

**Exploring a Unified Concept of Occupational Well-being
Through Validation in an Applied Setting**

by

Kelly R. Harkcom

A dissertation submitted to the Graduate Faculty of
Auburn University
in partial fulfillment of the
requirements for the Degree of
Doctor of Philosophy

Auburn, Alabama
August 1, 2015

Approved by:

Daniel J. Svyantek, Chair, Professor of Psychology
Elizabeth Brestan-Knight, Professor of Psychology
Jesse Michel, Assistant Professor of Psychology
John G. Veres III, Affiliated Faculty

Abstract

This study unifies divergent conceptualizations of occupational well-being (OWB) to clearly define the construct based on a well-articulated theory. It also validates a new measure of OWB in a practical setting in order to provide researchers and practitioners with an instrument for assessing this construct.

The study defines OWB as a positive evaluation of various aspects of one's job experiences and includes cognitive, affective, and motivational/behavioral components. It proposes that OWB is a multidimensional construct that is composed of two related but distinct dimensions of subjective occupational well-being (SOW-B) and psychological occupational well-being (POW-B). Confirmatory factor analysis supported the distinction between these two dimensions, while a second-order factor analysis showed that these dimensions tap different aspects of a more general underlying concept of OWB.

Significant and strong relationships were found between OWB and both discretionary effort and turnover intention providing support for construct validity. Weak or no support was found for relationships between the various components of OWB and select demographics suggesting that future research should examine how the work context plays a moderating role in these relationships.

Acknowledgements

I would like to thank my advisor, Dr. Daniel Svyantek, for his guidance, support, and patience. I would like to thank my parents, Carol and Larry Harkcom, for their endless encouragement throughout my entire educational career. I would like to thank my amazing husband, Chris, for absolutely everything. I know I would never have made it this far without him. I dedicate this to Aleryn and Cerise, my wonderful little speed bumps yet ultimate motivators, and to Duke, my forever friend.

Table of Contents

Abstract.....	ii
Acknowledgements.....	iii
List of Tables	vi
List of Figures.....	viii
INTRODUCTION	1
Study Purpose.....	1
The Rise of Positive Psychology.....	1
The Origins of Well-being	4
Subjective Well-being.....	7
Psychological Well-being	17
Integrating the Competing Models of Well-being	25
Overview of Occupational Well-being	29
Current OWB Models	33
Proposed Theory of Occupational Well-being.....	39
Proposed Occupational Well-being Dimensions.....	41
Recommendation for the Development of the Occupational Well-being Scale	51
The Impact of OWB on Organizational Performance.....	53
Age and Gender Differences in Occupational Well-being.....	58
Summary of Hypotheses	63
METHOD	65
Procedure.....	65
Participants	65
Measures.....	65
RESULTS	72
Measures.....	72
Assumptions of Normality	72

Reliability of Measures	72
Correlations Among the Measures	73
Hypothesis 1a	73
Hypothesis 1b	75
Hypothesis 2a	76
Hypothesis 2b	77
Hypothesis 3	77
Hypothesis 4a	79
Hypothesis 4b	79
Hypothesis 5	80
Hypotheses 6a-6g	81
DISCUSSION	84
Findings and Related Implications	84
General Implications	93
Study Limitations and Future Direction	96
Summary	99
REFERENCES	101
APPENDIX A	124
APPENDIX B	129

List of Tables

- Table 1: Respondent Demographics
- Table 2: Descriptive Statistics of Study Variables
- Table 3: Skewness and Kurtosis Statistics of Study Variables
- Table 4: Reliability Statistics of Study Variables
- Table 5: Correlations Among Study Variables
- Table 6: Fit Indices of Three-Factor SOW-B Model
- Table 7: Model estimates for Hypothesis 1a
- Table 8: Correlations between latent factors in Hypothesis 1
- Table 9: Fit Indices of Three-Factor SOW-B Model
- Table 10: Model estimates for Hypothesis 1b
- Table 11: Fit Indices of Six-Factor POW-B Model
- Table 12: Estimates for Hypothesis 2a
- Table 13: Fit Indices of Six-Factor POW-B Model
- Table 14: Estimates for Hypothesis 2b
- Table 15: Model Fit Summary for Hypothesis 3: Model 1
- Table 16: Estimates for Hypothesis 3, Model 1
- Table 17: Model Fit Summary, Hypothesis 3: Model 2
- Table 18: Estimates for Hypothesis 3: Model 2
- Table 19: Model Fit Summary for Hypothesis 3: model 3
- Table 20: Estimates for Hypothesis 3, model 3

Table 21: Descriptive Statistics of Job Satisfaction across Gender

List of Figures

Figure 1a: Proposed First Order Model of SOW-B

Figure 1b: Proposed Second Order Model of SOW-B

Figure 2a: Proposed First-Order Model of POW-B

Figure 2b: Proposed Second Order Model of POW-B

Figure 3: Proposed Model of OWB

CHAPTER I

INTRODUCTION

Study Purpose

Well-being research has not defined a consensus about the nature of this construct and its definition. However, recently competing lines of research have unified in an effort to validate a single model of well-being. Within organizations, the concept of occupational well-being has been investigated typically through the measurement of proxy constructs like job satisfaction and negative affect with few comprehensive measures proposed in the literature. The goals of this study are to unify divergent conceptualizations of occupational well-being and provide the validation of a new occupational well-being measure which assesses this unified conceptualization of occupational well-being.

The Rise of Positive Psychology

Before WWII, psychology had three distinct missions: curing mental illness, making the lives of all people more productive and fulfilling, and identifying and nurturing high talent (Seligman & Csikszentmihalyi, 2000). During this time, studies of giftedness (Terman, 1939), marital happiness (Terman, Bittenwieser, Ferguson, Johnson, & Wilson, 1939), effective parenting (Watson, 1928), and the search for the meaning of life (Jung, 1933) flourished. However, various events led to the de-emphasis of the study of happiness and other positive functioning concepts in psychology in lieu of more focused attention on the negative aspects of human behavior. Specifically, World War II proved to be a significant turning point in the field of psychological study, as many

psychological researchers shifted their focus toward examining healing and enduring under conditions of adversity (Seligman & Csikszentmihalyi, 2000). Research at the time focused on the study of pathology, weakness, and repairing damage within a disease model of human functioning while ignoring the other two fundamental missions of psychology. In fact, it was during this time that mental health began to be framed in the negative and thought of as the absence of illness instead of the presence of wellness (Ryff & Singer, 1996). Studies of positive psychological functioning grew sparse as those investigating mental problems became more prevalent over the next several decades. A mid-1990s review of psychological journals found that articles examining negative states outnumbered those examining positive states by a ratio of 17 to 1 (Myers & Diener, 1995).

Still, some mid-century researchers such as Erikson, Maslow, and Rogers maintained that focusing strictly on psychopathology is insufficient because it ignores the positive aspects of life. These researchers believed that people do not simply avoid misery but do, in fact, approach positive incentives and that the absence of positive emotions and response in the literature did not allow for a full picture of human functioning. As a result, multidimensional models of positive psychological functioning emerged (Erikson, 1959; Maslow, 1968; Rogers, 1961). These and other psychologists who were concerned with advancing a more holistic vision of psychology founded the Association for Humanistic Psychology in 1961 and launched the *Journal of Humanistic Psychology* in 1963 in order to open channels for research that focused on issues such as the self, self-actualization, health, hope, love, creativity, nature, individuality, and meaning. Even though humanistic psychology as a field was recognized by the American

Psychological Association in 1971, Seligman and Csikzentmihalyi (2000) argue that it did not attract much of an empirical base.

Significant empirical support for the study of positive human functioning was found when a researcher named Bradburn (1969) conducted a large-sample survey and found that positive and negative affect are statistically independent of one another. Rather than assume that positive and negative affect are two ends of a single continuum, Bradburn confirmed that a score on one of the dimensions is independent from a score on the other. Additionally, the study found that the two dimensions were found to be related to different sets of variables. Positive affect was correlated with higher levels of social contact and more exposure to new experiences. Negative affect was not correlated to either of these variables but was instead associated with indices of anxiety, fear of a nervous breakdown, and physical symptoms of ill-health, which were unrelated to positive affect.

Costa and McCrae (1980) supported Bradburn's findings in a study that showed that pleasant affect correlates moderately with extraversion but not neuroticism, whereas negative affect correlates moderately with neuroticism but not extraversion. The independence of positive and negative affect has since received further support from studies using other measures and methodologies (Bryant & Veroff, 1982; Cacioppo, Gardner, & Berntson, 1999; Diener & Emmons, 1984; Diener, Smith, & Fujita, 1995; Keyes, 2000; Watson & Clark, 1991; Zevon & Tellegen, 1982). These lines of research support the notion that psychological well-being is not simply the absence of ill-being but is an independent construct that should be examined in its own right.

More recently, the movement received support with the appointment of Martin Seligman as the President of the American Psychological Association in 1998. Upon taking the position, he declared that “positive psychology” would be the theme for his term. Although the concept originated with Maslow in his 1954 book *Motivation and Personality*, Seligman is widely considered the father of the modern positive psychology movement. The aim of this movement was to begin to shift the focus of psychology from a preoccupation with repairing the worst things in life to building positive qualities (Seligman & Csikszentmihalyi, 2000). As the editor of *The American Psychologist*, Seligman, along with fellow researchers, published two special issues of the journal in 2000 addressing various aspects of positive psychological functioning. These issues showcased a broad set of research topics, including wisdom, creativity, high intellectual talent, optimism, and flow. The comprehensive *Handbook of Positive Psychology* (Synder & Lopez, 2002) followed soon after and also encompassed a diverse set of topics tied together conceptually by a shared concern with positive functioning. A topic that received considerable attention within these publications was the concept of well-being.

The Origins of Well-being

From the beginnings of intellectual history, there has been considerable argument around the definition of well-being—around what truly constitutes living “the good life” and optimal functioning. This debate has implications for both theory and practice; the way the construct is defined can influence the practices of government, organizations, therapists, and parents (Ryan & Deci, 2001).

In the early and mid-twentieth century, researchers closely studied the demographic correlates of well-being in order to describe the characteristics of a happy person. However, after more than a half a century of research, the general conclusion is that the relationship between demographic variables and well-being is weaker than originally thought (e.g., Campbell, Converse, & Rogers, 1976; Diener, 1984; Diener, Sandvik, Seidlitz, & Diener, 1993; Diener, Wolsic, & Fujita, 1995; Okun & George, 1984). When put together, all of the demographic variables that were studied account for no more than 8% to 15% of the variance in well-being (e.g., Andrews & Withey, 1976; Argyle, 1999; Diener, 1984; Diener et al., 1999). Partly because of these limitations, more recent research has focused instead on defining the construct of well-being and the factors that influence it. This research has featured various approaches to defining, conceptualizing, and studying well-being (Kahneman et al., 1999; Ryan & Deci, 2001; Ryff & Singer, 1998). Two predominant perspectives, each with its own philosophical roots, have emerged (Ryan & Deci, 2001).

Hedonism vs. Eudaimonism. Hedonic psychology is defined as “the study of what makes experiences and life pleasant and unpleasant” (Kahneman, et al., 1999, p. ix). According to the hedonic view, well-being simply consists of happiness and focuses on the experience of pleasant feelings or on the balance between positive and negative affect.

The focus on hedonic happiness dates back to Aristippus, a Greek philosopher from the fourth century B.C., who taught that the goal of life is to maximize the amount of pleasure experienced. Thomas Hobbes in the seventeenth century argued that happiness lies in the successful pursuit of our human appetites. Utilitarian philosophers,

such as Jeremy Bentham in the eighteenth century, argued that the good society is created through individuals attempting to maximize pleasure and promote self-interest.

Modern-day psychologists who have adopted this hedonic view focus on studying pleasures of the mind as well as the body (Kubovy, 1999). Hedonic happiness can come from having the material objects or the opportunities one wishes to have or to experience (Kraut, 1979). Happiness comes not only from physical hedonism but also from attainment of goals or valued outcomes in various domains (Diener et al., 1998).

A competing view, called eudaimonism, takes a broader approach to defining well-being by involving a diverse set of experiences and mechanisms through which people achieve psychological growth, make meaning, and seek purpose in their lives (Lent, 2004). Well-being consists of more than just happiness and striving for as many pleasurable experiences as possible (Waterman, 1993). This view was inspired by Aristotle's quest to understand the actualization of human potential and stresses the importance of fulfilling or realizing one's daimon, or true nature. Aristotle considered hedonic happiness to be vulgar and instead posited that true happiness is found in the expression of virtue.

In its modern-day conceptualization, eudaimonia is a state that occurs when activities in life are congruent with one's deeply held values; it is present when one is moving toward self-realization while developing one's unique potential and furthering one's purpose in life (Waterman, 1993).

Hedonism and eudaimonism were founded on distinct views of human nature and ask different questions concerning how developmental and social processes relate to

well-being. As a result two operational definitions of well-being have emerged: subjective well-being (SWB) and psychological well-being (PWB).

Subjective Well-being

Definition of SWB. Research within the hedonic tradition of well-being has given rise to the concept of subjective well-being (SWB). According to Ed Diener, one of the main proponents of the construct, SWB is defined as “people’s cognitive and affective evaluations of their lives” (2000, p. 34). In other words, a person’s evaluation of his or her life may be in the form of cognitions, such as conscious evaluative judgments about his or her satisfaction with life as a whole, or in the form of affect, such as experiencing unpleasant or pleasant moods and emotions in reaction to life events. One is said to have high SWB if he or she experiences life satisfaction and frequent joy and only infrequently experiences unpleasant emotions such as sadness and anger (Diener, 1984).

An important feature of SWB is that it is subjective, residing wholly within the experience of the individual (Diener, 1984). This definition allows each individual the right to decide whether his or her life is worthwhile and does not rely on the external judgments of behavioral experts. This focus on the respondent’s point of view differentiates the field of SWB from traditional clinical psychology, which focuses more on an external, objective assessment of individual behavior and cognitions. Absent from definitions of SWB are objective conditions such as health, comfort, virtue, or wealth. Although these are seen as potential influences on SWB, they are not an inherent and necessary part of it. The characteristics that are functional and lead to well-being may be

similar across individuals. However, SWB researchers agree that turning to philosophers, psychologists, and other experts instead of the self to prescribe the definition of well-being is limiting (Diener, 1984).

Because of SWB's subjective nature, most hedonic psychology theorists reject a theoretical basis for their approach and argue for a bottom-up empirical approach in which a broad theory is created only after the elementary facts are known (Diener, et al., 1998). Despite the criticism that this approach has drawn (e.g., Ryff, 1989), Diener (1998) asserts that a broad theory cannot be created until more rudimentary facts are known and that SWB is an important concept even without strong theoretical support. Regardless of the resistance to explicit theory, findings from other lines of research have provided indirect support for the hedonic approach (Ryan & Deci, 2001). For example, the expectancy-value approach (e.g., Oishi, Diener, Lucas, Suh, 1999) suggests that SWB is a function of expecting to attain the outcomes that one values. Also, research on pleasure and pain links SWB to behavioral theories of reward and punishment (e.g., Shizgal, 1999) and theories that address the cognitive expectations of such outcomes (e.g., Peterson, 1999).

History of SWB. The concept of SWB emerged in the late 1950s when there was a search for useful indicators of quality of life to monitor social change and improve social policy (Land, 1975). Research at this time emphasized life satisfaction and happiness as components of life quality (Bradburn, 1969; Cantril, 1965). Bradburn (1969) defined happiness as the balance between positive and negative affect. Campbell, Converse, and Rodgers (1976) defined life satisfaction as a function of an individual's perceived distance from his or her ultimate aspirations and asserted that, although people

live in objectively-defined environments, they actually respond to their subjectively defined worlds. This view lends value to SWB as a useful index of people's quality of life. These early researchers laid the foundation for the modern three-component model of SWB, which includes positive affect, negative affect, and cognitive evaluations of one's life satisfaction.

The Components of SWB. Affect, which collectively includes people's moods and emotions, describes people's evaluations of life events. *Positive affect* and *negative affect* are two components of SWB that tap the experience of specific, intense, or defined states summed over different life contexts (Lent, 2004). The third component of SWB is *life satisfaction*, which comprises relatively broad, abstract, cognitive judgments about one's life. Pavot, Diener, Colvin, and Sandvik (1991) define life satisfaction as a "global evaluation by the person of his or her life" (p. 149).

This three-component structure of SWB has been empirically supported in numerous studies, which have suggested that life satisfaction and positive and negative affect are separate but related constructs (e.g., Andrews & Withey, 1976; Diener et al., 2002; Kuppens, Realo, & Diener, 2008; Warr, 1978; Warr, Barter & Brownbridge, 1983). For example, Diener, Smith, and Fujita (1995) used structural equation modeling and multi-method assessment and found that the two constructs of pleasant and unpleasant affect are moderately inversely correlated but clearly separable constructs. Lucas et al. (1996) used multitrait-multimethod matrix analyses to examine the convergent and discriminant validities of the SWB components. They found correlations between self-reported life satisfaction (SWLS; Diener et al., 1985) and positive affect and negative affect (PANAS; Watson et al., 1988) ranging from .42 to .52 and from -.30 to -.51,

respectively, in different samples. Empirical research also has demonstrated that positive and negative experiences have a causal influence on life satisfaction judgments, suggesting that people rely on their emotional experiences to form judgments of how satisfied they are with their lives (Schwarz & Clore, 1983; Schwarz & Strack, 1991).

Measures of SWB. Early research on happiness typically relied on a single self-report measure. For example, Andrews and Withey's (1976) measure simply asked, "How do you feel about your life as a whole?" More recent SWB measures contain multiple items for each of the three components in order to study their interrelations and relationships with other constructs more clearly. SWB can be assessed at the global level or can be assessed at progressively narrower levels. For example, life satisfaction can be divided into satisfaction in life domains such as love, marriage, friendship, and work. Positive affect can be divided into specific emotions such as joy, excitement, and pride. Negative affect can be separated into emotions such as anger, sadness, and anxiety. These components can be assessed with numerous self-report instruments, but the Satisfaction With Life Scale (SWLS; Diener, Emmons, Larsen, & Griffin, 1985) and the Positive And Negative Affect Schedule (PANAS; Watson, Clark, & Tellegen, 1988) have become the most popular and widely used measures of SWB.

The SWLS consists of five items, which assess a participant's satisfaction with life as a whole (Diener et al., 1985). Scoring consists of a 7-point Likert scale with a score of 1 indicating strong disagreement with a statement and a score of 7 indicating strong agreement with a statement. The SWLS demonstrates strong internal consistency and good temporal stability as demonstrated by an alpha coefficient of 0.87 and a 2-

month test-retest reliability of 0.82 (Diener et al., 1985). The SWLS also appears to have strong construct and discriminant validity (Pavot & Diener, 1993).

The PANAS contains ten items on each of the two scales and asks participants to indicate on a five-point scale the extent to which they generally experience a variety of positive (e.g., excited) and negative (e.g., nervous) feelings. Most of the work with the PANAS has been correlational, with the scales showing relationships with external variables that imply validity.

Determinants of SWB. Theories on the nature of SWB can be organized into three perspectives—the top-down approach, the bottom-up approach, and an integrative approach. These approaches differ in terms of their philosophical roots and their implications for understanding the nature and determinants of SWB (Diener, 1984).

Top-Down Approach. The top-down approach asserts that individuals are predisposed to react to events and circumstances in positive or negative ways. In this view, some people tend to be happier because they are predisposed to enjoy life's pleasures and not because they experience a greater number of experiences that most people would consider pleasurable. The strongest support for a temperamental predisposition to experience various levels of SWB comes from the behavior-genetic studies of heritability. These studies, in which twins who are separated at birth are later studied as adults, have found a genetic basis for both positive and negative affect (Lykken & Tellegen, 1996). Tellegen, Lykken, Bouchard, Wilcox, Segal, & Rick (1988) studied SWB in monozygotic and dizygotic twins and found that the monozygotic twins who were reared apart were more similar to each other than were dizygotic twins

regardless if they were reared apart or together. They estimated that genes accounted for between 40% and 50% of the variation in adult SWB.

Other lines of research support the trait-like properties of SWB, including the findings that people briefly react to good and bad events, but after a short time adapt and return to neutrality. For example, months after the event occurred, lottery winners were not happier than non-winners and people with paraplegia were not substantially less happy than those who could walk (Brickman & Campbell, 1971; Brickman, Coates, & Janoff-Bulman, 1978). Silver (1980) also studied paraplegics and quadriplegics to find high levels of unpleasant affect after the accident that produced their disability. However, within eight weeks of the accident, the pleasant affect of these victims was stronger than their unpleasant affect. Supported by studies such as these, Headey and Wearing (1992) proposed that each individual has a SWB baseline or “set point” which is determined by the recurring life events that result from individuals’ personality predispositions. They advanced a “dynamic equilibrium” hypothesis which states that changes in SWB induced by relatively unusual life events are likely to be temporary because stable personality characteristics tend to return individuals to their baseline levels over time.

Another line of research has examined the long-term stability of the various components of SWB. Costa and McCrae (1988) found 6-year stability coefficients in the .50 range for both positive and negative affect. Magnus and Diener (1991) examined life satisfaction scores over a 4-year period to find a stability coefficient of .58. Pavot and Diener (1993) reported a retest-correlation for life satisfaction of .82 over a 2-month period and a retest-correlation of .54 over a period of 4 years. Watson and Walker (1996)

found stability coefficients for positive affect and negative affect over a 7-year period to be .36 and .46, respectively.

These hereditary and stability findings have prompted some to conclude that SWB is determined by personality (Brief, Butcher, George, & Link, 1993). A large body of evidence indeed supports the view that personality is a potent predictor of SWB (DeNeve & Cooper, 1998; Diener & Lucas, 1999; Diener et al., 1999). Fujita (1991) found that positive affect correlated 0.71 with extraversion and that negative affect and neuroticism formed a single, indistinguishable factor. Both McCrae and Costa (1991) as well as Watson and Clark (1992) found negative affect to be strongly correlated with neuroticism and positive affect to be strongly correlated with extraversion. DeNeve & Cooper's (1998) meta-analysis included more than forty thousand adults and found many personality traits significantly associated with SWB. Extraversion and agreeableness were consistently and positively associated with higher levels of SWB, while neuroticism was consistently and negatively associated with higher levels of SWB. Despite the empirical support for the top-down approach to SWB, some believe this approach ignores the potential influence of factors over which people can exercise some control.

Bottom-Up Approach. Bottom-up theorists suggest that well-being is derived from a summation of pleasurable and unpleasurable moments and experiences (Maddi, Bartone, and Puccetti, 1987). People are happy because they experience many happy moments in their lives, and these experiences contribute to people's perceptions of well-being. As with the top-down approach, the bottom-up approach has received empirical support.

Veenhoven (1994) launched a literature review and a meta-analysis rebutting the notion that well-being is strictly a trait. Among his most crucial findings was that their measures become less stable over time. He found an average correlation of well-being over time of .35. He observed average correlations of .60 when measurements were taken several months apart, average correlations of .35 when measurements were taken 5 years apart, and average correlations of .15 when measurements were taken between 10 and 15 years apart. In addition, Veenhoven noted the Wierzibicki (1987) twin study which reported hedonic levels among mono-zygotic twins ($r=.55$) and dizygotic twins ($r=.15$). Veenhoven viewed this study as evidence that there is only a moderate genetic influence on SWB and thus considerable mood differences among identical twins.

If SWB were an inflexible and determined trait, neither the timing nor the context in which the measure was administered would influence the assessment of the construct. However, research has found that daily measures of SWB are relatively distinct from global assessments in which SWB is measured at one point in time (Kahneman, 1999). In addition, domain-specific (e.g., work) measures of well-being correlate only moderately with context-free life satisfaction (Kozma, Stone, and Stones, 2000).

An Integrated Approach. Most SWB theorists have supported a middle ground approach (e.g., DeNeve & Cooper, 1998; Diener, 1996) and believe that traits are useful predictors of SWB but do not sufficiently explain the construct. Researchers have found support for both top-down and bottom-up viewpoints, finding evidence that SWB is somewhat stable and influenced by personality but also influenced by life events (Headey & Wearing, 1989; Ormel & Schaufeli, 1991; Ormel & Wohlfarth, 1991). For example, a trait that is conducive to life satisfaction in young adulthood, such as the ability to control

one's fate, may be detrimental to it in old age (Lucas et al., 2002). Satisfaction with grades and with romantic relationships strongly predict overall life satisfaction in college students; in working adults, however, work satisfaction was a major predictor (Emmons & Diener, 1985). For retirees, it has been found that social participation is the most significant predictor of overall life satisfaction (Harlow and Cantor, 1996). Thus, although the level of one's life satisfaction may be fairly stable, these studies suggest that factors predicting SWB may change over one's lifetime.

In addition to life stages, SWB levels may also be influenced by the interaction between one's personality and a specific life event. In other words, life circumstances may affect well-being differently depending on one's personality. For example, extraverted prisoners have been found to be less happy than introverted prisoners, even though extraverts, in general, are found to be happier than introverts (Kette, 1991). This finding suggests that the situational factors within a prison environment were incompatible with an extroverted personality and combines elements of the top-down and bottom-up approaches. Expanding on this idea, Brief, Butcher, George, and Link (1993) assert that global features of personality and an individual's objective life circumstances influence the ways in which people interpret life events. This interpretation directly impacts SWB. In their model, the interpretation of life events acts as a mediator. They tested and found strong support for this mediated relationship in a study that examined the indirect influence of both negative affectivity (a global personality dimension) and objective health (an objective life circumstance) on SWB.

Lyubomirsky, Sheldon, and Schkade (2005) proposed another integrated model that includes both inherent traits and situational factors. Their "sustainable happiness

model” asserts that happiness is the result of a) genetic predisposition, b) life circumstances, and c) one’s intentional activities. It posits that the essential ingredients for achieving sustainable increases in happiness are one’s volitional activities and habitual performance of appropriate strategies such as regular exercise, meditation, and counting one’s blessings. A subsequent study on the effects of a four-week happiness intervention supported the model with the finding that imagining one’s best possible self led to lasting increases of positive affect (Sheldon & Lyubomirsky, 2006). Additionally, the effectiveness of five positive psychology interventions, which followed Lyubomirsky et al.’s model, was assessed. Two of the five interventions, using signature strengths in a new way and being aware of one’s blessings, led to increases in happiness and decreases in depression for at least six months (Seligman, Steen, Park, & Peterson, 2005; Sheldon & Lyubomirsky, 2006).

Diener (2000) finds further support for the integrated approach in the determinants of SWB. In response to the “dynamic equilibrium” set point theory previously discussed, Diener (2000) asserts that adaptation is certainly an observable phenomenon that may dampen the impact of life events. However, he does not believe that this notion should not be pushed to the extreme to indicate that the environment has no long-term impact on SWB. Some circumstances do seem to continually influence SWB, some adaptation may not be complete, and adaptation may not occur at all in some circumstances (Diener, 2000). Frederick and Loewenstein (1999) found that people adapt rapidly to some circumstances (e.g., imprisonment), adapt slowly to other conditions (e.g., the death of a loved one), and adapt little or not at all to other conditions (e.g., noise and sex). Studies on both widowhood (Lucas, Clark, Georgellis, & Diener,

2003) and unemployment (Lucas, Clark, Georgellis, & Diener, 2004) found that these events led to lower levels of life satisfaction even many years after the event.

In addition, substantial differences in SWB among nations in SWB have been reported, even though there has been ample time for people to adapt to the circumstances in these societies (Diener, Diener, & Diener, 1995). For example, wealthier nations with a good record on human rights report higher levels of SWB than nations with few human rights and in dire poverty (Diener & Suh, 2000). The former Communist nations that had recently gone through much turmoil showed lower rates of SWB than nearby nations and lower rates than what was previously reported in those Communist nations (Diener & Suh, 2000).

Based on these studies, it appears that people do indeed adapt over time, but the adaptation may not always restore levels completely back to the point where they started. These studies support the notion that although life satisfaction is moderately stable over time, life events can have a strong influence even on long-term levels of SWB thus supporting the integrated approach.

Psychological Well-being

History and Definition of PWB. As research within the hedonic tradition has given rise to the concept of subjective well-being (SWB), so has research within the eudaimic tradition given rise to psychological well-being (PWB). Out of the criticisms of SWB grew the eudaimic well-being perspective whose researchers assert that true happiness lies in human potential and growth and is contingent upon committing oneself to a meaningful and purposeful life (e.g., Baumeister, 1991; Dykman, 1998). While

hedonic well-being is related to feeling relaxed, happy, and without problems, eudaimonic well-being is related to feeling challenged and to activities that offer the opportunity for personal growth and development (Waterman, 1993). This tradition draws heavily on the formulations of human development and the existential challenges of life (Keyes, Schmotkin, & Ryff, 2002). PWB refers to optimum psychological functioning; it is a positive state resulting from the pursuit of self-realization (Ryan and Deci, 2001). Happiness is considered a by-product of this pursuit rather than its ultimate goal.

Proponents of the PWB construct assert that the underlying structure of well-being is substantially more complex than SWB literature suggests (Ryff, 1989; Waterman, 1993). While SWB researchers take an atheoretical approach, PWB researchers have drawn upon an extensive body of literature and theories of positive functioning in designing their construct. Three specific bodies of literature provide the theoretical framework of PWB as set forth by Ryff (1989). First, developmental psychology depicts wellness as personal growth across the life span. Erickson's (1959) model of the stages of psychosocial development, Buhler's (1935) formulation of basic life tendencies that work toward the fulfillment of life, and Neugarten's (1973) descriptions of personality change in adulthood and old age are examples of this perspective. Second, clinical psychology offers models of well-being including Maslow's (1968) formulation of self-actualization, Allport's (1961) conception of maturity, Jung's (1933) formulation of individuation, and Rogers' (1961) view of the fully functioning person. Third, mental health literature, though often framed by the negative aspects of psychosocial functioning, includes explanations of positive mental

health such as Jahoda's (1958) positive criteria of mental health and Birren's (1980) conception of positive functioning in later life.

These early conceptions of positive functioning had little impact on empirical studies of well-being in the past due largely to the absence of valid and reliable assessment procedures (Ryff, 1989). In addition, the diversity of these theories makes it difficult to create a single, unified well-being construct (Ryff, 1995). Despite these challenges, Ryff and colleagues have identified similar themes and points of convergence among these theories to develop a theoretical foundation for a multidimensional model of PWB (Ryff, 1989; Ryff & Keyes, 1995; Ryff & Singer, 1996). The model contains six dimensions: Self-acceptance, Purpose in Life, Environmental Mastery, Autonomy, Positive Relations with Others, and Personal Growth.

Dimensions of PWB. Ryff and colleagues (Ryff, 1989; Ryff & Singer, 2008) describe the six dimensions of PWB and discusses how each grew out of the integration of the previously described perspectives in developmental psychology, clinical psychology, and the study of mental health broadly.

Self-Acceptance is one of the most recurring themes in the positive functioning literature and therefore emerges as a central characteristic in the model of PWB. It is considered as a central feature of mental health as well as a characteristic of self-actualization, optimal functioning, and maturity. Self-acceptance, as well as acceptance of one's past life, is also emphasized in life span theories. Therefore, having a sense of self-acceptance means having a positive attitude toward one's self, acknowledging and accepting multiple aspects of one's self including good and bad qualities, and feeling positive about one's past life (Ryff, 1989).

Purpose in Life is a second component of the PWB construct. The definition of mental health includes beliefs that give one the feeling that there is purpose in and meaning to life. Maturity research also emphasizes a clear comprehension of life's purpose, a sense of directedness, and intentionality. Life span theories refer to a variety of changing purposes or goals in life such as being productive and creative. Therefore, positive functioning includes having goals and direction in life, feeling that there is meaning to one's present and past life, and has aims and objectives for living (Ryff, 1989).

Environmental Mastery emerges as the third component of PWB. The importance of one's ability to choose or create suitable environments for the self is emphasized within mental health. Maturity requires participation in a significant amount of activity outside of one's self. In addition, life span development theories also stress one's ability to advance in the world and change it creatively through physical or mental activities. As such, these combined perspectives suggest that environmental mastery occurs when one has a sense of competence in managing their environment, controls a complex array of external activities, makes effective use of surrounding opportunities, and is able to choose or create contexts suitable to his or her personal needs (Ryff, 1989).

Autonomy, the fourth component of PWB, has received considerable attention in both the mental health and clinical psychology literatures that describe self-determination, independence, and the regulation of behavior from within. The self-actualizing person is viewed as showing autonomous functioning and resistance to acculturation. Life span theorists describe the process of turning inward in later years in order to give one the sense of freedom from the standards that control everyday life.

Therefore, an autonomous person is self-determining and independent, is able to resist social pressures to think and act in certain ways, regulates behavior from within, and evaluate one's self by personal standards (Ryff, 1989).

Positive Relations with Others is the fifth component of PWB. Many theories in developmental and clinical psychology emphasize the importance of warm, trusting relationships as a central feature of a well-lived life. Adult development theories also emphasize the achievement of close unions with others. Within the field of mental health, the ability to love others is viewed as a central component. A characteristic of a self-actualizer is the ability to empathize and feel affection for all human beings. Therefore, a positive functioning person has warm, satisfying, trusting relationships with others; is concerned about the welfare of others; is capable of strong empathy, affection, and intimacy; and understands the give and take of human relationships (Ryff, 1989).

The sixth and final component of PWB is *Personal Growth*. One must not only achieve the five characteristics mentioned previously to optimally function but also must develop one's potential and grow as a person (Ryff, 1989). Rogers' (1965) fully functioning person, for example, must be open to experience and continually develop. Life span theories give clear emphasis to continued growth and the acceptance and confrontation of new challenges or tasks. Therefore, a positive functioning person has a feeling of continued development, sees one's self as growing and expanding, is open to new experiences, has a sense of realizing one's potential, and sees improvement in one's self and behavior over time (Ryff, 1989).

Through a confirmatory factor analysis, Ryff and Keyes (1995) tested the proposed theoretical structure of this 6-dimension model. The model that best fit the data

was one containing six primary factors joined together by a single higher-order factor. In other words, they found support that PWB has its effects through the six content domains specified a priori by guiding psychological theory (Ryff & Keyes, 1995). Other studies have examined the factorial validity of the model of PWB and have found support for this hierarchical structure as well (Cheng & Chan, 2005; van Dierendonck, 2004).

Measures of PWB. Ryff (1989) created a new measure for PWB called the Scales of Psychological Well-Being (SPWB). The SPWB is a structured, self-report instrument made up of six scales representing the six dimensions of PWB. Each scale contains twenty items equally split between positive and negative items. Items are scored on a 6-point scale ranging from strongly agree to strongly disagree. Ryff (1989) followed a rigorous, construct-oriented approach in order to develop the items in the measure. She first created definitions that described high-scorers and low-scorers for each dimension continuum. Using these definitions, item writers developed eighty items for each scale, including forty items for each end of the continuum. The quality of the items was assessed on item ambiguity, redundancy, fit with dimension definition, ability to differentiate the item from items on other dimensions, and ability to produce responses with variance. After some items were eliminated based on these criteria, the remaining items were administered to a sample of participants. An analysis of item-scale correlations further reduced the list to twenty items per dimension.

Psychometric support has been found for the PWB. The scales correlate positively with other measures of well-being, such as the Affect Balance Scale (Bradburn, 1969) and the Life Satisfaction Index (Neugarten et al., 1961) and correlate negatively with measures of depression like Zung's (1965) Depression Scale. Internal

consistency coefficients for the six scales range from 0.82 to 0.90 (Schmutte & Ryff, 1997). Shortened versions of this measure (e.g., Ryff, Lee, Essex, & Schmutte, 1994; Van Dierendonck, 2004; Ryff & Keyes, 1995) are often used for practicality reasons and show correlations between .70 and .89 with the longer 20-item per scale version (Ryff & Keyes, 1995).

Other validation studies have been conducted on the PWB scales and found links between the various aspects of PWB and such psychological constructs as personal goals (Carr, 1997; Riediger & Freund, 2004), coping strategies (Kling, Setzer, & Ryff, 1997), social comparison processes (e.g., Heidrick & Ryff, 1993), and emotional regulation (Gross & John, 2003). Ryff et al. (2004) used a sample of aging women to correlate the six dimensions of the SPWB with various biomarkers and found that older women with higher levels of personal growth and purpose in life were found to have better neuroendocrine regulation. Those with higher levels of environmental mastery, positive relations with others, and self-acceptance showed lower levels of insulin resistance. In this study, they also found that those with higher levels of environmental mastery experience longer periods of the much-needed REM sleep.

Antecedents of PWB. Similarly to how the nature of SWB has been examined to determine how it may be influenced, so has the nature of PWB. As previously discussed, the constructs of personality and SWB have been intricately linked perhaps mostly due to the fact that well-being had predominantly been described in terms of affect, which has been shown to be closely related to various components of personality (Costa & McCrae, 1985). Since affect is related to and often an antecedent of personality, measuring them at the same time and from the same person does not allow for the two constructs to be

distinguished (Lent, 2004). Further, SWB and personality are measured in very similar ways; the items used to measure each are often indistinguishable (Ryff, 1989).

Therefore, determining the impact of the environment beyond the impact of personality can pose a challenge to SWB researchers.

While personality is thought to be a heavy influence on one's SWB, PWB is thought to include multiple facets of psychological functioning, thus highlighting distinctions that do exist between personality and well-being (Ryff, 1994). Personality traits that influence SWB lead to stable patterns of behavior and are neither inherently good nor bad. In contrast, PWB is expected to change in response to life events and developmental achievements and represents an unambiguously desirable psychological state (Schmutte & Ryff, 1997). Despite the conceptual distinction, research has suggested that stable traits do influence PWB. Schmutte & Ryff (1997) found that extraversion, conscientiousness, and low neuroticism were linked to the PWB dimensions of self-acceptance, environmental mastery, and life purpose; openness to experience was linked to PWB's personal growth; agreeableness and extraversion were linked to PWB's positive relationships; and low neuroticism was linked to PWB's autonomy.

Despite links between personality characteristics and the various PWB dimensions, research suggests life experiences and individuals' interpretations of these experiences are important predictors of PWB. For example, in a study on mid-life parenting, parents' perceptions of how their grown children "turned out" and how these children compare with the parents themselves were related to the parents' environmental mastery, purpose in life, and self-acceptance (Ryff, Lee, Essex, & Schmutte, 1994). The physical health problems of aging women, combined with their assessments of how they

compare with other older women, explain substantial variance in reports of personal growth, positive relations with others, and autonomy (Heidrich & Ryff, 1993). Other research has found that PWB can be influenced by life experiences such as early parental loss or parental divorce (Maier & Lachman, 2000), growing up with an alcoholic parent (Tweed & Ryff, 1991), trauma disclosure (Hemenover, 2003), community relocation (Smider, Essex, & Ryff, 1996; Ryff & Essex, 1992), caregiving (Marks, 1998), and change in one's own marital status (Marks & Lambert, 1998). In summary, while it appears that stable personality traits influence PWB, ample research evidence suggests that life events and how those events are interpreted have a significant influence as well.

Integrating the Competing Models of Well-being

The concepts of SWB and PWB have developed separately over time, were founded on distinct views of human nature, and arrive at different conclusions regarding the processes that impact well-being. Research has suggested that SWB and PWB are in fact distinct constructs. McGregor and Little (1998) analyzed a diverse set of mental health indicators and found two factors, one reflecting happiness and the other meaningfulness. Measures of SWB loaded most highly on the happiness factor, whereas PWB components of growth and purpose loaded more strongly on the meaningfulness factor. Their results suggest that, when pursuing personal goals, doing well and feeling happy (a component of SWB) may be disconnected from finding meaning and acting with integrity (components of PWB). Similarly, Nix, Ryan, Manly, and Deci (1999) found that some conditions foster SWB without promoting PWB. Specifically, they showed that succeeding at an activity while feeling pressured to do so resulted in

happiness (a positive affect closely linked to SWB), but it did not result in vitality (a positive affect more closely linked to PWB), thus highlighting the distinctions between the two constructs.

Despite these distinctions, research evidence also suggests that SWB and PWB are related constructs. Waterman (1993) found a strong correlation between hedonic happiness and eudaimonic well-being measures ($r=.86$). Compton, Smith, Cornish, and Qualls (1996) investigated the relation among 18 indicators of well-being and mental health and discovered two factors; one factor reflected SWB (e.g., happiness, life satisfaction) while the other reflected personal growth (e.g., openness to experience, maturity). The two factors, while distinct, were found to be moderately correlated ($r=.36$). In addition, Ryff and Keyes (1995) used data from multiple studies to investigate the relationship between the various components of SWB and PWB. They found moderate associations between two of the PWB scales (Self-Acceptance and Environmental Mastery) and measures of happiness and life satisfaction.

Both the SWB and the PWB lines of research have individually run into problems when attempting to fully explain positive psychological functioning. Diener (2000) admits that SWB is not synonymous with mental health. For example, thought disorders or diminished reality-testing capacities (e.g., schizophrenics, manic states of bipolar disorder) may sometimes report extreme happiness and thus may conform with SWB definitions of well-being (Robbins & Kliewer, 2000). One of Ryff's arguments against using SWB instruments to measure well-being was that there were critical aspects of positive functioning that were not accounted for. In order to test this, Ryff (1989) examined the convergence of PWB's six dimensions with prior measures of well-being

used in research. She found that the PWB dimensions of self-acceptance and environmental mastery were strongly associated with measures of life satisfaction, affect balance, and morale—all conceptualizations of SWB. However, the other four PWB dimensions of positive relations with others, autonomy, purpose in life, and personal growth were not as closely related to those measures. In other words, there appears to be some overlap between SWB and PWB, but there are other aspects of positive functioning within PWB that are distinct from SWB and not being measured by SWB instruments. These findings support the notion that too much emphasis has been given to short-term affective well-being at the expense of more enduring life challenges such as having a sense of purpose and direction, achieving satisfying relationships with others, and gaining a sense of self-realization (Ryff, 1989). Thus, while SWB may be an important concept to measure, it alone does not describe mental health and a more comprehensive measure of well-being is necessary to fully understand individual positive functioning.

Similarly, Ryff admits that PWB is not the sole descriptor of mental health. Some people may function well in many aspects of their lives but are not particularly happy. It would be difficult for a person to function well over a sustained period of time if he or she was depressed or suffered from debilitating anxiety (Diener, 2000).

For these reasons, some researchers suggest well-being is best described as a multi-dimensional phenomenon that includes aspects of both SWB and PWB (e.g., Lent, 2004; Ryan & Deci, 2000). SWB and PWB appear to represent intricately related forms of well-being that can be brought together within a single conceptual framework. For example, people can experience happiness in the midst of a challenge (Nakamura & Csikzentmihalyi, 2002) and the pursuit of engaging goals offers one important route

towards hedonic satisfaction (e.g., Locke & Latham, 2002). When taken together, the two lines of research have provided a detailed picture of how various factors, both trait-based and contextual, relate to the nature and promotion of wellness (Ryan & Deci, 2001).

Recently researchers have begun to explore the integration of the SWB and PWB constructs into a comprehensive model of flourishing mental health. Keyes et al. (2002) tested the latent structure of well-being through various theoretical models. Through exploratory factor analysis, they found a two-factor structure suggesting the measures of SWB and PWB constitute distinctive factors with partially overlapping indicators. Through confirmatory factor analysis, they found that the best fitting model was one in which SWB and PWB were represented as two oblique, or statistically related, factors. Keyes (2005) later expanded on this finding by proposing and testing a model that integrates three current models of well-being—SWB, PWB, and social well-being. Social well-being is a primarily public phenomenon that focuses on the tasks encountered by adults in their social lives (Keyes, 1998). This differs from the social component of PWB which is primarily a private phenomenon focused on the challenges encountered in private lives (Ryff, 1989). Confirmatory factor analysis indicated the model of best fit was one containing two oblique second-order factors with social well-being loading on the PWB factor (Keyes, 2005). Gallagher, Lopez, and Preacher (2009) replicated these findings, which support the position that PWB and SWB are separate but related constructs. More recently, an investigation of intrinsic motivation found an asymmetric relationship between SWB and PWB. Specifically, a large percentage of activities rated high on PWB were also rated high on SWB, whereas many activities high on SWB were

not highly rated on PWB. In other words, nearly all activities that caused an increase in PWB had the same effect on SWB. Conversely, many activities that caused an increase in SWB had no influence on PWB, suggesting that PWB may be a related but distinct sub-component of SWB (Waterman, Schwartz, and Conti, 2008).

Given these recent findings, more research is needed to refine and validate an integrated approach to well-being that includes both SWB and PWB. Such an approach could result in more precise assessment of the construct and thus a better understanding of the nature, causes, and consequences of well-being. In summary, in order to assume a full understanding of mental health and positive functioning, a solid bridge must be formed between the competing lines of SWB and PWB research and an integrated, multidimensional model must be created and tested. While this integration has begun at the context-free or global level, there has been little research conducted within specific domains, such as the workplace. Well-being in the workplace, or occupational well-being, is the focus of the next section.

Overview of Occupational Well-being

Well-being at work has become a prevalent research topic in recent decades. However, this research is vast and unfocused, with a host of approaches to conceptualizing and measuring the construct making it difficult to accurately assess (Danna & Griffin, 1999). Conceptualizations of occupational well-being (OWB) in research include stress (e.g., Brief & Atieh, 1987; Briner, 1994), physical health (e.g., Cooper, Kirkcaldy, & Brown, 1994; Kuhnert & Palmer, 1991), emotional exhaustion (e.g., Boles, Johnston, & Hair, 1997), affect at work (e.g., Warr, 1990), burnout (e.g.,

Tunc & Kutanis, 2009), job satisfaction (e.g., Kirkaldy, Furnham & Cooper, 1994), depression (e.g., Dunn, 1996), and employee engagement (Harter, Schmidt, & Keyes, 2002). Given these numerous conceptualizations, there is a need to refine the construct and to develop a coherent measure to assess well-being in the workplace.

Domain Specificity. While there are established context-free instruments of both SWB and PWB (e.g., Diener, 1984; Ryff, 1989), these measures will not provide the most accurate assessment and optimal understanding of the construct within the work domain. If one is satisfied with one's life, this does not automatically indicate that the person is equally satisfied with his or her job. Quality of life research has examined the relationship among the components of general well-being and OWB to understand the similarity and differences between the two constructs. For example, the correlation between overall job satisfaction and overall life satisfaction has been found to range between .35 (Tait, Padgett, & Baldwin, 1989; Hart, 1999) and .60 (Judge & Watanabe, 1993; Spector, 1997) suggesting some overlap but also a moderate amount of unexplained variance. In a study of American adults, non-work satisfaction was found to be a stronger predictor of overall life satisfaction than was job satisfaction (Near, Smith, Rice, & Hunt, 1983). Hart (1999) demonstrated that the non-work domain contributes more than the work domain to overall and global levels of psychological well-being in a police officer population. In a longitudinal study of Australian adults, satisfaction with health, marriage, sex, and standard of living each accounted for between 10% and 25% of the variance in life satisfaction, while job satisfaction accounted for 3% (Headey, Glowacki, Holmstrom, & Wearing, 1985). In addition, relationships with job-related antecedents (i.e., decision latitude and job demands) have been found to be stronger for

affective well-being at work than with context-free well-being (Warr, 1990). While there is some shared variance, these findings suggest that domain-specific and context-free indices of well-being cannot be used interchangeably as they are related but different constructs.

Additional support for the use of a job-specific measure of well-being comes from the Abstract-Specific Hypothesis (Page & Vella-Brodrick, 2009). This hypothesis claims that what respondents attend to when asked questions concerning the quality of their lives depends on how abstract or specific the mode of measurement is (Davern, Cummins, Stokes, 2007). For example, when asked the abstract question “How satisfied are you with your life?” people do not evaluate every aspect of their life before answering but instead make relatively fast decisions using heuristics, which includes their current mood (Tversky & Kahneman, 1974). Schwarz and Strack (1999) supported this theory and found that individuals attend more specifically to the domain in question, such as work, and rely less on heuristics when the level of question specificity increases.

In summary, in order to adequately capture the subtleties, complexities, and variation of employees’ cognitive and affective experiences at work, the use of domain-specific measures of well-being are necessary (Daniels, 2000; Warr, 1990).

Positive and Negative Affect in OWB Measure. Just as mental illness has dominated the general mental health research, the “stressors-and-strain” approach has dominated employee health research over the past several decades. According to Beehr (1995), “stressors,” which are characteristics of the work environment, cause employee “strain” which manifests itself in negative psychological and physiological responses. Similarly, Kyriacou and Sutcliffe (1978) defined occupational stress as the experience of

unpleasant emotions, such as tension, frustration, anxiety, anger, and depression. This extensively-used definition of stress is similar to definitions of psychological distress and negative affect which are components of SWB.

The stressors-and-strains approach has been challenged in recent years within the quality of life and work psychology literature for being too narrow (Hart & Cooper, 2001). Hart (1999) asserts that occupational stress researchers must move beyond the traditional stressors-and-strains approach and focus on developing coherent theories that integrate both positive and negative aspects of employees' work. Research has demonstrated that positive and negative experiences make independent contributions to levels of employee well-being and thus cannot be considered merely opposite ends of the spectrum (Hart, 1999). Positive work experiences and positive emotional responses, which are typically not considered in the stressors-and-strains approach, have been shown to influence individual well-being outcomes. For example, it has been commonly asserted that withdrawal behaviors, such as absenteeism, turnover, and submitting stress-related workers compensation claims, are influenced primarily by negative work experiences and levels of distress (Hart & Cooper, 2001). George (1996) challenged this assumption with research that suggests that positive affect may be more important than negative affect in determining some types of withdrawal behaviors. Similarly, within a sample of police officers, Hart and Cotton (2003) examined the determinants of reported intention to leave the organization due to stress-related problems and found that a lack of positive affect, manifested through feelings of low energy and a lack of pride in the job, was a strong predictor of withdrawal behaviors. And, contrary to the stressors-and-strains approach, no significant relationship was found between negative affect and

withdrawal behaviors. In other words, the absence of positive affect rather than the presence of negative affect influenced withdrawal behavior intentions in this study.

Much of the variance remains unaccounted for in studies that focus on correlating levels of distress with withdrawal behaviors (Harrison & Matocchio, 1989). Therefore, including measures of positive experiences and positive emotional states in an OWB instrument will increase understanding of the nature, causes, and consequences of the construct.

Current OWB Models

In order to create a valid assessment of OWB, the construct must be specifically and clearly defined. As discussed, many employee health researchers have defined well-being narrowly as the absence of stress. Another popular approach to measuring OWB has been to assess employee job satisfaction, either globally or as a summation of satisfaction with various job domains (Spector, 1997). This approach has been criticized as being an inadequate and incomplete operationalization of well-being at work (Wright & Cropanzano, 1997, 2004). These narrow definitions have hindered the development of a comprehensive instrument that could be used consistently by researchers within the field (Pettersson & Arnetz, 1997). However, several models have emerged in an attempt to fill this void and conceptualize OWB more comprehensively by including a combination of affective, motivational, behavioral, cognitive, and psychosomatic dimensions.

Hart and Cooper's Organizational Health Framework. Hart and Cooper (2001) created a holistic model of organizational health derived from the organizational

health framework (Hart, 1999)—a theory-based framework describing how individual and organizational factors interact to impact employee well-being and organizational performance. Their model was developed as a reaction to the previously discussed stressors-and-strain approach which largely ignores positive work experiences, positive work emotions, and the impact stress has on the broader organization. This failure to link the stress process to organizational performance has tended to marginalize the issue of occupational stress in the broader management and organizational behavior literature.

Their comprehensive research model incorporates a range of individual characteristics, such as the enduring personality characteristics of emotionality and extraversion (Hart & Cooper, 2001). The model also incorporates organizational characteristics, which include organizational climate, as well as employee's positive and negative experiences of work. These individual and organizational characteristics together influence levels of occupational well-being which in turn impacts organizational performance such as compensation claims, discretionary effort, customer satisfaction, medical expenses, sickness absences, and turnover (Hart and Cooper, 2001).

Hart and Cooper's model aligns with Diener's (2000) overall SWB approach and defines OWB as having two components. First, the cognitive component that reflects employees' judgments about the levels of satisfaction with their work is termed job satisfaction. Job satisfaction represents an individual's evaluative judgments based on the weighing of positive and negative experiences at work and thus is a summary index of how satisfied an individual is with work (Hart, 1999). Hart agreed with critics (Warr, 1990; Daniels, 2000) who state that a comprehensive model of well-being should not solely measure job satisfaction and that measures of dispositional affect are crucial as

well. Thus, Hart and Cooper (2001) inserted an emotional component comprised of positive and negative affect, which are termed morale and distress, respectively. Positive affect, or morale, reflects a pleasurable emotional state at work characterized by terms such as pride, energy, and enthusiasm. Negative affect, or distress, includes emotional states such as anger, guilt, anxiousness, and sadness (Hart, 1999).

Hart and Cooper (2001) did not specifically design an instrument to measure their OWB construct. Later research, however, did investigate the applicability of various aspects of their broader organizational health model across various employee populations. In this study, OWB was conceptualized only as levels of distress and morale and excluded the cognitive component. However, significant relationships were found between this conceptualization of OWB and organizational climate, positive and negative employment experiences, and personality (Hart & Cotton, 2003).

Warr's Multi-dimensional Model of Mental Health. Warr (1990) designed a comprehensive model of mental health at work that included both work-specific affect and various behavioral components. His construct of "affective well-being" is described in terms of two diagonal axes called "pleasure" and "arousal." Warr's model was directly influenced by Russell's (1980) circumplex model of affect, which postulates that the underlying structure of affective experience can be characterized as an ordering of affective states along the circumference of a circle. The similarity between any two affective states is presumed to be determined by their distance from one another on the perimeter of the circle. Russell (1980), Thayer (1989), and Watson and Tellegen (1985) believed that the two orthogonal dimensions of "pleasure" and "arousal" account for most of the variance in emotional states. A particular degree of pleasure or displeasure may be

accompanied by high or low levels of arousal just like a particular quantity of mental arousal may be either pleasurable or unpleasurable. Thus, Warr (1990) describes a person's affective well-being at work in terms of its location relative to these two dimensions.

He asserts that there are three principal axes for measuring affective well-being. The pleasure-displeasure axis is described as the index of job satisfaction. The second axis runs from anxiety to comfort; feelings of anxiety combine low pleasure with high mental arousal, while comfort combines pleasure with low arousal. The third axis runs from depression to enthusiasm, with low pleasure and low mental arousal representing depression and high pleasure and arousal representing enthusiasm. Variations in arousal, which is uncorrelated with the pleasure axis, are not considered on their own to be an indicator of well-being and thus is not a dimension in and of itself (Warr, 1990).

Warr (1990) created an instrument to measure the second and third axes of his construct. The anxiety-comfort axis was assessed through the adjectives "tense," "uneasy," "worried," "calm," "contented," and "relaxed." Internal reliability analyses provided a coefficient alpha of .76. The depression-enthusiasm axis was tapped by the terms "depressed," "gloomy," "miserable," "cheerful," "enthusiastic," and "optimistic." The coefficient alpha for these items was .80. These adjectives were preceded by the question, "Thinking of the past few weeks, how much of the time has your job made you feel each of the following?" Warr (1990) tested his model of affective well-being using an occupationally diverse sample of working adults. Construct validity of the model was supported through patterns of correlations with demographic and occupational factors.

Warr (1990) believed that mental health is also exhibited through behavior in transactions with the environment. Thus, in addition to affective well-being, Warr's model of mental health also incorporates behavioral components which are similar in some aspects to Ryff's (1989) components of PWB. Warr admits that behaviors are conceptually distinct from the feelings involved in well-being but asserts that they often determine the level of an individual's affective well-being, tend to be valued as indicators of good mental health, and are likely to be observed in the workplace setting (Warr, 1994). He termed the first behavioral component *competence* which "covers a person's ability to handle life's problems and act on the environment with at least a moderate amount of success" (Warr, 1990, p. 85). This has been studied by numerous researchers under such terms as effective coping, environmental mastery, and self-efficacy. Warr measured this component with items such as "I can do my job well" and "In my job, I often have trouble coping." Warr (1990) termed the second behavioral component *aspiration*. A healthy person at work establishes challenging goals in his or her job and actively seeks ways to attain them. Warr measured this component with items such as "I enjoy doing new things in my job" and "I am not very concerned how things turn out in my job." He established coefficient alphas of .68 and .62 for his measures of competence and aspiration, respectively. In later research, Warr (1994) theorized a third behavioral component of mental health, which he called *autonomy*. He described it as the tendency to strive for independence and self-regulation, to resist environmental pressures, and to determine one's own opinions and actions (Warr, 1994).

Warr (1990) provided psychometric support for affective well-being as well as his first two behavioral components through associations with demographic and job

characteristics. For example, he found that older people exhibit greater job-related well-being than younger people, and that employees in high-level jobs report more aspiration than those at lower levels. He also found that employees in high-level jobs report significantly more job-related enthusiasm and also report higher levels of anxiety. In addition, perceived workload was found to be significantly related to levels of anxiety.

Van Horn, Tarris, Shaufeli, and Schreurs' Multi-dimensional Model of OWB. Van Horn, Tarris, Shaufeli, and Schreurs (2004) draw upon the research by Ryff (1989) and Warr (1987) to create a multi-dimensional model of well-being specific to the work environment. They recognize that while the two approaches are distinct, they do have a substantial degree of overlap and thus can be combined into a work-specific model of well-being. Van Horn and colleagues' model organizes the various components in Ryff's and Warr's models to form three dimensions. The *affective well-being* dimension incorporates Ryff's self-acceptance component and Warr's anxiety, depression, and job satisfaction components. The *professional well-being* dimension is made up of Ryff's personal growth, purpose in life, and autonomy components as well as Warr's components of aspiration, competency, and autonomy. The *social well-being* dimension is comprised of Ryff's environmental mastery and quality of relations with others components. Van Horn et al. (2004) also add two other dimensions to their model. The fourth dimension is termed *cognitive well-being* and describes the level of cognitive weariness or emotional exhaustion that an employee has on the job. The fifth and final dimension measures *psychosomatic well-being* which comprises indicators of an individual's physical health.

Van Horn et al. (2004) found support that the five proposed dimensions of well-being were distinct. They also found that all five constructs loaded onto a second order factor of occupational well-being but that professional, social, and affective well-being had the highest factor loadings. As a result, the authors suggest that these three components are the central aspects of occupational well-being while cognitive and psychosomatic well-being play a lesser role in defining the construct. However, a key limitation that the researchers point to is the fact that many of the measures they used, such as the job satisfaction scale, were specific to the teacher sample. As a result, the results may not be generalized to other samples in other work contexts.

Despite these initial studies to begin building an integrated model of OWB, there continues to be a need to develop valid and reliable instruments to evaluate the construct. The summary of current approaches highlights the variety of different conceptualizations of OWB and the need to create a comprehensive, cohesive measure and a common taxonomy for research (Danna & Griffin, 1999). Doing so will provide researchers and practitioners with a well-articulated construct for more precise research and measurement.

Proposed Theory of Occupational Well-being

The current research attempts to draw upon and integrate the existing SWB and PWB literature to clearly define OWB and create a practical and testable model. The proposed measure of OWB was designed to address some of the weaknesses of current conceptualizations. First, the instrument is domain-specific in that it considers the work context within the items themselves. Second, it includes both negative and positive

emotions at work allowing for untapped OWB variance to be explained. Third, it integrates competing models to form a comprehensive, integrative, and cohesive model of flourishing mental health at work. Specifically, it draws upon research by Hart and Cooper (2001), Warr (1990), and Ryff (1989) in order to address the construct specification problems currently in the literature. It also will provide researchers with a well-articulated theory of OWB as well as an instrument to assess this construct.

This study defines OWB as a positive evaluation of various aspects of one's job experiences and includes cognitive, affective, and motivational/behavioral components. The study hypothesizes that OWB is a multidimensional construct composed of two related but distinct dimensions. The first dimension is termed subjective occupational well-being (SOW-B) and is comprised of an affective as well as a cognitive component. The second is termed psychological occupational well-being (POW-B) and is comprised of six motivational/behavioral components: Professional Self-Acceptance, Positive Work Relationships, Work Autonomy, Environmental Mastery, Job Purpose, and Job Growth. SOW-B and POW-B are proposed to load onto a second-order factor of OWB.

The two dimensions assess different features of what it means to be well at work. SOW-B involves evaluations of work affect and quality of work life and speaks to whether one is happy at work in a general sense. POW-B examines perceived thriving given the challenges one faces at work and addresses whether one finds meaning at work. An individual can be satisfied and have more good experiences than bad experiences at work but may not be reaching his or her full potential. Conversely, it is possible that an individual may work hard, achieving all of his or her work goals, and get along well with coworkers but is not necessarily happy with his or her job. In order to truly be "well" at

work, one must possess both of these characteristics, thus the need to include both in a comprehensive model of the construct.

Proposed Occupational Well-being Dimensions

Subjective Occupational Well-being (SOW-B). Diener's model of SWB has been used to describe general well-being on many occasions and has proven to be an effective model in a context-free environment. Hart and Cooper (2003) and Warr (1990) draw upon a considerable body of empirical evidence in the quality of life literature that describes the structure of SWB (e.g., Diener, 2000; Heady & Wearing, 1992) to create work-specific models which include both an affective and a cognitive component.

However, in their studies to test their models only one of the components is used—either positive and negative affect *or* job satisfaction. The current study proposes that both the cognitive and the affective components of SWB are essential for inclusion in a model of subjective well-being at work.

Job Satisfaction. Being satisfied with one's job has been shown to be associated with various components and outcomes of OWB such as self-esteem at work (Reza, 2003), employee affective well-being (Wright & Cropanzano, 2000), frequency of absences at work (Dow & Stephen, 1985), and intentions to leave the organization (Eby, Freeman, Rush, & Lance, 1999). Additionally, in a sample of midwives, significant relationships were found between job satisfaction and both emotional exhaustion and depersonalization (in relation to treatment of clients and co-workers) (Oncel, Ozer, & Efe, 2007). Finally, in a study of stress levels among educators, job stress and a lack of job satisfaction were found to be highly associated with many stress-related physical

illnesses such as hypertension, heart disease, and stomach ulcers (Peltzer, Shisana, Zuma, Van Wyk, & Zungu-Dirwayi, 2009). Therefore, the proposed scale of SOW-B includes an assessment of job satisfaction.

Positive and Negative Work Affect. Hart (1994) found that psychological distress (negative affect) and morale (positive affect) contributed equally to teachers' overall satisfaction with their job. Hart, Wearing, and Heady (1994) studied the contribution of negative and positive work-related experiences to a police officer's perceived quality of life. They found that organizational hassles (negative experiences which led to negative affect) and uplifts (positive experiences which led to positive affect) were significant predictors of quality of life at work.

Greenglass and Fiksenbaum (2009) studied psychological functioning within three different populations and found significant relationships between positive affect and depression within first year university students, mastering independent functioning following major surgery within rehabilitation patients, and absenteeism within an employee sample. Therefore, the proposed scale of SOW-B includes measures of both positive and negative affect at work. In summary, the current research proposes the inclusion of both a cognitive and an affective component in the measurement of SOW-B.

Psychological Occupational Well-being (POW-B). Ryff's (1998) effort to develop a theory based on conceptualizations of well-being is more extensive and rigorous than other well-being researchers. Because OWB is a domain-specific means to examining well-being, it is feasible that the existing theories related to positive functioning by Ryff (1989) might be applicable to a theory of well-being within the

workplace. As a result, this study proposes a theory of POW-B that is based on the work of Ryff and her six dimensions of PWB.

Positive Work Relationships. Researchers in the field of well-being have long believed that social support plays a large role in an individual's mental health (e.g., Lyubmorsky, King, & Diener (2005); Quick, Quick, Nelson, and Hurrell, 2003). Bradburn (1969) found social relationships to be one of the strongest correlates of positive emotions. Similarly, Diener and Seligman (2002) found that the most consistent characteristics of the happiest individuals were strong positive social relationships. While some researchers have found it to have a direct impact on well-being (e.g., Ganster, Fusilier, & Mayes, 1986), others have found that it may act as a moderator between stressors and well-being (Seers, McGee, Serey, & Graen, 1983). Regardless, much support exists for the impact that social relationships has on well-being.

Similar support has been found in the workplace suggesting that work relationships have a direct positive effect on an individual's level of OWB. For example, employees who report having satisfying relationships and social support at work report less occupational strain and work distress (Frone, Yardley, & Markel, 1997; Viswesvaran, Sanchez, & Fisher, 1999). Within a nursing sample, perceived social support of co-workers has been found to be positively related to health and job satisfaction (Bradley & Cartwright, 2002). In a study of the occupational stress and psychological well-being of accountants, main effects of social support on psychological well-being at work were discovered (Daniels & Guppy, 1994). In addition, supportive supervisors and general co-worker support has been found to facilitate job satisfaction (Parasuraman, Greenhaus, & Granrose, 1992).

Other research in the work domain has supported the moderating effects of social support at work. Stress models have identified social support as an important resource or coping mechanism that can reduce the negative effects of stressors (Thomas & Ganster, 1995). For example, social support was found to be a moderator in the relationship between changes at work and employee well-being in women executives (Adejumo, 2008). In other words, having positive working relationships acted as a buffer to lessen the impact of undesirable changes in the work environment on individual well-being. Etzion (1984) also found the work stress-burnout relationship to be moderated by supportive relationships in the work environment (e.g., coworkers, supervisors), especially for men. Similarly, Burke (1987) found that a lack of social support was related to higher levels of work-family conflict.

The specific moderating effect of a supportive relationship with a supervisor has also been examined. Given similar work situations, lower work-family conflict was reported for employees who had supervisors who were supportive (Goff, Mount, & Jamison, 1990). A supportive supervisor may make work situations less stressful by discussing family-related problems and being flexible when emergencies arise (Roskies & Lazarus, 1980).

While Ryff has suggested that this dimension is important for general PWB, the research confirms that it is also likely that the relationships that individuals form at work can enhance their levels of OWB. Therefore, the proposed scale of POW-B assesses the quality of relationships an individual has formed within their organization.

Job Purpose. Individuals strive to fulfill needs for purpose, values, efficacy, and self-worth within any domain of life, including work (Baumeister, 1991). Work as a

source of meaning and purpose has been of particular interest to organizational scholars and practitioners as it is commonly believed that finding meaning within one's place of work is expected and that "meaningful work" is as important as pay and security and perhaps even more so (O'Brien, 1992). Interest in this area has also been fueled by the assumption that meaningful work influences various job and organizational attitudes, as well as individual motivation and performance (Robertson, 1990). One of the most common outcomes linked to meaningful work is satisfaction with one's job. Hackman and Oldham's (1976) widely cited Job Characteristics Model indicates that various characteristics of the job predict experienced meaningfulness at work which in turn influences a number of personal and work outcomes including internal work motivation, general job satisfaction, growth satisfaction, lower absenteeism, lower turnover, and work effectiveness.

Research examining the link between job purpose and meaning with OWB has been sparse, but it does suggest that meaningfulness is associated with psychological and even physical health as well as OWB outcomes (e.g., Baumeister, 1991; Ryff & Singer, 1998, Treadgold, 1999). Employees who feel their job has meaning and have perceptions of competence and perceptions of influence have shown indications of higher performance levels (Sigler & Pearson, 2000). A study by Wrzesniewski and Landman (2000) found that those who had a "calling" (i.e., those who did not simply work for financial rewards or advancement but for the fulfillment that doing the work brings) were not only more satisfied with their jobs but were also the top performers in the organization. In a sample of nurses, Begat, Ellefsen, and Severinsson (2005) found that the ability to find meaning in one's work influenced levels of well-being. Finally,

Wrzesniewski, McCauley, Rozin, and Schwartz (1997) found that employees who can connect their work to the larger, meaningful mission or purpose of the overall organization have higher levels of interest at work and ownership for organizational outcomes.

Ryff (1989) points out that having goals and direction in life, feeling that there is meaning to one's present and past life, and having aims and objectives for living are important aspects of positive functioning. Even though the literature is somewhat scarce, there is some support that this dimension could be an important indicator of OWB as well. Therefore, the proposed scale of POW-B will assess individual perceptions of job purpose.

Work Autonomy. The tendency to strive for independence and self-regulation has long been considered a key aspect of health (Angyal, 1965). Mentally healthy people are able to resist environmental features and determine their own opinions and actions (Warr, 1990). Work autonomy refers to the capacity of an individual to make decisions concerning the accomplishment of work (Breugh, 1998). It often is conceptualized as the personal control that individuals have over how and when job tasks are undertaken (Daniels, Tregaskis, & Seaton, 2007). The issues of personal control and job autonomy have been found to be related to the various components of and conceptualizations of OWB.

A positive relationship between work autonomy and job satisfaction has been documented for a number of decades as the typical worker is thought to be more satisfied when he or she has greater self-regulation at work (e.g., Argyris, 1957; Clark, 2001). Parasuraman and Alutto (1984) found that individuals with more job autonomy also

experienced less stress at work. In a recent meta-analysis examining the validity of Hackman and Oldham's (1977) Job Characteristics Model, a significant negative relationship was found between job autonomy and absenteeism (Fried & Ferris, 2006).

Personal control over one's decisions at work has been found to play an important role in health and well-being. Individuals will experience adverse health consequences from their work when it makes high demands on them while allowing them little personal control (Ganster, Fox, & Dwyer, 2001). Kirkaldy, Furnham, and Cooper (1994) found that subjects with high perceived internal locus of control reported less stress and more job satisfaction in comparison to those with high levels of perceived external locus of control. Subjects with an external locus of control reported feeling tense, overcontrolled, or helpless at work. Similarly, in a one-month time lag study of accountants, main effects of work locus of control on psychological well-being were found (Daniels & Guppy, 1994). Finally, Cooper, Kirkaldy, and Brown (1994) found locus of control and coping had an indirect effect on physical health through the mediating influence on job stress and overall job satisfaction.

Karasek (1979) described the term "decision latitude" within a work environment as the ability to make work-related decisions. He asserts that workers who learn new skills and are better able to predict future situations more effectively feel more secure and are better able to make decisions. When employee can make decisions to the way they work, they are able to devise coping strategies that can mitigate the effects of stress (Halpern, 2005). Similarly, Landsbergis (1988) found that individuals in jobs that were highly demanding but allowed for little decision latitude had lower levels of OWB than individuals in high demand and high decision latitude jobs.

Ryff (1989) describes the autonomous person as one who is self-determining and independent, is able to resist social pressures to think and act in certain ways, regulates behavior from within, and evaluate one's self by personal standards (Ryff, 1989). Due to extensive research that indicates that autonomy is an important indicator of well-being, the proposed model of POW-B includes this dimension.

Environmental Mastery at Work. The concept of environmental mastery was first introduced by Phillips (1961) who described it as an instinct that progresses through five stages: isolation, dependency, autonomy, cooperation, and independence. However, the concept did not receive significant attention until it was re-introduced by Ryff (1989) in the Scales of Psychological Well-Being (SPWB). According to Ryff's formulation, environmental mastery is defined as the "capacity to manage effectively one's life and surrounding world" (Ryff & Keyes, 1995, p. 720).

Environmental mastery is considered an important psychological resource and is gaining increased attention in the health and social science research. In a review of the literature by Windle and Woods (2004), environmental mastery was found to mediate the potential negative impact of community relocation for older women, to contribute to the absence of mood disorder in rheumatoid arthritis sufferers, and to predict fatigue and fatigue-related distress among people with multiple sclerosis. Windle and Woods (2004) also reported on a mediation model that demonstrated that "environmental mastery is the key to experiencing life satisfaction in the midst of adversity" (p. 595) for older adults living in the community. September, McCarrey, Baranowsky, Parent, and Schindler (2001) found that environmental mastery was a predictor of confidence and imposter feelings among Canadian undergraduate students. Seltzer, Greenberg, Floyd, and Hung

(2004) examined environmental mastery among parents of children with mental health problems and developmental disabilities. They found that higher levels of environmental mastery were associated with accommodative coping.

Little research has been conducted to examine the impact of environmental mastery specifically on OWB. Environmental uncertainty, however, is a closely related construct that has received some attention in the workplace. Environmental uncertainty occurs when there is not enough information related to tasks or activities (Bodt, 1995). This can occur when individuals fail to use planning and time management skills to control aspects of their work environment (Whetton & Cameron, 1995). The ability to plan can influence whether employees perceive situations to be stressful or challenging and can help employees better manager their workload minimizing cycles of inactivity and overload (Quick, Quick, Nelson, & Hurrell, 2003). Begat, Ellefsen, Severinsson (2005) found that a fast-paced hospital environment influenced the degree to which nurses could plan their day and created a high level of uncertainty and thus impacting their well-being.

Even though the literature is scant in the workplace, there is some support that an individual's level of environmental mastery or control over their work environment could be an important indicator of OWB. Therefore, the proposed scale of POW-B will assess individual perceptions of environmental mastery.

Job Growth. The healthy person is often viewed as someone who establishes realistic goals and makes active efforts to attain them (e.g., Maslow, 1973). They show an interest in the environment, engage in self-motivated activity, and seek to extend themselves in ways that are personally significant (Warr, 1994). In the work

environment, to tap into this construct, measures have been used that cover aspects of intrinsic motivation or growth-need strength and indicate the degree to which people seek out ways to develop themselves in their jobs (Warr, 1990).

Research suggests that career development and growth opportunities are important factors related to OWB and its components. The opportunity to grow within an organization and gain skills and experiences motivates employees and leads to positive results for an organization (Pfeffer, 1994). For example, Browne (2000) analyzed five hundred human resource practices and found that training and internal career opportunities were significant predictors of organizational effectiveness, job satisfaction, and job stress. Training was actually the best single overall predictor of all three outcomes. Chen, Chang, & Yeh (2004) examined the impact of the availability of career development programs within a Research and Development employee sample. They found a positive relationship between the perceived quality of the career development programs in which an employee was enrolled and that employee's overall job satisfaction. These results highlight the positive benefits associated with employee growth and development programs.

Supervisor support of career development has been found to be positively associated with high levels of job satisfaction for public sector professionals (Kim, 2002). In a sample of nurses, Yoder (1995) found that nurses achieved high levels of job satisfaction and fewer intentions to leave the organization when they perceived that an interest was taken in their career development and felt valued by their supervisor. In a sample of physicians, professional development was found to be a more important factor in predicting job satisfaction than positive evaluation of local leadership, support and

feedback from a supervisor, and work efficiency (Krogstad, Hofoss, Veenstra, & Hjortdahl, 2006).

As suggested by the research and by Ryff's (1989) measure of PWB, job growth will serve as an important component of the proposed measure of OWB.

Professional Self-Acceptance. As Ryff's (1989) research explains, for individuals to experience positive well-being, they must feel positively about themselves. Schultz and Schultz (2006) specifically examine organizational-based self-esteem, which refers to how valued and worthwhile employees feel they are by their employers. They go on to describe people with strong organization-based self-esteem as those who see themselves as key members of the organization who can effectively perform their jobs, who do not let a mistake shape their perception of their organizational worth, and who recognize that they make important and meaningful contributions to the organization.

While little research has been conducted linking organizational-based self-esteem with occupational well-being, Schultz and Schultz (2006) surmise that individuals with low levels should be more affected by job stress than those with high levels. Workers with low organizational-based self-esteem would be more likely to experience role conflict, which is considered a major workplace stressor. Given these assumptions and given Ryff's inclusion of self-acceptance into her model of PWB, the proposed scale of OWB will include a measure of professional self-acceptance.

Recommendation for the Development of the Occupational Well-being Scale

The proposed scale is comprised of 2 sub-components: Subjective Occupational Well-being (SOW-B) and Psychological Occupational Well-being (POW-B). It is

expected that each of these dimensions will load on their respective higher-order factor of SOW-B and POW-B. Further, it is also expected that these will load onto a second higher-order factor, Occupational Well-being (OWB).

Hypothesis 1a: SOW-B is comprised of 3 factors: Negative Work Affect, Positive Work Affect, and Job Satisfaction (see Figure 1a).

Hypothesis 1b: The 3 dimensions assessed by the scale load onto a higher-order factor, Subjective Occupational Well-being (see Figure 1b).

Hypothesis 2a: POW-B is comprised of 6 factors: Job Purpose, Environmental Mastery, Job Growth, Positive Work Relationships, Job Autonomy, and Professional Self-Acceptance (see Figure 2a).

Hypothesis 2b: The 6 dimensions assessed by the POW-B scale load onto a higher-order factor, Psychological Occupational Well-being (see Figure 2b).

Hypothesis 3: The two factors of SOW-B and POW-B load onto a higher-order factor, Occupational Well-being (See Figure 3).

The Impact of OWB on Organizational Performance

In order to determine the importance and utility of OWB, it must be linked to outcomes that directly affect organizational performance (Hart & Cooper, 2001). Low levels of OWB can manifest itself in many ways from employee exhaustion and lower work commitment to lack of concentration and psychosomatic complaints and can impact both turnover intentions and discretionary behavior (Hart & Cooper, 2003).

Turnover Intention. Because human capital plays a large role in the outcome of a firm's financial performance, there is an overall negative impact of employee turnover to the organization. When employees leave an organization, they take with them their knowledges, skills, and abilities that contributed to the goals, profit, and performance of the organization. Turnover can cause lost productivity and can contribute to low employee morale (Griffeth, Hom, & Gaertner, 2000). It takes time to process employees out of the organization, reorganize existing work, source the lost employees' replacement, interview candidates, prepare offers, and orient and train new employees to the position and the organizational culture (Leibowiz, Schlossber, & Shore, 1991). Using an example from the health care industry, Cascio (2000) calculated that the cost of replacing 288 employees per year (in a hospital with 200 beds employing 1200 persons with a turnover rate of 2% per month) was \$2,888,295.52 when all sources of costs were analyzed. SHRM, the Society for Human Resource Management, estimated that it costs \$3,500.00 to replace one \$8.00 per hour employee when all costs were considered (Dooney & Smith, 2005). Therefore, if OWB can be linked to turnover, understanding and improving OWB should lead to decreased turnover and a decrease in human capital costs for an organization and thus increased overall organizational performance.

Future plans to leave an organization, or turnover intention, can be used as a proxy measure of actual turnover itself. It is described as a mental decision intervening between an individual's attitude regarding a job and the stay or leave decision (Jacobs & Roodt, 2007). It has been described as the last in a sequence of withdrawal cognitions and is the immediate precursor to turnover behavior (Tett & Meyer, 1993). Research supports that turnover intention is consistently related to voluntary turnover (e.g., Dalessio, Silverman, & Schuck, 1986; Griffeth & Hom, 1988; Hung & Ching, 2006; Mathieu & Zajac, 1990). Because of this consistent relationship, one can confidently use turnover intention as a proxy for actual leaving behavior. This is especially important as it can be challenging and expensive to measure opinions of employees who have left an organization.

Various components of OWB have been found to be related to turnover intention. Job satisfaction specifically has frequently been found to be a key predictor of turnover intention (e.g., Eby, Freeman, Rush, & Lance, 1999; George & Jones, 1996; Rosse & Hulin, 1985; Tett & Meyer, 1993, Zaccaro & Stone, 1988) in that as job satisfaction decreases, turnover intentions increase. Some measures of job satisfaction specifically reflect issues such as a person's sense that he/she is fairly treated and not being denied better alternatives and have found to be linked to turnover intention as well (e.g., Eby et al., 1999; Farrell & Rusbult, 1981). Turnover intentions also have been found to be related to affective well-being at work (Warr, 1999) as well as job-related anxiety (Spector et al., 1988).

In the past, however, these studies have predominantly examined the correlations among levels of distress with withdrawal behaviors, including turnover intention. While

relationships have been found, much of the variance remains unaccounted for (Harrison & Martocchio, 1998). Hart and Cooper (2003) examined the determinants of reported intention to leave the organization due to stress-related problems. They found that a lack of positive affect, manifested through feelings of low energy and a lack of pride in the job, was a strong predictor of withdrawal behaviors. No significant relationship was found linking negative affect to these behaviors. In other words, the absence of positive affect rather than the presence of negative affect influenced withdrawal behavior intentions.

Therefore, the current study proposes that OWB will have a direct negative impact on turnover intention. It also proposes that positive affect will have a stronger relationship to turnover intention than the negative affect component of OWB and the measure of OWB, as a whole.

Hypothesis 4a: Occupational well-being influences intent to leave an organization, in that higher levels of OWB are associated with lower levels of turnover intention.

Hypothesis 4b: The magnitude of the relationship between positive work affect and turnover intention will be greater than that of the relationship between negative work affect and turnover intention.

Contextual Performance. Contextual performance describes a set of interpersonal and discretionary behaviors that support the social and motivational context in an organization (Van Scotter & Motowidlo, 1996, p. 525). Contextual activities

include volunteering to carry out task activities that are not formally part of the job and helping and cooperating with others in the organization to get tasks accomplished (Borman & Motowidlo, 1997). It has been shown to consist of two dimensions: interpersonal facilitation and job dedication (Borman & Motowidlo, 1993). Interpersonal facilitation describes “interpersonally-oriented behaviors that contribute to organizational goal accomplishment” (Van Scotter & Motowidlo, 1996, p. 526). These behaviors can include encouraging cooperation, consideration of others, and building and mending relationships that, cumulatively, enhance the social context within which task performance occurs. Job dedication, on the other hand, focuses on self-disciplined behaviors such as working hard and taking initiative to solve a problem at work (Van Scotter & Motowidlo, 1996).

Contextual performance has emerged as an important aspect of overall job performance in that job performance is no longer considered to simply consist of performance on a task. In fact, employees are increasingly expected to go above and beyond requirements listed in their job descriptions as customer service is increasingly emphasized, as team-based organizations become more popular, as downsizing continues to make employee adaptability and willingness to exhibit extra effort more of a necessity, and as global competition continues to raise the effort levels required of employees (Borman & Motowidlo, 1997). Research suggests that managers incorporate contextual performance into their overall ratings of employee performance (Borman, White, & Dorsey, 1995; Johnson, 2001; Kiker & Motowidlo, 1999; Werner, 1994) and that the effects of contextual performance are at least as great as those of task performance (Podsakoff, MacKenzie, Paine, & Bachrach, 2000).

In addition to showing the impact on individual performance, research generally supports that discretionary behaviors are related to overall organization performance as measured by quality, quantity, financial, and customer service measures (Dalal, 2007). Other organizational outcomes such as turnover have also been found to be related to discretionary behaviors; employees displaying more of these behaviors were less likely to turnover than those engaging in fewer (Dyer & Reeves, 1995; Van Scotter, 2000). Discretionary behaviors also are thought to have an important impact on the effectiveness and efficiency of work teams and organizations, therefore contributing to the overall productivity of the organization (Hoffman, Blair, Meriac, & Woehr, 2007).

Significant relationships have been found between various forms of OWB and discretionary behavior. Specifically, research has shown that higher levels of job satisfaction elicit more discretionary behaviors than lower levels of job satisfaction (e.g., Bateman & Organ, 1983; Motowidlo, Packard, & Manning, 1986; Organ & Konovsky, 1989; Puffer, 1987). McNeely & Meglino (1994) found that overall job satisfaction was significantly associated with discretionary behaviors including providing assistance to colleagues, being friendly, volunteering to undertake needed tasks, adhering closely to specified rules, and making suggestions to improve effectiveness. Other researchers have shown that occupational well-being is not only an outcome of high performance in an organization but also a precursor to it; happy employees are more likely to find their job more meaningful, more likely to receive favorable evaluations from their supervisors, less likely to lose their job, and more likely to show organizational citizenship behaviors which are a subset of discretionary behaviors (e.g., Diener, Nickerson, Lucas, & Sandvik, 2002; Marks & Fleming, 1999; Staw, Sutton, & Pelled, 1994). Hart, Palmer, Christie,

and Lander (2002) found that increased morale among employees, which is how they defined OWB, led to greater discretionary effort that, in turn, contributed to the satisfaction that was being experienced by customers of the organization. Finally, Cropanzano, Rupp, and Byrne (2003) reported emotional exhaustion to be negatively related to supervisor- and organization-directed citizenship behavior.

Therefore, the current study proposes that OWB will have a direct positive relationship with contextual performance.

Hypothesis 5: Occupational well-being is positively related to contextual performance in an organization in that higher levels of OWB are associated with higher levels of contextual performance.

Age and Gender Differences in Occupational Well-being

Much research has been conducted to study both gender differences (e.g., Cinamon & Rich, 2002; Rowe & Snizek, 1995; Roxburgh, 1996) and age differences (e.g., Clark, 1993; Doering, Rhodes, & Schuster, 1983; Salthouse, Hambrick, Lukas, & Dell, 1996; Warr, 1992) within the work environment. Employers who understand these differences can shape organizational culture in such a way as to enhance the overall level of job satisfaction and well-being of their employees, making them more willing to remain and build their career within the organization (Bellou, 2010). The organization can minimize the chances of losing talented individuals and is thus more likely to create a competitive advantage.

Job Satisfaction and Age. It is commonly assumed that as people get older, they move up the career ladder and move into better positions within an organization.

Through the decades, they sort through different alternative career paths and may find a job that matches their talents and abilities. For this reason, it is often believed that job satisfaction increases as age increases. Indeed, various studies have found this to be the case (e.g., Doering, Rhodes & Schuster, 1983; Kacmar & Ferris, 1989, Kose, 1985; Kong, Chye, & Hian, 1993; Warr, 1992).

Given these research findings, the current study proposes that age will have a direct positive relationship with the cognitive dimension of OWB, which is job satisfaction. As age increases, job satisfaction will also increase.

Hypothesis 6a: Age will be positive related to job satisfaction, the cognitive dimension of Occupational Well-being.

Job Satisfaction and Gender. Researchers have examined the relationship between job satisfaction and gender with the results of many of these studies being contradictory and inconsistent (Hickson & Oshagbemi, 1999). While some studies have found women to be more satisfied than men (e.g., Ward & Sloane, 2000), other have found men to be more satisfied than women (e.g., Forgionne & Peters, 1982). However, most of the studies in this area report no significant differences in gender in relation to job satisfaction (e.g., Eskildsen, Kristensen, & Westlund, 2004; Manning, 2002; Oshagbemi, 2003). Specifically, Manning (2002) studied job satisfaction among male and female managers and found no difference. Dolliver (2003) found that, although

females do feel discriminated against in the workplace, they are as satisfied with their jobs as are males are. Donohue & Heywood (2004) found no gender-job satisfaction gaps between young workers within the U.S.

Given these research findings, the current study proposes that there will not be a significant relationship found between gender and the cognitive dimension of OWB, which is job satisfaction. Moreover, males and females will have the same levels of job satisfaction.

Hypothesis 6b: There is no significant relationship between gender and job satisfaction, the cognitive dimension of Occupational Well-being; levels of job satisfaction for males and females will not be statistically different from one another.

PWB and Age and Gender. Relatively little emphasis has been given to age and sex differences in theoretical conceptions of positive psychological functioning (Ryff, 1989) and specifically within the context of OWB. While life span theorists have largely ignored sex differences, they have examined the different challenges confronted by individuals as they grow older and have found that certain aspects of general well-being such as self-acceptance and autonomy are more easily achieved by the aged (Buhler & Massarik, 1968; Erikson, 1959). Other dimensions such as environmental mastery are more prominent in the self-perceptions of middle-aged and older individuals (Neugarten, 1973).

Recognizing the lack of empirical findings in these areas, Ryff (1989) examined both age and sex differences within the six dimensions of PWB. She found that age was

significantly related to the dimensions of autonomy, environmental mastery, purpose in life, and personal growth. Specifically, personal growth and purpose in life decreased with age while environmental mastery and autonomy increased with age. She found no significant relationships with positive relations with others and self-acceptance.

Regarding sex differences, she found a significant relationship between gender and positive relations with others, with women scoring higher than men, but no other significant sex differences were obtained for any other dimension of PWB.

While these studies have mostly been conducted in a context-free environment, one would expect the results to generalize to some degree to the workplace context. For this reason, the current study first proposes that there will be a positive relationship between age and the OWB dimensions of autonomy and environmental mastery. Secondly, it proposes that there will be a negative relationship between age and the OWB dimensions of job purpose and job growth. Finally, it proposes that there will be a positive relationship between positive working relationships and gender with women scoring higher than men on this dimension.

Hypothesis 6c: Age will be positively related to the autonomy dimension of Occupational Well-being, in that autonomy will increase as age increases.

Hypothesis 6d: Age will be positively related to the environmental mastery dimension of Occupational Well-being, in that environmental mastery will increase as age increases.

Hypothesis 6e: Age will be negatively related to the job purpose dimension of Occupational Well-being, in that job purpose will decrease as age increases.

Hypothesis 6f: Age will be negatively related to the job growth dimension of Occupational Well-being, in that job growth will decrease as age increases.

Hypothesis 6g: Gender will be significantly related to the positive work relationships dimension of Occupational Well-being such that women will demonstrate significantly higher levels than men.

Summary of Hypotheses

The purpose of the current study is to create a measure of OWB and assess its psychometric properties. As such, the following hypotheses are proposed:

Hypothesis 1: Subjective Occupational Well-being (SOW-B)

- a. SOW-B is comprised of 3 factors: negative work affect, positive work affect, and job satisfaction.
- b. The 3 dimensions assessed by the scale load onto a higher-order factor, Subjective Occupational Well-being.

Hypothesis 2: Psychological Occupational Well-being (POW-B)

- a. POW-B is comprised of 6 factors: Job Purpose, Environmental Mastery, Job Growth, Positive Work Relationships, Job Autonomy, and Professional Self-Acceptance.
- b. The 6 dimensions assessed by the scale load onto a higher-order factor, Psychological Occupational Well-being.

Hypothesis 3: The 9 dimensions within SOW-B and POW-B load onto a higher order factor, Occupational Well-being.

Hypothesis 4: The relationship between Occupational Well-being and Turnover Intention

- a. Occupational well-being influences intent to leave an organization, in that higher levels of OWB are associated with lower levels of turnover intention.
- b. The magnitude of the relationship between positive affect and turnover intention will be greater than that of the relationship between negative affect and turnover intention.

Hypothesis 5: Occupational well-being is positively related to Discretionary Behavior in an organization in that higher levels of OWB are associated with higher levels of contextual performance.

Hypothesis 6: The demographics of age and gender will have differing relationships with various components of OWB.

- a. Age will be positively related to job satisfaction, the cognitive dimension of Occupational Well-being.
- b. There is no significant relationship between gender and job satisfaction, the cognitive dimension of Occupational Well-being; levels of job satisfaction for males and females will not be statistically significant from one another
- c. Age will be positively related to the autonomy dimension of Occupational Well-being in that autonomy will increase as age increases.
- d. Age will be positively related to the environmental mastery dimension of Occupational Well-being in that environmental mastery will increase as age increases.
- e. Age will be negatively related to the job purpose dimension of Occupational Well-being in that job purpose will decrease as age increases.
- f. Age will be negatively related to the job growth dimension of Occupational Well-being in that job growth will decrease as age increases.
- g. Gender will be significantly related to the positive work relationships dimension of Occupational Well-being such that women will demonstrate significantly higher levels than men.

CHAPTER II

METHOD

Procedure

The procedure for the proposed study involves the analysis of an existing data set collected in a wholly owned advertising and directories arm of a large telecommunications and information services company in Australia. The data were collected as part of a voluntary employee opinion survey which presented a total of 140 multiple-choice opinion items as well as demographic questions concerning age, tenure, gender, and employee status (i.e., full-time or part-time). Thirty-eight participants completed the survey via paper-and-pencil methodology, while 2971 participants completed it via online methodology.

Participants

The participants of the proposed study are individuals who completed the larger employee opinion survey within the organization. Out of the 4104 who had the opportunity to complete the survey, 3009 employees responded, which reflects a 73% participation rate. The sample was composed of almost an equal percentage of males and females. The majority of subjects were in the age groups of 20 to 30 years old (29.7%) or 30 to 40 years old (40.1%), which comprised 69.8% of the total sample. Summaries of the sample's gender and age demographics are shown in Table 1.

Measures

Each of the measures used in the current student are non-standard measures that were designed specifically for this study and were created from the existing employee opinion survey items. A panel was formed to design each measure and to evaluate the

selected items against established measures of the various constructs. It consisted of five individuals each with a background and extensive experience in psychological research with four panel members specifically focusing on occupational well-being research.

POW-B Measure. The panel focused first on the development of the six POW-B measures. A list of characteristics for each dimension was created based upon descriptions currently in the literature (e.g., Ryff, 1989). Each list describes what it means to possess that dimension. For example, people who possess “Job Purpose” see meaning in the work that they do, see meaning in the work their company does as a whole, are emotionally integrated into the organization, have a sense of direction in their job, and have clear goals at work.

Next, the panel examined the existing list of opinion items that had been administered in the participant organization and mapped any relevant items to each of the six POW-B dimensions broadly. This mapping was done independently to negate the possibility of the group influencing the outcome. Next, the panel discussed their mapping to achieve consensus. An item was included in the measure if there was agreement among panel members.

Positive Working Relationships. Positive working relationships, which is a part of POW-B construct, was measured with a 4-item scale asking participants to indicate their level of agreement with statements asking about their team morale, collaboration, and teamwork (See Appendix A). A five-point Likert-type scale was used with scale points ranging from “agree” to “disagree.”

Job Purpose. Job purpose, which is a part of POW-B construct, was measured with a 9-item scale asking participants to indicate their level of agreement with

statements asking about purpose felt within their job (See Appendix A). A five-point Likert-type scale was used with scale points ranging from “agree” to “disagree.”

Work Autonomy. Work autonomy, which is a part of POW-B construct, was measured with a 4-item scale asking participants to indicate their level of agreement with the statements (See Appendix A). A five-point Likert-type scale was used with scale points ranging from “agree” to “disagree.”

Environmental Mastery at Work. Environmental mastery at work, which is a part of POW-B construct, was measured with an 8-item scale asking participants to indicate their level of agreement with the statements (See Appendix A). A five-point Likert-type scale was used with scale points ranging from “agree” to “disagree.”

Job Growth. Job growth, which is a part of POW-B construct, was measured with a 6-item scale asking participants to indicate their level of agreement with the statements (See Appendix A). A five-point Likert-type scale was used with scale points ranging from “agree” to “disagree.”

Professional Self-Acceptance. Professional self-acceptance, which is a part of POW-B construct, was measured with a 4-item scale asking participants to indicate their level of agreement with the statements (See Appendix A). A five-point Likert-type scale was used with scale points ranging from “agree” to “disagree.”

SOW-B Measures. The panel then developed the measures for SOW-B focusing first on the negative work affect and positive work affect components. First, the existing list of opinion items was mapped to Warr’s (1990) three principal axes of affective well-being (i.e., pleased—displeased, comfortable—anxious, enthusiastic—depressed). These axes were set forth in his model of mental health and were discussed previously in this

study. It was decided that Warr's model was the most appropriate against which to map since it was created for and validated within a work environment. The current negative work affect item measuring the employee state of being "anxious" mapped to Warr's "comfortable-anxious" axis; the state of being "frustrated" mapped to Warr's "pleased-displeased" axis; and the state of being "unhappy" mapped to both the "pleased - displeased" axis as well as the "enthusiastic-depressed" axis. The current positive work affect items also mapped well to Warr's axes. The state of being "happy" mapped to Warr's "pleased-displeased" axis; the state of being "enthusiastic" mapped to Warr's "enthusiastic-depressed" axis; and the state of being "positive" mapped to both the "pleased-displeased" axis as well as the "enthusiastic-depressed" axis. .

The panel discussed their mapping to achieve consensus. An item was included in the measure if there was agreement among panel members that the item falls on at least one of Warr's axes. All three of Warr's axes were adequately covered by the six items.

While the overlap with the PANAS measure was not a criterion for inclusion in the current measure's NA and PA scales, the panel did examine the overlap in order to provide additional support. Both the NA and the PA states in the current measure mapped well with the PANAS items.

The panel then developed the Job Satisfaction measure. The existing list of opinion items was mapped to several established and validated measures of job satisfaction including the Index of Organizational Reactions (IOR; Dunham & Smith, 1979) and the Job Diagnostic Survey (JDS; Hackman & Oldham, 1976). The resulting 3-item job satisfaction scale includes one global satisfaction item and two job facet satisfaction items (See Appendix A). Single-item global measures of job satisfaction

have been shown to be highly correlated to multiple-item scales of job satisfaction ($r=.67$), and, therefore, their use has been considered acceptable (Wanous, Reichers, & Hudy, 1997). However, since one cannot estimate the internal consistency reliability of single-item measures, multiple-item measures should be used if the research situation allows, thus the inclusion of two facet satisfaction items in the current job satisfaction instrument.

Satisfaction with the work itself is generally the facet most strongly correlated with overall job satisfaction (e.g., Rentsch & Steel, 1992) and is the factor regarded as the most important (Herzberg, Mausner, Peterson, & Capwell, 1957). This job facet item is measured in the IOR and the JDS and has also been used by many other researchers (e.g., Becker & Billings, 1993; Cook, Hepworth, Wall, & Warr, 1981). Thus, this facet satisfaction item was included in the current job satisfaction measure.

Overall company satisfaction has also been found to be related to and thus a facet of job satisfaction and, more broadly, organizational commitment (Bhattachary, Rao, & Glynn, 1995; Kim, Lee, Lee, & Kim, 2010). The IOR includes a facet measure of company satisfaction and thus this facet satisfaction item was included in the current job satisfaction measure.

Negative Work Affect. Negative affect, which is part of the emotional component of the SOW-B construct, was measured with a 3-item scale asking participants to indicate their level of agreement with statements asking about their feelings of anxiety, frustration, and unhappiness at work (See Appendix A). A five-point Likert-type scale was used with scale points ranging from “agree” to “disagree.”

Positive Work Affect. Positive affect, which is part of the emotional component of the SOW-B construct, was measured with a 3-item scale asking participants to indicate their level of agreement with statements asking about their feelings of positivity, enthusiasm, and happiness at work (See Appendix A). A five-point Likert-type scale was used with scale points ranging from “agree” to “disagree.”

Job Satisfaction. Job satisfaction, which is the cognitive component of the SOW-B construct, was measured with a 3-item scale asking participants how satisfied they are overall with their job, overall with their company as a place to work, and also with the type of work that they do (See Appendix A). A five-point Likert-type scale was used with scale points ranging from “very satisfied” to “very dissatisfied.”

Turnover Intention. In order to measure intention to leave the organization, the panel mapped the available opinion items to various established instruments measuring this construct. The item “At the present time, I am seriously considering leaving my company” was adapted from an instrument by Landau and Hammer (1986) and is similar to items used by other researchers (e.g., Baillod & Semmer, 1994). The second item that the panel selected for this instrument, “It would take a lot for me to look for another employer,” did not map precisely with established instruments, but the panel determined that the face validity of this item was strong and thus included it in the instrument. Research has found that the relationship between actual turnover and turnover intention is strongest when the intention statement is direct and specific (Mobley, Griffeth, Hand, & Meglino, 1979). Thus, the panel determined that both of these items would adequately measure intention to leave and predict actual turnover.

For the first item, participants were asked to indicate “yes,” “no,” or “don’t know” to a statement asking if they were seriously considering leaving the organization. For the second item, participants were asked to indicate their level of agreement with the statement about looking for another employer using a five-point Likert-type scale with scale points ranging from “agree” to “disagree” (See Appendix A).

Discretionary Behavior. In order to develop a measure of discretionary behavior, the panel mapped the available opinion items to the two dimensions of contextual performance set forth by Borman & Motowidlo (1993) and previously described. One item was mapped to the *interpersonal facilitation* dimension and broadly states “The people I work with are willing to help each other, even if it means doing something outside their usual activities.” One item was also mapped to the *job dedication* dimension and broadly states “I work beyond what is required to help my company succeed.” The end result was a 2-item instrument to measure discretionary behavior. A five-point Likert-type scale was used with scale points ranging from “agree” to “disagree.”

CHAPTER III

RESULTS

Measures

The POW-B measure is composed of six dimensions: positive working relationships (PosWorkRelScale), job purpose (JobPurposeScale), work autonomy (AutonomyScale), environmental mastery at work (EnvMasteryScale), job growth (JobGrowthScale), and professional self-acceptance (ProfSelfAcceptScale). These were measured using a five-point Likert-type scale ranging from “agree” (1) to “disagree” (5).

The SOW-B measure is composed of three dimensions: negative work affect (NegWorkAffectScale), positive work affect (PosWorkAffectScale), and job satisfaction (JobSatisfactionScale). These were measured using a five-point Likert-type scale ranging from “agree” (1) to “disagree” (5). Discretionary effort and turnover intention were measured using a combination of various 3- and 5-point scales in which lower values indicate more favorable responses. Descriptive statistics for all measures are displayed in Table 2.

Assumptions of Normality

The normality of study variables was tested by measuring the skewness and kurtosis of the data. Skewness statistics greater than three indicate non-normality while kurtosis statistics between 10 and 20 indicate non-normality (Kline, 2005). Based on these criteria, all study variables met the criteria for normality. Skewness and kurtosis statistics are summarized in Table 3.

Reliability of Measures

The reliability of the measures was tested using Cronbach's Alpha. The observed Cronbach's Alphas generally compared favorably with the threshold of .70 for suggested by Nunnally (1978). Exceptions were the 2-item discretionary behavior scale and the 4-item work autonomy scale. Implications of using scales with less-than-ideal reliabilities include increased risk of Type II errors, which are further addressed in the Discussion chapter (Osborne & Waters, 2002). Cronbach's Alpha statistics for all scales are summarized in Table 4.

Correlations Among the Measures

To determine the relationship between the various measures, Pearson's correlations were computed. Table 5 displays the correlation matrix for the 11 measures used in the study. Correlations were generally strong and positive, indicating a significant degree of overlap across many of the measures. As expected, Negative Work Affect was an exception and was negatively related to all other measures.

Hypothesis 1a

A confirmatory factor analysis (CFA) was used to test a three-factor model of SOW-B including negative work affect, positive work affect, and job satisfaction. When testing model fit, Bollen and Long (1993) as well as Mueller (1996) recommend evaluating several indices simultaneously, which represent different classes of goodness-of fit criteria. Schermelleh-Engel, Moosbrugger, and Muller (2003) recommend the following selection of indices: chi-square and its associated p value and degrees of freedom, root mean square error of approximation (RMSEA), standardized root mean

square residual (SRMR), Non-normed Fit Index/Tucker-Lewis Index (NNFI/TLI), and Comparative Fit Index (CFI). The fit indices RMSEA, NNFI/TLI and CFI are sensitive to model misspecifications and do not depend on sample size as strongly as chi-square (Fan, Thompson, & Wang, 1999; Hu & Bentler, 1999; Rigdon, 1996). Therefore, they were determined to be the most appropriate evaluation indices.

A guideline CFI and TLI value of .95 and above indicates good model fit (Hu & Bentler, 1999). RMSEA values less than or equal to .05 indicate good model fit, values between .05 and .08 indicate adequate fit, and values between .08 and .10 indicate mediocre fit, whereas values greater than .10 are not acceptable (Brown & Cudeck, 1993).

The chi-square statistic was large and significant, suggesting that the data do not fit the proposed model, though this finding may be partly attributable to the large sample used in this analysis. Larger sample sizes increase the likelihood of a significant chi-square statistic (Bentler & Bonett, 1980). RMSEA indicated poor model fit, but TLI and CFI indicated a moderate and strong fit, respectively. The fit indices for Hypothesis 1a are summarized in Table 6 and, overall, provide mixed support for a three-factor model of SOW-B.

In addition to evaluating the model fit as a whole, the significance of the individual parameters was also assessed. Parameters were evaluated at the $p < .05$ level. The direction of the standardized path coefficients was checked to see if it was consistent with the hypothesis. Unstandardized regression weights, standardized regression weights (factor loadings), correlations, and squared multiple correlations were assessed and are shown in Table 7. Since it is conventional to constrain the first item in each factor to “1”,

these items do not have an unstandardized estimate or p-value. All items were statistically significant ($p < 0.01$). The factor loadings are strong and indicate that the observed variables fit the latent factors.

Table 8 shows the correlations between the three latent factors. There was a negative correlation between the positive work affect latent factor and the negative work affect latent factor (-.782). There was a positive correlation (.802) between the Job satisfaction latent factor and the Positive work affect latent factor (0.802), and a negative correlation between the Job satisfaction latent factor and the Negative work latent factor (-.651). In summary, Hypothesis 1a, stated that SOW-B is comprised of 3 factors. The three-factor model with positive work affect, negative work affect, and job satisfaction was a moderately good fit to the data based on the fit indices and the standardized regression weights.

Hypothesis 1b

A second order confirmatory factor analysis (CFA) was used to test whether the 3 dimensions of positive work affect, negative work affect, and job satisfaction load onto a higher-order factor, Subjective Occupational Well-being. The computed chi-square statistic was significant, a finding that may be attributable to the large sample size. The CFI was within the acceptable range, but both TLI and RMSEA fell outside the acceptable range for model fit. The model indices provided mixed support for model fit and are shown in Table 9.

Table 10 shows the unstandardized regression weights, standard error (S.E.), p-value, standardized regression weights. The observed regression weights were all

significant. The paths from the three latent variables to SOW-B were all significant ($p < 0.01$). Positive work affect, job satisfaction, and negative work affect positively loaded onto the Subjective Occupational Well-being latent factor. In summary, Hypothesis 1b, which stated the 3 dimensions assessed by the scale load onto a higher-order factor, Subjective Occupational Well-being was partially supported.

Hypothesis 2a

A first order CFA was used to test Hypothesis 2a, which posited a 6-factor model of Psychological Occupational Well-Being. The chi-square was significant, suggesting that the data were a poor fit to the model. This finding should be interpreted within the context of the large sample used for this analysis as larger sample sizes increase the chances of a significant chi-square finding (Bentler & Bonett, 1980). Among other indices, only RMSEA indicated a moderate fit for the tested model. In sum, these analyses produced weak support for Hypothesis 2a. The fit indices are summarized in Table 11.

Table 12 displays model estimates for Hypothesis 2a. The observed regression weights were all significant, suggesting that the individual variables fit the latent factors. However, the fit indices show that this is only a moderately good fitting model and some of the factor loadings are low, indicating that some of the variables could be dropped from the model. For example, the standardized estimates for item numbers OP30 (-.067) and OP52 (-.239) are low, indicating that these items are may not fit into the factors of work autonomy and environment mastery, respectively. In summary, Hypothesis 2a, which states that POW-B is comprised of 6 factors, is weakly supported by the analyses.

Hypothesis 2b

A second order CFA was used to test Hypothesis 2b, which states that that the 6 dimensions assessed by the measure load onto a higher-order factor, Psychological Occupational Well-being. Model fit was also assessed using chi-square statistics, Comparative Fit Index (CFI), Tucker-Lewis Index (TLI), and the root mean square error of Approximation (RMSEA). The fit indices are summarized in Table 13.

As in Hypothesis 2a, the chi-square statistic was significant and indicated that the data are not a good fit for the model and the CFI (.776), TLI (.749) and RMSEA (.09) fell outside of their acceptable ranges for good model fit. Overall, these indices suggest that the proposed model was a poor fit to the data. Table 14 shows the unstandardized estimates, standard error (S.E.), the standardized estimates, and R^2 for Hypothesis 2b. All of the estimates are significant ($p < 0.01$). The 6 latent factors load highly onto the Psychological Occupational Well-being (POW-B) latent factor, with standardized estimates ranging from 0.83 for Job Growth to 0.99 for Professional Self-Acceptance. In summary, Hypothesis 2b received weak support.

Hypothesis 3

Hypothesis 3 predicted that OWB is a multi-dimensional construct. Specifically, it proposed that the two factors of SOW-B and POW-B load onto a higher-order factor, OWB. In order to test the structure of OWB, three models were evaluated to determine the best model fit. Model 1 examined all nine components loading directly onto a single higher order factor of OWB. Model 2 examined two correlated higher-order factors of

SOW-B and POW-B. Model 3 examined whether the two higher-order factors of SOW-B and POW-B load onto a second-order factor of OWB.

Table 15 shows the fit statistics for Model 1, with a single higher-order factor. The chi-square was significant and the RMSEA, TLI and CFI taken together indicate weak to moderate model fit. The directions of the standardized path coefficients were checked to see if they were consistent with the hypothesis. As shown in Table 16, all the unstandardized estimates or loadings are statistically significant. The nine latent factors of Job Satisfaction, Positive Affect, Negative Affect, Job Purpose, Environmental Mastery, Job Growth, Positive Work Relationships, Job Autonomy, and Professional Self-acceptance had strong factor loadings on Occupational Well-being (OWB), indicating that the higher order factor of OWB is comprised of those constructs.

In Model 2, paths were drawn from the nine factors to their respective high-order factor of SOW-B and POW-B. A correlation between POW-B and SOW-B was also added to the model. This model failed to run due to a negative variance on the error term for the Prof Self-Acceptance factor. This factor was then removed from the model. Table 17 shows the fit statistics for the model with two correlated higher-order factors. The chi-square was significant and the RMSEA, TLI, and CFI taken together suggest weak-to-moderate fit. Table 18 shows model estimates, all of which were statistically significant. The correlation between SOW-B and POW-B was 0.82, which is very high, providing support that they are distinct yet related constructs.

In Model 3, paths were drawn from SOW-B and POW-B to OWB to show the loadings to the second higher-order factor. Table 19 shows the fit statistics for the model with a second higher-order factor. The chi-square was significant, and the RMSEA

indicated a poor model fit. However, the TLI and the CFI both indicated a good model fit. Table 20 shows model estimates, all of which were statistically significant, including the paths from SOW-B and POW-B to OWB, which were 0.93 and 0.95, respectively. Taken together, this indicates a good fit to the construct of OWB. Model 3 is the best of the three models tested in Hypothesis 3.

Hypothesis 4a

Hypothesis 4a predicted that occupational well-being influences intent to leave an organization, in that higher levels of OWB are associated with lower levels of turnover intention. A linear regression was used to test this hypothesis. The model was significant, $F(1, 2532) = 2626.87, p < 0.01$, and in the direction that was hypothesized. The resulting regression equation is:

$$\text{Turnover Intention} = -0.918 \text{ OWB} - 0.081$$

The r-square of 0.714 indicates that about 71% of the variance in turnover intention is accounted for by OWB. Hypothesis 4a was supported.

Hypothesis 4b

Hypothesis 4b predicted that the magnitude of the relationship between positive affect and turnover intention would be greater than that of the relationship between negative affect and turnover intention. Linear regression analysis yielded a significant model, $F(2,2912) = 1058.30, p < .01$ in which negative work affect and positive work

affect combined to account for 42% of the observed variance in turnover intention. Both positive work affect and negative work affect were significant at $p < 0.01$. The resulting regression equation is:

$$\text{Turnover Intention} = -.485 \text{ Positive Work Affect} - 0.071 \text{ Negative Work Affect} + 0.662$$

These findings support Hypothesis 4b, although the direction of the relationship between turnover intention and negative work affect is counterintuitive. It should be noted that the magnitude of this relationship is relatively small, and its statistical significance may partly be attributed to the large sample used in the study. Hypothesis 4b was supported.

Hypothesis 5

Hypothesis 5 suggests that occupational well-being is positively related to discretionary behavior in that higher levels of OWB are associated with higher levels of discretionary behavior. A regression analysis yielded a significant model, $F(1, 3006) = 1863.21, p < .01$. The resulting regression equation is:

$$\text{Discretionary Behavior} = .722 \text{ OWB} - .012$$

This indicates that the relationship between OWB and discretionary behavior was positive and in the predicted direction. OWB accounted for about 38% of the variance in discretionary behavior ($r\text{-square} = .383$). Hypothesis 5 was supported.

Hypotheses 6a-6g

This set of hypotheses investigated the effects of age and gender on OWB. Linear regression analyses were conducted for Hypotheses 6a, 6c, 6d, 6e, and 6f while t-tests were used for Hypotheses 6b and 6g.

Hypothesis 6a predicted a positive relationship between age and job satisfaction. The regression model was significant, $F(1, 2898) = 75.66, p < .01$, and yielded the following equation:

$$\text{Job Satisfaction} = .149 \text{ Age} + 2.555$$

Given the significant and positive relationship between age and job satisfaction, Hypothesis 6a was supported by the analysis.

Hypothesis 6b predicted that there is no relationship between gender and job satisfaction. Descriptive statistics for the t-test are shown in Table 21 and indicate that males scored higher on the job satisfaction scale than did females and this difference was significant $t(2944) = 4.554, p < .01$. Keeping in mind that lower scores indicate higher levels of satisfaction, these results suggest females report more job satisfaction than males. Therefore, Hypothesis 6b was not supported.

Hypothesis 6c predicted a positive relationship between age and work autonomy. The linear regression analysis yielded a nonsignificant model, $F(1, 2899) = .327, p = .567$, indicating that there is no linear relationship between age and work autonomy. Hypothesis 6c was not supported.

Hypothesis 6d predicted a positive relationship between age and environmental mastery. As with Hypothesis 6c, the regression model was nonsignificant, $F(1, 2899) = 1.978$, $p = .160$ and indicated the absence of a linear relationship between age and environmental mastery. Hypothesis 6d was not supported.

Hypothesis 6e predicted a negative relationship between age and the job purpose dimension of OWB. This regression model was significant but not in the predicted direction, $F(1, 2899) = 19.28$, $p < .01$. It should be noted that less than one percent of the variance in job purpose was accounted for by age ($r^2 = .007$). Hypothesis 6e was not supported. The resulting regression equation was:

$$\text{Job Purpose} = .061 \text{ Age} + 2.078$$

Hypothesis 6f predicted a negative relationship between age and the job growth dimension of OWB. The resulting regression model was not significant, $F(1, 2899) = .965$, $p = .326$, indicating a lack of a linear relationship between age and job growth. Hypothesis 6f was not supported.

Hypothesis 6g predicted a significant relationship between gender and the OWB dimension of positive work relationships such that women will demonstrate significantly higher levels than men. The descriptive statistics for the t-test are shown in Table 22. In line with the hypothesis, females demonstrated higher levels of positive work relationships than males, though these differences were not significant, $t(2945) = 1.199$, $p = 2.31$. These results suggest that males and females do not differ significantly on the

OWB dimension of positive work relationships, and therefore do not support Hypothesis

6g.

CHAPTER IV

DISCUSSION

Findings and Related Implications

The purpose of the present study was to unify divergent conceptualizations of occupational well-being (OWB) and validate a new measure of this construct. Models of well-being, which include comprehensive and unified measures of Subjective Well-being (SWB) and Psychological Well-being (PWB), have been tested and validated outside of the work environment. Studies within the work environment have examined SWB and PWB individually or have examined only partial components of a combined and coherent model. None, to date have examined all components in a meaningful way. This current study examined all aspects of the model to determine if a fully unified model is able to provide the most accurate measure of occupational well-being above and beyond current research.

The structures of each of the two components of this new model were tested first prior to testing the full, unified model. Partial support was found for Hypotheses 1a and 1b, which examined the three-factor structure of the first component, Subjective Occupational Well-being (SOW-B). Both the first-order and the second-order models received mixed support for model fit. For each hypothesis, the RMSEA showed poor model fit, the TLI showed weak model fit but just under the recommended cutoff, and the CFI showed good model fit.

Given the mixed model fit results, the parameter estimates were examined. The factor loadings were all high and significant, which indicates that the observed variables fit their respective latent factors. There were also significant relationships between the

first-order factors and significant loadings of each first-order factor onto the second-order factor of SOW-B. Even though the model fit support is inconsistent, there is some evidence that the three SOW-B factors that are measured in this current study are related constructs and are indicators of a common underlying dimension called SOW-B. In other words, the current study's proposed structure of SOW-B appears to be partially supported.

These results support existing research by showing significant relationships among the various factors of SOW-B, such as the relationship between job satisfaction and positive work affect and the relationship between positive work affect and negative work affect. To date, however, no context-specific models of SWB have been measured that included both the positive and the negative affect components, with measurement only consisting of job satisfaction and either positive affect at work or negative affect at work. Context-free theory and research on SWB strongly supports a three-factor model including both a cognitive component and a two-part affective component. This structure has allowed for a more holistic understanding of SWB and has allowed for research to be more effective in understanding its antecedents and its impact. The same will hold true for SOW-B. The current study has created the first domain-specific measure of SOW-B that includes all three components, which will allow for more effective research into the antecedents and outcomes of SOW-B.

Partial support was found for Hypotheses 2a and 2b, which examined the six-factor structure of the second component, Psychological Occupational Well-being (POW-B). Both the first-order and the second-order models received mixed support for model

fit. For each hypothesis, the RMSEA showed mediocre model fit, while both the TLI and the CFI showed poor model fit.

Once again, given the mixed model fit results, the parameter estimates were examined. The factor loadings were all high and significant except for one item within the Work Autonomy scale and one item within the Environmental Mastery at Work scale, which had significant but relatively low standard estimates. As previously mentioned, the measure of Work Autonomy did not have an acceptable level of reliability and this could have impacted the model fit. The elimination of the item with the lowest factor loading within this measure may allow for a stronger measure of Work Autonomy and potentially a better model fit. In addition, while the Environmental Mastery measure did have an acceptable level of reliability, the relatively low factor loading for one of its items may have impacted the overall fit of the larger model as well.

There were also significant relationships between the first-order factors and significant loadings of each first-order factor onto the second-order factor of POW-B. Even though the model fit support is inconsistent, there is some evidence that the six POW-B factors that are measured in this current study are related constructs and are indicators of a common underlying dimension called POW-B. In other words, the current study's proposed structure of POW-B appears to be partially supported.

These results support existing research by showing significant relationships among the various factors of POW-B. They provide support for Warr's (1990) workplace study showing relationships between environmental mastery and job growth. They also support Van Horn et al.'s (2004) findings showing relationships between job growth, job purpose, and autonomy as well as the relationship between environmental

mastery at work and personal work relationships. While various POW-B components examined in this study have been examined in previous research, the current study is the first to date that assesses all six of the Ryff-inspired components in the workplace setting. Van Horn et al. (2004) did include all of Ryff's components in his workplace well-being model and measure, but the study included items that were very specific to the teacher population and may not be generalizable. Thus, the current study builds upon this research by using measures of these six components that are broad and generalizable across job types and organizations. This measure should allow more variance to be explained, and thus more effectively investigate POW-B's antecedents and its impact.

Once the structures of the two components of the model were tested, the unified and multi-dimensional model, in which SOW-B and POW-B load onto a higher order OWB factor, was tested in Hypothesis 3. Three models were run to determine the best structure according to model fit. The first model examined a single higher-order factor of OWB, the second model examined two correlated higher-order factors of SOW-B and POW-B, and the third model examined if these factors then loaded onto a secondary-higher order factor of OWB. The third model fit the data best. The scales all loaded substantially and significantly on their respective first-order factor. SOW-B and POW-B had very high loadings onto OWB, 0.93 and 0.95, respectively. This suggests that OWB is best described as a single concept that manifests itself through two facets, SOW-B and POW-B.

Given the support found for the present study's model of OWB, the weaknesses of OWB conceptualizations that exist in other current research were addressed successfully. First, the instrument is domain-specific in that it considers the work context

within the items themselves. It also integrates competing models of well-being to form a comprehensive, integrative, and cohesive model of flourishing mental health at work. This is the first research to date that unifies all components of the highly supported context-free well-being models of Diener and Ryff into a model within the work domain and provides in-depth and theory-driven measurement of all components.

Second, the model includes both negative and positive emotions at work allowing for untapped OWB variance found in other studies to be explained here. The study found significant relationships between the two measures but also confirmed that they are separate constructs by showing the different relationships each has with turnover intention, which will be discussed in more detail shortly.

Given the support for the unified OWB model, it was possible to examine the relationship between this construct and behaviors that are important to individual and organizational performance. The first behavior to be examined was intention to leave the organization. A strong and significant negative relationship was found between OWB and turnover intention with over 71% of the variance in turnover intention being explained by OWB, providing strong support for Hypothesis 4a. In other words, as levels of OWB increase in an employee population, people are less likely to want to leave their organization.

This finding supports existing research on OWB and turnover intention, thus providing convergent validity for the current study's model. However, the current study furthers this line of research by finding support between OWB and turnover intention using a unified and more comprehensive measure of OWB than what has been used to date. Studies have focused on examining components of OWB such as job satisfaction,

affective well-being, and job-related anxiety, but the unified model in this current study will allow for a more nuanced understanding of what impacts turnover in organizations (Spector et al., 1988). This understanding can equip employers with the tools needed to create a more optimal work environment to promote retention. This, in turn, will decrease human capital costs for an organization, as more people stay, and thus increase overall organizational performance.

In addition, Hypothesis 4b posited that positive work affect, a specific component of OWB, would be more strongly related to turnover intention than negative work affect. Hypothesis 4b was supported showing that it was the presence of positive work affect that most impacted an employee's turnover intention. In other words, the presence of positive work experience more strongly impacted an employee's decision to stay at an organization than the presence of negative work experiences impacted an employee's decision to leave. Most research in this area has examined the relationship between turnover intention and negative work affect, but these studies have often found inconsistent or inconclusive results. The current finding provides support the little research that exists that examines the relationship between positive work affect and turnover intention, thus providing convergent validity for the current study's model. The current study provides support for this infrequently-studied area of research – that which examines the impact of positive work experiences instead of the strict focus on stressors and strains alone. While it is well-established that these are separate but related constructs and do not simply lie along a single continuum, the focus of research has long been lop-sided. This type of research is necessary to ensure organizations are providing the support that key talent need to increase their desire to stay in their organization;

providing positive work experiences and not simply trying to eliminate negative experiences is critical.

The impact of OWB on discretionary behavior was also examined in this study. The two-item measure of Discretionary Effort did not display acceptable reliability, which was impacted by the low variance in responses. Research has shown that self-ratings of these types of behaviors can be inflated and can have relatively low variance even more so than what research suggests for typical self-rating inflation (Harris & Schaubroeck, 1988; Kahlid & Ali, 2005). Adding questions to this measure may add some variance and increase the reliability to an acceptable level. However, due to the strong face validity of this measure, the scale is accepted as a valid measure of Discretionary Behavior.

Despite the lack of variance in this scale, Hypothesis 5 was supported as OWB was found to positively impact discretionary behavior. In other words, the more people experience well-being at work the more likely they are to engage in activities beyond their typical job responsibilities to help their organization succeed. This is in line with other research that has examined the relationship between components of OWB, such as job satisfaction and morale, and discretionary behavior thus providing convergent validity for the current study. This finding furthers research by examining the relationship using a model of OWB that unifies existing divergent theories of OWB in a coherent and comprehensive way. Examining and finding support for this unified model of OWB allows for a more complete understanding of what impacts discretionary behavior beyond job satisfaction. Given the well-established link between discretionary behavior and organizational performance, it is beneficial to an organization to understand fully the

antecedents of discretionary behavior in order to create the type of work environment that promotes it.

The impact that age and gender have on various components of OWB was tested in Hypotheses 6a through 6g in an attempt to further validate existing research. Support was found for Hypothesis 6a in that age was significantly related to job satisfaction. Hypothesis 6b predicted no difference between men and women in levels of job satisfaction, but men were found to be more satisfied in this study. Given the inconsistent findings on gender comparisons in this area of research, this finding was neither surprising nor unprecedented. Replication of the current study using data from other organizations or other industries may yield other results.

Hypotheses 6c through 6g test the relationships that age and gender have with various components of OWB, specifically components of POW-B. None of these hypotheses were supported. Age was not found to be related to autonomy, environmental mastery, job purpose, or job growth. Gender was not related to positive work relationships. Most of the existing research studies these relationships in a context-free environment. Given the dearth of research in this area (Ryff, 1989), the current study intended to examine if these relationships would generalize to some degree to the workplace context. This study did not support this generalization. It appears that age and gender do not have the same impact on some of the components of well-being in the workplace as they do in a context-free environment.

One of the primary objectives of the current study was to create a domain-specific model of well-being given that much research suggests that domain-specific and context-free indices of well-being cannot be used interchangeably as they are related but different

constructs. Even though the current study assumed that age and gender would impact some aspects of OWB in a manner similar to how they impact context-free well-being, it is not entirely surprising that these relationships were not found in the workplace. There are subtleties, complexities, and variations of employees' cognitive and affective experiences at work that may not readily manifest themselves in an observable way in their life outside of work.

Hypotheses 6e and 6f predicted that Job Purpose and Personal Growth at Work would both decrease with age. Neither of these hypotheses were supported, with Hypothesis 6e even finding a significant positive relationship between age and Job Purpose, although the relationship was very small with age accounting for less than one percent of the variance in Job Purpose. These hypotheses were based on research findings from context-free studies of well-being, and again this clearly highlights the need for a domain-specific measure of well-being. Given that the work environment provides workers a sense of purpose and growth opportunities, it is not surprising that the age effects seen in context-free research disappear in a work setting.

Hypothesis 6g predicted that women would have significantly higher levels of Positive Work Relationships than men. This hypothesis was not supported. While women did show slightly higher levels of Positive Working Relationships, the difference was not significant. This finding may be specific to this organization and may be linked to the finding that men in this sample had higher levels of job satisfaction. Higher levels of social support in a work context have been found to be related to higher levels of job satisfaction (Diener & Seligman, 2002). Since the current study shows higher levels of

Positive Work Relationships for men, perhaps these levels are impacting their job satisfaction.

General Implications

OWB is an increasingly relevant and necessary consideration in the modern workplace as there continues to be a gradual rise each year in the number of people experiencing mental health difficulties from work-related stress (Kalia, 2002). Stress-related difficulties can lead to accidents and medical problems, which can result in inability to work efficiently and in lost productivity due to increased sick leave (Kalia, 2002; Teasdale, 2006). Low levels of OWB can manifest itself in many ways from employee exhaustion and lower work commitment to lack of concentration and psychosomatic complaints and can impact both turnover intentions and discretionary behavior (Hart & Cooper, 2001). Two-thirds of both men and women say work has a significant impact on their stress level, and one in four has called in sick or taken a "mental health day" as a result of work stress (American Psychological Association, 2004). The National Institute of Stress reports that workplace stress is estimated to cost U.S. industry \$300 billion a year in absenteeism, turnover, diminished productivity and medical, legal and insurance fees. The current study's findings also show a strong link between OWB and turnover intention. According to the Corporate Leadership Council, replacing employees who leave can cost up to one hundred-fifty percent of the departing employee's salary when considering recruitment, hiring and training costs.

While there is a plethora of evidence showing the detrimental impact that a lack of OWB can have on an organization's bottom line, there is also an abundance of

research showing how increasing OWB can increase organizational performance. The current study finds a significant relationship between OWB and discretionary behavior, which other research has linked to various organizational outcomes such as increases in service quality (Yoon & Suh, 2003) and customer satisfaction and loyalty (Barroso, Armario, & Ruiz, 2004). Harter et al. (2002) demonstrated a direct relationship between the presence of positive workplace perceptions and feelings with higher levels of customer loyalty, higher profitability, and higher productivity. Meta-analysis reveals positive relationships between job satisfaction and individual performance, particularly facets such as satisfaction with one's supervisor and satisfaction with one's work. Spector's (1997) review suggests that more satisfied employees are more cooperative, more helpful to their colleagues, more punctual and time-efficient, show up for more days of work, and stay with the company longer than dissatisfied employees. There is a clear link between the happy and the productive worker; between emotional well-being and work performance (Harter et al., 2002).

Understandably, the evidence on both the adverse and the positive effects that OWB can have on various metrics of individual and organizational performance are of immediate interest to the corporate world. This makes it more crucial than ever to identify the components of OWB to provide practitioners with more precise measurement and a greater understanding of how to impact it in their organizations.

Given the partial support found for the OWB model, the current study provides a step in the right direction towards the creation of a unified, comprehensive, and theory-driven measure of OWB. More research is needed to continue exploring this construct and validating a measure. A comprehensive and unified model of OWB will help

employers understand all the components of this construct, which will allow them to create focused programs that serve to increase employee levels of OWB. In this age when managers and human resources within organizations are required to do more with fewer resources, this understanding will allow them to focus their efforts on programs that will actually impact OWB instead of focusing on areas that may provide only incremental increases or none at all and thus a low return on investment. For example, a strict focus only on measurement of positive and negative affect within an organization may lead to improvement in the selection of optimal employees, but this would ignore the impact that the work environment has on OWB. A focus only on enriching the work environment without selecting for optimal employees may make efforts less effective as some employees may not view these enrichment opportunities as positive experiences. The consideration of all aspects of OWB by selecting for optimal employees and providing these employees with opportunities for personal enrichment would allow for higher levels of OWB and a greater return on investment in the form of higher individual and organizational performance.

Warr (1994) supports this view that broad conceptualizations of OWB may lead employers to develop a correspondingly broad repertoire of strategies to impact OWB. He asserts that some may consider this a drawback, but others will recognize that comprehensive and multi-dimensional conceptualizations of OWB are more flexible than one-dimensional approaches as they offer more options for employers. It is in this sense that broad conceptualizations, such as the current study's conceptualization of OWB, enrich both theory and practice of occupational psychology.

Study Limitations and Future Direction

There are some limitations of the current study that must be discussed. First, archival data were used. The model of OWB was built based on strong theoretical grounds. However, the items within each of the measures of the current study were not designed specifically for the purposes of this study. Instead, survey items from the archival data set were examined for relevance and were mapped to each component of the model to create its respective measure. A rigorous survey item selection procedure was used to ensure high agreement among panel members of the items that were appropriate for the measures in order to offset this limitation (see the Method section). In addition, most of the scales that were created from the archival data set were found to be reliable measures of the construct. However, there were two scales that exhibited reliability coefficients below the acceptable cutoff. The scale measuring Work Autonomy had only four items and relatively low variance. The low variance impacted the ability to observe meaningful correlations and thus reduced the scale's reliabilities. For future research, additional items should be included in the Work Autonomy scale in order to increase the variance and potentially increase the reliability of this scale. This, in turn, may have an impact on the overall fit of the models for POW-B and OWB as only partial support was found for each model. In each case, one of the items within Work Autonomy had low factor loadings. It was noted during scale design that the Work Autonomy scale had a relatively low number of survey items mapped, but no additional survey items were agreed upon by the panel to map to this scale.

The scale measuring Discretionary Effort also fell below the acceptable cutoff for reliability. However, as discussed earlier in this Discussion, there are natural limitations

to variance in the measurement of discretionary behavior, which can decrease observed reliability. Still, adding questions to this measure may add some variance that would raise the reliability to an acceptable level. Again, this was not possible in the current study as no additional existing survey items were agreed upon by the panel to map to this scale. For future research, it is suggested that the survey items be designed specifically for the study of OWB as opposed to using existing survey items created for a similar but different purpose.

A second limitation of the current study is the problem of common method variance (CMV). This arises when measures of all variables investigated come from the same source and any defects in that source contaminate the measures in the same direction (Organ & Ryan, 1995; Podsakoff & Organ, 1986). It is a variance that is “attributable to the measurement method rather than to the constructs the measures represent” (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). Self-report data can create false correlations if the respondents have a propensity to provide consistent answers to survey questions that are otherwise not related (Chang, Witteloostuijn, & Eden, 2010). Thus, common methods can cause systematic measurement errors, which serve to either inflate or deflate the observed relationships between constructs and generate Type I or Type II errors, respectively.

Practitioners in the organization in which the data for the current study were collected, used several design methodologies in order to limit CMV in their results. First, respondents were assured of the confidential nature of the survey through multiple channels of communication and were asked to respond to the items as honestly as possible as no manager in their organization would see individual responses. This was

intended to reduce respondents' apprehension and make them less likely to edit their responses to make them more socially desirable (Podsakoff et al., 2003). Second, the survey items were constructed to read at a sixth grade reading level and the instrument contained definitions explaining certain survey references. These strategies were intended to ensure that the survey was concise and not confusing or ambiguous (Harrison, McClaughlin, & Coalter, 1996). Third, the survey items were randomized in that no items that were measuring the same construct were asked in a row. In fact, on average, there were 6 survey items separating similar construct items. This would make CMV less likely as the respondent cannot easily combine related items to cognitively create the correlation needed to produce a CMV-biased pattern of responses (Murray, Kotabe, & Zhou, 2005). Fourth, different scales and negatively-worded items were used throughout the survey instrument in order to cause the respondent to pause and pay closer attention to how they are responding to the items and to consider using other scale points (Chang et al., 2010).

For future research, it is recommended to use other sources of information for some of the key measures, where possible, instead of relying strictly on self-report. This can be difficult when attempting to measure well-being of employees, but it is possible to use this strategy when examining its impact on individual or organizational outcomes. Instead of using self-report for measuring turnover and discretionary behavior, independent data on actual turnover or manager evaluations of discretionary behavior would help to combat this issue.

Finally, the current study did not find support for many of the proposed relationships between various demographic groups and certain facets of OWB. These relationships

were proposed due to the research support that is found in a context-free environment. Upon further reflection and as discussed, it is not difficult to see how these relationships may not generalize to the work environment and may, in fact, change in strength or direction in this context. Further research on these relationships is needed as this study shows that a reliance on the research in a context-free environment may not be possible.

Summary

The purpose of the present study was to unify divergent conceptualizations of occupational well-being (OWB) and validate a new measure of this construct. The current research drew upon and integrated the existing SWB and PWB literature to clearly define OWB and create a practical and testable model. The proposed measure of OWB addressed some of the weaknesses of current conceptualizations. First, the instrument created was domain-specific in that it considered the work context within the items themselves. Second, it included both negative and positive emotions at work allowing for untapped OWB variance to be explained. Third, it integrated competing models to form a comprehensive, integrative, and cohesive model of flourishing mental health at work. The overall goal of this research was to provide researchers with a well-articulated theory of OWB as well as an instrument to assess this construct.

The study defined OWB as a positive evaluation of various aspects of one's job experiences and includes cognitive, affective, and motivational/behavioral components. It proposed that OWB is a multidimensional construct that is composed of two related but distinct dimensions. The findings of this study showed support that OWB is a single concept that manifests itself in the two facets of SOW-B and POW-B. These findings are

a step in the right direction towards creating a instrument to assess this construct, although more research is needed due to the limitations of the proposed model.

Study limitations included the use of strictly archival data and common method variance. Although many steps were taken to lessen the effects of both of these limitations, they still may have impacted results. Future research using survey items designed specifically to measure the various facets of OWB is needed since the current study used pre-existing items that were mapped to the facets. In addition, the use of independent data such as actual turnover or manager evaluations of discretionary behavior is needed in order to lessen any impact of common method variance on these relationships.

Finally, future studies should also examine how the work context plays a moderating role between the relationship between various demographic groups and OWB. While relationships between various facets of well-being and demographic groups have been studied and supported in a context-free environment, the work environment may have a stronger impact on groups than what is proposed outside the workplace.

REFERENCES

- Adejumo, A. (2008). Influence of Social Support, Work Overload, and Parity on Pregnant Career Women's Psychological Well-Being. *Journal of Applied Biobehavioral Research, 4*, 215-228.
- Al-ajmi, R. (2006). Effect of Gender on Job Satisfaction and Organizational Commitment in Kuwait. *The International Journal of Management, 23(4)*, 838-844.
- Allport, G.W. (1961). *Pattern and Growth in Personality*. New York: Hold, Rinehart & Winston, Inc.
- Andrews, F. M., & Withey, S. B. (1976). *Social Indicators of Wellbeing*. New York: Wiley.
- Angyal, A. (1965). *Neurosis and Treatment: A Holistic Theory*. New York: Wiley.
- Argyris, C. (1965). *Organization and Innovation*. Homewood, Illinois: R.D. Irwin.
- Argyle M. (1999). Causes and correlates of happiness. In D. Kahneman, E. Diener, & N. Schwarz, (Eds.), *Well-being: The Foundations of Hedonic Psychology* (pp. 353–373). New York: Sage.
- Aryee, S., Li-Yun, S., Xiong, Z., Chen, G., & Yaw, A.D. (2008). Abusive Supervision and Contextual Performance: The Mediating Role of Emotional Exhaustion and the Moderating Role of Work Unit Structure. *Management and Organization Review, 4*, 393–411.
- Baillo, J., & Semmer, N. (1994). Turnover and career paths among computer specialists. *Zeitschrift für Arbeits- und Organisationspsychologie, 38*, 152-163.
- Barroso, C., Armario, E.M., & Ruiz, D.M. (2004). The influence of employee organizational citizenship behavior on customer loyalty. *International Journal of Service Industry Management, 15(1)*, 27-53
- Bateman, T.S., & Organ, D.W. (1983). Job satisfaction and the good soldier: The relationship between affect and employee "citizenship." *Academy of Management Journal, 26*, 587-595.
- Baumeister, R.F. (1991). *Meanings of Life*. New York: Guilford.
- Becker, T. E., & Billings, R. S. (1993). Profiles of commitment: An empirical test. *Journal of Organizational Behavior, 14*, 177-190.

- Beehr, T.A. (1995). *Psychological Stress in the Workplace*. London: Routledge.
- Begat, I., Ellefsen, B., & Severinsson, E. (2005). Nurses' satisfaction with their work environment and the outcomes of clinical nursing supervision on nurses' experiences of well-being—a Norwegian study. *Journal of Nursing Management*, *13*(3), 221-230.
- Bellou, V. (2010). Organizational culture as a predictor of job satisfaction: The role of gender and age. *Career Development International*, *15*(1), 4-19.
- Bhattacharya, C. B., Rao, H., & Glynn, M.A. (1995). Understanding the bond of identification: An investigation of its correlates among art museum members. *Journal of Marketing*, *59*, 46–57.
- Bodt, J. H. I. (1995). The work organization of nursing units: An investigation on the relationship between unit environment and unit structure. Dissertation. Eindhoven, the Netherlands: Technical University Eindhoven, Faculteit Bedrijfskunde.
- Boles, J., Johnston, M., & Hair, J.E., Jr. (1997). Role stress, work-family conflict, and emotional exhaustion: Inter-relationships and effects on some work-related consequences, *Journal of Personal Selling and Sales Management*, *17*, 17-28.
- Boles, J., Madupalli, R., Rutherford, B. & Wood, J. A. (2007). The relationship of facets of salesperson job satisfaction with affective organizational commitment. *Journal of Business & Industrial Marketing*, *22* (5), 311–321.
- Bollen, K.A., & Long, J.S. (1993). *Testing Structural Equation Models*. Newbury Park, CA: Sage.
- Borman, W.C., & Motowidlo, S.J. (1993). Expanding the criterion domain to include elements of contextual performance. In N. Schmitt & W. C. Borman (Eds.), *Personnel Selection in Organizations* (pp. 71-98). San Francisco, CA: Jossey Bass.
- Borman, W., & Motowidlo, S. (1997). Task performance and contextual performance: The meaning for personnel selection research. *Human Performance*, *10*, 99-109.
- Borman, W.C., White, L.A., & Dorsey, D.W. (1995). Effects of ratee task performance and interpersonal factors on supervisor and peer performance ratings. *Journal of Applied Psychology*, *80*, 168-177.
- Bradburn N.M. (1969). *The Structure of Psychological Well-being*. Chicago: Aldine.

- Bradley, J.R., & Cartwright, S. (2002). Social support, job stress, health, and job satisfaction among nurses in the United Kingdom. *International Journal of Stress Management*, 9, 163-182.
- Breaugh, J.A. (1985). The measurement of work autonomy. *Human Relations*, 38, 551-579.
- Brickman, P., & Campbell, D. (1971). Hedonic relativism and planning the good society. In M. H. Apley (Ed.), *Adaptation-level Theory: A Symposium* (pp. 287–302). New York: Academic Press.
- Brickman, P., Coates, D., & Janoff-Bulman, R. (1978). Lottery winners and accident victims: Is happiness relative? *Journal of Personality and Social Psychology*, 36, 917-927.
- Brief, A., & Atieh, J.M. (1987). Studying job stress: Are we making mountains out of molehills? *Journal of Occupational Behavior*, 8, 115-126.
- Brief, A., Butcher, A., George, J., & Link, K. (1993). Integrating bottom-up and top-down theories of subjective well-being: The case of health. *Journal of Personality and Social Psychology*, 64, 646-653.
- Briner, R.B. (1994). Stress and well-being at work: Assessments and interventions for occupational mental health. *Journal of Occupational and Organizational Psychology*, 67, 183–184.
- Brown, M.W., & Cudeck, R. (1993). Alternate ways of assessing model fit. In K.A. Bollen & J.S. Long (Eds.), *Testing Structural Equation Models* (pp.136-162). Newbury Park, CA: Sage.
- Browne, J.H. (2000). Benchmarking HRM practices in healthy work organizations. *American Business Review*, 18(2), 54-61.
- Bryant, F.B., & Veroff, J. (1982). The structure of psychological well-being A socio-historical analysis *Journal of Personality and Social Psychology*, 43, 653-673.
- Buhler, C. (1935). *From Birth to Maturity*. London: Kegan Paul, Trench, & Trubner.
- Buhler, C. & Massarik, F. (Eds.). (1968). *The Course of Human Life*. New York: Springer.
- Burke, R. J. (1986). Occupational and life stress and the family: Conceptual frameworks and research findings. *International Review of Applied Psychology*, 35, 347-369.

- Cacioppo, J.T., Gardner, W.L., & Berntson, G.G. (1999). The affect system has parallel and integrative processing components: Form follows function. *Journal of Personality and Social Psychology*, 76, 839-855.
- Campbell, A., Converse, P.E., & Rogers, W.L. (1976). *The Quality of American Life, Perceptions, Evaluations, and Satisfactions*. New York: Sage.
- Cantril, H. (1965). *The pattern of human concerns*. New Brunswick, NJ: Rutgers University Press.
- Carr, E.G. (1977). The motivation of self-injurious behavior: A review of some hypotheses. *Psychological Bulletin*, 84, 800-816.
- Cascio, W.F. (2000). *Costing Human Resources*, 4th Edition. Boston: Kent Publishing Company.
- Chang, S.J., Witteloostuijn, A., & Eden, L. (2010). Common method variance in international business research. *Journal of International Business Studies*, 41(3), 178-184.
- Cheng T., & Chan A.C.M. (2005). Measuring psychological well-being in the Chinese. *Personality and Individual Differences*, 38, 1307–1316.
- Chen, T., Chang, P., & Yeh, C. (2004). An investigation of career development programs, job satisfaction, professional development and productivity: The case of Taiwan. *Human Resource Development International*, 7(4), 441 – 463.
- Cinamon, R.G., & Rich, Y. (2002). Attributions of importance to work and family roles: Implications for the work family conflict *Journal of Counseling Psychology*, 49, 212-220.
- Clark, R.E. (2001). *Learning from media: Arguments, analysis, and evidence*. Charlotte, NC: Information. Age Publishing.
- Compton, W.C., Smith, M.L. Cornish, K.A. & Qualls, D.L. (1996). Factor structure of mental health measures. *Journal of Personality and Social Psychology*, 71(2), 406-413.
- Cook, J.D., Hepworth, S.J., Wall, T.D., & Warr, P.B. (1981). *Experience of Work: A Compendium and Review of 249 Measures and Their Use*. New York: Academic Press.
- Cooper, C., Kirkcaldy, B.D., & Brown, J. (1994). A model of job stress and physical health: The role of individual differences. *Personality and Individual Differences*, 16, 653–655.

- Costa P.T., & McCrae, R.R. (1980) Influence of Extraversion and Neuroticism on subjective well-being: Happy and unhappy people. *Journal of Personality and Social Psychology*, 38, 668-678.
- Costa, P.T., Jr., & McCrae, R.R. (1985). *The NEO Personality Inventory Manual*. Odessa, Florida: Psychological Assessment Resources.
- Costa, P.T. Jr. , & McCrae, R.R. (1988). From catalog to classification: Murray's needs and the five factor model, *Journal of Personality and Social Psychology*, 55, 258-265.
- Cropanzano, R., Rupp, D E., & Byrne, Z S. (2003). The relationship of emotional exhaustion to work attitudes, job performance, and organizational citizenship behaviors. *Journal of Applied Psychology*, 88(1), 160.
- Daniels, K., Tregaskis, O. & Seaton, J.S. (2007). Job control and occupational health: the moderating role of national R&D activity. *Journal of Organizational Behavior*, 28, 1- 20.
- Davern, M., Cummins, R.A., & Stokes, M. (2007). Subjective wellbeing as an affective/cognitive construct. *Journal of Happiness Studies*, 8, 429-449.
- Cropanzano, R., Rupp, D E., & Byrne, Z S. (2003). The relationship of emotional exhaustion to work attitudes, job performance, and organizational citizenship behaviors. *Journal of Applied Psychology*, 88(1), 160.
- Dalessio, A., Silverman, W. & Schuck, J. (1986). Paths to turnover: A re-analysis and review of existing data on the Mobley, Horner, and Hollingsworth's turnover model. *Human Relations*, 39, 245-264.
- Daniels, K., & Guppy, A. (1994). Occupational stress, social support, job control, and psychological well-being. *Human Relations*, 47, 1523–1544.
- Danna, K. & Griffin, R.W. (1999). Health and well-being in the workplace: a review and synthesis of the literature. *Journal of Management*, 25(3), 357-384.
- Davis, K. (1988). *Ypetmede ysan davranypy: Orgusel Davranypy* (3rd ed). New York: McGraw-Hill.
- D'elia, G.P. (1979). Determinants of job satisfaction among beginning librarians. *Library Quarterly* 9, 283-302.
- DeNeve, K.M., & Cooper, H. (1998).The happy personality: a meta-analysis of 137 personality traits and subjective well-being. *Psychological Bulletin*, 124, 197–229.

- Diener, E. (1984). Subjective well-being. *Psychological Bulletin*, *95*(3), 542-575.
- Diener, E. (2000). Subjective well-being: The science of happiness, and a proposal for a national index. *American Psychologist*, *55*, 34-43.
- Diener, E., Sandvik, E., Seidlitz, L., & Diener, M. (1993). The relationship between income and subjective well-being: Relative or absolute? *Social Indicators Research*, *28*, 195-223.
- Diener, E., & Seligman, M.E.P. (2002). Very happy people. *Psychological Science*, *13*, 80-83.
- Diener, E., Diener, M., & Diener, C. (1995). Factors predicting the subjective well-being of nations. *Journal of Personality and Social Psychology*, *69*(5), 851-864.
- Diener, E., & Emmons, R.A. (1984). The independence of positive and negative affect. *Journal of Personality and Social Psychology*, *47*, 1105-1117.
- Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The Satisfaction With Life Scale. *Journal of Personality Assessment*, *49*, 71-75.
- Diener, E., & Lucas, R. (2000). Explaining differences in societal levels of happiness: Relative standards, need fulfillment, culture, and evaluation theory. *Journal of Happiness Studies*, *1*, 41-78.
- Diener, E., Lucas, R. E., Oishi, S., & Suh, E. M. (2002). Looking up and looking down: Weighting good and bad information in life satisfaction judgments. *Personality and Social Psychology Bulletin*, *28*, 437-445.
- Diener, E., Nickerson, C., Lucas, R.E, & Sandvik, E. (2002). Dispositional affect and job outcomes. *Social Indicators Research*, *59*, 229-259.
- Diener, E., Oishi, S., & Lucas, R. (2003). Personality, culture, and subjective well-being: Emotional and cognitive evaluations of life. *Annual Review of Psychology*, *54*, 403-425.
- Diener, E., Sapyta, J. J., & Suh, E. (1998). Subjective well-being is essential to well-being. *Psychological Inquiry*, *9*, 33-37.
- Diener, E., & Seligman, M.E.P. (2002). Very happy people. *Psychological Science*, *13*, 80-83.
- Diener, E., Smith, H., & Fujita, F. (1995). The personality structure of affect. *Journal of Personality and Social Psychology*, *69*, 130-141.

- Diener, E., & Suh, E.M. (Eds.). (2000). *Culture and subjective well-being*. Cambridge, MA: MIT Press.
- Diener, E., Suh, E. M., Lucas, R. E., & Smith, H. L. (1999). Subjective well-being: Three decades of progress. *Psychological Bulletin*, *125*, 276-302.
- Diener, E., Wolsic, B., & Fujita, F. (1995). Physical attractiveness and subjective well-being. *Journal of Personality and Social Psychology*, *69*, 120-129.
- Doering, M., Rhodes, S.R., & Schuster, M.R. (1983). *The Aging Worker: Research and Recommendations*. Beverly Hills: Sage Publications.
- Dolliver, M. (2003). Job Satisfaction. *Adweek*, *44(38)*, 38.
- Donohue, S., & Heywood, J. (2004). Job satisfaction, comparison income and gender: Evidence from the NLSY. *International Journal of Manpower*, *25*, 211–34.
- Dooney, J., & Smith, N. (2005). *SHRM Human Capital Benchmarking Study: 2005 Executive Summary*. Alexandria, VA: Society for Human Resource Management.
- Dunham, R.B., & Smith, F.J. (1979). *Organizational Surveys: An Internal Assessment of Organizational Health*. Glenview, IL: Scott Foresman & Company.
- Dyer, L., & Reeves, T. (1995). Human resource strategies and firm performance: What do we know and where do we need to go? *The International Journal of Human Resource Management*, *6*, 656-670.
- Dykman, B.M. (1998). Integrating cognitive and motivational factors in depression: Initial tests of a goal orientation approach. *Journal of Personality and Social Psychology*, *74*, 139-158.
- Eby, L.T., Freeman, D.M., Rush, M.C., & Lance, C.E. (1999). Motivational bases of affective organizational commitment: a partial test of an integrative theoretical model. *Journal of Occupational and Organizational Psychology*, *72*, 463–483.
- Emmons, R. A., & Diener, E. (1985). Factors predicting satisfaction judgments: A comparative examination. *Social Indicator Research*, *16*, 157-168.
- Erikson, E. (1950). Identity and the life cycle. *Psychological Issues*, *1*, 18-164.
- Erikson, E. (1959). *Identity and the Life Cycle*. New York: International Universities Press.
- Eskildsen, J.K., Kristensen, K., & Westlund, A.H. (2004). Work motivation and job satisfaction in the Nordic countries. *Employee Relations*, *26*, 122–136.

- Etzion, D. (1984). Moderating effect of social support on the stress-burnout relationship. *Journal of Applied Psychology, 69*, 615-622.
- Fan, X., Thompson, B., & Wang, L. (1999). The effects of sample size, estimation methods, and model specification on SEM fit indices. *Structural Equation Modeling, 6*, 56-83.
- Farrell, D., & Rusbult, C.E. (1981). Exchange variables as predictors of job satisfaction, job commitment and turnover: The impact of rewards, costs, alternatives and investments. *Organizational Behavior and Human Performance, 27*, 172-86.
- Feist, G., Bodner, T., Jacobs, J., Miles, M., & Tan, V. (1995). Integrating top-down and bottom-up structural models of subjective well-being: A longitudinal investigation. *Journal of Personality and Social Psychology, 68*, 138-150.
- Forgionne, G., & Peters, V.E. (1982). Differences in job motivation and satisfaction among female and male managers. *Human Relations, 35*(2), 101-118.
- Frederick, S., & Loewenstein, G. (1999). Hedonic adaptation. In D. Kahneman, E. Diener, and N. Schwartz (Eds). *Scientific Perspectives on Enjoyment, Suffering, and Well-Being* (pp. 302-329). New York: Russell Sage Foundation.
- Fried, Y. & Ferris, G.R. (1987). The validity of the job characteristics model: A review and meta-analysis. *Personnel Psychology, 40*, 287-322.
- Frone, M.R., Yardley, J.K., & Markel, K.S. (1997). Developing and testing an integrative model of the work-family interface. *Journal of Vocational Behavior, 50*, 145-167.
- Futrell, C.M. & Parasuraman, A. (1984). The relationship of satisfaction and performance to sales force turnover. *Journal of Marketing, 48*(4), 33-40.
- Gallagher, M.W., Lopez, S.J., & Preacher, K.J. (2009). The hierarchical structure of well-being. *Journal of Personality, 77*, 1025-1049.
- Ganster, D.C., Fox, M.L., & Dwyer, D.J. (2001). Explaining employees' health care costs: A prospective examination of stressful job demands, personal control, and physiological reactivity. *Journal of Applied Psychology, 86*, 954-964.
- Ganster, D.C., Fusilier, M.R., & Mayes, B.T. (1986). Role of social support in the experience of stress at work. *Journal of Applied Psychology, 71*(1), 102-110.
- George, J.M. (1996). Leader positive mood and group performance: The case of customer service. *Journal of Applied Social Psychology, 25*(9), 778-794.

- George, J.M., & Jones, G.R. (1996). The experience of work and turnover intentions: Interactive effects of value attainment, job satisfaction, and positive mood. *Journal of Applied Psychology, 81*, 318-325.
- Goff, S.J., Mount, M.K., & Jamison, R.L. (1990). Employer supported childcare, work/family conflict, and absenteeism: A field study. *Personnel Psychology, 43*, 793-809.
- Greenglass, E.R., & Fiksenbaum, L. (2009). Proactive coping, positive affect, and well-being testing for mediation using path analysis, *European Psychologist, 14*(1), 29-39.
- Griffeth, R.W. & Hom, P.W. (1988). A comparison of different conceptualizations of perceived alternatives in turnover research. *Journal of Organizational Behavior, 9*, 103-111.
- Griffeth, R.W., Hom, P.S., & Gaertner, S. (2000). A meta-analysis of antecedents and correlates of employee turnover: Update, moderator tests, and research implications for the next millennium. *Journal of Management, 26*, 463-488.
- Gross, J.J., & John, O.P. (2003). Individual differences in two emotion regulation processes: Implications for affect, relationships, and well-being. *Journal of Personality and Social Psychology, 85*, 348-362.
- Hackman, J. R., & Oldham, G. R. (1976). Motivation through the design of work: Test of a theory. *Organizational Behavior and Human Performance, 16*, 250-279.
- Halpern, D.F. (2005). How time-flexible work policies can reduce stress, improve health, and save money. *Stress and Health, 21*, 157-168.
- Hamshari, O.A.M. (1989). Job satisfaction of professional librarians: A comparative study technical and public service department in academic libraries in Jordan. *Dissertation Abstract International, 46*, 3179A.
- Harlow, R.E., & Cantor, N. (1996). Still participating after all these years: A study of life task participation in later life. *Journal of Personality & Social Psychology, 71*, 1235-1249.
- Harris, M.M., & Schaubroeck, J. (1988). A meta-analysis of self-supervisor, self-peer, and peer-supervisor ratings. *Personnel Psychology, 41*, 43-62.
- Harrison, D.A., & Martocchio, J.J. (1998). Time for absenteeism: A 20-year review of origins, offshoots, and outcomes. *Journal of Management, 24*, 305-350.

- Harrison, D.A., McLaughlin, M.E. & Coalter, T.M. (1996). Context, cognition and common method variance: Psychometric and verbal protocol evidence. *Organizational Behavior and Human Decision Processes*, 68, 246-261.
- Hart, P.M. (1999). Predicting employee life satisfaction: A coherent model of personality, work and nonwork experiences, and domain satisfactions. *Journal of Applied Psychology*, 84, 564–584.
- Hart, P.M., & Cooper, C. (2001). Occupational stress: Toward a more integrated framework. In N. Anderson, D.S. Ones, H.K. Sinangil, & C Viswesvaran (Eds.), *Handbook of Industrial, Work, and Organizational Psychology* (Vol. 2, pp. 93-114). London: Sage.
- Hart, P.M, Palmer, R.H., Christie, S., & Lander, D. (2002). Linking climate, job satisfaction, and contextual performance to customer experience. Presented at 17th Annual Conference for the Society for Industrial and Organizational Psychology, Toronto, Canada.
- Hart, P.M., Wearing, A.J., & Headey, B. (1995). Police stress and wellbeing: Integrating personality, coping and daily work experiences. *Journal of Occupational and Organizational Psychology*, 68, 133-156.
- Harter, J.K., Schmidt, F.L., & Keyes, C.L.M. (2002). Wellbeing the workplace and its relationship to business outcomes: A review of the Gallup studies. In C. L. Keyes & J. Haidt (Eds.), *Flourishing: The Positive Person and the Good Life* (pp. 205-224). Washington D.C.: American Psychological Association.
- Headey, B.W., Glowacki, T., Holmstrom, E.L. & Wearing, A.J. (1985). Modelling Change in Perceived Quality of Life. *Social Indicators Research*, 17, 267-98.
- Headey, B.W. & Wearing, A.J. (1992). *Understanding happiness: A theory of subjective well-being*. Melbourne: Longman Cheshire.
- Heidrich, S.M., & Ryff, C.D. (1993). The role of social comparison processes in the psychological adaptation of elderly adults. *Journal of Gerontology*, 48, 127-136.
- Hemenover, S.H. (2003). Individual differences in rate of affect change: Studies in affective chronometry. *Journal of Personality and Social Psychology*, 85, 121–131.
- Herzberg, F., Mausner, B., Peterson, R.D., & Capwell, D.F. (1957). *Job attitudes: Review of research and opinions*. Pittsburgh: Psychological Service of Pittsburgh.
- Hickson, C., & Oshagbemi, T. (1999). The effect of age on the satisfaction of academics with teaching and research. *International Journal of Social Economics*, 26(4), 537-544.

- Hoffman, B.J., Blair, C.A., Meriac, J.P., & Woehr, D.J. (2007). Expanding the criterion domain? A quantitative review of the OCB literature. *Journal of Applied Psychology, 92*, 555-566.
- Hu, L., & Bentler, P.M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling, 6*(1), 1-55.
- Hung, W.L. & Ching, H.L. (2006). An Examination of Factors Affecting Repatriates' Turnover Intentions. *International Journal of Manpower, 28*(2), 122-134.
- Inglehart, R., Basanez, M., & Moreno, A. (1998). *Human Values and Beliefs: A Cross-Cultural Source Book*. Ann Arbor: University of Michigan.
- Jacobs, E., & Roodt, G. (2007). The development of a knowledge sharing construct to predict turnover intentions. *Aslib Proceedings: New Information Perspectives, 59*(3), 229-248.
- Jahoda, M. (1958) *Current Concepts of Mental Health*. New York: Basic Books.
- Johnson, J. (2001). The relative importance of task and contextual performance dimensions to supervisor judgments of overall performance. *Journal of Applied Psychology, 86*, 984-996.
- Judge, T.A. & Watanabe, S. (1994). Individual differences in the nature of the relationship between job and life satisfaction. *Journal of Occupational and Organizational Psychology, 67*, 101-107.
- Jung, C. (1933). *Modern Man in Search of a Soul*. New York, Harcourt.
- Kacmar, K.M., & Ferris, G.R. (1989). Theoretical and methodological considerations in the age-job satisfaction relationship. *Journal of Applied Psychology, 74*, 201-207.
- Kalia, M. (2002). Assessing the economic impact of stress – the modern day hidden epidemic. *Metabolism, 51*(6), 49-53.
- Karasek, R.A. (1979). Job demands, job decision latitude, and mental strain: Implications for job redesign. *Administrative Science Quarterly, 24*, 285-307.
- Khalid, S.A., & Ali, H. (2005). Self and superior ratings of organizational citizenship behaviour: Are there differences in the source of rating? *Problems and Perspective in Management, 3*(4), 147-153.

- Kahneman, O. (1999). Objective happiness. In E. Diener, N. Schwarz, & O. Kahneman (Eds.), *Well-being: The Foundations of Hedonic Psychology* (pp. 3-27). Sage: New York.
- Kette, G. (1991). *Haft: Eine Socialpsychologische analyse*. Gottingen, Ger.: Hogrefe.
- Keyes, C.L.M. (1998). Social well-being. *Social Psychology Quarterly*, 61, 121–140
- Keyes, C.L.M. (2005). Mental health and/or mental illness? Investigating axioms of the complete state model of health. *Journal of Consulting and Clinical Psychology*, 73, 539–548
- Keyes, C.L.M., Shmotkin, D., & Ryff, C.D. (2002). Optimizing well-being: The empirical encounter of two traditions. *Journal of Personality and Social Psychology*, 82, 1007–1022.
- Kiker, D. S., & Motowidlo, S. J. (1999). Main and interaction effects of task and contextual performance on supervisory reward decisions. *Journal of Applied Psychology*, 84, 602-609.
- Kim, S. (2002). Organizational support of career development and job satisfaction. *Review of Public Personnel Administration*, 22(4), 276-294.
- Kim, H., Lee, M., Lee, H., & Kim, N. (2010). Corporate social responsibility and employee–company identification. *Journal of Business Ethics*, 95(4), 557-569.
- Kirkcaldy, B.D., Furnham, A., & Cooper, C.L. (1994). Police personality, job satisfaction, and health. *Studia Psychologica*, 36, 55-63.
- Kline R.B. (2005). *Principles and Practice of Structural Equation Modeling* (2nd ed.). New York, NY: The Guilford Press
- Kling, K.C., Seltzer, M.M., & Ryff, C.D. (1997). Distinctive late-life challenges: Implications for coping and well-being. *Psychology and Aging*, 12, 288-295.
- Kong, B.A., Chye, T.G., & Hian, C.K. (1993). The impact of age on the job satisfaction of accountants. *Personnel Review*, 22, 31-39.
- Kose, M.R. (1985). *A study of job satisfaction of employees in three research organizations in Turkey*. Yayymlanmanyyp yijsek Lisans tezi. Ankara: ODTU.
- Kozma, A., Stone, S., & Stones, M.J. (2000). Stability in components and predictors of subjective well-being (SWB): Implications for SWB structure. In E. Diener & D.R. Rahtz (Eds.). *Advances in Quality of Life: Theory and Research* (pp. 13-30). Great Britain: Kluwer Academic Publishers.

- Kraut, R. (1979). Two concepts of happiness. *The Philosophical Review*, 88, 167-197.
- Krogstad, U., Hofoss, D., Veenstra, M., & Hjortdahl, P. (2006). Predictors of job satisfaction among doctors, nurses and auxiliaries in Norwegian hospitals: relevance for micro unit culture. *Human Resources for Health*, 4(3).
- Kuhnert, K.W., & Palmer, D.R. (1991). Job security, health, and the intrinsic and extrinsic characteristics of work. *Group & Organization Studies*, 16, 178-192.
- Kubovy, M. (1999). On the pleasures of the mind. In D. Kahneman, E. Diener, & N. Schwarz (Eds.), *Well-being: The Foundations of Hedonic Psychology* (pp. 134-154). New York: Sage.
- Kuppens, P., Realo, A., & Diener, E. (2008). The role of positive and negative emotions in life satisfaction judgment across nations. *Journal of Personality and Social Psychology*, 95, 66-75.
- Kyriacou, C., & Sutcliffe, J. (1978). Teacher stress: Prevalence, sources, and symptoms. *British Journal of Educational Psychology*, 48, 159-167.
- Land, K.C. (1975). Social indicators models: An overview. In K.C. Land & S. Spilerman, (eds.), *Social Indicator Models* (pp. 5-36). New York: Russell Sage.
- Landau, J., & Hammer, T.H. (1986). Clerical employees' perceptions of intraorganizational career opportunities. *Academy of Management Journal*, 29, 385-404.
- Landsbergis, P.A. (1988). Occupational stress among health care workers: A test of the job demands-control model. *Journal of Organizational Behavior*, 9, 217-239.
- Leibowiz, Z., Schlossber, N., & Shore, J. (1991). Stopping the revolving door. *Training and Development Journal*, 45, 2.
- Lent, R. W. (2004). Toward a Unifying Theoretical and Practical Perspective on Well-Being and Psychosocial Research. *Journal of Counseling Psychology*, 51(4), 482-509.
- Locke, E.A., & Latham, G.P. (2002). Building a practically useful theory of goal setting and task motivation: A 35-year odyssey. *American Psychologist*, 57, 705-717.
- Lucas, R.E., Clark, A.E., Georgellis, Y., & Diener, E. (2003). Reexamining adaptation and the set point model of happiness: Reactions to changes in marital status. *Journal of Personality and Social Psychology*, 84, 527-539.
- Lucas, R.E., Clark, A.E., Georgellis, Y., & Diener, E. (2004). Unemployment alters the set-point for life satisfaction. *Psychological Science*, 15, 8-13.

- Lykken, D. & Tellegen, A. (1996). Happiness is a stochastic phenomenon, *Psychological Science*, 7, 186-189.
- Lyubomirsky, S., King, L., & Diener, E. (2005). The benefits of frequent positive affect: Does happiness lead to success? *Psychological Bulletin*, 131, 803-855.
- Lyubomirsky, S., Sheldon, K. M., & Schkade, D. (2005). Pursuing happiness: The architecture of sustainable change. *Review of General Psychology*, 9, 111–131.
- Maddi, S.R., Bartone, P.T., & Puccetti, M.C. (1987). Stressful events are indeed a factor in physical illness: Reply to Schroeder and Costa (1984). *Journal of Personality and Social Psychology*, 52, 833-84.
- Magnus, K., Diener, E., Fujita, F., & Pavot, W. (1993). Extraversion and neuroticism as predictors of objective life events: A longitudinal analysis. *Journal of Personality and Social Psychology*, 65, 1046-1053.
- Maier, E.H., & Lachman, M.E. (2000). Consequences of early parental loss and separation for health and well-being in midlife. *International Journal of Behavioral Development*, 24, 183-189.
- Manning, T.T. (2002). Gender, managerial level, transformational leadership and work satisfaction. *Women in Management Review*, 17(5), 209.
- Marks, G.N., & Fleming, N. (1999). Influences and consequences of well-being among Australian young people: 1980 –1995. *Social Indicators Research*, 46, 301–323.
- Marks, N.F. (1998). Does it hurt to care? Caregiving, work-family conflict, and midlife well-being. *Journal of Marriage and the Family*, 60, 951-966.
- Marks, N.F., & Lambert, J.D. (1998). Marital status continuity and change among young and midlife adults: Longitudinal effects on psychological well-being. *Journal of Family Issues*, 19, 652-686.
- Maslow, A.H. (1968). *Toward a Psychology of Being*. New York: D. Van Nostrand Company.
- Mathieu, J. & Zajac, D. (1990). A review and meta-analysis of the antecedents, correlates, and consequences of organizational commitment. *Psychological Bulletin*, 108, 171-194.
- McCrae, R.R., & Costa, P.T. (1991). Adding liebe und arbeit: The full five-factor model and well-being. *Personality and Social Psychology Bulletin*, 17(2), 227-232.

- McGregor, I., & Little, B.R. (1998). Personal projects, happiness, and meaning: On doing well and being yourself. *Journal of Personality and Social Psychology*, *74*, 494–512.
- McNeely, B.L., & Meglino, B.M. (1994). The role of dispositional and situational antecedents in prosocial organizational behavior: An examination of the intended beneficiaries of prosocial behavior. *Journal of Applied Psychology*, *79*, 836-844.
- Mobley, W.H., Griffeth, R.W., Hand, H.H., & Meglino, B.M. (1979). Review and conceptual analysis of the employee turnover process. *Psychological Bulletin*, *86*, 493-522.
- Motowidlo, S.J., Packard, J.S., & Manning, M.R. (1986). Occupational stress: Its causes and consequences for performance. *Journal of Applied Psychology*, *71*, 618-629.
- Mueller, R.O. (1996). *Basic Principles of Structural Equation Modeling: An Introduction to LISREL and EQS*. New York: Springer-Verlag.
- Murray, J.Y., Kotabe, M., & Zhou, J.N. (2005). Strategic alliance-based sourcing and market performance: Evidence from foreign firms operating in China,” *Journal of International Business Studies*, *36*(2), 187-208.
- Myers, D.G., & Diener, E. (1995). Who is happy? *Psychological Science*, *6*, 10-19.
- Nakamura, J., & Csikszentmihalyi, M. (2002). The construction of meaning through vital engagement. In C. Keyes & J. Haidt (Eds.), *Flourishing* (pp. 83-104). Washington, DC: American Psychological Association Books.
- Near, J.P., Smith, A.C., Rice, R.W., & Hunt, R.G. (1983). Job satisfaction and non-work satisfaction as components of life satisfaction. *Journal of Applied Social Psychology*, *13*, 126-144.
- Neugarten, B.L. (1973). Personality change in late life: A developmental perspective. In C. Eisdorfer & M.P. Lawton (Eds.), *The Psychology of Adult Development and Aging* (pp. 311-335). Washington, D.C.: American Psychological Association.
- Nix, G.A., Ryan, R.M., Manly, J.B., & Deci, E.L. (1999). Revitalization through self-regulation: The effects of autonomous and controlled motivation on happiness and vitality. *Journal of Experimental Social Psychology*, *35*(3), 266-284.
- Nunnally, J.C. (1978). *Psychometric Theory* (2nd ed.). New York: McGraw-Hill.
- O'Brien, C.A., III. (1992). Changing meanings at work. In J. F. Hartley & G. M. Stephenson (Eds.), *Employment Relations: The Psychology of Influence and Control at Work* (pp. 44-66). Oxford, UK: Blackwell.

- Oishi, S., Diener, E., Lucas, R.E., & Suh, E. (1999). Cross-cultural variations in predictors of life satisfaction: Perspectives from needs and values. *Personality and Social Psychology Bulletin*, 25, 980-990.
- Okun, M.A., & George, L.K. (1984). Physician- and self-ratings of health, neuroticism, and subjective well-being among men and women. *Personality and Individual Differences*, 5, 533-539.
- Oncel, S., Ozer, Z.C., Efe, E. (2007). Work-related stress, burnout and job satisfaction in Turkish midwives. *Journal of Social Behaviors and Personality*. 35, 317-328.
- Organ, D.W. (1988). *Organizational Citizenship Behavior: The Good Soldier Syndrome*. Lexington, MA: Lexington Books.
- Organ, D.W., & Konovsky, M.A. (1989). Cognitive versus affective determinants of organizational citizenship behavior. *Journal of Applied Psychology*, 74, 157-164.
- Organ, D.W., & Ryan, K. (1995). A meta-analytic review of attitudinal and dispositional predictors of organizational citizenship behavior. *Personnel Psychology*, 48, 775-802.
- Ormel, J., & Schaufeli, W.B. (1991). Stability and change in psychological distress and their relationship with self-esteem and locus of control: A dynamic equilibrium model. *Journal of Personality and Social Psychology*, 60, 288-299.
- Ormel J., Wohlfarth, T.D. (1991). How neuroticism, long-term difficulties, and life situation change influence psychological distress: A longitudinal model. *Journal of Personality and Social Psychology*, 60, 744-755.
- Osborne, J., & Waters, E. (2002). Four assumptions of multiple regression that researchers should always test. *Practical Assessment, Research & Evaluation*, 8(2) Retrieved from <http://pareonline.net/getvn.asp?v=8&n=2>
- Oshagbemi, T. (2003). Personal correlates of job satisfaction: empirical evidence from UK universities. *International Journal of Social Economics*, 30(12), 1210-1232.
- Page, K.M., & Vella-Brodrick, D.A. (2009). The 'what', 'why', and 'how' of employee well-being: A new model. *Social Indicators Research*, 90, 441-458.
- Parasuraman, S., & Alutto, J. (1984). Sources and outcomes of stress in organizational settings: Toward the development of a structural model. *The Academy of Management Journal*, 27(2), 330-350.
- Parasuraman, S., Greenhaus, J.H., & Granrose, C.S. (1992). Role stressors, social support, and well-being among two-career couples. *Journal of Organizational Behavior*, 13(4), 339-356.

- Pavot, W., & Diener, E. (1993). Review of the Satisfaction with Life Scale. *Psychological Assessment, 5*, 164-172.
- Pavot, W. G., Diener, E., Colvin, C. R., & Sandvik, E. (1991). Further validation of the Satisfaction with Life Scale: Evidence for the cross-method convergence of well-being measures. *Journal of Personality Assessment, 57*, 149-161.
- Pfeffer, J. (1994). *Competitive Advantage Through People*. Boston: Harvard Business School Press.
- Phillips, R.H. (1961). Environmental mastery and personality development, *Archives of General Psychiatry 5*, 146–150.
- Podsakoff, P.M., MacKenzie, S.B, Paine, J.B., & Bachrach, D.G. (2000). Organizational citizenship behaviors: A critical review of the theoretical and empirical literature and suggestions for future research. *Journal of Management, 26*, 513-561.
- Podsakoff, P.M., & Organ, D.W. (1986). Self-reports in organizational research: Problems and prospects. *Journal of Management, 12(4)*, 531–544.
- Puffer, S.M. (1987). Prosocial behavior, noncompliant behavior, and work performance among commission sales people. *Journal of Applied Psychology, 72*, 615-621.
- Quick, J.C., Quick, J.D., Nelson, D.L., & Hurrell, J.J. (1997). *Preventive stress management in organizations*. Washington, DC: American Psychological Association.
- Rentsch, J.R., & Steel, R.P. (1992). Construct and concurrent validation of the Andrews and Withey Job Satisfaction Questionnaire. *Educational and Psychological Measurement, 52*, 357-367.
- Riediger, M., & Freund, A.M. (2004). Interference and facilitation among personal goals: Differential associations with subjective well-being and persistent goal pursuit. *Personality and Social Psychology Bulletin, 30*, 1511-1523.
- Rigdon, E. (1996). CFI versus RMSEA. *Structural Equation Modeling, 3*, 369–379.
- Robbins, S.B., & Kliewer, W. (2000). Advances in theory and research on subjective well-being. In S.B. Brown & R.W. Lent (Eds.), *Handbook of Counseling Psychology* (3rd ed.) pp. 310-345. New York: Wiley.
- Rogers, C.R. (1961). *On Becoming a Person: A Psychotherapists View of Psychotherapy*. Boston, MA: Houghton Mifflin.

- Roskies, E., & Lazarus, R. (1980). Coping theory and the teaching of coping skills. In D. Davidson & S. Davidson (Eds.), *Behavioral Medicine: Changing Health Lifestyles* (pp. 38–69). New York: Brunner/Mazel.
- Rosse, J. & Hulin, C.L. (1985). Adaptation to work: An analysis of employee health, withdrawal and change. *Organizational Behavior and Human Decision Processes*, 36(4), 324-347.
- Rowe, R., & Snizek, W. (1995). Gender differences in work values. *Work and Occupations* 22, 215-229.
- Roxburgh, S. (1996). Gender differences in work and well-being: Effects of exposure and vulnerability. *Journal of Health and Social Behaviour*, 37, 265-277.
- Russell, J.A. (1980). A circumplex model of affect. *Journal of Personality and Social Psychology*, 39, 1161–1178.
- Ryan, R.M., & Deci, E.L. (2001). On happiness and human potentials: A review of research on hedonic and eudaimonic well-being. *Annual Review of Psychology*, 52, 141-166.
- Ryff, C.D. (1989). Happiness is everything, or is it? Explorations on the meaning of psychological well-being. *Journal of Personality and Social Psychology*, 57, 1069–1081.
- Ryff, C.D. (1995). Psychological well-being in adult life. *Current Directions in Psychological Science*, 4, 99-10.
- Ryff, C.D., & Essex, M.J. (1992). The interpretation of life experience and well-being: The sample case of relocation. *Psychology and Aging*, 7, 507-517.
- Ryff, C.D., & Keyes, C.L.M. (1995). The structure of psychological well-being revisited. *Journal of Personality and Social Psychology*, 69, 719-727.
- Ryff, C.D., Lee, Y.H., Essex, M.J., & Schmutte, P.S. (1994). My children and me: Midlife evaluations of grown children and of self. *Psychology and Aging*, 9, 195-205.
- Ryff, C.D., & Singer, B. (1996). Psychological Well-Being: Meaning, Measurement, and Implications for Psychotherapy Research. *Psychotherapy and Psychosomatics*, 65, 14-23.
- Ryff, C.D., & Singer, B. (2008). Know thyself and become what you are: A eudaimonic approach to psychological well-being. *Journal of Happiness Studies*, 9, 13-39.

- Sager, J.K., Griffeth, R.W., & Hom, P.W. (1998). A comparison of structural models representing turnover cognition. *Journal of Vocational Behavior, 53*(2), 254-273.
- Salthouse, T.A., Hambrick, D.Z., Lukas, K.E., & Dell, T.C. (1996). Determinants of adult age differences on synthetic work performance. *Journal of Experimental Psychology: Applied, 2*, 305-329.
- Seers, A., McGee, G.W., Serey, T.T., & Graen, G.B. (1983). The interaction of job stress and social support: A strong inference investigation. *Academy of Management Journal, 26*, 273-284.
- Schmutte, P.S. & Ryff, C.D. (1997). Personality and well-being: Reexamining methods and meanings. *Journal of Personality and Social Psychology, 73*, 549-559.
- Schwarz, N., & Clore, G. L. (1983). Mood, misattribution, and judgments of well-Being: informative and directive functions of affective states. *Journal of Personality and Social Psychology, 45*, 513-523.
- Schwarz, N., & Strack, F. (1991). Evaluating one's life: A judgment model of subjective well-being. In F. Strack, M. Argyle, & N. Schwarz (Eds.), *Subjective Well-being: An Interdisciplinary Perspective* (pp. 27- 47). Oxford: Pergamon.
- Seligman, M.E.P., & Czikszentmihalyi, M. (2000). Positive psychology: An introduction. *American Psychologist, 55*, 5-14.
- Seligman, M.E.P., Steen, T.A., Park, N., & Peterson, C. (2005). Positive Psychology progress: Empirical validation of interventions. *American Psychologist, 60*, 410-421.
- Seltzer, M.M., Greenberg, J.S., Floyd, F.J., & Hong, J. (2004). Accommodative coping and well-being of midlife parents of children with mental health problems or developmental disabilities. *American Journal of Orthopsychiatry, 74*, 187- 195.
- September, A.N., McCarrey, M., Baranowsky, A., Parent, C., & Schindler, D. (2001). The relation between well-being, imposter feelings, and gender role orientation among Canadian university students. *The Journal of Social Psychology, 141*(2), 218-232.
- Sheldon, K.M., & Lyubomirsky, S. (2006). How to increase and sustain positive emotion: The effects of expressing gratitude and visualizing best possible selves. *The Journal of Positive Psychology, 1*, 73-82.
- Shizgal, P. (1999). On the neural computation of utility: Implications from studies of brain stimulation reward. In D. Kahneman, E. Diener, & N. Schwarz (Eds.), *Well-being: The Foundations of Hedonic Psychology* (pp. 500- 524). New York: Russell Sage Foundation.

- Spector, P.E. (1997). *Job Satisfaction: Application, Assessment, Causes, and Consequences*. Thousand Oaks, CA: Sage.
- Staw, B.M., Sutton, R.I., & Pelled, L.H. (1994). Employee positive emotion and favorable outcomes at the work-place. *Organization Science*, 5, 51–71.
- Sigler, T.H. & Pearson, C.M. (2000). Creating an empowering culture: Examining the relationship between organizational culture and perceptions of empowerment. *Journal of Quality Management*, 5(1), 27–52.
- Smith, C.A., Organ, D.W., & Near, J.P. (1983). Organizational citizenship behavior: Its nature and antecedents. *Journal of Applied Psychology*, 68, 653-663.
- Snyder, C. R., & Lopez, S. (eds.). (2002). *Handbook of Positive Psychology*. Oxford, UK: Oxford University Press.
- Tait, M., Padgett, M. & Baldwin, T. (1989). Job and life satisfaction: A reevaluation of the strength of the relationship and gender effects as a function of the date of the study. *Journal of Applied Psychology*, 74, 502-507.
- Teasdale, E.L. (2006). Workplace stress. *Psychiatry*, 5(7), 251-254.
- Tellegen, A., Lykken, D.T., Bouchard, T.J., Jr., Wilcox, K., Segal, N., & Rich, S. (1988). Personality Similarity in twins reared apart and together. *Journal of Personality and Social Psychology*, 54, 1031-1039.
- Terman, L. (1939). The gifted student and his academic environment. *School and Society*, 49, 65-73.
- Terman, L., Bittenweiser, P., Johnson, W., & Wilson, D. (1938). *Psychological Factors in Marital Happiness*. New York: McGraw-Hill.
- Tett, R.P., & Meyer, J.P. (1993). Job satisfaction, organizational commitment, turnover intention, and turnover: Path analyses based on meta-analytic findings. *Personnel Psychology*, 46, 259-293.
- Thayer, R.E. (1989). *The Biopsychology of Mood and Arousal*. New York: Oxford University Press.
- Thomas, L. T., & Ganster, D.C. (1995). Impact of family-supportive work variables on work-family conflict and strain: A control perspective. *Journal of Applied Psychology*, 80, 6-15.
- Treadgold, R. (1999). Transcendent vocations: Their relationship to stress, depression, and clarity of self-concept. *Journal of Humanistic Psychology*, 39(1), 81-105.

- Tunc, T., & Kutanis, R.O. (2009). Role conflict, role ambiguity, and burnout in nurses and physicians at a university hospital in Turkey, *Nursing & Health Sciences. Special Issue: Disasters and Emergencies: Preparing, Managing, and Experiencing*, 11(4), 410-416.
- Tversky, A., & Kahneman, D. (1974). Judgment under uncertainty: heuristics and biases. *Science*, 185, 1124-1131.
- Tweed, S., & Ryff, C.D. (1991). Adult children of alcoholics: Profiles of wellness and distress. *Journal of Studies on Alcohol*, 52, 133-141.
- Van Dierendonck, D. (2004). The construct validity of Ryff's Scale of Psychological well-being and its extension with spiritual well-being. *Personality and Individual Differences*, 36, 629-644.
- Van Horn, J.E., Taris, T.W., Schaufeli, W.B., & Schreurs, P.J.G. (2004). The structure of occupational wellbeing: A study among Dutch teachers. *Journal of Occupational and Organizational Psychology*, 77, 365-375.
- Van Scotter, J. (2000). Relationships of task performance and contextual performance with turnover, job satisfaction, and affective commitment. *Human Resource Management Review*, 10, 79-95.
- Van Scotter, J.R., & Motowidlo, S.J. (1996). Interpersonal facilitation and job dedication as separate facets of contextual performance. *Journal of Applied Psychology*, 81, 525-531.
- Veenhoven, R. (1993). *Happiness in Nations: Subjective Appreciation of Life in 56 Nations 1946-1992*. Rotterdam, The Netherlands: Erasmus University.
- Veenhoven, R. (1994). Is happiness a trait? Tests of the theory that a better society does not make people any happier. *Social Indicators Research*, 32, 101-160 .
- Viswesvaran, C., Sanchez, J., & Fisher, J. (1999). The role of social support in the process of work stress: A meta-analysis. *Journal of Vocational Behavior*, 54, 314-334.
- Wanous, J.P., Reichers, A.E., & Hudy, M.J. (1997). Overall job satisfaction: How good are single-item measures? *Journal of Applied Psychology*, 82, 247-252.
- Ward, M., & Sloane, P. (2000). Non-pecuniary advantages versus pecuniary disadvantages: Job satisfaction among male and female academics in Scottish universities. *Scottish Journal of Political Economy*, 47(3), 273-303.

- Warr, P. (1978). A Study of Psychological Well-Being, *British Journal of Psychology*, 69, 111-121.
- Warr, P. (1987). *Work, Unemployment, and Mental Health*. Clarendon Press, Oxford.
- Warr, P. (1990). The measurement of well-being and other aspects of mental health. *Journal of Occupational Psychology*, 63, 193-210.
- Warr, P. (1994). A conceptual framework for the study of work and mental health. *Work and Stress*, 8(2), 84-97.
- Warr, P., Barter, J., & Brownbridge, G. (1983). On the independence of positive and negative affect, *Journal of Personality and Social Psychology*, 3, 644–651.
- Waterman, A.S. (1993). Two conceptions of happiness: Contrasts of personal expressiveness (eudaimonia) and hedonic enjoyment. *Journal of Personality and Social Psychology*, 64, 678-691.
- Waterman, A.S., Schwartz, S.J., & Conti, R. (2008). The implications of two conceptions of happiness (hedonic enjoyment and eudaimonia) for the understanding of intrinsic motivation. *Journal of Happiness Studies*, 9, 41-79.
- Watson, J. (1928). *Psychological care of infant and child*. New York: Norton.
- Watson, D., & Clark, L.A. (1991). Tripartite model of anxiety and depression: psychometric evidence and taxonomic implications. *Journal of Abnormal Psychology*, 100, 316-36.
- Watson, D., Clark, L.A., & Tellegen A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. *Journal of Personality and Social Psychology*, 54, 1063–1070.
- Watson, D. & Tellegen, A. (1985). Toward a consensual structure of mood. *Psychological Bulletin*, 98, 219–235.
- Watson, D., & Walkei; L. M. (1996). The long-term stability and predictive validity of trait measures of affect. *Journal of Personality and Social Psychology*, 70, 567-577.
- Werner, J.M. (1994). Dimensions that make a difference: Examining the impact of in-role and extrarole behaviors on supervisory ratings. *Journal of Applied Psychology*, 79, 98-107.
- Whetton, D. & Cameron, K. (1995). *Developing Management Skills* (3rd ed.) pp. 56-93. New York: Harper Collins College Publishers.

- Wierzbick, M. (1987). Similarity of monozygotic and dizygotic child twins in level and stability of clinically depressed mood. *American Journal of Orthopsychiatry*, 57(1), 33-40.
- Windle, G., & Woods, R.T. (2004). Variations in subjective wellbeing: The mediating role of a psychological resource. *Ageing & Society*, 24, 583-602.
- Wright, T.A., & Cropanzano, R. (2000). Psychological well-being and job satisfaction as predictors of job performance. *Journal of Occupational Health Psychology*, 5, 84-94.
- Wrzesniewski, A., & J. Landman. (2000). Occupational choice and regret: Decision antecedents and their Outcomes. *Unpublished manuscript*.
- Yoder, L.H. (1995). Staff nurses' career development relationships and self-reports of professionalism, job satisfaction, and intent to stay. *Nursing Research*, 44(5), 290-297.
- Yoon, M.H., & Suh, J. (2003). Organizational citizenship behaviors and service quality as external effectiveness of contact employees. *Journal of Business Research*, 56(8), 597-611.
- Zaccaro, S.J., & Stone, E.F. (1988). Incremental validity of an empirically based measure of job characteristics. *Journal of Applied Psychology*, 73(2), 245-252.
- Zevon, M.A., & Tellegen, A. (1982). The structure of mood change: An idiographic/nomothetic analysis. *Journal of Personality and Social Psychology*, 43, 111-122.
- Zung, W.W.K. (1965). A self-rating depression scale. *Archives of General Psychiatry*, 12, 63-70.

APPENDIX A

Survey Items

Job Satisfaction:

1. *How satisfied are you with the type of work you do?*
2. *Taking everything into account, how satisfied are you with your company as a place to work?*
3. *Overall, how satisfied are you with your job?*

Negative Work Affect:

1. *Over the past month, I often felt anxious at work.*
2. *Over the past month, I often felt frustrated at work.*
3. *Over the past month, most days I felt unhappy at work.*

Positive Work Affect:

1. *Over the past month, most days I felt happy at work.*
2. *Over the past month, I felt enthusiastic at work.*
3. *Over the past month, I felt positive while at work most of the time.*

Positive Working Relationships:

1. *Morale in my work team is generally high.*
2. *There is good cooperation between my work team and other work teams in my business unit.*
3. *My supervisor works to ensure that there is good cooperation between my work team and other work teams.*

4. *My supervisor does a good job of building teamwork.*

Job Purpose:

1. *I believe strongly in the goals and objectives of my company.*
2. *I fully support the values for which my company stands.*
3. *My company energizes me to go the extra mile.*
4. *My supervisor ensures that people in my work team understand the company's goals.*
5. *I believe strongly in the products and services this company provides.*
6. *The values of this company guide me in my work on a day-to-day basis.*
7. *I believe my company is environmentally responsible.*
8. *I believe my company is socially responsible in the community.*
9. *My supervisor breaks down our department goals into clear responsibilities for me.*

Work Autonomy:

1. *My supervisor involves me in solving problems related to our work.*
2. *There are too many approvals required for routine decisions in this company.*
3. *I have the flexibility in my job to do what is necessary to provide good customer service.*
4. *My work schedule allows sufficient flexibility to meet my personal/family needs.*

Environmental Mastery at Work:

1. *My supervisor keeps me informed about issues that affect me.*
2. *People in my work team are encouraged to come up with innovative solutions to work-related problems.*
3. *The information I need to do my job is readily available.*
4. *I have trouble getting my work done because priorities or work objectives are changed so frequently.*
5. *The training I have received has adequately prepared me for the work I do.*
6. *I have received sufficient development/training to deal effectively with our customers.*
7. *This company provides people with the necessary information and resources to manage their own careers effectively.*
8. *I have a very clear understanding of my job responsibilities.*

Job Growth:

1. *There are sufficient opportunities for me to receive training to improve my skills in my current job.*
2. *There are sufficient opportunities for me to receive cross-training to learn other jobs.*
3. *I believe I have the opportunity for personal development and growth in this company.*
4. *There are sufficient opportunities for me to receive training to increase my suitability for a better job.*
5. *My work provides me with challenges without overwhelming me.*

6. *My work provides me with the opportunity to take on new challenges.*

Professional Self-Acceptance:

1. *I think my performance on the job is evaluated fairly.*
2. *My work gives me a sense of personal accomplishment.*
3. *I am confident I can achieve my personal career objectives with this company.*
4. *I understand how my work contributes to my company's business objectives.*

Proposed Items for Turnover Intention Measure

1. *It would take a lot to make me look for another employer.*
2. *At the present time, I am seriously considering leaving my company.*

Proposed Items for Discretionary Behavior Measure

1. *I work beyond what is required to help my company succeed.*
2. *The people I work with are willing to help each other, even if it means doing something outside their usual activities.*

APPENDIX B

Table 1

Respondent Demographics

		Frequency	Percent
Gender	Male	1548	51.4
	Female	1399	46.5
	Total	2947	97.9
	Unreported	62	2.1
Age	<19	12	.4
	20-30	893	29.7
	30-40	1208	40.1
	40-50	544	18.1
	50-60	210	7.0
	60+	34	1.1
	Total	2901	96.4
	Unreported	108	3.6
	Total	3009	100.0

Table 2

Descriptive Statistics of Study Variables

	N	Minimum	Maximum	Mean	Std. Deviation
Discretionary Effort	2987	1.00	5.00	1.5338	.62371
Turnover Intent	2979	1.00	4.00	1.8810	.92682
Professional Self-Acceptance	2945	1.00	5.00	1.9111	.80421
Job Growth	2943	1.00	5.00	2.1741	.94895
Environmental Mastery at Work	2925	1.00	5.00	1.9997	.68646
Positive Working Relationships	2954	1.00	5.00	2.0297	.93642
Job Purpose	2811	1.00	5.00	1.8996	.72000
Work Autonomy	2926	1.00	5.00	2.4361	.73877
Positive Work Affect	2969	1.00	5.00	2.1385	1.12626
Negative Work Affect	2969	1.00	5.00	2.5986	1.14729
Job Satisfaction	2981	1.00	5.00	2.1066	.89593
Valid N (listwise)	2527				

Table 3

Skewness and Kurtosis Statistics of Study Variables

	N	Skewness		Kurtosis	
		Statistic	Std. Error	Statistic	Std. Error
Discretionary Effort	2987	1.476	.045	2.770	.090
Turnover Intent	2979	.882	.045	-.416	.090
Professional Self-Acceptance	2945	.951	.045	.662	.090
Job Growth	2943	.719	.045	-.134	.090
Environmental Mastery at Work	2925	.931	.045	.942	.091
Positive Working Relationships	2954	1.023	.045	.571	.090
Job Purpose	2811	.887	.046	.817	.092
Work Autonomy	2926	.708	.045	.483	.090
Positive Work Affect	2969	.954	.045	.073	.090
Negative Work Affect	2969	.383	.045	-.780	.090
Job Satisfaction	2981	.872	.045	.664	.090
Valid N (listwise)	2527				

Table 4

Reliability Statistics of Study Variables

Scale	Cronbach's Alpha	N of Items
Discretionary Effort	.331	2
Turnover Intent	.710	2
Professional Self-Acceptance	.759	4
Job Growth	.877	6
Environmental Mastery at Work	.795	8
Positive Working Relationships	.831	4
Job Purpose	.874	9
Work Autonomy	.516	4
Positive Work Affect	.934	3
Negative Work Affect	.821	3
Job Satisfaction	.876	3

Table 5

Correlations Among Study Variables

		Turnover Intent	Job Growth	Self Accept	Enviro Mastery	PosWork Relations	Job Purpose	Auto nomy	Pos Wk Affect	Neg Wk Affect	Job Sat	Disc Effort
Turnover Intent	Pearson Correlation	1	.594**	.677**	.568**	.504**	.633**	.441**	.645**	.472**	.733**	.358**
	Sig. (2-tailed)		.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
	N	2979	2915	2916	2897	2925	2784	2898	2941	2941	2954	2957
Job Growth	Pearson Correlation	.594**	1	.779**	.745**	.635**	.695**	.585**	.631**	.446**	.662**	.435**
	Sig. (2-tailed)	.000		.000	.000	.000	.000	.000	.000	.000	.000	.000
	N	2915	2943	2898	2875	2891	2772	2862	2907	2905	2916	2924
Self Accept	Pearson Correlation	.677**	.779**	1	.742**	.684**	.770**	.584**	.714**	.494**	.753**	.511**
	Sig. (2-tailed)	.000	.000		.000	.000	.000	.000	.000	.000	.000	.000
	N	2916	2898	2945	2883	2897	2777	2879	2907	2907	2918	2926
Enviro Mastery	Pearson Correlation	.568**	.745**	.742**	1	.737**	.717**	.634**	.628**	.507**	.626**	.466**
	Sig. (2-tailed)	.000	.000	.000		.000	.000	.000	.000	.000	.000	.000
	N	2897	2875	2883	2925	2882	2757	2859	2890	2889	2899	2905
Pos Work Relations	Pearson Correlation	.504**	.635**	.684**	.737**	1	.689**	.623**	.621**	.451**	.566**	.511**
	Sig. (2-tailed)	.000	.000	.000	.000		.000	.000	.000	.000	.000	.000
	N	2925	2891	2897	2882	2954	2772	2879	2915	2918	2929	2941
Job Purpose	Pearson Correlation	.633**	.695**	.770**	.717**	.689**	1	.564**	.657**	.429**	.666**	.530**
	Sig. (2-tailed)	.000	.000	.000	.000	.000		.000	.000	.000	.000	.000
	N	2784	2772	2777	2757	2772	2811	2755	2778	2780	2788	2800

Autonomy	Pearson Correlation	.441**	.585**	.584**	.634**	.623**	.564**	1	.545**	.488**	.508**	.330**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000		.000	.000	.000	.000
	N	2898	2862	2879	2859	2879	2755	2926	2891	2892	2901	2907
Pos Wk Affect	Pearson Correlation	.645**	.631**	.714**	.628**	.621**	.657**	.545**	1	.646**	.749**	.438**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000		.000	.000	.000
	N	2941	2907	2907	2890	2915	2778	2891	2969	2943	2943	2947
Neg Wk Affect	Pearson Correlation	.472**	.446**	.494**	.507**	.451**	.429**	.488**	.646**	1	.539**	.270**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000		.000	.000
	N	2941	2905	2907	2889	2918	2780	2892	2943	2969	2943	2947
Job Sat	Pearson Correlation	.733**	.662**	.753**	.626**	.566**	.666**	.508**	.749**	.539**	1	.442**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	.000		.000
	N	2954	2916	2918	2899	2929	2788	2901	2943	2943	2981	2960
Disc Effort	Pearson Correlation	.358**	.435**	.511**	.466**	.511**	.530**	.330**	.438**	.270**	.442**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	
	N	2957	2924	2926	2905	2941	2800	2907	2947	2947	2960	2987

Table 6

Fit Indices of Three-Factor SOW-B Model

Model	χ^2	df	Sig.	RMSEA	TLI	CFI
Three Factor	850.854	24	.000	.11	.93	.96

Table 7

Model estimates for Hypothesis 1a

			Unstandardized Estimate	S.E.	p	Standardized Estimate	R ²
OP82a	<---	PosWorkAffect	1.000			.906	0.821
OP82b	<---	PosWorkAffect	1.025	.013	*	.920	0.847
OP82c	<---	PosWorkAffect	.975	.013	*	.902	0.813
OP82d	<---	NegWorkAffect	1.000			.692	0.478
OP82e	<---	NegWorkAffect	1.098	.031	*	.737	0.543
OP82f	<---	NegWorkAffect	1.189	.030	*	.862	0.743
OP115	<---	JobSat	1.000			.807	0.652
OP116	<---	JobSat	.992	.020	*	.783	0.613
OP117	<---	JobSat	1.213	.020	*	.950	0.902

*p<0.01

Table 8

Correlations between latent factors in Hypothesis 1

			Estimate
PosWorkAffect	<-->	NegWorkAffect	-.782
JobSat	<-->	PosWorkAffect	.802
JobSat	<-->	NegWorkAffect	-.651

Table 9

Fit Indices of Three-Factor SOW-B Model

Model	χ^2	df	Sig.	RMSEA	TLI	CFI
Three Factor	864.343	25	.000	.11	.93	.96

Table 10

Model estimates for Hypothesis 1b

			Unstan dardiz ed Estima te	S.E.	P	Standardi zed Estimate	R ²
PosWorkAffect	<---	SOW_B	1		*	0.966	0.933
JobSat	<---	SOW_B	0.634	0.016	*	0.817	0.668
NegWorkAffect	<---	SOW_B	0.723	0.022	*	0.793	0.629
OP82a	<---	PosWorkAffect	1			0.896	0.543
OP82b	<---	PosWorkAffect	1.045	0.013	*	0.917	0.802
OP82c	<---	PosWorkAffect	0.994	0.013	*	0.897	0.84
OP82d	<---	NegWorkAffect	1			0.685	0.805
OP82e	<---	NegWorkAffect	1.099	0.032	*	0.731	0.469
OP82f	<---	NegWorkAffect	1.185	0.031	*	0.856	0.535
OP115	<---	JobSat	1			0.801	0.733
OP116	<---	JobSat	0.992	0.021	*	0.776	0.642
OP117	<---	JobSat	1.213	0.021	*	0.948	0.603

*p<0.01

Table 11

Fit Indices of Six-Factor POW-B Model

Model	χ^2	df	Sig.	RMSEA	TLI	CFI
Six Factor	13397.60	545	.00	.09	.75	.79

Table 12

Estimates for Hypothesis 2a

			Unstandard. Estimate	S.E.	P	Standardized Estimate	R ²
OP22	<---	PosWrkRel	1			0.819	0.671
OP25	<---	PosWrkRel	0.778	0.021	*	0.656	0.431
OP51	<---	PosWrkRel	1.066	0.025	*	0.734	0.539
OP76	<---	PosWrkRel	1.085	0.023		0.793	0.629
OP17	<---	JobPurpose	1			0.734	0.538
OP20	<---	JobPurpose	0.806	0.026	*	0.591	0.349
OP40	<---	JobPurpose	0.742	0.027	*	0.522	0.272
OP43	<---	JobPurpose	0.826	0.023	*	0.663	0.44
OP58	<---	JobPurpose	0.752	0.021	*	0.68	0.462
OP65	<---	JobPurpose	0.887	0.021	*	0.792	0.627
OP81	<---	JobPurpose	0.716	0.022	*	0.605	0.366
OP83	<---	JobPurpose	0.692	0.019	*	0.69	0.475
OP94	<---	JobPurpose	1.123	0.028	*	0.744	0.554
OP11	<---	Autonomy	1			0.481	0.232
OP30	<---	Autonomy	0.124	0.036	*	-0.067	0.005
OP72	<---	Autonomy	1.069	0.046	*	0.633	0.401
OP80	<---	Autonomy	1.278	0.052	*	0.705	0.497
OP3	<---	EnvMastery	1			0.65	0.423
OP6	<---	EnvMastery	0.824	0.028	*	0.603	0.364
OP8	<---	EnvMastery	0.742	0.025	*	0.602	0.363
OP34	<---	EnvMastery	0.874	0.031	*	0.566	0.32
OP48	<---	EnvMastery	1.016	0.031	*	0.674	0.454
OP52	<---	EnvMastery	0.468	0.038	*	-0.239	0.057
OP56	<---	EnvMastery	0.906	0.03	*	0.61	0.372
OP75	<---	EnvMastery	1.127	0.033	*	0.718	0.515
OP35	<---	JobGrowth	1			0.71	0.505
OP42	<---	JobGrowth	0.75	0.027	*	0.54	0.291
OP44a	<---	JobGrowth	1.102	0.027	*	0.777	0.604
OP44b	<---	JobGrowth	1.346	0.031	*	0.839	0.704
OP44c	<---	JobGrowth	1.407	0.031	*	0.872	0.76
OP64	<---	JobGrowth	0.987	0.027	*	0.711	0.506
OP29	<---	ProfSelfAccept	1			0.639	0.408
OP36	<---	ProfSelfAccept	0.591	0.02	*	0.598	0.358
OP78	<---	ProfSelfAccept	1.285	0.036	*	0.764	0.583
OP93	<---	ProfSelfAccept	1.02	0.031	*	0.696	0.484

*p<0.01

Table 13

Fit Indices of Six-Factor POW-B Model

Model	χ^2	df	Sig.	RMSEA	TLI	CFI
Six Factor	13926.37	554	.00	.09	.75	.78

Table 14

Estimates for Hypothesis 2b

			Unstandard. Estimate	S.E.	P	Standardized Estimate	R ²
JobGrowth	<---	POW_B	0.688	0.019	*	0.828	0.685
Autonomy	<---	POW_B	0.59	0.023	*	0.930	0.865
PosWrkRel	<---	POW_B	0.762	0.017	*	0.871	0.759
JobPurpose	<---	POW_B	0.703	0.017	*	0.877	0.768
EnvMastery	<---	POW_B	0.684	0.018	*	0.983	0.966
ProfSelfAccpt	<---	POW_B	0.752	0.019	*	0.990	0.980
OP22	<---	PosWrkRel	1			0.815	0.665
OP25	<---	PosWrkRel	0.787	0.021	*	0.661	0.436
OP51	<---	PosWrkRel	1.08	0.025	*	0.740	0.548
OP76	<---	PosWrkRel	1.08	0.023	*	0.786	0.618
OP17	<---	JobPurpose	1			0.734	0.538
OP20	<---	JobPurpose	0.821	0.026	*	0.602	0.362
OP40	<---	JobPurpose	0.745	0.027	*	0.524	0.275
OP43	<---	JobPurpose	0.837	0.023	*	0.673	0.453
OP58	<---	JobPurpose	0.743	0.021	*	0.671	0.451
OP65	<---	JobPurpose	0.882	0.021	*	0.788	0.621
OP81	<---	JobPurpose	0.72	0.022	*	0.609	0.370
OP83	<---	JobPurpose	0.689	0.019	*	0.687	0.472
OP94	<---	JobPurpose	1.111	0.028	*	0.737	0.543
OP11	<---	Autonomy	1			0.493	0.243
OP30	<---	Autonomy	0.142	0.036	*	-0.079	0.006
OP72	<---	Autonomy	1.11	0.046	*	0.673	0.453
OP80	<---	Autonomy	1.184	0.049	*	0.669	0.447
OP3	<---	EnvMastery	1			0.649	0.421
OP6	<---	EnvMastery	0.841	0.028	*	0.614	0.377
OP8	<---	EnvMastery	0.757	0.025	*	0.613	0.375
OP34	<---	EnvMastery	0.877	0.031	*	0.566	0.321
OP48	<---	EnvMastery	0.992	0.031	*	0.656	0.431
OP52	<---	EnvMastery	-0.482	0.038	*	-0.246	0.060
OP56	<---	EnvMastery	0.91	0.03	*	0.611	0.374
OP75	<---	EnvMastery	1.135	0.033	*	0.721	0.520
OP35	<---	JobGrowth	1			0.701	0.491
OP42	<---	JobGrowth	0.759	0.027	*	0.539	0.291
OP44a	<---	JobGrowth	1.115	0.028	*	0.776	0.601
OP44b	<---	JobGrowth	1.375	0.032	*	0.846	0.715
OP44c	<---	JobGrowth	1.434	0.032	*	0.876	0.768
OP64	<---	JobGrowth	0.997	0.027	*	0.709	0.503

OP29	<---	ProfSelfAccept	1			0.665	0.442
OP36	<---	ProfSelfAccept	0.57	0.019	*	0.600	0.361
OP78	<---	ProfSelfAccept	1.206	0.033	*	0.746	0.557
OP93	<---	ProfSelfAccept	0.966	0.029	*	0.685	0.470

*p<0.01

Table 15

Model Fit Summary for Hypothesis 3: Model 1

Model	χ^2	df	Sig.	RMSEA	TLI	CFI
Single higher order factor	18674.70	894	.00	.08	.77	.79

Table 16

Estimates for Hypothesis 3, Model 1

			Unstandard. Estimate	S.E.	P	Standardized Estimate	R ²
JobGrowth	<---	OWB	0.676	0.019	*	0.813	0.66
Autonomy	<---	OWB	0.6	0.022	*	0.91	0.828
PosWrkRel	<---	OWB	0.732	0.017	*	0.849	0.721
JobPurpose	<---	OWB	0.707	0.017	*	0.88	0.774
EnvMastery	<---	OWB	0.646	0.018	*	0.939	0.882
ProfSelfAccept	<---	OWB	0.756	0.019	*	1.015	1.031
PosWorkAffect	<---	OWB	0.887	0.018	*	0.832	0.692
NegWorkAffect	<---	OWB	0.669	0.021	*	-0.658	0.433
JobSat	<---	OWB	0.685	0.015	*	0.842	0.71
OP22	<---	PosWrkRel	1			0.804	0.646
OP25	<---	PosWrkRel	0.8	0.022	*	0.662	0.438
OP51	<---	PosWrkRel	1.122	0.026	*	0.759	0.576
OP76	<---	PosWrkRel	1.081	0.024	*	0.775	0.601
OP17	<---	JobPurpose	1			0.735	0.54
OP20	<---	JobPurpose	0.796	0.026	*	0.584	0.341
OP40	<---	JobPurpose	0.743	0.027	*	0.523	0.274
OP43	<---	JobPurpose	0.817	0.023	*	0.657	0.432
OP58	<---	JobPurpose	0.751	0.021	*	0.68	0.463
OP65	<---	JobPurpose	0.887	0.021	*	0.793	0.629
OP81	<---	JobPurpose	0.715	0.022	*	0.606	0.367
OP83	<---	JobPurpose	0.691	0.019	*	0.689	0.475
OP94	<---	JobPurpose	1.128	0.028	*	0.749	0.561
OP11	<---	Autonomy	1			0.512	0.262
OP30	<---	Autonomy	-0.153	0.035	*	-0.088	0.008
OP72	<---	Autonomy	1.094	0.044	*	0.689	0.475
OP80	<---	Autonomy	1.1	0.046	*	0.645	0.416
OP3	<---	EnvMastery	1			0.641	0.411
OP6	<---	EnvMastery	0.878	0.029	*	0.634	0.402
OP8	<---	EnvMastery	0.786	0.026	*	0.629	0.396
OP34	<---	EnvMastery	0.911	0.032	*	0.582	0.339
OP48	<---	EnvMastery	0.964	0.032	*	0.631	0.398
OP52	<---	EnvMastery	-0.531	0.039	*	-0.268	0.072
OP56	<---	EnvMastery	0.932	0.031	*	0.619	0.383
OP75	<---	EnvMastery	1.13	0.034	*	0.71	0.504
OP35	<---	JobGrowth	1			0.702	0.492
OP42	<---	JobGrowth	0.765	0.027	*	0.544	0.296
OP44a	<---	JobGrowth	1.105	0.028	*	0.77	0.593

OP44b	<---	JobGrowth	1.374	0.032	*	0.846	0.716
OP44c	<---	JobGrowth	1.432	0.032	*	0.876	0.768
OP64	<---	JobGrowth	0.998	0.027	*	0.711	0.505
OP29	<---	ProfSelfAccept	1			0.652	0.425
OP36	<---	ProfSelfAccept	0.559	0.019	*	0.578	0.334
OP78	<---	ProfSelfAccept	1.246	0.034	*	0.756	0.572
OP93	<---	ProfSelfAccept	1.019	0.029	*	0.709	0.503
OP82c	<---	PosWorkAffect	1			0.904	0.818
OP82b	<---	PosWorkAffect	1.057	0.013	*	0.928	0.861
OP82a	<---	PosWorkAffect	1.011	0.013	*	0.896	0.803
OP82f	<---	NegWorkAffect	1			0.795	0.631
OP82e	<---	NegWorkAffect	1.082	0.026	*	0.796	0.633
OP82d	<---	NegWorkAffect	0.97	0.025	*	0.735	0.54
OP115	<---	JobSat	1			0.829	0.687
OP116	<---	JobSat	0.961	0.02	*	0.779	0.606
OP117	<---	JobSat	1.157	0.019	*	0.93	0.865

*p<0.01

Table 17

Model Fit Summary, Hypothesis 3: Model 2

Model	χ^2	df	Sig.	RMSEA	TLI	CFI
2 higher order factors	15247.97	731	.00	.08	.79	.81

Table 18

Estimates for Hypothesis 3: Model 2

			Unstandard.			Standardized	
			Estimate	S.E.	P	Estimate	R ²
JobGrowth	<---	POW_B	0.659	0.019	*	0.805	0.648
Autonomy	<---	POW_B	0.607	0.023	*	0.944	0.891
PosWrkRel	<---	POW_B	0.775	0.017	*	0.893	0.798
JobPurpose	<---	POW_B	0.692	0.017	*	0.86	0.739
EnvMastery	<---	POW_B	0.691	0.018	*	0.988	0.976
PosWorkAffect	<---	SOW_B	1.005	0.018	*	0.944	0.891
NegWorkAffect	<---	SOW_B	0.852	0.021	*	-0.788	0.621
JobSat	<---	SOW_B	0.696	0.016	*	0.866	0.751
OP22	<---	PosWrkRel	1			0.81	0.655
OP25	<---	PosWrkRel	0.794	0.021	*	0.662	0.439
OP51	<---	PosWrkRel	1.1	0.025	*	0.749	0.56
OP76	<---	PosWrkRel	1.081	0.023	*	0.781	0.61
OP17	<---	JobPurpose	1			0.736	0.542
OP20	<---	JobPurpose	0.815	0.026	*	0.6	0.36
OP40	<---	JobPurpose	0.745	0.027	*	0.526	0.277
OP43	<---	JobPurpose	0.832	0.023	*	0.671	0.45
OP58	<---	JobPurpose	0.742	0.021	*	0.673	0.453
OP65	<---	JobPurpose	0.882	0.021	*	0.79	0.625
OP81	<---	JobPurpose	0.718	0.022	*	0.609	0.371
OP83	<---	JobPurpose	0.689	0.019	*	0.689	0.475
OP94	<---	JobPurpose	1.1	0.028	*	0.732	0.536
OP11	<---	Autonomy	1			0.5	0.25
OP30	<---	Autonomy	0.158	0.035	*	-0.089	0.008
OP72	<---	Autonomy	1.085	0.044	*	0.667	0.445
OP80	<---	Autonomy	1.168	0.048	*	0.669	0.447
OP3	<---	EnvMastery	1			0.652	0.426
OP6	<---	EnvMastery	0.842	0.028	*	0.619	0.383
OP8	<---	EnvMastery	0.753	0.025	*	0.613	0.376
OP34	<---	EnvMastery	0.87	0.031	*	0.565	0.319
OP48	<---	EnvMastery	1.001	0.031	*	0.666	0.443
OP52	<---	EnvMastery	0.51	0.038	*	-0.262	0.068
OP56	<---	EnvMastery	0.9	0.03	*	0.608	0.369
OP75	<---	EnvMastery	1.106	0.033	*	0.707	0.499
OP35	<---	JobGrowth	1			0.69	0.476
OP42	<---	JobGrowth	0.766	0.028	*	0.536	0.287
OP44a	<---	JobGrowth	1.133	0.029	*	0.776	0.603
OP44b	<---	JobGrowth	1.408	0.033	*	0.853	0.727

OP44c	<---	JobGrowth	1.466	0.034	*	0.882	0.779
OP64	<---	JobGrowth	1.001	0.028	*	0.701	0.492
OP82c	<---	PosWorkAffect	1			0.903	0.816
OP82b	<---	PosWorkAffect	1.051	0.013	*	0.922	0.85
OP82a	<---	PosWorkAffect	1.02	0.013	*	0.903	0.816
OP82f	<---	NegWorkAffect	1			0.844	0.713
OP82e	<---	NegWorkAffect	0.966	0.023	*	0.755	0.57
OP82d	<---	NegWorkAffect	0.873	0.022	*	0.703	0.494
OP115	<---	JobSat	1			0.819	0.671
OP116	<---	JobSat	0.973	0.02	*	0.78	0.608
OP117	<---	JobSat	1.184	0.019	*	0.94	0.884

*p<0.01

Table 19

Model Fit Summary for Hypothesis 3: model 3

Model	χ^2	df	Sig.	RMSEA	TLI	CFI
Higher order factor	954.207	26	.00	.11	.92	.96

Table 20

Estimates for Hypothesis 3, model 3

			Unstandardized			Standardized	
			Estimate	S.E.	P	Estimate	R ²
POW-B	<---	OWB2	1.00			0.95	0.86
SOW-B	<---	OWB2	1.00			0.93	0.89
PosWork	<---	POW_B	1.00			0.80	0.45
Autonomy	<---	POW_B	0.69	0.02	*	0.70	0.79
JobPurp	<---	POW_B	0.80	0.02	*	0.84	0.73
EnvMaster	<---	POW_B	0.79	0.01	*	0.86	0.71
SelfAccept	<---	POW_B	0.96	0.02	*	0.90	0.80
JobGrowth	<---	POW_B	1.07	0.02	*	0.84	0.74
JobSat	<---	SOW_B	1.00			0.85	0.71
PosWkAff	<---	SOW_B	1.31	0.02	*	0.89	0.49
NegWkAff	<---	SOW_B	1.01	0.03	*	0.67	0.64

*p<0.01

Table 21

Descriptive Statistics of Job Satisfaction across Gender

	Gender	N	Mean	Std. Deviation	Std. Error Mean
Job Satisfaction	Male	1548	2.1714	.89660	.02279
	Female	1398	2.0222	.87877	.02350

Table 22

Descriptive Statistics of Positive Work Relationships Scale across Genders

	Gender	N	Mean	Std. Deviation	Std. Error Mean
Positive Work Relationships	Male	1548	2.0454	.91030	.02314
	Female	1399	2.0041	.96023	.02567

Figure 1a: Proposed First Order Model of SOW-B

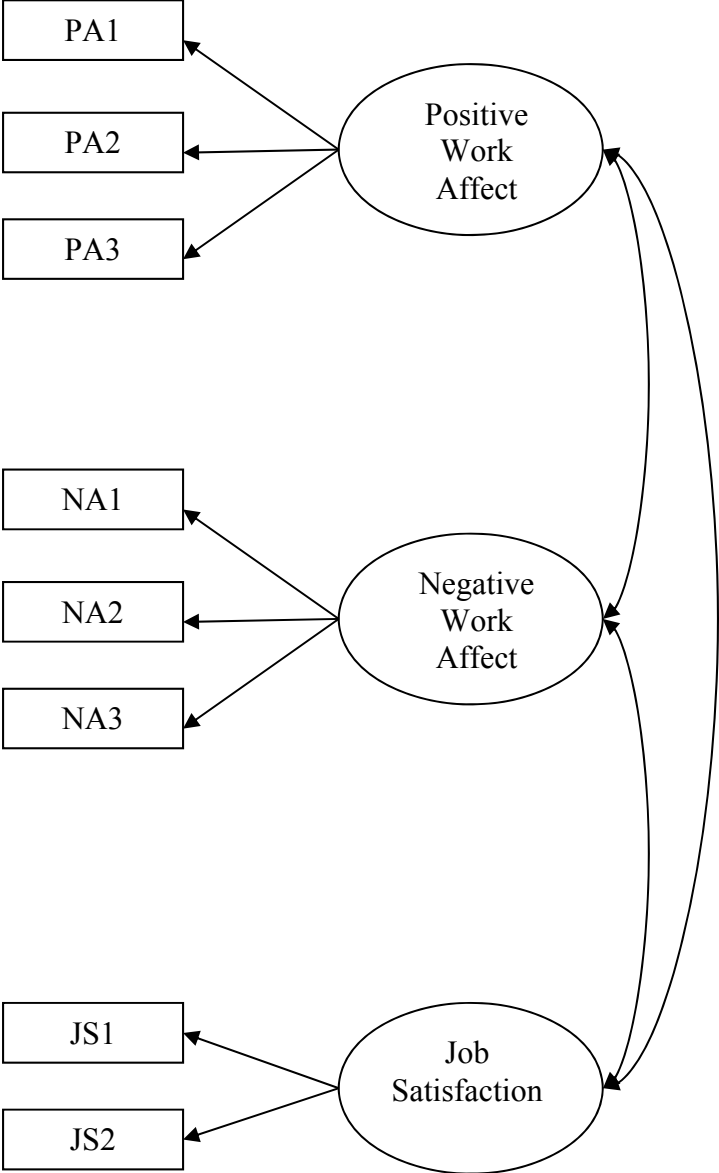


Figure 1b: Proposed Second Order Model of SOW-B

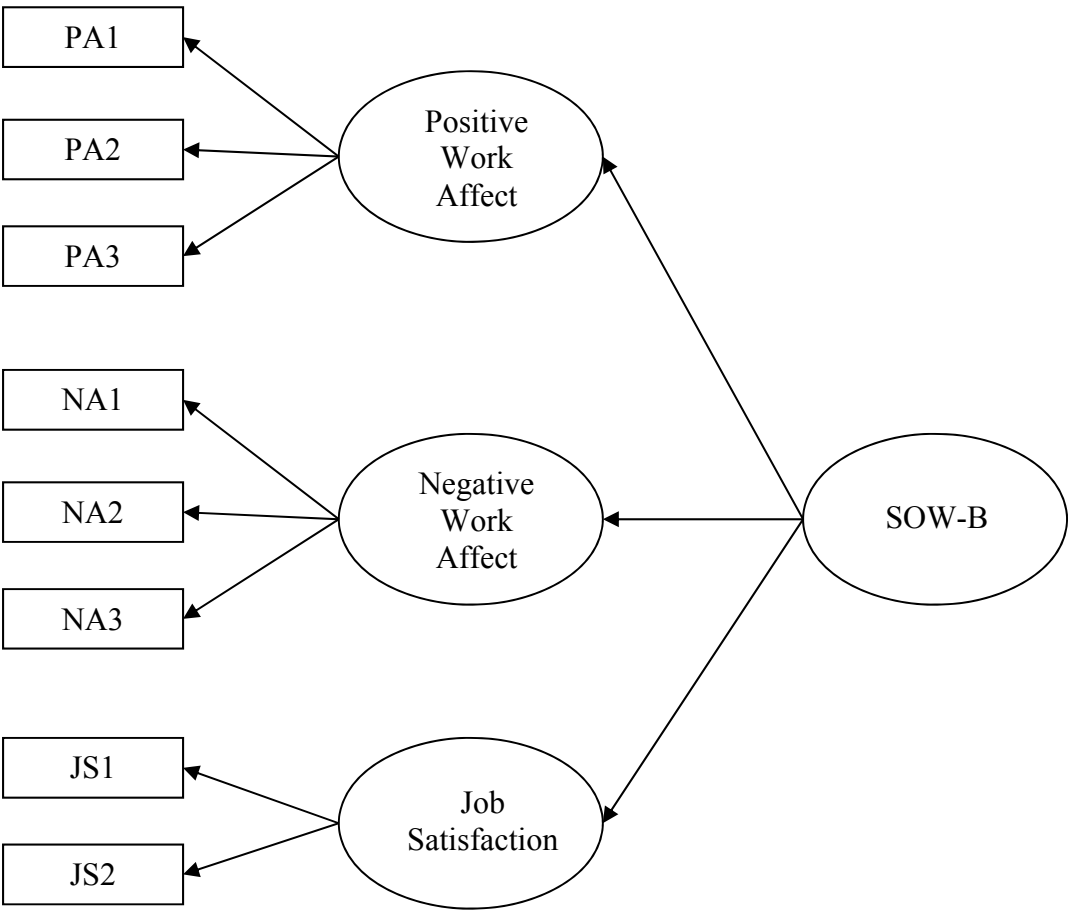


Figure 2a: Proposed First-Order Model of POW-B

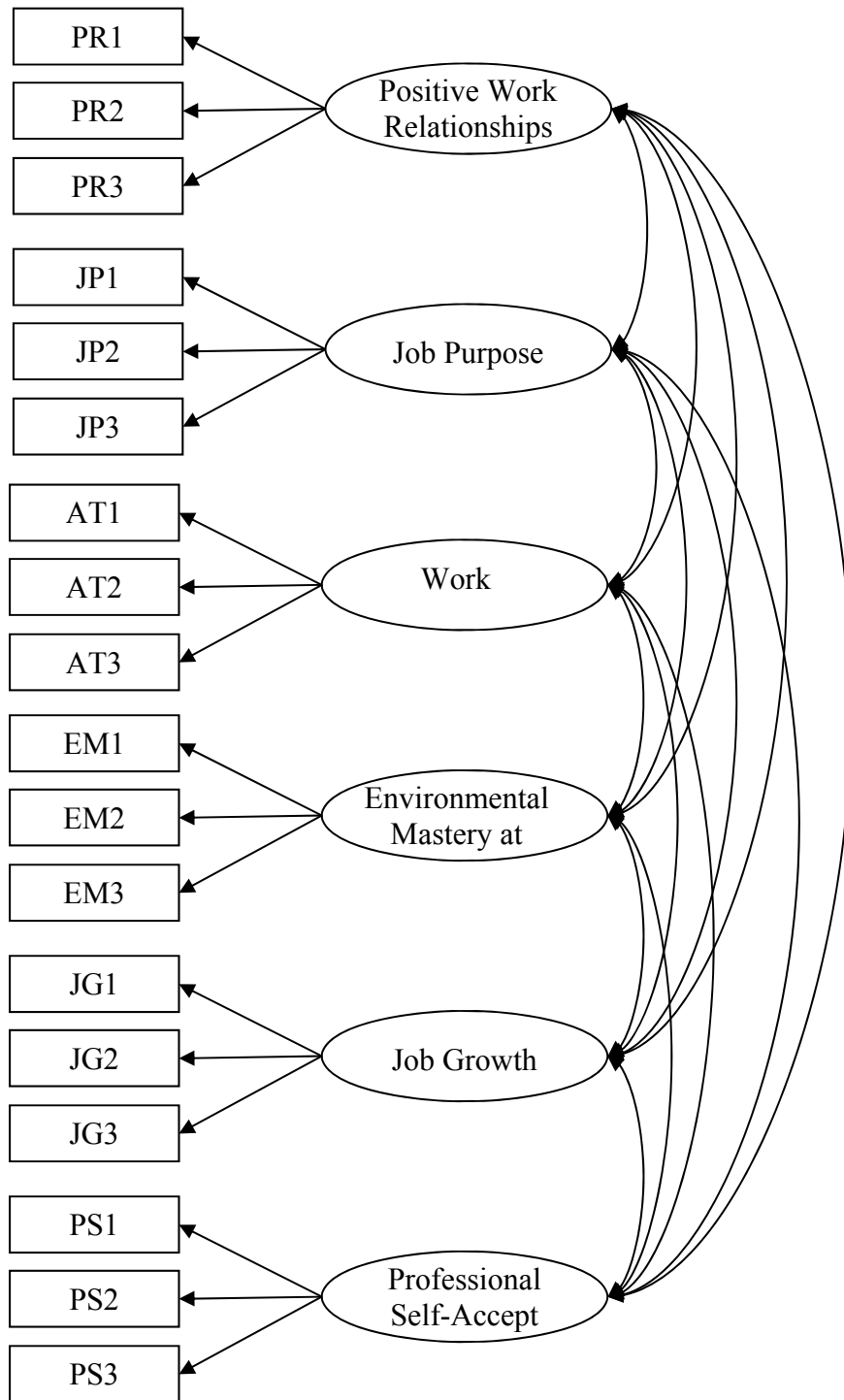


Figure 2b: Proposed Second Order Model of POW-B

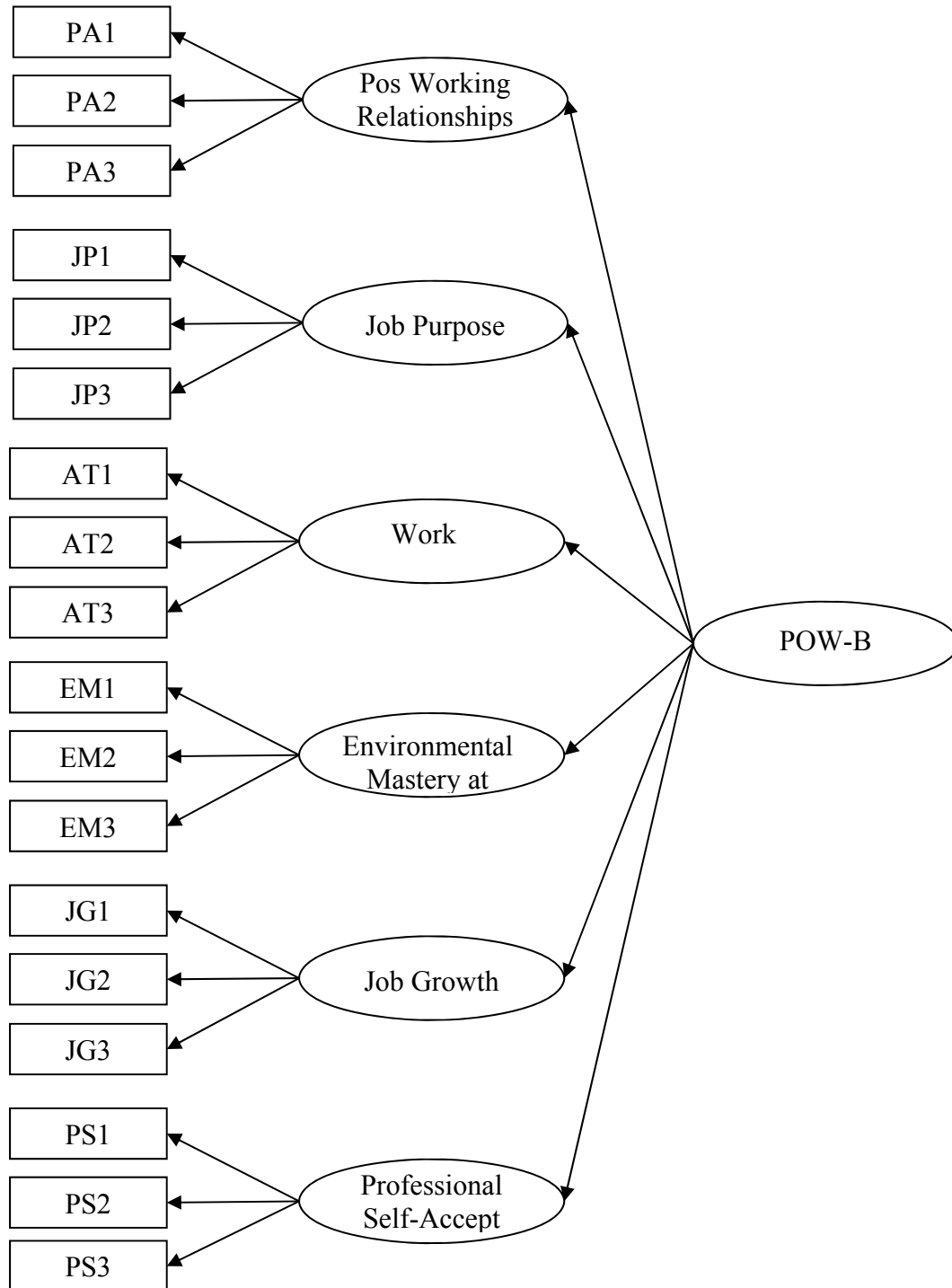


Figure 3: Proposed Model of OWB

