

Examining the Relationship between Work/Life Conflict  
and Life Satisfaction in Executives:  
The Role of Problem-Focused Coping Techniques

A Dissertation  
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## **Dedication**

This dissertation is dedicated to my lifeline, my best friend, my partner and the best husband and father in the world...Brian. Without your love, support and occasional nagging, I would have never completed this degree. I can't imagine doing this without you...I love you dearly, you'll never know how much I appreciate you and everything you do for me. This is as much your degree as it is mine...thank you for everything.

To my son Ethan: I hope you always know how much Mommy loves you. Even though pursuing this degree has kept me away from you sometimes, you are never far from my thoughts. As you grow older, I hope you see my accomplishment as a stepping stone to your own accomplishments. You can go as far in this world as you want my little man!

In memory of Dr. Tom Mentzer – your lessons will never be forgotten.

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Finally, to my parents. ....thank you Mom for always pushing, even when I didn’t want you to! While I know that the idea of me going back to school seemed far-fetched in the beginning, you never gave up on me. And yes Daddy, it is Dr. Senseney McMillan.

## **Abstract**

Determining not only what makes people, but also how many people are, satisfied personally and with work has become an ongoing stream of research for both academics and practitioners. The idea of satisfaction is of such concern today that Gallup-Healthways conducts a survey, and reports, on the daily *well-being* of Americans (<http://www.gallup.com/poll/106915/gallup-daily-us-mood.aspx>). Given the importance of satisfaction to individuals, organizations and society at large, it is imperative to understand the predictors and mediators of satisfaction. Research has been conducted on the negative (i.e., inverse) relationship between satisfaction and work/life conflict, as well as the positive relationship between coping and satisfaction. The purpose of this dissertation was to explore the interactions between work/life conflict (originating from both the work and family domains), problem-focused coping styles (i.e., problem-solving and communication skills) and life satisfaction. Additionally, mediational effects of coping on the well-documented relationship between work/life conflict and satisfaction were explored.

The data used in this study was archival in nature, coming from 491 working professionals enrolled in an Executive MBA program at a Southeastern university. Using the transactional model of stress, this study established the single, second-order construct of work/life conflict, consisting of six (6) first-order constructs (i.e., WF Time, WF Strain, WF Behavior, FW Time, FW Strain, and FW Behavior). This new construct maintains the bi-directionality (i.e., WF and FW) supported by a litany of researchers (e.g., Anderson, et al., 2002; Boyar, et al., 2003; Carlson, et al., 2000; Kopelman, et al., 2003), while reflecting Frone, et al.'s (1992a, 1992b) contention that WFC and FWC conflict have an interactive, additive

effect. Additionally, in answer to multiple calls in the literature (e.g., Allen, et al., 2000; Eby, et al., 2005; MacDermid, 2005; MacDermid & Harvey, 2006) to incorporate coping into work/life conflict research. This study found that problem-solving coping partially mediates the relationship between work/life conflict and life satisfaction. Communication coping was not found to mediate the relationship between work/life conflict and life satisfaction.

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## Chapter 1

If you're happy and you know it, clap your hands;  
If you're happy and you know it, clap your hands;  
If you're happy and you know it, then your face will surely show it;  
If you're happy and you know it clap your hands.

(Authorship Unknown)

If only the determination of happiness was as simple as the nursery rhyme. Since the days of Socrates, Plato and Aristotle, philosophers have been attempting to define not only what happiness is, but what circumstances actually make individuals happy (Bowling & Windsor, 2001; Brooks, 2008). In a conversation with his students, Socrates asked “Do not all men desire happiness...for what human being is there who does not desire happiness?” (Plato, 380 BC/1999).

With the development of the first psychology laboratory by Wilhelm Wundt in 1879, research in psychology focused on negative emotions, such as depression and anxiety, with the idea that reducing negative emotions results in happiness (Sirgy, et al., 2006; Pavot & Diener, 2008). Beginning in the late 1960s and early 1970s, psychological research began to shift awareness from negative emotions to positive emotions (Diener, 1984). In 1967, Wilson published “Correlates of Avowed Happiness,” which described the characteristics of a *happy* person, and provided an empirical basis for early work in subjective well-being. In 1969, Bradburn established the “Affect Balance Scale,” which served to establish the relative independence of positive and negative emotions (Sirgy, et al., 2006). The year 1973 brought the listing of *happiness* as an index item in *Psychological Abstracts International*, however, little definition, or measurement development, of the construct occurred until the early 1980s (Diener, 1984; Larsen & Eid, 2008).

In 1984, Ed Diener published “Subjective Well-Being,” a literature review on the topic that attempted to not only define happiness as a theoretical construct, but also provide a framework for measuring it (Diener, 1984; Larsen & Eid, 2008). Larsen and Eid refer to this paper as the seminal work in subjective well-being and “a citation classic, and then a mega-citation classic” (2008, p. 2). Since the publication of “Subjective Well-Being,” researchers have begun to focus their research efforts on positive emotions and happiness, and the resultant benefits to the individual, organization and society (Diener & Biswas-Diener, 2008; Larsen & Eid, 2008; Myers, 1992; Pavot & Diener, 2008).

### **Happiness – A Brief Definition**

Building on Bradburn (1969), Diener and Biswas-Diener define happiness as the prevalence of positive affect over negative affect (2008). It is an assessment of both the good and bad in an individual’s life (Brooks, 2008; Ehrhardt, Saris & Veenhoven, 2000). Happiness requires both positive and negative affect, because having one without the other is unrealistic. Additionally, Diener and Biswas-Diener contend that happiness is not only an individual’s perception of his/her circumstances, but also the impact of the circumstances themselves (2008).

Individuals experience three general types of happiness: (1) fleeting feelings of happiness; (2) happiness on balance; and (3) moral quality of life (Nettle, 2005). *Fleeting feelings of happiness* are most commonly thought of as momentary feelings of joy or euphoria (Brooks, 2008). Similar to the feeling a person gets when he finds a \$20 dollar bill in the washer, these feelings are ephemeral in nature, and therefore can’t be considered a reliable predictor of an individual’s overall happiness. *Happiness on balance*, however, is an individual’s assessment of the good and bad things in his/her life. Also known as psychological happiness, this definition

mirrors Diener and Biswas-Diener's definition, in that happiness on balance is like an emotional balance sheet that recognizes and requires positive and negative emotions in life (Brooks, 2008; Hudson, 1996). Finally, *moral quality of life*, refers to an assessment of an individual's life based on the gains resulting from maximizing his/her potential. Termed as *eudemonia* by Aristotle, moral quality of life actually involves living a virtuous life, but not necessarily a happy one, and may actually be more closely related to psychological unhappiness (Brooks, 2008).

### **Happiness as Subjective Well-Being**

Diener and Biswas-Diener (2008) contend that "'happiness' as 'subjective well-being' (SWB) is in scientific parlance, because it is about how people evaluate their lives and what is important to them" (p. 4). These terms are interchangeable, with happiness as the most common vernacular because it has become known as "the name we put on thinking and feeling positively about one's life" (Diener & Biswas-Diener, 2008, p. 4). Happiness as SWB (as shown in Figure 1), is comprised of affective and cognitive components, which are broken into three constituent elements (i.e., factors) of positive affect, negative affect and life satisfaction (Andrews & Withey, 1976; Diener, 1984). As discussed in the next section, research has demonstrated that these three factors are independent factors (i.e., positive affect, negative affect, and life satisfaction) of happiness as SWB (Diener, 1984).

### **Historical Development of Subjective Well-Being**

Diener coined the term *subjective well-being* in the early 1980s following a yearlong sabbatical to determine what path he wanted his research future to take. Prior to his sabbatical Diener was considered "a card-carrying member of the Dark Side" (Larsen & Eid, 2008, p. 2), as

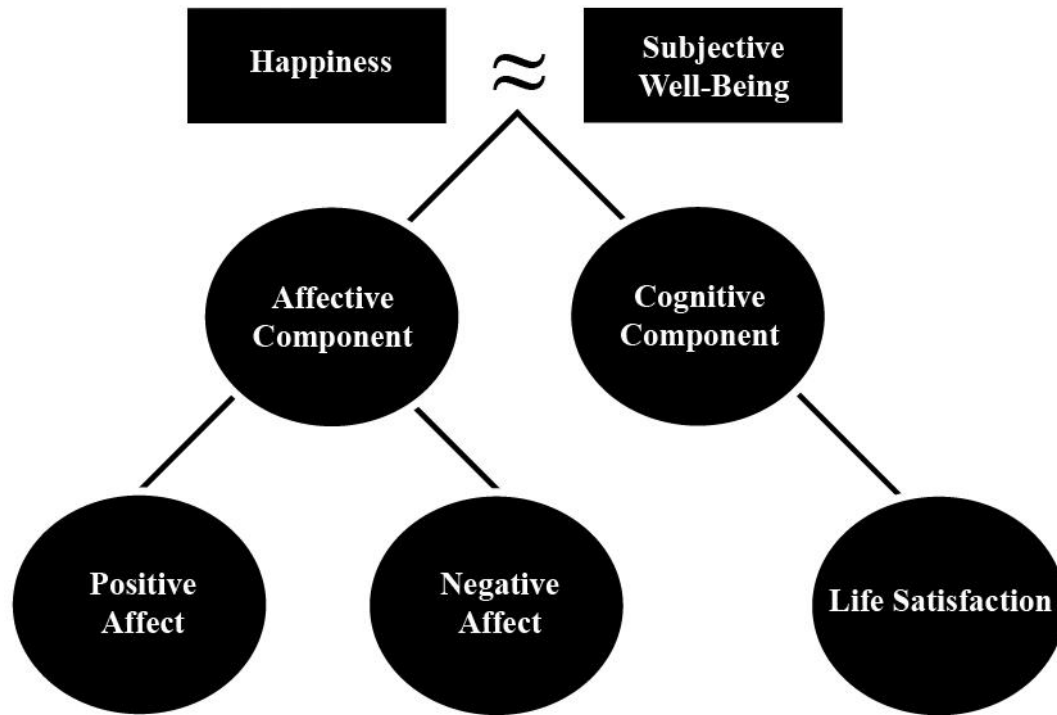


Figure 1: Graphical Representation of Constituent Elements of Happiness as SWB

his research was focused primarily on the traditional psychological construct of deindividuation, the idea that individuals behave counter to their self-defined values and morals when interacting with others in a group. (Diener, Fraser, Beaman & Kelem, 1976). An example of this type of behavior occurred in post-Hurricane Katrina New Orleans, when individuals rioted and resorted to other random acts of violence due to the lack of governmental support and police presence. After his sabbatical year in his early 1980s, Diener and his research team at Illinois began developing the concept of subjective well-being through simple descriptive and measurement evaluation and literature reviews into happiness and related constructs (Larsen & Eid, 2008). Called the “cornerstone” of research in subjective well-being, with over 1200 citations (Larsen & Eid, 2008, p. 2), “Subjective Well-Being,” provides the first profile of SWB as a construct (Diener, 1984).

Refined over multiple publications and two decades, Diener, Suh, Lucas and Smith (1999), define SWB as a “general area of scientific interest, rather than a single specific construct” (p. 277) consisting of three separate components: (1) the presence of positive affect; (2) the relative lack of negative affect; and (3) an individual’s cognitive evaluation of their life circumstances and ultimate determination of satisfaction with them. The Diener, et al. definition is similar to Andrews and Withey’s (1976) definition in which they noted an individual’s assessment of his/her life involves “both a cognitive evaluation and some degree of positive and/or negative feeling, i.e., ‘affect’” (p. 18). As stated by Arthaud-Day, Rode, Mooney and Near (2005), the primary issue with SWB as a construct with three independent factors is that cognition and affect, while independent, are related to each other. In essence, an individual may involuntarily *express* an emotion without cognition, but cannot *experience* an emotion without cognition (Zajonc, Pietromonaco & Bargh, 1982). Zajonc (1980) attempts to clarify the problem by explaining that “affect and cognition are under the control of separate and partially independent systems that can influence each other in a variety of ways, and that both constitute independent sources of effects in information processing” (p. 151).

### **Testing the Independence of the Constituent Elements of Happiness as Subjective Well-Being**

As previously discussed, Andrews and Withey (1976) and Diener (1984) first maintained that happiness as SWB was comprised of three distinct, independent constituent elements (i.e., factors): positive affect, negative affect and life satisfaction. Beginning in 1965, Bradburn and Caplovitz discerned construct and discriminant validity on the constructs of positive and negative affect through a series of correlation analyses, using what is now known as the Bradburn Affect



scale. To further support the distinction in the constructs, they performed correlation analyses with other independent variables, which resulted in different  $r$ -values for positive and negative affect. Diener and Emmons (1984) built on Bradburn and Caplovitz's research using time studies, ultimately finding that the passage of time increases the distinction between the constructs. This study also allowed for the movement away from the state-like qualities of previous happiness as SWB measures (as they only captured happiness a snapshot in time) to a trait-like measurement tool that allowed more stability in the measure, similar to that found in other behavioral and psychological research. Diener, Smith and Fujita (1995) used structural equation modeling and multi-method assessment (for measurement error control) to assess discriminant validity. While they did find moderate inverse correlation between positive and negative affect, the authors contend that they remained separate, independent factors.

Concurrent with the empirical development of distinct affective constructs of happiness as SWB, the life satisfaction construct was also being empirically developed. Publishing their findings in 1976, Andrews and Withey expanded on Bradburn and Caplovitz's work not only reconfirming the discriminant validity of positive and negative affect, but also added the finding of discriminant validity for the life satisfaction construct. Utilizing a series of "perceptual maps," Andrews and Withey conducted a series of Smallest Space Analyses in order to determine the relationship(s) between variables. A relatively new technique at the time, Andrews and Withey stated "we would not have felt confident about its results unless we had also tried several complementary approaches" (1976, p. 36), including factor analysis and ICLUST, a clustering technique. The *rho* correlation between the  $r$ 's and the gammas for the sixty-six pairs of variables tested in the study was .95 (1976).

Lucas, Diener and Suh (1996) utilized multitrait-multimethod (MTMM) analysis, over a two year period with a variety of reporting measures, on positive affect, negative affect and life satisfaction, ultimately finding construct and discriminant validity for each factor. Finally, work by Arthaud-Day, et al. (2005), utilizing structural equation modeling, reinforced previous work, found construct and discriminant validity for the three factors. Similar to other research, moderate, but significant, correlation ( $r$ -values ranging from -0.33 to 0.32) were found with the positive and negative affect.

### **Why This Study Focuses on Life Satisfaction**

While multiple researchers (e.g., Arthaud-Day, et al., 2005; Pavot & Diener, 2008; Diener, et al., 1999) maintain that in order to appropriately study happiness as SWB, scales must be comprised of both cognitive and affect oriented scales, this study focuses solely on the cognitive, or life satisfaction component of happiness as SWB. As noted by Arthaud-Day, et al., Diener, et al.'s (1999) definition of SWB and Andrews and Withey's (1976) requirement that an individual's assessment of his/her life requires both a cognitive and affective evaluation, which "placed well-being research squarely in the midst of an ongoing psychological debate regarding the relative independence versus interrelationship of cognition and affect" (2005, p. 446). They continue to state that the psychological argument is not only well-developed, but beyond the scope of their investigation, which I contend holds true for this research as well. Furthermore, Pavot and Diener (2008) maintain that perceptions of life satisfaction, while distinct from affect, are likely to be influenced by personality traits, including extraversion and neuroticism. Additionally, to be discussed in greater detail in the literature review, life satisfaction tends to be resistant to fluctuations caused by changes in an individual's mood (Schimmack, Diener, &

Oishi, 2002; Schimmack & Oishi, 2005), thereby making it a more stable, integrated judgment of the individual's life as a whole. Finally, and perhaps most important, utilizing life satisfaction as the dependent variable of interest allows for individual respondents to individually determine not only the criteria, but its importance, in determining his/her overall level of satisfaction. For example, a determinant of satisfaction could be whether or not an individual has achieved some predefined level of success or achieved some type of life goal (Diener, Scollon & Lucas, 2004; Pavot & Diener, 2008).

### **Why Should We Care About an Individual's Satisfaction?**

Determining not only what makes people, but also how many people are, satisfied personally and with work has become an ongoing stream of research for both academics and practitioners. The idea of satisfaction is of such concern today that Gallup-Healthways conducts a survey, and reports, on the daily *well-being* of Americans (<http://www.gallup.com/poll/106915/gallup-daily-us-mood.aspx>). Beginning in January 2008, the Gallup organization, in conjunction with Healthways, started a daily "mood" survey measuring the *happiness* (using their terminology) and stress levels of Americans, as well as their general health condition and other questions regarding their life style and living conditions. The *mood* data, in combination with other economic and organizational data collected, is analyzed for impact on health, organizational and societal issues (Gallup, n.d).

Overall, people around the world, except those in the grimmest of circumstances, report being satisfied the majority of the time; but don't, in general, report being extremely satisfied all of the time (Diener Research Lab, n.d.). Furthermore, satisfaction has been shown to be stable over time, despite the fluctuations generally found in people's moods, as evidenced in research

finding the average level of satisfaction has remained relatively constant over the last 35 years. The National Opinion Research Center's General Social Survey found that 30% of the American population in 1972 indicated that they were very satisfied with their lives. In 1982, 31% reported being very satisfied, and in 2006, 31% again reported being very satisfied (Davis, Smith & Marsden, 2004). Similarly, the percentage of individuals stating they were dissatisfied with life hovered around 13% across the three surveys (Davis, et al. 2004).

### **Importance of Satisfaction to the Individual**

Research has shown that satisfaction is important to an individual's physical and mental well-being. Fredrickson (1998) contends that positive emotions serve the specific purpose of expanding the breadth and depth of an individual's personal resources. Satisfied individuals have longer, healthier lives (mentally and physically) and tend to have more satisfying social relationships (Diener & Seligman, 2004; Veenhoven, 2008). Further, these findings are self-reinforcing because healthy social contact is essential to satisfaction, and satisfied people tend to have stronger and more supportive family and friendships, which results in greater psychological benefits (Bartolini, Bilancini & Pugno, 2007; Cacioppo, et al., 2008; Cunningham, 1994). Diener and Biswas-Diener contend happiness serves as a form of *emotional capital* that can be "spent in the pursuit of other attractive outcomes" (2008, p. 20). These findings have been shown to hold true across race, culture and pre-existing health conditions (e.g., Blanchflower & Oswald, 2005; Diener & Oishi, 2000; Diener & Oishi, 2004; Diener, Oishi, & Lucas, 2003; Dijkers, 1997; Frasure-Smith & Lesperance, 2005; Grant, Wardle, & Steptoe, 2009; Headey, Kelley, & Wearing, 1993; Herbert & Cohen, 1993; Kiecolt-Glaser, McGuire, Robles & Glaser, 2002; Scollon, Diener, Oishi, & Biswas-Diener, 2004).

## **Importance of Satisfaction to Organizations**

An individual's overall life satisfaction should be of significant importance to organizations as well. Diener and Biswas-Diener contend "individuals who are satisfied with their work will – by definition – be enjoying a greater chunk of their lives than people who can't stand their jobs" (2008, p. 69). Due to the amount of time individuals spend at work, high levels of job satisfaction tend to reinforce an individual's personal satisfaction, thereby resulting in a greater level of life satisfaction overall (Brooks, 2008).

Due to its importance to organizational outcomes, Judge and Church (2000) contend that satisfaction may be the most extensively researched topic in the history of industrial and organizational psychology. Researchers (e.g., Cropanzano & Wright, 1999; Cropanzano, James & Konovsky, 1993; Judge, Thoresen, Bono & Patton, 2001; Lucas & Diener, 2003; Wright & Cropanzano, 2000, 2004) found that individual perceptions of satisfaction served as a predictor of work performance. Additionally, a longitudinal study by Diener, Nickerson, Lucas and Sandvik (2002) found that young adults (aged 18 and 19) with a higher life satisfaction earned approximately 30% more than their counterparts at age 40. In addition to earning potential and higher work performance, satisfied individuals tend to have (1) higher levels of work attendance (Scott & Taylor, 1985; Smith, 1977); (2) lower turnover (Carsten & Spector, 1987; Hom, Katerberg & Hulin, 1979; Hom & Kinicki, 2001; Hulin, 1966, 1968; Miller, Katerberg & Hulin, 1979; Mobley, Horner & Hollingsworth, 1978; Wright & Bonett, 2007); (3) increased likelihood to postpone retirement (Hanisch & Hulin, 1990; 1991; Schmitt & McCune, 1981); (4) better organizational financial outcomes (Harter, Schmidt, & Hayes, 2002); (5) improved managerial performance (Staw & Barsade, 1993); (6) increased organizational citizenship behaviors

(Bateman & Organ, 1983; Farrell, 1983; Mount, Ilies & Johnson, 2006; Rozonwski & Hulin, 1992); and (7) decreases in pro-union behavior and activities (Getman, Goldberg, & Herman, 1976; Hamner & Smith, 1978; Schriesheim, 1978; Zalesny, 1985).

### **Importance of Satisfaction to the Society at Large**

The Declaration of Independence promises each American the “right to life, liberty and the pursuit of happiness.” Not only is satisfaction a goal in and of itself, but is also a stepping stone towards the achievement of larger goals, thereby causing a surge in research on the benefits and consequences of individual satisfaction on the society at large (Larsen & Eid, 2008).

Research on *satisfied* people has shown that they are successful in many different areas of their lives, and this global success is at least partially attributed to their overall level of satisfaction (King, 2008; Lyubomirsky, King, & Diener, 2005; Oishi & Koo, 2008). In general, satisfied people have the traits of increased sociability, altruism and self-worth, as well as exhibit strong conflict resolution and problem solving skills (Larsen & Eid, 2008). Furthermore, Diener and Seligman (2004) contend that satisfied individuals have the ability to facilitate the operations of, and possibly influence, government through their ability to earn more money and create opportunities for others to earn.

### **Problem Statement**

Given the importance of satisfaction to individuals, organizations and society at large, it is imperative to understand the predictors and mediators of satisfaction. Research has been conducted on the negative (i.e., inverse) relationship between satisfaction and work/life conflict (e.g., Chiu, 1998; Ford, Heinen & Langkamer, 2007; Kossek & Ozeki, 1998; Perrewe & Hochwarter, 2001). In fact, Kossek and Ozeki’s (1998) stated in their meta-analysis of studies on

the relationship between work/life conflict and satisfaction that “regardless of the type of measure used (bi-directional work-family conflict, work to family, family to work), a consistent negative relationship exists among all forms of work-family conflict and job and life satisfaction” (p. 139). Friedman (2001) states that since coping is positively related to an individual’s health and well-being, it is necessary in dealing with the stressors related to role incompatibility or conflict, and therefore should be included as a potentially important variable in work/life conflict research. In her conceptual model of the work/life interface, Voydanoff (2002) contends that coping mediates the relationship between the work/family interface (i.e., conflict) and various outcomes, including satisfaction. Furthermore, some researchers suggest that the coping mechanisms an individual utilizes may be more important to overall well-being (including life satisfaction) than the actual stressors (e.g., work/life conflict) being faced (e.g., Perrewe & Zellers, 1999).

This study is designed to investigate the relationship between the bi-directional elements of work/life conflict (i.e., work-to-family and family-to-work) and life satisfaction as mediated by the cognitive, or problem-focused, coping strategies of communication and problem-solving (See Figure 2). This relationship is being treated as mediational for a variety of reasons. By definition, coping is a mediating construct, as it serves as a process for alleviating or ameliorating stressors (e.g., Coyne & Lazarus, 1980; Folkman, 1984; Folkman, Lazarus, Gruen, & DeLongis, 1986; Lazarus, 1966; Lazarus & Folkman, 1984). Specifically, problem-focused coping strategies are utilized to manage or alter situations causing stress (Folkman & Lazarus, 1980; Lazarus & Folkman, 1984). Multiple researchers (e.g., Boyd, Lewin & Sager, 2009; Lazarus & Folkman, 1984; Lewin & Sager, 2008; Thoits, 1986) suggest that certain coping

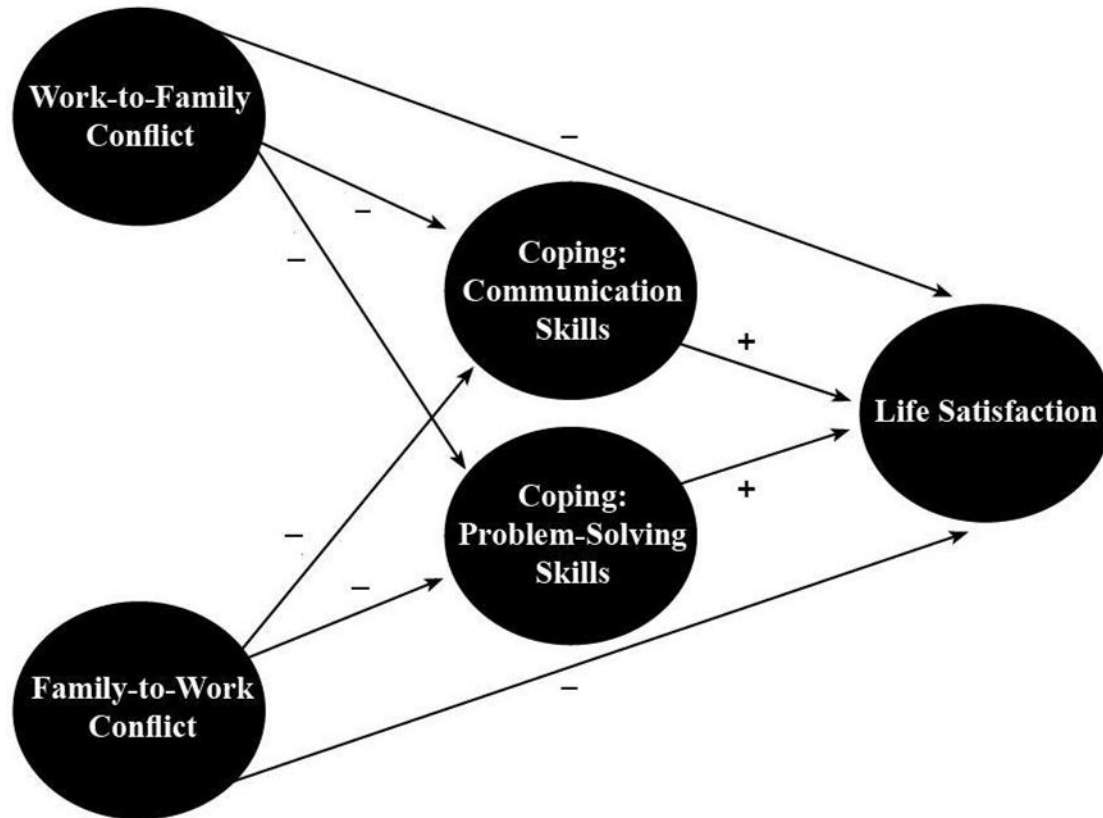


Figure 2: Work/life Conflict - Satisfaction Relationship Model

styles/strategies are beneficial in mediating the impact of antecedent stressors on individual outcomes. Furthermore, work by Lewin and Sager (2007), Thoits (1986), and Wilk and Moynihan (2005), among others, suggests that coping strategies (problem-focused and emotion-focused) have the potential to either diminish or amplify the negative effects of stressors (e.g., work/life conflict) on outcomes (e.g., life satisfaction). These mediational affects have been proposed by a host of multi-disciplinary researchers in psychology, sociology and occupational stress literatures (e.g., Sand & Miyazaki, 2000; Terry, Rawle & Callan, 1995; Thoits, 1995). Finally, using Super's (1990) life-span, life-space theory, research by Perrone, Áegisdóttir, Webb and Blalock (2006) suggests that coping is positively related to work/life conflict ( $r = .31, p <$



.01) and serves to mediate work/life conflict's relationship with family satisfaction ( $r = .19, p < .01$ ).

Specifically, this study seeks to address whether the level of problem-focused coping strategies (i.e., communication and problem solving skills) an individual possesses influence the magnitude of the relationship between work/life conflict and life satisfaction. Because of the cognitive, evaluative nature of the antecedent and outcome constructs (i.e., perceptions of work/life conflict and life satisfaction), only problem-focused coping (i.e., cognitive coping) strategies will be examined in this study. Maintaining this cognitive focus allows for the examination of only those components of work/life conflict, life satisfaction and coping deemed most critical to individual study participants (e.g., Diener, et al., 2004; Pavot & Diener, 2008). This study provides three primary contributions to the body of knowledge. First, it is the only research identified that utilizes the bi-directional components of work/life conflict with the cognitive elements of coping. This is of importance to organizations because of the contention of Lazarus and Folkman (1984) that coping is a process-oriented, rather than trait-oriented effort. Therefore, individuals can be trained to improve the way they manage the process, thereby increasing their cognitive coping skills. Subsequently, organizations can selectively implement initiatives to specifically increase problem-focused coping skills, in order to ameliorate or alleviate areas of work/life conflict, which is critical in times of increasing organization change (e.g., mergers, acquisitions, economic constraints, layoffs, outsourcing, offshoring) (Morris, 2008). Furthermore, MacDermid (2005) states that a significant gap in current work/life conflict research is the lack of a clear distinction between cognitive, affective and behavioral measures.

By using only cognitive measures of work/life conflict, coping and life satisfaction, this study can help fill this void.

Second, this is the only research identified using a global construct of life satisfaction. As previously mentioned, satisfaction serves as the stable, integrated judgment of an individual's life as a whole (Schimmack, et al., 2002; Schimmack & Oishi, 2005). This allows individuals to integrate their roles as work and at home, and ultimately determine their own criteria for satisfaction. This is critical due to Brook's (2008) contention that job satisfaction reinforces personal satisfaction, and both serve as components of overall life satisfaction. The treatment of life satisfaction as a *holistic* measurement allows for the influence of all the domains in which an individual may participate. Finally, MacDermid and Harvey (2006) note that with a few exceptions (e.g., Behson, 2002; Kopelman, Greenhaus & Connolly, 1983; McCubbin, Thompson & McCubbin, 1996; Moen & Yu, 2000), coping has received little attention in work/life research. This study can assist in filling that gap in the literature.

### **Nominal Definitions**

The following section provides a brief overview of the conceptual definitions for the latent constructs and manifest variables in the study. Instrumentation to assess these variables will be discussed in Chapter 3.

#### **Antecedent Construct**

**Work/life conflict.** "A form of interrole conflict in which the role pressures from the work and family domains are mutually incompatible in some respect" (Greenhaus & Beutell, 1985, p. 77). A manifestation of stress due to competing role demands, conflict is considered a bi-directional construct, in that work can interfere with family (i.e., *work-to-family conflict*

[WFC]) and family can interfere with work (i.e., *family-to-work conflict* [FWC]) (Frone, 2003; Hammer & Thompson, 2003). WFC and FWC serve as the latent antecedent variables for this study and both are a reflection of the three primary stressors (i.e., causes of conflict), which serve as manifest variables (Greenhaus & Beutell, 1985):

***Time-based conflict.*** Time-based conflict is defined as stress resulting when “time devoted to one role makes it difficult to fulfill requirements of another role” (Greenhaus & Beutell, 1985, p. 78).

***Strain-based conflict.*** Strain-based conflict is defined as stress resulting when “strain produced by one role makes it difficult to fulfill requirements of another role” (Greenhaus & Beutell, 1985, p. 78).

***Behavior-based conflict.*** Behavior-based conflict is defined as stress resulting when “behavior required in one role makes it difficult to fulfill requirements of another role” (Greenhaus & Beutell, 1985, p. 78).

## **Outcome Construct**

**Life satisfaction.** Viewed as a “constituent component of SWB” (Pavot & Diener, 2008, p. 137) life satisfaction is a “distinct construct representing the cognitive and global evaluation of the quality of one’s life as a whole” (Pavot & Diener, 2008, p. 137; Pavot & Diener, 1993). Life satisfaction serves as a perceptual judgment of an individual’s life, which is related to, but distinct from the affective components of SWB (Lucas, et al., 1996). Literature references to the cognitive dimension of subjective well being are in actuality tapping the construct of life satisfaction (DeNeve & Cooper, 1998).

## **Mediating Constructs**

**Coping.** Analogous to *bending without breaking* (Lazarus, 1993), Lazarus and Folkman (1984) define coping as “constantly changing cognitive and behavioral efforts to manage specific external and/or internal demands that are appraised as taxing or exceeding the resources of the person” (p. 141). This study utilizes the cognitive or problem-focused type of coping, which occurs when an individual perceives that stressful conditions are capable of being changed or influenced (Lazarus & Folkman, 1984). Specifically, problem-solving and communication skills as cognitive (i.e., instrumental) coping measures serve as latent mediating variables.

**Problem-solving coping skills.** Olson (1995) defines problem-solving skills as those activities that are actively engaged by an individual in order to deal with problems and make positive changes to his/her life. Studies by Perlin (1989) and Lazarus and Folkman (1984) indicate that individuals with high levels of problem solving skills more effectively deal with stressors (e.g., work/life conflict).

**Communication coping skills.** Olson (1995) defines communication skills as the ability to effectively exchange information with another person. Doherty and Campbell (1988) suggest that the ability to verbally express emotions is vital to individual well-being.

## **Research Questions**

This study will address the following research questions:

1. How do different sources of conflict (i.e., work-originating versus family-originating affect life satisfaction? Research (e.g., Chiu, 1998; Ford, et al., 2007; Kossek & Ozeki, 1998; Perrewe & Hochwarter, 2001) has repeatedly shown that work/life conflict is

negatively related to satisfaction, but this study will specifically examine the different magnitudes of affect of work/life conflict on life satisfaction.

2. What are the roles of problem-solving and communication coping skills in mediating the relationship between work/life conflict (i.e., WFC and FWC) and life satisfaction? Do the coping styles behave consistently across sources of conflict? Is one style of coping more effective than the other?

### **Theoretical Foundations**

Numerous theories have been used to help explain the process underlying the conflict between work and family (e.g., spillover, conservation of resources, compensation, segmentation, person-environment fit) (Edwards & Rothbard, 2000; 2005). Furthermore, Edwards and Rothbard (2005) contend that utilizing theories from other domains, such as stress research (e.g., Eckenrode & Gore, 1990; Frone, Russell & Cooper, 1992a; Grandey & Cropanzano, 1999; Greenhaus & Parasuraman, 1986; Higgins, Duxbury & Irving, 1992; Kopelman, et al., 1983; Martin & Schermerhorn, 1983) has brought “theoretical rigor” to work/life research (p. 212). Not only do Greenhaus and Beutell (1985), contend work/life conflict is a stressor manifested through competing interrole demands, but Greenhaus (1988) also maintains that utilizing a stress-based lens for work/life research is beneficial because researchers have the benefit of an existing, respected paradigm. This is because of the overlapping of constructs (e.g., work/life conflict, coping, well-being) between the two disciplines (Greenhaus, 1988; Edwards & Rothbard, 2005).

Based on these contentions, I will be using Kahn, Wolfe, Quinn, Snoek and Rosenthal’s (1964) *role conflict theory* and Lazarus and Folkman’s (1984) *transactional model of stress* as

the bases for this study. Role conflict theory (Kahn, et al., 1964) helps explain how an individual perceives processes in both the home and work domains, while the transactional model of stress (Lazarus & Folkman, 1984) allows for the appraisal of, and deployment of necessary coping mechanisms to ameliorate or alleviate stressors.

### **Role Conflict Theory**

Consistent with the identification of conflict as a manifestation of stress through competing role demands (i.e., Allen, Herst, Bruck & Sutton, 2000; Frone, 2003; Greenhaus & Beutell, 1985; Quick, Quick, Nelson & Hurrell, 1997), MacDermid (2005) maintains that role conflict theory, created by Kahn, et al. in 1964, serves as “the foundation for much of today’s thinking about conflict between family and work roles” (p. 23). In this theory, role conflict is defined as the “simultaneous occurrence of two (or more) sets of pressures such that compliance with one would make more difficult compliance with the other” (p. 19). This bottom-up perspective of roles (Greenhaus & Beutell, 1985) focuses on the relationship and interaction between roles, with the perceived severity of conflict escalating when: (1) roles are considered salient to the individual; and (2) the pressure to comply with competing demands is strong. An additional component to role theory is the consideration of external perceptions of role expectations. Essentially, how others perceive the importance of roles (e.g., organizational or familial perceptions) also impact an individual’s perceived conflict. Kahn et al. (1964) note three generalizations about role conflict: (1) role conflict often results in psychological conflict, meaning that when an individual experiences conflict between roles, that often morphs into an internal conflict; (2) an individual’s perceived needs and values have as much influence as external demands on the manifestation of conflict; and (3) conflict is the result of a push to

change, the source of the push (i.e., internal to the individual, or external to the environment) is irrelevant.

Role conflict theory purports that the different roles held by an individual create a type of system driven by the expectations that have been developed for those roles (Kahn, et al., 1964). Each of these roles has two constituent groups: (1) the role sender (i.e., the source of external expectations); and (2) the role performer (i.e., the individual actually functioning in the role). When the expectations of the sender are perceived as too great by the performer, conflict occurs. Additionally, when the performer is perceived as not having met the expectations of the sender, then future expectations of the sender are affected (Kahn, et al., 1964). The following vignette serves as an example for a familial relationship:

*A child expects that his/her parent will attend extra-curricular activities, such as sporting events. If the parent does attend the event, then the child will feel “loved” and reward the parent with affection, therefore no conflict has occurred. However, if the parent is unable to attend the sporting event because of a meeting at work, then the child may feel disappointed or “unloved” and act sullen towards the parent. Furthermore, the child may not ask his/her parent to come to any other events for fear of being disappointed again.*

This role interaction has been described by Katz and Kahn (1978) as the “building blocks of social systems” (p. 219).

As illustrated in the previous vignette, Kahn et al. (1964) suggest that role conflict develops because the *status quo* (i.e., the current level of functioning in all roles) is unacceptable to the individual or to the external constituencies important to the individual. Three primary

consequences to the violation of this status quo have been identified: (1) perceptions of distress or reduced levels of general (i.e., life) satisfaction; (2) feelings of reduced trust, respect and liking for those causing conflict (i.e., the role senders); and (3) ultimately psychological and social withdrawal, manifested in reduced communication, from the conflict-inflicting role senders (Kahn, et al., 194). Subsequent studies have shown the negative consequences of role conflict on stress, commitment, turnover, job satisfaction, work satisfaction and life satisfaction (e.g., Eckenrode & Gore, 1990; Fisher & Gitelson, 1983; Frone, Yardley & Markel, 1997; Kopelman, et al., 1983; Tidd & Friedman, 2002; Van Sell, Brief & Schuler, 1981).

Similar to role conflict theory, role strain theory (Goode, 1960) suggests that demands of multiple roles may exceed individual capacity, and that individuals must choose where to expend their resources. Rather than the “bottom-up” approach of role stress theory, Goode’s role strain theory uses a “top-down” approach to examine the system (i.e., all roles occupied by the individual) as a whole. One of the unique aspects of this study is the focus on the source of conflict, which makes the use of role strain theory inappropriate (Frone, 2003; Gutek, Searle & Klepa, 1991; Kossek & Ozeki, 1998).

### **Transactional Model of Stress**

The transactional model of stress consists of two components, appraisal and coping. Appraisal serves as the primary focus, as coping strategies are not triggered unless an individual appraises (i.e., perceives) an encounter as stressful (Lazarus & Folkman, 1984). *Primary appraisal* is the determination of the significance of the transaction (i.e., interaction) between the person and the environment in terms of individual well-being. It opens the door for the interaction to be considered positive or negative (eustress or distress). If the transaction is



determined to be stressful, then the alternatives are: (1) harm/loss (i.e., damage has already occurred); (2) threat (i.e., the possibility of damage in the future exists); (3) or challenge (i.e., an opportunity for growth, mastery or gain) (Lazarus & Folkman, 1984).

*Secondary appraisal* focuses on what can be done about the stressful transaction. At this level, the focus is on the coping strategies (i.e., resources), rather than the actual process of coping, that can be utilized to deal with the stressful situation (Lazarus, 2001). Nomenclature of primary and secondary appraisals suggests a hierarchical status is present, however Lazarus and Folkman maintain that the appraisals are of equal importance and can act independently of each other (1984). Essentially, an individual can just “deal with” the situation without analyzing (i.e., appraising) the potential significance of the interaction.

The second step of the transactional method, and of primary importance to this study, *coping* is defined as “constantly changing cognitive and behavioral efforts to manage specific external and/or internal demands that are appraised as taxing or exceeding the resources of the person” (Lazarus, 1998, p. 201). Furthermore, Lazarus contends “stress itself as a concept pales in significance for adaptation compared with coping” (1998, p. 202). Lazarus (1998) maintained that researchers must focus on coping in order to determine how the stress process as a whole works. This refined focus began the shift from the traditional view of coping as a personality trait to coping as a process (Lazarus, 1993). Lazarus identified three principles of the coping process (1998, p. 201): (1) coping constantly changes over the course of an encounter; (2) coping must be assessed as independent of its outcomes; and (3) coping consists of what an individual thinks and does in an effort to deal with the demands that tax or exceed resources (i.e. appraisal).

Coping processes are initiated to “manage the troubled person-environment relationship and these processes influence the person’s subsequent appraisal and hence the kind and intensity of the stress reaction. This cognitive-relational view, which once had to overcome entrenched behavioristic resistance, is now all but dominant” (Lazarus, 1990, p. 1). The ultimate goal of coping strategies is to deal with stressors by avoiding them, taking action to remove them, seeking external resources to deal with them, or changing the individual’s perception of the stressor (Folkman & Moskowitz, 2004). Individuals who cope with stress most effectively are able to realistically determine what they do and don’t have control over, and ultimately choose their coping strategies appropriately (i.e., problem-focused versus emotion-focused coping strategies, to be defined later in the literature review) (Folkman & Lazarus, 1991; Quillian-Wolever & Wolever, 2003; Sapolsky, 1998).

### **Summary and Overview**

This study allows for the investigation of the mediating effect of problem-focused coping (i.e., communication and problem-solving skills) on the relationship between work/life conflict (i.e., WFC and FWC) and life satisfaction. Because of the previously discussed psychological debate about the independence versus interrelationship between affect and cognitive judgment in determining an individual’s overall happiness, the focus on the study is solely on the impact that work/life conflict, as mediated by problem-focused coping, has on life satisfaction, the cognitive evaluation of the quality of one’s life. An acknowledged delineation of this study is the omission of the measurement of positive and negative affect, a noted requirement for the comprehensive assessment of happiness as SWB (e.g., Arthaud-Day, et al., 2005; Diener & Seligman, 2004; Pavot, 2008).

However, MacDermid (2005) notes that a “major gap” in current research is the lack of a clear distinction in cognitive, affective and behavioral components of work/life conflict (p. 25). This study attempts to address that gap by focus purely on the cognitive components of work/life conflict, coping and life satisfaction. Furthermore, this focus is of greater import to organizations because of the trainability of cognition. Specifically, organizations can “teach” or “train” individuals to increase their cognitive-based skills, but find affective or behavioral skills more challenging because of their latent nature. Therefore, in order to maintain a competitive advantage, particularly in times of frequent change (e.g., mergers, acquisitions, budgetary constraints), organizations can selectively implement initiatives to specifically increase problem-focused coping skills, in order to ameliorate or alleviate areas of work/life conflict (Morris, 2008).

Chapter 2 provides the definitions for, as well as, the historical development for each study variable: life satisfaction, work/life conflict and coping. Additionally, established research linkages between the variables will be explored. Chapter 3 discusses the methodology for the study, including description of the sample, instrumentation and data analysis procedures. Chapter 4 discusses the findings of the study. Finally, Chapter 5 discusses the conclusions from the study, potential limitations and directions for future research.

## **Chapter 2**

Stress, in the form of work/life conflict, problem-focused coping strategies (i.e., problem-solving and communication skills), and life satisfaction are salient research constructs which are defined and discussed in the following sections. The relationships among these variables are also discussed. In this study, work/life conflict (i.e., WFC and FWC) is modeled as a main-effect antecedent of life satisfaction, with problem-solving and communication serving as partial mediators of the main effects of work/life conflict and life satisfaction. Subsequently, hypotheses are presented regarding these relationships.

### **Work/life Conflict**

Greenhaus and Beutell (1985), influenced by the work of Kahn, et al. (1964), are credited with creating the seminal definition (MacDermid & Harvey, 2006) of work-life conflict: “a form of interrole conflict in which the role pressures from the work and family domains are mutually incompatible in some respect” (p. 77). Work/life conflict studies in the 1980s (e.g., Bedeian, Burke, & Moffett, 1988; Cooke & Rousseau, 1984; Kopelman, et al., 1983) mirrored Greenhaus and Beutell’s idea of work/life conflict as an unidimensional construct. Essentially, work/life conflict was treated as a “global” construct, without differentiating between the actual sources (i.e., work or family) of conflict (Eby, Casper, Lockwood, Bordeaux, & Brinley, 2005). Research in the 1990s (e.g., Frone, et al., 1992a, 1992b; Kelloway, Gottlieb, & Barham, 1999; Williams & Alliger, 1994) began to shift this focus away from the unidimensional construct to treating work/life conflict as a bi-directional construct with distinct sources of conflict (e.g., conflict originating in the work acts differently than conflict originating at home) (Frone, 2003; Hammer & Thompson, 2003). By virtue of twenty-one years of additional research, Greenhaus,

Allen, and Spector (2006), influenced by the work of Edwards and Rothbard (2000), expanded the definition to include conflict that occurs when one role interferes with an individual's effectiveness in the other role. "Therefore, the essence of work-family conflict is interrole interference, and work-family conflict could just as easily be referred to as work-family interference" (Greenhaus, et al., 2006, p. 64).

Three types of work/life conflict have been identified in literature: time-based, strain-based and behavioral-based (Greenhaus & Beutell, 1985). *Time-based conflict* is considered the most prevalent type of conflict (Hammer & Thompson, 2003). It occurs in one of two ways: (1) the amount of time spent in one role takes away from the amount of time available for the other role, and (2) preoccupation with one role impairs the ability to function in the other role, despite the individual's physical presence (aka presenteeism) (Bartolome & Evans, 1979). Time conflict combines the schedule conflict and excessive work time concepts identified by Pleck, Staines, and Lang (1980) with role overload, originally identified by Kahn, et al. (1964). Time-based conflict also reflects scarcity theory, in that the total amount of time and/or energy available to an individual is fixed, and participation in multiple roles decreases the total amount of time and/or energy available to meet all demands, thereby creating conflict (Marks, 1977) and strain on the individual (Goode, 1960).

Work-related time conflict is generally based on the number of hours that an individual works per week (Burke, Weir, & Duwors, 1980; Keith & Schafer, 1980; Pleck, et al., 1980). These hours include not only time physically spent on the job, but time spent in commuting and work-travel (Bohen & Viveros-Long, 1981). Pleck, et al. contend that overtime and shiftwork also contribute to work-related time conflict. Family-related time conflict involves the amount of

time spent with family or dealing with family members detracting from time that could be spent at work (Greenhaus & Beutell, 1985). Research has found that, generally speaking, married females experience more family-related time conflict than single females, and mothers experience more conflict than non-mothers (Bohen & Viveros-Long, 1981; Herman & Gyllstrom, 1977). Of course, since every individual is different, this scenario will not hold true for everyone (Holahan & Gilbert, 1979; Pleck, et al). Lambert's accommodation theory suggests that individuals can accommodate time demands in one role by decreasing the amount of time in the other role (1990). Segmentation theory suggests that individuals intentionally compartmentalize their roles to prevent presenteeism (Greenhaus & Singh, 2003; Lambert, 1990).

*Strain-based conflict* occurs when the strain (or stressors) felt in one role makes it difficult to perform in the other role (Greenhaus & Beutell, 1985). Again building on the work of Pleck, et al. (1980), strain-based conflict is based in the idea of fatigue and irritability created from one role affecting the activities in the other role. Strain-based conflict also reflects person-environment (P-E) fit theory, developed by Kahn, et al. (1964). P-E fit is based on conflicting role demands, where fit is defined as the match between an individual's knowledge, skills and abilities (KSAs) and the role he/she is asked to perform. When KSAs don't match the expectations of the role (whether work or personal), a lack of fit develops, ultimately leading to stress (both positive and negative) (Nelson & Simmons, 2003). Work-related strain conflict has been positively related to job ambiguity and negatively related to leader support and facilitation (Jones & Butler, 1980; Kopelman, et al., 1983). Work-related strain has also been related to stressful events at work or job burnout that result in fatigue or depression in the family role

(Bartolome & Evans, 1980; Jackson & Maslach, 1982). Family-based strain conflict primarily occurs when spousal career and family expectations are not in congruence (Beutell & Greenhaus, 1982; Chadwick, Albrecht, & Kunz, 1976; Eiswirth-Neems & Handal, 1978).

*Behavioral-based conflict* occurs when the behaviors required in one role are incompatible with the behaviors required in the other role (Greenhaus & Beutell, 1985): “behaviors that are expected or appropriate in the family role (e.g. expressiveness, emotional sensitivity) are viewed as inappropriate or dysfunctional when used in the work role” (Parasuraman & Greenhaus, 1997, p. 4). As previously noted, this is bi-directional in nature in that aggressive behaviors that may be required at work are considered inappropriate at home (Hammer & Thompson, 2003).

### **The Bi-Directional Nature of Work/life Conflict**

As previously mentioned, work/life conflict is considered a bi-directional construct, in that work can interfere with family and family can interfere with work (Frone, 2003; Hammer & Thompson, 2003). The differences in nomenclature are used to distinguish the source of the conflict. Specifically, work-to-family conflict (i.e., WFC) is used to describe conflict that arises in the work domain and carries over to the family domain. Conversely, family-to-work conflict (i.e., FWC) is used to describe conflict that arises in the family domain and carries over to the work domain. A litany of research (e.g., Adams, King, & King, 1996; Anderson, Coffey, & Byerly, 2002; Boyar, Maertza, & Mosely, 2003; Carlson, Kacmar, & Williams, 2000; Frone, Barnes, & Farrell, 1994; Frone, et al., 1992a, 1992b; Grandey & Cropanzano, 1999; Grzywacz & Marks, 2000; Netemeyer, Boles, & McMurrian, 1996; O’Driscoll, Ilgen, & Hildreth, 1992;

Parasuraman, Purohit, Godshalk, & Beutell, 1996) purports the bi-directionality of the construct and has empirically shown that WFC and FWC have different predictors and consequences.

The idea of bi-directionality developed from the “myth of separate worlds” (Piotrkowski, 1979, p. 206). Building on the work of Kanter (1977), Piotrkowski maintained that the widely held belief that work and family occupied separate, distinct spheres in an individual’s life and never interacted with each other was faulty. Instead, she advocated that the work and family spheres actually are related and events occurring in one sphere impact the other: “even when people think they are leaving work-related concerns at the job by not talking about them at home, such worries may be communicated unconsciously” (Piotrkowski, 1979, p. 206). Furthermore, Pleck (1977) suggested that the concept of *asymmetrical permeable boundaries* better described the relationship between domains. The idea of asymmetrical permeable boundaries is based on the idea that stressors and demands originating in one domain (i.e., work or family stressors) may intrude on the other domain at a different level of intensity than what is felt in the originating domain (Pleck, 1977).

It is of further importance to note that while the consequences of conflict are different depending upon the domain (i.e., work or family) where the conflict originates, conflict behaves in a reciprocal nature and can actually have an additive, compounding effect (Frone, et al., 1992a, 1992b). Building on the vignette offered earlier, when the parent is unable to attend a sporting event due to a meeting at work, time-based WFC occurs. The child’s sullen response can lead the parent to feelings of guilt and stress, which he/she later acts upon at work, creating strain-based FWC. Though the conflict originated in the work domain, the stress becomes circular and evolves into family-to-work conflict.



Gutek, et al. (1991) were among the first to empirically examine the bi-directionality of work/life conflict. Using distinct measures of work-to-family (i.e., Kopelman, Rovenpour, & Guan, 2003) and family-to-work conflict (i.e., Burley, 1989), gender and the number of hours spent in each role, they performed a series of analyses (including t-tests, ANCOVAs and hierarchical multiple regressions) to assess the differences in experienced conflict based on domain origin and rational versus gender frameworks across two samples. Significant to this study, Gutek, et al. found: (1) with a single exception, WFC and FWC operate within, not across, domains; and (2) regardless of gender, higher levels of WFC are experienced than FWC.

Furthermore, confirmatory factor analyses and ANCOVAs by Frone, et al. (1992b) supported the results of Gutek, et al. (1991) finding that WFC and FWC are separate factors, and regardless of gender, WFC occurs with greater intensity than FWC. As previously noted, and in addition to the Gutek, et al. (1991) and Frone, et al. (1992b) studies, the bi-directionality of conflict has been empirically established in a variety of studies (e.g., Adams, et al., 1996; Boyar, et al., 2003; Carlson, et al., 2000; Frone, et al., 1994; Grandey & Cropanzano, 1999; Grzywacz & Marks, 2000; Netemeyer, et al., 1996). Furthermore, to be addressed in the next section, WFC and FWC have also been shown to be related to different outcomes (e.g., Carlson, et al., 2000; Frone, et al., 1992b; Frone, et al., 1994; Kelloway, et al., 1999; O'Driscoll, et al., 1992).

### **Work/life Conflict as an Antecedent Construct**

In an effort to better understand work/life conflict, as well as WFC and FWC, researchers have examined it in a variety of ways (i.e., work/life conflict as a consequent, work/life conflict as an antecedent and work/life conflict as a mediator) (Eby, et al., 2005). While research into the causes of work/life conflict and the use of work/life conflict as a mediator is important to

furthering the understanding of the discipline, a review of this type of research is beyond the scope of this study. For the purpose of this study, a focus on the history of work/life conflict as an antecedent variable is of greater value. Work/life conflict has been examined as an antecedent of (1) physical and mental health outcomes (e.g., Burke & Greenglass, 1999; Frone, et al., 1997; Frone, 2000; Schmidt, Colligan, & Fitzgerald, 1980); (2) organizational consequences (e.g., Bedeian, et al., 1988; Bruck, Allen, & Spector, 2002; Greenhaus, Parasuraman, & Collins, 2001); and (3) family consequences (e.g., Bedeian, et al., 1988; Parasuraman, Greenhaus, & Granrose, 1992).

From a historical perspective, it is important to note that research using work/life conflict as an antecedent reflected the understanding of the construct (i.e., early research treated conflict as an unidimensional construct, whereas later research treated conflict as a bi-directional construct). As researchers' understanding of the construct increased, greater operationalization of the construct also occurred, which allowed for examining the differing effects of work-based conflict and family-based conflict on outcomes. For example, work by Schmidt, et al. (1980) found that work/life conflict (as an unidimensional construct) was significantly related to increased physical health symptoms. Later research by Frone, et al. (1997) was able to expand on this work, finding that WFC predicted higher levels of depression, physical health complaints and hypertension. Alternatively, FWC predicted higher levels of alcohol consumption. Eby, et al.'s (2005) meta-analysis noted that a limitation in work/life research is the heavy reliance on study variables in the work domain, as compared to the family domain and individual personality characteristics, and the need for increased research using the bi-directional and time-based, behavior-based and strain-based aspects of work/life conflict. This study attempts to address this

concern by examining WFC and FWC conflict (as separate latent antecedent variables, with time-based, behavior-based, and strain-based manifest antecedents) as distinct predictors of life satisfaction, an overall perception that includes work, family and relationship considerations.

### **Life Satisfaction**

Refining Diener's (1984) definition of life satisfaction as a "...cognitive evaluation of one's life" (p. 550) and Shin and Johnson's (1978) definition of life satisfaction as "a global assessment of a person's quality of life according to his chosen criteria" (p. 478), Pavot and Diener (1993) define life satisfaction as a cognitive, global evaluation of an individual's life as a whole based on a set of pre-determined standards: "life satisfaction is a conscious cognitive judgment of one's life in which the criteria for judgment are up to the person" (p. 164). As previously discussed, while multiple researchers (e.g., Arthaud-Day, et al., 2005; Diener, et al., 1999; Pavot & Diener, 2008) maintain that in order to appropriately study happiness as SWB, scales must be comprised of both cognitive and affect-oriented scales. This study focuses solely on the cognitive or life satisfaction component of happiness as SWB. Research by Andrews and Withey (1976), Arthaud-Day, et al. (2005), Diener, et al. (1999), and Pavot and Diener (2008) has shown that life satisfaction, a distinctly cognitive, judgment-based construct, is influenced by an individual's personality and affective disposition. Considered a stable, integrated judgment of an individual's life as a whole (Schimmack, et al., 2002; Schimmack & Oishi, 2005), the construct of life satisfaction (as opposed to subjective well-being as a whole) allows for respondents to individually determine not only the criteria, but also its importance, in determining their overall level of satisfaction (Diener, et al., 2003; Pavot & Diener, 2008). To be discussed further in the next section, because life satisfaction is a global assessment of an

individual's life, it is not as subjective as an assessment of individual domains (e.g., work or family satisfaction), as it examines the satisfaction of the individual as a whole (Diener, Emmons, Larsen & Griffin, 1985).

Life satisfaction, by definition, is unique to the individual determining it. Although there is some agreement about the important qualities influencing life satisfaction (e.g., health and successful relationships), individuals ultimately determine these factors for themselves and assign a value to them (Diener, et al., 1985). Pavot and Diener (1993) contend that life satisfaction judgments are comprised of three (3) temporal components: (1) long-term influences, which include personality and stable life circumstances; (2) moderate-term influences, which include current life events and cognitive interpretations; and (3) short-term influences, which include current mood and immediately salient life events. Research in social cognition supports Pavot and Diener's (1993) temporal components in suggesting that life satisfaction judgments are based on the relevant information available to the individual at the time the judgment is made (Schimmack, et al., 2002). However, researchers continue to question which of the temporal components (i.e., long-term, moderate-term or short-term) have the greatest impact on global life satisfaction.

Costa and McCrae (1980) found that global life satisfaction is stable over time, regardless of the influence of intervening life events. Furthermore, in their sample of 1,100 males, they found that the personality traits of neuroticism and extraversion were significantly related to dissatisfaction and satisfaction, respectively. Based on this relationship, they concluded that personality differences are more related to changes in satisfaction over a 10-year period than short-term influences like mood. Schimmack, et al. (2002) also found a similar relationship

between personality and other stable, long-term influences (e.g., academic success) on overall satisfaction in their cross-cultural study of 651 individuals. However, they ultimately concluded that individuals use long-, moderate-, and short-term influences in order to form life-satisfaction judgments. While long-term (i.e., personality) traits are responsible for the stability in life satisfaction, individuals use moderate- and short-term influences deliberately to help form life satisfaction judgments.

In this vein, multiple researchers have utilized longitudinal studies to examine the stability of life satisfaction judgments. Examining a sample of 264 high school students, Vitterso (2001) found a test-retest reliability of .64 on life satisfaction. Further, Magnus, Diener, Fujita, and Pavot (1993) found test-retest reliability of .54 over a four-year period on life satisfaction in 97 college students. Reflecting on those results, Diener (2000) maintained that results were evidence that “situational factors usually pale in comparison with long-term influences on well-being measures” (p. 35).

### **Domains of Satisfaction: The Bottom-up Versus Top-down Debate**

As previously mentioned, while there is some consensus on factors that influence life satisfaction (e.g., health and successful relationships), there is a debate among researchers as to whether life satisfaction is the sum of satisfaction with specific life domains (e.g., work, marital, family) (i.e., the *bottom-up perspective*) or if an overall positive life satisfaction results in satisfaction with specific life domains (i.e., the *top-down perspective*) (Diener, et al., 1985). More specifically, bottom-up theories assume that an individual’s assessment of his/her satisfaction is based on an assessment of satisfaction in a relatively small number of domains (Andrews & Withey, 1976; Brief, Butcher, George, & Link, 1993; Heller, Watson, & Ilies, 2004;

Schimmack, 2008; Schimmack, et al., 2002). Schimmack (2008) contends that bottom-up theories assume that the correlations between life satisfaction and various domains are indicative of a causal influence of those domains on life satisfaction. Schimmack illustrates this relationship with the following example: “an individual with high marital satisfaction has high life satisfaction because his or her marital satisfaction is an important aspect of his or her satisfaction with life as a whole” (2008, p. 98). Most researchers have assumed that not only is the bottom-up theory appropriate, but also that a linear additive model exists where global life satisfaction is a sum of the satisfaction with its domains (Andrews & Withey, 1976; Argyle, 1987; Campbell, Converse, & Rogers, 1976).

Conversely, top-down theories assume that the correlations between life satisfaction and various domains are indicative of a casual influence of life satisfaction on individual domains. Life satisfaction can be viewed as a general construct made up of multiple, individual domains, and satisfaction with life as a whole is determined by the satisfaction with individual domains (Cummins, 1996, 1998, 2003; Headey, Holmström, & Wearing, 1984; Headey & Wearing, 1992; Meadow, Mentzer, Rahtz, & Sirgy, 1992; Rampichini & D’Andrea, 1998; Rojas, 2006; Salvatore & Muñoz Sastre, 2001; Saris & Ferligoj, 1996; Sirgy, et al., 1995; Veenhoven, 1996). In the top-down model, an individual’s personality is a strong determinant of life satisfaction, and ultimately domain satisfaction. Influenced by the stability of personality inherent in trait theory, top-down theories emphasize the stability of life satisfaction over time, while de-emphasizing situational changes in satisfaction (Pavot & Diener, 2008). Diener (1984) notes that high correlations between domains of satisfaction are indicative of a top-down model. Schimmack

(2008) illustrates this basic relationship in stating “the simplest top-down model assumes that people who are generally satisfied with life are more satisfied with everything” (p. 101).

In “Subjective Well-Being,” Diener maintains that the debate between top-down and bottom-up theorists has been in effect throughout the scholarly history of research on happiness (1984). He further relates the bottom-up perspective to Lockean reductionist or atomistic views, where the whole is a representation of the sum of its parts (Kozma & Stones, 1980) and the top-down perspective to Kantian view, where causation starts with higher-order constructs down through lower-order constructs (Diener, 1984). Headey, Veenhoven, and Wearing (1991) stated that this uncertainty over the antecedents of subjective well-being (and more specifically, life satisfaction) is one of the “most fundamental problems” in the discipline (p. 81). They further maintain that most of the previous research on the causes of SWB (specifically life satisfaction) had actually only been shown to be correlates of SWB, and “might conceivably be consequences, or perhaps both causes and consequences” of SWB and life satisfaction (p. 81).

**Are both sides correct?** In 1991, Headey, et al. published results from a longitudinal study of 649 individuals over six (6) years in an effort to address the bottom-up versus top-down controversy. Rather than finding clear support for either perspective, their results served to “paint a more complicated picture” (Headey, et al., 1991, p. 95). They found that life satisfaction and marital satisfaction actually had two-way causation (i.e., high levels of life satisfaction resulted in higher levels of marital satisfaction, and vice versa). Further, a top-down relationship existed between life satisfaction and the domains of work, leisure and standard of living (i.e., high levels of life satisfaction resulted in higher levels of satisfaction in the domains of work, leisure and standard of living). While acknowledging a general lack of support for bottom-up

theories, Headey, et al. (1991) suggest that the results may have been due to a reduction in the population study over the time period or to other causal variables besides life and domain satisfaction.

Heller, et al. (2004) conducted a series of meta-analyses to examine explanations for individual differences in life satisfaction. A total of 317 correlations from 116 independent samples were used to calculate the meta-analytic estimates. Consistent with the top-down perspective, meta-analytic findings indicated that neuroticism was negatively related, and extraversion, agreeableness, and conscientiousness were positively related to both domain (i.e., job, marital, health) and global life satisfaction. Consistent with the bottom-up perspective, domain satisfactions were strongly linked to life satisfaction, but weakly linked to each other. Heller, et al. concluded that the findings supported both a personality-based top-down model and an integrative model that incorporates the direct influence of domain satisfaction on life satisfaction (2004).

### **Life Satisfaction as a Outcome Construct**

Life satisfaction can be considered the ultimate outcome variable. Based on the importance of satisfaction to individuals, organizations and society at large (e.g., Diener & Biswas-Diener, 2008; Diener & Seligman, 2004; Fredrickson, 1998; Judge & Church, 2000; Larson & Eid, 2008; Veenhoven, 2008), determining the predictors of and correlates to satisfaction is of utmost importance to researchers. Lucas and Diener (2008) note that the majority of research into satisfaction has the goal of answering the question of “what external conditions are necessary for happiness [life satisfaction] to ensue” (p. 477). Early researchers focused on external factors that contribute to satisfaction. Significant positive correlations have



been found between satisfaction and the following external variables: (1) income and personal wealth (e.g., Diener & Biswas-Diener, 2002; Diener, Sandvik, Seidlitz, & Diener, 1993); (2) marriage (e.g., Glenn, 1975; Gove & Shin, 1989; Morris & Blanton, 1994; White, 1992); (3) religious beliefs (e.g., Ellison, 1991; Ellison, Gay, & Glass, 1989; Gartner, Larson, & Allen, 1991; Pollner, 1989); and (4) self-report measures of health (e.g., Ganz, Lee, & Siau, 1990; McClellan, Anson, Birkeli, and Tuttle, 1991; Mossey & Shapiro, 1982; Rumsfeld, et al., 1999).

Despite this abundance of research on external factors, the majority of the variables only achieved, while significant, small effects on satisfaction, which served to frustrate many researchers (e.g., Ryff, 1989; Wilson, 1967). Lucas and Diener contend that frustration pushed researchers to begin considering psychological variables that also influence satisfaction:

“people’s needs and resources must be examined in the context of individual lives, goals, values, and personalities” (2008, p. 477). Significant positive correlations have been found between the following personality and individual variables and life satisfaction: (1) extraversion (e.g., Diener & Lucas, 1999; Heller, et al., 2004; Lucas, Le, & Dyrenforth, 2008); (2) low levels of neuroticism (e.g., Diener & Lucas, 1999; Heller, et al., 2004); (3) self-esteem (e.g., Diener & Lucas, 1999; Diener & Diener, 1995); and (4) goal-setting (e.g., Oishi, Diener, Suh, & Lucas, 1999).

### **Coping**

The transactional model of stress is grounded in the idea that coping is a process for dealing with stress that involves an interaction between the individual and his/her environment (e.g., Coyne & Lazarus, 1980; Folkman, 1984; Folkman, Lazarus, Gruen, & DeLongis, 1986; Lazarus, 1966; Lazarus & Folkman, 1984). As previously discussed, the transactional approach

is comprised of two primary components: (1) primary appraisal of the significance of the situation and (2) secondary appraisal of the potential coping strategies (i.e., resources) to address the situation (Lazarus & Folkman, 1984). It is important to note that coping does not actually occur during secondary appraisal, rather this stage of the process is for the development of judgments about the appropriateness of strategies (Lazarus, 2001). Two types of coping strategies exist: problem-focused (i.e., cognitive) and emotion-focused (i.e., behavioral) (Folkman & Lazarus, 1980, 1985; Lazarus & Folkman, 1984). *Problem-focused coping* strategies are aimed at managing or altering the problem that is causing stress, while *emotion-focused coping* strategies are directed at regulating an individual's emotional response to a problem (Folkman & Lazarus, 1980; Lazarus & Folkman, 1984). Generally, problem-focused coping strategies are used when an individual perceives that (s)he can change the situation, while emotion-focused coping strategies are used when an individual perceives that nothing can be done to change potentially harmful or threatening situations (Folkman & Lazarus, 1980, 1985).

Folkman, Schaefer, and Lazarus (1979) proposed the *goodness of fit* hypothesis for explaining successful outcomes resulting from selecting the “correct” coping strategy. The goodness of fit hypothesis suggests that psychological gains are greater when the coping strategy (i.e., problem-focused or emotion-focused) aligns with the situation stressor. When the correct or most appropriate coping strategy is implemented (e.g., problem-focused coping strategies when an event is appraised as significant and controllable), resolution of the stressor is more successful than when an inappropriate method (e.g., an emotion-based coping strategy in this scenario) is utilized. Support for the goodness of fit hypothesis came from research studies (e.g., Forsythe & Compas, 1987; Silovsky & Lyman, 1993) that found that when individuals used problem-

focused coping as a response to significant, controllable scenarios, their overall psychological symptoms were decreased. Similarly, the use of emotion-focused coping as a response to uncontrollable scenarios, resulted in fewer reported psychological symptoms.

Folkman (1984) defines coping as “cognitive and behavioral efforts to master, reduce, or tolerate the internal and/or external demands that are created by the stressful transaction” (p. 843). Several aspects of this definition compel further examination. First, coping uses both cognitive (i.e., problem-focused) and behavioral (i.e., emotion-focused) strategies in order to deal with stressful situations. As noted above, coping strategies are triggered as a reaction to the appraisal component of the transactional stress model (Lazarus & Folkman, 1984). The type (i.e., problem- or emotion-focused) and number of strategies used vary based upon the importance of the individual’s appraisal (Folkman, et al., 1986). Additionally, multiple researchers (e.g., Holmes & Rahe, 1967; Kobasa, 1979; Selye, 1979) have demonstrated that as perceived stress levels increase, coping mechanisms need to become more diversified in order to accommodate the individual’s increased level of impairment.

Second, coping requires action by the individual experiencing the stressor. Lazarus and Folkman (1984) contend that coping does not occur spontaneously or unconsciously. Coping is a purposeful behavior designed to mitigate the impact of the stressor. Murphy (1974) suggests that coping lies along the middle of a continuum, with primitive or reflex responses at one end and complete self-mastery at the other end. Lazarus and Folkman further maintain that similar to the “a square is a rectangle” analogy, not all adaptive processes can be considered coping, yet coping processes are a type of adaptation that requires effort on the part of the individual (1984).

Third, coping is a process that can change based on changes in the environment. As part of the appraisal process, individuals determine what type (if any) coping strategy is required based on whether the event is perceived as irrelevant, benign or stressful (Coyne & Lazarus, 1980; Folkman & Lazarus, 1980; Lazarus & Folkman, 1984). Individuals who cope with stress most effectively are able to realistically determine what they can or cannot have control and ultimately choose their coping strategies appropriately (i.e., problem-focused versus emotion-focused coping strategies) (Folkman & Lazarus, 1991; Quillian-Wolever & Wolever, 2003; Sapolsky, 1998).

Finally, coping strategies do not exist in a vacuum. Their success is determined not only by the strategy itself, but also the situation to which it is applied. Lazarus and Folkman (1984) contend that not only can strategies have different levels of success in different situations, but that a coping strategy that is successfully used once may not prove successful if used again in a similar scenario. In fact, the success of any given coping strategy varies based not only on the situation but also the perception of what is “at stake” to the individual (Folkman, et al., 1986).

### **Problem-focused Coping**

As previously discussed, this study specifically focuses on problem-focused coping strategies. This is despite Folkman and Lazarus’ theory that problem-focused and emotion-focused coping occur together (1980). Utilizing only problem-focused coping reflects the cognitive focus of the study at large. Problem-focused coping strategies are aimed at managing or altering the problem that is causing stress, while emotion-focused coping strategies are directed at regulating an individual’s emotional response to a problem (Folkman & Lazarus, 1980; Lazarus & Folkman, 1984). Generally, problem-focused coping strategies are used when

an individual perceives that (s)he can change the situation (Folkman & Lazarus, 1980, 1985). Furthermore, problem-focused coping strategies tend to be used more frequently when the individual believes the situation is capable of being changed, and therefore makes a cognitive choice to make the needed change(s) (Folkman & Lazarus, 1980). This implies that individuals perceive control over their situation, which Compas, Banez, Malcarne, and Worsham (1991) contend has a positive and reciprocal relationship with problem-focused coping.

Lazarus and Folkman maintain that problem-focused coping strategies are similar, but not identical, to general problem-solving strategies. Therefore, they are “often directed at defining the problem, generating alternative solutions, weighing the alternatives in terms of their costs and benefits, choosing among them, and acting” (1984, p. 152). Problem-focused coping strategies go beyond the purely outwardly focused, analytical nature of problem solving to include strategies that are directed inward to the individual. Kahn, et al. (1964) note that two major forms of problem-focused strategies exist: those that focus outward on the environment, and those that focus inward on the individual. Outwardly focused strategies involve altering environmental pressures, increasing and/or changing resources, and implementing and/or changing barriers. Inwardly focused strategies involve cognitive or motivational changes, including changing expectations, developing new standards of behavior, and learning new skills (Kahn, et al., 1964). Lazarus and Folkman maintain that inwardly focused problem-solving coping skills, with the exception of developing new standards of behavior or learning new skills, are, in actuality, problem-focused coping reappraisals (1984). This study focuses specifically on the skill-based strategies of perceived problem-solving and communication skills. These two skill-based strategies will be discussed next.

**Problem-solving skills.** Building on Janis (1974), Janis and Mann (1977) suggest that problem solving skills are important resources for coping. Furthermore, problem-solving is thought to be most effective in dealing with work-related problems (Mattlin, Wethington, & Kessler, 1990; Menaghan & Merves, 1984). Problem-solving skills include the following: (1) the ability to search for information; (2) the ability to analyze situations to identify the problem; (3) the ability to generate and evaluate alternative strategies to deal with the problem; and (4) the ability to implement the desired problem-solving strategy (Janis, 1974; Janis & Mann, 1977; Lazarus & Folkman, 1984). Rosenbaum (1980) contends that problem-solving skills are drawn from an individual's life experiences, intellect, learned skills and abilities, and personal self-control. While some problem-solving skills are directed towards specific situations, like studying for an exam or changing a tire (Lazarus & Folkman, 1984), others are more conceptual and broad-based, like dealing with moral issues (Schwartz, 1970), dealing with conflicts in work and marriage roles (Levinger, 1966; Parsons & Bales, 1955). Examples of research involving problem-solving coping will be discussed later.

**Communication skills.** Also known as social skills, communication skills refer to the ability of individuals to communicate and interact with others in a way that is considered socially appropriate and effective (Lazarus & Folkman, 1984). Skilled communicators are more able to control social situations, gain the cooperation and support of others, and can also facilitate group cohesion and performance (Lazarus & Folkman, 1984). Mechanic (1974) suggests that organizational focus on teaching communication skills results from organizations seeing the increased performance capabilities of groups over individuals. An important consideration in communication is how to present negative or threatening information. Lazarus and Folkman

suggest that it is generally advantageous to present information in a manner that is challenging, rather than threatening, essentially focusing on the possibilities of success, rather than the implications of failure (1984). Communication coping skills are unique in that they can be problem-focused (e.g., cognitive and process-oriented) or emotion-focused (e.g., affective self-expression) (e.g., Altman & Taylor, 1973; Greeff & Malherbe, 2001; Reis & Patrick, 1996). Problem-focused communication skills aid in the *delivery* of information (Ekman & Friesen, 1969), whereas emotion-focused communication can provide *context* for the information (Kraus and Fussell, 1996). Examples of research involving communication coping will be offered in the next section.

### **Coping as a Mediating Construct**

By definition, coping is a mediating construct. Boyd, et al. note that several scholars (e.g., Lazarus & Folkman, 1984; Lewin & Sager, 2008; Thoits, 1986) support the idea of coping as a mediator (2009). Consistent with the transactional (or mediational) model of stress, coping serves as a mediating process that allows an individual to deal with his/her stressor and the environment (e.g., Coyne & Lazarus, 1980; Folkman, 1984; Folkman, et al., 1986; Lazarus, 1966; Lazarus & Folkman, 1984, Thoits, 1986). In other words, coping mediates the impact of potential stressors on individual and organizational outcomes. Cohen and Willis (1985) concluded that in the absence of defined stressors, coping produced a limited effect on individual well-being. However, when acting as a mediator of the stress - well-being relationship, coping did have a significant impact on individual well-being. They suggest that this occurs for two potential reasons: (1) coping attenuates or prevents a negative appraisal of stressful situations and (2) if a negative appraisal does occur, coping may mediate the adverse impact by altering the

level of the stress reaction. More recently work by De Rijk, Le Blanc, Schaufeli, and de Jonge (1998), Folkman and Lazarus (1988), and Lewin and Sager (2007) support Cohen and Willis' proposition of the mediational value of coping (1985).

Several studies have been completed utilizing coping as a mediational variable. However, this research often does not specify specific types of coping (i.e., problem-solving or communication) or combines them into the encompassing problem-focused coping construct. For example, Porter, Kraft, and Claycomb (2003) theorized that coping, specifically problem-focused coping, mediates the relationship between stress and well-being by minimizing the negative effects of stressors. Further, coping has been shown to mediate the negative effects of job stress on emotional well-being (Parkes, 1990), job stress and burnout (e.g., Koeske, Kirk & Koeske, 1993; Sand & Miyazaki, 2000), and job stress and emotional exhaustion (Nonis & Sager, 2003). Boyd, et al. found that problem-focused coping mediated the relationship between: (1) role clarity and emotional exhaustion; (2) role conflict and emotional exhaustion; (3) self-efficacy and emotional exhaustion; (4) locus of control and emotional exhaustion; (5) role clarity and job-induced anxiety; (6) role conflict and job-induced anxiety; (7) self-efficacy and job-induced anxiety; and (8) locus of control and job-induced anxiety (2009). Furthermore, Greenhaus, et al. suggest that coping behaviors (e.g., problem-focused coping strategies) can be used to mediate the negative effects of conflict over time, resulting in fewer episodic instances of conflict (2006).

### **Main Effects: The Relationship between Work/life Conflict and Life Satisfaction**

In their meta-analysis, Allen, et al. note that work/life conflict has “dysfunctional and socially costly effects on individual work life, home life and general well-being and health”



(2000, p. 301). As previously discussed, by definition, life satisfaction is a cognitive, global evaluation of an individual's life as a whole (Pavot & Diener, 1993). Therefore, the relationship between work/life conflict and life satisfaction has received a considerable amount of attention in the research literature. Not only is life satisfaction considered the non-work variable most associated with work/life conflict, it is also the one most strongly statistically related to work/life conflict (Allen, et al., 2000). With the exception of two studies in the early 1980s (i.e., Beutell & Greenhaus, 1982; Cooke & Rousseau, 1984), individuals who report increasingly higher levels of work/life conflict also report lower levels of overall life satisfaction. Allen, et al. contend that this trend in research may, in fact, be a reflection of generational changes in employee attitudes resulting in a greater desire for work/life balance (2000).

However, some discrepancies occur in research based upon the type of work/life conflict measure used (i.e., work-to-family conflict, family-to-work conflict, or a global [bi-directional] conflict). O'Driscoll, et al. (1992) noted that the majority of early research utilized the global, bi-directional approach. When separate measures are used, WFC measures are used more than FWC measures (Netemeyer, et al., 1996). Kossek and Ozeki maintain that work/life conflict measures that clearly specify the direction of the conflict (i.e., work-to-family and family-to-work) perform better than global, bi-directional measures (1998). Four meta-analyses have been conducted examining the relationship between work/life conflict and life satisfaction. In the first, Kossek and Ozeki (1998) examined all three measures of work/life conflict (i.e., work-to-family, family-to-work, and a global measurement) with significant, weighted mean correlation scores of -.31, -.20 and -.30, respectively. In the second, Allen, et al. (2000) only examined the relationship between WFC and life satisfaction, finding a weighted mean correlation of -.28.

Mesmer-Magnus and Viswesvaran (2005) examined WFC and FWC separately, finding weighted mean correlations of -.26 and -.20, respectively. Interesting to note in the Mesmer-Magnus and Viswesvaran study is that both WFC and FWC had a stronger relationship with life satisfaction than any other variable besides job stressors (and health for FWC). Most recently, Michel, Mitchelson, Kotrba, LeBreton, and Baltes (2009) used structured equation modeling to conduct a meta-analysis of work/life conflict research to test multiple models, including Frone, et al.'s (1992a) work-family conflict model. A meta-analytic correlation matrix showed significant ( $p < .05$ ) correlations between life satisfaction and WFC and FWC of -.30 and -.20, respectively. Structured equation modeling of the parsimonious stressor and involvement model (where work/life conflict is a predictor of life satisfaction) was supported with the following overall fit statistics:  $\chi^2(13) = 179.57$ , CN = 323.94, GFI = .98, NFI = .96, CFI = .96, RMSEA = .08, and AIC = 243.57. While WFC and FWC do predict life satisfaction, the path loadings are relatively low at -.13 and -.01, respectively.

*Hypothesis 1a:* Work-to-family conflict (WFC) is inversely related to life satisfaction. Specifically, as individuals report greater levels of WFC, they will also report lower levels of life satisfaction.

*Hypothesis 1b:* Family-to-work conflict (FWC) is inversely related to life satisfaction. Specifically, as individuals report greater levels of FWC, they will also report lower levels of life satisfaction.

*Hypothesis 2:* Work-to-family conflict (WFC) will be a stronger predictor of life satisfaction than family-to-work conflict. Specifically, though both WFC and FWC are expected to detract life satisfaction, WFC will have a stronger negative predictive power than FWC.

## **Antecedent/Mediator Relationships: Work/life Conflict, Problem-solving and Communication**

Voydanoff's model of work/life conflict (2002) suggests that coping strategies are effective in dealing with work/life conflict by mediating or interceding in the negative effects of work/life conflict on outcomes such as work and family satisfaction. However, Rotondo and Kincaid (2008) note that the absence of research on coping and WFC has been cited in several comprehensive reviews of the work/life conflict literature (i.e., Bellavia & Frone, 2005; Eby, et al., 2005; Frone, 2003). Haar (2006) suggests that "despite high interest, few studies have sought to examine how employees cope with work/life conflict occurring both from the workplace and the home" (p. 149). Eby, et al. (2005) state that the gap in research on the effects of coping on work/life conflict are "puzzling" (p. 186) given the amount of research between coping and other conflict-related variables, such as role stress, health and wellness. Of the studies conducted, results are often inconsistent within and contradictory across studies. Somech and Drach-Zahavy (2007) suggest that these inconsistencies are the result of the comprehensive manner in which coping is conceptualized (e.g., examining generalized problem-focused coping strategies, rather than specific types of problem-focused coping like problem-solving and communication skills).

While it is important to note that no one style of coping is universally appropriate (Rotondo, Carlson, & Kincaid, 2003), because this study examines problem-focused coping, the remainder of the discussion on the relationship between coping and WFC will specifically address problem-focused coping studies. Most researchers (e.g., Aryee, Luk, Leung, & Lo, 1999; Baltes & Heydens-Gahir, 2003; Billings & Moos, 1984; Hecht & McCarthy, 2010; Koeske, et al., 1993; Lazarus & Folkman, 1984; Parkes, 1990; Rotondo & Kincaid, 2008; Rotondo, et al.,

2003; Scheck, Kinicki, & Davy, 1997; Somech & Drach-Zahavy, 2007) purport that effective coping strategies are related to lower levels of work/life conflict, and specifically, problem-focused coping strategies are most effective in reducing work/life conflict (Koeske, et al., 1993). Problem-focused coping works by attempting to “remove or circumvent the stressor or ameliorate its effects” on the individual (Haar, 2006, p. 268). Furthermore, individuals who tend to cope by taking a problem-solving approach are less likely to experience conflict between roles (Burke, 1998; Hecht & McCarthy, 2010; Lapierre & Allen, 2006; Rotondo, et al., 2003) and report better individual and organizational outcomes (Bhagat, Allie, & Ford, 1995; Rotondo & Perrewe, 2000).

There appears to be a thread running through the research that links problem-focused coping more closely to FWC than WFC. Finding a relationship between problem-focused coping and strain-based FWC ( $-.21, p < .01$ ), but no form of WFC, Lapierre & Allen (2006) suggest that the lack of relationship otherwise may be a sign that problem-focused coping is more effective in situations that people feel are under their control (Aryee, et al., 1999; Lazarus & Folkman, 1984). Research by Rotondo and Kincaid (2008) also supports this idea. In regressing two problem-focused coping styles on WFC and FWC, they only found relationships between direct action problem-focused coping ( $\beta = -.054, p < .05$ ) with FWC and advise seeking problem-focused coping (PFC) ( $\beta = -.087, p < .001$ ) with FWC. Rotondo, et al. (2003) found problem-focused coping strategies to be negatively related to both time- and strain-based FWC. There is some thought among researchers that problem-focused coping is less effective in WFC than FWC because individuals often have less control over their work stressors, and control is key to problem-focused coping (Aryee, et al., 1999; Pearlin & Schooler, 1978; Thompson,

Poelmans, Allen, & Andreassi, 2007). However, as previously noted, some inconsistencies exist in the research. Haar (2006) found a positive relationship between problem-focused coping and WFC, as well as FWC. His findings suggest that the energies expended in utilizing a problem-focused coping strategy actually backfired and created more work/life conflict because of the extra effort individuals expended to reduce the work/life conflict.

*Hypothesis 3a:* Work-to-family conflict (WFC) is inversely related to the communication. Specifically, as individuals report greater levels of communication coping, they will also report lower levels of WFC.

*Hypothesis 3b:* Family-to-work conflict (FWC) is inversely related to the communication. Specifically, as individuals report greater levels of communication coping, they will also report lower levels of FWC.

*Hypothesis 4a:* Work-to-family conflict (WFC) is inversely related to the problem solving. Specifically, as individuals report greater levels of problem-solving coping, they will also report lower levels of WFC.

*Hypothesis 4b:* Family-to-work conflict (FWC) is inversely related to the problem solving. Specifically, as individuals report greater levels of problem-solving coping, they will also report lower levels of FWC.

### **Mediator/Outcome Relationships: Problem-solving, Communication and Life Satisfaction**

In a review of the literature, I found that the majority of the studies on coping and satisfaction did not identify the type of coping used, or used a variety of methods as a global construct. Additionally, life satisfaction as a construct was rarely used as an outcome. Job and family satisfaction were much more frequent outcome variables. Haar (2006) supports these findings in his contention that the majority of the work on the relationship between coping and satisfaction has focused on job and family satisfaction, rather than life satisfaction. Based on the design of this study, I confine this discussion to studies only utilizing the construct of life satisfaction and clearly defined problem-focused strategies of coping.

Six studies found a relationship between problem-focused coping and a specific life satisfaction construct. Deniz (2006) examined the relationship between generalized problem-focused coping and life satisfaction ( $r = .18, p < .001$ ). Examining more specific forms of problem-focused coping, Moreno-Jiménez, et al. (2009) found communication was positively related to life satisfaction ( $r = .47, p < .001$ ). Hamarat, et al. (2001) determined communication coping was positively related to life satisfaction ( $r = .19, p < .05$ ), and problem solving was positively related to life satisfaction ( $r = .34, p < .01$ ). Hamarat, et al. also concluded that coping resources in general are positively related to life satisfaction and increase with age (2001) (note: age effects will be examined in ad hoc analyses). In more extensive testing, Outten, Schmitt, Garcia, and Branscombe (2009) found that problem-focused coping was significantly related to life satisfaction ( $r = .23, p < .05$ ). However, they did not find a predictive relationship between problem-focused coping and life satisfaction. Brown and Duan (2007) found both correlation and causality for both problem solving and communication skills. Problem solving was related to and regressed on life satisfaction ( $r = .38, p < .01$  and  $\beta = .26, p < .01$ ). Additionally, communication was related to and regressed on life satisfaction ( $r = .42, p < .01$  and  $\beta = .25, p < .05$ ) (Brown & Duan, 2007). In the most extensive study, Hecht and McCarthy (2010) utilized structured equation modeling, finding problem-focused coping was related to ( $r = .23, p < .001$ ) as well as loaded on life satisfaction ( $\beta = .21, p < .001$ ) with acceptable fit model statistics ( $\chi^2(1011) = 1629.4$ , NNFI = .90, CFI = .91, RMSEA = .05, and AIC = 1959.5) (2010).

Boyd, et al. (2009), referencing conflicting studies of the direct (e.g., Leiter, 1991; Nonis & Sager, 2003; Sand & Miyazaki, 2000) versus mediating (e.g., De Rijk, Le Blanc, Shaufeli, & de Jonge, 1998; Thoits, 1986) effect of coping, question whether coping primarily works to

mediate the potentially adverse effects of stress or does it directly affect well-being without the presence of stress. Aryee, et al. (1999) suggest that this conflict might be the result of the “situationally specific” nature of problem-focused coping, “making it more relevant in the work and family domains as opposed to a general sense of well-being” (p. 274). Essentially, problem-focused coping is more closely related to work and family stressors because it is a reaction to them, rather than being a stand-alone predictor of life satisfaction. Their findings support the idea of a mediational relationship versus direct causality.

*Hypothesis 5a:* Communication coping is positively related to life satisfaction. Specifically, as individuals report greater levels of communication coping, they will also report higher levels of life satisfaction.

*Hypothesis 5b:* Problem solving coping is positively related to life satisfaction. Specifically, as individuals report greater levels of problem solving coping, they will also report higher levels of life satisfaction.

### **The Complete Model**

Brown and Duan suggest that research on life satisfaction and its correlates (i.e., work/life conflict and coping) are “important concepts in understanding the psychological functioning of professional men and women” (2007, p. 271). MacDermid and Harvey (2006) note that with a few exceptions (e.g., Behson, 2002; Kopelman, et al., 1983; McCubbin, Thompson & McCubbin, 1996; Moen & Yu, 2000), coping has received little attention in work/life research. Furthermore, Eby, et al. (2005) recommend cross-gender research on the relationship between work/life conflict and different styles (e.g., problem-solving and communication) of coping because research (e.g., Beutell & Greenhaus, 1982, 1983; Matsui, Ohsawa, & Onglatco, 1995) suggests that the effectiveness of coping varies according to style and gender (note: gender effects will be examined in ad hoc analyses). Lazarus (1999) maintains

that coping is a mediator of the outcome (i.e., perceptions of life satisfaction) of a stressful event (i.e., work/life conflict) because it results from the *de novo* from interactions an individual has with his/her environment (p. 121). However, because of the abundance of research consistently reporting an inverse relationship between work/life conflict and life satisfaction (e.g., Bedeian, et al., 1988; Carlson & Kacmar, 2000; Carlson, et al., 2000; Chiu, 1009; Duxbury & Higgins, 1991; Greenhaus, Collins, & Shaw, 2003; Higgins & Duxbury, 1992; Judge, et al., 1994; Kopelman, et al., 1983; Mallard and Lance, 1998; Netemeyer, et al., 1996; Parasuraman, Greenhaus, Robinowitz, Bedian & Mossholder, 1989; Perrewe, Hochwarter & Kiewitz, 1999; Rice, Frone & McFarlin, 1992; Wiley, 1987), this study tests the coping partially mediates the relationship between work/life conflict and life satisfaction, rather than fully mediating it.

Baron and Kenny (1986) state that a fully mediating variable accounts for the relationship between antecedent and outcome variables. Alternatively, a partially mediating variable significantly reduces the relationship between the antecedent and outcome variables. Baron and Kenny further suggest that “because most areas of psychology, including social, treat phenomena that have multiple causes, a more realistic goal may be to seek mediators that significantly decrease Path *c* [the direct relationship] rather than eliminating the relation between the independent and dependent variables altogether” (1986, p. 1176). They further maintain that a significant reduction in the direct antecedent - outcome relationship demonstrates that the mediator provides explanatory power, but is not “both a necessary and a sufficient condition for an effect to occur” (Baron & Kenny, 1986, p. 1176). In testing for the presence of partial mediation, three conditions must be met: 1) the outcome is correlated with the antecedent, 2) the mediator is correlated with the antecedent, 3) the mediator affects the outcome after the



antecedent is controlled. Furthermore, Kenny (2009) maintains (in contrast to Baron and Kenny [1986]) that the value of coefficients themselves, rather than their statistical significance should be used for determining mediation. This is due to vagaries involved with the ability for small coefficients to be statistically significant with large sample sizes, while large coefficients can be statistically insignificant in small samples. Using structured equation modeling to test for partial mediation, this study can assist in filling gaps in the literature by testing the following:

*Hypothesis 6a:* Communication partially mediates the relationship between work-to-family conflict (WFC) and life satisfaction. Specifically, as individuals report greater levels of communication coping, they will also report higher levels of life satisfaction, even in instances of high WFC.

*Hypothesis 6b:* Communication partially mediates the relationship between family-to-work conflict (FWC) and life satisfaction. Specifically, as individuals report greater levels of communication coping, they will also report higher levels of life satisfaction, even in instances of high FWC.

*Hypothesis 7a:* Problem solving partially mediates the relationship between work-to-family conflict (WFC) and life satisfaction. Specifically, as individuals report greater levels of problem-solving coping, they will also report higher levels of life satisfaction, even in instances of high WFC.

*Hypothesis 7b:* Problem solving partially mediates the relationship between family-to-work conflict (FWC) and life satisfaction. Specifically, as individuals report greater levels of problem-solving coping, they will also report higher levels of life satisfaction, even in instances of high FWC.

### **Summary**

Chapter 2 not only addressed the development of each of the constructs (i.e., work/life conflict, life satisfaction and coping) of this study, but also discussed how each of the constructs has been researched similarly to this study (i.e., work/life conflict as an antecedent construct, life satisfaction as a consequent construct, and coping as a mediating construct). Additionally, established relationships between each of the constructs has been reviewed. Fortes-Ferreira,

Peiró, González-Morales, and Martín note that problem-focused coping neutralizes stressors (e.g., work/life conflict) before they become harmful, thereby increasing overall well-being (i.e., life satisfaction) (2006). This review of the literature lays the groundwork for the six (6) hypotheses of this study, examining each of the paired relationships (i.e., WFC and life satisfaction; FWC and life satisfaction; WFC and communication coping; FWC and communication coping; WFC and problem-solving coping; FWC and problem-solving coping; communication coping and life satisfaction; and problem-solving coping and life satisfaction) and the partially mediating value of problem-focused coping (i.e., communication coping partially mediating the relationship between WFC and life satisfaction; communication coping partially mediating the relationship between FWC and life satisfaction; problem-solving coping partially mediating the relationship between WFC and life satisfaction; and problem-solving coping partially mediating the relationship between FWC and life satisfaction). Chapter 3 discusses the methodology for the study, including description of the sample, instrumentation and data analysis procedures.

## **Chapter 3**

### **Methodology**

The primary focus of this study was to examine the mediating effects of problem-solving and communication coping skills on the relationship between work/life conflict (i.e., work-to-family and family-to-work) and life satisfaction (see Figures 2 and 10 for a graphical representation). Data for this study was drawn from an archival source at a major research university in the southeastern United States. Data was contained in multiple datasets to which the author was granted access. Because the data was archival, the sample size and demographics are limited, and there were limitations on the scales and measures able to be analyzed. While primary data collection is preferable, as it allows for increased control over study demographics and scale selection, the data collected does allow this study to make an important contribution to the understanding of work/life conflict, coping and life satisfaction. This contribution occurs for two primary reasons. First, the nature of the sample allows for a wide demographic cross-section. Existing research typically covers a specific type of employee (e.g., professional or non-professional), industry or demographic (e.g., gender, marital status, children, etc) (e.g., Allen, et al., 2000; Eby, et al., 2005). This dataset covers a wide variety of demographics, which allows for greater generalizability of results. Second, characteristics of work and family roles are collected through the work/life conflict measures. Eby, et al. (2005) suggest that this is critical to advancing research because it allows for examination of the effects of role imbalance, in addition to specific role stressors, on the overall well-being of the individual.

## **Participants**

The sample for this study consisted of 491 professionals enrolled in different divisions (i.e., Aerospace, Physicians, Senior Executive and Professional) of an Executive Masters of Business Administration (EMBA) program at a large southeastern university. The research participants worked concurrently in a broad range of industries and at different levels, from staff professional to CEO. All participants were classified as full-time employees by their organizations. Participants were predominantly male (76.98%), married (79.02%), Caucasian (78.41%) with children living at home (56.83%). Full demographic information for the sample can be found in Table 1.

## **Data Collection Procedure**

Participants were asked to complete the measures as part of their coursework during the EMBA program. Data was collected through a combination of pen and paper and online tools. Throughout the data collection period, participants were treated in accordance to APA Ethical Guidelines (American Psychological Association, 2010). Before the current author was granted access to the data, all identifying information was removed from the dataset, and participants were assigned identification numbers. Individual datasets were matched based on participant identification numbers. All data was treated in accordance with APA Ethical Guidelines (American Psychological Association, 2010).

## **Data Management**

The dataset was analyzed for missing item values, which were limited. Any missing items were ultimately corrected using estimation of the missing values (Nunnally & Bernstein, 1994; Winer, Brown & Michels, 1991). This process involves replacing missing data with the

Table 1: Sample Demographics

|                                                     | Males<br>n = 378 | Females<br>n = 113 | Total Sample<br>n = 491 |
|-----------------------------------------------------|------------------|--------------------|-------------------------|
| Current Age (Average)                               | 40.12            | 39.66              | 40.01                   |
| Ethnicity                                           |                  |                    |                         |
| African American                                    | 25               | 13                 | 38                      |
| Asian American                                      | 30               | 9                  | 39                      |
| Caucasian/Euro-American                             | 303              | 82                 | 385                     |
| Hispanic/Latin-American                             | 12               | 4                  | 16                      |
| Native American                                     | 2                | 4                  | 6                       |
| Other                                               | 6                | 1                  | 7                       |
| Marital Status                                      |                  |                    |                         |
| Single, never married                               | 37               | 19                 | 56                      |
| Single, committed relationship but not cohabitating | 6                | 1                  | 7                       |
| Single, committed relationship and cohabitating     | 15               | 7                  | 22                      |
| Single, divorced                                    | 9                | 8                  | 17                      |
| Single, widowed                                     | 1                | 0                  | 1                       |
| Married                                             | 280              | 63                 | 343                     |
| Married, but separated                              | 2                | 4                  | 6                       |
| Remarried                                           | 28               | 11                 | 39                      |
| Age at Most Recent Marital Status (Average)         | 27.30            | 27.71              | 27.40                   |
| Total Number of Children                            |                  |                    |                         |
| 0                                                   | 69               | 206                | 275                     |
| 1                                                   | 38               | 12                 | 50                      |
| 2                                                   | 78               | 15                 | 93                      |
| 3                                                   | 30               | 11                 | 41                      |
| 4                                                   | 17               | 5                  | 22                      |
| 5                                                   | 2                | 1                  | 3                       |
| 6                                                   | 1                | 1                  | 2                       |
| 7                                                   | 1                | 0                  | 1                       |
| 8                                                   | 3                | 0                  | 3                       |
| 9                                                   | 0                | 0                  | 0                       |
| 10                                                  | 0                | 0                  | 0                       |
| 11                                                  | 0                | 0                  | 0                       |
| 12                                                  | 0                | 0                  | 0                       |
| 13                                                  | 1                | 0                  | 1                       |
| Number of Children Living at Home                   |                  |                    |                         |
| 0                                                   | 151              | 61                 | 212                     |
| 1                                                   | 74               | 23                 | 97                      |
| 2                                                   | 95               | 19                 | 114                     |
| 3                                                   | 27               | 19                 | 46                      |
| 4                                                   | 17               | 0                  | 17                      |
| 5                                                   | 1                | 1                  | 2                       |
| 6                                                   | 0                | 0                  | 0                       |
| 7                                                   | 1                | 0                  | 1                       |
| 8                                                   | 1                | 0                  | 1                       |
| 9                                                   | 0                | 0                  | 0                       |
| 10                                                  | 0                | 0                  | 0                       |
| 11                                                  | 1                | 0                  | 1                       |

Table 1: Sample Demographics, cont.

|                                 | Males<br>n = 378 | Females<br>n = 113 | Total Sample<br>n = 491 |
|---------------------------------|------------------|--------------------|-------------------------|
| Job Title                       |                  |                    |                         |
| President/CEO                   | 13               | 3                  | 16                      |
| Owner                           | 11               | 1                  | 12                      |
| Chief Operations Officer        | 3                | 2                  | 5                       |
| Chief Financial Officer         | 2                | 2                  | 4                       |
| Chief Medical Officer           | 5                | 0                  | 5                       |
| Vice President                  | 13               | 5                  | 18                      |
| Department Manager              | 69               | 27                 | 96                      |
| Supervisor                      | 25               | 4                  | 29                      |
| Staff Professional              | 95               | 28                 | 123                     |
| Unknown (data not collected)    | 142              | 41                 | 183                     |
| Industry                        |                  |                    |                         |
| Communication Services          | 8                | 4                  | 12                      |
| Public Utilities                | 6                | 4                  | 10                      |
| Retail                          | 7                | 5                  | 12                      |
| Transportation Services         | 3                | 0                  | 3                       |
| Education                       | 45               | 16                 | 61                      |
| Entertainment                   | 82               | 24                 | 106                     |
| Financial Services              | 3                | 0                  | 3                       |
| Government                      | 49               | 12                 | 61                      |
| Healthcare                      | 17               | 5                  | 22                      |
| Information Technology          | 6                | 0                  | 6                       |
| Manufacturing                   | 2                | 1                  | 3                       |
| Other Services                  | 7                | 1                  | 8                       |
| Unknown (data not collected)    | 143              | 41                 | 184                     |
| Hours Worked per Week           |                  |                    |                         |
| 21-32                           | 2                | 0                  | 2                       |
| 33-40                           | 111              | 40                 | 151                     |
| 41-45                           | 77               | 23                 | 100                     |
| 46-50                           | 74               | 26                 | 100                     |
| 51-60                           | 65               | 17                 | 82                      |
| 60+                             | 49               | 7                  | 56                      |
| Annual Salary (without bonuses) |                  |                    |                         |
| \$20,000 – 39,999               | 9                | 8                  | 17                      |
| \$40,000 – 59,999               | 39               | 18                 | 57                      |
| \$60,000 – 79,999               | 57               | 18                 | 75                      |
| \$80,000 – 99,999               | 56               | 25                 | 81                      |
| \$100,000 – 119,999             | 55               | 10                 | 65                      |
| \$120,000 – 139,999             | 34               | 3                  | 37                      |
| \$140,000 – 159,999             | 20               | 7                  | 27                      |
| \$160,000 – 179,999             | 13               | 5                  | 18                      |
| \$180,000 – 199,999             | 10               | 5                  | 15                      |
| \$200,000 – 249,999             | 18               | 5                  | 23                      |
| \$250,000 – 299,999             | 11               | 3                  | 14                      |
| \$300,000 – 349,999             | 15               | 1                  | 16                      |
| \$350,000 – 399,999             | 7                | 1                  | 8                       |
| \$400,000 – 499,999             | 15               | 0                  | 15                      |
| > \$500,000                     | 14               | 3                  | 17                      |
| no response                     | 5                | 1                  | 6                       |

unweighted mean of the item. Estimation of the missing values was used because it is not subject to as much data loss as pairwise and listwise deletions, nor is it as subject to differences in the subject composition (Nunnally & Bernstein, 1994). Any items that needed to be recoded or reversed were transformed.

### **Measures**

Three instruments of interest (in addition to a demographic profile) were completed by research participants: Carlson, et al.'s (2000) Multi-dimensional Work/Family Conflict Scale, Olson's (1995) Coping and Stress Profile, and Spanier and Thompson's (1984) Life Satisfaction Scale. Development and initial testing of the scales will be discussed. Additionally, the current study measurement model for each scale will be presented.

Utilizing structured equation modeling (SEM), a measurement model was created for each of the scales in order to test for construct validity (Anderson & Gerbing, 1988). Based on the known theoretical literature for each construct, confirmatory factor analysis was utilized to develop the initial measurement model (Byrne, 2001). Adequacy of the measurement model was assessed utilizing three criteria. First, all latent variable regression weights were tested for both statistical and practical significance. While statistical significance was assessed at  $\alpha = .01$ , practical significance was considered met if each standardized regression weight was greater than .40 (Harman, 1976). Second, the overall fit of the measurement model was evaluated utilizing three indices. The Comparative Fit Index (CFI) (i.e., the Bentler Comparative Fit Index), compares the fit of the specified model (e.g., the measurement model) to a worst-case scenario model (i.e., a model assuming uncorrelated latent variables). A CFI greater than .90 suggests adequate fit (Bentler, 1990; Byrne, 2001). The second index, the Root Mean Square of

Approximation (RMSEA), assesses the degree of error associated with covariation estimates. RMSEA values less than .08 are considered adequate, with values less than .05 considered a close fit (Schumacker & Lomax, 2004). The final fit index considered is the Consistent Akaike's Information Criterion (CAIC), which assesses parsimony in the model fit in relationship to sample size (Bozdogan, 1987). Used to compare models, the smaller CAIC value indicates the better fitting model (Hu & Bentler, 1995). The CAIC will only be reported when comparing options within the same model. AMOS 18 will be used for all structured equation modeling in this study. Finally, reliability coefficients were computed for both scales. Nunnally and Bernstein (1994) contend Cronbach's alpha values greater than .70 indicate scale reliability. PASW 17.0 (formerly SPSS) will be used to compute reliability coefficients.

### **Multi-dimensional Work/Family Conflict Scale**

Developed by Carlson, et al. the multi-dimensional work/family conflict scale is the only one in publication that taps the bi-directionality (i.e., work-to-family and family-to-work) of the conflict typology (i.e., time, strain and behavior) (2000). The final scale (see Appendix A) consists of 18 items (three for each direction of the typology, equaling six total factors) and was subject to rigorous psychometric development. Thirty (30) initial items were developed using existing literature (i.e., Duxbury, Higgins & Mills, 1992; Frone, et al., 1992a; Gutek, et al., 1991; Stephens & Sommer, 1993, 1996) and judged utilizing three individual studies, with confirmatory factor analysis used at each stage to purify the measures.

To ensure best fit, the final six-factor work/life conflict model (i.e., work-to-family time, work-to-family strain, work-to-family behavior, family-to-work time, family-to-work strain, and family-to-work behavior) was tested against three-factor, two-factor and single-factor models.



The six-factor model achieved the maximum fit of the four tested (CFI = 0.95 and RMSEA = 0.06). Internal consistency of the six factors exceeded accepted levels of 0.70 (Nunnally & Bernstein, 1994) with alpha values ranging from 0.78 to 0.87. Finally, discriminant validity tests of factor correlations indicate phi values ranging from 0.24 to 0.83, with only two correlations above the 0.60 mark, thereby supporting that each factor is tapping a different construct (Carlson, et al., 2000).

**Current study measurement model.** Figure 3 shows the initial measurement model (based on Carlson, et al. 2000) used for testing the full work/life conflict scale. Achieving results similar to those reported by Carlson, et al. (2000), the measurement model achieved a CFI = .978, RMSEA = .040, and CAIC = 580.998. Also shown in Figure 3, standardized regression weights ranged from .66 to .92 with all values significant at  $p \leq .001$ . There were also high covariances found in this initial model (e.g., WF behavior – FW behavior covariance = .85). Because this study focuses on domain-specific conflict, measurement models were also developed for work-to-family conflict (WFC) and family-to-work conflict (FWC). Shown in Figure 4, this measurement sub-model was designed with six (6) first order factors (i.e., WF time [WFT], WF strain [WFS], WF behavior [WFB], FW time [FWT], FW strain [FWS], FW behavior [FWB]) and two (2) second order factors (i.e., WFC and FWC). It achieved a CFI = .887, RMSEA = .087, and CAIC = 914.371. Also shown in Figure 4, standardized regression weights of the first order factors ranged from .35 to .85 with all values significant at  $p \leq .001$ . Correlation analysis on the relationship between WFC and FWC resulted in an  $r = .531$ ,  $p \leq .001$ . Based on the high correlation between the second order constructs (WFC and FWC) and the poor

fit indicated, a third model was tested. Figure 5 shows the tested covariance model (without path weights as comparisons were of primary interest).

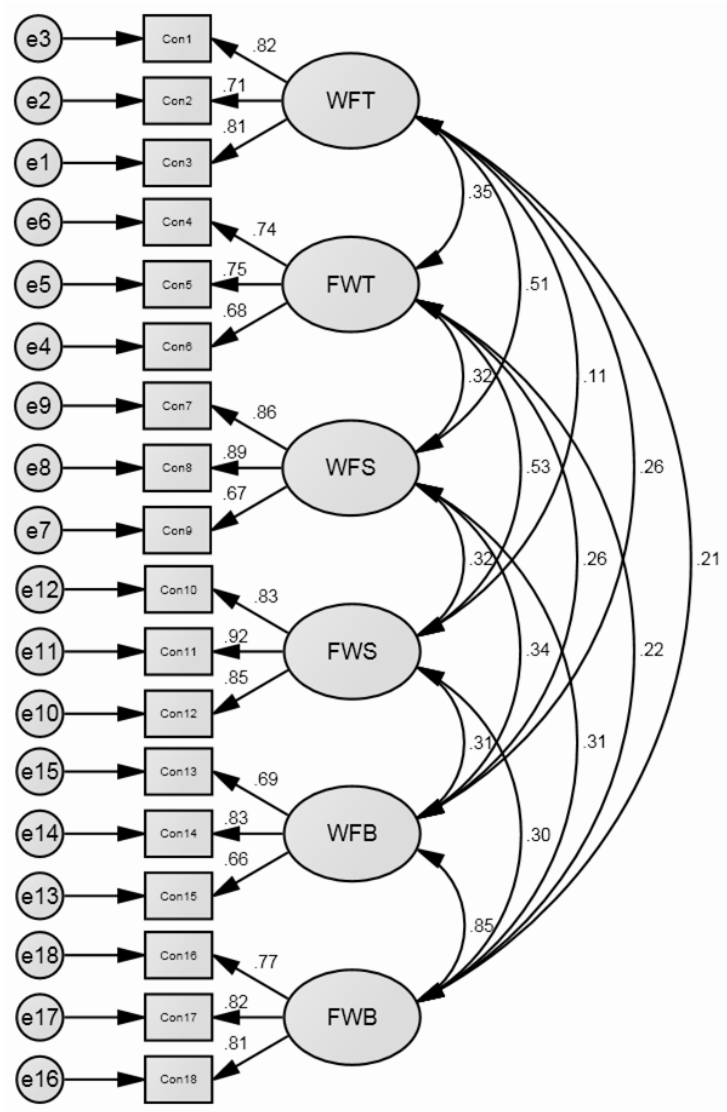


Figure 3: Initial Work/life Conflict Measurement Sub-Model

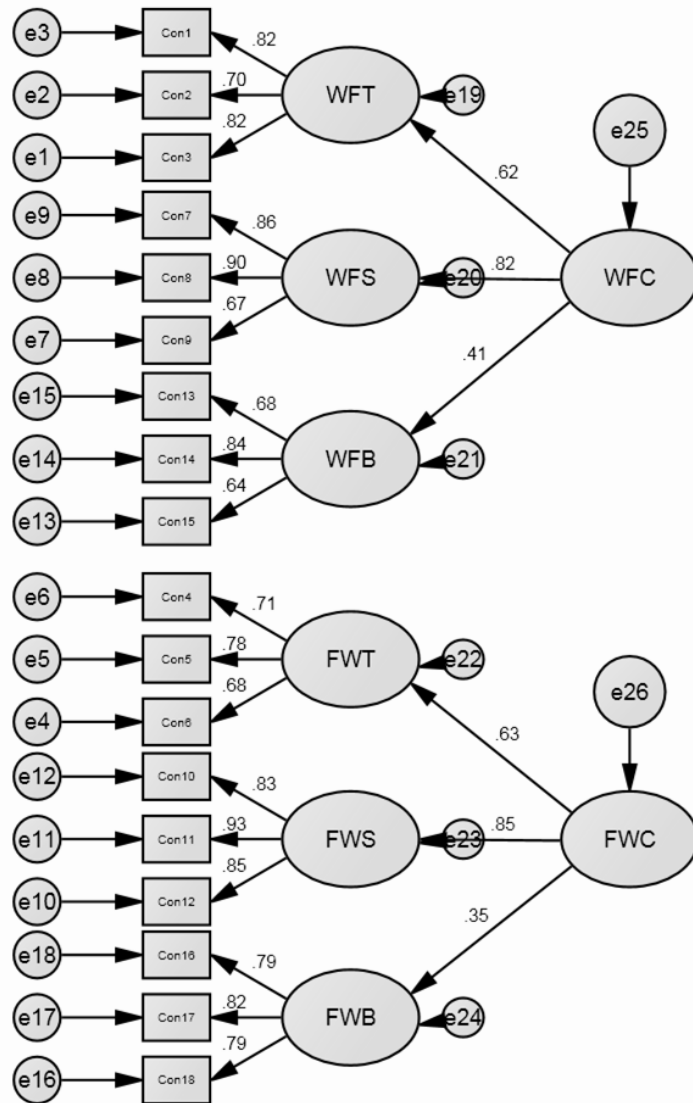


Figure 4: Domain-specific Measurement Sub-model

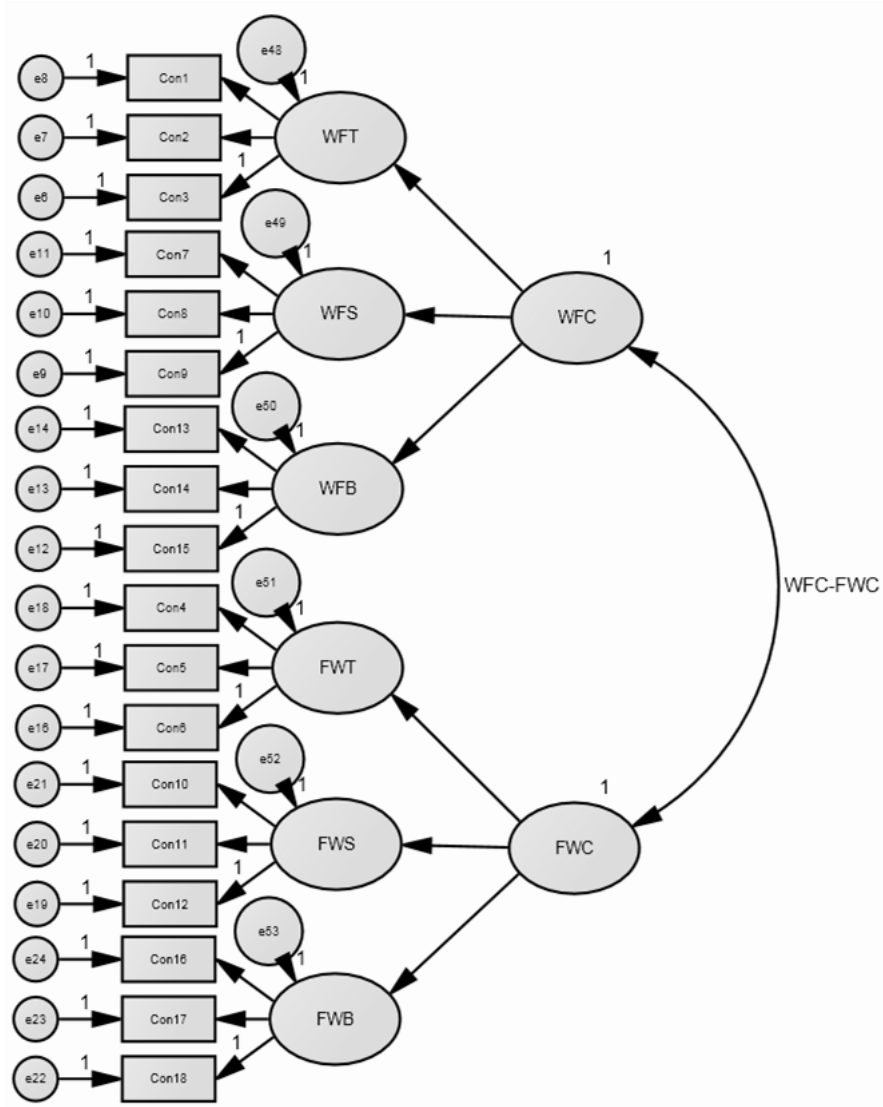


Figure 5: Co-varied Work/life Conflict Measurement Sub-model

A nested model comparison was used to test the covariance sub-model (Figure 5). Three tests (i.e., the default model [WFC-FWC allowed to co-vary freely],  $WFC-FWC = 0$  [constructs do not co-vary, therefore discriminant validity exists], and  $WFC-FWC = 1$  [constructs co-vary completely, therefore no discriminant validity exists]). The results (shown in Table 2) indicate a lack of discriminant validity, with the  $WFC-FWC = 0$  covariance significant (i.e., different from

the default model), and the WFC-FWC path = 1 (i.e., no difference from the default model). Combined with the excessively high covariance between WFC and FWC (i.e., .85) (Kline, 2005), and the determination of ill-fitting models (i.e., Figures 3 and 4), the determination was made to treat WF conflict and FW conflict as a single construct.

Consequently, a final step was to determine the ultimate structure of the measurement sub-model. Two modeling options exist: (1) work/life conflict as a single, first-order latent variable with eighteen (18) items; or (2) work/life conflict as a single, second-order construct with six (6) first-order constructs (i.e., WFT, WFS, WFB, FWT, FWS, and FWB) and eighteen (18) items. As these models are so different in structure, they cannot be tested as nested models, therefore the fit indices will be compared. Shown in Table 3, work/life conflict as a single, second-order construct (Figure 6) is clearly the better model, with statistics indicating a good fit and a CAIC approximately 75% lower than the CAIC for work/life conflict as a first-order construct. Table 4 shows discriminant validity for the six (6) first-order constructs, with all correlations ranging from .09 - .69. All correlations were within Nunnally and Bernstein's (1994) specification for discriminant validity, with only one correlation (i.e., WFB-FWB,  $r = .69$ ) above the .60 mark, indicating that each first-order construct is distinct. It should be noted that there is a large range of factors loadings of the first-order constructs on the single, second-order construct of conflict (i.e., .31-.94), with three loadings (i.e., WFT-Conflict, FWT-Conflict, and FWS-Conflict) below Harman's (1976) factor loading criteria of  $> .40$ . Both first-order behavioral constructs had factor loadings on conflict with values much larger than any other construct (i.e., WFB = .94 and FWB = .87, compared to the next highest factor loading for WFS = .42). This wide variation in loadings may be indicating an underlying causal model among the first-order

constructs, and should be examined in future research. Based on these results, the final model will be based on work/life conflict as a single, second-order construct with six (6) first-order constructs (e.g. WF time), and eighteen (18) items.

Table 2: Work/life Conflict Discriminant Validity Test

| Model Tested                                      | CMin (df)           | CFI  | GFI  | RMSEA | CAIC    | $\Delta$ CMin (p) |
|---------------------------------------------------|---------------------|------|------|-------|---------|-------------------|
| Default Model<br>(WFC-FWC allowed to load freely) | 423.263***<br>(128) | .915 | .931 | .069  | 732.710 | ---               |
| No Covariance Model<br>(WFC-FWC = 0)              | 612.12***<br>(129)  | .887 | .897 | .087  | 914.371 | 188.858<br>(.000) |
| Full Covariance Model<br>(WFC-FWC = 1)            | 426.039***<br>(129) | .931 | .914 | .069  | 728.290 | 2.776<br>(.096)   |

N = 491

\* $p \leq .05$ , \*\* $p \leq .01$ , \*\*\* $p \leq .001$

Table 3: Work/life Conflict Final Sub-model Fit Comparison

| Model Tested                                          | CMin (df)           | CFI  | GFI  | RMSEA | CAIC    |
|-------------------------------------------------------|---------------------|------|------|-------|---------|
| Work/life Conflict as 1 <sup>st</sup> order construct | 2637.77***<br>(135) | .416 | .550 | .195  | 2896.84 |
| Work/life Conflict as 2 <sup>nd</sup> order construct | 426.04***<br>(129)  | .931 | .914 | .069  | 728.29  |

N = 491

\* $p \leq .05$ , \*\* $p \leq .01$ , \*\*\* $p \leq .001$

Table 4: Work/life Conflict First Order Variable Correlations

|                | 1.     | 2.     | 3.     | 4.     | 5.     | 6.     |
|----------------|--------|--------|--------|--------|--------|--------|
| 1. WF Time     | (.820) |        |        |        |        |        |
| 2. WF Strain   | .45*** | (.843) |        |        |        |        |
| 3. WF Behavior | .21*** | .30*** | (.762) |        |        |        |
| 4. FW Time     | .28*** | .27*** | .20*** | (.901) |        |        |
| 5. FW Strain   | .09*   | .31*** | .28*** | .44*** | (.842) |        |
| 6. FW Behavior | .18*** | .27*** | .69*** | .17*** | .27*** | (.816) |

Note. Reliabilities based on Cronbach's Alpha are presented on the diagonal.

N = 491

\* $p \leq .05$ , \*\* $p \leq .01$ , \*\*\* $p \leq .001$

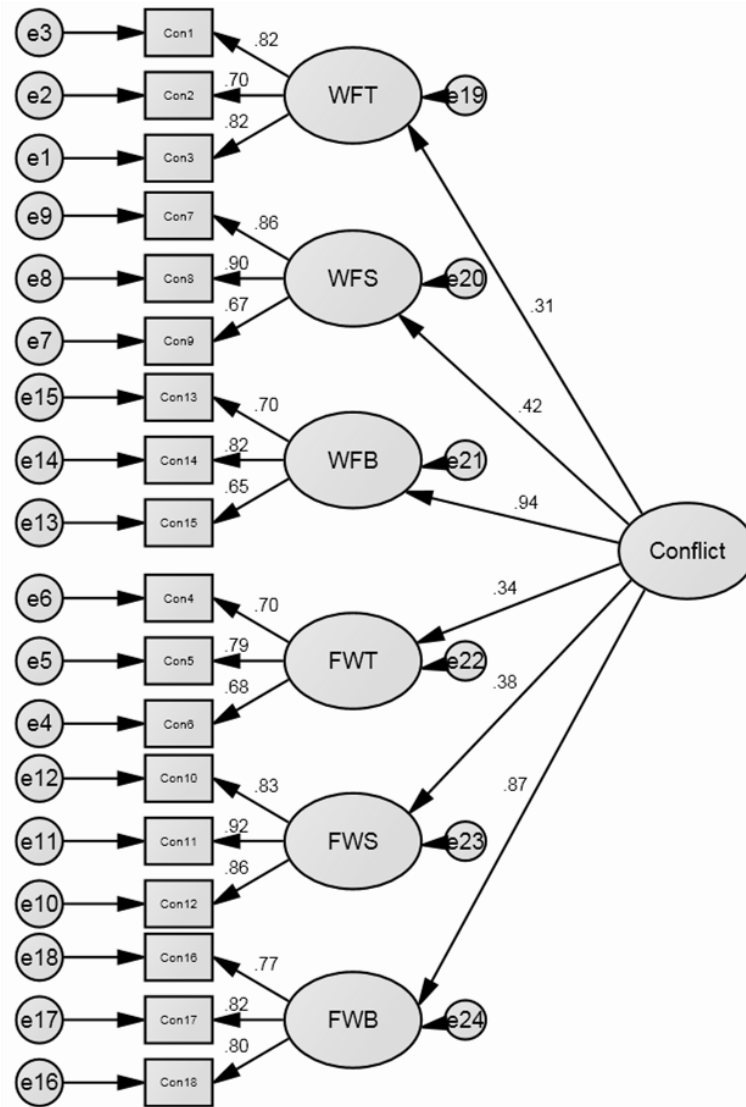


Figure 6: Work/life Conflict Approved Measurement Model

### Coping and Stress Profile

Developed by David Olson, the Coping and Stress Profile focuses on three components: (1) level of stress; (2) coping resources; and (3) adaptation or satisfaction, across multiple areas of life (i.e., personal, work, couple and family lives) (Olson, 1995). Only four of the twenty-four scales created for the Coping and Stress Profile are of interest in this study: personal problem-

solving coping, work problem-solving coping, personal communication coping and work communication coping. Because this is a proprietary instrument, participants are provided with a purchased workbook that provides scoring and interpretation information for their personal use. Consequently, the scale is not reproduced in the appendix of this research.

**Problem-solving Coping Scale.** Originally developed by Olson and Stewart (1988), the problem-solving scales were designed to evaluate how individuals create new ideas and solutions at home and work. They address both active dealing with issues and conceptual problem-solving. Consisting of thirteen (13) total items (i.e., 7 for personal problem solving and 6 for work problem solving) Olson and Stewart (1988) reported alphas scores of .79 and .82, both exceeding Nunnally and Bernstein's desired alpha of .70 (1994). Higher scores indicate a greater level of problem-solving skills. For the purpose of this study, a second-order latent construct, problem-solving skills, will be created to incorporate both scales.

*Current study measurement model.* Figure 7 shows the approved measurement model for the full problem-solving scale. The final eight (8) item scale (determined after six scale iterations) achieved a CFI = .979 and RMSEA = .056. A stepwise method was used to remove items from the scale. Items were first evaluated for low (i.e., < .40) standardized regression values (Harman, 1976). This process eliminated the following items: PPS3R ( $r = .105$ ), PPS6R ( $r = .268$ ), and WPS1 ( $r = .363$ ). High modification indices (i.e.,  $MI > 10$ ) (Byrne, 2001) were still present after the first four iterations. Two additional items was subsequently removed based on MI levels: WPS2 ( $MI = 20.798$ ) and WPS3 ( $MI = 11.74$ ). As shown in Figure 7, standardized regression weights ranged from .49 to .81 with all values significant at  $p < .001$ . The final step in



developing an approved measurement model, determining scale reliability, resulted in a scale  $\alpha =$  .817.

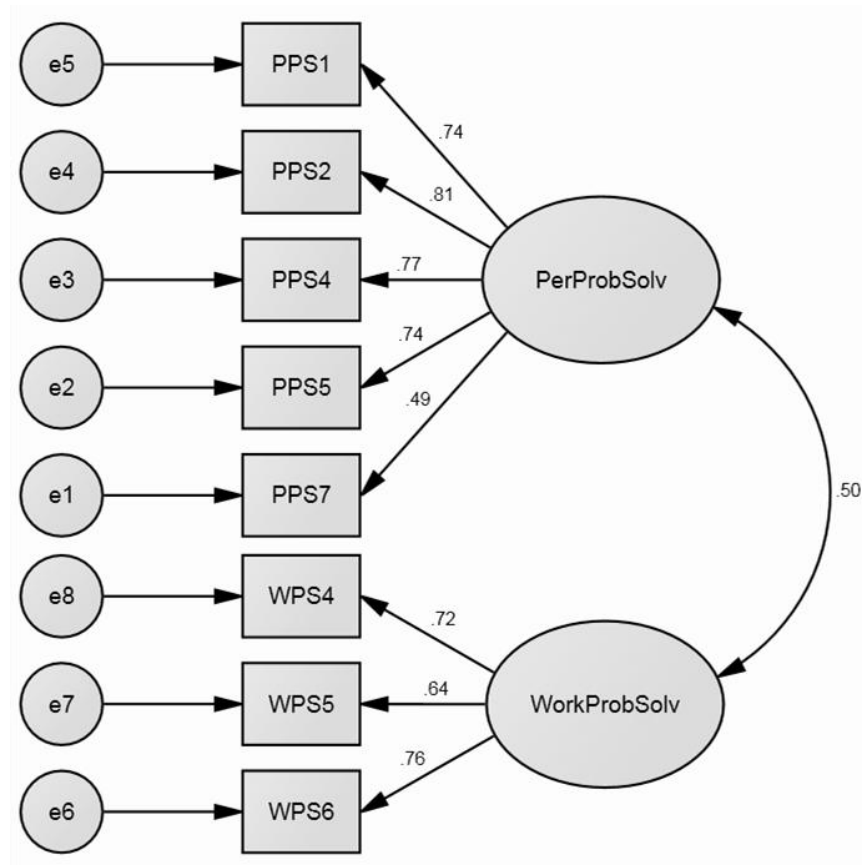


Figure 7: Problem Solving Approved Measurement Model

**Communication Coping Scale.** Originally developed by Olson and Stewart (1988), the communication scales were designed to evaluate how individuals communicate with others. The scales evaluate not only general interpersonal communication, but also how individuals express their emotions and remain in control of their feelings. Because of the cognitive focus of this study, only the work communication coping items (which deal specifically with communication processes, rather than conveying emotion) will be used. Consisting of ten (10) total items, Olson and Stewart (1988) reported an alpha score of .88, exceeding Nunnally and Bernstein's desired alpha of .70 (1994). Higher scores indicate a greater level of communication skills.

*Current study measurement model.* Figure 8 shows the approved measurement model for the communication coping scale. All ten (10) items were retained in the final scale, which achieved a CFI = .932 and RMSEA = .085. With standardized regression weights ranging from .49 – .77 (all significant at  $p \leq .001$ ), all items met Harman's (1976) threshold (i.e.,  $< .40$ ) for standardized regression values. The final step in developing an approved measurement model, determining scale reliability, resulted in a scale  $\alpha = .870$ .

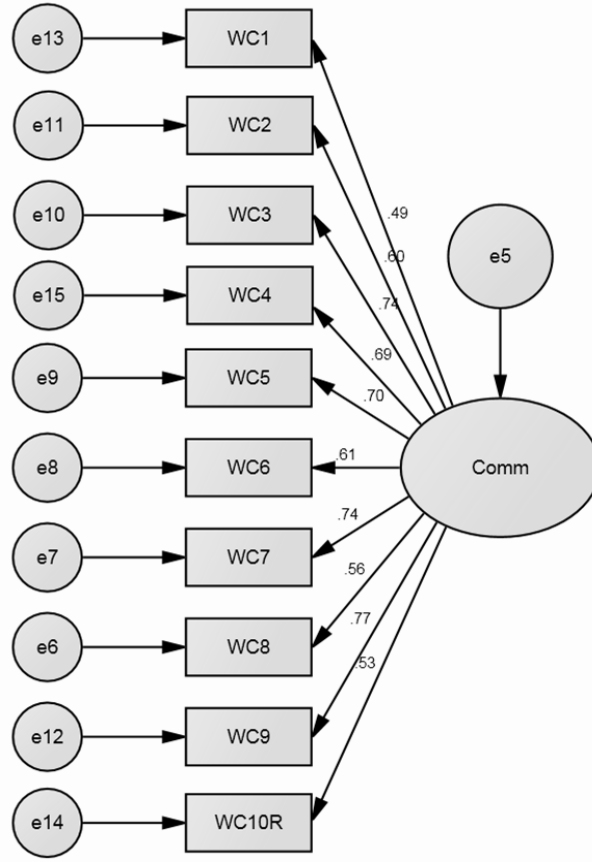


Figure 8: Communication Approved Measurement Model

### Life Satisfaction Scale

The Life Satisfaction Scale (LSS) was developed by Spanier and Thompson (1984) in order to assess post-divorce satisfaction levels. A five-item scale with four anchors (see Appendix A for full scale), Spanier and Thompson reported an  $\alpha = .71$  for the scale (1984). Higher scores on the LSS indicate a higher level of life satisfaction.

**Current study measurement model.** Figure 9 shows the approved measurement model for the full life satisfaction scale. The final four (4) item scale (determined after two scale iterations) achieved a CFI = .982 and RMSEA = .110. A stepwise method was used to remove items from the scale. High modification indices (i.e., MI > 10) (Byrne, 2001) were present after

the first iteration. Item LS23 (i.e., satisfaction with health) was removed based on a MI level of 15.553. As shown in Figure 8, standardized regression weights ranged from .57 to .87 with all values significant at  $p < .001$ . The final step in developing an approved measurement model, determining scale reliability, resulted in a scale  $\alpha = .809$ . Despite the high RMSEA value (.110), all other goodness-of-fit measures exceeded acceptability standards (Bentler, 1990; Byrne, 2001; Harman, 1976; Nunnally & Bernstein, 1994).

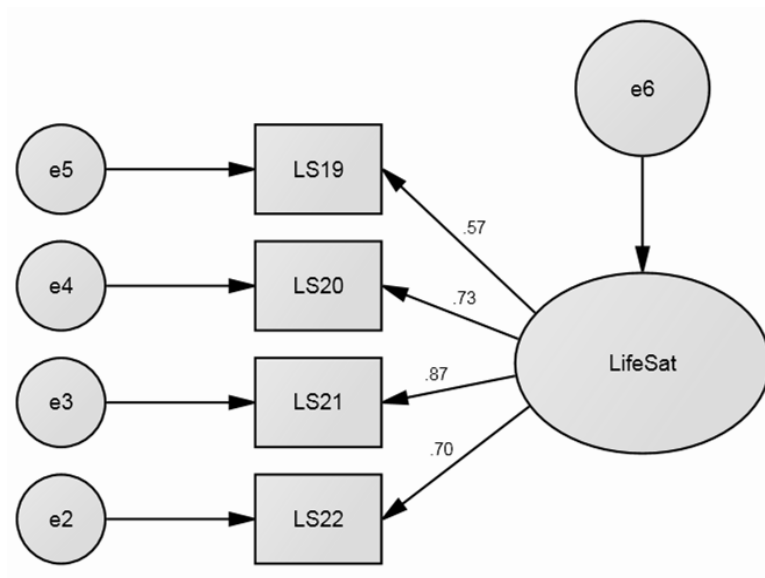


Figure 9: Life Satisfaction Approved Measurement Model

## Revision of Hypotheses

Based on the finding of a single, second order construct for work/life conflict during the measurement model testing, the hypotheses proposed in chapter 2 will be revised to reflect the new single, second order construct with six (6) first-order constructs and eighteen (18) items. Essentially, hypotheses testing differential relationships (i.e., WFC or FWC) will be revised to “work/life conflict.” Only hypothesis 2, which compared the predictive power of WFC and FWC on life satisfaction, will be eliminated. The new hypotheses are as follows:

*Hypothesis 1:* Work/life conflict is inversely related to, and is a predictor of, life satisfaction. Specifically, as individuals report greater levels of work/life conflict, they will also report lower levels of life satisfaction.

*Hypothesis 2a:* Work/life conflict is inversely related to communication. Specifically, as individuals report greater levels of communication coping, they will also report lower levels of work/life conflict.

*Hypothesis 2b:* Work/life conflict is inversely related to problem solving. Specifically, as individuals report greater levels of problem-solving coping, they will also report lower levels of work/life conflict.

*Hypothesis 3a:* Communication coping is positively related to life satisfaction. Specifically, as individuals report greater levels of communication coping, they will also report higher levels of life satisfaction.

*Hypothesis 3b:* Problem-solving coping is positively related to life satisfaction. Specifically, as individuals report greater levels of problem-solving coping, they will also report higher levels of life satisfaction.

*Hypothesis 4:* Communication partially mediates the relationship between work/life conflict and life satisfaction. Specifically, as individuals report greater levels of communication coping, they will also report higher levels of life satisfaction, even in instances of high work/life conflict.

*Hypothesis 5:* Problem solving partially mediates the relationship between work/life conflict and life satisfaction. Specifically, as individuals report greater levels of problem-solving coping, they will also report higher levels of life satisfaction, even in instances of high work/life conflict.

## **Data Analyses**

Hypotheses were tested utilizing correlational analyses and SEM. Correlation analyses were used to test how the constructs are related, while SEM was utilized to test mediation and make comparisons of relationship fit. Based upon the accepted measurement models, the structural model for the current study is comprised of the latent, second-order antecedent construct of work/life conflict, the latent, second-order mediating construct of problem-solving, the latent, first order construct of communication, and the latent outcome construct of life satisfaction. The full structural model is shown in Figure 10. Initial fit statistics indicate an adequate-fitting model, with the following values: CMin = 1470.691,  $df = 727$ , CFI = .912, GFI = .867, RMSEA = .046, and CAIC = 2139.961. Following hypothesis testing, a final evaluation of the model, including any revisions necessary due to hypothesis testing outcomes, was performed.

SEM goes beyond multiple regression by allowing for simultaneous testing of data. The ability to simultaneously test data allows for a more robust tool, as it accommodates interaction models, correlations, measurement and correlated error, and multiple latent independent, dependent and mediating variables (Byrne, 2001). Additionally, SEM has several other advantages, including the ability to test full models (as compared to individual relationships), manage complex data, analyze data for inferential purposes and test flexible assumptions (Byrne, 2001). SEM also allows for the use of confirmatory factor analysis, which is theoretically more sound than exploratory factor analysis (Byrne, 2001). A series of nested models (i.e., study model, independent model, and saturated model) are estimated using sequential  $\chi^2$  tests, where a

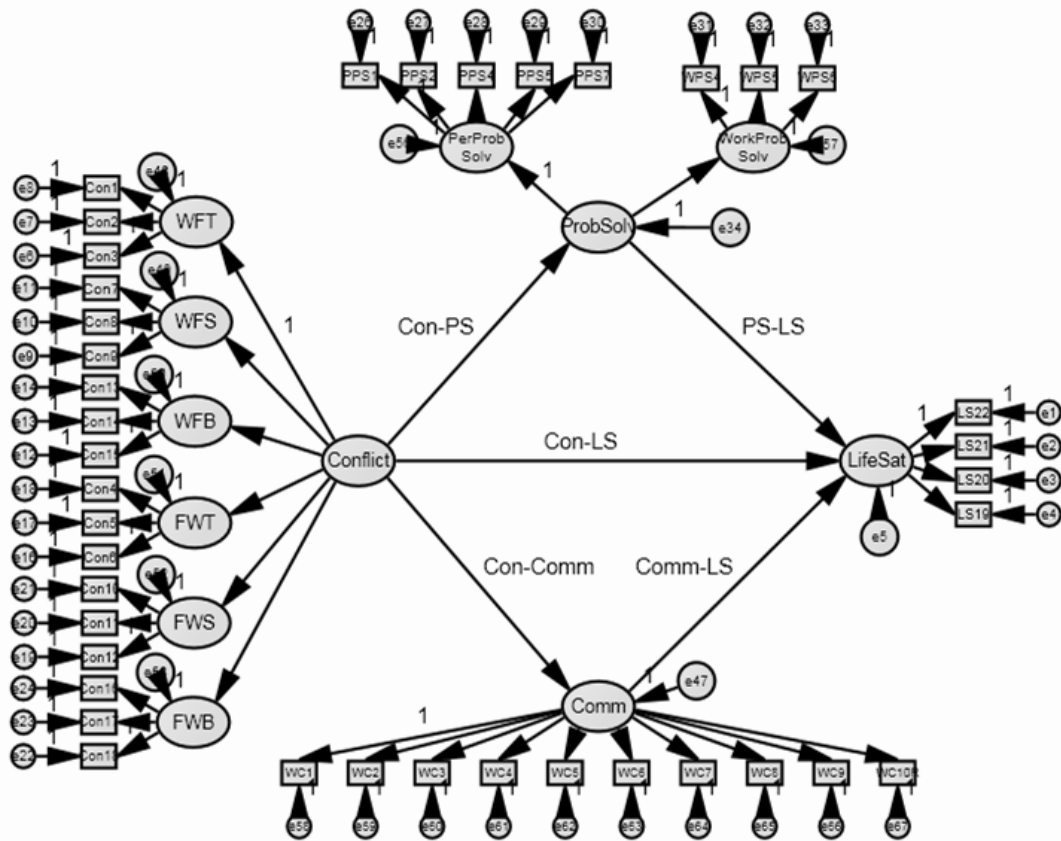


Figure 10: Full Structural Model

significant change in  $\chi^2$  indicates substantial improvement in model fit (Byrne, 2001). Combined with the first step of utilizing confirmatory factor analysis for determining the approved measurement model of the latent constructs, this method for testing hypotheses is considered statistically sound (Byrne, 2001) and has been used multiple times in research (e.g., Carlson, et al., 2000; Hecht & McCarthy, 2010; Michel, et al., 2009).

Regarding sample size, for SEM to function properly, it is necessary for the number of observations to be significantly larger than the number of parameters being tested (Landis, Beal, & Tesluk, 2000). Furthermore, Landis, et al. note that no single criterion exists to determine appropriate sample size (2000). Anderson and Gerbing (1988) contend that 150 observations are

required to use SEM, while Kelloway (1998) recommends a minimum sample size of 200. These recommendations were made regardless of the number of parameters tested in the model. However, Bentler and Chou (1987) suggest a more specific method for determining *a priori* sample size. They recommend a ratio of sample size to estimated parameters to range between 5:1 and 10:1. A smaller ratio should be used when fewer latent constructs are present in the study, whereas a larger ratio should be used for more complex models (Bentler & Chou, 1987). Regarding this study, using the most conservative of ratios, for the eleven (12) first-order (e.g., PerProbSolv, WFT, PerComm), and two (2) second-order (i.e., Conflict and ProbSolv) latent constructs, a minimum sample size of 130 should be used. At  $N = 491$ , the study exceeds the conservative sample size requirements at a ratio of 37.77:1.

### **Summary**

The primary focus of this study was to assess the partially mediating effects of problem-solving and coping skills on the relationship between work/life conflict and life satisfaction. This study utilizes secondary data collected from working professionals also completing an Executive MBA program. SPSS and AMOS were utilized to develop measurement models, which Byrne (2001) states provides links between survey items and latent constructs. AMOS will be used to test the five (5) hypotheses of the study. Results of hypothesis testing are discussed in Chapter 4.



## Chapter 4

The purpose of this chapter is to present the main findings of the current study. As sample demographic information and the measurement model were presented in the previous chapter, descriptive statistics, common method bias testing, correlational and SEM analyses will be discussed in this chapter. Results are organized by the hypothesis being tested.

### Descriptive Statistics

Descriptive statistics for the latent variables are shown in Table 3. With the exception of the Life Satisfaction Scale, scales utilize a 1 to 5 Likert-type scale, with higher scores indicating greater agreement with the item and ultimately, higher levels of work/life conflict or utilization of coping strategies. The LSS utilizes a 1 to 4 Likert-type scale, again with higher scores indicating greater agreement with the item and ultimately, higher overall life satisfaction. Averages were computed for each subscale based on calculation instructions from the appropriate authors (i.e., the problem-solving and communication scales requires items to be summed to create a total score, which was then averaged). Problem-solving and communication scores are also shown standardized to ease comparison with other scores.

Overall, respondents reported an overall work/life conflict level of ( $\bar{X} = 2.53$ ), with conflict originating in the work domain consistently higher than conflict originating in the family domain. Individuals reported the greatest level of conflict in WF Time ( $\bar{X} = 3.09$ ) and the lowest level of conflict in FW Strain ( $\bar{X} = 1.89$ ). In examining sub-scales of problem-solving, the work-based skill subscale was utilized more than personal-based coping ( $\bar{X}_{\text{std}} = 3.84$  and  $\bar{X}_{\text{std}} = 3.71$ ). Higher reliance on work-based coping skills is consistent with the greater levels of work-

Table 5: Descriptive Statistics

| Scale: Variable (total items) | Mean (Std Score) | SD   | Variance |
|-------------------------------|------------------|------|----------|
| Work/life Conflict:           |                  |      |          |
| WF Time (3)                   | 3.09             | .97  | .94      |
| WF Strain (3)                 | 2.77             | .97  | .94      |
| WF Behavior (3)               | 2.70             | .87  | .75      |
| FW Time (3)                   | 2.17             | .72  | .52      |
| FW Strain (3)                 | 1.89             | .75  | .57      |
| FW Behavior (3)               | 2.58             | .82  | .68      |
| Total Work/life Conflict (18) | 2.53             | .55  | .30      |
| Problem Solving:              |                  |      |          |
| Personal Problem Solving (5)  | 18.54 (3.71)     | 3.10 | 9.62     |
| Work Problem Solving (3)      | 11.53 (3.84)     | 1.94 | 3.78     |
| Total Problem Solving (8)     | 30.07 (3.76)     | 4.24 | 17.99    |
| Communication:                |                  |      |          |
| Work Communication (10)       | 32.32 (3.23)     | 5.83 | 34.01    |
| Life Satisfaction (4)         | 2.35             | .70  | .48      |

N = 491

originating conflict reported. The LSS score indicates that individuals were only “somewhat satisfied” with their life as a whole.

### Common Method Bias

Podsakoff, MacKenzie, Lee and Podsakoff (2003) note that common method bias is a significant concern in behavioral research because of its potential to create measurement error. This measurement error negatively affects the validity of behavioral studies through both random and systematic manifestations of error (Bagozzi & Yi, 1991; Nunnally, 1978; Spector, 1987). This study was potentially subject to common method bias because it utilized self-report measures that were collected in one instrument. Because secondary data was used for this study, interventions to reduce common method bias (e.g., multiple scale methodologies, temporal separations, and the use of different sources [Podsakoff, et al., 2003]) was not possible. Therefore, the data was tested for common method bias with the intent to statistically control for it if necessary.

Two tests were conducted to determine whether common method bias exists. First, correlations between independent variables were examined. Spector (2006) notes that when common method bias exists, all the relationships among variables should be significant. Without full relationship significance, common method bias is so small that it can be considered meaningless. As shown in Table 6, four (4) correlations (i.e., Personal PS – WF Time, Personal PS – WF Strain, Work PS – WF Time, Work PS – FW Time) were not significant, providing no indication of common method bias.

The second test conducted was Harman's single-factor test. In this test, the unrotated factor solution, generated by performing an exploratory factor analysis, is generated and the number of resulting factors is examined (Podsakoff, et al., 2003). If common method bias exists, one of two outcomes will be present: (1) a single factor emerges containing all variables, or (2) multiple factors emerge, but one general factor accounts for the majority of the variance in the measures (Podsakoff, et al., 2003). Four factors emerged, with eigenvalues ranging from 1.02 – 2.87, accounting for 65.15% of the variance among variables. Additionally, three (3) (i.e., Personal PS, Work PS, and Personal Comm) of the ten (10) factors had a loading below .40. Harman (1976) recommended .40 as the minimum correlation required between an item and a factor. Items with correlations less than .40 are not considered as "loading" on a given factor. This result supports the results from the examination of variable correlations, which indicated that no common method bias exists in this study.

Table 6: Independent Variable Correlation Table for Common Method Bias Testing

|                | 1.     | 2.      | 3.      | 4.      | 5.      | 6.      | 7.     | 8.     |
|----------------|--------|---------|---------|---------|---------|---------|--------|--------|
| 1. WF Time     |        |         |         |         |         |         |        |        |
| 2. WF Strain   | .45*** |         |         |         |         |         |        |        |
| 3. WF Behavior | .21*** | .30***  |         |         |         |         |        |        |
| 4. FW Time     | .28*** | .27***  | .20***  |         |         |         |        |        |
| 5. FW Strain   | .09*   | .31***  | .28***  | .44***  |         |         |        |        |
| 6. FW Behavior | .18*** | .27***  | .69***  | .17***  | .27***  |         |        |        |
| 7. Personal PS | .01    | -.05    | -.12**  | -.10*   | -.17*** | -.09*   |        |        |
| 8. Work PS     | -.03   | -.10*   | -.19*** | -.03    | -.10*   | -.16*** | .38*** |        |
| 9. Comm        | -.10*  | -.23*** | -.24*** | -.16*** | -.24*** | -.25*** | .24*** | .34*** |

N = 491

\* $p \leq .05$ , \*\* $p \leq .01$ , \*\*\* $p \leq .001$

## Hypothesis Testing Results

As previously noted, hypotheses were tested using a combination of correlational and SEM analyses. SEM analyses were based on the accepted structural model (Figure 10) determined in Chapter 3. Initial fit statistics indicated an adequate-fitting model, with the following values: CMin = 1470.691,  $df = 727$ , CFI = .912, GFI = .867, RMSEA = .046, and CAIC = 2139.961.

### Hypothesis 1

Hypothesis 1 predicted that work/life conflict is inversely related to, and is a predictor of, life satisfaction. Correlational analysis resulted in a  $r = -.168$ ,  $p \leq .001$ . While the correlational analysis performed provides support for the prediction component of hypothesis 1, SEM analysis was used to make the ultimate determination of prediction. Using the full structural model (figure 10), hypothesis 1 was tested by setting the PS-LS and Comm-LS paths to zero. Controlling for these two paths allows for the sole testing of the direct effect of conflict on life satisfaction. Hypothesis 1 is fully supported, with a  $\beta = -.25$ ,  $p \leq .001$ , as well as fit statistics (i.e., CMin = 1477.850,  $df = 729$ ,  $p \leq .001$ ; CFI = .912; GFI = .867; RMSEA = .046, CAIC = 2132.727) indicating adequate model fit. Finding full support for hypothesis 1 (i.e., the

significant, negative direct effect of conflict on life satisfaction) is consistent with previous research showing a negative relationship between work/life conflict and life satisfaction (Allen, et al., 2000).

### **Hypotheses 2a & 2b**

Hypothesis 2a predicted that work/life conflict is inversely related to communication coping skills. Hypothesis 2b predicted that work/life conflict is inversely related to problem-solving coping skills. Work/life conflict was negatively correlated to communication ( $r = -.338$ ,  $p \leq .001$ ) and problem-solving ( $r = -.164$ ,  $p \leq .001$ ). In testing hypothesis 1, hypotheses 2a and 2b were also tested, and are fully supported, with a  $\beta = -1.055$ ,  $p \leq .001$  for the Con-Comm path, and  $\beta = -.33$ ,  $p \leq .01$  for the Con-PS path. Model fit statistics are identical to those presented in hypothesis 1. As discussed in Chapter 2, research is limited on these relationships, and what has been reported is often mixed, primarily due to inconsistencies in measuring the type of coping being used. Additionally, previous research has often failed to distinguish whether the general problem-focused coping measures used are reflecting problem-solving or communication skills (Eby, et al., 2005; Somech & Drach-Zahavy, 2007).

### **Hypotheses 3a & 3b**

Hypothesis 3a predicted that communication coping is positively related to life satisfaction. Hypothesis 3b predicted that problem-solving coping is positively related to life satisfaction. Both communication ( $r = .128$ ,  $p \leq .01$ ) and problem-solving ( $r = .161$ ,  $p \leq .001$ ) were positively related to life satisfaction. While the correlational analysis performed provided initial support for both sub-hypotheses, SEM analysis was used to make the ultimate determination. Using the full structural model (figure 10), hypotheses 3a and 3b were tested by

estimating all paths and examining path loadings. Mixed results were found for these hypotheses. Initial model fit statistics (i.e., CMin = 1470.691,  $df = 727$ , CFI = .912, GFI = .867, RMSEA = .046, and CAIC = 2139.961) indicate adequate model fit, with a  $\beta = .034$ ,  $p = .544$  for the Comm-LS path, demonstrating partial support hypothesis 3a and a  $\beta = .160$ ,  $p = .018$  for the PS-LS path, demonstrating full support for hypothesis 3b. To confirm the results for hypothesis 3a, an alternate model testing the relationship between communication and life satisfaction without interference from the direct effects of conflict (i.e., constraining Con-LS at 0) was performed. Similar to the previous test for hypothesis 3a, the results provided a  $\beta = .081$ ,  $p = .122$  for the Comm-LS, with a poorer overall model fit (CMin = 1479.143,  $df = 728$ , CFI = .912, GFI = .866, RMSEA = .046, CAIC = 2141.216). The results of the alternate model test confirm the partial support (i.e., correlation without prediction) of hypothesis 3a.

Though not completely supporting this study's hypotheses, these findings are not inconsistent with existing research. While correlational relationships have often been found between coping and life satisfaction (e.g., Moreno-Jiménez, et al., 2009; Hamarat, et al., 2001), Outten, et al. (2009) found correlation, without prediction, between problem-focused coping and life satisfaction. Additionally, Boyd, et al. (2009) note that coping behaves differently when considered as a mediating (e.g., De Rijk, et al., 1998; Thoits, 1986) versus direct (e.g., Leiter, 1991; Nonis & Sager, 2003; Sand & Miyazaki, 2000) effect on well-being (i.e., life satisfaction). Therefore, as mixed results were found for hypotheses 3a and 3b, finding support for partial mediation is not possible for communication coping, but is still possible for problem-solving coping.

## **Hypotheses 4 and 5**

Prior to discussing the testing for hypotheses 4 and 5, it is critical to review the assumptions for successful testing of structural equation models. James, Mulaik and Brett (1982) identified ten (10) conditions governing the use of structural equation modeling to test causal relationships. The first seven (7) conditions (i.e., 1 – formal statement of the theory in terms of a structural model; 2 – theoretical rationale for causal hypotheses; 3 – specification of causal order; 4 – specification of causal direction; 5 – self-contained functional equations; 6 – specification of boundaries; and 7 – stability of the structural model) address the need for theoretical justification in model development (p. 26). James, et al. contend that reasonable satisfaction of the first seven (7) conditions suggest “a well-developed, stable theoretical model in which self-contained [probabilistic] functional equations specify hypothesized causal relations among causes and effects” (1982, p. 26).

Conditions 1 – 4 for this model are satisfied through the discussion of theoretical development of conflict, coping and life satisfaction presented in chapters 1 and 2. Condition 5, (i.e., all relevant variables included in the model) is met by simultaneously testing all paths in the model. Self-containment can only occur when all relevant causes of the endogenous variable are included in the model (James, et al., 1982). Failure to achieve condition 5 results in biased estimates of the structural parameters. Essentially, an accurate result cannot be achieved when forcibly constraining paths. Condition 6 (i.e., the specification of boundaries, or providing context for the sample) is satisfied through the sample description provided in chapter 3. Condition 7 (i.e., stability of the model) is possible in cross-sectional research when the values for variables have reached a “temporary state of constancy” (James, et al., p. 50). As discussed in

chapter 3, participants were asked to rate their levels of work/life conflict, coping and life satisfaction at that specific moment in time. This method of questioning allows scores on the endogenous and exogenous variables to be temporarily fixed, a state Heise (1975) refers to as *equilibrated* (James, et al.).

The last three (3) conditions (i.e., 8 – operationalization of variables; 9 – empirical support for functional equations; and 10 – fit between the theoretical model and empirical data) address the operational aspects of the structural model itself. These conditions focus on the variables directly associated with latent constructs, and are commonly referred to as *manifest variables* (James, et al., 1982). Condition 8 (i.e., operationalization of variables) was achieved through confirmation of the measurement model. Conditions 9 (i.e., practically and statistically significant paths) and 10 (i.e., inclusion of all necessary paths) is met during model testing, by ensuring that all paths are necessary and significant to the model and that the overall model has acceptable fit (James, et al., 1982).

Condition 9 ensures that paths that should be nonzero are different from zero, while condition 10 ensures paths that should be zero are actually zero (or approximately zero). James, et al. recommend considering conditions 9 and 10 together to confirm (or disconfirm) a structural model. Conditions 9 and 10 are satisfied in this study through the process of testing hypotheses 4 and 5 simultaneously. James et al. state in model testing, paths can only be set to zero (0) if it is “based on theoretical grounds (i.e., accompanied by a theoretical rationale) and proposed as part of the original structural model” (1982, p. 81). This relates back to condition 5 in that artificially constraining paths to zero (0) in order to test the structural model ultimately results in incorrect measurement and biased assumptions.



**Hypothesis Testing.** Hypothesis 4 predicted that communication coping partially mediates the relationship between work/life conflict and life satisfaction. Hypothesis 5 predicted that problem-solving partially mediates the relationship between work/life conflict and life satisfaction. A series of nested models based on the full structural model (figure 10), was used to test the hypotheses simultaneously. As previously noted in the discussion of hypothesis 3a, communication coping correlated with, but did not significantly load, on life satisfaction, suggesting that it is impossible for communication to partially mediate the relationship between work/life conflict and life satisfaction. However, based on extant research, simply removing communication from the model would result in a violation of condition 5 (i.e., all relevant variables are included in the model) and would have the potential of providing biased results for hypothesis 5 (i.e., the partial mediation of problem solving coping on the relationship between work/life conflict and life satisfaction). Therefore, it must remain in the model.

Testing for mediation in SEM is based on Baron and Kenny's (1986) three (3) conditions for mediation and comparing fit values in a nested model. The first (or default) model, tests for partial mediation, where all paths of interest (i.e., Con-LS, Con-Comm, and Comm-LS) are tested simultaneously without constraint. The second model tests for complete mediation, and constrains the Con-LS path to zero to remove the direct effect of work/life conflict on life satisfaction. Complete mediation is present when the second model fits as well, or better, than the default model, and tested paths are significant and not equal to zero (0). The presence of complete mediation must be tested for, and the possibility eliminated, for the ultimate determination that partial mediation exists. Partial mediation is suggested when all paths are

significant and not equal to zero (0), and the model fits significantly better than the complete mediation model.

As shown in Table 7, the results for the partial mediation test support the initial findings from hypotheses 3a and 3b, which suggested that partial mediation was possible for problem-solving coping, but was not possible for communication coping. As previously noted, partial mediation occurs when all paths are significant, not equal to zero (0) and the model fits significantly better than the complete mediation model. The Con-LS and PS-LS paths were significant and not equal to zero (0), while the Comm-LS path was not significant. These results indicate a failure to support hypothesis 4 and support of hypothesis 5.

The results of testing for complete mediation provide final confirmation of the initial results. Similar to partial mediation tests, the PS-LS path is significant, while the Comm-LS path is insignificant. Additionally, in comparing the fit between the two models, fit indicators are slightly worse for the complete mediation model, with lower CFI and GFI values (.912 and .867 compared to .911 and .866), and a higher CAIC value (2139.96 compared to 2141.22). Finally, the difference in chi-square values is used to test the hypothesis that the more constrained (i.e., complete mediation model) is correct, with smaller differences resulting in a failure to reject the hypothesis. Failure to reject the test hypothesis results in the determination that the complete mediation model is correct. The difference in chi-squared is 8.451, with a  $p = .004$ , indicating a rejection of the test hypothesis, and ultimate support for the partial mediation model.

Table 7: Partial Mediation Testing

| Model Tested <sup>a</sup>                 | $\beta$ (SE)                                                                                                        | CMin (df)           | CFI<br>GFI   | RMSEA<br>CAIC    | $\Delta$ CMin<br>( <i>p</i> ) |
|-------------------------------------------|---------------------------------------------------------------------------------------------------------------------|---------------------|--------------|------------------|-------------------------------|
| Default Model<br>(Partial Mediation Test) | Con-PS = -.32(.12)**<br>Con-Comm = -.35(.14)***<br>Con-LS = -.18(.14)**<br>PS-LS = .16(.12)**<br>Comm-LS = .03(.06) | 1470.69***<br>(727) | .912<br>.867 | .046<br>2139.961 | ---                           |
| Complete Mediation Model<br>(Con-LS = 0)  | Con-PS = -.34(.12)***<br>Con-Comm = -.36(.14)***<br>PS-LS = .23(.12)***<br>Comm-LS = .08(.06)                       | 1479.14***<br>(728) | .911<br>.866 | .046<br>2141.216 | 8.451<br>(.004)               |

\* $p \leq .05$ , \*\* $p \leq .01$ , \*\*\* $p \leq .001$

### Final Model Confirmation using the Jackknife Technique

As discussed in Chapter 2, the final step in data analysis involves testing the final structural model with changes indicated by the results of hypothesis testing. Based on the hypotheses supported (i.e., 1, 2a, 2b, 3b, and 5) the structure of the model proposed in figure 10 needs to be adjusted. This finding is confirmed by performing a jackknife test on the model. To use the jackknife technique, a nested model comparison was used to systematically constrain individual paths to zero (0) to test for model degradation (Efron & Gong, 1983). Worsening model fit (e.g., increasing differences in chi-square and higher CAIC values) indicates that each path is not equal to zero (0), and is therefore required in the model.

Shown in Table 8, results of the first pass of the jackknife support removing the Comm-LS path from the model. Fit statistics for this model (CMin = 1471.03,  $df$  = 728, CFI = .913, GFI = .867, RMSEA = .046, and CAIC = 2133.101) indicate an adequate fitting model that fits better than the original structural model (figure 10). Only Jackknife 5, which constrained Comm-LS to zero (0), failed to be significantly different from the default model. Failing to find a significant difference in chi-square values indicates that the models are statistically the same. Therefore, for the sake of parsimony, the Comm-LS path should be removed from the model. This finding

Table 8: Model Confirmation using the Jackknife Technique – Initial Structural Model

| Model Tested                                 | CMin (df)           | CFI<br>GFI   | RMSEA<br>CAIC   | $\Delta$ CMin ( <i>p</i> )<br>from Default <sup>^</sup> |
|----------------------------------------------|---------------------|--------------|-----------------|---------------------------------------------------------|
| Default Model<br>(All paths freely estimate) | 1470.69***<br>(727) | .912<br>.867 | .046<br>2139.96 | ---                                                     |
| Jackknife 1<br>(Con-PS = 0)                  | 1496.47***<br>(728) | .910<br>.865 | .046<br>2158.54 | 25.78<br>(.000)                                         |
| Jackknife 2<br>(PS-LS = 0)                   | 1476.25***<br>(728) | .912<br>.867 | .046<br>2138.32 | 5.56<br>(.018)                                          |
| Jackknife 3<br>(Con-LS = 0)                  | 1479.14<br>(728)    | .912<br>.866 | .046<br>2141.22 | 8.45<br>(.004)                                          |
| Jackknife 4<br>(Con-Comm = 0)                | 1515.99***<br>(728) | .907<br>.865 | .047<br>2178.07 | 45.31<br>(.000)                                         |
| Jackknife 5<br>(Comm-LS = 0)                 | 1471.03***<br>(728) | .913<br>.867 | .046<br>2133.10 | .336<br>(.562)                                          |

<sup>^</sup>CMin difference tests\**p* ≤ .05, \*\**p* ≤ .01, \*\*\**p* ≤ .001

supports the conclusions drawn from the partial support of hypothesis 3a and failure to support hypothesis 4.

As shown in figure 11, the final structural model (with standardized path weights in parentheses) reflects the removal of the Comm-LS path. In order to confirm that the removal of the Comm-LS path results in the best model, a second jackknife test must be conducted, using the final structural model as the default model. Shown in Table 9, results of the second jackknife confirm that all paths are required in the final model. Despite a slightly lower CAIC value when the PS-LS path is constrained to zero (0), the chi-square difference between Jackknife 2 and the Revised Default Model is significant, indicating that the PS-LS is required in the model.

Fit statistics for the final model show improvement over initial model (CMin = 1471.03, *df* = 728, CFI = .913, GFI = .867, RMSEA = .046, and CAIC = 2133.101 as compared to CMin = 1470.691, *df* = 727, CFI = .912, GFI = .867, RMSEA = .046, and CAIC = 2139.961). All paths were significant and behaved in the manner expected (i.e., positive and negative loadings). The final jackknife test satisfies condition 9 by removing the path (i.e., Comm-LS) that was not

statistically significant, as well as condition 10 by showing that model fit statistics did not substantially worsen by removing the paths in each iteration of the test.

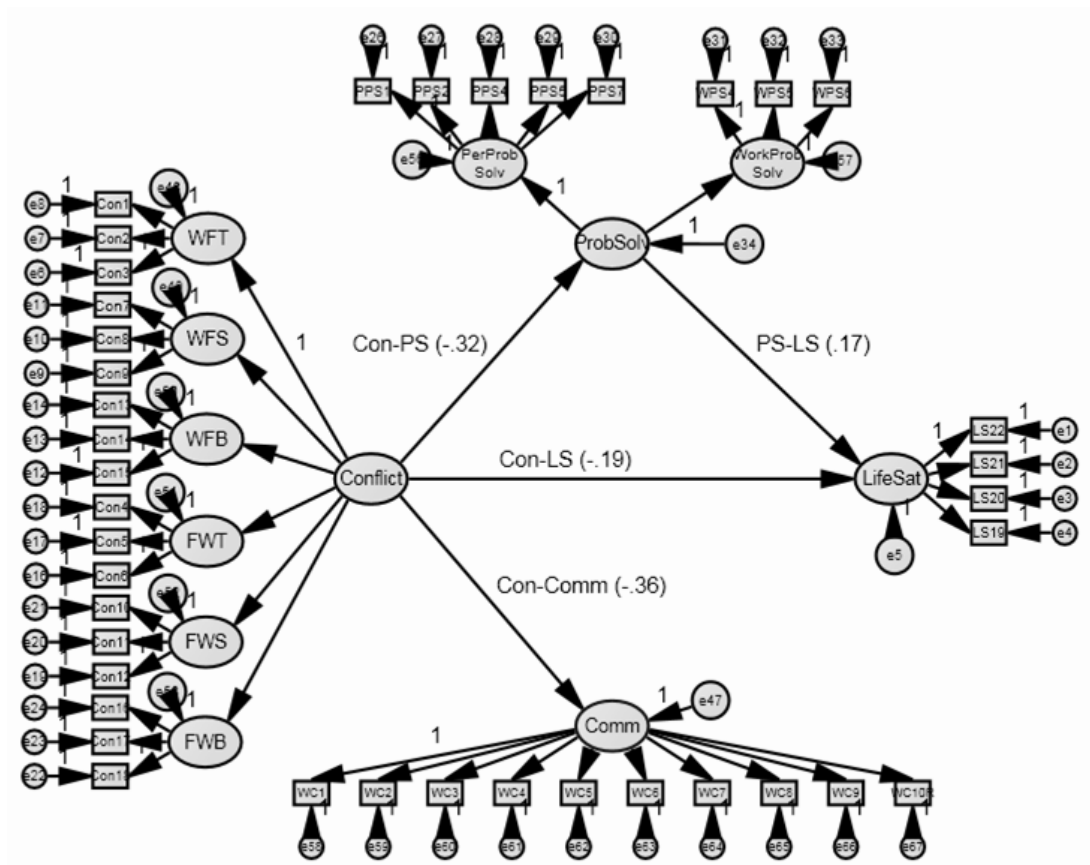


Figure 11: Final Structural Model

Table 9: Model Confirmation using the Jackknife Technique – Final Structural Model

| Model Tested                                                           | CMin (df)           | CFI<br>GFI   | RMSEA<br>CAIC   | ΔCMin (p)<br>from Default <sup>^</sup> |
|------------------------------------------------------------------------|---------------------|--------------|-----------------|----------------------------------------|
| Revised Default Model – Comm-LS removed<br>(All paths freely estimate) | 1471.03***<br>(728) | .913<br>.867 | .046<br>2133.10 | ---                                    |
| Jackknife 1<br>(Con-PS = 0)                                            | 1496.85***<br>(729) | .910         | .046<br>2151.73 | 25.821<br>(.000)                       |
| Jackknife 2<br>(PS-LS = 0)                                             | 1477.85***<br>(729) | .912         | .046<br>2132.73 | 6.823<br>(.009)                        |
| Jackknife 3<br>(Con-LS = 0)                                            | 1481.21***<br>(729) | .911         | .046<br>2136.09 | 10.182<br>(.001)                       |
| Jackknife 4<br>(Con-Comm = 0)                                          | 1516.78***<br>(729) | .907         | .047<br>2171.66 | 45.751<br>(.000)                       |

<sup>^</sup>CMin difference tests

\* $p \leq .05$ , \*\* $p \leq .01$ , \*\*\* $p \leq .001$

### Ad Hoc Testing

As noted in the literature review, gender (e.g., Beutell & Greenhaus, 1982, 1983; Eby, et al., 2005; Matsui, et al., 1995) and age (Hamarat, et al., 2001) have been shown to influence an individual's coping resources. In order to determine if those artifacts exist in this study, ANOVAs were conducted on communication coping and problem-solving coping for both demographic groups.

**Gender.** Beutell and Greenhaus (1982, 1983) and Matsui, et al. (1995) found that gender can affect coping style and resource utilization. Consequently, Eby, et al. (2005) recommend that the relationship between gender and coping be considered in studies. In response, an ANOVA was conducted on the sample to examine differences in coping resources based on gender, with mixed results. As shown in Table 10, problem-solving coping skills were consistent across gender, while communication coping skills were different, with females reporting higher levels of communication coping skills.

**Age.** Hamarat, et al. (2001) utilized the following age groupings in their study: young adults between 18 and 40, middle-aged adults between 41 and 65, and older adults 66 and older.

Their findings showed that as individuals age, their levels of coping resource effectiveness (as evaluated by the Coping Resources Effectiveness [Matheny, Curlette, Aycock, Pugh, & Taylor, 1987] score) increased. An ANOVA was conducted on the sample using the same scale groupings as Hamarat, et al (2001). Due to the nature of this sample (i.e., working professionals) only two of Hamarat, et al.'s subgroups emerged: (1) young adults and (2) middle-aged adults. Shown in Table 11, no age effects were found in this sample. To ensure that the wide age groupings did not mask any age effects, the sample was also divided into generational groups (i.e., Baby Boomers [1946-1964], Generation X [1965-1979], and Generation Y [1980-2001]). Again, grouping the sample by age did not affect coping resources (Table 12).

Table 10: Ad Hoc Testing: Gender Effects on Coping Skills

| Gender (n)    | Communication Coping |      |        | Problem-Solving Coping |      |        |
|---------------|----------------------|------|--------|------------------------|------|--------|
|               | Mean                 | SD   | F (p)  | Mean                   | SD   | F (p)  |
| Males (378)   | 39.69                | 5.48 | 17.66  | 29.98                  | 4.33 | .671   |
| Females (113) | 42.16                | 5.45 | (.000) | 30.35                  | 3.93 | (.413) |

Table 11: Ad Hoc Test - Age Effects on Coping Skills

| Age Group (n)            | Communication Coping |      |        | Problem-Solving Coping |      |        |
|--------------------------|----------------------|------|--------|------------------------|------|--------|
|                          | Mean                 | SD   | F (p)  | Mean                   | SD   | F (p)  |
| Young Adults (235)       | 40.20                | 5.75 | .024   | 30.16                  | 4.18 | .277   |
| Middle-Aged Adults (248) | 40.27                | 5.42 | (.877) | 29.96                  | 4.26 | (.599) |

Table 12: Ad Hoc Test - Generational Effects on Coping Skills

| Generational Group (n) | Communication Coping |      |        | Problem-Solving Coping |      |        |
|------------------------|----------------------|------|--------|------------------------|------|--------|
|                        | Mean                 | SD   | F (p)  | Mean                   | SD   | F (p)  |
| Baby Boomers (170)     | 40.51                | 5.57 | .896   | 29.85                  | 4.30 | .741   |
| Generation X (269)     | 40.22                | 5.60 | (.409) | 30.26                  | 4.08 | (.477) |
| Generation Y (44)      | 39.25                | 5.42 |        | 29.64                  | 4.71 |        |

## Summary

As shown in Table 13 in Appendix B, five (5) of the original seven (7) sub-hypotheses were fully supported (i.e., all but 3a [partially supported] and 4). The model behaved as expected with the exception of the relationship between communication and life satisfaction.

Communication skills were correlated to, but did not significantly load on life satisfaction. While resulting in a partial support for hypothesis 3a, these findings are in line with previous research finding that problem-focused coping (e.g., communication) skills can be correlated to, but not actually predictive of life satisfaction, as stand-alone variables (e.g., Boyd, et al., 2009; Outten, et al. 2009). The failure to support hypothesis 4 (i.e., communication partially mediating the relationship between work/life conflict and life satisfaction) was expected based on the findings in hypothesis 3a. The final structural model (figure 11) removes the proposed Comm-LS path, but maintains the communication variable in the model. This model has better fit statistics than the original structural model ( $CM_{in} = 1471.03$ ,  $df = 728$ ,  $CFI = .913$ ,  $GFI = .867$ ,  $RMSEA = .046$ , and  $CAIC = 2133.101$  as compared to  $CM_{in} = 1470.691$ ,  $df = 727$ ,  $CFI = .912$ ,  $GFI = .867$ ,  $RMSEA = .046$ , and  $CAIC = 2139.961$ ), as well as meets James, et al.'s ten (10) conditions for model confirmation. Chapter 5 discusses the conclusions from the study, potential limitations and directions for future research.



## Chapter 5

Identifying ways to increase individual satisfaction (and overall happiness) has been occurring since the time of Socrates, Plato and Aristotle (Bowling & Windsor, 2001; Brooks, 2008). Yet, time has not yielded a single, distinct answer to this problem. Rather, time has merely served to confuse the issue through debate over definitions, relationships and measurement (e.g., the psychological debate over the independence versus interrelationship between affect and cognitive judgment in the determination of satisfaction). In an effort to clarify the issue, researchers have examined how satisfaction relates to other constructs such as work/life conflict and coping. Rather than clarifying the issue, examination of these relationships seems to prompt a new research question for each one that is answered (e.g., MacDermid, 2005; Eby, et al., 2005; Kossek & Ozeki, 1998). This study sought to address the issue by examining the interrelationships between work/life conflict, problem-focused coping strategies and life satisfaction. Serving as a mediator, problem-focused coping (i.e., problem solving and communication) was hypothesized to ameliorate the well-established, inverse relationship of work/life conflict and life satisfaction (e.g., Allen, et al., 2000; Kossek & Ozeki, 1998; Mesmer-Magnus & Viswesvaran, 2005; Mitchel, et al., 2009; O'Driscoll, et al., 1992). The purpose of this chapter is to discuss the findings of this study as well as address its limitations. Additionally, implications and recommendations for research and practice are also discussed.

The data in this study supported the majority (i.e., 71.4%) of the hypotheses regarding the relationships between work/life conflict, problem-focused coping, and life satisfaction. However, before the hypotheses were even tested, a significant finding was discovered during measurement model testing. The current research trend (e.g., Adams, et al., 1996; Boyar, et al.,

2003; Carlson, et al., 2000; Eby, et al., 2005; Frone, et al., 1992b; Frone, et al., 1994; Grandey & Cropanzano, 1999; Grzywacz & Marks, 2000; Gutek, et al., 1991; Matthews, Kath & Barnes-Farrell, 2010; Mitchel, et al., 2009; Netemeyer, et al., 1996) has treated work/life conflict as global construct, consisting of the distinct (i.e., orthogonal) domain-based constructs of work-to-family conflict and family-to-work conflict. As such, work/life conflict has been operationalized as work-to-family or family-to-work conflict, and treated as distinct, orthogonal constructs.

And yet, even though researchers have empirically measured these constructs orthogonally, the lived experience of work/life conflict is different. Piotrkowski (1979) maintained that work and family are not distinct spheres; events are related and those that occur in one sphere (e.g., work) interfere with the other sphere (e.g., family). Frone, et al. (1992a, 1992b) took this idea further, stating that in addition to crossing over spheres, events can then cross back, creating an interactive, additive effect. Rapoport, Bailyn, Fletcher and Pruitt (2002), as well as Morris and Madsen (2007), suggest that integration is the key to maximizing satisfaction with work and life: “men and women should be able to experience these two parts of their lives as not in conflict, or separate and in need of balance, but *integrated*. By this we mean that they should be able to function and find satisfaction in both work and personal life” (Morris & Madsen, 2007, p. 17). By focusing on measuring work-to-family conflict and family-to-work conflict as singular events, rather than assessing how they affect, and potentially magnify, each other, researchers may not be capturing the full effect of work/life conflict on individuals.

I contend that by treating work-to-family and family-to-work conflict as distinct constructs, researchers are losing the interactive, additive effect described by Frone and his colleagues. In contrast to how work/life conflict has been operationalized and measured in

previous research, this study captures the interactive, additive effect by operationalizing work/life conflict as a single, second-order construct, with six (6) first-order constructs (i.e., WF Time, WF Strain, WF Behavior, FW Time, FW Strain, and FW Behavior). This second-order construct model of work/life conflict (Figure 6) retains the bi-directionality (i.e., WF and FW) of the three components of conflict (i.e., time, strain and behavior) which led Matthews, et al. (2010) to call the Carlson, et al. (2000) scale the “best example of a measure intended to account for the three bidirectional types of pressures” (p. 76). Additionally, it allows for covariance among the constructs, reflecting Frone, et al.’s (1992a, 1992b) contention that WFC and FWC conflict have an interactive, additive effect. This study’s development of work/life conflict as a single, second-order construct, consisting of the six (6) first order constructs allows researchers to continue to capture the bi-directionality of conflict, but acknowledges that individuals do not always consciously distinguish the cause of work/life conflict...in their lived experience, they just know that the work/life conflict is present.

All hypotheses tested in the study, regardless of the level of support found, contribute to our understanding of the satisfaction literature. Regarding direction of relationships, all hypotheses behaved in the manner proposed. Work/life conflict was inversely related to life satisfaction and two forms of problem-focused coping (i.e., hypotheses 1, 2a and 2b). Further, both forms of problem-focused coping (i.e., problem-solving and communication) were positively related to life satisfaction; however, communication coping was related to, but did not have a significant path loading (i.e., did not significantly regress) on life satisfaction (resulting in a failure to support hypothesis 3a). Problem-solving coping did have a significant path loading on life satisfaction, resulting in support for hypothesis 3b. Consequently, communication coping

failed to partially mediated the relationship between work/life conflict and life satisfaction (i.e., hypothesis 4), while problem-solving did partially mediate the relationship (i.e., hypothesis 5). Specific discussions of the results are organized by research question.

### **Research Question 1: How does work/life conflict affect life satisfaction?**

While indirectly addressed by hypotheses 4 and 5, research question 1 was primarily tested in hypothesis 1 by examining the direct relationship between work/life conflict and life satisfaction. As previously discussed, the operationalization of work/life conflict has evolved from global, bi-directional measures to explicit, domain-specific measures, which Kossek and Ozeki (1998) contend perform better. By operationalizing the Carlson, et al. (2000) scale as a single, second-order construct consisting of six (6) first-order constructs, I was able to maximize the inter-relationships between the different types of work/life conflict. This operationalization accommodated Kossek and Ozeki's (1998) idea that defined measures perform better, as well as incorporating Frone, et al.'s (1992a, 1992b) contention that work/life conflict has an interactive, additive effect.

The results of this study align with existing research (e.g., Allen, et al., 2000; Eby, et al., 2005) that has consistently found an inverse relationship between work/life conflict and life satisfaction. Using the single, second-order construct of work/life conflict developed as part of testing the measurement sub-model, hypothesis 1 was fully supported. Work/life conflict was significantly related to life satisfaction with an inverse correlation of  $r = -.168$ ,  $p \leq .001$  and  $\beta = -.25$ ,  $p \leq .001$ . Meta-analytic correlations for domain-specific (i.e., work-to-family and family-to-work) work/life conflict and life satisfaction range from  $-.20$  to  $-.31$  (Allen, et al., 2000; Kossek & Ozeki, 1998; Mesmer-Magnus & Viswesvaran, 2005; Michel, et al., 2009). While the

correlation determined in this study is not as high as previous research, the predictive power of work/life conflict (i.e., the path weight) on life satisfaction is higher than previous research. Michel, et al. (2009) found path weights of -.13 and -.01 for WFC and FWC, as compared to the  $\beta = -.25$  found in this study. While a path weight of -.25 is relatively small, Lucas and Denier (2008) suggest that small, yet significant, influences of non-personality constructs on life satisfaction are not unusual, because the majority of life satisfaction is predicted by psychological variables. Finally, by satisfying the first of Baron and Kenny's (1986) requirements for mediation, these results provide a foundation for the second research question of this study.

**Research Question 2: What are the roles of problem-solving and communication coping skills in mediating the relationship between work/life conflict and life satisfaction?**

Discussion of research question 2 will be organized by hypotheses 2-5. Hypotheses 2 and 3 (i.e., the relationships between the independent and mediating, and mediating and dependent variables) were required as part of testing the overall mediating ability of coping on the relationship between work/life conflict and life satisfaction. Determining that relationships exist between the mediators and other variables is required as part of the process of establishing mediation (Baron & Kenny, 1986). Hypotheses 4 and 5 examined the actual mediation of communication and problem-solving on the relationship between work/life conflict and life satisfaction.

**Hypotheses 2 and 3**

Hypotheses 2a and 2b addressed the second of Baron and Kenny's (1986) requirements for mediation, specifically the relationships between the mediators and independent variable.

Full support was provided for hypotheses 2a and 2b, with both problem-solving and communication skills being negatively related to work/life conflict. Communication exhibited a stronger relationship to work/life conflict ( $r = -.338, p \leq .001$  and  $\beta = -1.055, p \leq .001$ ) than problem-solving coping to work/life conflict ( $r = -.164, p \leq .001$  and  $\beta = -.33, p \leq .01$ ).

While previous empirical research on the relationship between coping and work/life conflict has been noted as limited (e.g., Bellavia & Frone, 2005; Eby, et al., 2005; Frone, 2003; Haar, 2006; Rotondo & Kincaid, 2008), researchers theorize that generalized forms of problem-focused coping strategies are most effective in reducing conflict (e.g., Aryee, et al., 1999; Baltes & Heydens-Gahir, 2003; Hecht & McCarthy, 2010; Koeske, et al., 1993; Rotondo & Kincaid, 2008; Somech & Drach-Zahavy, 2007). Not only does this study utilize specific forms of problem-focused coping (i.e., problem-solving and communication skills), the results of this study support the idea that individuals who utilize problem-focused coping are less likely to experience conflict between roles (Burke, 1998; Hecht & McCarthy, 2010; Lapierre & Allen, 2006; Rotondo, et al., 2003). Finally, the results of hypothesis 2 satisfy the second of Baron and Kenny's (1986) requirements for mediation.

Hypothesis 3a and 3b tested the relationships between the mediators and dependent variable. Problem-solving exhibited a stronger relationship to life satisfaction ( $r = .161, p \leq .001$  and  $\beta = .160, p = .018$ ) than communication coping to life satisfaction ( $r = .128, p \leq .01$  and  $\beta = .034, p = .544$ ). These results indicate full support for hypothesis 3b, and partial support (i.e., correlation without prediction) for hypothesis 3a. While the mixed support is disappointing, the results are consistent with existing research. As previously noted, similar to the results for the relationship between communication and life satisfaction, Outten, et al. (2009) found correlation

without prediction for general problem-focused coping. An important distinction to make regarding Outten, et al.'s (2009) finding is that they studied generalized problem-focused coping, while this study found a similar result for specific communication coping. Regarding the differences in relationship strength between the mediators and independent and dependent variables, communication skills are more narrowly focused on socially appropriate, effective interactions with others (Lazarus & Folkman, 1984). This focus may explain the stronger relationship with work/life conflict than life satisfaction; specifically, the ability of skilled communicators to control social situations and create consensus among groups potentially allows for better management of role conflicts, such as those seen in the work/life conflict context. Conversely, because of the ability of problem-solving to be specific in nature (i.e., directed towards specific problems) (Lazarus & Folkman, 1984) or conceptual in nature (i.e., directed towards dealing with generalized problems, like moral issues) (Schwartz, 1970), individuals have greater options for dealing with stressors, which leads to the greater relationship with life satisfaction as compared to communication coping.

#### **Hypotheses 4 and 5**

Boyd, et al. (2009) noted that several scholars (e.g., Cohen & Willis, 1985; Lazarus & Folkman, 1984; Lewin & Sager, 2008; Thoits, 1986) support the idea that, consistent with the transactional model of stress, coping mediates the impact of potential stressors on well-being (i.e., life satisfaction). Building on the work of Cohen and Willis (1985), De Rijk, et al. (1998), as well as Lewin and Sager (2007), maintain that when acting as a mediator of the relationship between stress and well-being, coping has a significant impact on individual well-being. This impact occurs for two potential reasons: (1) coping attenuates or prevents a negative appraisal of

stressful situations and (2) if a negative appraisal does occur, coping may mediate the adverse impact by altering or buffering the direct impact of the stress reaction. While this study did not directly address the appraisal of stressful situations, the second proposition, where coping alters or buffers the direct impact of the stress reaction occurred in both hypotheses 4 and 5. The indirect effect on the appraisal of stressful situations occurs naturally as part of the transactional model of stress. As previously discussed, the transactional model of stress consists of two components, appraisal and coping (Lazarus & Folkman, 1984). Before coping can occur, an appraisal about the severity of the situation (i.e., primary appraisal), and the appropriate resources needed to address the situation (i.e., secondary appraisal) are required. Because primary and secondary appraisal are of equal importance and can act independently of each other, individuals can skip the primary appraisal, and focus on the coping resources necessary (i.e., secondary appraisal) to deal with the situation (Lazarus & Folkman, 1984). In this scenario, coping indirectly addresses primary appraisals of stressful situations.

As previously noted, the failure to fully support hypothesis 3a (i.e., the relationship between communication coping and life satisfaction) provided first notice that hypothesis 4 would also fail to be supported. However, full support was found for hypothesis 5, problem-solving reduces (i.e., partially mediates) the direct impact of work/life conflict on life satisfaction, with a Con-PS path weight of  $\beta = -.32, p \leq .01$ , a Con-LS weight of  $\beta = -.18, p \leq .001$ , a PS-LS path weight of  $\beta = .16, p \leq .01$ , fit statistics indicating adequate model fit (CMin = 1470.69,  $p \leq .001$ , CFI = .912, GFI = .867, RMSEA = .046) and a lower CAIC than that present for the complete mediation model (2239.96 versus 2141.22).



These differing relationships are consistent with existing research in coping. Folkman, et al. (1979) suggested the *goodness of fit hypothesis* for the successful application of coping resources. They contend that successful outcomes result from selecting the correct coping strategy that is aligned with the stressor. Furthermore, Rotondo, et al. contended that no single coping mechanism is effective in all situations (2003). As discussed in Chapter 2, while coping as a general mediator is well established in the literature, little research exists on the specific ability of coping to mediate the relationship between work/life conflict and satisfaction. Additionally, almost no research exists on the mediational ability of problem-solving and communication skills on the relationship between work/life conflict and life satisfaction. Consequently, due to a relative gap in the literature (MacDermid & Harvey, 2006), there is little research available for comparisons to this study.

The failure to find full support for hypothesis 4, though unexpected, is not unusual considering extant literature. Skilled communication allows for the mobilization of people and resources, and ultimately allows individuals to exercise more control over situations (Lazarus & Folkman, 1984). Additionally, because of the ability to mobilize resources, skilled communication also facilitates problem solving, which adds to its ability to mediate the negative relationship between work/life conflict and life satisfaction. Mechanic (1974) suggested that problem-solving is less dependent on individual action than on the ability of a group to solve a problem. Effective communication allows an individual to not only effectively participate in the group's collective problem-solving ability, but also allows the potential to actually control those activities.

Finally, because the affective nature (i.e., ability to express emotion) of personal communication coping, only the work communication coping scale, which was cognitive or process oriented was used. A rather serious implication immediately presented itself from only using the work communication coping scale. It is possible that the more narrow focus of the work communication process failed to capture the processes individuals use when communicating with friends and family outside the workplace. These ten (10) questions were very specific to workplace interactions (e.g., “co-workers listen and understand my ideas” and “respectful and effective communication exists between staff and management”). This narrow focus fails to capture communication processes outside of work, and may thereby weaken communication’s ability to positively influence life satisfaction.

Additionally, in previous research, Olson and colleagues describe communication as a facilitator to connectedness (i.e., a form of emotion-focused coping) and adaptability (i.e., a form of problem-focused coping) (Olson, Russell & Sprenkle, 1989). Strong communication skills are hypothesized as allowing individuals in couple and family systems to maintain balance by reflecting and feeding positive behaviors. Because this study only focused on the processes of communication (i.e., cognitive influences), the potential impact expressing emotion (i.e., affective influences) are not present. To fully capture the ability of communication as a coping resource, both components (i.e., cognitive and affective) may need to be considered together. Crouter, Perry-Jenkins, Huston and Crawford (1989) and Cutrona, et al. (2003) found that communication skills are likely to be responsive to stressors (like work/life conflict). Two recent studies have been conducted finding that communication partially mediates the relationship between stress and marital quality (a component of life satisfaction) (Ledermann, Bodenmann,

Rudaz & Bradbury, 2010; Ledermann & Macho, 2009). These studies suggest that it is possible for communication to partially mediate the relationship between work/life conflict and life satisfaction, more work needs to be done using both components of communication coping.

Regarding hypothesis 5, Aryee, et al. (1999) support the idea of the mediational ability of problem-solving by suggesting that problem-solving is a reaction to conflict, rather than a stand-alone predictor of life satisfaction. Lapierre and Allen (2006) and Rotondo and Kincaid (2008) suggest that generalized problem-focused coping is more effective for work/life conflict originating from the family domain than from the work domain because of the greater level of control individuals have over their home situations, as compared to work situations. As the single, second-order construct of work/life conflict used in this study encompasses both domains of conflict, it is possible that having the influence of both domains reduced the ability of problem-solving to fully mediate the negative relationship between work/life conflict and life satisfaction. As previously discussed, communication skills serve as a process to facilitate, and potentially improve, an individual's problem-solving ability (e.g., Lazarus & Folkman, 1984; Mechanic, 1974; Olson, et al., 1989). Consequently, the results of this study support the notion that while problem-solving is effective in partially mediating the negative effects of work/life conflict on life satisfaction, it is possible that communication coping is helping to strengthen that relationship.

### **Limitations**

Several potential limitations exist in this study. This study was limited by the use of secondary data. Specifically, it was impossible to control for sample demographics, or expand the sample in order to create greater diversity. This sample was predominantly male (76.98%),

Caucasian (78.41%), and married (79.02%) with children living at home (56.83%), which is not representative of the general population. Additionally, as the sample is drawn from an Executive MBA program, they are highly educated with 68% of responses having an income greater than \$80,000 per year. An expanded, more diverse sample would have allowed for examination of a litany of demographic effects, including gender, race, marital status and the presence of children in the home. Another issue with the use of secondary data is the lack of control over the use of measures, collection procedures and instructions to participants. Finally, data is cross-sectional in nature. All data was collected at one point of the respondent's Executive MBA program. Additionally, respondents were not asked to evaluate work/life conflict, coping or life satisfaction over time, rather a "snapshot" of their current perceptions of each construct was assessed. Measuring the impact of each of these issues is difficult, if not impossible, although it is reasonable to assume that eliminating or altering any of the assessments would have an impact on the final results.

As acknowledged in Chapter 1, I purposefully chose to exclude affective evaluations from the constructs of subjective well-being and coping. This occurred for a variety of reasons. First, Pavot and Deiner (2008) maintain that perceptions of life satisfaction, while distinct from affect, are likely to be influenced by personality traits. By excluding the measurement of affective influence on life satisfaction, I focused on the cognitive element of satisfaction, thereby controlling for affective and behavioral contributions to life satisfaction. Andrews and Withey (1976) further maintain that the psychological debate regarding the relationship between cognitive and affective evaluation is well-established, and beyond the scope of life satisfaction research. Additionally, work/life conflict is a perceptual, evaluative judgment of the relationship

between work and family domains. Based on the cognitive nature of the antecedent and outcome constructs, only problem-focused coping (i.e., the cognitive component of coping) was examined. Maintaining this cognitive focus allowed for the examination of only those components of work/life conflict, life satisfaction and coping deemed most critical to individual study participants (e.g., Diener, et al., 2004; Pavor & Diener, 2008). Furthermore, MacDermid (2005) maintains that in order to fully understand work/life conflict, researchers must consider the cognitive, behavioral and affect components of the relationship between work/life conflict and other constructs (including coping and life satisfaction) separately.

The temporal differences of the constructs are also a potential limitation. As previously discussed, life satisfaction is stable, trait-like and generally resistant to fluctuations due to intervening life events (Costa & McCrae, 1980). Lazarus and Folkman (1984) contend that coping is not a spontaneous or unconscious behavior, but rather a process with three main features. First, coping is concerned with what individuals actually do in the face of stressors, not what they usually or should do, which is distinctive to traits. Second, coping occurs within specific contexts. Coping varies based upon environmental conditions, and therefore must be examined in the context it is being applied. Finally, coping strategies vary based upon situational demands; no single coping strategy is appropriate in all situations (Lazarus & Folkman, 1984). Because of the process nature of coping, individuals can be trained on methods that allow them to better utilize coping skills and resources.

Alternately, work/life conflict is state-like, it fluctuates over time based on life circumstances. The impacts of a state-variable on a trait-variable are even further magnified when using a cross-section of data collection, rather than collecting work/life conflict

perceptions longitudinally. Using state constructs to predict trait constructs can often result in high standard errors in measurement (Nunnally & Bernstein, 1994). However, this did not occur in this study. This outcome may reflect Pavot and Diener's (1993) idea of the temporal nature of life satisfaction, where short-term influences, including mood and immediately salient life events, affect overall satisfaction. Schimmack, et al. support Pavot and Diener's idea of the temporal nature of life satisfaction by suggesting that determinations of life satisfaction are based on the relevant information available to the individual at the time (2002).

Finally, the source of the sample may be a limitation of this study. Each of the study participants was employed full-time (68.84% working more than 40 hours per week) while enrolled in an intensive, Executive MBA program. It is very likely that these individuals possess a greater aptitude for problem solving and communication due to: (1) their multiple roles of involved (e.g., employee, student, boss, spouse, parent, etc.), and (2) likely higher levels of emotional intelligence (e.g., high core self evaluation, high goal orientation, internal locus of control, increased critical thinking skills). The results from these obviously high performers may not be generalizable to the population as a whole. It is possible, however, that general workforce population may see even greater benefit from higher levels of coping skills than this select group.

### **Implications and Recommendations for Theory, Research and Practice**

Despite the limitations previously discussed, this study is important for multiple reasons. Implications of the study, as well as recommendations for research and practice, are organized by finding.

## **Coping as a Mediator of the Relationship between Work/life Conflict and Life Satisfaction**

This study's application of coping as a linking mechanism between work/life conflict and life satisfaction addresses an acknowledged gap in the literature (MacDermid & Harvey, 2006). By demonstrating that coping serves to ameliorate (i.e., in the case of problem-solving) the established negative relationship between work/life conflict and life satisfaction, a sound base for further research and practice is created. I further contend that the failure to find support for communication as a mediator of the negative relationship between work/life conflict and life satisfaction is simply a preliminary finding, and further research needs to be conducted to address issues previously discussed (i.e., the use of work-centered communication questions and the exclusion of the expression of emotion).

Regarding theory, McMillan, Morris and Atchley (2011) maintain that a conceptual understanding of work/life conflict is necessary to further research and practice. MacDermid and Harvey (2005) note that Kahn, et al.'s (1964) role conflict theory has served as the foundational theory for work/life conflict research for more than twenty (20) years. This study moves beyond viewing work/life conflict simply as a form of role conflict, to viewing work/life conflict as an actual stressor, and therefore able to be explained by the transactional model of stress. Applying the transactional model of stress (Lazarus and Folkman, 1984) allows for study of the demands associated with the stressors (e.g., work/life conflict), coping in the form of primary and secondary appraisal processes, and an examination of the outcomes, whether they are bonadaptative or maladaptive (McCubbin & Patterson, 1983). Additionally, applying the transactional model of stress to work/life conflict, provides a framework for future mediational studies.

This study answers Eby, et al.'s (2005) call for research to study mediational relationships in work/life conflict. She and her colleagues contend that the majority of research simply tests predictions regarding the behavior of work/life conflict based on historical studies. Using the transactional model of stress as a theoretical base (Lazarus & Folkman, 1984), this study goes beyond exploratory research (which Eby, et al. [2005] state serves to promote a general understanding of the phenomenon), to actually developing a model (Figure 10) that attempts to explain how coping mediates the relationship between work/life conflict and life satisfaction. Therefore, by examining specific patterns (i.e., the differences between problem-solving and communication) of coping, this study establishes an initial model that addresses the *what*, *how*, and *why* required for theory development (Whetten, 1989). While the generalizability of the model proposed in this study needs to be established through testing with broader samples, modified and/or expanded versions of the model should also be tested.

The first research recommendation for this model is to assess generalizability across different samples. The sample for this study is executives pursuing MBAs, and it is expected that they have a higher level of coping (particularly communication skills) than the average person. Therefore, the failure to find support of partial mediation for communication skills, and the finding of partial mediation for problem-solving skills may be the result of sample artifact. Additionally, ad hoc testing indicated a difference in the level of communication skills by gender. Research by Tannen (1990), suggests that women are more skilled communicators than men. Considering the small percentage of females (23%) in this study, a broader sample base may strengthen the ability of communication to fully mediate the relationship between work/life



conflict and life satisfaction. Further research needs to be conducted on a broader sample to determine if the mediational relationships found in this study are upheld.

Additionally, the model developed in this study needs to be expanded to include additional types of coping, both problem-focused and emotion-focused. As previously discussed, research on the influences coping has repeatedly been recognized as lacking in the literature (e.g., Eby, et al., 2005; MacDermid & Harvey, 2006). The communication and problem-solving strategies of coping used in this model can be substituted with any other coping strategy, or resource, of interest, including support mechanisms (e.g., organizational support, supervisory support, spousal support), emotion-focused strategies, and negative coping strategies (e.g., drinking and drug use). Examining the effects of different types of coping is critical given existing evidence on the differing abilities of coping in dealing with work/life conflict (e.g., Behson, 2002; Beutell & Greenhaus, 1982, 1983; Kopelman, et al., 1983; Matsui, et al., 1995; McCubbin, et al., 1996; Moen & Yu, 2000).

Finally, the additive and interactive mediational effects of coping on the relationship between work/life conflict and life satisfaction need to be examined. Multiple researchers (e.g., Folkman, et al., 1979; Lazarus & Folkman, 1984; Mechanic, 1974; Olson, et al., 1989; Rotondo, et al., 2003) have stated that communication facilitates problem-solving as a coping mechanism. Therefore, further research needs to be conducted to examine the additive mediational effects of combining communication and problem-solving coping on the relationship between work/life conflict and life satisfaction.

Regarding recommendations for practice, research (e.g., Allen, et al., 2000; Carsten & Spector, 1987; Hom, et al., 1979; Harter, et al., 2002; Judge, et al., 2001; Kossek & Ozeki, 1998;

Lucas & Diener, 2003; Mesmer-Magnus & Viswesvaran, 2005; Michel, et al., 2009; Scott & Taylor, 1985; Smith, 1997; Staw & Barsade, 1993) has shown that life satisfaction is positively related to organizational outcomes (e.g., lower turnover, higher work attendance, improved performance and better financial outcomes), and negatively related to work/life conflict. Therefore, organizations should be interested in promoting a mechanism that allows for the reduction of work/life conflict, and the resultant increases in life satisfaction and organizational performance. Lazarus and Folkman (1984) maintained that because coping is process-oriented, individuals can be trained in techniques which allow them to maximize their coping resources. Therefore, in order to achieve and maintain a competitive advantage, particularly in times of frequent change (e.g., mergers, acquisitions, budgetary constraints), organizations can selectively implement initiatives to specifically increase problem-focused coping skills (e.g., communication and problem-solving skill development seminars), in order to ameliorate or alleviate areas of work/life conflict (Morris, 2008). Organizations that provide this training and support should see reduced work/life conflict, and ultimately increased satisfaction and performance (Behson, 2002). A variety of programs exist to assist organizations in providing training programs designed to enhance employees' coping resources. One such program, *ROPES* (realistic orientation programs for new employee stress) (Wanous, 1992), is a process for employee orientation that includes role playing and video demonstrations to learn and practice coping skills. The efficacy of ROPES program has been used by a variety of workforce development programs (i.e., Australia's National Research Centre on Workforce Development, The Providers' Council for Caring Communities, National Fire Academy) and established in research (e.g., Larson, Lakin, & Bruininks, 1998; Saks & Gruman, in press; Wanous & Reichers, 2000).

## **Work/life Conflict as a Latent, Second-Order Construct**

Perhaps of greatest interest for future research, was the finding of the single, second-order construct of work/life conflict comprised of the six (6) bi-directional domains of types of conflict (i.e., WF Time, WF Strain, WF Behavior, FW Time, FW Strain, and FW Behavior). In an effort to understand how to ameliorate or alleviate work/life conflict, current research focuses on the origin of conflict, work or family, with the aim of developing specific measures targeted to those areas. However, unlike previous research findings and recommendations, treating conflict as a pair of orthogonal constructs fails to fully capture the true experience of work/life conflict. Thirty years ago Piotrkowski proposed that work and family are not distinct spheres (1979). Despite segmentation theory research (e.g., Greenhaus & Singh, 2003; Lambert, 1990) that suggests individuals purposefully attempt to divide roles in order to prevent work/life conflict, I believe that in actuality, individuals don't forget about their families when they go to work, and they don't forget about work when they go home (see Morris and Madsen, 2007 for more details on the integration between work and family domains). Frone, et al., (1992a, 1992b) support this notion and go one step further by stating that not only do individuals fail in compartmentalizing roles, but issues in one role can not only cross over to the other role (e.g., Friedman & Greenhaus, 2000), but that they can then cross-back, creating an overlapping, compounding, pile-up effect, that stress theory discusses (McCubbin & Patterson, 1983). This study's development of the single, second-order construct of work/life conflict, as well as the indication of a potentially different causal model for the first-order constructs, allows for individuals to consider all aspects of their lives when making determinations about their overall

level of conflict. I believe that this makes for a more complete assessment of work/life conflict as a whole.

Further research needs to be conducted establishing generalizability of the single, second-order construct of work/life conflict proposed in this study. As discussed in the limitation section, the sample in this study (predominantly married, well-educated, Caucasian men with children) is not representative of the population at large. Since the single, second-order construct of work/life conflict is a re-interpretation of Carlson, et al.'s (2000) Multi-dimensional Work/Family Conflict Scale, establishing generalizability should not be difficult. Existing research using Carlson, et al.'s scale can be conceptualized using the same procedures described in Chapter 3 of this study. Furthermore, new research can be designed with intent to utilize the Carlson, et al. scale to measure work/life conflict as a single, second-order latent construct.

Additionally, I propose that single, second-order work/life conflict measure used in this study be adapted to move beyond simply measuring the existence of work/life conflict. Currently, the questions measure the frequency, rather than the magnitude, of the different types of work/life conflict. MacDermid states that for the discipline to progress, it must “focus more on the ‘how’ and less on the ‘how much’” (2005, p. 36) when measuring work/life conflict. For example, Carlson, et al. (2000) asks respondents to rank their agreement on a 5-point scale (i.e., strongly disagree to strongly agree) to the following question: “The time I must devote to my job keeps me from participating equally in household responsibilities and activities.” By including alternate anchor points measuring magnitude of stress (i.e., not at all stressful to very stressful), as well as perception of stress (i.e., negative or positive), individuals are allowed to go beyond simply indicating how much conflict occurs, and actually provide information on the severity

and whether it is perceived as beneficial or detrimental (Morris Personal Conversation, March 22, 2011). Adding these anchors not only addresses MacDermid's call to advance the discipline, but also reinforces the benefits of grounding work/life conflict in stress theory.

### **Other Potential Research Questions**

In the course of this research, a litany of questions outside the direct scope of this study presented themselves, and warrant articulation and a call to researchers to address them.

First, what about the positive side of the work/life interface? If problem-solving (and potentially communication) reduce the negative impacts of work/life conflict on life satisfaction, will they also serve to increase the positive impacts of work/life enrichment on satisfaction? Additionally, what has the greatest impact on life satisfaction – work/life conflict or work/life enrichment? Not only can the model presented in this study be tested with work/life enrichment replacing work/life conflict to determine the mediational effects of coping, but work/life enrichment can be tested alongside conflict to determine which has the greater influence on life satisfaction. Furthermore, is Carlson, Kacmar, Wayne and Grzywacz's (2006) Multi-dimensional Work/Family Enrichment Scale (which is designed in the same manner as the Carlson, et al., 2000 work/family conflict scale) also better operationalized as a single, second-order construct of work/life enrichment tapping the six (6) bi-directional causes of enrichment (i.e., WF Development, WF Affect, WF Capital, FW Development, FW Affect and FW Efficiency)?

Second, this study addresses individual life satisfaction, what about the satisfaction of others (i.e., cross-over effects [Friedman & Greenhaus, 2000])? Can one person's level of work/life conflict negatively impact the overall satisfaction of his/her spouse, children or co-workers? Furthermore, if work/life conflict can spill across relationships, how does the negative

spillover impact the functioning (e.g., ability to be a good spouse or parent, employee productivity, etc.) of the other person? How far can one person's work/life conflict spread? Systems theory (e.g., Barling, 1984; Barnett & Brennan, 1995; Barnett & Gareis, 2005) suggests that individual work/life conflict can spread beyond the affected individual to his/her spouse, children, and co-workers. It is not out of the realm of possibility to think that if my work/life conflict crosses over and causes my co-worker work/life conflict, then my co-worker's conflict can spread to his/her family system. Determining how wide the ramifications of one person's work/life conflict can spread would greatly increase our understanding of work/life conflict.

### **Summary**

In conclusion, using a secondary data set of 491 executives pursuing MBAs, this study makes several important contributions to the literature. The transactional model of stress (Lazarus & Folkman, 1984) was used as the theoretical basis for this study to understand how coping can potentially ameliorate or alleviate the negative effect of work/life conflict (i.e., stressors) on life satisfaction.

Specifically, this study found that the single, second-order construct of work/life conflict, consisting of six (6) first-order constructs (i.e., WF Time, WF Strain, WF Behavior, FW Time, FW Strain, and FW Behavior) is more beneficial in examining the impacts of work/life conflict on an individual. This revised conceptualization of work/life conflict maintains the bi-directionality (i.e., WF and FW) supported by a litany of researchers (e.g., Anderson, et al., 2002; Boyar, et al., 2003; Carlson, et al., 2000; Kopelman, et al., 2003), while reflecting Frone, et al.'s (1992a, 1992b) contention that WFC and FWC conflict have an interactive, additive effect. Additionally, this study addresses multiple calls in the literature (e.g., Allen, et al., 2000;

Eby, et al., 2005; MacDermid, 2005; MacDermid & Harvey, 2006) to incorporate coping into work/life conflict research. Problem-solving coping was found to partially mediate the relationship between work/life conflict and life satisfaction. While support for communication coping partially mediating the relationship between work/life conflict and life satisfaction was not found, the potential for the relationship is still present and needs to be explored further. Because coping is a process, and coping skills can therefore be increased through training (Lazarus & Folkman, 1984), organizations can develop interventions designed to increase coping skills, and ultimately, life satisfaction, which has been shown to a positive impact on organizational performance (e.g., Allen, et al., 2000; Harter, et al., 2002; Judge, et al., 2001; Lucas & Diener, 2003; Mesmer-Magnus & Viswesvaran, 2005; Michel, et al., 2009).

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## **Appendices**

## **Appendix A**

### **Multi-dimensional Work/Family Conflict Scale**

Carlson, et al., 2000 (Model Item IDs)

Please answer the questions below using a scale of 1 to 5, with 1 indicating “Strongly Disagree,” 3 indicating “Neither Agree or Disagree,” and 5 indicating “Strongly Agree.”

#### **Time-based WF Conflict (Con1 – Con3)**

1. My work keeps me from my family activities more than I would like.
2. The time I must devote to my job keeps me from participating equally in household responsibilities and activities.
3. I have to miss family activities due to the amount of time I must spend on work responsibilities.

#### **Time-based FW Conflict (Con4 – Con6)**

4. The time I spend on family responsibilities often interfere with my work responsibilities.
5. The time I spend with my family often causes me not to spend time in activities at work that could be helpful to my career.
6. I have to miss work activities due to the amount of time I must spend on family responsibilities.

#### **Strain-based WF Conflict (Con7 – Con9)**

7. When I get home from work I am often too frazzled to participate in family activities/responsibilities.
8. I am often so emotionally drained when I get home from work that it prevents me from contributing to my family.
9. Due to all the pressures at work, sometimes when I come home I am too stressed to do the things I enjoy.

#### **Strain-based FW Conflict (Con10 – Con12)**

10. Due to stress at home, I am often preoccupied with family matters at work.
11. Because I am often stressed from family responsibilities, I have a hard time concentrating on my work.
12. Tension and anxiety from my family life often weakens my ability to do my job.

#### **Behavior-based WF Conflict (Con13 – Con15)**

13. The problem-solving behaviors I use in my job are not effective in resolving problems at home.
14. Behavior that is effective and necessary for me at work would be counterproductive at home.
15. The behaviors I perform that make me effective at work do not help me to be a better parent and spouse.

#### **Behavior-based FW Conflict (Con16 – Con18)**

16. The behaviors that work for me at home do not seem to be effective at work.
17. Behavior that is effective and necessary for me at home would be counterproductive at work.
18. The problem-solving behavior that works for me at home does not seem to be as useful at work.

## **Life Satisfaction Scale**

Spanier & Thompson, 1974 (Model Item IDs)

Please indicate your level of satisfaction with the statements below using a scale of 1 to 4, with 1 indicating “Not at all Satisfied,” 2 indicating “Somewhat Satisfied,” 3 indicating “Very Satisfied,” and 4 indicating “Extremely Satisfied.”

1. The work you do. (LS19)
2. Where you live. (LS20)
3. Your way of life. (LS21)
4. The things you do for enjoyment. (LS22)
5. Your health. (LS23)

## Appendix B

Table 13: Summary of Findings by Hypothesis

| Hypothesis                                                                                                                                                                                                                                                                                              | Finding             |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|
| <i>H1</i> : Work/life conflict is inversely related to, and predictive of, life satisfaction. Specifically, as individuals report greater levels of work/life conflict, they will also report lower levels of life satisfaction.                                                                        | Supported           |
| <i>H2a</i> : Work/life conflict is inversely related to the communication. Specifically, as individuals report greater levels of communication coping, they will also report lower levels of work/life conflict.                                                                                        | Supported           |
| <i>H2b</i> : Work/life conflict is inversely related to the problem solving. Specifically, as individuals report greater levels of problem-solving coping, they will also report lower levels of work/life conflict.                                                                                    | Supported           |
| <i>H3a</i> : Communication coping is positively related to life satisfaction. Specifically, as individuals report greater levels of communication coping, they will also report higher levels of life satisfaction.                                                                                     | Partially Supported |
| <i>H3b</i> : Problem solving coping is positively related to life satisfaction. Specifically, as individuals report greater levels of problem solving coping, they will also report higher levels of life satisfaction.                                                                                 | Supported           |
| <i>H4</i> : Communication partially mediates the relationship between work/life conflict and life satisfaction. Specifically, as individuals report greater levels of communication coping, they will also report higher levels of life satisfaction, even in instances of high work/life conflict.     | Not Supported       |
| <i>H5</i> : Problem solving partially mediates the relationship between work/life conflict and life satisfaction. Specifically, as individuals report greater levels of problem-solving coping, they will also report higher levels of life satisfaction, even in instances of high work/life conflict. | Supported           |

## **Vita**

Heather Senseney McMillan grew up in Knoxville, Tennessee where she graduated from South-Doyle High School. In 1998, she graduated Magna Cum Laude with a Bachelors of Business Administration degree in Human Resource Management from East Tennessee State University in Johnson City, TN. After working for one year with the Tennessee Welfare to Work Program and two and a half years as a Compensation and Benefits Coordinator for Frontier Health in Gray, TN, she attended the Masters of Business Administration Program, also at East Tennessee State University. She received certification as a Professional in Human Resources Certification from the Society for Human Resource Management (SHRM) in 2000 and her MBA from ETSU in 2002. After receiving her MBA, she worked as Human Resource Manager for HealthSouth Rehabilitation Hospital in Kingsport, TN. During this time, she also taught as an adjunct in the Department of Management and Marketing at ETSU.

She began working on her doctoral degree in Management at the University of Tennessee – Knoxville in 2005. While completing her degree, she worked as a member of the Assessment Team for Tennessee Assessment Center, and as Conference Coordinator for the Academy of Human Resource Development. She received the Scholarly Activities Research Grant from the University of Tennessee in 2007. In 2008 she was awarded the Chancellor's Citation for Excellence in Professional Promise from The University of Tennessee. She completed her doctoral degree in May, 2011.

McMillan is currently an Assistant Professor of Management at Southeast Missouri State University in Cape Girardeau, MO. She has been published in Journal of Leadership and Organizational Development, Human Resource Development Quarterly, Human Resource

Development Review, Performance Improvement Quarterly, as well as writing chapters for The Praeger Handbook of Human Resource Management. She has presented her work at Southern Management Association, Marketing Management Association, National Council on Family Relations, and Academy of Human Resource Development, where she has received the “Cutting Edge” award in 2009 and 2010.

McMillan is the daughter of Wayne and Connie Senseney of Franklin, TN. She married Brian, an advertising professional (and her favorite copy editor) in 1998. They have a wonderful and precocious son, Ethan....appropriately born on April Fool’s Day in 2004.