one’s emotions and reactions
to clients without fear of retribution. On an organizational level supervision must be valued and it must be permitted to police itself without fear of reprisal or interference. Azar (2000) continues:

> Essentially, the goal in supervision is to provide the professional and paraprofessional with a “revised” worldview that is more flexible and consonant with the realities of the work and that allows him or her to maintain meaning in the face of many obstacles to feeling successful. This does not preclude the need for systems-based change, but given that such change is slow, it provides a framework within which to operate while this is taking place. (p. 651)

Balevre (2001) devised an instrument to measure maladaptive thinking patterns and burnout levels in nurses. Using REBT as the theoretic basis, the survey was composed of five maladaptive cognitive patterns scales: Mistrust, Self-Sacrificing/Servant, Perfection and Control, Entitlement, and Failure. He found that the Mistrust and Perfection and Control subscales were statistically, significantly correlated with thoughts of burnout ($r = .527$ and $r = .451$, respectively) and less so with self-reported burnout behaviors ($r = .263$ and $r = .350$, respectively). He suggests, “Nurses who demand perfection and control in themselves and others create unrealistic demands and expectations that cannot be met in the real world of nursing. This leads to frustration, stress, and burnout” (p. 270). In addition, he found that critical care nurses were more likely to endorse more maladaptive cognitive patterns than their non-critical care counterparts.

Larrabee et al. (2003) noted that an attitude of psychological empowerment explained the largest amount of the variance (54%) in job satisfaction ratings among
nurses. In turn, hardness was found to be a strong predictor of psychological empowerment. In noting this as the primary predictor of job satisfaction, they explain, “personal perception of empowerment is an important mediator between organizational context and behavior” (p. 278). In light of these findings they suggest strategies such as “screening applicants on the basis of attitude or interpretive style” or “training…designed to help them modify their interpretative styles” (p. 280).

James and Tetrick (1986) explored the relationship between job perceptions and job satisfaction, using structural equation modeling. They employed a heterogeneous sample of occupations, indicating that the model that provided the best fit was one in which job satisfaction is postcognitive. That is, cognitions related to one’s job precede affective response to one’s job (satisfaction or lack thereof). This finding is in concert with cognitive-behavioral theories which assert that cognition precedes affect.

As opposed to having more distorted cognitions when depressed, some have argued that depressed individuals are, in fact, more accurate in their appraisals than non-depressed individuals. “Depressive realism” refers to the fact that depressed individuals lack positively-valenced distortions that assist non-depressed individuals in remaining optimistic. Alloy and Abramson (1982) demonstrated the fact that non-depressed individuals tended to overestimate their perceptions of control when they were compared with depressed individuals. Glass and McKnight (1996) suggest, “Beliefs of invulnerability and illusions of control may insulate individuals from feelings of helplessness and other forms of discomfort in stressful situations” (p. 38). This may be particularly important in some occupational settings where chronic and inescapable stress may be present. Glass, McKnight, and Valdimarsdottir (1993) found a similar pattern
with burned out nurses; higher levels of burnout were associated with more accurate perceptions of job uncontrollability. They suggest that individuals experiencing burnout “may have difficulty in distorting reality and feel compelled to acknowledge the uncontrollable nature of their jobs” as opposed to others who successfully use defense mechanisms such as denial to cope with stressful work situations (Glass, McKnight, & Valimarsdottir, 1993).

Schaufeli and Enzmann (1998) are not convinced that high or unrealistic expectations contribute to the development of burnout. They report that of 20 studies analyzing this phenomenon, ten supported the relationship, seven showed no relationship, and three found an inverse relationship. Of these three studies that found an inverse relationship, the only longitudinal study revealed lower burnout rates at one year for more optimistic and idealistically motivated workers (Kirk & Koeske, 1995). That is, those individuals with the higher expectations had lower rates of burnout at one year. An explanation for this counterintuitive finding is that perhaps one year was not enough time to see burnout symptomatology emerge.

Burnout in Nursing

Nurses leave the field for many reasons; however, burnout is a particularly pervasive phenomenon which is robbing the profession of some of its best and brightest. How pervasive is burnout in nursing? In a recent survey of over 10,000 hospital nurses, Aiken, Clarke, Sloane, Sochalski, and Silber (2002) found that just over 40% of nurses were experiencing high levels of emotional exhaustion, which is the prime component of
burnout, and nearly the same amount were dissatisfied with their current jobs. Aiken et al. (2002) also found that 43% of nurses experiencing high burnout and job dissatisfaction expressed intent to leave their current jobs within 12 months, whereas only 11% of nurses who are not experiencing burnout or job dissatisfaction intend to leave.

**Nursing Shortage**

The findings of Aiken et al. (2002) are troubling, given the fact that the nursing profession is struggling to maintain an adequate supply of professionals. There is presently a nationwide shortage of nurses that, in some areas, has already reached epidemic proportions. In some states, registered nurse vacancy rates are at all time highs, nearing 20%. The U.S. Department of Health and Human Services (2002) projects that by the year 2020 there will be a deficit of 7 ½ million nurses, if current trends continue. There have been other nursing shortages; however, experts agree this current shortage is qualitatively different from others (U.S. Department of Health and Human Services, 2002). The factors contributing to the present nursing shortage are found both in the supply and demand sides of the equation. The factors are varied and include among others: (a) an exponential increase in the number of older adults, (b) longer life expectancies and subsequent increases in the number of individuals living with chronic illness, (c) advancements in technology resulting in more complex patient care needs, (d) decreased enrollments in nursing schools, (e) an aging nursing workforce in which the average age of a nurse is 45 years old, and (f) an even worse faculty shortage where the
average age of nursing faculty is 55 years old. Certainly, given the present situation, the recruitment and retention of nurses is an utmost priority.

A shortage of nurses is a dangerous situation. Aiken and colleagues have recently conducted groundbreaking research demonstrating a causal link between patient outcomes, including morbidity and mortality rates, and registered nurse staffing levels (Aiken, Clarke, Sloane, Sochalski, & Silber, 2002). In fact, they (2002) determined that, controlling for a wide range of nurse, patient, and organizational variables, for every additional patient assigned to a nurse, there is a 7% increase in patient mortality and a 7% increase in the failure to rescue rate (deaths within 30 days of admission among patients who experienced complications). With the current shortage, many hospitals find themselves struggling to maintain optimal nurse-patient ratios, perhaps exposing themselves, their nurses, and their patients to adverse events.

The U.S. Department of Health and Human Services’ Bureau of Health Professions’ Division of Nursing added a job satisfaction measure to their March 2000 National Sample Survey of Registered Nurses (Spratley, Johnson, Sochalski, Fritz, & Spencer, 2000). The first time in seven national surveys conducted over the last 30 years, lead researchers justified the inclusion of a job satisfaction measure, basing it on the fact that “there is a wealth of empirical literature linking job satisfaction and other important workplace features, such as turnover rates” (Spratley et al., 2000, p. 30). They stopped short of linking burnout to declines in the quality of patient care or other patient outcomes, referring to this as an emerging area of research. According to the 2000 survey, only two-thirds of nurses (69.5%) report satisfaction with their present position; this is much lower than the satisfaction levels in other occupations. According to data
from the General Social Survey of the National Opinion Research Center taken between 1986 and 1996, 85% of workers overall and 90% of professional workers report job satisfaction, a striking contrast to nurses (Spratley et al., 2000).

Impact of Burnout on Nursing

Attrition

Burnout robs the field of some of its most seasoned professionals. Turnover is particularly disruptive to the personal and professional lives of nurses. The stress and financial hardship of changing jobs is quite evident. With frequent job changes, some nurses may not be able to accrue enough time within a given organization to take advantage of retiree benefits, including pension funds and health care coverage. Some nurses find themselves stuck with growing families that need to be supported, and do not have the resources to move within their careers, let alone move outside of their careers to find a different calling. The perception of “being stuck” may lead to increased dissatisfaction and burnout. There have been many studies linking burnout with depression, and though experts disagree on causality or direction of influence; the devastation that depression can cause individuals and their families is well documented.
Turnover

Turnover is particularly detrimental for hospitals; it is quite costly to replace staff. Although the proportion of turnover as a consequence of burnout is unknown, there is some indirect evidence of a linkage. It *is* known that low turnover is associated with hospitals that have more favorable work climates. Hospitals that achieve Magnet status, a special designation given to organizations who demonstrate excellence in nursing, share both low turnover and a favorable work environment as rated by the nurses (Scott, Sochalski, & Aiken, 1999). In an attempt to recruit a limited supply of nurses, many hospitals have expanded orientation programs and mentoring opportunities more than ever before. Institutions are investing significant amounts of money in orienting new staff. Frequent turnover, then, results in large losses to the organization. In addition, turnover often results in a relative increase in the ratio of inexperienced nurses to experienced nurses. An unbalanced mix of inexperienced staff to experienced staff may impact patient outcomes and patient satisfaction (Morrison, Beckmann, Durie, Carless, & Gilles, 2001).

Patient Satisfaction

Severe and unresolved burnout may result in attrition and turnover. However, even prior to nurses leaving the field, burnout can have harmful effects on both the professionals themselves and also on their clients. In fact, burnout may be associated with negative outcomes for patients. Nurses who are burned out may have altered their
practice patterns, resulting in decreased patient satisfaction. Given competition within the healthcare delivery system, patient satisfaction is an increasingly important measure of hospital success. Leiter, Harvie, and Frizzel (1998) suggest, “With the competition for medical dollars, patients are seen as paying customers rather than passive recipients of prescribed procedures” (p. 1611).

Leiter, Harvie, and Frizzell (1998) studied the impact of burnout on patient satisfaction by integrating the results of two surveys at one hospital. An employee survey was completed by 1268 nurses, and at the same site, 931 patient satisfaction surveys were collected. It was found that patient satisfaction and level of nurse exhaustion were inversely correlated (Leiter, Harvie, & Frizzell, 1998). Moreover, patient satisfaction decreased on units where nurses had more cynical attitudes or on units where nurses more frequently expressed intentions to leave their jobs (Leiter, Harvie, & Frizzell, 1998). In fact, Weisman and Nathanson (1985) demonstrated that of all the potential contributing factors, nurse job satisfaction was the best determinant of client satisfaction.

Not only does nurse burnout contribute to patient satisfaction ratings for nurses, it also impacts patient satisfaction ratings for doctors and for the hospital stay as a whole. That is, patient encounters with burned out nurses impacts the overall view that the hospital stay and care provided. Carey and Siebert (1993) surveyed 17,000 inpatients to find that physicians accounted for a mere 2% of the variance in overall quality of care ratings beyond the 45% that had been explained by nursing care. Larrabee et al. (2004) agree that satisfaction with nursing care is the major predictor of patient satisfaction with hospital care.
Patient satisfaction is a function both of cognitive and of affective evaluation. Cognitive evaluation includes the patient’s thoughts not only about the adequacy and appropriateness of care but also about the technical proficiency of staff. On the other hand, a patient’s affective evaluation of staff includes whether or not one felt valued, respected, understood, and cared about. Various researchers confirm the fact that non-technical aspects of nursing care (such as caring, compassion, and communication) contribute more to patient satisfaction ratings of nursing care than technical aspects (physical needs, procedures, unit efficiency; Erikson, 1987; Bader, 1988; Taylor, Hudson, & Keeling, 1991). Patients typically assume the staff that is competent and technically proficient. What appears to drive patient satisfaction ratings are their interpersonal experiences with the staff, particularly the nurses.

Larrabee et al. (2004) demonstrated through structural equation modeling that patient-perceived nurse caring was the greatest predictor of patient satisfaction (r = .72). They found that RN job satisfaction was inversely correlated with patient-perceived nurse caring (r = -.10), which in turn was influenced strongly by RN/MD collaboration (r = .51). Because nursing care is a large determinant of patient satisfaction ratings, because the non-technical aspects of nursing are important contributors to satisfactory ratings, and because job dissatisfaction and burnout may be perceived by patients as non-caring attitudes, it is important to ensure that nurses remain satisfied and not burned out. Leiter, Harvie, and Frizzell (1998) conclude:

If, as Vuori (1991) contended, patients assess hospital care on the affective aspects while assuming the technical aspects to be adequate, then positive emotional interaction with nursing staff is crucial. When nurses are unable to
meet the affective expectations, patients judge the quality of the entire hospital experience less favorably. (p. 1615)

Although some factors that have been shown to contribute to patient satisfaction may not be amenable to change (such as age, race, or level of education), other factors can be modified. Eliminating or reducing burnout can lead to more positive nurse-patient relationships and greater levels of patient satisfaction.

Patient Outcomes

It is less clear whether or not burnout in nurses results directly in altered patient outcomes such as morbidity and mortality. If they are related, perhaps it is because nurses who experience burnout are less attentive to their patients’ needs and less responsive to their patients’ requests. As the “surveillance system” of the healthcare team, a decrease in attentiveness to patients is potentially dangerous. However, there is no evidence yet to directly support that claim.

On the other hand, it may be that attrition, a result of burnout, is the more proximal cause for altered patient outcomes, if they do indeed exist. There is some evidence that an increase in turnover and a subsequent increase in relatively inexperienced nurses contributes to decreased patient outcomes (Consolvo, 1982). Taunton, Kleinbeck, Stafford, Woods, and Bott (1994) found a link between absenteeism and the prevalence of nosocomial urinary tract and bloodstream infections. Although increased prevalence of certain nosocomial infections has not been directly linked to
burnout, there is evidence that burned out individuals tend to have higher absentee rates than non-burned out individuals.

Organizational Impact

Nurses who are burned out may have effects not only on the patients they care for, but also on the health of organizations that they work for. Extrapolating from studies of other professionals experiencing burnout, nurses experiencing burnout may have decreased efficiency, decreased cost-effectiveness, increased rates of sick time utilization, and increased rates of disability claims. Given the theorized contagion effect, one burned out nurse may “infect” many others, leading to decreased team cohesion and other interpersonal difficulties that ultimately decrease productivity and patient outcomes.

Impact on the Profession

If the impact of burnout is not yet apparent, there are also tremendous implications for the nursing profession as a whole. Given the looming shortage, it is necessary not only to encourage a new generation of individuals to pursue nursing, but also to work diligently to retain the qualified nurses. The need to project a positive image of nurses is of vital importance in building a vibrant and healthy workforce. Efforts to recruit young people into nursing could be greatly hampered by high levels of job dissatisfaction and burnout.
In addition to recruitment, it is critical that efforts be made to retain the nurses who are in the profession. Individuals experiencing burnout may act as contagions within organizations and within the profession, doing much more harm than the good that is done by non-burned out nurses. This could result in an even more grave nursing shortage, because those who do remain become further overburdened by the shortage.

*Causes of Burnout in Nursing*

Numerous variables have been posited to contribute to the development of burnout. For instance, Buunk and Schaufeli (1993) suggest job stress and burnout are a function of a constantly changing environment which breeds uncertainty; of a lack of equity and direct reciprocity in the helping relationship; of a lack of control over many individuals, processes, and outcomes; of one’s temperament; and of one’s self-esteem. VanYperen, Buunk, and Schaufeli (1992) suggest that work overload, low job status, lack of feedback and recognition, and role ambiguity contribute to burnout in nursing. In addition, Leiter (2005) believes that job risks such as patient aggression, risk for illness exposure, and verbal abuse are related to emotional exhaustion via increased workload. In this section several variables related to burnout will be explored in greater detail.

*Workload*

In a survey by Aiken et al. (2002) of more than 10,000 hospital nurses (mentioned above), “higher emotional exhaustion and greater job dissatisfaction in nurses were
strongly and significantly associated with patient-to-nurse ratios” (p. 1990). They
determined that burnout and job dissatisfaction increased by 23% and 15%, respectively,
for every one additional patient per nurse that was added to the hospital’s staffing level
(Aiken et al., 2002). In terms of odds ratios, this means that “nurses in hospitals with the
highest patient-to-nurse ratios are more than twice as likely to experience job-related
burnout and almost twice as likely to be dissatisfied with their jobs compared with nurses
in the hospitals with the lowest ratios” (Aiken et al., 2002, p. 1992). They also report that
43% of nurses reporting high burnout and job dissatisfaction intend to leave their present
position in the next year, yet only 11% of non-burned out and satisfied nurses intend to
leave, a four-fold increase (Aiken et al., 2002).

*Job Satisfaction*

Job satisfaction, which is correlated with burnout, may vary by setting in which
one works, by age, by position, and by educational level. Nurses working in nursing
homes and hospitals are least satisfied (65% and 67%, respectively), nurses working in
staff nursing positions are least satisfied, nurses who are least educated are least satisfied,
and increasing age in staff nurses in all settings (with the exception of ambulatory care) is
associated with decreasing satisfaction (Spratley et al., 2000). Others, however, have
found different demographic trends; Maslach (1982), for instance, reports that psychiatric
nurses tended to burnout a year and a half into their careers, but rates decrease with
increasing age and work experience.
Kalliath and Morris (2002) studied over 200 nurses, and through structural equation modeling found that job satisfaction was highly predictive of emotional exhaustion (r = -.97). Job satisfaction had an indirect effect on depersonalization via emotional exhaustion (r = .60). Regardless of stress level induced by the work setting, satisfaction with one’s job may help mitigate the effects of burnout. This may come in the form of manageable workloads, readily available equipment and resources, a commitment to professional development, extensive orientation programs, peer and supervisory support, recognition and reward, open communication, and justice and fairness (Kalliath & Morris, 2002).

Social Support

Social support, both on and off the job, has been linked to burnout in nurses. Hare and Pratt (1988) reported higher levels of burnout in nurses reporting less informal social support from relatives and friends. Eastburg et al. (1994) found supervisory support and peer (co-worker) cohesion were correlated with emotional exhaustion (-.58 and -.41), depersonalization (.29 [sic] and -.27), and personal accomplishment (.31 and .26). In addition, emotionally exhausted nurses whose supervisors received training in giving positive feedback to staff reported a significant decrease in emotional exhaustion compared with similar nurses whose supervisors had not received the training (Eastburg et al., 1994). Moreover, they found that extroverts needed more peer support than introverts did to avoid burnout, thus linking personality variables to nursing burnout.
Verbal Abuse

Rowe and Sherlock (2005) suggest that verbal abuse is a key contributor to the development of job stress and subsequent burnout in nurses. Traditionally, most have considered the physician to be the main perpetrator of verbal abuse toward nurses, given the historically subordinate position of nurses. In their survey of over 200 nurses, almost every respondent reported having been verbally abused (96.4%). Surprisingly, respondents identified other nurses as the most common source of verbal abuse (27%). This was followed by families of patients (25%), physicians (22%), patients (17%), and others. Perhaps similar social psychological processes are at work in the healthcare profession that as those that operate with other minority groups– externally imposed oppression results in internal strife and stratification (identification with the oppressor). Respondents reported the consequences of verbal abuse include increased job stress levels, decreased job satisfaction, absenteeism, and lower quality of patient care. Although the researchers did not measure burnout directly, a strong body of evidence links job stress and dissatisfaction with burnout.

Leiter (2005) found that most nurses experience verbal abuse less than once per year, on average. This might appear encouraging on the surface, but the standard deviation (.74) suggests considerable variance in the occurrence. In fact, 20% of respondents report verbal abuse occurring at least monthly, if not more frequently.
Type of Nursing Specialty

The frequency or intensity of burnout in nurses might be a function of the setting in which the nurse works or the type of role the nurse performs. Balevre (2001) found that critical care nurses experienced higher levels of burnout symptoms than non-critical care nurses. Bennett, Michie, and Kippax (1991) found that nurses working with HIV/AIDS patients had similar frequency but greater intensity of burnout symptoms than oncology nurses. Visintini et al. (1996) found similar findings with a group of nurses who work with HIV/AIDS patients. They hypothesized that empathy may turn into overidentification (Visintini et al.). However, they found that identification with positive aspects of patients (feeling like a peer, feeling valued) was protective against burnout, whereas identification with the negative aspects of patients (observing death and dying) is harmful (Visintini et al.).

A qualitative study of pediatric nurses identified numerous work-related and personal stressors that contribute to compassion fatigue and burnout (Maytum, Heiman, & Garwick, 2004). Work-related triggers included observing children in pain, experiencing the death of a child, and dealing with grieving families. Other work-related stressors for pediatric nurses included staffing, policies, excessive paperwork, lack of support, and work overload. Personal stress triggers include getting too involved with a client or crossing professional boundaries.

A study of community mental health nurses who work exclusively with forensic patients revealed nearly half are experiencing high levels of emotional exhaustion and a quarter are experiencing high levels of depersonalization (Coffey, 1999). Interestingly,
the top-ranked stressors, however, were not patient related. Rather, they were systemic in nature. These included lack of community resources for clients and excessive office interruptions.

In another study caregivers (not limited to nurses) working in nursing homes were compared with those working in acute geriatric units of general medical hospitals (Cocco, Gatti, Lima, & Camus, 2003). Staff in the general hospital setting had higher levels of emotional exhaustion and depersonalization and lower levels of personal accomplishment than long term care workers. Difficulties impacting stress and burnout levels on the acute inpatient geriatric unit, according to the staff as a whole, include poor staffing (81.9% reporting), work overload (74.6%), patient at-risk for self-harm (66.1%), and patient aggression (61.3%), among others. Comparatively, when considering only those hospital staff who scored as high burnout on at least one of the three subscales of the MBI, stressors impacting burnout level include poor staffing (87.3% reporting), work overload (84.5%), unsupportive supervisors (70.9%), patient aggression (70.0%), and too little time to spend with residents (69.1%).

Von Baeyer and Krause (1983) suggest that nurses working with burn victims are exposed to high stress levels (and subsequently, increased potential for burnout) due to the intense emotional experiences they must endure. Rafii, Oskouie, and Nikravesh (2004) agree that nurses working with burn victims experience high levels of stress and subsequent burnout. In particular, caring for patients with poor prognoses, those who have self-inflicted burns, or those who are uncooperative with the treatment regimen are particularly difficult. They suggest that nurses’ personal characteristics were most predictive of burnout level and include “conscience, religious beliefs, personal
philosophy, commitment, a sense of responsibility, and altruism” (¶29). Furthermore, nurses’ reactions to patients varied, depending on patient characteristics including social status and educational level. Although the findings are suggestive of the importance of individual characteristics in the development of burnout, the cultural context in which the study was performed (Tehran) limits generalizability of the findings. It remains to be seen whether or not one type of nursing will place one at higher risk for burnout.

Interventions for Burnout

*Individual versus Organizational Approaches*

An argument exists about what type of intervention program is more likely to decrease or prevent burnout – one that focuses on the individual or one that focuses on the occupational environment. In their literature review, Mimura and Griffiths (2003) found few studies of nurses with regard to individual versus environmental, occupational stress reduction interventions. Of those that were found, they note that more evidence exists for the utility of individual-based interventions, specifically cognitive or cognitive-behavioral interventions, than for environmentally-based interventions (for example, change in nursing care delivery method). Mimura and Griffiths (2003) conclude:

…it seems that there is more evidence for the effectiveness of personal support than environmental management for reducing workplace stress in the nursing profession. However, it is not possible at this stage to determine what kind of
approach is more effective, because the number of studies is too small to compare different approaches. (¶ 29)

They conclude that a multidimensional approach to addressing workplace stress makes sense in light of the multidimensional nature of the phenomenon of stress. A limitation to Mimura and Griffiths’ study is the fact that they were looking at occupational stress in general, not burnout specifically.

Like Mimura and Griffiths, Edwards and Burnard (2003) suggest a dual-pronged approach to combating workplace stress that includes both organizational/environmental and individual approaches. They suggest that organizations should eradicate or minimize known stressors, but stress management strategies should be employed with individuals.

On the contrary, Van Dierendonck, Schaufeli, and Buunk (1998) support a focus on individual interventions. They report that research on burnout intervention programs “suggests that the core symptom of burnout – emotional exhaustion – can indeed be reduced, particularly by training professionals to use coping skills such as relaxation techniques, cognitive restructuring, and social skills” (p. 392).

Some researchers encourage the use of organization-only intervention programs. According to Leiter, Harvie, and Frizell (1998),

Nurses comprise the largest component of hospital staff and have the most consistent and direct contact with patients. The goal of assuring patient satisfaction may best be reached by providing a supportive environment that promotes meaningfulness of work and reduces or prevents burnout. This logic is recognized, at least in principle, by facilities with mission statements indicating the importance of caring for staff who care for patients. With the pressures
currently faced by hospitals, however, organizational profitability rather than staff nurturance often becomes the priority in practice. While there are no easy answers for the complex challenges facing health care facilities, neglecting staff well-being in the short-term may result in patient dissatisfaction and decrease in service utilization in the long term. (p. 1616)

They suggest the use of a staff survey in addition to a patient survey to keep an eye on staff attitudes and well-being (Leiter, Harvie, & Frizell, 1998).

Visintini et al. (1996) suggest that burnout can be prevented in nurses by employing four interventions. First, they suggest that nurses who desire to work in areas known for high rates of burnout be screened as part of the selection process. Second, they suggest specific courses be offered to nurses which address strategies to manage the emotionally demanding psychosocial and interpersonal aspects of the nurse-patient relationship. Third, Visintini et al. recommend that support groups be available to nurses. Finally, they suggest an increase in role clarification be made within organizations to combat the stress of role ambiguity.

Types of Interventions

Potential Utility of Clinical Supervision in the Prevention and Treatment of Burnout

Clinical (as opposed to administrative) supervision might improve the coping of nurses experiencing occupational stress and burnout (Kalliath & Beck, 2001). Several decades ago Davidson and Noyes (1973) identified the utility of psychiatric nursing
consultation in improving staff responses to patients and in improving patient care. Unlike fields such as psychology, however, clinical, as opposed to administrative, supervision is not commonly employed in nursing. Given the acute, potentially traumatizing situations as well as the mundane day-to-day chronic stressors with which nurses must cope, it appears that clinical supervision would provide a forum for processing and integrating experiences.

There are many definitions of clinical supervision. To some, clinical supervision denotes guidance to students during formal educational experiences, but to others clinical supervision can be “used to describe a supportive exchange between practicing professionals that enables them to develop their professional skills” (Hyrkäs, 2005, p. 531). Moreover, clinical supervision can be thought of as “systematic actions after vocational education, aimed at developing supervisees’ professional knowledge and skills, as well as supporting, clarifying, and strengthening their professional identity and practice” (Hyrkäs, 2005, p. 532). Bégat, Ellefsen, and Severinsson (2005) suggest that “a systematic supervision structure helps the nurses to reflect, analyse, solve problems, plan actions and learn for future practice” (p. 223).

Bégat, Ellefsen, and Severinsson (2005) also suggest clinical supervision’s “perceived benefits [are] improved patient care, stress reduction, enhanced skills and job satisfaction” (p. 223). In their comparison of Norwegian nurses who did and who did not attend clinical supervision regularly, they found that the benefits for attendance included fewer physical symptoms (e.g., pain, headache, fatigue), less anxiety and an improved sense of control (Bégat, Ellefsen, & Severinsson, 2005). Several studies have demonstrated the utility of clinical supervision in improving job satisfaction and
preventing or decreasing burnout (Berg & Hallberg, 1999; Berg, Hanson, & Hallberg, 1994; Hallberg, 1994).

Although the benefits of clinical supervision appear compelling, barriers exist for its widespread implementation and effectiveness. Financial barriers include the cost of providing the supervision (either by hiring a clinical supervisor or designating a portion of an existing employee’s workload to supervision) and the cost of attending supervision (paying staff wages to attend as well as paying replacement staff to cover the floor). Organizational barriers would need to be overcome. Clinical supervision needs to be valued by managers and staff in order to ensure attendance. In addition, clinical supervisors must be afforded confidentiality to protect what nurses reveal in sessions. Individual nurse barriers also would present a challenge to implementing clinical supervision. Encouraging openness and honesty may be difficult, especially for some who are already burned out, cynical, or suspicious of motives. Encouraging nurses to see supervision as a valuable tool as opposed to further burdening their workload would be a challenge.

Cognitive-Behavioral Interventions for Burnout

Von Baeyer and Krause (1983) demonstrated the utility of a cognitive behavioral stress management intervention with burn unit nurses. Their intervention was specifically patterned after stress inoculation training, a program that entails education, rehearsal, and application of cognitive-behavioral stress management techniques. The intervention was particularly beneficial to inexperienced, as opposed to experienced,
nurses. Von Baeyer and Krause (1983) suggest this is because “…the more senior nurses, although experiencing preassessment levels of anxiety similar to those of their juniors, felt that they should be able to handle such problems without outside help and were therefore less receptive to suggestions” (p. 124).

Van Dierendonck, Schaufeli, and Buunk (1998) employed a cognitively-oriented intervention program which also borrowed from the equity theory. It was effective in decreasing burnout (emotional exhaustion only) and absenteeism. In addition, the intervention improved perceptions of deprivation in terms of the employee’s perspective of the organization; this was related to perception of supervisory support. No improvements were noted in personal accomplishment, depersonalization, and perceptions of relational equity with recipients.

Gorter, Eijkman, and Hoogstraten (2001) demonstrated the utility of an intervention utilizing cognitive-behavioral techniques in the reduction of emotional exhaustion and of increase in personal accomplishment in a group of practicing dentists. They noted the following disadvantages of the program according to participants: time consuming, dislike of the group format, program content, financial cost, and distance to be traveled.

*Educational Intervention Strategies*

Some suggest that burnout might be related to a lack of knowledge or skills necessary to perform one’s job satisfactorily. Ewers, Bradshaw, McGovern, and Ewers (2002) utilized an educational training to reduce burnout in forensic nurses. Although all
nurses have basic exposure to all major areas of nursing, many practitioners find their training leaves them inadequately prepared for their current positions. The study’s intervention provided nurses working in forensic settings with knowledge about psychiatric illness. The training included teaching about the manifestations and etiology of mental illness, as well as issues related to the management of the mentally ill. The covert purpose of the program was to decrease blame toward the clients by helping nurses conceptualize their patients’ problem behaviors in a more constructive manner. A significant increase in knowledge and improvement in attitudes toward clients was noted in the intervention group. In addition, significant changes in the three subscales of burnout were noted in the intervention group. Ewers et al. (2002) suggest:

By providing new knowledge and, more importantly, a new way of making sense of problems, it is possible that staff may make different cognitive appraisals. By adopting more positive appraisals of their patients’ difficulties, the nurses would experience fewer feelings of frustration and hopelessness, which contribute to stress and the burnout processes. This would explain why there were changes, not only in knowledge, but also in attitudes, reduced emotional exhaustion, increased personal achievement and reduced depersonalization. (p. 475)

Mindfulness-Based Stress Reduction

Shapiro, Astin, Bishop, and Cordova (2005) employed a mindfulness-based stress reduction (MBSR) program with health care workers as a means to decrease stress and
prevent burnout. MBSR is based on a form of Buddhist meditation, stressing quiet
watchfulness of one’s thoughts without judging. Moreover,

The MBSR intervention is designed to teach participants to become more aware
of, and relate differently to thoughts, feelings, and body sensations. MBSR helps
participants cultivate a nonjudging yet discerning observation of all the stimuli
that enter their field of awareness moment by moment. Mindfulness practice
allows for greater awareness of the “here and now,” as the practitioner learns to
let go of ruminations about the past and fears regarding the future. In this way,
practitioners learn to see their habitual reactions to stress and to cultivate
healthier, more adaptive ways of responding. The essence of mindfulness
involves awareness and acceptance of whatever is occurring in the present
moment. (p. 165-166)

Using a randomized trial with waitlist control, Shapiro et al. (2005) found the
intervention group receiving MBSR had a significant reduction in mean perceived stress
levels and an increase in mean self-compassion. In addition, the intervention group
demonstrated gains in life satisfaction and decreases in burnout and distress.

Comparison of Interventions

Van der Klink, Blonk, Schene, and van Dijk (2001) categorize interventions for
workplace stress (a precursor of burnout) into four types. The first three include
cognitive-behavioral approaches which improve active coping skills, relaxation
techniques which ameliorate stress symptoms (or passive coping), and multimodal
approaches which enhance both active and passive coping skills. The final intervention approach is one that focuses on the organization as a whole. They conducted a quantitative meta-analysis of studies comparing interventions specifically designed for occupational stress and burnout with those that also employed an experimental or quasi-experimental design with a no-treatment control group.

Forty-eight studies published between 1977 and 1996 met the inclusion criteria, five of which were organization-focused, 18 were cognitive-behavioral, 17 were relaxation, and 8 were multimodal (Van der Klink et al., 2001). They found significant differences in effect sizes for individual versus organizational interventions; however, this could be because the sample sizes tended to be significantly larger for the organizational interventions. Overall, cognitive-behavioral interventions yielded the largest effect sizes, although not all studies were equal in their effect sizes, suggesting that not all interventions work with all clients.

In terms of outcomes, cognitive-behavioral interventions resulted in improvements in worklife quality (which includes such things as job demands, work pressure, job control, work conditions, and peer and managerial support), psychological responses and resources (self-esteem, mastery, beliefs, and coping skills), and complaints (physical and mental; Van der Klink et al., 2001). Psychophysiologic outcomes (e.g., tension, adrenaline level or cholesterol level) and absenteeism were not impacted by the cognitive-behavioral interventions, although they were not tested in all studies. On the other hand, relaxation interventions had a significant impact on psychophysiologic measures. Multimodal interventions had a significant impact on worklife quality and complaints (both anxiety and depression). Organizational interventions had a small effect
on psychological responses and resources. Interestingly, larger effect sizes were found for intervention programs rather than for prevention programs.

Based on this meta-analysis, Van der Klink et al. (2001) assert that “an intervention that focuses on individual employees is the first choice in the case of employees with stress-related complaints” (p. 274). There was a small but significant effect of occupational status (which the authors suggest may be indicative of degree of job control) on treatment outcome. That is, workers with a higher degree of job control fared better in the cognitive-behavioral groups than workers with lower job control. The authors hypothesize that CBT interventions should be used for high control occupational settings and organizational interventions for low control occupational settings (Van der Klink et al., 2001).

Rationale for the Study

Cognitive-behavioral therapy is the most widely researched psychotherapeutic modality to date. Empirical support exists for its utility with numerous disorders and dysfunctions including depression, anxiety, substance abuse, marital problems, chronic pain, and schizophrenia. The CBT model has been pivotal in increasing the validity of psychotherapy in modern times. Its strong emphasis on empirical testing has earned psychotherapy credibility in numerous professional circles, as well as in society at large.

Numerous studies have compared CBT with other treatment modalities. Studies have explored various combinations of treatment conditions including medication alone, CBT alone, medication and CBT combined, other psychotherapies alone and other
psychotherapies and medication combined (DeRubeis, Gelfand, Tang, & Simons, 1999). In adult populations, CBT has been shown to be superior to other forms of psychotherapy and equally effective when compared with antidepressant medication (DeRubeis, et al., 1999). The greatest effect size, however, is seen when CBT and pharmacotherapy are combined. CBT has also provided a wealth of valid and reliable measurement tools that have become benchmarks in the field. The contributions of CBT cannot be overestimated. It is perhaps the most effective form of psychotherapy currently available.

Given the burnout phenomenon’s overlap with depressive symptomatology, and given cognitive-behavioral therapy’s effectiveness with other disorders and dysfunctions, especially depression, CBT is expected to be beneficial with this population. Because much of cognitive-behavioral work is targeted at an individual’s cognitions, attempting to determine whether or not burned out individuals experience an increased amount of cognitive distortions is imperative. Moreover, if burned out individuals do experience significantly more cognitive distortions than non-burned out individuals, what type of distortions do they experience? These findings would provide information that could be used directly in clinical interventions with burned out individuals. In addition, these findings would provide indirect support that a cognitive-behavioral model is an appropriate model with which to conceptualize the phenomenon of burnout.

The Purpose of the Study

This study is designed with several aims in mind. First, the study seeks to determine the nature and extent of the relationship between burnout and cognitive
distortions and dysfunctional attitudes. Second, demographic variables will be compared with burnout to determine if any trends emerge. Third, relationships between burnout, cognitive distortions, and dysfunctional attitudes and the other measures (job satisfaction, intent to leave, and work environment) will be explored. Finally, factor analysis will be performed on the Inventory of Cognitive Distortions in order to contribute to the mounting body of evidence in support of this measure.

The first of the study’s aims is to determine whether or not a relationship between burnout and cognitive distortions and dysfunctional attitudes exists, and if so, characterize it. The study seeks to determine whether or not distorted thinking and dysfunctional attitudes are indeed present in registered nurses who are experiencing burnout. In addition, specific types of cognitive distortions will be examined for their relationship with burnout.

The second aim of the study is to determine whether or not any relationships exist between demographic variables and burnout. Because results have been mixed with regard to demographics, this portion of the study is exploratory.

The third aim of the study is to explore the relationship between burnout and job satisfaction, intent to leave or stay, and work environment. Job satisfaction has been strongly linked to burnout. Moreover, intent to leave or stay relates to the potential financial impact of burnout on individuals and, given the cost of hiring and orienting new employees, the organizations for which they work. Characteristics of the work environment, including degree of supervisory support and perception of feeling valued will also be explored in the context of burnout.
Finally, the study is designed to explore further the validity and reliability of the Inventory of Cognitive Distortions in a new population via factor analysis. The ICD is one of the few, but sorely needed, self-report measures of cognitive distortions.

Underlying all of the study’s specific aims is the desire to gather more information to support the utility of developing a comprehensive cognitive-behavioral theoretical conceptualization of burnout. Currently no cognitive-behavioral theoretical conceptualization of burnout exists, although clinicians are employing cognitive-behavioral principles and techniques in the conceptualization and treatment of burnout. Although techniques applied in an eclectic manner can be used effectively, it is important to have a cogent organizing theory grounding one’s practice. Theories can be standardized and tested, providing a mechanism to further the science and treatment of burnout. By this study’s attempt to link burnout with a key tenet of cognitive-behavioral therapy, cognitive distortions, evidence will mount in support of the model.

Burnout is a pervasive phenomenon that causes dysfunction in individuals and in their families. Burnout adversely impacts organizations through increased rates of absenteeism and disability as well as through decreased productivity. Burnout affects an individual’s coworkers, leading to decreased morale and team cohesion, and potentially inducing burnout in them. The discovery of effective treatment and of prevention programs to mitigate burnout is imperative.
Research Hypotheses

The current research project is guided by the following hypotheses:

1. There will be a significantly positive correlation between Emotional Exhaustion (EE) and Depersonalization (DP) subscale scores on the Maslach Burnout Inventory and the Inventory of Cognitive Distortions. Conversely, there will be a significantly negative correlation between Personal Accomplishment (PA) subscale score on the Maslach Burnout Inventory and the Inventory of Cognitive Distortions. That said, individuals experiencing burnout will endorse a greater number of cognitive distortions than those not experiencing burnout.

2. There will be a significant positive correlation between various cognitive distortions as measured by factors emerging from the factor analysis of the ICD and Emotional Exhaustion (EE) and Depersonalization (DP) subscale scores on the Maslach Burnout Inventory. Likewise, there will be a significant negative correlation between various cognitive distortions (factors of the ICD) and the Personal Accomplishment (PA) subscale score on the MBI. No presumptions will be made because this is exploratory.

3. There will be a significantly positive correlation between Emotional Exhaustion (EE) and Depersonalization (DP) subscale scores on the Maslach Burnout Inventory and the Dysfunctional Attitudes Scale. Conversely, there will be a significantly negative correlation between Personal Accomplishment (PA) subscale score on the Maslach Burnout Inventory and the Dysfunctional Attitudes Scale. It is hypothesized that
individuals who experience more symptoms of burnout report a greater number of dysfunctional attitudes than those who experience fewer symptoms of burnout.

4. There will be a relationship between age, level of education, total hours worked, type of position, and type of unit worked on Maslach Burnout Inventory, Inventory of Cognitive Distortions, and Dysfunctional Attitudes Scale scores.

5. There will be a significantly negative correlation between job satisfaction and Emotional Exhaustion (EE) and Depersonalization (DP) subscale scores on the Maslach Burnout Inventory, Inventory of Cognitive Distortions, and Dysfunctional Attitudes Scale scores. There will be a significantly positive correlation between job satisfaction and the Personal Accomplishment (PA) subscale score on the Maslach Burnout Inventory.

6. There will be a significantly positive correlation between measures of intent to leave and Emotional Exhaustion (EE) and Depersonalization (DP) subscale scores on the Maslach Burnout Inventory, Inventory of Cognitive Distortions, and Dysfunctional Attitudes Scale scores. There will be a significantly negative correlation between measures of intent to leave and the Personal Accomplishment (PA) subscale score on the Maslach Burnout Inventory.

7. Conversely, there will be a significantly negative correlation between measures of intent to stay and Emotional Exhaustion (EE) and Depersonalization (DP) subscale scores on the Maslach Burnout Inventory, and Inventory of Cognitive Distortions and Dysfunctional Attitudes Scale scores. There will be a significantly positive correlation between measures of intent to stay and the Personal Accomplishment (PA) subscale score on the Maslach Burnout Inventory.
8. There will be a significantly negative correlation between measures of the work environment and Emotional Exhaustion (EE) and Depersonalization (DP) subscale scores on the Maslach Burnout Inventory, and Inventory of Cognitive Distortions and Dysfunctional Attitudes Scale scores. There will be a significantly positive correlation between measures of the work environment and the Personal Accomplishment (PA) subscale score on the Maslach Burnout Inventory.
CHAPTER 3

METHODOLOGY

Research Design

A descriptive correlational design was used to examine the relationship between burnout, as measured by the Maslach Burnout Inventory, and cognitive distortions, as measured by the Inventory of Cognitive Distortions, and between burnout and dysfunctional attitudes, as measured by the Dysfunctional Attitudes Scale. Pearson Product Moment Correlations were performed to compare MBI subscale scores with ICD and DAS scores, as well as other demographic variables and measures of job satisfaction, intent to leave, and work environment. Factor analysis was performed on the ICD. In addition, ICD factors obtained via analysis were compared with MBI subscale scores using Pearson Product Moment Correlations.

Participants

Any registered nurse with an active license who works in a hospital setting was eligible to participate. Registered nurses who were not currently licensed, who were retired, or who were working in non-hospital settings were excluded from the study.

A randomized list of certified critical care registered nurses was purchased from the American Association of Critical-Care Nurses (AACN), whose membership includes approximately 65,000 nurses nationwide. Critical care registered nurses work in a variety of settings including intensive care units, emergency departments, and medical-surgical...
settings. Seven hundred (700) registered nurses were randomly selected to participate in the direct mail survey.

Participation in the study was voluntary. No special recruitment tactics or inducements were used. Interested recipients completed the survey. Recipients who were ineligible to participate or not interested in participating were instructed to return the blank surveys, although many chose to discard them. Individuals who chose to discontinue the survey prior to completion could do so, and were instructed to return the partially completed survey for tracking purposes. All surveys (whether completed or not) were to be placed into the self-addressed, stamped envelope provided and returned to the researcher. No identifiable markings were placed on the survey materials or on the return envelope to assure anonymity.

Each participant received a survey packet mailed to his or her address of record. Survey packets included the following:

1. Letter of informed consent
2. Demographic Questionnaire
3. Maslach Burnout Inventory
4. Inventory of Cognitive Distortions
5. Dysfunctional Attitudes Scale
6. A stamped, self addressed return envelope

Completion time was estimated between 30 and 40 minutes.
Measures

Measures administered included the Maslach Burnout Inventory (MBI), the Inventory of Cognitive Distortions (ICD), and the Dysfunctional Attitudes Scale (DAS).

*Maslach Burnout Inventory-Human Services Survey*

The Maslach Burnout Inventory-Human Services Survey (MBI-HSS; also known as simply the Maslach Burnout Inventory [MBI]) is a 22 item self-report scale that measures three facets of human services, work-related burnout including emotional exhaustion, depersonalization, and personal accomplishment (Maslach, Jackson, and Leiter, 1996). Using a 7 point, fully anchored scale ranging from 0 (“never”) to 6 (“every day”), individuals endorse their frequency of belief in particular statements.

The MBI consists of three subscale scores. No total or full scale MBI score is determined; rather, subscale scores are considered separately, because the theoretical relationship between the constructs is not fully understood. The Emotional Exhaustion (EE) subscale consists of nine items, the Depersonalization (DP) subscale consists of five items, and the Personal Accomplishment subscale consists of eight items. Emotional Exhaustion (EE) and Depersonalization (DP) subscales are positively correlated with burnout; in other words, higher scores represent higher levels of burnout. Conversely, Personal Accomplishment (PA) subscale scores are negatively correlated with burnout; lower scores represent higher levels of burnout. Maslach, Jackson, and Leiter (1996)
report the following subscale intercorrelations: EE and DP (r = .52), EE and PA (r = -.22), DP and PA (r = -.26).

Scoring

Burnout is considered a continuous variable that ranges from low to high rather than a dichotomous variable that is either present or absent (Maslach, Jackson, and Leiter, 1996). Subscale scores can be compared with norms that are established for various occupational groups including medicine, mental health, and social services, among others. Maslach, Jackson, and Leiter (1996) used established normative distributions to define “high,” “average,” and “low” degrees of burnout. The top third is considered a high degree of burnout, the middle third is considered an average degree of burnout, and the lower third is considered a low degree of burnout.

The “Medicine” occupational subgroup categorization scores (norms) were used to determine high, average, and low ranges of experienced burnout (Table 1). Norms for the group were developed from a group of 1,104 physicians and nurses (Maslach, Jackson, and Leiter, 1996). Low burnout is defined as EE ≤ 18, DP ≤ 5, and PA ≥ 40. Average degree of burnout is defined as EE = 19-26, DP = 6-9, and PA = 34-39. A high degree of burnout is defined as EE ≥ 27, DP ≥ 10, and PA ≤ 28.
Table 1

*Maslach Burnout Inventory – Norms for Medicine Subgroup*

<table>
<thead>
<tr>
<th>MBI Subscale</th>
<th>Low</th>
<th>Average</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emotional Exhaustion</td>
<td>≤18</td>
<td>19-26</td>
<td>≥27</td>
</tr>
<tr>
<td>Depersonalization</td>
<td>≤5</td>
<td>6-9</td>
<td>≥10</td>
</tr>
<tr>
<td>Personal Accomplishment</td>
<td>≥40</td>
<td>34-39</td>
<td>≤28</td>
</tr>
</tbody>
</table>

*Reliability*

Maslach, Jackson, and Leiter (1996) used Cronbach’s coefficient alpha to estimate internal consistency with a sample of 1,316 individuals. They report the following reliability coefficients for the subscales: EE = .90, DP = .79 and PA = .71 with standard errors of measurement of 3.80, 3.16, and 3.73 respectively.

In terms of test-retest reliability, Maslach, Jackson, and Leiter (1996) report, “Overall, longitudinal studies of the MBI-HSS have found a high degree of consistency within each subscale that does not seem to diminish markedly from a period of one month to a year” (p. 12). Test-retest reliability coefficients found for EE, DP, and PA respectively include .82, .60, and .80 in two to four weeks (Maslach, Jackson, & Leiter,
Validity

Studies of convergent validity support the integrity of the scale. Maslach, Jackson, and Leiter (1996) reported that MBI scores were correlated with several dimensions to demonstrate convergent validity. They also report MBI scores were compared with behavioral ratings by significant others, job characteristics and experiences, and measures of various personal outcomes related to burnout.

Maslach, Jackson, and Leiter (1996) reported that studies of discriminant validity support the utility of the MBI and of the construct of burnout itself. Disagreement remains as to the relationship between burnout and depression and burnout and job stress (as discussed previously).

Inventory of Cognitive Distortions

The Inventory of Cognitive Distortions (ICD; Yurica & DiTomasso, 2002) is a 69 item, self-report measure designed to quantify the frequency of endorsement of cognitive distortions. A five-point Likert scale is used to measure the frequency of
endorsement of a series of short sentences reflecting one of 11 factor-analyzed distortions, with 1 indicating “never” and 5 indicating “always.” Potential total scores range from 69 to 345, the higher the score indicating greater endorsement of cognitive distortions. The ICD is based on 11 factors (representing 11 cognitive distortions) which emerged from factor analysis. These include: Externalization of Self-Worth, Fortune-Telling, Magnification, Labeling, Perfectionism, Comparison with Others, Emotional Reasoning, Arbitrary Inference/Jumping to Conclusions, Minimization, Mind Reading, and Emotional Reasoning and Decision-Making.

Reliability

Total scale Cronbach’s alpha was .98, with individual factors ranging from .56 to .94, confirming acceptable levels of internal consistency (Yurica, 2002). Yurica (2002) demonstrated excellent test-retest reliability with a total ICD score test-retest reliability coefficient of .998 (n = 28, p < 0.001).

Validity

Content validity was ensured as CBT experts were extensively used during all phases of instrument development (Yurica, 2002). Good concurrent validity was found when total ICD scores were correlated with other widely accepted measures of dysfunctional attitudes, depression, and anxiety. The ICD and the Dysfunctional Attitudes Scale (DAS; r = .70, n = 159, p < 0.0001), the Beck Depression Inventory, 2nd
edition (BDI-II; r = .70, n = 161, p < 0.0001), and the Beck Anxiety Inventory (r = .59, n = 161, p < 0.0001) were all significantly and positively correlated. In addition, Yurica (2002) demonstrated exceptional criterion validity, because ICD total scores were able to differentiate between clinical outpatients and non-patient controls (F = 15.2, df = 169, p, 0.0001).

*Dysfunctional Attitudes Scale*

The Dysfunctional Attitudes Scale (DAS; Weissman, 1979) is a 40 item self-report inventory designed to measure the degree to which depressed individuals hold dysfunctional beliefs, a core component of Beck’s cognitive theory of depression. These beliefs include approval, love, achievement, perfectionism, entitlement, omnipotence, and autonomy. Two forms (DAS-A and DAS-B) are available. A seven-point Likert scale, ranging from *totally agree* to *totally disagree*, is used to measure the degree of dysfunctional attitudes one holds. Items are presented in both directions, and scores are assigned based on whether or not the statement is considered maladaptive. The DAS forms a single total score ranging from 40 to 280. Higher scores on the DAS reflect greater endorsement of dysfunctional beliefs associated with Beck’s cognitive theory of depression.
Reliability

The internal consistency for the DAS ranges from .84 to .92 for Form A. Test-retest correlations over the course of 8 weeks range from .80 to .84.

Validity

The concurrent and predictive validity of the DAS have been demonstrated by others (Hankin et al., 2004; Ilardi & Craighead, 1999). The utility of the DAS in clinical populations has also been supported (Beck, Brown, Steer, & Weissman, 1991).

Demographic Questionnaire

The following demographic and occupational variables were obtained: age, gender, race, marital status, type of unit primarily worked, shift primarily worked, highest level of education, total years as registered nurse, total years on current unit, type of position (i.e., staff, supervisor), total hours worked, and whether or not one is employed in more than one nursing or non-nursing job.

Job Satisfaction

Participants rated their job satisfaction compared with a year prior on a Likert scale from extremely satisfied to extremely dissatisfied. The question used is taken
directly from the March 2000 National Sample Survey of Registered Nurses distributed through the U.S. Department of Health and Human Services’ Bureau of Health Professions’ Division of Nursing (Spratley et al., 2000).

*Intents to Leave and Stay*

Participants answered several items related to their desires and intents to leave or stay in their present positions. Intent to leave was measured by two items: “How often do you find yourself thinking about leaving your current nursing job?” and “If I had another job offer, I’d leave today.” Intent to stay was measured by one item: “I see myself working here 12 months from now.”

*Work Environment*

Other questions regarding perceived control over work environment and perceived organizational support were also posed to participants. Work environment was measured by three items: “I believe that I work in a supportive work environment,” “I believe that I make an important contribution to the organization in which I work,” and “I believe that my superiors value the work that I do.”
Procedure

Permission to perform the current study was obtained by the Philadelphia College of Osteopathic Medicine’s Institutional Review Board. Survey packets were assembled with the materials outlined above. The MBI, ICD, and DAS were ordered randomly to avoid potential ordering effects. A stamped, addressed return envelope was included. A total of 700 surveys were mailed to the addresses of record of a random sample taken from a pool of 65,000 registered nurses belonging to the American Association of Critical-Care Nurses (AACN).

Participation in the study was voluntary. No special recruitment tactics or inducements were used. Interested recipients completed the survey. Recipients who were ineligible to participate or not interested in participating were instructed to return the blank surveys, although many chose to discard them. Individuals who chose to discontinue the survey prior to completion could do so, and were instructed to return the partially completed survey for tracking purposes. All surveys (whether completed or not) were to be placed into the self-addressed, stamped envelope provided and returned. No identifiable markings were placed on the survey materials or on the return envelope to assure anonymity.
CHAPTER 4

RESULTS

This research study employed a descriptive correlational design which was used to investigate the relationships between variables. The Statistical Program for the Social Sciences (SPSS) was used to establish a database. Means and frequencies were generated for the responses provided in the Demographic Questionnaire. Subscale scores on the Maslach Burnout Inventory were considered separately, as suggested by Maslach and Jackson (1996). In addition, burnout scores were defined as a continuous variable, also as suggested by Maslach and Jackson (1996). Pearson product moment correlations were used to compare scores on the Maslach Burnout Inventory subscales with total scores and factor scores on the Inventory of Cognitive Distortions and the Dysfunctional Attitude Scale to determine the extent of the relationship between burnout and dysfunctional cognitions and attitudes. The MBI, ICD, and DAS scores were also compared with demographic and occupational data, as well as measures of job satisfaction, intent to leave or stay, and the perceived work environment. In addition, factor analysis of the Inventory of Cognitive Distortions was performed.
Descriptive Statistics

Response Rate

A total of 700 surveys were mailed. Ten (10) were returned as unable to be delivered. A total 288 surveys were returned. Fifty-five of those were returned unanswered, because the participant was ineligible or was not interested in participating. Interestingly, 11 participants who reported ineligibility to participate stated they had recently left nursing or the hospital setting because they had burned out. A response rate of 37% was calculated, which is consistent for expectancies in an unsolicited direct mail survey (Díaz de Rada, 2005).

Age

Participants ranged in age from 28 to 74 years old with the mean being 45.63 years old (SD = 7.613).

Gender

Female participants composed 91.4% of the sample (n = 213), and males made up 8.2% (n = 19) of the sample.
Race

Participants describing themselves as Caucasian composed 89.3% (n = 208) of the sample. Asians composed 8.2% (n = 19), African Americans composed 1.3% (n = 3), and individuals of Hispanic descent made up 1.3% (n = 3) of the sample.

Marital Status

Three quarters of participants (n = 171) are married, and another 6.0% (n = 14) are cohabitating. The remaining are single (n = 24; 10.3%) divorced (n = 16; 6.9%), or widowed (n = 4; 1.7%).

Highest Level of Nursing Education

The majority of the sample reported having a bachelor of science in nursing (n = 110; 47.2%), followed by associate degree (n = 66; 28.3%), and diploma (n = 24; 10.3%). Thirty respondents (12.9%) completed a master’s degree and two other individuals (0.9%) have taken doctoral level courses.

Years in the Nursing Profession

The total years employed in the nursing profession ranged from 5 to 54 years, with the mean being 21.24 years (SD = 8.090).
Type of Unit Worked

All respondents worked in the hospital setting. The majority of respondents (n = 149; 63.95%) worked in some type of critical care unit. The remaining respondents worked in the emergency department (n = 15; 6.4%), the post anesthesia care unit (n = 11; 4.7%), or other unit (n = 45; 19.2%). Several respondents reported multiple units (n = 13; 5.6%).

Length of Time Working on Present Unit

The length of time participants have worked on their present units ranged from newly employed to 35 years. The average length was 10.69 years (SD = 7.78).

Type of Position

Three quarters of respondents (n = 175) reported working as a staff nurse. Supervisors (n = 1; 5.2%), administrators (n = 5; 2.1%), educators (n = 7; 3.0%), and others (n = 9; 3.9%) make up the remaining portion of the sample. Twenty-five (10.7%) respondents selected multiple roles or did not respond to the item.
Shift

Half of respondents (n = 120; 51.5%) reported working a day shift either of eight or of twelve hours. Twenty percent (n = 47) of the sample worked a night shift, either of eight or of twelve hours, and 4.3% (n = 10) worked weekends only, either day or night. Twelve respondents (5.2%) reported working day/evening rotation, six respondents (2.6%) worked evenings only, and four respondents (1.7%) work evening/night rotation. The remaining portion of the sample worked some other shift.

Total Hours Worked Per Week

Participants were asked to report the total hours worked for all jobs held, because nurses often seek additional employment outside of a full time position. In this sample, total hours worked per week ranged from 6 to 80, with the mean being 38.55 (SD = 10.806).

Other Employment

In addition to a primary place of employment, one fifth (n = 47) of respondents worked another job, either nursing or non-nursing.
Measures

*Job Satisfaction*

Participants were asked their current levels of job satisfaction compared with a year previous. Just over half of respondents (58.6%; n = 136) are either extremely (15.9%) or moderately (42.5%) satisfied with their jobs.

*Intent to Leave and Stay*

One quarter of respondents (n = 60) think of leaving their present positions either often (18.9%) or all the time (6.9%). Another 36.9% (n = 86) sometimes think of leaving. Only 36.8% of respondents think seldom (25.3%) or never (11.2%) about leaving. Nearly one quarter of respondents (n = 55) strongly or moderately agreed that if they had another job offer, they would leave their present positions immediately. However, three quarters of the sample either strongly or moderately agreed that they see themselves working in the same positions a year from now. Thirteen percent (n = 31) do not expect to be in their positions a year from now.

Measures of job satisfaction and intent to leave were moderately correlated ($r = .689$, $p < 0.01$, two-tailed).
Work Environment

Over half of respondents (59.1%) believe they work in a supportive setting, whereas a third (30.5%) believe they do not. Although most respondents (87.9%) believe they make an important contribution to the organization in which they work, only 61.7% believe their superiors value their work. Nearly a quarter of respondents (n = 53; 23%) moderately or strongly disagree that their superiors value their work.

Maslach Burnout Inventory

Of the total sample, 222 respondents correctly completed the Maslach Burnout Inventory and results were used to compute the following. There are three subscales of the MBI: Emotional Exhaustion (EE), Depersonalization (DP), and Personal Accomplishment (PA). The first two are positively correlated with burnout and the last is negatively correlated with burnout. Total possible scores on the EE, DP, and PA subscales range from 0-54, 0-30, and 0-48 respectively. As mentioned above, Maslach, Jackson, and Leiter (1996) standardized the subscales on various occupational groups. The “Medicine” occupational subgroup categorization scores (norms) were used to determine high, average, and low ranges of experienced burnout. Low burnout is defined as EE ≤ 18, DP ≤ 5, and PA ≥ 40. Average degree of burnout is defined as EE = 19-26, DP = 6-9, and PA = 34-39. A high degree of burnout is defined as EE ≥ 27, DP ≥ 10, and PA ≤ 28.
In this sample, scores on the Emotional Exhaustion subscale of the MBI ranged from 3 to 54. The mean EE subscale score was 22.86 (SD = 11.90). Forty-five percent of respondents (n = 100) scored 27 or higher, indicating a high degree of burnout. (The EE subscale is most robustly correlated with burnout.)

Scores on the Depersonalization subscale of the MBI for this sample ranged from 0 to 47. The mean DP subscale score was 7.06 (SD = 6.32). Just over one quarter of respondents (n = 58; 26.13%) scored 10 or higher, indicating a high degree of burnout.

The Personal Accomplishment scale is inversely correlated with burnout. In this sample, scores on the PA subscale ranged from 4-48. The mean PA subscale score was 36.59 (SD = 7.61). Just over one quarter of respondents (n = 62; 27.93%) scored 33 or lower, indicating a high degree of burnout.

In terms of internal consistency, Cronbach’s Alpha for the MBI was .806. Individual items ranged from .779 to .827. This indicates acceptable internal consistency and homogeneity of item content.

In terms of the subscales’ relationships to one another, a series of Pearson Product Moment Correlation Coefficients were computed. The Emotional Exhaustion subscale was significantly positively correlated with the Depersonalization subscale (r = .616, r² = .379, p < 0.01, one-tailed). As expected, the Emotional Exhaustion subscale was significantly negatively correlated with the Personal Accomplishment subscale (r = -.287, r² = .082, p < 0.01, one-tailed). Also as expected, the Depersonalization subscale was significantly negatively correlated with the Personal Accomplishment subscale (r = -.352, r² = .124, p < 0.01, one-tailed). All of these relationships were slightly stronger than
those reported by Maslach, Jackson, and Leiter (1996) who reported correlation coefficients of .52, -.22, and -.26, respectively.

**Inventory of Cognitive Distortions**

In this sample, scores on the Inventory of Cognitive Distortions ranged from 74 to 321. The mean score on the ICD was 160.11 (SD = 33.30). Cronbach’s Alpha for the ICD was .96, with individual items ranging from .968 to .970. This indicates high internal consistency and homogeneity of item content. The ICD appears to be a valid measure of individual and total cognitive distortions.

Factor analysis of the ICD yielded statistically significant findings for the internal structure of the scale. A principal component, varimax rotated factor analysis using Kaiser’s Criterion, was performed. A forced solution of 11 factors was assigned. A factor loading criterion of .40 or greater was used. Nine factors were ultimately retained (see Table 2). One factor was eliminated because it consisted of only one item. An additional factor was eliminated because of low internal consistency. Of the entire 69 original items, 66 loaded significantly on the 9 factors. Ten items were eliminated from the factor analysis because they loaded significantly on more than one factor. The 9 retained factors accounted for 60.232% of the total scale variance (see Table 3).

Compared with Yurica’s (2002) findings, many similarities emerged. The following five factors were retained: Fortune-telling, Externalization of Self-worth, Magnification, Perfectionism, and Minimization. The factors shared similar item overlap with Yurica’s. Yurica’s Emotional Reasoning and Emotional Reasoning and Decision
Making collapsed to one factor in this sample. Three new factors emerged; these were blends of items from other factors. Based on item content and weightings, they were titled Discounting Positives, Dichotomous Thinking, and Catastrophizing.
Table 2

*Factor Loadings of the Principal Components Varimax Rotated Factor Analysis of the Inventory of Cognitive Distortions*

<table>
<thead>
<tr>
<th>Factor</th>
<th>Name</th>
<th>Items</th>
<th>Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Fortune-</td>
<td>2. I feel like a fortune teller, predicting bad things will happen to me.</td>
<td>.732 *</td>
</tr>
<tr>
<td></td>
<td>Telling</td>
<td>9. I act as if I have a crystal ball, forecasting negative events in my life.</td>
<td>.689 *</td>
</tr>
<tr>
<td></td>
<td></td>
<td>14. If a problem develops in my life, you can bet it has something to do with the way I am.</td>
<td>.421</td>
</tr>
<tr>
<td></td>
<td></td>
<td>22. Things seem to go all right or all wrong in my world.</td>
<td>.513 *</td>
</tr>
<tr>
<td></td>
<td></td>
<td>26. I have a habit of predicting that things will go wrong in any given situation.</td>
<td>.672 *</td>
</tr>
<tr>
<td></td>
<td></td>
<td>33. When a new rule comes out at work, school, or home, I think it must have been made because of something I did.</td>
<td>.568</td>
</tr>
<tr>
<td></td>
<td></td>
<td>34. When faced with several possible outcomes, I tend to think the worst is going to happen.</td>
<td>.607 *</td>
</tr>
</tbody>
</table>

* Item loads similarly to Yurica (2002)
Table 2 (continued)

<table>
<thead>
<tr>
<th>Factor</th>
<th>Name</th>
<th>Items</th>
<th>Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>36. I believe my negative forecasts about my future will come to pass.</td>
<td>.641 *</td>
<td></td>
</tr>
<tr>
<td></td>
<td>38. I typically image terrible consequences from my mistakes.</td>
<td>.419 *</td>
<td></td>
</tr>
<tr>
<td></td>
<td>48. As far as my life goes, things are either great or horrible.</td>
<td>.487 *</td>
<td></td>
</tr>
<tr>
<td></td>
<td>52. The positive things in my life just do not count for much at all.</td>
<td>.483</td>
<td></td>
</tr>
<tr>
<td></td>
<td>55. My negative predictions usually come true.</td>
<td>.516 *</td>
<td></td>
</tr>
<tr>
<td>External-</td>
<td>1. I need others to approve of me in order to feel that I am worth something.</td>
<td>.717 *</td>
<td></td>
</tr>
<tr>
<td>Self-Worth</td>
<td>3. I believe others think about me in a negative way.</td>
<td>.400 *</td>
<td></td>
</tr>
<tr>
<td></td>
<td>7. I compare myself to others all the time.</td>
<td>.612 *</td>
<td></td>
</tr>
<tr>
<td></td>
<td>10. What others think about me is more important than what I think about myself.</td>
<td>.664 *</td>
<td></td>
</tr>
<tr>
<td></td>
<td>41. I need a lot of praise from others to feel good about myself.</td>
<td>.666 *</td>
<td></td>
</tr>
</tbody>
</table>

* Item loads similarly to Yurica (2002)
Table 2 (continued)

<table>
<thead>
<tr>
<th>Factor</th>
<th>Name</th>
<th>Items</th>
<th>Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td>44.</td>
<td></td>
<td>People only say nice things to me because they want something or because they are trying to flatter me.</td>
<td>.402</td>
</tr>
<tr>
<td>46.</td>
<td></td>
<td>I find that I frequently need feedback from others to obtain a sense of comfort about myself.</td>
<td>.608 *</td>
</tr>
<tr>
<td>65.</td>
<td></td>
<td>I tend to dwell on things I do not like about myself.</td>
<td>.417</td>
</tr>
<tr>
<td>67.</td>
<td></td>
<td>If people ignore me, I think they have negative thoughts about me.</td>
<td>.607 *</td>
</tr>
<tr>
<td>3</td>
<td>Discounting</td>
<td>4. I tend to discount the good things about me.</td>
<td>.685</td>
</tr>
<tr>
<td>Positives</td>
<td></td>
<td>17. I have a tendency to blame myself for bad things.</td>
<td>.405</td>
</tr>
<tr>
<td></td>
<td></td>
<td>20. I hold myself responsible for things that are beyond my control.</td>
<td>.476</td>
</tr>
<tr>
<td></td>
<td></td>
<td>21. I tend to disqualify the positive traits I have.</td>
<td>.759</td>
</tr>
<tr>
<td></td>
<td></td>
<td>28. I downplay my accomplishments.</td>
<td>.745</td>
</tr>
<tr>
<td></td>
<td></td>
<td>31. Most people are better at things than I am.</td>
<td>.455</td>
</tr>
<tr>
<td></td>
<td></td>
<td>49. I label myself with negative words.</td>
<td>.553</td>
</tr>
<tr>
<td></td>
<td></td>
<td>50. I find myself assuming blame for things.</td>
<td>.465</td>
</tr>
<tr>
<td></td>
<td></td>
<td>58. I tend to downplay accomplishments.</td>
<td>.595</td>
</tr>
</tbody>
</table>

* Item loads similarly to Yurica (2002)
Table 2 (continued)

<table>
<thead>
<tr>
<th>Factor</th>
<th>Name</th>
<th>Items</th>
<th>Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>Magnification</td>
<td>8. I amplify things well beyond their real importance in life.</td>
<td>.665 *</td>
</tr>
<tr>
<td></td>
<td></td>
<td>13. I draw conclusions without carefully reviewing necessary details.</td>
<td>.543</td>
</tr>
<tr>
<td></td>
<td></td>
<td>23. I tend to pick out negative details in a situation and dwell on them.</td>
<td>.559</td>
</tr>
<tr>
<td></td>
<td></td>
<td>24. I have a tendency to exaggerate the importance of minor events.</td>
<td>.726 *</td>
</tr>
<tr>
<td></td>
<td></td>
<td>30. I have been known to make a mountain out of a mole hill.</td>
<td>.739 *</td>
</tr>
<tr>
<td></td>
<td></td>
<td>32. I have a tendency to exaggerate the importance of even small events.</td>
<td>.725 *</td>
</tr>
<tr>
<td></td>
<td></td>
<td>43. I typically make judgments without checking out all the facts beforehand.</td>
<td>.530</td>
</tr>
<tr>
<td></td>
<td></td>
<td>47. I jump to conclusions without considering alternative points of view.</td>
<td>.565</td>
</tr>
<tr>
<td></td>
<td></td>
<td>69. I blow things out of proportion.</td>
<td>.667 *</td>
</tr>
</tbody>
</table>

* Item loads similarly to Yurica (2002)
Table 2 (continued)

<table>
<thead>
<tr>
<th>Factor</th>
<th>Name</th>
<th>Items</th>
<th>Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>Perfectionism</td>
<td>25. I attempt to achieve perfection in all areas of my life.</td>
<td>.809 *</td>
</tr>
<tr>
<td></td>
<td></td>
<td>39. When I think about it, I am quite perfectionistic.</td>
<td>.745 *</td>
</tr>
<tr>
<td></td>
<td></td>
<td>53. I must have things a given way in my life.</td>
<td>.413</td>
</tr>
<tr>
<td></td>
<td></td>
<td>57. It is important to strive for perfection in everything I do.</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Emotional</td>
<td>12. I make decisions on the basis of my feelings.</td>
<td>.541 *</td>
</tr>
<tr>
<td></td>
<td>Reasoning †</td>
<td>40. If I feel a certain way about something, I am usually right.</td>
<td>.621 *</td>
</tr>
<tr>
<td></td>
<td></td>
<td>56. My feelings reflect the way things are.</td>
<td>.662 *</td>
</tr>
<tr>
<td></td>
<td></td>
<td>60. My feelings are an accurate reflection of the way things really are.</td>
<td>.718 *</td>
</tr>
<tr>
<td></td>
<td></td>
<td>66. I go with my gut feeling when deciding something.</td>
<td>.662 *</td>
</tr>
<tr>
<td>7</td>
<td>Dichotomous</td>
<td>5. I either like a person or do not, there is no in-between thinking for me.</td>
<td>.541</td>
</tr>
<tr>
<td></td>
<td></td>
<td>37. Things ought to be a certain way.</td>
<td>.549</td>
</tr>
</tbody>
</table>

* Item loads similarly to Yurica (2002)
† Combines Yurica’s Emotional Reasoning and Emotional Reasoning and Decision Making factors
<table>
<thead>
<tr>
<th>Factor</th>
<th>Name</th>
<th>Items</th>
<th>Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>Minimization</td>
<td>6. I minimize the importance of even serious situations.</td>
<td>.666</td>
</tr>
<tr>
<td></td>
<td></td>
<td>45. I find that I have a tendency to minimize the consequences of my actions, especially if they result in negative outcomes.</td>
<td>.585 *</td>
</tr>
<tr>
<td></td>
<td></td>
<td>68. I underestimate the seriousness of situations.</td>
<td>.620 *</td>
</tr>
<tr>
<td>9</td>
<td>Catastrophizing</td>
<td>59. When something negative happens, it is just terrible.</td>
<td>.582</td>
</tr>
<tr>
<td></td>
<td></td>
<td>61. Even small events can bring on catastrophic consequences.</td>
<td>.642</td>
</tr>
</tbody>
</table>

* Item loads similarly to Yurica (2002)
Table 3

*Inventory of Cognitive Distortions Explanation of Variance by Factor Rotation of Sums of Squared Loadings*

<table>
<thead>
<tr>
<th>Factor</th>
<th>Total</th>
<th>% of Variance</th>
<th>Cumulative %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>24.435</td>
<td>35.413</td>
<td>35.413</td>
</tr>
<tr>
<td>2</td>
<td>3.786</td>
<td>5.487</td>
<td>40.900</td>
</tr>
<tr>
<td>3</td>
<td>2.582</td>
<td>3.740</td>
<td>44.640</td>
</tr>
<tr>
<td>4</td>
<td>2.280</td>
<td>3.304</td>
<td>47.944</td>
</tr>
<tr>
<td>5</td>
<td>2.098</td>
<td>3.040</td>
<td>50.984</td>
</tr>
<tr>
<td>6</td>
<td>1.893</td>
<td>2.744</td>
<td>53.728</td>
</tr>
<tr>
<td>7</td>
<td>1.710</td>
<td>2.479</td>
<td>56.207</td>
</tr>
<tr>
<td>8</td>
<td>1.455</td>
<td>2.108</td>
<td>58.315</td>
</tr>
<tr>
<td>9</td>
<td>1.323</td>
<td>1.917</td>
<td>60.232</td>
</tr>
</tbody>
</table>
In this sample, scores on the Dysfunctional Attitudes Survey ranged from 47 to 216 with the mean score being 114.79 (SD = 28.53). Cronbach’s alpha for the DAS was .924, with individual items ranging from .919 to .924. This indicates good internal consistency and homogeneity of item content.

The ICD and DAS were moderately and positively correlated (r = 0.681, r² = 46.38).

Relationships between Measures and Demographic Variables

Hypothesis 1: The Relationship between Burnout and Cognitive Distortions

It was hypothesized that individuals experiencing a greater degree of burnout would likewise endorse a greater number of cognitive distortions. A series of Pearson Product Moment Correlation Coefficients were performed to determine the relationship between burnout and cognitive distortions. Specifically, scores on the three subscales of the MBI, Emotional Exhaustion (EE), Depersonalization (DP), and Personal Accomplishment (PA) were compared with total frequency of cognitive distortions as measured by total scores on the Inventory of Cognitive Distortions. It was hypothesized that there would be a significant positive correlation between EE and ICD scores and between DP and ICD scores. On the other hand, it was hypothesized that there would be a significant negative correlation between PA and ICD scores.
When comparing EE and ICD scores, the results demonstrated a significant positive Pearson correlation coefficient \( r = .442, r^2 = .195, p < 0.01, \text{ one-tailed} \). Therefore, nearly one-fifth of the variance in Emotional Exhaustion subscale scores (the most robust component of burnout) could be attributed to differences in total scores on the Inventory of Cognitive Distortions.

Scores on the DP subscale and the ICD were also compared. The results demonstrated a significant positive Pearson correlation coefficient \( r = .439, r^2 = .193, p < 0.01, \text{ one-tailed} \). Again, nearly one-fifth of the variance in Depersonalization subscale scores is attributed to differences in total scores on the Inventory of Cognitive Distortions.

Personal Accomplishment subscale scores were compared with total ICD scores. The results demonstrated a significant negative Pearson correlation coefficient \( r = -.223, r^2 = .050, \ p < 0.01, \text{ one-tailed} \). Five percent of the variance in Personal Accomplishment subscale scores can be attributed to differences in total Inventory of Cognitive Distortions scores.

**Hypothesis 2: The Relationship between Burnout and Various Cognitive Distortions**

It was hypothesized that there would be a significant positive correlation between various cognitive distortions (as measured by factors emerging from the factor analysis of the ICD) and Emotional Exhaustion (EE) and Depersonalization (DP) subscale scores on the Maslach Burnout Inventory. Likewise, it was hypothesized that there would be a
significant negative correlation between certain types of cognitive distortions (factors of the ICD) and the Personal Accomplishment (PA) subscale score on the MBI. A series of Pearson Product Moment Correlation Coefficients were performed to determine the relationships. Because this was exploratory, no presumptions were made.

All factors of the ICD were significantly correlated with the Emotional Exhaustion subscale of the Maslach Burnout Inventory. The strongest correlation existed between Magnification and EE \( (r = .411, r^2 = .169, p < 0.01, \text{one-tailed}) \), followed by Discounting Positives \( (r = .388, r^2 = .151, p < 0.01, \text{one-tailed}) \), Fortune Telling \( (r = .367, r^2 = .135, p < 0.01, \text{one-tailed}) \), and Externalization of Self-Worth \( (r = .366, r^2 = .134, p < 0.01, \text{one-tailed}) \). Correlations between .239 and .141 existed for the remaining five factors.

All of the factors of the ICD except Emotional Reasoning correlated with the Depersonalization subscale of the Maslach Burnout Inventory. The strongest correlation existed between Magnification and DP \( (r = .409, r^2 = .167, p < 0.01, \text{one-tailed}) \), followed by Externalization of Self-Worth \( (r = .393, r^2 = .154, p < 0.01, \text{one-tailed}) \), Discounting Positives \( (r = .356, r^2 = .127, p < 0.01, \text{one-tailed}) \), and Fortune Telling \( (r = .339, r^2 = .115, p < 0.01, \text{one tailed}) \). Significant correlations between .297 and .143 existed for the remaining factors except Emotional Reasoning.

Six of the nine factors of the ICD had significant negative correlations with the Personal Accomplishment subscale of the Maslach Burnout Inventory. The strongest negative correlation existed between Fortune Telling and PA \( (r = -.295, r^2 = .087, p < 0.01, \text{one-tailed}) \), followed by Magnification \( (r = -.274, r^2 = .075, p < 0.01, \text{one-tailed}) \), Externalization of Self-worth \( (r = -.197, r^2 = .039, p < 0.01, \text{one-tailed}) \), and Discounting
Positives ($r = -.188, r^2 = .035, p < 0.01, \text{one tailed}$). Significant correlations between -.168 and -.144 existed for the remaining factors except Emotional Reasoning, Dichotomous Thinking, and Perfectionism.

\textit{Hypothesis 3: The Relationship between Burnout and Dysfunctional Attitudes}

It was hypothesized that individuals experiencing a greater degree of burnout would likewise endorse a greater number of dysfunctional attitudes. A series of Pearson Product Moment Correlation Coefficients were performed to determine the relationship between burnout and dysfunctional attitudes. Specifically, scores on the three subscales of the MBI, Emotional Exhaustion (EE), Depersonalization (DP), and Personal Accomplishment (PA) were compared with total frequency of dysfunctional attitudes as measured by total scores on the DAS. It was hypothesized that there would be a significantly positive correlation between EE and DAS scores and between DP and DAS scores. On the other hand, it was hypothesized that there would be a significantly negative correlation between PA and DAS scores.

When comparing EE and DAS scores, the results demonstrated a significant positive Pearson correlation coefficient ($r = .311, r^2 = .097, p < 0.01, \text{one-tailed}$). Therefore, almost 10\% of the variance in Emotional Exhaustion subscale scores can be attributed to differences in total scores on the Dysfunctional Attitudes Survey.

Scores on the DP subscale and the DAS were compared. The results demonstrated a significantly positive Pearson correlation coefficient ($r = .331, r^2 = .110, p < 0.01, \text{one-tailed}$). Again, approximately 10\% of the variance in Depersonalization
subscale scores is attributed to differences in total scores on the Dysfunctional Attitudes Survey.

Personal Accomplishment subscale scores were compared with total DAS scores. The results demonstrated a significantly negative Pearson correlation coefficient \((r = -0.186, r^2 = 0.035, p < 0.01\), one-tailed). Only 3.5% of the variance in Personal Accomplishment subscale scores can be attributed to differences in total Dysfunctional Attitudes Survey scores.

**Hypothesis 4: Relationship between Demographic Variables and Burnout, Cognitive Distortions, and Dysfunctional Attitudes**

It was hypothesized that there would be relationships between age, level of education, total hours worked, and type of position and Maslach Burnout Inventory, Inventory of Cognitive Distortions, and Dysfunctional Attitudes Scale scores. A series of Pearson Product Moment Correlation Coefficients were computed to determine whether or not relationships existed.

Age was significantly negatively correlated with the Emotional Exhaustion subscale of the MBI \((r = -0.120, r^2 = 0.014, p < 0.05\), one-tailed) and with total scores on the Inventory of Cognitive Distortions \((r = -0.119, r^2 = 0.014, p < 0.05\), one-tailed). Although statistically significant, only a negligible amount of variance in age could be accounted for either by the EE subscale of the MBI or the ICD.
Multivariate analysis of variance revealed no significant relationship between level of education and EE (F = 2.204, df = 3, p = .089), DP (F = .759, df = 3, p = .518) and PA (F = 1.082, df = 3, p = .358).

Total hours worked per week was significantly positively correlated with the Personal Accomplishment subscale of the MBI (r = .179, r² = .032, p < 0.004). Conversely, total hours worked per week was significantly negatively correlated with total scores on the Dysfunctional Attitudes Scale (r = -.128, r² = .016, p < 0.05). Although statistically significant, a negligible amount of the variance is explained by these relationships.

Multivariate analysis of variance revealed no significant relationship between type of position and EE (F = .718, df = 4, p = .580), DP (F = .931, df = 4, p = .447) and PA (F = 2.255, df = 4, p = .065).

**Hypothesis 5: Relationship between Job Satisfaction and Burnout, Cognitive Distortions, and Dysfunctional Attitudes**

It was hypothesized that there would be a significantly negative correlation between job satisfaction and Emotional Exhaustion (EE) and Depersonalization (DP) subscale scores on the Maslach Burnout Inventory, Inventory of Cognitive Distortions scores, and Dysfunctional Attitudes Scale scores. On the other hand, it was hypothesized that there would be a significantly positive correlation between job satisfaction and the Personal Accomplishment (PA) subscale score on the Maslach Burnout Inventory. A
series of Pearson Product Moment Correlation Coefficients were computed to determine the relationship between job satisfaction and MBI, ICD, and DAS scores.

When comparing job satisfaction to Emotional Exhaustion subscale scores, the results demonstrated a significant negative Pearson correlation coefficient ($r = -.605$, $r^2 = .366$, $p < 0.01$, one-tailed), indicating that nearly 37% of the variance in job satisfaction ratings can be attributed to differences in total EE subscale scores.

Job satisfaction ratings were also compared with Depersonalization subscale scores. The results demonstrated a significantly negative Pearson correlation coefficient ($r = -.321$, $r^2 = .103$, $p < 0.01$, one-tailed). This suggests that approximately 10% of the variance in job satisfaction ratings is attributable to differences in DP subscale scores.

Comparisons were also made between job satisfaction ratings and Personal Accomplishment subscale scores. The results demonstrated a significantly positive Pearson correlation coefficient ($r = .289$, $r^2 = .083$, $p < 0.01$, one-tailed). Approximately 8% of the variance in job satisfaction ratings can be attributed to differences in PA subscale scores.

When comparing job satisfaction ratings with total scores on the Inventory of Cognitive Distortions, the results demonstrated a significantly negative Pearson correlation coefficient ($r = -.223$, $r^2 = .050$, $p < 0.01$, one-tailed). Although statistically significant, this result indicates that about 5% of the variance in job satisfaction ratings is attributable to differences in total scores on the ICD.

Similarly, results demonstrated a significantly negative Pearson correlation coefficient ($r = -.124$, $r^2 = .015$, $p < 0.05$, one-tailed) when comparing ratings of job satisfaction and total Dysfunctional Attitudes Survey scores. This indicates that only a
negligible amount of the various in job satisfaction ratings can be attributed to differences in total DAS scores.

*Hypothesis 6: Relationship between Intent to Leave and Burnout, Cognitive Distortions, and Dysfunctional Attitudes*

It was hypothesized that there would be significant correlations between intent to leave and burnout, cognitive distortions, and dysfunctional attitudes. Intent to leave was measured by two items: “How often do you find yourself thinking about leaving your current nursing job?” (referred to as ‘frequency of thinking of leaving’) and “If I had another job offer, I’d leave today” (referred to as ‘another job offer’). Specifically, it was hypothesized that there would be a significantly positive correlation between measures of intent to leave and Emotional Exhaustion (EE) and Depersonalization (DP) subscale scores on the Maslach Burnout Inventory, Inventory of Cognitive Distortions scores, and Dysfunctional Attitudes Scale scores. Conversely, it was hypothesized that there would be a significantly negative correlation between measures of intent to leave and the Personal Accomplishment (PA) subscale score on the Maslach Burnout Inventory. A series of Pearson Product Moment Correlation Coefficients were computed to determine the relationship between intent to leave and MBI, ICD, and DAS scores.

When comparing measures of intent to leave and Emotional Exhaustion subscale scores, the results demonstrated significant positive Pearson correlation coefficients: “Frequency of thinking of leaving” ($r = .590$, $r^2 = .348$, $p < 0.01$, one-tailed) and “Another job offer” ($r = .468$, $r^2 = .219$, $p < 0.01$, one-tailed). The results indicate that
nearly 35% of the variance in the “Frequency of thinking of leaving” intent to leave measure and over 20% of the variance in the “Another job offer” intent to leave measure can be attributed to differences in total EE subscale scores.

When comparing measures of intent to leave and Depersonalization subscale scores, the results demonstrated significantly positive Pearson correlation coefficients: “Frequency of thinking of leaving” ($r = .354$, $r^2 = .125$, $p < 0.01$, one-tailed) and “Would leave today if had another job offer” ($r = .254$, $r^2 = .065$, $p < 0.01$, one-tailed). The results indicate that over 12% of the variance in the “Frequency of thinking of leaving” intent to leave measure and over 6% of the variance in the “Another job offer” intent to leave measure can be attributed to differences in total DP subscale scores.

Comparisons were also made between measures of intent to leave and Personal Accomplishment. The results demonstrated significantly negative Pearson correlation coefficients: “Frequency of thinking of leaving” ($r = -.218$, $r^2 = .048$, $p < 0.01$, one-tailed) and “Another job offer” ($r = -.198$, $r^2 = .039$, $p < 0.01$, one-tailed). The results indicate that although statistically significant, under 5% of the variance in both measures of intent to leave measure can be attributed to differences in total DP subscale scores.

When comparing measures of intent to leave to total scores on the Inventory of Cognitive Distortions, the results demonstrated significantly positive Pearson correlation coefficients: “Frequency of thinking of leaving” ($r = .215$, $r^2 = .046$, $p < 0.01$, one-tailed) and “Another job offer” ($r = .170$, $r^2 = .029$, $p < 0.01$, one-tailed). The results indicate that less than 5% of the variance in both measures of intent to leave measure can be attributed to differences in total ICD scores.
Measures of intent to leave were also compared with total scores on the Dysfunctional Attitudes Survey. No statistically significant relationship was found between the “Frequency of thinking of leaving” measure of intent to leave and the DAS (r = .088, p = 0.090, one-tailed). A significantly positive Pearson correlation coefficient was found between the “Another job offer” measure of intent to leave and the DAS (r = .144, r² = .020, p < 0.05, one-tailed). The results indicate that only a negligible amount of the variance in one measure of intent to leave can be attributed to differences in total DAS scores.

Hypothesis 7: Relationship between Intent to Stay and Burnout, Cognitive Distortions, and Dysfunctional Attitudes

It was hypothesized that there would be a significantly negative correlation between intent to stay and Emotional Exhaustion (EE) and Depersonalization (DP) subscale scores on the Maslach Burnout Inventory, and Inventory of Cognitive Distortions and Dysfunctional Attitudes Scale scores. On the other hand, it was hypothesized that there would be a significantly positive correlation between intent to stay and the Personal Accomplishment (PA) subscale score on the Maslach Burnout Inventory. A series of Pearson Product Moment Correlation Coefficients were computed to determine the relationship between intent to stay and MBI, ICD, and DAS scores.

When comparing intent to stay to Emotional Exhaustion subscale scores, the results demonstrated a significantly negative Pearson correlation coefficient (r = -.418, r²
indicating that nearly 18% of the variance in intent to stay ratings can be attributed to differences in total EE subscale scores.

The intent to stay rating was also compared with Depersonalization subscale scores. The results demonstrated a significantly negative Pearson correlation coefficient ($r = -.179$, $r^2 = .032$, $p < 0.01$, one-tailed). This suggests that only about 3% of the variance in intent to stay ratings is attributable to differences in DP subscale scores.

Comparisons were also made between intent to stay ratings and Personal Accomplishment subscale scores. The results demonstrated a significantly positive Pearson correlation coefficient ($r = .118$, $r^2 = .014$, $p < 0.05$, one-tailed). However, only a negligible amount of the variance in intent to stay ratings can be attributed to differences in PA subscale scores.

When comparing intent to stay ratings to total scores on the Inventory of Cognitive Distortions, the results demonstrated a significant negative Pearson correlation coefficient ($r = -.136$, $r^2 = .018$, $p < 0.05$, one-tailed). However, only a negligible amount of the variance in intent to stay ratings can be attributed to differences in total scores on the ICD.

Similarly, results demonstrated a significantly negative Pearson correlation coefficient ($r = -.138$, $r^2 = .019$, $p < 0.05$, one-tailed) when comparing ratings of intent to stay and total Dysfunctional Attitudes Survey scores. Once again, however, results indicate that only a negligible amount of the variance in intent to stay ratings can be attributed to differences in total DAS scores.
Hypothesis 8: Relationship between Work Environment and Burnout, Cognitive Distortions, and Dysfunctional Attitudes

It was hypothesized that there would be a significantly negative correlation between measures of the work environment (belief that one works in a supportive work environment, belief that one makes an important contribution to his or her organization, and belief that superiors value one’s work) and Emotional Exhaustion (EE) and Depersonalization (DP) subscale scores on the Maslach Burnout Inventory, and Inventory of Cognitive Distortions and Dysfunctional Attitudes Scale scores. Conversely, it was hypothesized that there would be a significantly positive correlation between measures of the work environment and the Personal Accomplishment (PA) subscale score on the Maslach Burnout Inventory. A series of Pearson Product Moment Correlation Coefficients were computed to determine the relationship between measures of the work environment and MBI, ICD, and DAS scores.

When comparing measures of the work environment to Emotional Exhaustion subscale scores, the results demonstrated significantly negative Pearson correlation coefficients: “Belief that one works in supportive work environment” (r = -.503, r² = .253, p < 0.01, one-tailed), “Belief that one makes an important contribution to his or her organization” (r = -.189, r² = .036, p < 0.01, one-tailed), and “Belief that superiors value one’s work” (r = -.498, r² = .248, p < 0.01, one-tailed). The results indicated that approximately 25% of the variance in ratings of one’s belief in having a supportive work environment and having superiors that value one’s work can be attributed to differences in total EE subscale scores. Only 4% of the variance in ratings of believing one makes an
important contribution to his or her organization is attributable to differences in total EE subscale scores.

Measures of the work environment were also compared with Depersonalization subscale scores. The results demonstrated significantly negative Pearson correlation coefficients: “Belief that one works in supportive work environment” ($r = -0.276$, $r^2 = 0.076$, $p < 0.01$, one-tailed), “Belief that one makes an important contribution to his or her organization” ($r = -0.255$, $r^2 = 0.065$, $p < 0.01$, one-tailed), and “Belief that superiors value one’s work” ($r = -0.301$, $r^2 = 0.091$, $p < 0.01$, one-tailed). The results indicated that between 6.5% and 9.1% of the variance in the measures of the work environment can be attributed to differences in total DP subscale scores.

Comparisons were also made between measures of the work environment and Personal Accomplishment subscale scores. The results demonstrated significantly positive Pearson correlation coefficients: “Belief that one works in supportive work environment” ($r = 0.204$, $r^2 = 0.042$, $p < 0.01$, one-tailed), “Belief that one makes an important contribution to his or her organization” ($r = 0.392$, $r^2 = 0.154$, $p < 0.01$, one-tailed), and “Belief that superiors value one’s work” ($r = 0.349$, $r^2 = 0.122$, $p < 0.01$, one-tailed). The results indicated that 15% of the variance in ratings of belief that one makes an important contribution to his or her organization and 12% of the variance in ratings of having superiors that value one’s work can be attributed to differences in total PA subscale scores. Only 4% the variance in ratings of believing one works in a supportive environment is attributable to differences in total PA subscale scores.

When comparing measures of the work environment to total scores on the Inventory of Cognitive Distortions, the results demonstrated significantly negative
Pearson correlation coefficients: “Belief that one works in supportive work environment” (r = -.129, r² = .017, p < 0.05, one-tailed), “Belief that one makes an important contribution to his or her organization” (r = -.176, r² = .031, p < 0.01, one-tailed), and “Belief that superiors value one’s work” (r = -.195, r² = .038, p < 0.01, one-tailed). The results indicated that only a negligible amount of the variance in measures of the work environment can be attributed to differences in total scores on the ICD.

When comparing measures of the work environment with total scores on the Dysfunctional Attitudes Survey, the results demonstrated no statistically significant relationship between the belief that one works in a supportive environment and scores on the DAS (r = .102, p = 0.062, one-tailed). Statistically significant negative Pearson correlation coefficients did exist for the other measures of work environment: “Belief that one makes an important contribution to his or her organization” (r = -.134, r² = .018, p < 0.05, one-tailed), and “Belief that superiors value one’s work” (r = -.209, r² = .044, p < 0.01, one-tailed). The results indicated that only a negligible amount of the variance in other two measures of the work environment can be attributed to differences in total scores on the DAS.
Chapter 5
Discussion

The main purpose of the study was to determine the nature and extent of the relationships between burnout and cognitive distortions and burnout and dysfunctional attitudes. In addition, demographic variables were examined in relation to burnout to determine if any trends emerged. Moreover, relationships between burnout, cognitive distortions, and dysfunctional attitudes and the other measures (job satisfaction, intent to leave or stay, and work environment) were explored. Finally, factor analysis was performed on the Inventory of Cognitive Distortions in order to contribute to the mounting body of evidence in support of this measure. Significant positive findings support most of the study’s hypotheses. In this chapter, the findings will be explored in the context of current evidence. Implications for practice, limitations of the study, and directions for future research will also be presented.

Analysis of the three inventories used, the Maslach Burnout Inventory, the Inventory of Cognitive Distortions, and the Dysfunctional Attitudes Scale, revealed these instruments were valid and reliable in their measurements of the constructs of interest. Cronbach’s Alphas were .806, .969, and .924, respectively. The subscales of the MBI correlated with one another slightly stronger than that reported by Maslach, Jackson, and Leiter (1996). The ICD and DAS were moderately positively correlated (r = 0.681).
Participants were certified critical care registered nurses working in hospital settings. They ranged in age from 28 to 74 years old, with the average age being 46 years (SD = 7.613). This corresponds with the average age of the RN population (45.2 years) noted in the National Sample Survey of Registered Nurses, the comprehensive and conclusive “census” of this country’s registered nurse workforce (Spratley et al., 2000).

Male participants made up 8.2% of the sample. The National Sample Survey of Registered Nurses reports that males make up only 5.4% of the total nursing population (Spratley et al., 2000). It may be that males tend to be overrepresented in certain specialty areas of nursing, including critical care.

Most of the participants were married (73.4%). This roughly mirrors the findings of the National Sample Survey of Registered Nurses which noted that 71.5% of the workforce is married, 17.9% is divorced, separated, or widowed, and 9.9% is single (Spratley et al., 2000).

According to the National Sample Survey of Registered Nurses, Caucasians, African Americans, Asians, and individuals of Hispanic descent make up 86.6%, 4.9%, 3.5%, and 2.0% of the nursing workforce (Spratley et al., 2000). The present sample was composed mainly of Caucasians (89.3%), which is consistent with the national RN workforce. Asians were overrepresented and African Americans and Hispanics were underrepresented in the sample. Because the ethnicity of the subject was not known, it is not clear whether or not this represents insufficient sampling or whether certain groups of individuals were more likely or less likely to complete the survey.
As a whole, the sample is more highly educated than the general registered nurse population. Nearly half of the sample had a Bachelor of Science degree in nursing and nearly 13% had a master’s degree in nursing. The National Sample Survey of Registered Nurses reports the highest level of nursing education as follows: 30.7% of nurses have a bachelor of science, 34.3% have an associate degree, and 22.3% have a diploma (Spratley et al., 2000). In addition, 9.8% of the nursing workforce has a master’s degree in nursing or a related field and a mere 0.6% has a doctoral degree in nursing or a related field.

Again, because their educational levels were not known at the time of survey mailing, it is not clear whether or not this group represents insufficient sampling or whether certain groups of individuals were more likely or less likely to complete the survey. Another hypothesis could be that the value of utilizing, conducting, and participating in research is emphasized in an incrementally greater fashion with each level of education; therefore, more highly educated individuals may have seen more value in the survey or may have felt a greater sense of professional obligation to complete the survey. Alternatively, the more highly educated sample that was obtained may be a function of the sampling pool, because nurses who obtain and maintain certification (a voluntary process), and in particular critical care registered nurse (CCRN) certification, may somehow be different from the registered nurse population as a whole.

The nursing career length of the participants ranged from 5 to 54 years, with an average of 21 years. The majority of participants worked on some sort of critical care unit (63%), had been employed on their present unit for an average of 11 years (range: 0-35 years), are presently in staff nurse positions (75%), and currently work the day shift (either 8 hour or 12-hour shifts; 52%). Participants work an average of 39 hours per
week; the time ranges, however, from 6 to 80 hours. The average RN works 42 hours per week, according to the National Sample Survey of Registered Nurses (Spratley et al., 2000). One fifth of the sample holds another job in addition to their present positions.

The registered nurse sample participating in this study was generally similar, with a few exceptions, to that used in the National Sample Survey of Registered Nurses, the nationwide “census” of the RN workforce (Spratley et al., 2000). Therefore, results of this study generally appear applicable to all nurses working in similar hospital settings.

Major Findings

Descriptives

Burnout

High levels of emotional exhaustion, the prime component of burnout, are present in 45% of the sample. This finding is slightly higher than the approximately 40% that was found by Aiken et al. (2002) in their recent survey of over 10,000 hospital nurses. Because Aiken and colleagues surveyed all hospital-based registered nurses, including certified critical care registered nurses, it is possible that nurses working in critical care settings experience a greater amount of emotional exhaustion than other types of nurses. Just over a quarter of respondents had high levels of depersonalization and decreased personal accomplishment, two other components of burnout. Aiken et al. (2002) did not include these components in their survey.
Job Satisfaction

Fifty-nine percent of respondents are extremely (15.9%) or moderately (42.5%) satisfied with their present jobs. This is lower than that reported by the National Sample Survey of Registered Nurses, which reports satisfaction rates of 69.5% for all nurses and 65% for hospital-based nurses, the lowest rate for all groups of nurses (Spratley et al., 2000). Job satisfaction rates in the sample are significantly lower than the overall rates reported by the National Opinion Research Center, which reports job satisfaction rates of 85% for all employees and 90% for professional workers (Spratley et al., 2000). Factors contributing to lower job satisfaction rates in this sample may include a selection bias. Those individuals who wanted to voice their frustrations about their jobs and/or the nursing profession might have felt compelled to complete the survey (although the opposite could be argued that burned out individuals are too exhausted to complete the survey). It could be that critical care nurses are less satisfied than nurses overall; perhaps issues inherent in critical care area (workload, nature of patient’s illness, degree of family interaction, etc.) are contributing to the lower rate of job satisfaction.

Intent to Leave

A quarter of respondents think about leaving their present positions either often (18.9%) or all the time (6.9%). Another 37% sometimes think of leaving. Another quarter of respondents would leave their present positions immediately if they had another job offer. However, 87% expect to be in their positions a year from now. Why
the discrepancy? This may speak to the fact that dissatisfied and burned out nurses often remain in positions out of financial obligation (pay, healthcare, or pension). Being highly dissatisfied and/or burned out is not necessarily a “pink slip.” Job satisfaction and intent to leave were moderately correlated (r = .689, p < 0.01, two-tailed).

*Work Environment*

Although one third of respondents do not consider their work settings supportive, just over half do. Most respondents (88%) believe they make a valuable contribution to their organizations, yet only 62% believe their superiors value their work. These findings speak to the lack of supervisory support and feedback that is often reported in studies of burnout. The frequency and amount of public recognition for accomplishments obviously does not match nurses’ perceptions of their accomplishments. This speaks to the need to train individuals more adequately to be effective leaders and managers.

*The Relationship between Burnout and Cognitive Distortions*

As was hypothesized, individuals experiencing higher levels of burnout endorsed significantly greater amounts of cognitive distortions. Specifically, scores on the Emotional Exhaustion and Depersonalization subscales were moderately and positively correlated to scores on the Inventory of Cognitive Distortions (.442 and .439, respectively), whereas scores on the Personal Accomplishment subscale were negatively correlated to scores on the Inventory of Cognitive Distortions (-.223). Approximately
one-fifth of the variance in scores could be explained by either the Emotional Exhaustion and Depersonalization subscales, whereas 5% of the variance could be explained by the Personal Accomplishment subscale. These findings are in line with the conceptual properties of the scale which purport that emotional exhaustion is most strongly correlated with the concept of burnout; this is followed by depersonalization, then personal accomplishment.

Although small to moderate, the correlations obtained in this study are equal to or higher than those found for other psychological variables linked to burnout (most use the Emotional Exhaustion subscale exclusively due to its strength): hardiness (-.3 to -.4; Schaufeli & Buunk, 2003); locus of control (.2 to .4; Glass & McKnight, 1996); and coping style (.35; Gueritault-Chalvin et al., 2000). The correlations are equal to or higher than those found for interpersonal variables such as supervisory support (-.37) and social support (-.2 to -.3; Lee & Ashforth, 1996). The correlations found in this study are equal to or higher than those found for organizational factors such as lack of perceived autonomy (.3) and lack of participation in decision-making (.2 to .3; Glass & McKnight, 1996); more direct contact with clients (.15 to .31) and less feedback from job (-.24; Maslach, Jackson, & Leiter, 1996). The correlation is larger than that noted for a known, strong correlate of burnout, job satisfaction (-.35; Maslach & Jackson, 1981). Therefore, the finding that burnout is moderately correlated with cognitive distortions is an important contribution to the field.

Although burnout is generally not considered psychopathology, burnout is an extreme response to a situational stressor that manifests in cognitive, affective, and behavioral ways. Therefore, the significant relationship that exists between cognitive
distortions and burnout is consistent with the extensive body of literature supporting the
efficacy of the cognitive-behavioral model.

The Relationship between Burnout and Type of Cognitive Distortion

All factors of the ICD correlated significantly with one or more burnout
subscales. Magnification was most strongly correlated with Emotional Exhaustion and
Depersonalization (.411 and .409, respectively) and was the second most strongly
correlated factor with Personal Accomplishment (.274). Items on this factor suggest the
tendency to over-inflate the negative aspects of a situation or over-inflate the significance
of minor issues. Perhaps the tendency toward magnification is an inherent or learned trait
of nurses. Overestimating risk serves to save patient lives. Said differently, nurses
would rather err on the side of having more false hits than false misses. Another
hypothesis is that nurses who tend to use magnification tend to overstate the negative
aspects of their work environments. They may selectively filter the aspects of their work
environments that support a pessimistic orientation.

The second strongest correlation with Emotional Exhaustion was with the
cognitive distortion, Discounting Positives (.388), which emerged as a new factor in this
study. It refers to the tendency to ignore, downplay, or discount one’s positive qualities
or accomplishments. Perhaps nurses who minimize their self-worth and value as
employees are more liable to become burned out, because they feel unappreciated and
overworked. Because causation cannot be determined, it is just as likely that burnout
leads to low self-esteem and devaluing of oneself. Which came first – the distortion or burnout? That answer remains unclear at this point.

The distortion that is second in terms of its correlation with Depersonalization is Externalization of Self-Worth (.393). As opposed to Discounting Positives, this distortion refers to the tendency to rely heavily on external sources of esteem and approval. In addition, individuals who employ this distortion have an external locus of control and engage in self-comparison. How might Externalization of Self-Worth be linked to Depersonalization, the tendency for burned out individuals to dehumanize the recipients of their care and distance themselves from their clients? Perhaps individuals who rely heavily on external sources of affirmation are especially prone to burnout, because the very nature of the helping relationship often leaves the caregiver lacking. Because depersonalization is hypothesized to be a more serious sign of burnout – one that emerges as a protective response to prolonged emotional exhaustion – this distortion may be a particularly important one to address in nurses.

The distortion that is most strongly correlated with Personal Accomplishment is Fortune Telling. Fortune Telling refers to the tendency to predict negative outcomes for oneself in spite of a lack of evidence for or evidence to the contrary. Perhaps individuals experiencing the lack of personal accomplishment, which is hypothesized to be a later stage of burnout, tend to become more negative in their perspectives of the future. Despite the fact that causal statements cannot be made, it is interesting to note the cognitive distortions most strongly linked to burnout. This may serve useful in future cognitive-behavioral intervention programs.
As was hypothesized, individuals experiencing higher levels of burnout endorsed significantly greater amounts of dysfunctional attitudes. Specifically, scores on the Emotional Exhaustion and Depersonalization subscales were significantly and positively correlated to scores on the Dysfunctional Attitudes Survey (.311 and .331, respectively), whereas scores on the Personal Accomplishment subscale were significantly and negatively correlated to scores on the Dysfunctional Attitudes Survey (-.186).

Approximately 10% of the variance in scores could be explained by either the Emotional Exhaustion and Depersonalization subscales, whereas 3.5% of the variance can be explained by the Personal Accomplishment subscale. These findings are in line with the conceptual properties of the MBI which purport the fact that Emotional Exhaustion is most strongly correlated with the concept of burnout; this is followed by Depersonalization and then by Personal Accomplishment. Again, these findings are similar in strength to those found with other commonly studied correlates that are reported in the burnout literature (see above) and support the utility of a cognitive-behavioral framework in conceptualizing and treating burnout.
The Relationship between Demographic Characteristics and Burnout, Cognitive Distortions, and Dysfunctional Attitudes

Age

A small, but significant, negative correlation existed between age and the Emotional Exhaustion subscale of the MBI (-.12), indicating a slight trend that younger individuals were more likely to experience burnout than their older counterparts. This is consistent with the literature. Moreover, a small, but significant negative correlation existed between age and cognitive distortions, indicating a slight trend that younger individuals endorse higher numbers of cognitive distortions. Both of these findings may be related to the self-selection process whereby burned out individuals exit the profession, leaving behind a relatively healthier workforce.

Level of Education

Unlike the findings of some others, no significant findings emerged with regard to burnout when comparing nurses with different levels of education. A hypothesis to explain this might be the fact that although nurses may have different levels of education, all who practice as registered nurses work in similar environments with similar work duties. Therefore, burnout may be equally represented in all basic educational levels.
**Total Hours Worked Per Week**

Total hours worked per week was significantly positively correlated with the Personal Accomplishment subscale of the MBI (.18), indicating a slight trend that individuals who work more tend have an increased sense of personal accomplishment from their work. Because the finding is correlational as opposed to causal, it is unclear whether or not individuals derive feelings of accomplishment when they work more or whether or not individuals who have a greater sense of personal accomplishment surrounding their work put in more hours at work. It is interesting and somewhat counterintuitive that number of hours worked per week does not correlate with emotional exhaustion or depersonalization. These findings suggest that subjective qualities of one’s work, rather than the objective quantity of work hours, may contribute burnout.

**Position Worked**

The type of position held by the nurse did not correlate with burnout level. It appears there were too few subjects in each category to detect a difference if one did exist. It may be possible that all positions have an inherent risk for burnout, and that the person-job fit may be an important factor here.
As hypothesized, job satisfaction was significantly negatively correlated with emotional exhaustion (-.605) indicating that more than 35% of the variance in scores could be attributed to differences in total EE subscale scores. In fact, of all the variables tested in this study, job satisfaction was the most strongly correlated with EE. This finding is in line with those found by others, which demonstrates the fact that job satisfaction is one of the strongest predictors of burnout. Schulz, Greenley, and Brown’s (1995) statistical model revealed that 31% of the total covariance in emotional exhaustion levels was explained by work satisfaction, the largest explanatory variable in the model. Moreover, they found that most organizational variables impacted emotional exhaustion indirectly via work satisfaction. Job satisfaction was also found to be significantly negatively related to depersonalization (-.321) and significantly positively related to personal accomplishment (.289).

Job satisfaction was significantly negatively related to cognitive distortions and dysfunctional attitudes. However, the correlations were small. Because job satisfaction is subjective, individuals who less commonly utilize cognitive distortions and less
commonly hold dysfunctional attitudes may have more positive views of their work situations. However, one reason to explain the failure to find a stronger correlation may be related to research on depressive realism (mentioned above). It may be that cognitive distortions are a two-way street serving to alter one’s thinking either in a more positive or more negative direction. That is, individuals employ cognitive distortions to improve their perceptions of the environment – to make lemonade out of lemons, so to speak. Therefore, the mere presence of cognitive distortions or dysfunctional attitudes may not guarantee dissatisfaction with one’s job.

The Relationship between Intents to Leave and Stay and
Burnout, Cognitive Distortions, and Dysfunctional Attitudes

Burnout

Intent to Leave.

“Frequency of thinking of leaving” was significantly correlated with emotional exhaustion (.590), depersonalization (.354), and personal accomplishment (-.218). “Another job offer” was significantly correlated with emotional exhaustion (.468), depersonalization (.254), and personal accomplishment (-.198). Again, the strength and directions of the correlations are in line with the strength and directions of the relationship of the subscales with the overall construct of burnout. These findings provide strong evidence that nurses experiencing symptoms of burnout, especially
emotional exhaustion, are at risk of leaving their jobs or leaving the profession. Given the challenges facing the nursing workforce supply, interventions designed to ameliorate the symptoms of burnout and address its causes would result in substantial preservation of the workforce.

In addition, there are deleterious effects if a burned out nurse does not leave the job. Productivity and organizational commitment is lost when a nurse finds herself frequently fantasizing about leaving. Burnout has a powerful impact on patient satisfaction. Moreover, emerging research suggests the patients of burned out nurses have poorer outcomes than those of non-burned out nurses. There is a need for more research on the consequences when burned out nurses continue working without intervention.

*Intent to stay.*

As hypothesized, intent to stay was significantly negatively correlated with emotional exhaustion (−.418) and less so with depersonalization (−.179). Intent to stay was significantly correlated with personal accomplishment (.118). Not all individuals experiencing emotional exhaustion are necessarily intending to leave their present positions; interventions to decrease their experiences of burnout would certainly be beneficial to them, to their patients, and to the organization.
Cognitive Distortions and Dysfunctional Attitudes

Intent to leave.

Because of its high correlation with burnout, it was expected that intent to leave would function similarly in the statistical analysis. However, given the numerous variables that individuals consider when contemplating leaving their jobs, it was not expected that cognitive distortions or dysfunctional attitudes would explain a large portion of intent to leave. As hypothesized, both measures of intent to leave were significantly correlated with cognitive distortions (.215 and .170 for “Frequency of thinking of leaving” and “Another job offer”, respectively). However, only “Another job offer” was statistically significantly related to dysfunctional attitudes, as measured by the DAS (.144).

The small, but significant, correlations demonstrate that there is a relationship between a tendency to distort and hold dysfunctional attitudes and expressing intent to leave one’s job. It is not known whether or not expressions of intent to leave actually result in leaving; it may be that the presence of higher levels of cognitive distortions and dysfunctional attitudes simply makes one more prone to verbalizing one’s desire to leave.

Intent to stay.

As hypothesized, intent to stay was significantly negatively correlated with cognitive distortions (-.136) and dysfunctional attitudes (-.138). Again, burnout is not the
only reason individuals leave their jobs and having burnout does not necessarily mean one will leave his or her job.

_The Relationship between Work Environment and Burnout, Cognitive Distortions, and Dysfunctional Attitudes_

_**Supportive Work Environment**_

The belief that one works in a supportive work environment was significantly negatively correlated with emotional exhaustion (\(-.503\)) and depersonalization (\(-.276\)). The belief was significantly correlated with feelings of personal accomplishment (\(.204\)). These findings suggest that providing a supportive work environment is clearly important to maintaining a healthy nursing workforce. It is unclear, based on the phrasing of the item, exactly what factors constitute a “supportive work environment.” Both tangible and intangible resources maybe needed to create a supportive work environment such as adequate staffing, supplies, time to do one’s work properly; recognition and praise; and positive relationships with co-workers and interdisciplinary team members.

The perception that one’s work environment is supportive was significantly negatively correlated with cognitive distortions (\(-.129\)), but not at all with dysfunctional attitudes. It may be that many individuals who are not burned out are accurately perceiving their environments, be it supportive or not. Therefore, the presence of distortions may improve perceptions of the work environments for some, but worsens the perceptions for others.
Contribution to the Organization

The belief that one makes an important contribution to their organization was significantly negatively correlated with emotional exhaustion (-.189) and depersonalization (-.255). The belief in the importance of one’s contributions was significantly correlated with personal accomplishment (.392). Interestingly, 88% of the sample reported believing that they make important contributions to their organizations in spite of the fact that nearly half scored in the high burnout range on the Emotional Exhaustion subscale. Therefore, despite experiencing symptoms of burnout, most individuals still retain a sense of pride in their work. The small, but significant, correlations may be due to a decline in one’s perceptions of self-efficacy and value as burnout levels increase. Alternatively, burnout may cause one to be reluctant to call praise to one’s accomplishments.

The belief that one makes an important contribution to his or her organization was significantly negatively correlated with both cognitive distortions (-.176) and dysfunctional attitudes (-.134). The presence of greater amounts of cognitive distortions and dysfunctional attitudes may cause individuals to minimize or discount their accomplishments.

Superiors Value One’s Work

The belief that one’s superiors value one’s work was significantly negatively correlated with emotional exhaustion (-.498) and depersonalization (-.301). Having the
belief that superiors value one’s work was significantly correlated with feelings of personal accomplishment (.349). The belief is significantly negatively correlated with cognitive distortions (-.195) and dysfunctional attitudes (-.209). Given the fact that individuals employing cognitive distortions often misinterpret the actions and intentions of others, it is surprising that there is not a stronger correlation present. Most likely there are organizational and interpersonal processes at work (in addition to the individual intrapsychic process) that prevent adequate amounts of positive feedback and recognition from getting to the direct line staff.

Factor Analysis of the Inventory of Cognitive Distortions

The Inventory of Cognitive Distortions was evaluated to determine its appropriateness for this population. The measure demonstrated high internal consistency and homogeneity of item content. It appears to be a valid and reliable measure of amount and type of cognitive distortions.

Some deviations from Yurica’s (2002) original work occurred when factor analysis was performed on the ICD. Five of Yurica’s original 11 factors were retained, sharing significant overlap in item content. These included Fortune-Telling, Externalization of Self-Worth, Magnification, Perfectionism, and Minimization. A sixth factor, Emotional Reasoning, performed as a single factor, combining Yurica’s Emotional Reasoning and Emotional Reasoning and Decision-Making. Of some interest is the fact that performance as a single factor rather than as two separate factors was Yurica’s (2002) original prediction. Three new factors emerged from a blend of items
from other factors; these include Discounting Positives, Dichotomous Thinking, and Catastrophizing.

Discounting Positives is the first of three new factors to emerge in this analysis. It combines items from several of Yurica’s factors including Externalization of Self-worth, Labeling, and Comparison to Others. The most heavily weighted items speak to a tendency to ignore or discount one’s positive qualities or accomplishments. Items include: “I tend to disqualify the positive traits I have,” and “I downplay my accomplishments.” Whereas the Externalization of Self-worth factor encompassed an individual’s need to seek acceptance and approval from outside sources, the Discounting Positives factor emerged as a separate entity encompassing an individual’s tendency to criticize oneself. More simply, the Externalization of Self-worth factor has a greater external, information-seeking focus, whereas the Discounting Positives factor has a greater internal, judgment-making focus.

The second new factor to emerge in this sample is Dichotomous Thinking. It is composed of items from several of Yurica’s factors including Labeling, Perfectionism, and Mind Reading. The most heavily weighted item, however, was not represented on any of Yurica’s factors: “In my mind, things are either black or white; there are no gray areas.” This factor relates to individuals who tend to think categorically rather than in shades of gray.

The last new factor to emerge in this sample is Catastrophizing. It is composed of two items which were not represented in any of Yurica’s factors. These items include: “When something negative happens, it is just terrible” and “Even small events can bring
on catastrophic consequences.” This factor relates to individuals who tend to believe that the worst possible outcomes can result from even the most minor of problems.

The ICD may have performed differently in this study because of the nature of the sample or because of the procedure. Perhaps certain personality traits are especially prevalent in individuals who choose a career in nursing, or maybe personality traits are altered after practicing as a nurse for a given amount of time. Alternatively, the ICD may have performed differently as a function of the context in which it was administered. The cover letter and initial demographic questionnaire prompted individuals to think about their jobs. Although not instructed to do so, participants may have been primed to think about the items in the context of one’s work as opposed to thinking globally.

Limitations of the Study

There are several limitations of the study that require mention. Because the study is correlational in design, no causal inferences can be made with regard to the variables in question. Although it is the author’s theoretical belief that distortions precede and contribute to burnout, it is just as likely that the process of burnout leads to the development of distortions in one’s cognition or that these phenomena emerge in tandem.

Random selection from the population of actively certified critical care registered nurses working in a hospital setting was performed, thus strengthening the study’s internal validity. However, increasing subject homogeneity serves to decrease external validity. The extent to which the population sampled is similar to the registered nurse population in general could be in question. There may be fundamental differences
between nurses who attain and maintain certification and those who do not. In addition, the sample is more highly educated, has a higher percentage of males and Asians, and has a lower percentage of African-Americans and Hispanics than the RN population as surveyed by the National Sample Survey of Registered Nurses (Spratley et al., 2000).

Because the study used a survey method, several limitations, including subject-selection bias, come into play. Subjects who complete the survey may be inherently different from subjects who do not complete it, confounding the study’s results. Kazdin (1998) compiled the results of numerous studies demonstrating the fact that certain types of individuals are more likely than others to participate in research. Demographics of the population from which the sample was selected are unknown; therefore, it is not known whether or not these differences are inherent in the larger pool from which the sample was drawn or whether individuals with these characteristics were more likely to complete the survey. Moreover, it is possible that individuals who were experiencing higher levels of burnout did not complete the survey or have already left nursing. On the other hand, because the survey was about burnout and gave individuals the chance to vent their feelings, increased numbers of burned out individuals may have completed the survey.

An additional limitation is the study’s reliance on self-report measures which lend themselves to bias or distortion. Kadzin (1998) suggests, “The extent to which distortion may occur is a function of many factors, including whether subjects can detect the purpose of the measure and whether their motives are consistent with those of the investigator” (p. 281). The major bias in self-ratings is that individuals typically attempt to manage their images to maintain their social desirability. That is, people want to be seen in a good light. A second bias or distortion in self-ratings is the participant’s
tendency to acquiesce. In order to diminish these confounds, a statement expressing the
importance of answering honestly and the assurance of anonymity was included in the
cover letter of the survey packet.

A final concern was the length of the survey materials. Fatigue or disinterest
could have led to less than accurate responding. Every attempt was made to keep the
length of the survey within a reasonable timeframe.

Recommendations for Future Research

It is the researcher’s hope that this study would inform: (a) the development of a
cognitive-behavioral conceptualization of burnout, (b) the development of cognitive-
behavioral screening tools to target those at risk for developing burnout or those who are
currently experiencing burnout, (c) the development of cognitive-behavioral prevention
programs to target those at risk for developing burnout, and (d) the development of
cognitive-behavioral intervention programs for those who are experiencing symptoms of
burnout. In addition, it is hoped that the findings can be extended to other types of nurses
working in other settings and to other types of individuals working as human service
professionals.

Following the trend of positive psychology, burnout now has its “positive
antithesis,” as Maslach (2003) labeled it – job engagement – which has three dimensions
(energy, involvement, and sense of efficacy) which mirror Maslach’s conceptualization
of burnout. Leiter (2005), who worked with Maslach to develop this model which they
dubbed the Mediation Model of Burnout, suggests a continuum from engagement to
burnout, reflecting all the possible variants of one’s relationship with work. Maslach (2003) suggests “one of the important implications of the research on engagement is that interventions may be more effective if they are framed in terms of building engagement rather than reducing burnout” (p. 191). As appealing as this change in perspective on burnout might be, research is needed to determine that the construct is a valid one. Although a focus on job engagement is encouraging, burnout will continue to be with us and further research on this topic is needed.

Most agree that future burnout research needs to address the following four issues. First, researchers continue to struggle to articulate a coherent theoretical framework of burnout. Because no cognitive-behavioral conceptualization exists (although CBT principles and intervention techniques have been incorporated into other frameworks), it is suggested that one be proposed and tested. Given CBT’s effectiveness with other disorders, it is likely to have efficacy with burned out individuals. Second, future research in burnout needs to include more longitudinal studies that look at the genesis and progression of burnout over the course of a career. From this, causal inferences with regard to variables such as cognitions and burnout could be made. Third, more tightly controlled intervention trials are needed to determine which interventions are most effective for which employees. Maslach (2003) suggests that interventions geared toward organizations rather than toward individuals be developed. Developing methodologically sound means of researching organizational interventions is imperative. Perhaps the future holds controlled clinical trials that compare CBT alone, organizational intervention alone, combined CBT and organizational intervention, and a waitlist control group. Finally, researchers suggest increasing standardization of intervention trials so
that separate trials can be compared. This might include standardizing the measures that will be used and the theoretical underpinnings of the intervention.

This study also replicated findings of other burnout studies which demonstrate moderate correlations between burnout and job satisfaction, intent to leave, and work environment. Much more research needs to be conducted on the factors that contribute to job satisfaction. In addition, understanding the variables that make up the decision to leave one’s job or leave the profession would be helpful in counseling burned out nurses. Moreover, continued research into the factors that promote effective management of nurses, specifically with regard to communicating value, recognition, and appreciation, is encouraged.

A very important area of burnout research is burnout’s impact on actual nurse performance and patient outcomes. Research has shown that burned out nurses perceive themselves as less efficient. It remains to be seen whether or not burned out nurses provide the same quality of care as non-burned out nurses. Moreover, research has repeatedly demonstrated the impact of nurse burnout on patient satisfaction. However, does nurse burnout result in physical or psychological complications for their clients? Are patient outcomes compromised? If this is shown to be true, organizational inertia in providing prevention and intervention programs for burnout will be sheer negligence.

It is recommended that the work begun in this study be extended to determine which specific types of cognitive distortions are predictive of burnout. It would be helpful to establish norms for the ICD that help to discriminate individuals with burnout and without burnout. In addition, it would be imperative to extend the generalizability of this study to other types of nurses working in other settings, as well as to other types of
professionals. Great potential exists for alleviating the huge emotional and financial toll of burnout for individuals, for families, and for organizations.

Conclusions

Many emerging theories and treatments for burnout incorporate cognitive-behavioral principles; however, no coherent CBT model presently exists. This study provides support for the efficacy of the cognitive-behavioral model in conceptualizing burnout. Given the fact that distortions in cognition form the cornerstone of the CBT model, the finding that cognitive distortions are correlated with burnout is important. In addition, knowledge about the types of distortions linked to burnout may inform cognitive-behavioral intervention programs.

Although there were some discrepancies in its replication with its initial validation study, this study provides further support for the psychometric properties of the Inventory of Cognitive Distortions. The ICD is the one of the few measures designed to quantify cognitive distortions.

This study also confirms findings of previous studies which demonstrate the role of job satisfaction in burnout. Moreover, the study suggests that burnout is associated with intention to leave, which may aggravate an already tenuous supply and demand situation in the RN workforce. Alternatively, not every nurse experiencing symptoms of burnout expressed a desire or intent to leave and may not have the luxury to do so. More research into the impact of nursing burnout on patient health outcomes is needed.
The study also highlights the importance of having a supportive work environment. Nurses need supervisors who provide acknowledgement and recognition. The study revealed an obvious disconnect between the percentage of nurses who believe they make an important contribution to their organizations and those who believe their superiors value the work they do. Strategies are needed to educate managers to provide more accurate, specific, and timely appreciation and recognition of their staff nurses; this is imperative.

A healthy, vibrant nursing workforce is in all of our best interests. Patients, organizations, and families benefit from nurses who experience a sense of engagement in and satisfaction with their jobs. This study contributes to the growing knowledge base that will help improve the wellbeing of America’s nurses, which ultimately improves the health and wellbeing of all our citizens.
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Please complete the following items.

1. Age: ______

2. Gender (circle one): Male Female

3. Race (check all that apply): _____ Caucasian
   _____ African American
   _____ American Indian or Alaska Native
   _____ Asian
   _____ Native Hawaiian or Other Pacific Islander
   _____ Other (specify: ________________________)

4. Are you of Hispanic or Latino origin? (circle one)  No Yes

5. Marital Status (circle): Single Cohabitating Married Separated Divorced Widowed

6. Highest Level of Nursing Education: _____ Completed diploma in nursing
   _____ Some associate-level nursing courses
   _____ Completed associate degree in nursing
   _____ Some bachelor-level nursing courses
   _____ Completed bachelors degree in nursing
   _____ Some masters-level nursing courses
   _____ Completed masters degree in nursing
   _____ Some doctoral-level courses (either nursing or non-nursing)
   _____ Completed doctoral degree (either nursing or non-nursing)

7. How many years have you been a registered nurse? _____

8. What type of unit do you typically work on? ________________________________

9. How long have you worked on your present unit? ___________________________

10. How would you describe your present position? _____ Staff member
    _____ Supervisor
    _____ Administrator
    _____ Educator
    _____ Researcher
    _____ Other (please specify: ___________)

11. What shift do you **typically** work (check one)?
   _____ Day
   _____ Day/evening rotation
   _____ Evening
   _____ Evening/night rotation
   _____ Night
   _____ Weekends only (7a-7p)
   _____ Weekends only (7p-7a)
   _____ Other (please specify: ___________)

12. Total number of hours per **week** typically worked (include all nursing jobs if you hold more than one position or work in more than one facility): ______

13. Check here if you are employed in any nursing or non-nursing capacity in addition to the position you are referring to above: ______

* * * * * * *

For the following seven items, please place a check beside the response that best reflects your feelings at this present time.

1. Compared to a year ago, how would you best describe your feeling about your current nursing job?
   _____ Extremely satisfied
   _____ Moderately satisfied
   _____ Neither satisfied nor dissatisfied
   _____ Moderately dissatisfied
   _____ Extremely dissatisfied

2. How often do you find yourself thinking about leaving your current nursing job?
   _____ Never
   _____ Seldom
   _____ Sometimes
   _____ Often
   _____ All the time
3. Please rate your endorsement of the following: If I had another job offer, I’d leave here today.
   _____ Strongly agree
   _____ Moderately agree
   _____ Neither agree nor disagree
   _____ Moderately disagree
   _____ Strongly disagree

4. Please rate your endorsement of the following: I see myself working here 12 months from now.
   _____ Strongly agree
   _____ Moderately agree
   _____ Neither agree nor disagree
   _____ Moderately disagree
   _____ Strongly disagree

5. Please rate your endorsement of the following: I believe that I work in a supportive work environment.
   _____ Strongly agree
   _____ Moderately agree
   _____ Neither agree nor disagree
   _____ Moderately disagree
   _____ Strongly disagree

6. Please rate your endorsement of the following: I believe that I make an important contribution to the organization in which I work.
   _____ Strongly agree
   _____ Moderately agree
   _____ Neither agree nor disagree
   _____ Moderately disagree
   _____ Strongly disagree
7. Please rate your endorsement of the following: I believe that my superiors value the work that I do.

[ ] Strongly agree
[ ] Moderately agree
[ ] Neither agree nor disagree
[ ] Moderately disagree
[ ] Strongly disagree