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The Role of Personality and Coping in Work-family Conflict: New Directions

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The Role of Personality and Coping in Work-Family Conflict: New Directions

by

Jeanine K. Andreassi

A dissertation submitted to the Graduate Faculty in Business in partial fulfillment
of the requirements for the degree of Doctor of Philosophy,

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in satisfaction of the dissertation requirement for the degree of Doctor of Philosophy.

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Abstract
THE ROLE OF PERSONALITY AND COPING IN WORK-FAMILY
CONFLICT: NEW DIRECTIONS

By

Jeanine Karin Andreassi

Advisor: Professor Abraham Korman

The purpose of this study was to understand the role of coping and personality in the experience of work-family conflict. The research on coping and work-family conflict is limited and to my knowledge, no study has examined coping as a possible mediator of the relationship between personality and work-family conflict. The sample consisted of 291 employees from diverse industries. As expected, neuroticism was related to higher levels of family-to-work conflict (FIW), work-to-family conflict (WIF), strain-based work-family conflict (SWFC) and time-based work-family conflict (TWFC). In partial support of hypotheses, an internal locus of control was negatively related to SWFC and FIW (and was not related to TWFC and WIF). Contrary to expectations, extraversion was unrelated to the four outcome measures. The hypothesis that active coping would be related to lower levels of work-family conflict was not supported. However, as expected, passive coping was related to higher levels of all four outcome measure (SWFC, TWFC, WIF and FIW). Neuroticism was related to higher levels of SWFC and FIW through increased levels of passive coping. None of the other mediating tests were significant (i.e., for locus of control or extraversion). Finally, it was hypothesized that the

adaptiveness of coping mechanisms would differ depending on the circumstances (e.g., degree of control) and for whom (e.g., personality characteristics) a coping strategy was used. In this study, none of the moderators were found to be significant (the interaction between coping choice and perceived controllability of the situation, as well as the interaction between personality and coping choice). The theoretical and practical implications are presented in the discussion section.

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Chapter 1: Introduction

The 2003 census shows that of 76.2 million families in the United States, 57.7 million (76%) consisted of married couples and of those, 35.1 million (61%) were dual-earner couples (http://ferret.bls.census.gov/macro/032004/faminc/new01_000.htm). The large number of dual career households has made work-family conflict an important issue in the workforce. Its centrality is reflected by a “google” search, which yielded 3.2 million hits for the search term “managing work and family”.

When researchers study work-family issues, the focus is generally on either 1) what the company can do, in terms of policies or practices, to help its employees balance work and family (e.g., Allen, 2001; Thompson, Beauvais & Lyness, 1999; Frone, Yardley & Markel, 1997) or 2) the situational characteristics in the workplace that affect the demands on the employee, such as role conflict, role ambiguity, role overload, family demands and work demands (e.g., Major, Klein & Erhart, 2002; Frone, Russell & Cooper, 1992; Gutek, Searle & Klepa, 1991). The research emphasis in the past underscores the notion that the organization is the source of conflict in individuals. Indeed, the organization does contribute to work-family conflict, but it does not explain the full story.

What is missing is an understanding of the role of individual factors in the experience of work-family conflict. After all, it is well established that individuals can respond to exactly the same situation in different ways (Cooper, Dewe & O’Driscoll, 2000). Why would this not apply to two people within an organization facing similar work and family demands? It seems likely that, all else equal, some individuals have

certain personality characteristics and styles of coping that enable them to balance work and family more effectively than others. A recent newspaper article on workplace stress illustrates the very different reactions two different people may have to the same environmental stressors: “For Michael Jones, an architect at a top-tier firm in New York, juggling multiple projects and running on four hours of sleep is business as usual ... [he] has adjusted ... to a rapid pace ... that leads his colleagues to ‘blow up’ from time to time” (O’Connor, New York Times, 9/10/2004). The notion that Michael Jones thrives on the rapid pace of his work environment while his colleagues burn out emphasizes the importance of individual differences in the workplace.

Definitions and Contributions of the Current Research

Recent research has attempted to fill a gap in our understanding of how individual differences relate to work-family outcomes (i.e., work-family conflict or work-family facilitation; Bruck & Allen, 2003; Burke, 1988; Carlson, 1999; Grzywacz & Marks, 2000; Stoeva, Chiu & Greenhaus, 2002; Wayne, Musisca & Fleeson, 2004). Work-family conflict (WFC) refers to the existence of pressures from both work and family, which occur at the same time and are incompatible in some way (Greenhaus & Beutell, 1985). Meanwhile, work-family facilitation (WFF) refers to “the extent to which individuals’ participation in one life domain (e.g., *work*) is made easier by the skills, experiences, and opportunities gained by their participating in another domain (e.g., *family*; Grzywacz & Butler, 2005).

In this research, only work-family conflict was examined. Work-family conflict can be broken out into types. **Time-based** conflict refers to less time available in one sphere because of experiences in the other, **strain-based** conflict indicates less strain in

one field because of experiences in the other and **behavior-based** conflict refers to a difference in behavior displayed in one domain because of activities in the other domain (Greenhaus & Beutell, 1985). Research has demonstrated that work-family conflict is bi-directional, with **work-to-family conflict** (WIF) referring to the degree to which work experiences affect the home sphere and **family-to-work conflict** (FIW) reflecting the extent to which home experiences spillover into the family domain (Frone, Russell, & Cooper, 1992). In this study, both directions and the forms strain-based and time-based work-family conflict were examined.

The relationship between personality and work-family conflict is still in the early stages of exploration, and there is much left to understand. First of all, there are personality variables that have not yet been researched. For instance, although locus of control is extensively implicated in the experience of stress (e.g., Anderson, 1977; Brookings, Bolton, Brown & McEvoy, 1985; Siu, Lu & Cooper, 1999; Szilagyi, Sims & Keller, 1976), it has not been examined with respect to work-family outcomes. The current research examined the possible role of locus of control in the experience of work-family conflict.

This research was also designed to examine the mechanism through which three personality variables (internal locus of control, extraversion and neuroticism) affected work – family outcomes. It is possible that coping is such a mechanism, because personality is related to coping choice (e.g., Bolger & Zuckerman, 1995; Endler & Parker, 1990; Martin, 1989; McCrae & Costa, 1986; Parkes, 1986; Penley & Tomaka, 2002; Watson & Hubbard, 1996), which, in turn, is related to the adaptiveness of outcomes (e.g., Brown, Mulhern & Joseph, 2002; Coyne & Racioppo, 2000; Ingledew et

al., 1997; McCrae & Costa, 1986; Petrosky & Brikimer, 1991). In the context of work-family, it is expected that the degree to which coping is effective will be related to an individual experiencing lower or higher levels of work-family conflict.

Not only will the work-family field benefit from understanding whether coping is one of the processes through which personality affects work-family outcomes, it will also benefit from a greater understanding of the role that coping has on work-family outcomes. Coping is a variable that is studied extensively in the stress literature, but has surprisingly been ignored in the work-family area. Eby, Casper, Lockwood, Bordeaux and Brinley (2005), indicated in a review of the field, that coping is one of the three least commonly studied predictors for work-family outcomes, representing less than 1% of work-family studies (Eby et al., 2005).

Finally, although some coping mechanisms are typically “adaptive” and others “maladaptive” in terms of outcome, the adaptiveness can differ depending on the circumstances (e.g., degree of control) and for whom (e.g., personality characteristics) a coping strategy is used (Zeidner & Saklofske, 1996). In this study, the interaction between coping choice and perceived controllability of the situation, as well as the interaction between personality and coping choice was examined.

Introducing a new personality variable (locus of control), researching coping as a possible mechanism through which personality affects work-family conflict, and examining the adaptiveness of coping mechanisms, taking into consideration the interactions with personality and controllability of the situation, will help identify the coping behaviors and the circumstances under which work-family conflict can be reduced. This has important implications because coping is a skill, which research has

demonstrated, can be taught (Coyne & Racioppo, 2000; Schwartz, 1999). Therefore, the information gained from the present research could help design techniques for teaching coping behavior, tailored at the individual level.

Personality and Work-Family Conflict

The first objective of the research was to examine the relationship between three personality variables (locus of control, neuroticism and extraversion) and work-family conflict. Extraversion and neuroticism were examined because they are most related to work-family outcomes and coping behaviors. Those who are high on **Extraversion** typically have good social skills, numerous friendships, enterprising vocational interests and participate in sports and clubs (Costa & McCrae, 1999). Extraversion has been related to higher levels of work-family facilitation, in both directions (Grzywacz & Marks, 2000; Wayne et al., 2004) as well as lower levels of work-to-family conflict (Grzywacz & Marks, 2000) and lower levels of family-to-work conflict (Grzywacz & Marks, 2000; females only). Individuals high on **Neuroticism** typically have low self-esteem; have irrational perfectionist beliefs and pessimistic attitudes (Costa & McCrae, 1999). Neuroticism has been related to higher levels of work-family conflict in both directions (Wayne et al., 2004; Grzywacz & Marks, 2000) as well as lower levels of work-to-family facilitation (Wayne et al., 2004; Grzywacz & Marks, 2000; females only).

An individual with an **internal locus of control** perceives that events in his or her life are contingent upon his or her behavior or relatively permanent characteristics; whereas, an individual with an external locus of control believes that luck, chance, fate or powerful others control events (Rotter, 1966). Control perceptions have been found to be

an important element in the stress appraisal process, with higher levels of perceived control related to lower levels of strain (Judge et al., 1999; Ingledew et al., 1997).

Therefore, it is expected that it will be implicated in work-family outcomes.

Coping and Effectiveness

Coping Definitions

The second objective of the research was to examine coping as a possible mediator of the relationship between personality (locus of control, neuroticism and extraversion) and work-family conflict. Coping is defined as cognitive and behavioral efforts to manage external and/or internal demands that are perceived as exceeding one's resources (Folkman & Lazarus, 1991). Coping refers to an effort that is made in response to cognitive appraisal that a situation is taxing one's resources (e.g., a challenge, threat or loss), and is not necessarily a "successful" act. Also, coping can be either a behavior or directed at cognitions (Schwarzer & Schwarzer, 1996). In this study, two types of coping behaviors were examined: problem-focused and avoidance –focused coping. ***Problem-focused*** coping was defined as action oriented, with the stressful environment being acted upon with instrumental actions (e.g., talking to one's boss about changing a work schedule to part-time; Folkman & Lazarus, 1991). **Avoidance** coping consists of strategies (e.g., denial, distraction, repression) that focus attention away from either the source of stress or away from one's reactions to the stressor (Suls & Fletcher, 1985). These two coping strategies were chosen because problem-focused and avoidance are

most consistently related to positive and negative strain outcomes, respectively, in the stress field.

Personality, Coping Choice & Coping Effectiveness

As indicated previously, personality is related to coping choice and in the stress research, it is well established that coping styles differ in adaptiveness (Brown, Mulhern, & Joseph, 2002; Coyne & Racioppo, 2000; Ingledew, Hardy, & Cooper, 1997; McCrae & Costa, 1986; Petrosky & Brikimer, 1991; Zeidner & Saklofske, 1996). For instance, an internal locus of control has been linked to active, problem focused coping (e.g., directly attacking the source of the problem; Anderson, 1977; Ingledew et al., 1997; Petrosky & Birkimer, 1991) and an external locus of control has been associated with avoidance coping behaviors (e.g., going shopping to avoid problems; Ingledew et al., 1997; Brown et al., 2002; Petrosky & Birkimer, 1991). Furthermore, extraversion has been associated with more active, problem based types of coping and neuroticism has been tied to more passive types of coping, such as avoidance and emotion-based (Penley & Tomaka, 2002; Watson and Hubbard, 1996; Martin, 1989; Rim, 1987; McCrae & Costa, 1986; Parkes, 1986). Active, problem-focused styles are generally found to be more effective than passive, avoidance and emotion-focused styles (Menagham, 1982; McCrae & Costa, 1986; Felton, Revenson & Hinrichsen, 1984). Following this line of reasoning, different personalities are likely to be associated with different ways of coping with work and family demands, affecting the degree to which one experiences conflict in managing the two domains.

Interaction between Coping Choice and Perceived Controllability

Exploring the role of stressor controllability in the personality/coping/work-family conflict model was a third aim of the current research. Although there is some research on this interaction in the stress field, it is limited and to my knowledge, has not been applied to the work-family area. The controllability of a stressor can affect the degree to which a particular coping strategy is effective. For instance, studies have found that active coping styles are most adaptive in situations that are perceived as controllable and passive styles are most adaptive when the situation is perceived as uncontrollable (Compas, Malcarne & Fondacaro, 1988; Forsythe & Compas, 1987; Vitaliano et al., 1990). This research suggests a “goodness of fit” between coping style and controllability with active styles most beneficial and passive strategies least adaptive when a situation is controllable (i.e., the active based strategy can be carried out in a controllable environment). Meanwhile, when a situation is uncontrollable, the normally adaptive active coping style may be maladaptive because one is attempting to change the source of the stressor when in fact it cannot be altered. This could lead to greater frustration and strain than if a passive style of coping is used in the same uncontrollable situation. Therefore, it is expected that coping style will interact with the degree to which one perceives control over the work and family domain such that active coping styles will be more effective and passive coping styles more detrimental as the situation increases in perceived controllability.

Interaction between Personality and Coping Choice

This study also examined the effects of a possible interaction between personality and coping choice on work-family conflict. Aside from direct relationships between personality and work-family conflict, there is some support for the notion that personality

and coping style interact in predicting strain (Strentz & Auerbach, 1988; Jex et al., 2001). Although active coping is generally an effective mechanism, its effectiveness may depend on personality. If this is the case, coping strategies would need to be taught to individuals, with personal differences in mind. This will be the fourth and final purpose of this research. Strentz and Auerbach (1988) found that individuals high on external locus of control experienced lower levels of strain when they were provided emotion – focused coping training. It is possible that externals are uncomfortable and consequently less effective when they employ methods that act on the world around them (i.e., active coping) because this is not congruent with their perception that events in life are outside their control. Bolger and Zuckerman (1995) tested a personality/stress framework model in a 14-day diary study of 94 students. They measured neuroticism, interpersonal conflicts, coping and distress. They found that high and low neuroticism participants differed both in their choice of coping strategy used and in the effectiveness of the efforts. When self-control coping was used [(efforts to regulate feelings (e. g., "I tried to keep my feelings to myself,") and actions (e. g., "I tried not to act too hastily or follow my first hunch"; Folkman, Lazarus, Dunkel - Schetter, DeLongis & Gruen, 1986)], high neuroticism participants had greater levels of depression the following day and low neuroticism participant had lower levels of depression the next day. And, when escape-avoidance was used as a coping strategy, high neuroticism participants had no change in depression scores the next day, whereas low neuroticism participants displayed higher subsequent levels of depression. It should be noted that there were no significant interactions between neuroticism and coping style on anger. This supports the notion that

each strain outcome variable is distinct and that it would be beneficial to include work-family conflict as a separate outcome variable.

There have been indications of an interaction between external locus of control, neuroticism and coping style choice (Strentz & Auerbach, 1988; Bolger & Zuckerman, 1995). It is possible that given the same level of active coping, individuals who are high on an internal locus of control are more skilled at active coping and are more effective using this style than individuals low on an internal locus of control. Furthermore, extraverts might be more effective at using active coping styles because of their tendency to perceive events in a positive manner (Costa & McCrae, 1980). These interactions will be explored as research questions due to the limited information on this relationship.

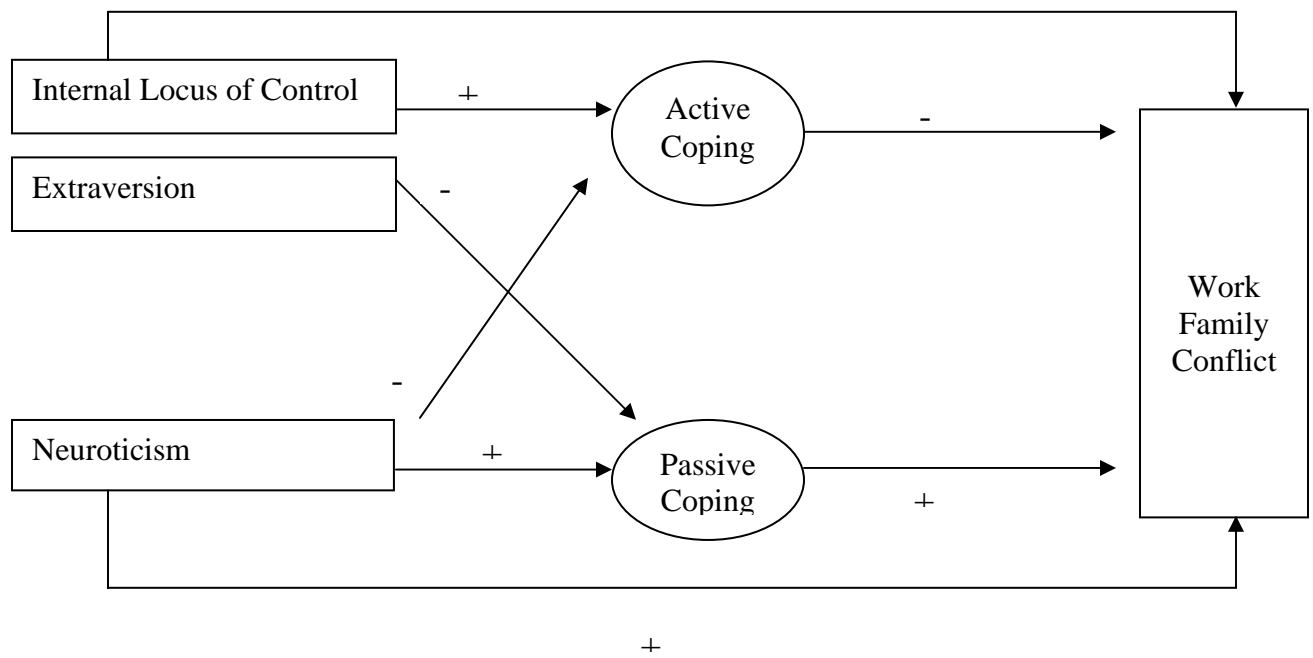
Conclusion

This research was designed to fill three important gaps in the current literature: 1) It will study the relationship between locus of control – a variable that has not been looked at with respect to work-family outcomes – and work-family conflict, 2) It will examine coping behaviors as a possible mediator and moderator of the relationship between personality and work-family conflict and 3) It will consider the role of perceived controllability on the relationship between coping style and work-family conflict. The proposed model linking personality, coping, control and work-family conflict appears in Figure I.

The contributions of this investigation to the field of work-family research are both theoretical and practical. First, expanding our knowledge about the personality factors that are related to work-family conflict will help to advance our understanding of

the individual dynamics that are involved in the work-family experience. Secondly, introducing coping as a possible mechanism through which personality affects work-family conflict and understanding the interaction between personality and coping style will add a more practical element because organizations can use this knowledge to design interventions focused around teaching individuals the coping skills that are more likely to assist in handling life's multiple demands. Finally, because individuals have varying degrees of control over work-family situations, it would be helpful to understand the role of perceived controllability on the effectiveness of coping style. Teaching coping skills has been demonstrated to be very effective in enhancing quality of life (Schwartz, 1999). That being said, the findings of this study should help individuals, organizations and society in general to understand the role that an individual's dispositions and coping behaviors play in balancing the conflicting demands of work and family.

Figure I. Proposed model to link personality, coping and work-family conflict.



Chapter 2: Literature Review

This review starts with a discussion of the construct work-family conflict, including a definition of what it is, and a summary of its antecedents. Next, the literature examining the relationship between personality and work-family conflict is discussed. Whereas the literature on the Big Five personality traits emphasizes past research, the construct locus of control is more theoretically developed. This is because of a lack of existing research on the relationship between this locus of control and work-family conflict. After personality is reviewed, research on personality and coping will be presented, followed by a consideration of which coping methods are more adaptive and under what circumstances. Finally, the review concludes with the research on coping and work-family conflict that has been conducted to date.

Work-Family Conflict

Definition of work-family conflict

Work-Family Conflict (WFC) is generally defined as conflict that arises from mutually incompatible pressures from both work and family (Greenhaus & Beutell, 1985). Whereas early research focused on work interfering with family (WIF), recent research has also focused on family interfering with work (FIW). Although these two constructs are reciprocally related, with one affecting the other (Frone, Russell & Cooper, 1992; Frone, Yardley & Markel, 1997), it has been found that work related stressors are more related to WIF and family stressors are more related to FIW (Vinokur, Pierce & Buck, 1999). This study will examine both directions of work-family conflict (WIF and FIW). Work-family conflict is important to study in organizations because it has been

related to organizational outcomes such as absenteeism (e.g., Thomas & Ganster, 1995), intention to leave (Burke, 1988) and low job satisfaction (e.g., Burke & Greenglass, 2001)

Antecedents of work-family conflict

There are many different factors that lead to the experience of work-family conflict, including dispositional, situational and organizational antecedents. Dispositional antecedents are reviewed in the next section.

Situational antecedents to work-family conflict include demographic variables. For instance, conflict levels tend to be higher among those with younger children (e.g., Frone et al., 1992), women (e.g., Gutek et al., 1991) and individuals with higher income (e.g., Durnin, 1996). Workplace characteristics that influence work-family conflict include the culture of the organization, the supportiveness of managers and peers and work-family benefits (e.g., daycare, flextime). A family friendly culture is related to decreased levels of work-family conflict (Allen, 2001; Friedman & Johnson, 1997; Thompson et al., 1999). Its importance is also emphasized by studies which have found that a supportive culture is related to an increased utilization rate of work-family benefits (Thompson et al., 1999; Allen, 2001). Also part of a supportive work-family culture, managerial support has been found to be a crucial element in reducing work-family conflict (Frone et al., 1997; Goff, Mount & Jamison, 1990; Friedman & Johnson, 1997). When managers are flexible in allowing their employees to adjust their schedule to meet family demands, it goes a long way towards increasing one's ability to balance work and family.

On a more basic level, characteristics of the job itself are related to work-family conflict. For example, longer hours increase levels of work-family conflict (Major et al., 2002), but flexible scheduling decreases work-family conflict through perceptions of increased control (Thomas & Ganster, 1995). The influence of benefit availability on the experience of work-family conflict is mixed, with some studies showing that benefit availability decreases work-family conflict (Thompson et al., 1999; Allen, 2001) and others showing no effect (Thomas & Ganster, 1995; Goff et al., 1990).

Finally, recent work has begun to examine the role of an individuals' personality traits as possible antecedents to work-family conflict. This research will be examined in the next section.

Personality and Work-Family Conflict

The Big Five Personality and Work-Family Conflict

The Big Five Constructs

McCrae & Costa (1998) explain the history of the development of the Big 5 factors as beginning in the 1930s, when factor analysis began to be used as a tool for summarizing the correlations among personality variables. This development paved the way for personality researchers to find a small number of broad personality traits. In particular, five factors were discovered (Neuroticism, Extraversion, Openness to Experience, Agreeableness and Conscientiousness) through factor analysis and were accordingly labeled based upon psychological constructs developed by personality theorists. It is argued that almost every aspect of personality can be classified as one of the five factors (Costa & McCrae, 1998). Costa and McCrae indicate that there is

substantial stability, validation, cross-cultural invariance and predictive utility of the five-factor model (see McCrae & Costa, 1999).

The structure of the Big Five is hierarchical, with each big five trait described by specific traits. These specific traits can be quite different from one another. For instance, conscientiousness includes characteristics such as dutiful, deliberate, self-disciplined and high in achievement striving (Costa & McCrae, 1998). There is often a tradeoff in research between using broad traits in order to determine basic relationships that exist and using the more specific subfactors of the Big Five Traits. For mainly practical reasons, this study will focus on the broader traits in order to determine basic relationships among personality, coping and work-family conflict. Examining all the subfactors at this time would produce a survey that is too long to administer. In addition, because this study is exploring new relationships, a broad analysis will help to determine if a more detailed focused is warranted.

McCrae and Costa (1999) have identified typical characteristics of each of the five factors. The two factors that are studied in this paper are neuroticism and extraversion. *Neurotics* typically have low self-esteem, have irrational perfectionist beliefs and pessimistic attitudes. Meanwhile, *extraverts* typically have good social skills, numerous friendships, enterprising vocational interests and participate in sports and clubs (McCrae & Costa, 1999). Neurotics would likely have higher levels of work-family conflict because they have a low self-esteem. In the stress appraisal process, this low self-esteem is likely to affect one's assessment of their ability to handle work and family demands, increasing the experience of work-family conflict. Extraverts would likely have lower levels of work-family conflict because they tend to be optimistic in their appraisals

of situations, which likely increases their confidence that they can handle the task at hand and subsequently leads to decreased levels of strain. The research findings on neuroticism and extraversion and the experience of work-family conflict will be presented in the following paragraphs.

Neuroticism

A neurotic individual has a basic tendency to feel sadness, hopelessness and guilt (McCrae & Costa, 1999). Basic characteristics include low self-esteem, irrational perfectionist beliefs and pessimistic attitudes. Bruck and Allen (2003) looked at the effect of the Big Five personality variables on the experience of work-family conflict, above and beyond the effect of negative affectivity (NA), Type A and control variables. The participants were students at a large university who also worked at least 20 hours a week and were either married, living with a partner or had at least one child or dependent at home. The dependent variables that were measured included both directions of work-family conflict – work interference with family (WIF) and family interference with work (FIW) and three forms of conflict (time, strain and behavior). In a hierarchical linear regression, control variables (marital status, gender, age, number children at home, hours worked/week) were entered in the first steps, followed by Type A and NA in the second step and the Big Five last. Separate regressions were conducted for each dependent variable. They found none of the beta weights in regression analysis for neuroticism significant, contrary to the hypothesized positive relationship. However, there was a statistically significant simple correlation between work-family conflict and neuroticism ($r=.26, p<.01$). The non-significant beta weight of neuroticism in the regression analysis was possibly the result of its correlation with negative affectivity, also a variable in the

regression. As mentioned in the introduction, because negative affectivity is a broad personality trait that encompasses neuroticism, it will be excluded from analysis in order to reduce the chances of multicollinearity (Watson and Clark, 1984).

The role of neuroticism in the experience of work-family conflict has been supported (Grzywacz and Marks, 2000; Wayne et al., 2004). Grzywacz and Marks (2000), who used data from a nationally representative and random sample of the National Survey of Midlife Development in the United States (N=1,986), found that a higher level of neuroticism was associated with more negative spillover between work and family (both WIF and FIW) for both men and women and less positive spillover between work and family (both WIF and FIW) for women only. Using the same database to investigate the relationship between each of the big five personality variables and conflict and positive spillover, Wayne et al. (2004) looked at the effect of the Big Five on work-family conflict (both WIF and FIW) as well as the relationship between the Big Five and work-family facilitation (both directions). Neuroticism was related to increased conflict between the work and family domains (both WIF and FIW) and was related only weakly to facilitation.

Extraversion

Someone who is high in extraversion has a preference for companionship and social stimulation (McCrae & Costa, 1999). Extraversion has mixed support for being related to the experience of work-family conflict. Stoeva et al. (2002) found no relationship between positive affectivity (a construct conceptually related to extraversion) and work-family conflict. Similarly, Bruck and Allen (2003) found no relationship between extraversion and work-family conflict. The beta weights for extraversion were

not significant for any of the three forms of work-family conflict (time, strain and behavior) or either direction (WIF, FIW). Bivariate correlations also revealed no relationship with overall WFC, WIF or FIW. Wayne et al. (2004) also did not find a relationship between extraversion and work-family conflict. However, they found that extraversion was related to greater work-family facilitation (both directions).

Grzywacz and Marks (2000) found support for the relationship. In particular, a higher level of extraversion was associated with less negative spillover (both WIF and FIW) and more positive spillover (both WIF and FIW). It seems likely that extraverts do experience less conflict because they are more likely to be sociable, increasing the social network available to them – an aspect that is crucial to managing stressful events. In addition, extraversion is conceptually related to positive affect, a trait that is related to perceiving events in a positive manner (Costa & McCrae, 1980). It is likely that individuals with a positive affect attract people to them, increasing social support. On a more fundamental level, it is possible that individuals high in positive affect perceive events in a more positive manner, decreasing the level of work-family conflict experienced.

Other Personality Variables

One of the objectives of this study was to examine whether there are other personality variables, besides the Big Five, NA and Type A that can help explain the variance in the experience of work-family conflict among individuals in organizations. It is proposed that locus of control can meaningfully explain some of the variance in work-family conflict.

Locus of Control

The Construct. Locus of control refers to the extent to which individuals believe that events in life are controlled by themselves (internal) or by outside forces (external). Rotter (1966) conceptualized the concept of locus of control as a stable personality trait, maintaining that all individuals have beliefs concerning the degree to which they have control over aspects of their lives. People with an internal sense of control believe that events in their lives are the consequence of their actions and characteristics, whereas people with an external locus of control believe that luck, chance, powerful others or fate determine life events (Rotter, 1966). The most widely used Locus of Control measure is a scale developed by Rotter (1966), which operationalizes Locus of Control as a unidimensional trait, with individuals varying along the dimension of internal to external locus of control. Levenson's (1974) research refuted Rotter's unidimensional definition, and instead, proposed a multidimensional measure. She argued that if an individual believes that their efforts lead to important outcomes (i.e., is high on internal locus of control), it doesn't preclude them from also believing that outside forces are responsible for outcomes (i.e., high external locus of control). Levenson also believed that combining the disparate components (e.g., powerful others, chance, fate) of the external locus of control construct resulted in a loss of important distinctions among its subfacets. The Levenson (1974) scale, instead, breaks external locus of control into two different aspects – belief that chance controls life events versus the belief that powerful others have control (Levenson, 1974). The Rotter (1966) scale has been criticized for its unidimensionality as well as the complications that arise from its forced choice format. According to Lefcourt (1966), although it is widely criticized, it is useful in exploratory research on the locus of

control construct. Levenson has provided extensive validity evidence which substantiates its use in exploratory research (Lefcourt, 1966)

Research has shown that a high internal locus of control is related to low levels of strain, where strain is defined as psychological, behavioral and physical distress. There are several mechanisms through which locus of control is proposed to effect strain. Each of these mechanisms will be discussed.

Research on Locus of Control and Stress

Locus of control directly affects the perception of stressors. In the stress process, stressor (e.g., role conflict, role ambiguity, or role overload) refers to anything that causes one to experience strain (psychological, behavioral or physiological symptoms).

Researchers have suggested that locus of control may buffer the effects of stressors because internals perceive themselves as having more control over events, leading to less experienced strain (Averill, 1973; Cohen, 1980). Organ and Greene (1974) found that internals perceived less role ambiguity and higher levels of job satisfaction than externals. Szilagyi, Sims and Keller (1976) looked at the effect of locus of control on role conflict, role ambiguity, job satisfaction and job performance. Using two samples, a hospital and a manufacturing plant, they found that individuals with an internal locus of control had higher job satisfaction, higher job performance, and perceived less role conflict and role ambiguity than externals. Although an internal locus of control was significantly related to lower levels of role conflict and role ambiguity, the influence of locus of control was greater on the experience of role conflict. Similarly, Brookings et al. (1985) found that an internal locus of control was related to lower levels of job tension (which was operationalized as sources of job –related role conflict, ambiguity and

overload). Anderson (1977) longitudinally tested the hypothesis that locus of control influences performance through its effect on perceived stress and decision behaviors. In the study, which looked at victims of a flood disaster, individuals with an external locus of control were more likely to perceive higher stressors and use fewer task-oriented coping behaviors and more emotion –focused coping behavior. They suggested that internals use the more adaptive task-related coping mechanisms because they see a stronger relationship between their task behavior and goal accomplishment.

Locus of control directly affects the perception of strain. Studies have found that an internal locus of control is related to decreased perceptions of strain. In a meta-analysis by Spector (1986), there was a significant correlation between locus of control and job strains (job dissatisfaction, symptoms and emotional distress). This finding has also been replicated cross-culturally. In a study of Hong Kong and Korean managers, those managers who had an internal locus of control experienced less strain (higher job satisfaction, better mental health and physical well-being and less quitting intention) than those who had an external locus of control (Siu, Lu & Cooper, 1999).

Locus of control: Indirect relationships. Aside from a direct relationship between locus of control and the perception of strain, research has also supported the notion that control perceptions may affect the experience of stress through **coping** mechanisms. This relationship will be discussed in the section on locus of control and coping. Research has also suggested that locus of control may **moderate** the relationship between the stressors an individual confronts and the experience of strain. For instance, in a theoretical discussion on whether distress and disease are inevitable among professional women,

Nelson and Quick (1985) proposed that locus of control, along with self-confidence, mentoring and self-awareness might moderate the stressor-strain relationship.

Locus of Control and Work-Family Conflict

Only one study to date (Noor, 2002) has examined the effect of locus of control on the experience of work family conflict. She found that the higher an individual was on a measure of interpersonal control, the less work-family conflict he or she experienced. However, the study operationalized locus of control as a 10-item interpersonal control scale, rather than a general internal/external locus of control scale. One of the items in the scale “I have no trouble making and keeping friends” seems to suggest that it measured extraversion and not locus of control. Therefore, there have been no studies to date that look at the relationship between locus of control and work-family conflict, that uses the definition of locus of control as we understand it (e.g., through Rotter’s definition). In addition, the study only examined married women, limiting the generalizability of the study. The present study will extend previous research by examining the relationship with a mixed-gender sample.

The relationship between personality and work-family conflict has been reviewed. Next, a history of the coping construct will be presented along with a literature review on how personality variables are related to coping and how coping variables differ in terms of outcomes. Other aspects of coping such as how control over a situation effects coping choice and effectiveness will be discussed.

Coping: The Construct and History

According to Folkman and Lazarus, “coping consists of cognitive and behavioral efforts to manage specific external and/or internal demands that are appraised as taxing or exceeding the resources of the person” (Folkman & Lazarus, 1991, p. 210). Definitions of coping are not complete without a brief history of coping research because the context in which the research took place over the years has influenced its definition and conceptualization. Coping research has gone through several schools of research, beginning with an emphasis on stable traits, moving towards a more transactional perspective, only to come full circle to a more stable, dispositional approach.

Psychodynamic Perspective

In 1937, Freud indicated that coping was a defense mechanism, which included dissociation, repression and isolation. The researchers during this time focused on coping as relatively stable and consisting of some mechanisms that were adaptive and others that were non-adaptive (e.g., Goldstein, 1973). For instance, Vaillant (1977) proposed a model where coping mechanisms were arranged on a hierarchy from immature to mature, with mechanisms such as “humor” and “suppression” on the mature end, and “projection” and “passive aggression” on the immature end of the spectrum. This early dispositional based approach lost its popularity in the 1960s, in part because at the time, personality was thought to be a poor predictor of behavior (Mischel, 1968).

Transactional approach

The new approach, which dominated coping research in the 1960s and 1970s, was the transactional approach. It was promoted by Folkman and Lazarus, who emphasized that coping was a transactional process, or exchange between the individual and their surroundings (Suls, David, & Harvey, 1996). They conceptualized coping as consisting

of two main types: emotion-focused and problem-focused. Whereas problem-focused coping is directly aimed at the source of one's experienced distress, emotion-focused coping is directed at managing emotions that arise from the stressor. According to this approach, cognitive appraisal of the situation, consisting of primary and secondary appraisals, affects coping style. In the primary appraisal stage, the person asks "What do I have at stake in this encounter?" and in the secondary appraisal, the individual is concerned with "What are my coping options and how will the environment respond to the action I take?" According to the model, the answer to the secondary appraisal influences the coping method used, with problem-focused coping used if the situation is perceived as changeable, and emotion-focused coping employed in situations deemed to be unchangeable (Folkman & Lazarus, 1991). For example, under the assumptions of this model, a mother who has a sick child, and her spouse is around, might actively solve the problem of back-up daycare by negotiating with her husband concerning who will stay home with the sick child. However, if her husband is away on business when the child is sick, and there is no-back up daycare, she might perceive this situation as uncontrollable. As a result, the individual might resort to emotion-focused coping such as blaming the spouse for not being around instead of working to actively solve the problem at hand.

Current Coping Research: Personality and Situation

The current research stream (1980s to the present), has revived the interest in personality and coping. It is very different from the coping research during the transactional era, which for the most part, ignored the role of dispositions in the coping process. According to Suls et al. (1996), there are several reasons for the renewed interest in the role of dispositions in the coping process. First is the growing belief that

personality has a strong relationship with behavior. In particular, Kenrick and Funder (1988) found a .30 between personality and specific behaviors (Suls et al., 1996).

Another reason for the renewed interest in personality in the coping process was the development of the Big Five by Costa and McCrae in 1985, which enabled a more comprehensive study of the role of personality in coping (Suls et al., 1996). As a result of these developments, current research focuses on the role of both the situation and the individual in the coping process. As aptly noted by Costa, Sommerfield and McCrae, 1996, p. 47, “for some hardy individuals, all life’s problems are taken in stride; for very vulnerable individuals, even minor disturbances of daily routine can be traumatic.”

Literature on 1) coping as a dispositional trait and 2) the relationship between the Big Five personality traits and coping styles will be reviewed next.

Coping as a Dispositional Trait

One of the longstanding debates about coping, as discussed earlier, involves the degree to which coping is 1) situation dependent or 2) consistent across situations and more dependent on personality.

In support with the transactional approach of coping, which dominated the period, 1960s - 1970s, which emphasized that coping involved an exchange between the individual and their surroundings, some research has supported the notion that coping is situation dependent. For instance, Folkman and Lazarus (1980) conducted a longitudinal, 12-month study on occupational stress, coping and emotions. Each participant coded, on average, the coping style used for 15 different stressful episodes. Consistency in coping pattern was calculated as the proportion of coping style repetitions within each person.

The proportions ranged from .073 to 1.00, with a mean of .265. The authors concluded that there was more variability across situation than consistency.

There is also research which supports the newest conceptualization of coping as influenced by personality and hence demonstrating **consistency** across situations. For example, Amirikhan, Risinger and Swickert (1995) looked at the influence of extraversion, optimism and pessimism on coping. In a study of psychology students at a southern university, each student was randomly assigned to one of four stressor conditions. They were asked to describe a personal problem within the last six months and to indicate how they coped with it. Individuals high on extraversion and optimism were significantly more likely to seek support and less likely to use avoidance types of coping. Conversely, those who scored high on pessimism used less problem solving and more avoidance types of coping. The type of situation, or stressor type, did not produce meaningful changes in the degree to which personality was related to coping mechanisms. This suggests that coping is relatively stable, and dispositional in nature.

Cross-situational consistency was also found in a sample of children, who coped similarly regardless of whether they were faced with an academic or peer stressor (Causey & Dubow, 1992). Finally, Stone and Neale (1984), in a validation study of a daily diary coping measurement, asked married couples to keep a diary over 21 consecutive days indicating problems encountered and coping method used. In general, they found that when the same problem was encountered on multiple occasions, subjects were consistent in their coping style (Stone & Neale, 1984).

The current research approaches coping behaviors as influenced by personality and is supported by research that has found significant relationships between personality and coping behaviors. This research is reviewed next.

Studies on Personality and Coping

According to Hewitt and Flett (1996), “it has been held that assessing the links between coping and particular personality variables may help to explain why certain personality factors are related to maladjustment or negative outcomes” (p. 410). There are, in general, three streams of research involving coping and personality. The first looks at coping as a mediator between personality and maladjustment. The second examines the independent effects of coping and personality on maladjustment. Finally, the third proposes that coping and personality interact to create maladjustment. Although there has been research on all three models, the majority of the research examines the mediating model (Hewitt & Flett, 1996). The current study will examine all three relationships. The research on coping and personality will be reviewed in order to formulate hypotheses about personality and coping relationships.

The Big Five and Coping

In a longitudinal study on aging (Baltimore Study of Aging), McCrae and Costa (1986) examined the influence of personality on coping and of coping on well-being. They examined the big three factors of personality (at the time, there were only three- Neuroticism, Extraversion and Openness to experience) on coping. They examined three types of stressors – threats, opportunities and challenges and 27 distinct mechanisms of coping (a scale created by adding items to the Folkamn & Lazarus (1980) ways of coping checklist; McCrae & Costa, 1984). Scores were computed by determining the proportion

of items checked off in each scale. Participants were asked to recall ways of coping they had used in dealing with a potentially stressful event. In Study 1 (154 men, 101 women), the investigator chose the type of stressor a priori. The participants were asked to indicate which coping strategies they used to cope with the three separate events (threat, opportunity and challenge). In study 2 (80 men, 71 women), subjects chose the stressors – one from each of the three categories. In study 2, a shorter coping checklist was used (only the 50 McCrae & Costa items) and perceived effectiveness of each method was assessed (“Did it help solve the problem?” and “Did it make you feel better?”). In both studies, Neuroticism was related to increased usage of hostile reaction, escapist fantasy, self-blame, sedation, withdrawal, wishful thinking, passivity and indecisiveness. Extraversion was correlated with rational action, positive thinking, substitution and restraint. Openness was related to use of humor in dealing with stress and turning to faith. The results were similar for both self-ratings of personality and either spouse or peer ratings. The authors concluded that of the big 5 traits, neuroticism and extraversion had the most consistent and largest relationships with different coping behaviors.

Parkes (1986), in a more complex study, looked at how personality (extraversion and neuroticism), environmental factors (social support and work demand), and situational characteristics (stressor type and its perceived importance) interacted to predict coping (general coping, direct coping, and suppression); person and situation factors were found to be most predictive of coping. The sample consisted of first year female nursing students. Personality was measured before exposure to the nursing environment. Information about stressful episodes, their importance and coping (using The Ways of Coping Questionnaire) were obtained during the early stages of nursing

practice. Extraverts and individuals low in neuroticism responded most adaptively, using direct coping methods. There was an interesting interaction between neuroticism and work demand. While low neurotics showed an inverted-U relationship between work demand and direct coping, with the highest level of direct coping at a moderate level of work demand, high neurotics had consistently low levels of direct coping, regardless of the level of work demand (Parkes, 1986). It is this author's contention that the high demand condition was uncontrollable, and research has shown that direct coping is effective only when the situation is controllable. There was also an interaction between neuroticism and suppression; low neurotic subjects reported high levels of suppression under high demand situations and high neurotic subjects reported low levels of suppression under high demand situations. The authors reported that under high demands, it was adaptive to use suppression of distressing thoughts in order to focus on the task at hand. In both situations, the neurotic subjects displayed less adaptive patterns of coping (Parkes, 1986). Similar to Parkes (1986), Rim (1987), in a sample of graduate students, found that extraversion predicted active and direct coping and neuroticism was related to more passive and avoidant styles.

Martin (1989) looked at the relationship between personality and coping in myocardial infarction survivors. Patients filled out scales measuring active coping (self reflection, achievement-related behavior and revision of expectancies), passive coping (denial, evasive reaction and depressive reaction), extraversion (warmth, boldness, impulsivity and assertiveness) and anxiety (suspiciousness, insecurity and tension). As expected, extraversion was found to positively related to active coping but contrary to expectations, anxiety was not related to passive coping behavior (Martin, 1989).

Endler and Parker (1990), in their construction and validation of a multidimensional coping inventory (MCI) found correlations between coping measures and personality. Undergraduates (73% female) were asked to complete the Coping scale as well as measures of extraversion and neuroticism (Eysenck Personality Questionnaire). The coping scale consisted of three types of coping: emotion, task (similar to problem-focused) and avoidance. Note that Endler and Parker (1995) added the new “avoidance” coping dimension. Examples of avoidance items include “Treat myself to a favorite food or snack, visit a friend, see a movie, spend time with a special person and take time off and get away from the situation” (Endler & Parker, 1990). For both men and women, neuroticism was strongly and positively related to emotion-focused coping. However, the use of avoidance and task oriented coping differed by gender; men high in neuroticism were more likely to use avoidance-oriented coping and females high in neuroticism less likely to use task-oriented coping. Neuroticism was unrelated to usage of task-oriented coping for men and unrelated to avoidance-oriented coping for women. It should be noted that although the males and females high in neuroticism responded in a different manner, both groups used coping styles that were maladaptive (i.e., using less of the adaptive task oriented styles and using more of the maladaptive avoidance behaviors). Extraversion was only positively related to task oriented coping in the female sample (Endler & Parker, 1990). It is this researcher’s contention that the predominantly female sample limited the power to find a relationship that existed within the male sample. As mentioned previously, the current study will obtain a balanced gender sample.

Watson and Hubbard (1996) used two personality inventories: the NEO Five factor inventory (Costa & McCrae, 1992) and the Big Five Inventory (John, Donahue &

Kentle, 1991) in studying the effect of personality on 14 types of coping among undergraduate students. Watson and Hubbard (1996) examined the correlations between each coping variable and the Big Five. Additionally, regression analysis was used to see how much each personality factor uniquely explained coping behavior. Of all the personality variables, Neuroticism and conscientiousness were most related to coping. Neuroticism explained 40% shared variance in coping style and was significantly related to 11 of the 14 coping styles. Neuroticism was most related to “focus on and venting of emotions” ($r = .44$), followed by mental disengagement ($r = .39$), behavioral disengagement ($r = .36$), and denial ($r = .34$). Positive reinterpretation and growth had the highest negative relationship with neuroticism ($r = -.26$). After neuroticism, conscientiousness explained the most variance (29%); It was significantly and positively associated with active coping ($r = .37$), planning ($r = .33$), and suppression of competing activities ($r = .29$). It was also significantly negatively related to passive forms of coping such as alcohol-drug disengagement ($r = -.34$), behavioral disengagement ($r = -.33$) and mental disengagement ($r = -.28$; Watson & Hubbard, 1996).

The other Big Five factors - Openness, Extraversion and Agreeableness - explained less but still added significantly to explaining variation in coping style usage, with an approximate shared variance of 21% (Watson & Hubbard, 1996). In general, extraverts sought social support (consistent with extraverts being sociable) and were positive in their coping style (consistent with extraverts having a positive affect). For instance, extraversion was positively and significantly related to positive reinterpretation and growth ($r = .33$), seeking emotional ($r = .31$) and instrumental ($r = .27$) social support and negatively and significantly related to behavioral disengagement ($r = -.11$). Openness to

experience was most related to a greater propensity to plan ($r=.28$) and positive reinterpretation and growth ($r=.25$) and a decreased tendency to turn to religion ($r=-.19$). Finally, agreeable individuals, in general, were more likely to use positive reinterpretation and growth (.26) and planning (.21).

Penley and Tomaka (2002) examined the relationship between McCrae & Costa's Big Five and stress as well as coping processes among university undergraduates. The participants completed an abbreviated version of the NEO-PI before presenting a speech to an audience, which consisted of one person in the laboratory. The speech was in response to the statement: "the level of bilingualism in America is reaching dangerous levels." Before the speech was given, the participants completed measures of anticipated situational demand (e.g., "how demanding do you expect the upcoming task to be?") and perceived coping ability (e.g., "how able are you to cope with this task?"). After the speeches, the participants were asked to report their emotional reactions (overall distress and positive versus negative emotions experienced) and the coping strategies used during the speech (48-item questionnaire based on Carver, Scheier and Weintraub's (1989) Cope Questionnaire). The factors included social support seeking, active coping (e.g., focus on performance), defensive coping (e.g., not thinking about it, denial), emotional regulation (e.g., focus on managing nerves) and passive endurance (e.g., waiting for time to pass). Task performance was rated by two independent judges. Penley and Tomaka (2002) found that neuroticism was significantly and positively related to defensive and emotional regulation coping styles. Surprisingly, extraversion was not significantly related to any of the coping styles. Both openness to experience and conscientiousness were related to more active coping. Agreeableness was related to higher levels of social

support seeking and passive endurance, a finding that contradicted Watson and Hubbard's (1996) study (agreeable individual used active types of coping). The relationship between openness and coping was surprising to the researchers, who claimed that the nature of the laboratory study may have biased the results; those who are more in favor of bilingualism may be higher on openness, making it easier for them to engage in coping such as focusing on the task (Penley & Tomaka, 2002). This researcher believes it is possible that there is, indeed, a relationship between openness and active coping; Watson and Hubbard (1996) found that people high in openness had a greater propensity to plan, which is a component of problem-focused coping. Extraversion was not related to coping and may have resulted from a lack of social resources to draw upon in the laboratory, and the short duration of the study (Penley & Tomaka, 2002).

Finally, Bolger and Zuckerman (1995) found that participants who were high in neuroticism were more likely to engage in planful problem solving, self-control, seek social support and use escape avoidance than did low neuroticism students. This author notes that is surprising that people high in neuroticism were more likely than those low in neuroticism to use planful problem solving because this is an active method that is used more often by individuals who are low on neuroticism.

Locus of Control and Coping

Previously the role of locus of control in the stress process was explained. One of the reasons hypothesized for the association between an internal locus of control and less strain is its relationship with effective coping methods. Research indicates that an internal locus of control is associated with more effective ways of coping. As an example, Judge et al. (1999) examined whether managerial coping with organizational change (reactance

to change and leading change) was influenced by dispositional traits – internal locus of control, generalized self-efficacy, self-esteem, positive affectivity, openness to experience, tolerance for ambiguity, and risk aversion – in six organizations. An internal locus of control was correlated positively and significantly ($r = .37$) with a self-reported ability to cope with organizational change (Judge et al., 1999).

Ingledeu, Hardy and Cooper (1997) studied the role of personal resources (locus of control & perceived social support) in the stress process in a 2 year longitudinal study among a sample of psychiatric workers facing a shutdown of their workplace. Their locus of control items are questionable as a dispositional locus of control measure because they used Paulhus and Christie's Spheres of Control instrument to assess personal efficacy, interpersonal control and sociopolitical control. Ingledeu et al (1997) mentioned a suggestion by Paulus and Van Selst (1990) that the scales may actually be measuring self-efficacy. With the knowledge that the measure of control they used is not locus of control but a related construct, the degree of applicability to the current research is questionable. Nevertheless, their findings were similar to other research. In particular, an internal orientation increased problem-focused coping, and there was support for the role of an external locus of control on avoidance coping. Although there was no direct effect of resources on coping, they did find an interaction effect; that is, as stressors increased, avoidance coping increased more for those who were lower on an internal locus of control than those who were higher on an internal locus of control. They did not find support for their mediation hypothesis that resources (locus of control and social support) influenced well-being through their effect on coping.

In contrast to the Ingledew et al. (1997) finding that coping did not mediate the relationship between locus of control and psychological distress, Brown, Mulhern and Joseph (2002) found a mediator role for coping. In their study, they looked at the role of coping in relation to distress among firefighters in Northern Ireland who responded to terrorism related activities. They split the sample into those firefighters who experienced a number of stressful incidents higher than the median and those that fell equal to or lower than the median. Avoidance coping mediated the relationship between locus of control and psychological distress in both the high and low stressor conditions, with an external locus of control related to greater avoidance coping and more psychological distress. In fact, most of the variance in psychological distress in the study was explained by avoidance coping. Task and emotion-focused coping did not mediate the relationship between locus of control and psychological distress (Brown et al., 2002).

Petrosky and Birkimer (1991) examined the relationship among coping, locus of control and symptoms in a sample of undergraduate students, controlling for demographic variables. Participants were asked to write about a stressful encounter in the last 6 months, indicate the degree to which it was controllable and fill out the ways of coping checklist (Folkman & Lazarus, 1980) to convey how they coped. There were two types of coping – problem focused and suppression (Petrosky & Birkimer, 1991). The suppression scale appeared similar to avoidance coping since it captured avoiding the situation instead of managing either emotions or tackling the problem. Regression analysis revealed that age, control over the situation and an internal locus of control were each positively and significantly related to direct coping. Conversely, an external locus of control was related positively to suppression (or avoidance) and negatively to direct

coping. There were no significant relationships between powerful others locus of control and either coping measure (Petrosky & Birkimer, 1991).

Other research has specifically examined locus of control and accessing social support as ways of coping. Sandler and Lakey (1982) hypothesized that internals would make better use of social support than externals and would hence experience the stress buffering effects of support more than externals. They reported that the stress buffering effect of social support was found for only those with an internal locus of control. Similarly, Rimmerman (1991) found that mothers with an internal locus of control were more likely to experience adaptive family functioning and access social supports more effectively than mothers who did not believe they had control over situations. Similarly, in a nursing setting, Boey (1999) found that distressed nurses had high levels of stress and low mental health and the stress resistant nurses had high levels of stress and high mental health. Also, stress-resistant nurses had a significantly higher internal locus of control than distressed nurses.

The research reviewed above on personality and coping has demonstrated that there are relationship between personality variables and coping styles. This is important in understanding work-family outcomes, because some personality variables are more effective than others. The research on the effectiveness of coping methods is reviewed next.

Effectiveness of Coping Methods

In the field of stress research, the amount of variance predicted in distress was generally less than 10% and individuals showed a wide range of responses to stressors (Cohen & Edwards, 1988). Because many people seemed unaffected by stressors and

others were debilitated by it, researchers began to examine coping as a moderating factor in the stress – illness relationship (Holahan, Moos & Schaefer, 1996). The definition of coping as “cognitive and behavioral efforts to manage specific external and/or internal demands” (Lazarus & Folkman, 1991, pg. 210), reflects the role of coping in helping individuals adapt to stressful encounters. Research has been conducted in order to try to understand the mechanisms, which lead to adaptive versus maladaptive outcomes, in an attempt to gain information useful for stress intervention.

Active coping is generally highly effective in stress reduction because it provides a sense of mastery over the stressor, and diverts one’s attention away from the problem. The research on the adaptiveness of avoidance coping is mixed, but appears to be due to the timeframe involved, with avoidance coping maladaptive in dealing with long-term stressors but adaptive when handling short-term ones (e.g., noise, uncomfortable medical procedures; Zeidner & Saklofske, 1996). Research is mixed with respect to emotion-focused coping as well, with some research supporting its maladaptiveness and other supporting an opposite pattern (Zeidner & Saklofske, 1996).

McCrae and Costa (1986) examined the effectiveness of coping mechanisms. They measured perceived effectiveness of each coping method (“Did it help solve the problem” and “Did it make you feel better”). The most effective coping responses, as judged by the participant’s responses to the two questions about success, included direct action, help seeking, expression of feelings, drawing strength from adversity, self-adaptation, faith and humor. The least effective included hostile reactions, indecisiveness, self-blame, wishful thinking, isolation of affect and passivity. With the exception of “isolation of affect,” all the ineffective coping mechanisms were positively associated

with neuroticism in both studies. Factor analysis revealed two factors: neurotic coping (ineffective methods) and mature coping (effective methods). Neurotic coping was negatively related and mature coping positively related to well being. The authors maintain that this result should be interpreted with caution because personality also affects well-being and coping and personality are so closely related (McCrae & Costa, 1986).

Ingledew et al. (1997) and Brown et al (2002) found similar results (both studies described in Locus of Control and Coping section); problem-focused and emotion-focused coping had beneficial effects on well-being and avoidance coping had detrimental effects on well-being. Coyne & Racioppo (2000) found that of three coping mechanisms (cognitive self-control, ineffective escapism and solace seeking), ineffective escapism, a construct conceptually similar to avoidance coping, was most strongly related to both current and future depression. Petrosky and Brikimer (1991) found that direct coping was related to higher levels of well-being (especially lower depression scores) but that suppression (conceptually related to avoidance coping) was unrelated to psychological symptoms measures.

Some research findings that look at both active and passive coping find that only one type of coping is related to the outcome measures in the study. For instance, Bellizzi and Blank (2006), in a study that looked at the relationship between coping (active and passive) on positive outcomes (i.e., relationships, appreciation of life, and personal strength) found that active coping was related to higher levels of the positive outcomes, but that passive coping was unrelated to the negative outcomes. Opposite to this finding, Mercado (2005) found in a sample of individuals with neck or back pain, that individuals

who used moderate to high levels of passive coping were five times more likely to develop disabling pain after 6-12 months than those who used low levels of passive coping. Active coping was not associated with a change in risk factor for developing chronic pain. It is possible that different outcome measures used affect whether one coping mechanism or several affect the outcome of interest.

Although some coping mechanisms are generally more effective than others in terms of adaptiveness in the stress process, situational characteristics can affect the degree to which they are effective. This research is reviewed next.

Controllability of Stressor

Control perceptions have found to influence the relationship between personal resources (e.g. personality and social support) and coping choice as well as the relationship between coping choice and adjustment outcomes. The literature related to each of these relationships will be explored in the following paragraphs.

Control moderates personal resources and coping choice. Valentiner, Holahan and Moos (1994) conducted a well-designed longitudinal study of 175 college students, using LISREL analysis to test a model integrating the relationships among family support (a personal resource), appraisals of event controllability and coping. They found that when events were perceived as controllable, active coping behaviors mediated the relationship between family support and positive adjustment. However, when events were perceived as uncontrollable, family support was directly related to changes in psychological adjustment, and active coping was not used (Valentiner, Holahan and Moos, 1994). Similarly, Terry (1994) found that a low level of neuroticism was related

to problem-focused coping only when the event was appraised as having some potential for control.

Control moderates coping choice and outcome adaptiveness. Vitaliano, DeWolfe, Maiuro, Russo and Katon (1990) found a weak relationship between the appraised controllability of the situation and coping styles used, but found a strong association between coping and the adaptiveness of outcomes. Specifically, they found that problem-focused coping was negatively related to depressed mood when the individual appraised the event as controllable but unrelated when the situation was appraised as unchangeable (Vitaliano et al., 1990). Similarly, in a study of adolescents, Compas, Malcarne, and Fondacaro (1988) found that the highest levels of behavioral problems under two conditions: 1) high degree of problem-focused coping where appraised control was low and 2) low degree of problem solving where appraised control was high. Forsythe and Compas (1987) in a sample of undergraduate students found that problem- focused coping and emotion-focused coping were associated with lower distress symptoms when events were perceived as controllable and uncontrollable, respectively. Strentz and Auerbach (1988) measured locus of control and experimentally manipulated exposure to different coping training (problem, emotion and control group) in a simulated abduction of airline personnel as part of an FBI training exercise on hostage confinement. They measured anxiety, clinical symptoms and independently observed dysfunctional behavior at various points of time during the 4 day captivity and afterwards. Subjects who received emotion-focused training reported the lowest anxiety and overall emotional distress levels and were rated as having the lowest levels of independently observed

behavioral disturbance during the four day hostage period (Strentz & Auerbach, 1988). It is this writer's opinion that this was due to the uncontrollable nature of the stressor.

The literature on controllability of stressors has found that control can moderate two relationships: 1) resources (e.g., personality) --> coping choice and 2) Coping choice --> adaptiveness. Because there appears to be more support for control moderating coping choice and adaptiveness (#2), the interaction between coping styles used and adaptiveness of outcomes will be examined. It is predicted that once an individual chooses a coping style, the degree of fit between the coping choice used and the perceived controllability of the situation will affect adjustment outcomes (Compas, Malcarne & Fondacaro, 1988; Forsythe & Compas, 1987; Vitaliano et al., 1990) as discussed below.

Coping and Work-Family Conflict

Research has consistently demonstrated that active coping behaviors are related positively and avoidance coping styles are related negatively to well-being (Brown et al., 2002; Inglede et al., 1997; McCrae & Costa, 1986). This research on coping and well-being has been extended to the work-family literature, but the studies are few.

The first study that looked at how coping style impacted the experience of conflict between work and family demands was by Hall (1972). Hall proposed 3 types of coping styles to handle the multiple demands of working parents. One, structural role definition, is similar to active coping in that the person is directly attacking the source of the problem. This coping style is defined as altering structurally imposed expectations held by others about the appropriate behavior of the individual in a situation. An example they give is an individual working out an arrangement with his or her boss to finish work at

3:00 in order to be at home when the children arrive home from school. What is interesting is that Hall (1972) indicated that this type of style “implies an internal rather than external locus of control” (Hall, 1972, pg. 474). This is consistent with the theories tested in this research.

The second type of coping mechanism that Hall (1972) proposed was “personal role redefinition” which consisted of changing one’s attitude toward one’s role expectations. This included setting priorities (e.g., putting sick children before dusting) and accepting that there will be role conflict. This dimension could also be considered active because setting priorities is similar to suppressing competing activities, which is an active, adaptive coping mechanism. However, although acceptance is generally considered adaptive, it is not an active coping mechanism. And, as Hall points out, when this style is used, the individual is accepting role expectations as unchangeable.

The third coping mechanism presented was “reactive role behavior” defined as attempting to increase role performance in order to meet the competing role demands. Hall indicated that this style was a passive orientation towards one’s roles and would likely lead to the most strain. It included behaviors such as “planning, scheduling and organizing, “no strategy” and “working harder”. The current researcher agrees with the placement of planning, scheduling and organizing in this category, because it is a way to increase role behavior. However, I disagree with combining negative (e.g., no strategy) and positive coping styles (e.g., planning) into one category. This is because coping consists of behaviors that are, by their nature, designed to help someone manage stressors in the environment (Cooper, Dewe & O’Driscoll, 2000). Due to this function, and the

importance of measuring if coping behaviors are successful, it is difficult to research the outcomes of this coping style when combining behaviors that are positive and negative.

In Hall's (1972) research in an all female sample, they looked at the relationship between coping style and satisfaction (satisfaction was measured as "Overall, how satisfied do you feel with the way you deal with your roles in life?"). The frequency of each of the three types of coping was computed within the high and low satisfaction groups. The first coping mechanism "structural redefinition" differentiated those who were high in satisfaction versus those low in satisfaction, with this coping mechanism related to high satisfaction. The reverse was found to be true for type 3 "reactive role behavior" with the usage of this coping style related to low satisfaction. It is this researcher's contention that this outcome was the result of "no strategy" and "working harder" being in this dimension and not from the component "planning, scheduling and organizing." An interesting outcome with respect to "reactive" coping which surprised Hall (1972) but supports the current research hypotheses was that this behavior was increasingly related to lower satisfaction as the number of roles decreased. This seems to support the notion that passive types of coping are more detrimental as the controllability of the situation increases.

Brink and de la Rey (2001), in a sample of female successful women (defined as middle management and higher), found that being organized and having a positive attitude were crucial in maintaining a balance between work and family. She broke the sample into two parts: those who experienced low strain (one standard deviation below the mean) and those who experienced high strain (one standard deviation above the mean). The participants were presented with a hypothetical work-family situation and

asked to answer questions about their coping style in reference to the situation. The scenario presented was about having an important and urgent assignment at work, but your child has fallen ill. The situation describes that someone can be paid to take care of the child, but that you are not sure if this will be the right thing to do. The females who used the coping strategy “accepting responsibility” (acknowledge the problem, try to put things right), had higher strain than those who did not use this strategy. The author expressed that normally accepting responsibility would be a problem-focused method, but that in this scenario, it may have implied the individual felt responsibility for the child’s illness or for working. She also examined the relationship between appraisal of controllability and both coping strategy used and strain. Appraisal of control (they could do something about the situation) was related to lower work-family strain. In addition, those who scored high on control appraisal were less likely to use escape avoidance as a coping strategy.

Matsui, Ohsawa & Onglatco (1995), in a sample of female employed women in Japan, focused on one coping dimension: structural role redefinition, which was defined by Hall (1972) and that consists of altering expectations relative to one’s roles. Examples include talking to a supervisor to change the nature of the work so that work accommodates family and removing domestic duties through domestic help or changing family expectations. This dimension is similar to active coping methods measured by more recent scales. In the study, it was found that family role redefinition was higher than work role definition. It should be noted that role definition was conceptualized in a similar manner as role prioritization. Family role redefinition moderated the relationship between FIW and life strain; this relationship was not found for the other direction of

work-family conflict, WIF. It is possible that this finding reflects greater control over the family than work sphere. This is supported by their finding that WIF was higher than FIW, which is consistent with other research (e.g., Frone et al., 1992).

Rotondo, Carlson & Kincaid (2003), in a mixed gender sample, examined the relationship between four styles of coping (direct action, help seeking, positive thinking and avoidance) and the experience of work interfering with family (WIF) and family interfering with work (FIW). They found that help seeking and direct action coping used at home were associated with lower FIW and avoidance/resignation coping was consistently associated with higher conflict levels (both WIF and FIW).

Chapter 3: Hypotheses/Research Questions

The literature review presented in chapter 2 revealed a number of gaps in research on work-family conflict. The current research filled these gaps by 1) exploring the relationship between locus of control and work-family conflict, 2) examining coping as a possible mediator and moderator of the relationship between personality and work-family conflict and 3) looking at the interaction between coping and perceived control over work and family on the experience of work-family conflict. A number of hypotheses/research questions were proposed to serve as a guide for the current research. These are presented in three sections that correspond to the different relationships in the model presented in this paper: 1) coping and work-family conflict, 2) personality, coping and work-family conflict and 3) controllability and effectiveness of coping style.

Coping and Work-Family Conflict

Research has consistently demonstrated that active coping behaviors are related positively and passive coping styles are related negatively to well-being (Brown et al., 2002; Inglede et al., 1997; McCrae & Costa, 1986). This research on coping and well-being was extended to the work-family literature by Rotondo, Carlson and Kincaid (2003), who found that active coping measures, such as help seeking and direct action coping used at home were associated with lower FIW and passive coping, such as avoidance/resignation was consistently associated with higher conflict levels (both WIF and FIW).

Based on theory and past research on coping and well-being, it is predicted that:

- Hypothesis 1. Active coping will be negatively related to work-family conflict (WIF, FIW, time-based and strain-based).
- Hypothesis 2. Passive coping will be positively related to work-family conflict (WIF, FIW, time-based and strain-based).

Personality, Coping and Work-Family Conflict

Neuroticism

A neurotic individual has a basic tendency to feel sadness, hopelessness and guilt (McCrae & Costa, 1999). Basic characteristics include low self-esteem, irrational perfectionist beliefs and pessimistic attitudes. The role of neuroticism in the experience of work-family conflict has been supported (Grzywacz and Marks, 2000; Bruck & Allen, 2003). In addition, stress theory can be used to predict the relationship between personality and work-family conflict. In the primary appraisal process, an individual assesses the degree to which a stressor is threatening. Due to the anxiety proneness and pessimistic nature of individuals high in neuroticism, they are likely to appraise events as more threatening than someone who is low on this trait. The secondary appraisal process, where the individual assesses their ability to effectively handle the demands of the situation, is also likely to be affected by the low-self esteem characteristic of individuals who are high on this trait.

Research on neuroticism and coping supports the maladaptive tendencies of neurotics when faced with stressors. In fact, of the Big Five factors, research suggests that coping is most related to neuroticism and extraversion (McCrae & Costa, 1986). Studies have shown that neuroticism is related to more frequent usage of less effective,

passive types of coping (Endler & Parker, 1990; McCrae & Costa, 1986; Parkes, 1986; Penley & Tomaka, 2002; Rim, 1987; Watson & Hubbard, 1996) and to less usage of effective, active coping behaviors (Parkes, 1986; Watson & Hubbard, 1996). Although research has supported a tendency for individuals high in neuroticism to use less effective coping behaviors, there is still variance left unexplained. In particular, there are some individuals high in neuroticism who do not use more avoidance coping methods. There is some support for the notion that personality and coping interact in predicting strain (Strentz & Auerbach, 1988; Jex et al., 2001). It is possible that individuals high in neuroticism are less effective when they use problem-based coping styles. Problem-based styles might be threatening to high neuroticism individuals because of their low self-esteem. It is also possible that individuals who are high in neuroticism compensate for this trait by using active types of coping. Because there are different possibilities with respect to neuroticism interacting with coping, this interaction will be explored as a research question.

Based on theory and past research, it is predicted that:

- Hypothesis 3. Neuroticism will be positively related to work-family conflict (WIF, FIW, time-based and strain-based).
- Hypothesis 3a. Neuroticism leads to higher levels of passive coping, which leads to higher levels of work-family conflict (WIF, FIW, time-based and strain-based).
- Hypothesis 3b. Neuroticism leads to lower levels of active coping, which leads to higher levels of work-family conflict (WIF, FIW, time-based and strain-based).

- Research Question 1: Does the adaptiveness of active and passive coping differ depending on levels of Neuroticism?

Extraversion

An extraverted individual is someone who has a preference for companionship and social stimulation (McCrae & Costa, 1999). Extraversion has mixed support for being related to the experience of work-family conflict. Stoeva et al. (2002) found no relationship between positive affectivity (a construct conceptually related to extraversion) and work-family conflict. In addition, Bruck and Allen (2003) found no relationship between extraversion and work-family conflict. Support for the relationship was found, however, by Grzywacz and Marks (2000). They found that a higher level of extraversion was associated with less negative spillover (both work to family and family to work) and more positive spillover (both directions of work-family conflict). Extraversion is conceptually related to positive affect, a trait that is related to perceiving events in a positive manner. This is likely to affect primary appraisal in the stress process, where events are perceived as either threatening or non-threatening. Also, the secondary appraisal, where an individual assesses their ability to handle the situation, is likely to be influenced by characteristics extraverts possess such as sociability (likely to increase the size of the support network), assertiveness and a positive view of their ability to handle the situation.

Extraversion may also be related to lower levels of work-family conflict through its effect of coping behavior. Of the Big Five factors, research suggests that coping is most related to neuroticism and extraversion (McCrae & Costa, 1986). Research has

supported the notion that extraversion is related to higher incidences of active, effective coping behaviors (McCrae & Costa, 1996; Rim, 1987; Martin, 1989; Watson & Hubbard, 1996) and to less frequent passive coping behaviors (Watson & Hubbard, 1996). There is some support for the notion that personality and coping interact in predicting strain (Strentz & Auerbach, 1988; Jex et al., 2001). There is no theoretical reason why a particular interaction would be proposed for extraversion, therefore a research question will look at this possibility.

Therefore it is predicted that:

- Hypothesis 4. Extraversion will be negatively related to work-family conflict (WIF, FIW, time-based and strain-based).
- Hypothesis 4a. Extraversion leads to higher levels of active coping, which leads to lower levels of work-family conflict (WIF, FIW, time-based and strain-based).
- Hypothesis 4b. Extraversion leads to lower levels of passive coping, which leads to lower levels of work-family conflict (WIF, FIW, time-based and strain-based).
- Research Question 2: Does the adaptiveness of active and passive coping differ depending on levels of Extraversion?

Locus of Control

Research has demonstrated that locus of control has an important role in the stress process. It has been found that individuals with an internal locus of control experience less distress because they perceive fewer stressors in the environment (Brookings et al., 1985; Organ & Greene, 1974; Szilagyi, Sims & Keller, 1976) and less strain (Siu, Lu &

Cooper, 1999; Spector, 1986). An internal locus of control also has been found to buffer the effects of stress on strain (Averill, 1973; Cohen, 1980).

Theoretically, there is no reason to believe that locus of control affects the threat appraisal of a situation in the primary appraisal process, but it appears reasonable that it may affect the secondary appraisal process where the individual assesses their ability to handle the stressor. In particular, those with an internal locus of control are more likely to perceive that they have control over events, and hence can handle the stressor where externals are more likely to believe that luck, chance or powerful others decide the course of events, likely leading to an assessment that they can not solve the issues at hand. This line of reasoning appears to be bolstered by the relationship between stressor and choice of coping style. Internals are likely to experience less distress because they cope using active, problem-focused methods (Judge et al., 1999; Ingledew et al., 1997) and externals cope using more passive avoidance behaviors (Ingledew et al., 1997; Brown et al., 2002). It is also likely that locus of control interacts with coping on the experience of work-family conflict. Strentz and Auerbach (1988) found that externals responded more to emotion focused training as opposed to active coping training. It is possible that internals, who feel that events are controllable, are incrementally effective when they employ methods that act on the world around them (i.e. active coping).

Based on the theoretical relationship between locus of control and experienced distress, it is proposed that:

- Hypothesis 5. An internal locus of control will be negatively related to work-family conflict (WIF, FIW, time-based and strain-based).

- Hypothesis 5a. An internal locus of control leads to higher levels of active coping, which leads to lower levels of work-family conflict (WIF, FIW, time-based and strain-based).
- Hypothesis 5b. An internal locus of control leads to lower levels of passive coping, which leads to lower levels of work-family conflict (WIF, FIW, time-based and strain-based).
- Research Question 3: Does the adaptiveness of active and passive coping differ depending on levels of Internal Locus of Control?

Controllability and Effectiveness of Coping Style

Research has found that the type of coping choice will affect the adjustment outcomes based upon the fit between the coping style and the controllability of the situation. This is supported by studies, which have found that active coping styles are most adaptive in situations that are perceived as controllable (Compas, Malcarne & Fondacaro, 1988; Forsythe & Compas, 1987; Vitaliano et al., 1990). Based on theory and past outcome, the following hypotheses are proposed:

- Hypothesis 6. Active coping will be associated with greater decreases in work-family conflict as the individual's control over the work-family situation increases.

Chapter 4: Methodology

Participants

The major source of participants is described in the following paragraphs.

One organization was a consulting firm with 50 employees. Surveys were distributed to all employees via a link through inter-office email system, which directed the employee to an on-line survey. A reminder email was sent one week after the first email. Thirty-one responses were received from this population, yielding a response rate of 62 %. This comprised 11 % of the total sample.

The second group of responses was from a trading group within a large financial services company. The survey was sent via email to approximately 25 individuals. Eighteen responses were received from this population, yielding a response rate of 72%. This comprised 5% of the total sample.

The third group of responses was from a rehabilitation group within a regional Hospital. The survey was sent out via email to approximately 35 people. Nineteen responses were received from this population, or a response rate of 54%. This comprised 7% of the total sample.

The fourth group of responses was obtained from a posting on an online internet site called "HR Net" (<http://finance.groups.yahoo.com/group/hrnet>). An approximation will be made for this sample because it is not possible to identify how many people viewed the solicitation letter. There are 1,382 members of HRNET. Because one is required to log in to the HR Net website to receive messages posted to the site, it is estimated that only 5% of the members saw the email, or 69 people. Thirteen responses

were obtained from this site, or an approximate response rate of 19%. This comprised 5% of the sample.

The fifth group of responses was obtained from a posting on an online internet site called the “Berkeley Family Network” an on-line advice newsletter for the community of parents in the Berkeley, California area (see <http://parents.berkeley.edu>). The network is run by a group of volunteer parents; 10-12 email newsletters each week are sent to over 13,000 local parents. Similar to the HR Network, an approximation is necessary for this sample, because it is not possible to identify how many people viewed the solicitation letter. Assuming that 5% of those who received the email opened it, approximately 650 people received the email. Seventy-two responses were obtained from this site, for an approximate response rate of 11%.

Finally, the last group of responses was obtained by creating a snowball effect. An initial email was sent out by the researcher to 65 colleagues that contained a cover letter requesting participation in the survey. The letter requested that each individual forward the email. Assuming that the average person forwarded the survey to 10 individuals, it is estimated that the survey reached approximately 650 individuals. Through this method 135 responses were obtained, an estimated response rate of 21%.

The survey was administered on-line to 291 participants. The majority of the respondents were female (68%). The mean age of females was 38 and for males it was 42. A variety of companies, work groups within companies and internet posting boards were used to obtain responses for the current study. The average person in the sample worked 44 hours per week, with 60% indicating that managing the work of others was a significant part of their job. Seventy percent of the sample had at least one child, with the

average number of children for those who had a child being 1.83. This is the same as the average number of children in the United States, among households with children (average = 1.87; see www.census.gov/population/socdemo/hh-fam/tabST-F1-2000.pdf). The majority of the sample was married or living with a partner (76%). Only 7% had elder care responsibilities that amounted to at least ten hours a week. Of those who had a spouse or living with a partner, 71% had a spouse who worked full-time, 13% had a spouse who worked part-time and 16% had a stay at home spouse. The industry composition was mostly service: 2% Wholesale and Retail Trade, 42% Services, 17% Financial and Real Estate Services, 7% Manufacturing / Mining / Construction, 6% Trade / Communication / Utilities, 4 % Public Administration, 1% Agriculture / Forestry / Fishing, 22% Other. The sample was largely composed of professional employees; 70% indicating that they were a professional (e.g., attorney), Mid-Level Manager or Upper-Middle Level Manager, 20% indicating they were a first level supervisor, sales staff or hourly employee and 8% indicating they were an executive.

In order to be inclusive of individuals without children, who also balance work-non work activities, data was only excluded if the individual did not work. One case was removed because of this criterion. In order to insure anonymity, the respondents were not asked to provide their name and the website did not capture information on the respondent other than the demographic variables in the research.

Procedure

All data were collected through a web-based survey questionnaire that was hosted by Baruch College, using a system called “Asset” that was developed by Bert

Wachsmuth at Seton Hall University. The survey setting used was “anonymous” which means that no identifying information was collected through the web portal. The survey was pre-tested and modified based on suggestions by those who completed the survey. The survey took approximately 15 minutes to complete. At the end of the survey, the individual was instructed that they could either email the researcher, or click on a link to obtain results of the survey when they were available. If they clicked on this link, it brought them to a separate survey that was developed by the researcher asking for their email address if they wanted to receive the results of the study. The two surveys were separate, so that the individual requesting the results could not be linked to results from the actual survey. This research protocol was approved by the Internal Review Board at Baruch College.

Participation in the study was voluntary, and assurances of confidentiality and anonymity were provided to the respondents. Participants were provided with the name, email address and telephone number of the researcher to contact if they had any questions. The researcher was contacted only three times. Each time, the individual was expressing their interest in the survey and sharing further work-life experiences.

The questionnaire was designed to measure coping (Active and Passive), personality (Neuroticism, Extraversion and Internal Locus of Control), perceived control over work and family and work-family conflict (work interference with family (WIF), family interference with work (FIW), Time-based work-family conflict (TWFC) and Strain-based work-family conflict (SWFC). Demographic variables were also measured, some of which were control variables and others that served to provide a description of the sample to determine generalizability.

A power analysis was performed using the “Power and Precision” software developed by Borenstein, Rothstein & Cohen (2001). Three analyses were conducted to determine the largest sample size needed to detect significant effect sizes. The effect size that was desired for detection was determined by both past research as well as the size that was determined to be meaningful. The first power analysis was conducted to determine the number of participants required in order to detect incremental R-squared of .10 for a set of three personality variables in analysis with 8 control variables. It was determined that 130 participants would be needed to achieve an overall power level of .91. A second power analysis in order to determine the number of subjects needed to detect a .05 increment to R-squared for each independent variable for the mediation test (coping mediates personality and work-family conflict), while controlling for a set of 8 control variables. This participant level needed to achieve an overall power level of .82 was 150. Finally, the number of participants required for the interaction analysis to detect an interaction of the effect size (.02) at an overall power level of .82 was 150. In conclusion, it was determined that for all of the hypothesized variables, at least a power of .80 would be achieved for each increment in the regression analysis if an n size of 150 was obtained. A sample size of 291 was obtained, well above the number required.

Instruments

Dependent Variable

Work-Family Conflict. A scale by Carlson, Kacmar and Willams (2000) was used to measure overall work-family conflict, work interference with family (WIF) and family interference with work (FIW). The 12-item scale contains six items measuring WIF and

six questions measuring FIW. Of the six items measuring each direction of work-family conflict, three measured time based conflict and three measured strain based conflict. Carlson et al. (2000) demonstrated acceptable levels of internal consistency with Cronbach's alpha for the four scales ranging from .79 to .87. They demonstrated separate factors, with factor loading consistent with dimensions. Only one of the correlations between dimensions was above .60 (the correlation between time-based FIW and strain-based FIW .76), indicating that the different directions and forms were distinct constructs. In their validation study, domain specific antecedents were related to their respective direction of work-family conflict (i.e., work antecedents related to WIF and family antecedents to WIF). Evidence of construct validity was determined when the measures were related to antecedents of work-family conflict and outcomes (for details, see Carlson et al., 2000).

Independent Variables

Coping. The Carver, Scheier and Weintraub (1989) COPE scale was used. The scale consisted of 14 distinct 4-item dimensions that measured aspects of problem-focused coping, emotion-focused coping and other types of coping that were indicated as "less useful" coping styles. All reliability coefficients (alpha) were above .60 with the exception of one. Test-retest reliabilities over an interval of 6 weeks ranged from .42 to .89, indicating the relative stability of coping tendencies. Convergent validity was established; coping strategies that are theoretically considered functional were correlated with personality qualities that are regarded as "beneficial" (e.g. optimism, high self-esteem). Conversely, "ineffective" coping strategies were related to personality traits that are generally not as "desirable" (e.g., pessimism). Discriminant validity was also

established. Although personality was related to coping styles, the correlations weren't strong enough to indicate that they were the same construct. The COPE scale was also not significantly associated with social desirability.

Second order factor analysis of the COPE full scale has consistently revealed 3 dimensions: Active Coping (Planning, Active and suppression of competing activities), Emotion Coping (Emotional support, instrumental support, focus on and venting of emotions) and Passive (Denial, behavior disengagement and mental disengagement). The current study specifically measured active coping and passive coping.

According to Carver (see <http://www.psy.miami.edu/faculty/ccarver/sciCOPEf.html>), there are 3 instruction formats that can be used for the scale:

“One is a ‘dispositional’ or trait-like version in which respondents report the extent to which they usually do the things listed, when they are stressed. A second is a time-limited version in which respondents indicate the degree to which they actually did have each response during a particular period in the past. The third is a time-limited version in which respondents indicate the degree to which they have been having each response during a period up to the present.”

The current study views coping as dispositional in nature. Therefore, the items were framed in terms of what the person “usually” does when under stress as opposed to what the person “did” or is “doing currently” in a specific coping episode. The 5-point response scale ranged from “I usually don’t do this at all” to “I usually do this a lot.”

Internal Locus of Control. Levenson’s (1974) Internal Locus of Control scale was used. Both construct and discriminant validity have been determined for this measure (see Levenson, 1974). The scale measures an internal locus of control, an external locus of control and a powerful others locus of control. Only the internal measure of this scale was used. In addition, an internal locus of control is of most interest, because it is related

to adaptive outcomes. There are eight items measuring an internal locus of control. A Likert 6-point scale is used. Test-retest reliabilities for the internal locus of control scale range from .64 (Levenson, 1974) to .89 (Lam & Schaubroeck, 2000), sufficient to demonstrate internal consistency. Factor analysis demonstrated the independence of the scales. For validity evidence, see Levenson (1974). In the present study, the internal consistency estimate was .68.

Big Five (neuroticism and extraversion). The Big Five factors of neuroticism and extraversion were measured with the International Personality Item Pool (IPIP; Goldberg, 1992). There are 10 items for each trait. Coefficient alphas for each of the factors of this measure are all above .83. Convergent validity was determined by significant associations between each of the IPIP personality markers and the NEO-PI (Costa & McCrae, 1985). This scale has demonstrated reliability as well as validity (see Goldberg, 1992). In the present study, the internal consistency estimate for neuroticism was .90 and the estimate for extraversion was .74.

Control Variables

Control variables were included that have been significantly related to work-family conflict in past research (Carlson, 1999). These variables are gender (males = 0, females = 1), age, marital status (married or living with partner = 0; single, widowed, separated or divorced = 1), average number of hours worked per week and work status of the spouse (0 = existence of stay at home spouse/partner, 1 = Spouse works part-time, 2 = spouse works full-time and 3 = no spouse). Finally, total family demands was controlled for (Total family demands was measured following a Responsibility for Dependents Scale – RFD- procedure developed by Rothausen, 1999). For each child, weights were assigned,

so that as the child increased in age, the demand level decreased. If the child was less than one year old, the number of months was divided by 12 to obtain a fraction of a year age. The sum of the demand score of each child was computed. A score of 1 was added if, in addition, the individual cared for an elderly parent at least 10 hours per week. The weightings for each child's age was entered into the SPSS syntax as follows: (0 thru .9=7), (1 thru 2=6.5), (3 thru 5=6), (6 thru 14=5), (15 thru 18=4.5), (18 thru 25=3), (26 thru 30=2.5), (31 thru 80=0).

Control. A 15-item scale, developed by Thomas (1991), measuring perceptions of control over areas of work and family was used in this study (e.g., “How much choice do you have over the amount and quality of care available for a sick child?”, “How much choice do you have over when you begin and end each workday or each workweek?”, “How much control do you have over when you can take a few hours off?”). The response format ranges from 1 = “very little choice” to 5 = “very much choice.” To reduce the wordiness and demand placed on the respondent, the stem “How much choice do you have over” will be used and each ending will be indicated as a separate item. In questions 11 and 14, the word “control” was changed to “choice” in order to maintain consistency throughout the questions. The coefficient alpha for the measure in the original scale development study was .75. Convergent validity was established for this scale. In particular, the construct control was significantly related to outcome measures that it should theoretically be related to and in meaningful directions. For instance, control perceptions were significantly related to 1) the perception that family-friendly policies were in place in the organization and 2) greater levels of job satisfaction. And, greater perceptions of control were significantly related to lower work-family conflict,

depression, somatic complaints and smoking frequency. In the present study, the internal consistency estimate was .89.

Results

Psychometric Properties of the Scales

Table I presents the means, standard deviations and correlations for each of the variables in the study. The reliability coefficients appear in the diagonal of the correlation matrix. The reliability coefficients range from .68 to .90, with only one scale falling below a reliability coefficient of .70 (Internal Locus of Control = .68).

Summary of Analysis Method

Hierarchical multiple regression was used to test the study hypotheses. Regressions were run separately with each of the dependent variables: work-to-family conflict (WFC), family-to-work conflict (FWC), time based work family conflict (TWFC) and strain-based work family conflict (SWFC). For all hypotheses (with the exception of mediation tests), the control variables were entered in step one of the regression.

Coping and Work-Family Conflict

Hypothesis 1. Hypothesis 1 predicted that active coping would be negatively related to work-family conflict (WIF, FIW, TWFC and SWFC). A series of 4 regressions (one for each of the four dependent measures) were computed. The control variables were entered in step 1 and then active and passive coping were entered in step 2. As shown in Table II, hypothesis 1 was not supported for any of the four outcome measures; active coping was not related to work-family conflict. In Table II, Step 1 displays the Beta weights from the first group of variables entered into the regression analysis (i.e., control variables) and Step 2 presents the Beta weights from the second group of variables

entered into the regression equation. Refer to the Step 2 column data for the beta weights for the hypothesized variables.

Hypothesis 2. Hypothesis 2 predicted that passive coping would be positively related to work-family conflict (WIF, FIW, TWFC and SWFC). A series of 4 regressions (one for each of the four dependent measures) were computed. The control variables were entered in step 1 and then active and passive coping were entered in step 2. As shown in Table II, hypothesis 2 was fully supported. Passive coping was positively related to WIF ($\beta = .249, p < .001$), FIW ($\beta = .294, p < .001$), TWFC ($\beta = .223, p < .01$) and SWFC ($\beta = .364, p < .001$). As shown in Table I, the zero-order correlations between passive coping and work-family conflict are significant for three of the four dependent measures. In particular, passive coping is related to higher levels of WIF ($r = .13, p < .05$), FIW ($r = .22, p < .01$), and SWFC ($r = .29, p < .01$). The zero-order correlation between passive coping and TWFC was not significant ($r = .09, n.s.$); however, it was positively related to TWFC, the direction that was hypothesized.

Personality and Work-Family Conflict

Hypothesis 3. Hypothesis 3 predicted that neuroticism would be positively related to work-family conflict (WIF, FIW, TWFC and SWFC). A set of 4 regressions was computed for the relationship between neuroticism and each dependent variable (WIF, FIW, TWFC, SWFC). As shown in Table III, Hypothesis 3 was fully supported. Neuroticism was positively related to WIF ($\beta = .387, p < .001$), FIW ($\beta = .221, p < .001$), TWFC ($\beta = .187, p < .01$) and SWFC ($\beta = .465, p < .001$). As shown in Table I, the zero-order correlations between neuroticism and work-family conflict also support Hypothesis

3; neuroticism was positively related to WIF ($r = .36, p < .01$), FIW ($r = .25, p < .01$), TWFC ($r = .17, p < .01$) and SWFC ($r = .46, p < .01$).

Hypothesis 4. Hypothesis 4 predicted that extraversion would be negatively related to work-family conflict (WIF, FIW, TWFC and SWFC). A set of 4 regressions was computed for the relationship between extraversion and each dependent variable (WIF, FIW, TWFC, SWFC). As shown in Table III, Hypothesis 4 was not supported; extraversion was not related to work-family outcomes. Although the regression results did not support Hypothesis 4, as can be seen in Table I, there was a significant negative relationship between extraversion and one of the dependent measures (FIW; $r = -.13, p < .05$).

Hypothesis 5. Hypothesis 5 predicted that an Internal Locus of Control would be negatively related to work-family conflict (WIF, FIW, TWFC and SWFC). A set of 4 regressions was computed for the relationship between Internal Locus of Control and each dependent variable (WIF, FIW, TWFC, SWFC). As shown in Table III, Hypothesis 5 was partially supported. An internal locus of control was negatively related to 2 of the 4 outcome measures. In particular, an Internal Locus of Control was negatively related to FIW ($\beta = -.127, p < .05$) and SWFC ($\beta = -.13, p < .05$). As shown in Table I, the zero-order correlations also support the regression results; Internal Locus of Control was negatively related to FIW ($r = -.20, p < .01$) and SWFC ($r = -.22, p < .01$).

Table I.

Means, standard deviations, and correlations

Variable	Mean	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1.Sex	.68	.47	-															
2.Age	39.17	8.83	-.19**	-														
3.Marital	.24	.43	.09	-.17**	-													
4.WkStatSp	1.86	.90	.43**	-.18**	.61**	-												
5.Hrs Worked	44.21	11.50	-.31**	-.04	.06	-.13*	-											
6.Fam Dem	6.48	5.55	-.18**	.17**	-.40**	-.37**	-.08	-										
7.Active	3.74	.47	-.05	.17**	-.15*	-.08	.01	.07	(.86)									
8.Passive	2.05	.50	.13*	-.08	.24**	.19**	-.09	-.17**	-.41**	(.84)								
9.Neuroticism	2.77	.83	.14*	-.08	.10	.10	-.09	-.09	-.16**	.34**	(.90)							
10.Extraversion	3.20	.74	.06	-.02	.03	.01	.05	-.08	.11	-.08	.00	(.74)						
11.LOC	3.56	.50	-.30**	.08	-.13*	-.22**	.18**	.03	.28**	-.25**	-.22**	.17**	(.68)					
12.Control	3.57	.77	-.19**	.18**	-.04	-.16**	-.10	.04	.24**	-.21**	-.19**	.11	.29**	(.89)				
13.WIF	2.80	.71	.01	-.01	-.03	-.08	.29**	.01	-.04	.13*	.36**	.01	-.05	-.32**	(.86)			
14.FIW	2.18	.70	.09	.11	-.12*	.01	-.20**	.30**	-.05	.22**	.25**	-.13*	-.20**	-.18**	.28*	(.87)		
15.TWFC	2.61	.61	.02	.09	-.18**	-.09	.08	.30**	.02	.09	.17**	-.06	-.05	-.24**	.67**	.72**	(.75)	
16.SWFC	2.37	.67	.08	.02	.01	.01	.03	.06	-.11	.29**	.46**	-.08	-.22**	-.30**	.74**	.69**	.54**	(.84)

Note: $N = 291$. Reliability estimates are reported in parentheses along the diagonal.

* $p < .05$, two-tailed; ** $p < .01$, two-tailed, *** $p < .001$, two-tailed

Test of Hypotheses

Table II.

Active and Passive Coping as predictors of Work-Family Conflict: (WIF, FIW, TWFC, SWFC; N=291)

Independent Variables	Two Directions of Work-Family Conflict				Two Forms of Work-Family Conflict			
	WIF		FIW		TWFC (Time)		SWFC (Strain)	
	Step 1	Step 2	Step 1	Step 2	Step 1	Step 2	Step 1	Step 2
Sex	.214**	.204**	.082	.069	.161*	.153*	.164*	.147*
Age	.019	.011	.074	.072	.074	.065	.032	.029
Marital	.033	-.006	-.057	-.108	-.108	-.139	.074	.009
WkStatSp	-.134	-.142	.128	.123	.043	.035	-.047	-.053
Hrs Worked	.331***	.350***	-.129*	-.105	.167**	.183**	.059	.088
Family Demands	.002	.024	.292***	.319***	.265*	.285***	.071	.104
Active Coping		.066		.034		.077		.035
Passive Coping		.249***		.294***		.223**		.364***
R ²	.112	.160	.130	.203	.114	.151	.023	.136
ΔR ²	.112***	.048***	.130***	.073***	.114***	.037**	.023	.113***
F	5.63***	6.32***	6.64***	8.43***	5.72***	5.91***	1.04	5.20***

Note: *p<.05; **p<.01; ***p<.001

Table III.

Personality (Neuroticism, Extraversion and Internal Locus of Control) predicting Work-Family Conflict (WIF, FIW, TWFC, SWFC; N=291)

Independent Variables	Two Directions of Work-Family Conflict				Two Forms of Work-Family Conflict			
	WIF		FIW		TWFC (Time)		SWFC (Strain)	
	Step 1	Step 2	Step 1	Step 2	Step 1	Step 2	Step 1	Step 2
Sex	.214**	.157*	.082	.035	.161*	.133	.164*	.081
Age	.019	.036	.074	.089	.074	.084	.032	.057
Marital	.033	-.004	-.057	-.092	-.108	-.128	.074	.018
WkStatSp	-.134	-.122	.128	.123	.043	.045	-.047	-.042
Hrs Worked	.331	.366***	-.129*	-.090	.167**	.189**	.059	.115*
Family Demands	.002***	.022	.292***	.292***	.265***	.271***	.071	.087
Neuroticism		.387***		.221***		.187**		.465***
Extraversion		-.024		-.077		-.048		-.063
Internal LOC		-.031		-.127*		-.036		-.130*
R2	.112	.262	.130	.210	.114	.154	.023	.273
ΔR2	.112***	.149***	.130***	.080***	.114***	.040**	.023	.250***
F	5.63***	10.39***	6.64***	7.81***	5.72***	5.34***	1.04	11.01***

Note: *p<.05; **p<.01; ***p<.001

Coping Mediates Personality and Work-family Conflict

Hypotheses 3a, 3b, 4a, 4b, 5a and 5b predicted that the relationships between personality (neuroticism, extraversion and internal locus of control) and work-family conflict (WIF, FIW, TWFC, and SWFC) would be mediated by coping style. Hypotheses 3a and 3b predicted that the positive relationship between neuroticism and work-family conflict would be mediated by higher levels of passive coping and lower levels of active coping, respectively. Hypotheses 4a and 4b predicted that the negative relationship between extraversion and work-family conflict would be mediated by higher levels of active coping and lower levels of passive coping respectively. Finally, hypotheses 5a and 5b predicted that the negative relationship between an internal locus of control and work-family conflict would be mediated by higher levels of active coping and lower levels of passive coping respectively.

The technique of Baron and Kenny (1986) was followed to test for mediation. For each independent variable (Neuroticism, Extraversion and Internal locus of control), three regressions were conducted: (1) the mediator (coping) was regressed on the independent variable (e.g., Neuroticism); (2) the dependent variable (e.g., WIF) was regressed on the independent variables, and (3) the dependent variable (e.g., WIF) was regressed on both the mediator variable (coping) and the independent variable (e.g., Neuroticism). These three steps were conducted for each dependent variable (WIF, FIW, TWFC and SWFC). There were 6 mediation tests performed (two coping styles (active and passive) by 3 personality variables (neuroticism, extraversion and internal locus of control). The first thing to test for in mediation analysis is that steps 1 and 2 are significant as well as the mediator in step 3.

Next, the relationship between the independent variable and the outcome variable must be less when the mediator variable is included (i.e., step 3) than when it is alone (i.e., step 2). If the beta coefficient of the independent variable in Step 3 was less than in Step 2, the Sobel test (1982) was used to determine whether the change was significant and therefore, indicative of a mediating effect (see Preacher and Leonardelli, 2004, for an interactive calculation program).

Hypothesis 3a was supported for 2 of the 4 outcome variables. Namely, passive coping mediated the positive relationship between neuroticism and family interference with work (FIW), and strain-based work-family conflict (SWFC). The hypothesis that passive coping would mediate the positive relationship between neuroticism and time-based work-family conflict passed the Baron and Kenny (1986) test for mediation, but the beta weight was not significant when the Sobel test was applied. Passive coping also did not mediate the positive relationship between neuroticism and work interference with family (WIF). Hypotheses 3b, 4a, 4b, 5a and 5b were not supported. For one of the dependent variables of hypothesis 3b (Active coping mediating the negative relationship between neuroticism and FIW), all four criteria of the Baron and Kenny (1986) mediation test were met, but the beta weight was not significant when the Sobel test was applied. See table IV for the results of the Sobel test that were applied only to relationships that met all four criteria of the Baron and Kenny (1986) test of mediation. The NA indicates that the Sobel test was not applied, because the Baron and Kenny (1986) criteria were not met.

Table IV.

Summary of Sobel test Statistics:

Only for proposed mediations that met all four Baron and Kenny Criteria for at least one Dependent Variable. The NA appears where the Sobel test was not performed

Dependent Variables	N → Passive Sobel Test	N → Active Sobel Test
WIF	NA	NA
FIW	2.4248*	.1743
TWFC	.4903	NA
SWFC	2.4398*	NA

* $p < .05$, two-tailed; ** $p < .01$, two-tailed, *** $p < .001$, two-tailed.

Interactions between Personality and Coping on Work-Family Conflict

Research Questions 1, 2 and 3 were designed to determine whether there was an interaction between personality and coping on the experience of work-family conflict.

Research question 1 asked “Does neuroticism interact with active coping such that individuals with the same level of neuroticism, who predominantly use **passive** coping, will experience less conflict than those who predominantly use **active** styles?” Research Question 2 posed “Research Question 2: Does extraversion interact with active coping such that those who predominantly use **active** coping will experience less conflict than those who predominantly use **passive** coping?” And finally, Research Question 3 asked “Does an internal locus of control interact with active coping such that individuals with the same level of internal locus of control, who predominantly use **active** coping, will experience less conflict than those who predominantly use **passive** coping behaviors?”

For Research Questions 1, 2, and 3, regressions were carried out to test interactions of each personality variable * coping variable. Six regressions were carried out to test the interactions between each personality (Neuroticism, Extraversion and Locus of Control)

and coping variable (Passive Coping and Active Coping). First the control variables were entered, followed by the personality and coping variables, followed by an interaction term (Personality Variable multiplied by Coping Variable). The beta weights associated with the variables in these three steps are represented by “Step 1,” “Step 2,” and “Step 3” respectively in Tables V-I through V-VI. Refer to the step 3 results in the tables for the beta weights of the interaction terms. In all, six interactions were tested: neuroticism * passive coping (see Tables V-I and V-II), neuroticism * active coping (see Tables V-III and V-IV), extraversion * passive coping (see Tables V-V and V-VI), extraversion * active coping (see Tables V-VII and V-VIII), internal locus of control * passive coping (see Tables V-IX and V-X) and internal locus of control * active coping (see Tables V-XI and V-XII). Each personality and coping variable were standardized multiplying to create the interaction term. This is following the recommendation of Aiken and West (1996).

In the regression model, none of the interaction terms (Neuroticism * Passive, Neuroticism * Active, Extraversion * Passive, Extraversion * Active, Internal Locus of Control * Passive, Internal Locus of Control * Active) were significant. See Table V for these results.

Interaction between Active Coping and Control on Work-Family Conflict.

Hypothesis 6 proposed that active coping would be associated with greater decreases in work-family conflict as the individual's control over the work-family situation increases. This hypothesis was not supported: The interaction term active coping * control was not significant in the regression equation. See Tables VI-I and VI-II.

Table V-I.

Interaction of Neuroticism and Passive Coping on WIF and FIW: N = 274.

	Two Directions of Work-Family Conflict					
	WIF			FIW		
Independent Variables	Step 1	Step 2	Step 3	Step 1	Step 2	Step 3
Sex	.214**	.160*	.160*	.082	.048	.049
Age	.019	.035	.035	.074	.083	.084
Marital	.033	-.016	-.016	-.057	-.114	-.110
WkStatSp	-.134	-.121	-.121	.128	.133	.132
Hrs Worked	.331***	.367***	.367***	-.129*	-.097	-.098
Total Dem: Family	.002	.033	.033	.292***	.323***	.324***
Neuroticism		.361***	.361***		.173**	.174**
Passive Coping		.099	.099		.221***	.223***
Neuroticism * Passive			-.002			-.021
R ²	.112	.268	.268	.130	.228	.228
ΔR^2	.112***	.156***	0.000	.130***	.098***	.000
F	5.634***	12.129***	10.741***	6.645***	9.758***	8.661***

Note: *p<.05; **p<.01; ***p<.001

Table VI-II.

Interaction of Neuroticism and Passive Coping on TWF and SWFC: N = 274.

Independent Variables	Two Directions of Work-Family Conflict					
	TWFC			SWFC		
	Step 1	Step 2	Step 3	Step 1	Step 2	Step 3
Sex	.161*	.134	.134	.164*	.096	.097
Age	.074	.081	.081	.032	.051	.052
Marital	-.108	-.147	-.148	.074	-.001	.003
WkStatSp	.043	.048	.048	-.047	-.032	-.034
Hrs Worked	.167**	.190**	.190**	.059	.108	.107
Total Dem: Family	.265***	.287***	.287***	.071	.116*	.117*
Neuroticism		.149*	.149*		.422***	.424***
Passive Coping		.138*	.137*		.207***	.210***
Neuroticism * Passive			.011			-.028
R ²	.114	.166	.166	.023	.287	.287
ΔR^2	.114***	.052***	.000	.023	.264***	.001
F	5.723***	6.581***	5.833***	1.045	13.335***	11.851***

Note: *p<.05; **p<.01; ***p<.001

Table V-III.

Interaction of Neuroticism and Active Coping on WIF and FIW: N = 274.

	Two Directions of Work-Family Conflict					
	WIF			FIW		
Independent Variables	Step 1	Step 2	Step 3	Step 1	Step 2	Step 3
Sex	.214**	.161*	.162*	.082	.048	.050
Age	.019	.033	.035	.074	.093	.096
Marital	.033	.002	.002	-.057	-.085	-.086
WkStatSp	-.134	-.119	-.119	.128	.142	.142
Hrs Worked	.331***	.361***	.360***	-.129*	-.109	-.110
Total Dem: Family	.002	.026	.023	.292***	.307***	.302***
Neuroticism		.395***	.393***		.237***	.232***
Active Coping		.016	.014		-.057	-.061
Neuroticism * Active			.021			.040
R ²	.112	.260	.261	.130	.190	.192
ΔR^2	.112***	.148***	.000	.130***	.060***	.001
F	5.634***	11.649***	10.338***	6.645***	7.782***	6.959***

Note: *p<.05; **p<.01; ***p<.001

Table V-IV.

Interaction of Neuroticism and Active Coping on TWFC and SWFC: N = 274.

Independent Variables	Two Directions of Work-Family Conflict					
	TWFC			SWFC		
	Step 1	Step 2	Step 3	Step 1	Step 2	Step 3
Sex	.161*	.135	.136	.164*	.097	.098
Age	.074	.081	.083	.032	.060	.062
Marital	-.108	-.122	-.123	.074	.027	.026
WkStatSp	.043	.050	.051	-.047	-.024	-.024
Hrs Worked	.167**	.181**	.181**	.059	.097	.096
Total Dem: Family	.265***	.277***	.274***	.071	.101	.097
Neuroticism		.196**	.192**		.482***	.478***
Active Coping		.010	.008		-.051	-.054
Neuroticism * Active			.028			.035
R ²	.114	.150	.151	.023	.254	.255
ΔR ²	.114***	.036**	.001	.023	.231***	.001
F	5.723***	5.847***	5.208***	1.045	11.286***	10.056***

Note: *p<.05; **p<.01; ***p<.001

Table V-V.

Interaction of Extraversion and Passive Coping on WIF and FIW: N = 274.

Independent Variables	Two Directions of Work-Family Conflict					
	WIF			FIW		
	Step 1	Step 2	Step 3	Step 1	Step 2	Step 3
Sex	.214**	.204**	.203**	.082	.077	.075
Age	.019	.020	.019	.074	.076	.073
Marital	.033	-.009	-.007	-.057	-.108	-.102
WkStatSp	-.134	-.137	-.140	.128	.121	.115
Hrs Worked	.331***	.350***	.349***	-.129*	-.100	-.102
Total Dem: Family	.002	.021	.021	.292***	.312***	.313***
Extraversion		-.011	-.013		-.080	-.084
Passive Coping		.219***	.218***		.273***	.271***
Extraversion * Passive			-.024			-.053
R ²	.112	.157	.158	.130	.208	.211
ΔR^2	.112***	.045**	.001	.130***	.078***	.003
F	5.634***	6.171***	5.488***	6.645***	8.708***	7.839***

Note: *p<.05; **p<.01; ***p<.001

Table V-VI.

Interaction of Extraversion and Passive Coping on TWFC and SWFC: N = 274.

	Two Directions of Work-Family Conflict					
	TWFC			SWFC		
Independent Variables	Step 1	Step 2	Step 3	Step 1	Step 2	Step 3
Sex	.161*	.156*	.154*	.164*	.153*	.152*
Age	.074	.075	.072	.032	.034	.032
Marital	-.108	-.143	-.138	.074	.009	.013
WkStatSp	.043	.039	.034	-.047	-.054	-.058
Hrs Worked	.167**	.185**	.184**	.059	.092	.091
Total Dem: Family	.265***	.280***	.281***	.071	.098	.099
Extraversion		-.040	-.044		-.059	-.063
Passive Coping		.185**	.184**		.343***	.342***
Extraversion * Passive			-.046			-.037
R ²	.114	.148	.150	.023	.138	.140
ΔR^2	.114***	.034**	.002	.023	.115***	.001
F	5.723***	5.768***	5.192***	1.045	5.320***	4.764***

Note: *p<.05; **p<.01; ***p<.001

Table V-VII.

Interaction of Extraversion and Active Coping on WIF and FIW: N = 274.

Independent Variables	Two Directions of Work-Family Conflict					
	WIF			FIW		
	Step 1	Step 2	Step 3	Step 1	Step 2	Step 3
Sex	.214**	.215**	.216**	.082	.088	.089
Age	.019	.024	.024	.074	.085	.085
Marital	.033	.028	.036	-.057	-.066	-.059
WkStatSp	-.134	-.133	-.143	.128	.128	.120
Hrs Worked	.331***	.334***	.326***	-.129*	-.120	-.126*
Total Dem: Family	.002	.000	-.003	.292***	.286***	.283***
Extraversion		-.024	-.02		-.091	-.088
Active		-.037	-.034		-.079	-.076
Coping						
Extraversion * Active			.055			.050
R ²	.112	.114	.117	.130	.146	.148
ΔR^2	.112***	.002	.003	.130***	.016	.002
F	5.634***	4.283***	3.901***	6.645***	5.659***	5.107***

Note: *p<.05; **p<.01; ***p<.001

Table V-VIII.

Interaction of Extraversion and Active Coping on TWFC and SWFC: N = 274.

Independent Variables	Two Directions of Work-Family Conflict					
	TWFC			SWFC		
	Step 1	Step 2	Step 3	Step 1	Step 2	Step 3
Sex	.161*	.166*	.167*	.164*	.167*	.168*
Age	.074	.075	.075	.032	.047	.047
Marital	-.108	-.108	-.099	.074	.059	.068
WkStatSp	.043	.041	.031	-.047	-.044	-.053
Hrs Worked	.167**	.171**	.163**	.059	.068	.060
Total Dem: Family	.265***	.262***	.258***	.071	.067	.063
Extraversion		-.053	-.049		-.073	-.069
Active Coping		-.011	-.007		-.110	-.107
Extraversion * Active			.058			.057
R ²	.114	.117	.120	.023	.042	.045
ΔR^2	.114***	.003	.003	.023	.019	.003
F	5.723***	4.388***	4.009***	1.045	1.444	1.378

Note: *p<.05; **p<.01; ***p<.001

Table V-IX.

Interaction of Internal Locus of Control and Passive Coping on WIF and FIW: N = 274.

Independent Variables	Two Directions of Work-Family Conflict					
	WIF			FIW		
	Step 1	Step 2	Step 3	Step 1	Step 2	Step 3
Sex	.214**	.191**	.194**	.082	.045	.048
Age	.019	.023	.029	.074	.082	.087
Marital	.033	-.016	-.017	-.057	-.123	-.124
WkStatSp	-.134	-.141	-.142	.128	.116	.115
Hrs Worked	.331***	.356***	.354***	-.129*	-.092	-.094
Total Dem: Family	.002	.016	.014	.292***	.306***	.304***
Internal LOC		-.066	-.058		-.128	-.120*
Passive Coping		.204**	.213**		.250***	.258***
Internal LOC * Passive			.049			.049
R ²	.112	.161	.163	.130	.216	.218
ΔR ²	.112***	.048**	.002	.130***	.086***	.002
F	5.634***	6.333***	5.702***	6.645***	9.100***	8.165***

Note: *p<.05; **p<.01; ***p<.001

Table V-X.

Interaction of Internal Locus of Control and Passive Coping on TWF and SWFC: N = 274.

Independent Variables	Two Directions of Work-Family Conflict					
	TWFC			SWFC		
	Step 1	Step 2	Step 3	Step 1	Step 2	Step 3
Sex	.161*	.144*	.146*	.164*	.116	.121
Age	.074	.077	.081	.032	.041	.050
Marital	-.108	-.148	-.148	.074	-.009	-.010
WkStatSp	.043	.038	.038	-.047	-.063	-.063
Hrs Worked	.167**	.187**	.186**	.059	.105	.103
Total Dem: Family	.265***	.279***	.278***	.071	.088	.085
Internal LOC		-.042	-.037		-.163**	-.151*
Passive Coping		.179**	.184**		.311***	.324***
Internal LOC * Passive			.029			.074
R ²	.114	.148	.149	.023	.157	.162
ΔR^2	.114***	.034**	.001	.023	.134***	.005
F	5.723***	5.762***	5.136***	1.045	6.161***	5.670***

Note: *p<.05; **p<.01; ***p<.001

Table V-XI.

Internal Locus of Control and Active Coping on WIF and FIW: N = 274.

	Two Directions of Work-Family Conflict					
	WIF			FIW		
Independent Variables	Step 1	Step 2	Step 3	Step 1	Step 2	Step 3
Sex	.214**	.191**	.191**	.082	.046	.046
Age	.019	.024	.026	.074	.088	.087
Marital	.033	.015	.015	-.057	-.087	-.087
WkStatSp	-.134	-.142	-.140	.128	.118	.116
Hrs Worked	.331***	.345***	.345***	-.129*	-.106	-.106
Total Dem: Family	.002	-.006	-.006	.292***	.280***	.280***
Internal LOC		-.113	-.109		-.176**	-.179**
Active Coping		-.007	-.009		-.039	-.037
Internal LOC * Active			-.030			.018
R ²	.112	.124	.125	.130	.162	.163
ΔR^2	.112***	.012	.001	.130***	.033**	.000
F	5.634***	4.694***	4.190***	6.645***	6.426***	5.704***

Note: *p<.05; **p<.01; ***p<.001

Table V-XII.

Interaction of Internal Locus of Control and Active Coping on TWFC and SWFC: N = 274.

Independent Variables	Two Directions of Work-Family Conflict					
	TWFC			SWFC		
	Step 1	Step 2	Step 3	Step 1	Step 2	Step 3
Sex	.161*	.144*	.143*	.164*	.118	.119
Age	.074	.077	.080	.032	.049	.047
Marital	-.108	-.119	-.120	.074	.035	.036
WkStatSp	.043	.036	.042	-.047	-.060	-.064
Hrs Worked	.167**	.177**	.178**	.059	.088	.087
Total Dem: Family	.265***	.259***	.260***	.071	.056	.055
Internal LOC		-.088	-.080		-.221**	-.226**
Active Coping		.009	.003		-.054	-.051
Internal LOC * Active			-.060			.039
R ²	.114	.120	.124	.023	.075	.077
ΔR^2	.114***	.006	.003	.023	.052**	.002
F	5.723***	4.534***	4.147***	1.045	2.696**	2.439*

Note: *p<.05; **p<.01; ***p<.001

Table VI-I

Interaction of Active Coping and Control on WIF and FIW: N = 274.

	Two Directions of Work-Family Conflict					
	WIF			FIW		
Independent Variables	Step 1	Step 2	Step 3	Step 1	Step 2	Step 3
Sex	.213**	.161*	.160*	.080	.046	.045
Age	.015	.053	.053	.074	.106	.105
Marital	.031	.054	.054	-.062	-.058	-.058
WkStatSp	-.137	-.191*	-.186*	.130	.102	.105
Hrs Worked	.329***	.275***	.278***	-.130*	-.161**	-.159*
Total Dem: Family	.003	-.014	-.011	.292***	.283***	.285***
Active Coping		.033	.035		-.046	-.045
Control		-.312***	-.306***		-.186**	-.183**
Active * Control			-.03			-.02
R ²	.112	.195	.196	.131	.168	.169
ΔR^2	.112***	.083***	.001	.131***	.037**	.000
F	5.56***	7.97***	7.11***	6.67***	6.65***	5.90***

Note: *p<.05; **p<.01; ***p<.001

Table VI-II.

Interaction of Active Coping and Control on TWFC and SWFC: N = 274.

Independent Variables	Two Directions of Work-Family Conflict					
	TWFC			SWFC		
	Step 1	Step 2	Step 3	Step 1	Step 2	Step 3
Sex	.159*	.118	.118	.162*	.109	.108
Age	.070	.098	.099	.031	.078	.078
Marital	-.111	-.090	-.090	.069	.080	.079
WkStatSp	.041	-.003	-.004	-.046	-.092	-.084
Hrs Worked	.164**	.121*	.120	.058	.009	.014
Total Dem: Family	.267***	.254***	.253***	.072	.057	.062
Active Coping		.041	.041		-.048	-.045
Control		-.247***	-.248***		-.297***	-.287***
Active * Control			.007			-.063
R ²	.115	.167	.167	.022	.110	.114
ΔR^2	.115***	.052***	.000	.022	.088***	.004
F	5.73***	6.57***	5.82***	1.00	4.06***	3.74***

Note: *p<.05; **p<.01; ***p<.001

Additional Analyses

Control Over Work and Family and WFC

Research has found flexible scheduling to be related to lower levels of work-family conflict through increased perceptions of control (Clark, 2002; Thomas & Ganster, 1995). Adams and Jex (1999) found that perceptions of control over time were related to lower levels of family interfering with work and work interfering with family. Therefore, it was expected that control over work and family would be related to lower levels of work-family conflict (WIF, FIW, TWFC, SWFC).

The control over family and work scale was broken out into two scales – control over work ($\alpha = .82$) and control over family ($\alpha = .89$). The control over work and family scale in this research measured perceptions of control in both the work and family sphere, with seven items measuring choice over work (e.g., How much choice do you have over when you begin and end each workday or each workweek?) and six items measuring choice over family (e.g., How much choice do you have in making unanticipated child-care arrangements?). It is maintained that these questions effectively attempt to measure actual control, and not a dispositional trait. This is supported by the bivariate correlation between an internal locus of control and the measure of control ($r = .29, p < .01$), which leaves much variance in the control measure unexplained. Frone et al. (1992) found that antecedents to work-interfering with family and family interfering with work were domain specific (i.e., work stressors are most related to WIF and family stressors are most related to FIW). Following this, it was expected that control over work would be related to work-interfering with family and control over family would be related to family interfering with work.

Regressions were run with the control variables of the study entered first, followed by control over work and control over family. As expected, control over work was significantly related to lower levels of work interfering with family ($B = -.274, p < .001$) and family over work was significantly related to lower levels of family interfering with work ($B = -.303, p < .001$). Both control over work ($B = -.177, p < .05$) and control over family ($B = -.225, p < .01$) were related to lower levels of strain-based work-family conflict. Only control over family was related to lower levels of time-based work-family conflict ($B = -.216, p = .01$).

Gender Differences in Coping, Control and Work-Family Conflict

To ensure that it didn't make a significant difference combining the results of males and females in the analysis, a series of independent t-tests were conducted, comparing gender differences for coping (active and passive), control over work and family and work-family conflict (WIF, FIW, SWFC, TWFC). There was only one statistically significant difference. Females were significantly more likely to cope passively than males ($p < .01$). The average coping score for males was 1.95 and the average score for females was 2.14. Although, the difference is large enough to be statistically significant, an average difference of .19, on a 5-point scale, doesn't seem large enough to warrant special consideration. However, it is noteworthy in that future research may want to examine gender differences in coping styles more closely and how those differences may translate into different work-family conflict levels.

CHAPTER 6

Discussion

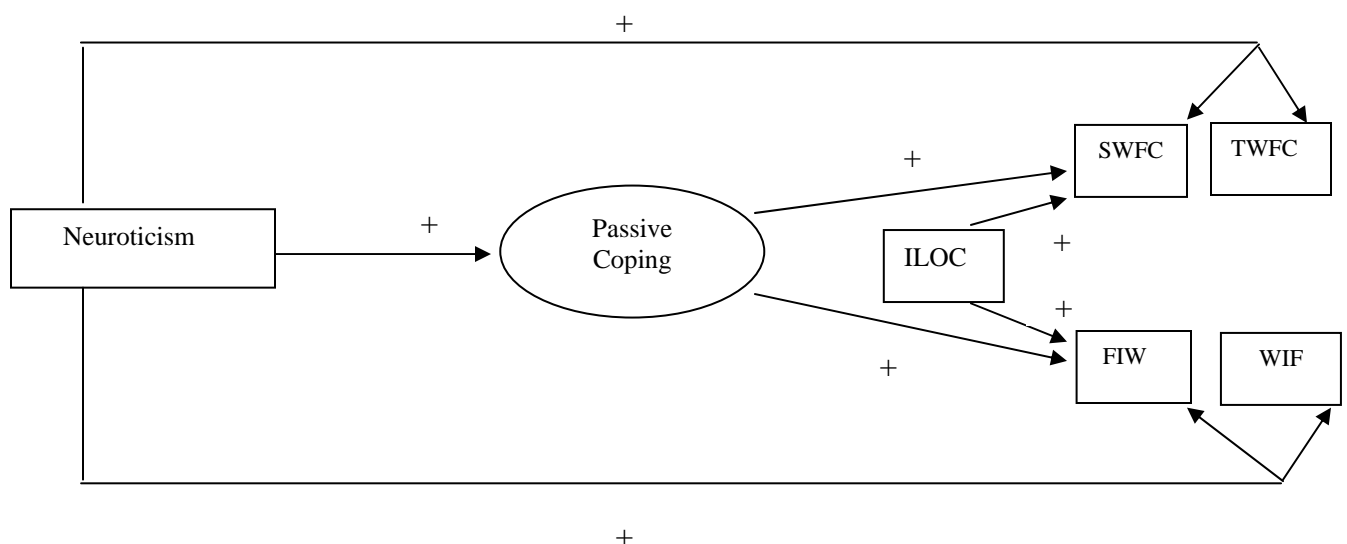
The purpose of this study was to examine how personality and coping influence the experience of work-family conflict. Figure I on page 12 of the introduction illustrates the predictions made. Specifically, it was expected that neuroticism would be associated with higher levels of work-family conflict and that extraversion and an internal locus of control would be related to lower levels of work-family conflict. In addition, it was hypothesized that personality would be related to work-family outcomes through the coping process (active and passive coping). It was also proposed that there would be an interaction between coping style used and control over the situation, with active coping decreasing in effectiveness as control over the situation decreased. Research questions were designed to explore whether there was a degree of fit between personality and coping style, with certain coping styles being more effective, depending on personality.

Neuroticism and passive coping were significantly related to higher levels of work-family conflict (SWFC, TWFC, WIF, FIW). An internal locus of control was related to lower levels of strain-based work-family conflict and family interfering with work. In addition, passive coping mediated the relationship between neuroticism and work-family conflict (Strain-based work-family conflict and family interfering with work). None of the interactions tested were significant.

Figure II, presented below, is a revision of the original model, based on the results of the current study. The revised model differs from the original in that (1) extraversion was removed as a personality variable involved in work-family conflict and (2) more specific pathways were drawn relating an internal locus of control and neuroticism to the

four work-family outcome measures: Strain-based work-family conflict (SWFC), time-based work-family conflict (TWFC), work interfering with family (WIF) and family interfering with work (FIW). In particular, an internal locus of control was changed from having both a direct and indirect relationship (through coping) with work-family conflict to having only a direct relationship with two of the outcome measures (SWFC and FIW). And, although the direct pathways between neuroticism and all four work-family conflict outcomes remained the same in the revised model, the mediating role of passive coping in the relationship between neuroticism and work-family conflict was revised so that it only has a role for strain based work-family conflict and family interfering with work. Furthermore, the model was simplified by removing the interaction term between active coping and work-family conflict, as well as the interaction between personality and work-family conflict. In the remainder of this chapter, the implications of these results are explained and related to existing literature. In addition, the relevance for theory and practical applications of findings are discussed, as well as limitations of the study, and suggestions for future research.

Figure II. Revised model linking personality, coping and work-family conflict.



In the model, the following abbreviations were made: ILOC = Internal Locus of Control, SWFC = Strain-based work-family conflict, TWFC = Time-based work-family conflict, FIW = Family interfering with work, WIF = Work interfering with family. Positive signs (+) indicate a positive relationship between variables.

Discussion of Hypotheses

An important contribution of the current study was the finding that passive coping was the pathway through which neuroticism was related to higher levels of family interference with work (FIW) and strain-based work-family conflict (SWFC). Information from the coping, personality and stress literature was drawn upon in order to hypothesize this pathway. Neuroticism is related to passive types of coping (Penley & Tomaka, 2002; Watson and Hubbard, 1996; Martin, 1989; Rim, 1987; McCrae & Costa, 1986; Parkes, 1986). Active, problem-focused styles are generally found to be more effective in reducing experienced strain than passive and emotion-focused styles (Menagham, 1982; McCrae & Costa, 1986; Felton, Revenson & Hinrichsen, 1984). Following this line of reasoning, it was expected that neuroticism would be related to higher levels of work-family conflict through higher levels of passive coping.

Although it was hypothesized that passive coping would mediate the relationship between neuroticism and all four work-family outcome measures, it is logical that it was significant for the two pathways found in the present research (SWFC and FIW). Coping is defined as cognitive and behavioral efforts to manage external and/or internal demands that are perceived as exceeding one's resources (Folkman & Lazarus, 1991). Because coping helps in the management of stressors, it follows that the mediating pathway between

neuroticism and strain-based work-family conflict was significant and the strongest relationship of the four outcome measures. This understanding helps advance theory, because it informs us about the pathway through which neuroticism is related to work-family conflict. The fact that passive coping is the mechanism through which neuroticism leads to higher levels of strain-based work-family conflict would enable organizations to train individuals to use active styles of coping, and not passive ones, in dealing with work-life demands.

Neuroticism was related to higher levels of family interfering with work (and not work interfering with family) through passive coping, a finding that is supported by coping research indicating that passive coping is most detrimental when controllability of the situation is greatest (Compas, Malcarne & Fondacaro, 1988; Forsythe & Compas, 1987; Vitaliano et al., 1990). One might argue that the home sphere is, in general, more controllable than the work sphere. Therefore, it would follow that passive coping is the reason why neuroticism is related to family interfering with work and not work interfering with family. Future research should examine whether people perceive more control over the work or home spheres. This finding suggests that organizational attempts to increase control that individuals have over managing work and life demands in the workplace may contribute to lower levels of work-family conflict. This could be achieved through allowing greater flexibility in work arrangements.

The finding that passive coping did not mediate the relationship between neuroticism and time based work-family conflict is not surprising. This is because passive coping is related to higher levels of strain outcomes (e.g., Menagham, 1982), and not necessarily associated with less effective time management. Future research should

investigate the mechanism through which neuroticism affects time-based work-family conflict. It might be that people high in neuroticism have perfectionist tendencies, which cause procrastination, leading to time-based work-family conflict. Understanding the pathways better would advance theory and facilitate organizational intervention.

The discovery that passive coping is the means through which neuroticism is related to family interfering with work and strain-based work-family conflict is new to the field of work-family and has many implications. Organizational researchers can use personality inventories and coping measures to identify those who are high on neuroticism, and then diagnose which coping behaviors are affecting their conflict the most. These individuals can be taught how to cope in ways that are more effective (see Schwartz, 1999). This type of training would likely benefit organizations, because work-family conflict has been linked with increased intentions to leave an organization and higher levels of job satisfaction (e.g., Burke, 1988; Kossek & Ozeki, 1998).

The finding that control over work and family was significantly and negatively related to work-family conflict (WIF, FIW, TWFC, and SWFC) supports the implementation of greater control over the work sphere. The relationship between control over work and family and work-family conflict is consistent with research which has found flexible scheduling to be related to lower levels of work-family conflict through increased perceptions of control (Clark, 2002; Thomas & Ganster, 1995). Also, Adams and Jex (1999) found that perceptions of control over time were related to lower levels of family interfering with work and work interfering with family.

When the control over work and family scale was broken down into domain specific items (i.e., work control vs. family control), control over work was significantly

related to lower levels of work interfering with family and family over work was significantly related to lower levels of family interfering with work. This is supported by research which has found that antecedents to work-interfering with family and family interfering with work are domain specific (i.e., work stressors most related to WIF and family stressors most related to FIW; Frone et al., 1992). This is an important theoretical contribution because past research on control and work-family conflict has not examined the impact with respect to the directionality of conflict (i.e., FIW and WIF). An understanding of the domain specific antecedents that play a role in both directions of work-family conflict has been expanded. Practically, the implication is that organizations should not merely provide control over work, but should assist in enabling individuals to have control over their family as well. This could be achieved through company assisted day care, and back-up day care for sick children.

Aside from relationships that were domain specific, it was found that both higher levels of control over work and higher levels of control over family were related to lower levels of strain-based work-family conflict. This makes sense because increased perceptions of control have been found to be related to lower levels of strain (e.g., Bond & Bunce, 2003; Loscocco & Spitze, 1990). Surprisingly, only control over family was related to lower levels of time-based work-family conflict. As mentioned previously, it may be that the work sphere is less controllable, and therefore, perceptions of control over the work environment might be underestimated. For instance, an individual who perceives control over scheduling work hours might still encounter deadlines that are inescapable and face a time dilemma. On the other hand, time dilemmas in the family sphere can be alleviated through outsourcing of work such as hiring a housecleaning service or dry cleaning. If this

is the case, it highlights the challenges that the working class faces, in that they do not have the financial means to hire the same level of assistance. Future research should replicate this finding.

Aside from acting as a mediator, passive coping had a direct and positive relationship to both directions and both forms of work-family conflict (WIF, FIW, TWFC and SWFC). This finding is consistent with previous research in which Rotondo, Carlson and Kincaid (2003) found that avoidance coping (conceptually similar to passive coping in this study) was consistently associated with higher conflict levels (both WIF and FIW). However, Rotondo et al. (2003) only investigated the two directions of work-family conflict and not the forms (time and strain). Although, the outcome measured was not specifically work-family conflict, Hall (1972) found that “reactive role behavior”, a passive orientation towards one’s roles, was related to lower levels of satisfaction in dealing with one’s role in life. Furthermore, research has consistently demonstrated that passive coping styles are negatively related to well-being (McCrae & Costa, 1986; Inglede et al., 1997; Brown et al., 2002). Of the four outcome measures, passive coping was most strongly related to higher levels of strain-based work-family conflict ($\beta = .364$). This makes sense because, conceptually, passive coping is related to lower levels of maladjustment. Of the four outcome measures, passive coping had the weakest relationship with time-based work-family conflict ($\beta = .223$). This is expected because coping behaviors reduce experienced strain, and do not necessarily impact the time one spends in a role.

The finding that passive coping is related to lower levels of work-family conflict is a contribution to the theoretical understanding of the work-family interface. Research on coping and work-family conflict is very limited and no study has looked at the influence of

coping on both the direction and form (time and strain) of work-family conflict. It is interesting that passive coping also affects time-based work-family conflict. Perhaps when someone engages in passive coping such as daydreaming, that person is not using time effectively. The time they spend daydreaming could be used for more productive activities – ones that would be useful in managing work and life demands. Future research should examine the pathway through which passive coping is related to lower levels of time-based work-family conflict. Future research would also benefit from breaking down the larger coping categories into more specific coping behaviors and examine the unique antecedents each have to the different forms and directions of work-family conflict. For instance mental disengagement (e.g., daydreaming) might be related to higher levels of time-based work-family conflict but may be related to lower levels of strain-based conflict because of avoiding the stressor. The practical implication of the finding that passive coping is related to higher levels of work-family conflict is that organizations can use this information to train individuals on how to use active coping styles instead of passive coping styles when they are faced with conflicting demands. Individuals can be taught to recognize the times when they are coping in maladaptive ways. For instance, someone might shop excessively as a stress reducing mechanism. Training can teach individuals to recognize that this is a maladaptive way of dealing with stress and to adjust their behavior accordingly. Because passive coping also affects time-based work-family conflict, this training might have implications that extend beyond reducing work-family conflict and could possibly be related to direct increases in productivity. For instance, a worker experiencing high levels of stress might search the internet at work instead of tackling work-related issues. If this

type of passive coping is also addressed, the implications could extend beyond the reduction of work-family conflict.

Similar to passive coping, neuroticism had a direct positive relationship with all four work-family conflict measures (WIF, FIW, TWFC and SWFC; Hypothesis 3), in line with past research, which found a significant, positive relationship between neuroticism and work-family conflict (Rantanen, Pulkkinen & Kinnunen, 2005; Bruck & Allen, 2003; Wayne et al., 2004; Grzywacz & Marks, 2000). Previous researchers have attributed the relationship between neuroticism and work-family conflict to be the result of high neuroticism individuals perceiving work and family as a higher threat, perceiving experiences more pessimistically, and being less able to effectively cope with stress than their low neuroticism peers (Rantanen et al., 2005; Wayne et al., 2004 & Bruck & Allen, 2003).

Of the four outcome measures, neuroticism was most strongly related to an increased level of strain-based work-family conflict, and was the strongest relationship in the study ($\beta = .465$). This is logical because by definition people high on neuroticism typically have low self-esteem, irrational perfectionist beliefs and pessimistic attitudes (McCrae & Costa, 1999). In the stress appraisal process, low self-esteem affects assessment of one's ability to handle stressors. The low self-esteem of people high on neuroticism would likely act in a similar manner, thus increasing the experience of work-family conflict. In addition, perfectionist tendencies are related to higher levels of perceived stressors, and experienced strain (Hewitt and Flett, 2002). Hall and Hall (1980), after interviewing dual career couples, concluded that the "couples who seem to be able to avoid conflicts and stress from unmet expectations are those who recognize their limits and set

realistic standards (p. 254).” Finally, individuals high in neuroticism generally have strong physiological reactions to stimulation (Stelmack, 1990), are emotionally reactive when compared to more stable individuals, and are susceptible to burnout (Wright & Cropanzano, 1998).

The relationship between neuroticism and work interference with family was also quite strong ($\beta = .387$) and higher than the relationship between neuroticism and family interference with work ($\beta = .221$). It is possible that the current sample consists of people with high work identities, who become very involved in their work and hence are more likely to bring work matters home into the family sphere. The majority of the sample consisted of individuals who were highly educated. Moreover, the sample was largely composed of professional employees: 70% indicated that they were from professional (e.g., attorney), mid-level manager or upper-middle level manager. Kinnunen and Mauno (1998) found that education level was positively related only to the direction work interfering with family for the men in their sample of Finnish employees. Research has also found that high occupational status professions are positively related to work interfering with family (and not family interfering with work; Rantanen, Pulkkinen & Kinnunen, 2005). Finally, the relationship between neuroticism and time-based work-family conflict was the smallest ($\beta = .187$). This is likely due to the fact that neuroticism is by definition related to stress, and not necessarily organization or time management skills. However, the significant relationship between neuroticism and time-based work-family conflict suggests that people high on neuroticism are not as effective at dealing with stress and this may lead to having difficulty in managing the amount of time available to handle the two spheres. Future

research should examine why people high on neuroticism would have more difficulty managing their time.

The finding that neuroticism was related to all four work-family outcome measures corroborates past research findings. The finding supports the theoretical relationship between neuroticism and work-family conflict. In the primary appraisal process, an individual assesses the degree to which a stressor is threatening or not. Due to the low-self esteem and pessimistic nature of individuals high in neuroticism, they are likely to appraise events as more threatening than someone who is low on this trait. The secondary appraisal process, where the individual assesses their ability to effectively handle the demands of the situation, is also likely to be affected by the low-self esteem characteristic of individuals who are high on this trait. Studies have indeed demonstrated that neuroticism is related to more frequent usage of less effective, passive types of coping (Endler & Parker, 1990; McCrae & Costa, 1986; Parkes, 1986; Penley & Tomaka, 2002; Rim, 1987; Watson & Hubbard, 1996) and to less usage of effective, active coping behaviors (Parkes, 1986; Watson & Hubbard, 1996). Theoretically, this would lead directly to more difficulty managing work and life demands.

There are also practical implications in that organizations can use this information to test individuals on this personality trait. If individuals score high on this trait, they could be taught how neuroticism might be affecting both the way that they cope with stressors and the strain they experience in managing work and family demands. They can also be taught how to cope actively instead of passively. Furthermore, the characteristics of perfectionism and low self-esteem can be challenged in order to help reduce the negative impact of these traits.

An internal locus of control was negatively related to family interfering with work and strain-based work-family conflict. The significant relationship between an internal locus of control and these two pathways is reflected in the new model in Figure II. This finding has theoretical implications, in that the relationship between locus of control and work-family conflict has yet to be examined. Research has supported the notion that active attempts in an uncontrollable situation are not effective in reducing experienced strain (Vitaliano, DeWolfe, Maiuro, Russo & Katon, 1990; Compas, Malcarne, & Fondacaro, 1988; Forsythe & Compas, 1987; Strentz & Auerbach, 1988). As mentioned previously, it is possible that the work sphere is more controllable than the home sphere and that people who actively try to control a situation (i.e., are high on internal locus of control) are only effective at home. Conversely, it follows that these active attempts would not be associated with work interference with family. Following this line of reasoning, it makes sense that people high on an internal locus of control in a work setting do not have lower levels of work interference with family, possibly due to restrictions in the workplace that might prevent them from actively managing the situation.

Surprisingly, active coping was not related to work-family conflict (WIF, FIW, TWFC and SWFC; Hypothesis 1). This finding runs counter to findings of Rotondo, Carlson and Kincaid (2003), who found that direct action coping (conceptually similar to the definition of active coping used here) used at home was associated with lower family interfering with work (FIW). Also, Hall (1972) found that structural role redefinition, which is similar to the active coping dimension used here, was related to higher satisfaction with life roles. However, it supports the findings of a study on police stress, where destructive coping (conceptually similar to passive coping used here) was related to

somatization complaints, anxiety and depression and constructive coping (conceptually similar to active coping in this research) was not related to the outcome measures (He, Zhao & Ren, 2005). Theory also supports a relationship between active coping and work-family conflict; research has demonstrated that active coping behaviors are related positively to well-being (McCrae & Costa, 1986; Inglede et al., 1997; Brown et al., 2002). However, it should be noted that the bivariate correlation between active coping and strain-based work-family conflict ($r = -.11$, $p = .07$) approached significance and was in the expected direction.

In order to explain the non-significant relationship between active coping and work-family conflict, several alternatives were explored. One possibility examined was that there was little variance among active coping measures, causing a restriction in range. However, the standard deviations of active coping and passive coping were very similar (.47 for active versus .50 for passive). Another possibility was that participants in this study did not have a high degree of control over work and family. Limited time available in the day, and the number of demands faced when combining work and life activities, might result in an uncontrollable situation. Research has shown that in uncontrollable situations, active coping attempts may not be successful because the situation is not amenable to change (Compas, Malcarne & Fondacaro, 1988; Forsythe & Compas, 1987; Vitaliano et al., 1990). However, one of the hypotheses of the current research, which was not supported, was that active coping would interact with controllability of work and family on the experience of work-family conflict. An additional analysis was conducted on this. The sample was divided into individuals whose perceived control over work and family levels was one standard deviation above the mean, and those who scored one standard deviation below the

mean. Among those who had high control, there was not a significant relationship between active coping and work-family conflict. This further supported the non-finding because even under conditions where active coping would be beneficial there was still no benefit of reducing work-family conflict through active coping.

One conclusion that might be drawn is that active coping is not beneficial for reducing work-family conflict. Although this runs counter to research on coping in the stress literature, it is conceivable that work-life demands, and, in particular, work-family demands are in a large part, uncontrollable. Perhaps, despite active attempts to manage the environment, conflict is inevitable. Even though this may be the case, individuals should not be discouraged from using active coping styles. Active coping is related to lower levels of passive coping ($r = -.41, p < .01$). And, passive coping is related to higher levels of work-life conflict. If one is actively coping, one is also less likely to be engaged in detrimental passive coping behaviors. Active coping might be necessary in order to not have high levels of work-family conflict. Future research could test this type of model in order to understand more fully the role of active and passive coping on the experience of work-family conflict.

The “Opt-Out Revolution,” an article published in the *New York Times* created a stir in the world of work, because it discussed high achieving women who left the workforce when they realized that they couldn’t “have it all” – that is, high powered careers and a perfect family life (Belkin, 2003). More recently, an article was published in the *New York Times* entitled “Stretched to Limit, Women Stall March to Work.” The following excerpt from the article suggests an uncontrollable aspect of combining work and family:

“...Since the mid-1990’s, the growth in the percentage of adult women working outside the home has stalled, even slipping somewhat in the last five

years and leaving it at a rate well below that of men...the broad reconfiguration of women's lives that allowed most of them to pursue jobs outside the home appears to be hitting some serious limits...employed mothers, on average, [work] at home and on the job a total of 15 hours more a week...research suggests that women may have already hit a wall in the amount of work that they can pack into a week”

(Porter, 2006, Page A1)

This type of uncontrollable situation is similar to qualitative findings this writer obtained when determining the coping behaviors that people use when managing work and family. High achieving women indicated that they try hard to be a perfect mom and a perfect employee, but find that they fail to reach perfection at both. There was also a theme of being frustrated at trying to actively manage situations that they had no control over.

The uncontrollable nature of combining some aspects of work and family is worrisome for our society. Women's participation in the workforce was 40 percent in the late 1950s, and increased to 75 percent in 2006, an increase which helped fuel economic growth (Porter, 2006). Future research should examine closely why women are leaving the workforce and what the ramifications are for society – both for gender equality and economic stability. Perhaps the United States needs to be more supportive on a national level similar to some European countries such as Sweden, which has a high-quality government-supported childcare system.

Counter to expectations, extraversion was not related to work – family conflict (WIF, FIW, TWFC and SWFC; Hypothesis 4). The finding is not surprising because extraversion has mixed support as being a factor related to the experience of work-family conflict. Someone who is high on extraversion has a preference for companionship and social stimulation (McCrae & Costa, 1999). Stoeva et al. (2002) found no relationship

between positive affectivity (a construct conceptually related to extraversion) and work-family conflict. Other researchers have not found a significant relationship between extraversion and work-family conflict (Rantanen et al., 2005; Bruck and Allen, 2003 & Wayne et al., 2004). The only research that has supported this relationship was Grzywacz and Marks (2000), who found that a higher level of extraversion was associated with less negative spillover (both WIF and FIW) and more positive spillover (both WIF and FIW).

Although there was weak support for the relationship between extraversion and work-family conflict, it was included because it is related to positive ways of coping (Penley & Tomaka, 2002; Watson & Hubbard, 1996; Martin, 1989; Rim, 1987; McCrae & Costa, 1986; Parkes, 1986), and the role of coping as a mediator was the central theoretical contribution of this study. Extraversion was also included in the analysis because as a construct, there are theoretical reasons for why it would be related to less work-family conflict. For instance, extraverts are more likely to be gregarious, thereby increasing the social support network available to them – an aspect that is crucial to managing stressful events. In addition, extraversion is conceptually related to positive affect (Costa & McCrae, 1980). It is likely that individuals with a positive affect attract people to them, increasing social support. On a more fundamental level, it was thought that individuals high in positive affect would perceive events in a more positive manner, thereby decreasing the level of work-family conflict experienced. Similar to the active coping explanation, there might be only so much one can do, and just so many resources available to help with multiple work and life demands. Combining work and family demands also might be so difficult for individuals that even a positive outlook doesn't help much. Future research should break extraversion down into its lower level facets such as optimism and sociability.

It might be that the higher order construct of extraversion is too broad to capture traits that can be beneficial.

Although there was support for passive coping mediating the relationship between neuroticism and work-family conflict (FIW, SWFC), there was no support for coping (neither active nor passive) mediating the relationships between extraversion, internal locus of control and work-family conflict. Moreover, there was no support for neuroticism leading to higher levels of work-family conflict through lower levels of active coping. First, extraversion could not be mediated by coping (neither active nor passive), because it was not found to be significantly related to the work-family outcomes of the study, as previously discussed. Furthermore, active coping could not possibly be a mediator between any of the personality variables and work-family conflict, because no direct relationships were found between active coping and work-family conflict, as discussed earlier.

Finally, an internal locus of control was only related to higher levels of strain-based work-family conflict and family interfering with work. Therefore, these are the only outcome measures for which passive coping could mediate the relationship between an internal locus of control and work-family conflict. The findings suggest that an internal locus of control is directly related to work-family outcome measures, and not only because internals are coping more passively. This is important for organizations to know, because in this case, it is the trait that should be the focus of intervention. That is, people who are low on an internal locus of control can be taught to perceive higher levels of control in their environment, when control does indeed exist.

Interactions between Personality and Coping

Research Questions examined the interactions of personality and coping style. It was hypothesized that some personalities might be more comfortable using certain coping styles over others. In all, six interactions were tested: neuroticism * passive coping, neuroticism * active coping, extraversion * passive coping, extraversion * active coping, internal locus of control * passive coping and internal locus of control * active coping. None of the interaction terms were significant, suggesting that there is not a degree of fit between personality and coping behaviors. This finding is a theoretical contribution because no study has tested how personality interacts with coping choices in explaining work-family conflict. Past research has supported an interaction between personality and coping on strain and depression (Bolger & Zuckerman, 1995; Auerbach, 1988). However, research has found that the interaction depends on outcome measured; Bolger and Zuckerman (1995) found that self-control coping and escape-avoidance coping interacted with neuroticism on the experience of depression and not on the outcome anger. Therefore, it is maintained that finding no significant interactions between personality and coping on the experience of work-family conflict is a contribution to the literature because this outcome measure has not been examined before in this “personality/coping fit” context.

It is encouraging that the interactions were not found to be significant. This is because it facilitates intervention for Organizations. However, the statistical difficulty in detecting interaction effects in non-experimental studies has been demonstrated (McClelland & Judd, 1993). Therefore, replication with a study that uses more control (e.g., an experimental design) is recommended. The results of this study indicate that passive coping affects work family outcomes. It also shows that passive coping is the means through which neuroticism influences work-family conflict (family interfering with

work and strain-based conflict). Because personality does not interact with coping, one can teach individuals to recognize passive coping behaviors and to avoid these if possible, regardless of their personality.

Limitations

As in any study, there were some limitations. First of all, the cross-sectional nature of the data prevents any conclusions about causality. Therefore, it is important for future research to longitudinally examine the relationships among personality, coping and work-family outcomes measures. This type of longitudinal analysis is especially important for the study of coping, because it is a process that is dynamic. This could be achieved through a diary study, where personality is measured at time 1, and coping each day, while taking measures of control over each situation and outcomes such as work-family conflict, depression and life and work satisfaction.

There is also the possibility of common-method bias because of the self-report nature of the study. However, because the results of this study were consistent with past research, this bias does not seem to be a flaw in the current research. Future research could seek to eliminate common method bias by having self-reports of personality and coping, and obtaining reports of work-family conflict from a spouse or significant other.

Finally, this study found the proposed interactions to be non-significant. Specifically, there was no interaction between coping style used and control over the situation. And, coping style effectiveness did not differ depending on personality. The statistical difficulty in finding interaction effects in non-experimental studies has been demonstrated (McClelland & Judd, 1993). Therefore, future research should investigate these interactions in a more controlled study.

Future Research

The present study only examined the negative effects of combining work and family. In line with the new emphasis on examining the positive impacts that work can have on family and vice-versa (see Barnett & Hyde, 2001), this research should be replicated with the outcome measure work-to-family facilitation and family-to-work facilitation. Research has found that the personality factors related to conflict are distinct from those associated with facilitation (Wayne et al., 2004). For instance, Wayne et al. (2004) found that extraversion was not related to work-family conflict but was related to work-family facilitation. It would be a contribution, therefore, to include additional personality variables that are associated with positive ways of coping such as high self-esteem, high self-efficacy, optimism and hardiness.

The structure of the Big Five is hierarchical, with each higher level trait described by specific traits, or subfactors, that are conceptually related but are in some ways distinct from one another. For instance, conscientiousness includes characteristics such as dutiful, deliberate, self-disciplined and high in achievement striving (Costa & McCrae, 1998). There is often a tradeoff in research between using broad traits in order to determine basic relationships that exist and using the more specific subfactors. For mainly practical reasons, this study focused on the broader traits in order to determine basic relationships among personality, coping and work-family conflict. However, it is possible that subfactors are related to different forms of conflict. For instance, it could be that the neurotic characteristic “low self-esteem” is related to strain-based work-family conflict and the neurotic trait “perfectionist tendencies” is associated with time-based work-family conflict.

Future research should examine the Big 5 factors at the subfactor level in order to increase our understanding of the relationships among personality, coping and work-family conflict.

Passive coping mediated the relationship between neuroticism and strain-based work-family conflict and family interfering with work. Future research should investigate the mechanism through which neuroticism affects time-based work-family conflict and work interfering with family. An examination of the Big 5 traits at the subfactor level might elucidate this relationship as mentioned previously. Aside from looking more closely at neuroticism, future researchers should investigate how an internal locus of control is related to higher levels of strain-based work-family conflict and family interfering with work. Understanding the pathways better would advance theory and facilitate organizational intervention.

Finally, this study examined the coping behaviors at a high level analysis in order to obtain an understanding of how coping is involved in the relationship between personality and work-family conflict. Because coping is a behavior that can be taught, it would be beneficial if future research provided a more detailed analysis of the relationship between coping and work-family conflict. For instance, in this research, active coping styles such as taking active measures, planning and suppression of competing activities were combined to form an active coping dimension. Similarly, denial, behavioral disengagement and mental disengagement were combined in order to measure a passive style of coping. Future research should examine the relationship between coping and work-family conflict at the subfactor level in order to have a more specific understanding of the behaviors that are associated with conflict so that training can be more tailored to obtain maximum effectiveness. For instance, it might be the case that overall, passive styles are detrimental

but that behavioral disengagement is the most detrimental action. Knowledge of this would enable organizations to focus on training individuals to recognize when they engage in this type of coping behavior and how to use alternative more active ones instead. Future research would also benefit from breaking down the larger coping categories into more specific coping behaviors and examine the unique antecedents to the different forms and directions of work-family conflict. For instance mental disengagement (e.g., daydreaming) might be related to higher levels of time-based work-family conflict but unrelated to strain-based work-family conflict. Finally, this study did not examine social support coping behaviors, which have been found to be useful in the coping literature. Future research should include these behaviors in work-family research. The theoretical and practical implications are discussed next.

Theoretical Implications

This study successfully filled gaps in our theoretical understanding of the work-family interface. Specifically, the research (1) Advanced our understanding of the personality variables that are implicated in work-life conflict by adding the personality variable internal locus of control, 2) Examined coping behaviors as a possible mediator and moderator of the relationship between personality and work-family conflict and 3) Considered the role of perceived controllability on the relationship between coping style and work-family conflict.

This study addressed a theoretical question that had not yet been answered in the literature. The question was “Why is personality related to work-family conflict?” It was

found that passive coping explains why neuroticism is related to family interfering with work and strain-based work-family conflict. Knowledge that coping does not explain the relationship between an internal locus of control and work-family conflict is an important contribution as well. The finding with respect to coping as a mediator advances our understanding of why neuroticism is related to work-family conflict. Future research is needed to understand the pathway through which neuroticism is related to work interfering with family and time based conflict as well the pathway through which an internal locus of control is related to higher levels of family interfering with work and strain-based work-family conflict.

Aside from the role of coping as a mediator variable, the finding that passive coping was related to higher levels of work-family conflict (SWFC, TWFC, WIF, FIW) was a theoretical contribution. Research on coping and work-family conflict is very limited and no study has looked at the influence of coping on both directions and different forms of work-family conflict. The fact that passive coping is related to time-based conflict expands our understanding of the benefits of coping, because it is generally conceptualized as related to strain, and not necessarily to time-based outcomes.

Including locus of control as a personality trait expanded our understanding of the personality variables that are related to work-family conflict. As expected, an internal locus of control was significantly related to lower levels of family-to-work conflict and lower levels of strain-based work-family conflict. These findings with respect to locus of control have not previously been demonstrated in the work-family literature. Although Noor (2002) found that an internal locus of control was negatively related to work-family conflict, locus of control was not operationalized as a dispositional trait but rather as an

interpersonal control scale (e.g., “I have no trouble making and keeping friends”). This is a substantial contribution to the literature because it suggests that not only is situational control (i.e., job autonomy) important in understanding work-family conflict, but the degree to which one is predisposed to perceive control over events is also important.

This study also supported past research, such as the finding that neuroticism was related to higher levels of work-family conflict. In addition, extraversion was not related to work-family conflict, in congruence with most studies that have examined this trait. These findings lend further support to past research. It should be noted that the finding that personality style did not interact with coping style supports the recent coping stream, which treats coping as a stable trait, as opposed to situational in nature. This is a contribution to both the coping literature and the work-family research.

Finally, when the control over work and family scale was broken down into domain specific items (i.e., work control vs. family control), control over work was significantly related to higher levels of work interfering with family and control over family was significantly related to higher levels of family interfering with work. This is an important theoretical contribution because past research on control and work-family conflict has not examined the impact with respect to the directionality of conflict (i.e., FIW and WIF).

Practical Applications

The discovery that passive coping is the means through which neuroticism is related to family interfering with work and strain-based work-family conflict has many implications. Organizational researchers can use personality inventories and coping measures to identify those who are high on neuroticism, and then diagnose which

maladaptive coping behaviors they are utilizing. These individuals can be taught how to cope in ways that are more effective (see Schwartz, 1999). This type of training would likely benefit organizations, because work-family conflict has been linked with increased intentions to leave an organization and higher levels of job satisfaction (Allen et al. 2000; Burke, 1988; Kossek & Ozeki, 1998).

The results of this study indicate that active coping does not help in reducing work-family conflict but that coping passively is detrimental. Organizations can use this information to help reduce work-family conflict in their workforce by identifying people who cope passively. They can teach these individuals how to recognize when they are using these behaviors and to learn alternative coping behaviors. This can be done efficiently in lecture format followed by discussion groups. There was no significant interaction between coping style used and control over the situation. Also, there were no significant interactions between personality and coping style. This information facilitates intervention, because it informs practitioners in organizations that they do not need to tailor coping training so that it fits the individual and control over the situation. This simplifies diagnosis as well as training.

There are also practical implications of the knowledge that personality is directly related to the experience of work-family conflict. Neuroticism was related to higher levels of work-family conflict and an internal locus of control was related to lower levels. In general, organizations should teach people how neuroticism can increase the experience of work-family conflict because of the tendency to view more threat in a situation and to have less confidence in one's ability to handle the situation. People high in neuroticism can be taught to recognize anxiety that they encounter when faced with work and family stressors

and to engage in activities such as countering negative thoughts with positive thinking. They can also be taught to cope in more active ways, and to de-emphasize passive styles. Individuals who score low on measures of internal locus of control can be taught how to view situations as more controllable, where control does in fact exist.

The finding that control over work is related to lower levels of work interfering with family and that control over family is related to lower levels of family interfering with work supports organizational enablement of employee control in the workplace and at home. Although control over the work sphere has been stressed in past research, organizations working to increase control over the home sphere has received little attention. Organizations might be able to increase employees' perception of control over the family domain by implementing programs such as company assisted day care and back up day care for sick children.

In conclusion, this study advances our understanding of the individual contributors of work-family conflict. This knowledge does not mean that organizations are "off the hook," but rather, that they should take measures aimed at the individual level in order to address the delicate balance that exists for people attempting to maintain equilibrium between work and life.

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