THE MEDIATIONAL ROLE OF COPING IN THE RELATIONSHIP BETWEEN

PERSONALITY AND WORK-FAMILY CONFLICT

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THE MEDIATIONAL ROLE OF COPING IN THE RELATIONSHIP BETWEEN PERSONALITY AND WORK-FAMILY CONFLICT

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A Dissertation

Submitted to

the Graduate Faculty of

Auburn University

in Partial Fulfillment of the

Requirements for the

Degree of

Doctor of Philosophy

Auburn, Alabama
August 8, 20

DISSERTATION ABSTRACT

THE MEDIATIONAL ROLE OF COPING IN THE RELATIONSHIP BETWEEN PERSONALITY AND WORK-FAMILY CONFLICT

Stacey Marie Smoot

Doctor of Philosophy, August 8, 2005

Directed by Randolph B. Pipes, Ph.D.

The purpose of the present study was to explore a model of Work-Family Conflict (WFC) that includes personality and coping with a sample of university faculty. Contrary to prediction, coping was not a mediator in the relationship between the Big Five personality traits (Extraversion, Conscientiousness, Agreeableness, Neuroticism, and Openness to Experience) and WFC. Additionally, there was not a significant relationship between WFC and tenure status, but number of work hours was positively related to WFC. Several personality traits were significantly correlated with various other variables in the study. There was a significant and positive relationship between Extraversion and Problem-Focused Coping and a negative relationship between Extraversion and WFC. There was a significant negative relationship between Conscientiousness and WFC, and Neuroticism and Openness to Experience both had positive relationships with WFC. Furthermore, there were significant positive relationships between Problem-Focused Coping and WFC and between Emotion-Focused Coping and WFC. These findings are

discussed as well as the suggestion that future research further examine the role of coping and its influence on WFC.

ACKNOWLEDGMENTS

The author would like to acknowledge several people for their support and assistance in completing this dissertation. First, thanks are due to Dr. Randy Pipes for his guidance and support, not only as the dissertation committee chairperson, but also as the author's graduate advisor throughout the Counseling Psychology doctoral program. His efforts have made an immeasurable contribution to this project and to the author's future career as a psychologist. Also, thanks are due to the dissertation committee members, Dr. Jamie Carney and Dr. Joe Pittman, as well as the outside reader, Dr. Scott Ketring for all of their time and energy spent with this project.

The author would also like to acknowledge family and friends that have served as an unconditional support system. David, Mom and Dad, Heather, Kyle, Allison, Erin, the Martins, the Owens, and others have helped to make completing this project and this graduate program possible. Special thanks are also due to Maggie for her suggestions and help with this investigation.

SOFTWARE USED

Microsoft ® Word 2000

SPSS 12.0 for Windows, Amos 4.01

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THE MEDIATIONAL ROLE OF COPING IN THE RELATIONSHIP BETWEEN PERSONALITY AND WORK-FAMILY CONFLICT

In the last twenty years, society has witnessed some rather dramatic changes in the American family. The culture and economy of today have led men and women to be much more likely to pursue careers or jobs to better provide for their families. More women are present in the workforce today, as compared to just a few years ago, which has led to the development of the dual-earner couple and family.[1] Between 1951 and 1997, the proportion of married women who were in the labor force nearly tripled, from 23 percent to 62 percent (U.S. Census Bureau, 2000). Research indicates that 85% of employees report having some day-to-day family responsibility (Bond, Galinsky, & Swanberg, 1998). Because people hold various roles in their lives, predominantly work and family roles, it is important to look at how these roles influence not only each other, but also outcomes for the individual, work, and family. The change in work and family roles for individuals has brought about research on conflict between work and family roles.

The research examining conflict between work and family roles has tended to focus on situational variables, such as work variables (e.g., number of hours worked) and family variables (e.g., number of children). While these variables play an important role

[1] A dual-earner couple is one in which both partners hold jobs in order to bring home increased income. Dual-career couples, on the other hand, are couples where both partners have careers. Rather than working solely for the financial benefits, both partners in a dual-career situation are pursuing careers, rather than jobs, with more personal investment, commitment, and benefits (Holahan & Gilbert, 1979).

in the conflict between work and family, other individual variables may also be important. For example, personality seems to be a likely variable that influences conflict between work and family.

Personality is studied in many areas of psychology, as it is seen as being a major influence on people's thoughts and behaviors. As individuals try to integrate their work and family roles, it is evident that personality could play a role in the conflict experienced between roles. Two people may experience the same objective work or family situation (e.g., same level of job involvement, same number of children) yet differ in their experience of conflict between work and family roles. That is, though their objective experience is the same, one's personality may influence how he or she perceives the situation, resulting in different experiences of conflict. In fact, some initial research in this area has shown that personality variables (e.g., Type A personality, negative affectivity, neuroticism, conscientiousness) are related to levels of conflict between work and family roles. Thus, while it is important to consider situational factors influencing conflict between work and family, it is also important to consider how one's personality may affect, or even help produce, the experience of conflict.

While some research has begun to examine the role of personality in conflict between work and family roles, an understanding as to how personality impacts conflict between work and family is not clear. The outcome of any stressful interaction is impacted not only by the appraisal of the situation, but also by the coping behavior of the individual (Cox & Ferguson, 1991), and therefore one potential explanation is that coping plays a role in the relationship between personality and conflict between work and family. Coping refers to "behavior that protects people from being psychologically

harmed by… life-strains" (Pearlin & Schooler, 1978, p. 2). It is a variable that has been studied extensively by psychologists and other researchers interested in human behavior, and has been correlated with personality and with conflict between work and family. Therefore, it was examined in the present study.

Past research has indicated that there are significant relationships between personality and coping behaviors. One example is that individuals scoring high on Extraversion have been shown to use more Problem-Focused coping behaviors (e.g., positive thinking/positive reappraisal, social support) and fewer Emotion-Focused Coping behaviors (e.g., distancing, escape-avoidance) (e.g., Hooker, Frazier, & Monahan, 1994). Significant relationships have also been found between coping behaviors and levels of conflict between work and family. Problem-Focused Coping is related to lower levels of conflict and Emotion-Focused Coping is related to higher levels of conflict (e.g., Rotondo, Carlson, & Kincaid, 2003). These findings suggest that personality variables are related to coping behaviors and that coping behaviors are related to conflict between work and family roles Thus, it seems that coping may play a mediational role in the relationship between personality and conflict between work and family roles.

It was predicted in the present study that coping would mediate the relationship between personality and conflict between work and family roles. A review of the work and family literature by Eby, Casper, Lockwood, Bordeaux, and Brinley (2003) revealed that only 28 percent of predictive studies reviewed examined mediated effects. One criticism of this literature is a lack of theoretical models of the work-family interface (Eby et al., 2003).

The purpose of the present study was to explore a model of conflict between work and family roles that includes personality, coping, and work variables. Some of these relationships have been studied in past research, but the purpose of this study was to test a mediational model of conflict between work and family roles that had not been examined previously.

LITERATURE REVIEW

Conflict that employees experience between their work and family roles has been shown to negatively influence job, life, and marital satisfaction, and more. A plethora of research has investigated the antecedents and consequences of conflict between work and family. Additionally, there have been approximately 10 reviews of the literature on conflict between work and family roles. These reviews have focused on different aspects of the area, such as the work and family consequences of conflict between work and family (Allen, Herst, Bruck, & Sutton, 2000; Kossek & Ozeki, 1998, 1999), the effects of organizational policies aimed at reducing conflict (Glass & Estes, 1997; Kossek & Ozeki, 1998, 1999), how work and family roles vary in the emotional management they require (Wharton & Erickson, 1993), life-span perspectives of career development, including the interaction of work and nonwork domains (Swanson, 1992), investment by individuals in work and family roles (Lobel, 1991), the causal relationships between work and family constructs (Edwards & Rothbard, 2000), and the causal effects of time-, strain-, and behavior-based conflict (Greenhaus & Beutell, 1985).

The aim of this chapter is to provide a review of several literatures. First, a review of definitions, theory, and research on conflict between work and family will be given. Next a brief review of some coping literature will be provided with emphasis given to those theories and studies that relate to the focus of the present study. Because it is proposed here that coping plays a mediational role in the relationship between

personality and conflict between work and family, research examining these relationships is also reviewed. Summaries of studies examining relationships between personality and conflict between work and family, personality and coping, and coping and conflict are provided in order to demonstrate how the hypotheses tested in the present study were developed. Within the sections in this chapter, previews will be provided to give more specific outlines of what will be discussed.

Conflict Between Work and Family: Definitions and Theory

Definitions

In this section, definitions of work, family, Work-Family Conflict (WFC), and Family-Work Conflict (FWC) are provided, so that the reader will have an understanding of what these terms mean to researchers in the work and family arena. Definitions of and distinctions between different types of conflict that have been identified in past research will also be provided. Following the definitions, theoretical perspectives that have been utilized in this area are described, as well as mechanisms explaining how work and family may conflict with each other.

Work can be defined as "instrumental activity that is intended to provide goods and services to support life" (Edwards & Rothbard, 2000, p. 179). Work may involve intrinsic rewards, but its main purpose is to provide extrinsic rewards. Family is defined as persons related by biological ties, marriage, social custom, or adoption (Edwards & Rothbard, 2000). Individuals may include people in their family who are not considered family, either biologically or legally. Being in a family, by definition, is assumed to lead to intrinsic rewards. Conflict between work and family roles has been defined as a form of interrole conflict in which work and family role demands are mutually incompatible,

such that if one is to meet the demands in one domain, it is difficult to meet the demands in the other domain (Adams, King, & King, 1996). For instance, if an employee is working on an important project at work, and is spending long hours at work, he or she will not have as much time or energy to devote to his or her family role. Thus, a conflict occurs between the work and family roles. Various models of conflict between work and family incorporate two assumptions. First, conflict arises when the demands of participation in either work or family are incompatible with the demands of participation in the other. Second, this conflict can have an important effect on the quality of both work and family life (Adams, King, & King, 1996). Conflict between work and family roles, therefore, is assumed to be aversive because extrinsic and intrinsic rewards may not be obtained when role demands in both domains are not met completely (Edwards & Rothbard, 2000).

While conflict between work and family roles assumes that the interaction between work and family roles is a negative one, some research has shown that having multiple roles can have positive effects for men and women (Bolger, DeLongis, Kessler, & Wethington, 1990), enhancing one's psychological well-being (e.g., Thoits, 1983) and feelings of personal worth and security (e.g., Sieber, 1974). Work-family facilitation states that work and family can positively influence one another because participation in one domain is easier because of skills developed in the other domain (Frone, 2003). However, the benefit associated with holding multiple roles depends considerably on the demands of the work and family roles. For instance, Kessler and McRae (1981) found that the mental health benefits related to a paying job were less for women who had children than for those that did not. While it is recognized that holding work and family

roles can have benefits for individuals, the focus of the present review and study is on the conflict between roles.

Within the work-family literature, researchers and writers have used the term Work-Family Conflict (WFC) to refer to either the general interference between work and family roles (as defined above), or to the specific influence of the work role on the family role. Use of the term WFC, therefore, can be confusing. The specific (i.e., directional) definition of WFC involves conflict due to the interference that one's work role has on his or her family role, whereas Family-Work Conflict (FWC) refers to that which occurs when one's family life or role interferes with his or her work role. It is assumed that many of the processes and effects that work and family have on each other are bidirectional, where work affects family and family also affects work (Edwards & Rothbard, 2000), both of which are presumed to be aversive to individuals. The literature has consistently shown that WFC is more likely to occur than FWC (Greenhaus & Parasuraman, 1999), perhaps due to the fact that there is more perceived flexibility in meeting family demands than work demands. For instance, the financial contribution of work to the family is quite important, and therefore it may be very difficult to alter the work role.

Research has indicated that antecedent work variables (e.g., number of hours worked) contribute to WFC and antecedent family variables (e.g., number of children) contribute to FWC. In addition, WFC has been shown to impact family outcomes (e.g., family distress), while FWC has been shown to impact work outcomes (e.g., work satisfaction). As noted above, the term WFC has been used in some studies to refer to general conflict between work and family roles, some of which is actually FWC. In order

to reduce confusion, the term WFC will be used in the present review to refer exclusively to the specific impact of the work role on the family role leading to conflict.

While a distinction has been made in the literature between the direction of conflict, Greenhaus and Beutell (1985) have further distinguished among three forms of conflict between work and family roles: time-, strain-, or behavior-based conflict. Time-based conflict occurs when devoting time to one domain, work or family, takes away from time that would normally be devoted to the other domain. For example, if an employee works long hours, then he or she has less time at home with the family. This time-based conflict can involve either physical or mental time. A person can either be physically absent from one or the other domain, or they may be preoccupied mentally with one domain while they are supposed to be devoting time to the other (e.g., thinking about a sick child at home while he or she is at work).

Strain-based conflict occurs when the strain (e.g., tension, anxiety, and fatigue) that occurs in one domain prohibits a person from performing his or her role in the other domain. It is assumed that strain leads to a decrease in resources, such as energy and motivation that are needed to perform a role. Therefore, if these resources are reduced due to one domain, then the other domain's roles are not fulfilled. Strain-based conflict does not necessarily mean that the work and family roles are conflicting with each other, but rather the resources that a person has are depleted. For example, a person whose company is downsizing may be worried about job security. Worry and stress then deplete emotional resources and prohibit that person from being able to perform his or her family role.

Behavior-based conflict occurs when behaviors that a person performs in one role are incompatible with the behaviors they must perform in the other role. When this conflict occurs, it means that the person is unable to adjust his or her behaviors according to which role they are currently fulfilling. An example of this type of conflict would be when an employee is expected to be aggressive and cut-throat in the business world, but then is expected to be nurturing and pleasant at home with his or her family. These two roles are very different from one another, and the person may have trouble changing from one to the other. He or she may then use business strategies to solve problems at home, and this could lead to conflict.

Although these three forms of conflict between work and family have been proposed in the literature (Greenhaus & Beutell, 1985), strain- and time-based are reported to be experienced more by individuals than behavior-based. As will be discussed later, the variables most often found to be related to conflict between work and family roles are things that are more time-based (e.g., job and family involvement, number of hours worked) and strain-based (e.g., job and family stressors, role conflict and ambiguity, parental demands) than they are behavior-based.

In summary, research examining the interaction between work and family roles has tended to focus on the conflict between the two. It is recognized that holding multiple roles can have positive effects for individuals, but much research has focused on the negative effects. This literature asserts that conflict is bi-directional such that work can impact family (WFC) and family can impact work (FWC). Terms used in the field can be confusing, as WFC has been used to refer to general conflict between work and family roles, or to the specific interference of the work role on the family role. In the

present review WFC will be used to signify conflict that arises when the work role interferes with the family role. Next, a review of theoretical perspectives describing why conflict between work and family roles may arise is provided.

Theoretical Perspectives

There have been various theories proposed and used in the literature to explain why conflict between work and family roles may arise. Two will be the focus of discussion here, as they are the most prevalent in the literature: role theory and identity theory. These two theories propose relationships between work and family roles based on the level of commitment, energy, and investment people assign to the roles they hold, and how these roles can interfere with one another.

Past research and discussions on conflict between work and family have drawn causal relationships between the work and family domains from role theory (Edwards & Rothbard, 2000). A role is "a socially expected behavior pattern usually determined by an individual's status in a particular society" (Mish, 1990, p. 1021). In terms of work and family, a role can be viewed as the assigned responsibilities and behaviors that a person has in either domain. According to the role theory view, it is assumed that both work and family entail multiple roles, each of which places demands on a person. Rewards from meeting the demands of these roles enhance a person's role performance, which brings about extrinsic rewards from others (e.g., pay, approval, advancement) as well as intrinsic rewards from the self (e.g., sense of accomplishment, pride). These intrinsic and extrinsic rewards are assumed to lead to a positive mood, whereas a lack of reward is assumed to bring about a negative mood. When a negative mood comes about, coping efforts are stimulated to change aspects of the work and family domains, adapt to

conditions in the domains, or avoid a domain in part or completely in order to deal with the negative mood. These coping mechanisms involve the same goal, to enhance well-being in both the family and work roles, which in turn enhances overall well-being (Edwards & Rothbard, 2000). Conflict between work and family roles that arises according to role theory may be time-, strain-, or behavior-based, as described above. The roles may interact negatively because of time constraints, strain, or behavior discrepancies.

Another theory that is associated with the literature on conflict between work and family roles is identity theory. Identity theory describes the notion that individuals have multiple roles that are hierarchically arranged in terms of their salience, priority, and importance to each individual (Burke, 1980). The salience of identity is important because it motivates action in support of each specific identity in different situations. For example, an individual who is both a father and an employee of a company may place more salience on his father role, thereby leading him to spend more time being a father than being an employee. In this instance, time-based conflict might occur. Strain-based and behavior-based conflict may also arise according to this theory, depending on the situation and the factors in play.

There are two perspectives that have looked at the identity issue in terms of role salience: the scarcity perspective and the multiplicity perspective. The scarcity perspective states that individuals do not have the resources to fulfill various roles, and therefore cannot be dually committed, or have identities with both roles at once; they must participate in one role at the expense of the other (Bailyn, 1978). The multiplicity perspective, on the other hand, asserts that individuals are able to commit to and have an

identity with more than one role, without forsaking the other role, as long as they are committed to both (Marks, 1977). Neither of these perspectives, however, takes into account individual differences or context. The heart of identity theory is that the number of roles that a person has is not what is important; rather, it is the salience or the identity with the roles that matter. Identity theory would propose that a person who has high work salience but low family salience (or vice versa) would experience less conflict between work and family roles than someone who is high on both. Because a person who has both high work and family salience has to commit time and energy to both roles, and this person probably does not have enough time or energy to give to both, they will experience more conflict than someone who is high on one role and low on the other.

Both role theory and identity theory have been applied to various studies on the conflict between work and family roles, focusing on how people perceive both their roles in workplace and at home, and also the conflict that arises between these two roles. Role theory explains how work and family include various roles, which place demands on a person. These demands can overlap, thereby causing conflict to arise. Identity theory asserts that people have multiple identities in their lives, and the importance that they place on these identities or roles is what influences whether conflict occurs. The importance of and commitment to a particular role is shown in the literature to affect the interference between work and family roles (e.g., job involvement and family involvement, as described later). Both of these theories are important in understanding the variables used in the present study and how they impact the interaction between work and family. The ways that conflict between work and family roles occur, the perceptions that individuals have of the interactions between work and family roles, and the ways in

which people cope with conflict may be due to both the interference of the roles and to how individuals place priority on their identities.

This section has described two of the most prominent theories used to explain why conflict may occur between work and family roles. Next, a summary of linking mechanisms that describe causal relationships between work and family will be provided. While the theories explain why conflict may occur, the mechanisms are another way of viewing the interaction between work and family roles, identifying more specifically how this conflict may come about.

Mechanisms

Edwards and Rothbard (2000) reviewed the work-family literature and identified linking mechanisms to better explain the "causal relationships between work and family constructs" (p. 184). These mechanisms stem from role theory and identity theory (described above), but go further to describe specific interactions between work and family roles that lead to conflict between work and family roles. A linking mechanism is a relationship between a work construct, such as time spent at work, and a family construct, such as time spent with family, and exists when these two domains are distinct from each other. Linking mechanisms involve relationships that span across both the family and work domains, and not ones that are within each (Edwards & Rothbard, 2000). That is, the mechanisms explain how the work and family roles interact with one another, and not necessarily how different roles within work or within family affect one another.

As described above, there are three types of conflict between work and family roles that have been identified: time-, strain-, and behavior-based conflict. The

mechanisms that follow may be used to describe how any of those three types of conflict come about. Examples are provided with each description of a mechanism, and the type of conflict resulting is named. However, it should be remembered that if a strain-based conflict example is given, for instance, it does not mean that time- or strain-based conflict cannot arise because of that same mechanism. The mechanisms will now be described.

Spillover

Spillover refers to "effects of work and family on one another that generate similarities between the two domains" (Edwards & Rothbard, 2000, p. 180). There are two versions of this mechanism, one that involves a similarity between a construct in both domains (e.g., positive relationship between job and family satisfaction), and another that involves experiences that are transferred from one domain to another (e.g., work fatigue is seen at home also). A case of experiences that are transferred between domains would be a person who works long hours at work and as a result is tired. This fatigue would carry over to the person's family role, leaving him or her less able to perform his or her family role (leading to strain-based conflict).

Compensation

Compensation involves seeking satisfaction in either work or family to offset some dissatisfaction in the other domain (Edwards & Rothbard, 2000). There are also two forms of this mechanism. The first involves decreasing participation in the dissatisfying domain. So, for instance, because a person is not happy with his or her family life, he or she might spend less time and energy on his or her family role. Compensation may also involve pursuing rewards in the satisfying role. An example of this would be a person who is unhappy with his or her career who decides to commit

more time and energy to their family role to compensate (leading to time- or strain-based conflict).

Segmentation

Segmentation is defined as the behavioral and/or cognitive separation of work and family so that they do not interfere with one another (Edwards & Rothbard, 2000). This is an active process that a person employs purposefully. This is probably one of the more conscious mechanisms, as there are many people who try to leave work problems at work, or leave family problems at home (trying to avoid behavior-based conflict, for example).

Resource Drain

Resource drain involves the transfer of personal resources from one domain to another, such as time, attention, or energy (Edwards & Rothbard, 2000). The reason for the transfer is not what is important, but rather merely the fact that the transfer occurs. An instance of this is when a person has a sick child at home and he or she works fewer hours to be home to help the child. When a person has to use his or her time and energy for one role, and possibly becomes strained from this drain, he or she will have less to devote to the other role (leading to time- or strain-based conflict).

Congruence

Edwards and Rothbard (2000) also proposed congruence as another mechanism between work and family. Congruence is similarity between work and family, owing to a third variable that acts as a common cause, such as personality, genetics, general behavioral styles, and culture. For example, a person who has generally positive affect will have a positive relationship between work and family satisfaction because they are

both affected similarly (Edwards & Rothbard, 2000). Individual variables, such as personality may influence which roles people participate in, as well as which roles they engage in more.

As one can see, the ways in which work and family roles interact can vary, and a number of these ways have the potential to lead to conflict. Role theory and identity theory are theoretical ways to describe this interaction, while distinctions between the different processes (i.e., compensation, spillover, resource drain, etc.) help us to understand how conflict functions by specifying the underlying mechanisms of the relationship. Now that the reader has a general understanding of the ways that work and family roles interact to lead to conflict, a discussion of how research on this topic is usually conducted will be provided.

General Methodology in the Literature on Conflict Between Work and Family Roles

A review of the literature on conflict between work and family roles yields many studies that have been reported in journals in sociology, developmental psychology, industrial/organizational (I/O) psychology, management, and more. In the present review, general trends in this literature will be summarized.

In a recent review of the literature, Eby et al. (2003) found that 62 percent of the studies involved hypothesis testing, 11 percent were exploratory, 9 percent tested models, 8 percent used model development and testing, 8 percent used hypothesis testing and were exploratory, and 2% used model testing and hypothesis testing. In a typical study of conflict between work and family, researchers develop and test structural models (using structural equations modeling; SEM) of the relationship between work and family variables and conflict. Typically, when researchers have used SEM, self-report measures

of work and family antecedents and outcomes are administered along with scales to measure conflict.

Self-report methodology has been criticized because it carries with it different biases that individuals hold. Answers to questions such as those in WFC scales are based on self-report and therefore are not only on information about a person's life, but also on his or her own psychological input and biases. Research in other areas has shown that there can be significant differences between information obtained objectively and information obtained by self-report (Allen, et al., 2000), and therefore it has been suggested that it would be advantageous to the literature to try to objectively study WFC.

Although the self-report methodology has been criticized, it may not be such a negative aspect of the literature. The experience of conflict between work and family is reliant on the perception of circumstances that an individual encounters. For instance, a study that measures an objective variable such as hours spent at work versus hours spent at home may not adequately access the interaction between work and family. For example, even though a person may spend more hours at home than at work, per week, perhaps he or she spends much of the time at home making work phone calls or thinking about work activities. Therefore, he or she may experience WFC, even though the hours spent at work are not high. The report that an individual gives about his or her experiences seems to be more important than some objective measures. Because the experience of conflict is such an individual one, subjective measures may be more telling of the actual experience.

An illustrative example of the self-report methodology is a study by Weigel and Weigel (1995). They surveyed 517 state employees who were asked to answer questions

that measured work and family characteristics, WFC, general stress, and quality of family life. In measuring WFC, the researchers included three subscales from the Job-Family Role Strain Scale (Bohn & Viveros-Long, 1981). Statements that participants had to respond to included things such as, "I worry that other people at work think my family interferes with my job," and "I worry that other people feel I should spend more time with my children." They tested a model of WFC that specified relationships between the variables noted above using path analysis (or SEM). Their results indicated that there were significant relationships (some of which will be reviewed below) that impacted WFC for the participants in their study. Their model has been used in future research for further examining the influence of such variables on WFC.

Appendix A is a summary of many of the studies in the literature on conflict between work and family roles showing various instruments used to measure WFC and FWC, independent and dependent measures examined, samples used, and key findings of the studies. Many of the measures of WFC and FWC examine variables such as role ambiguity, conflict, strain, or stress (e.g., Bedeian et al., 1988; Holahan & Gilbert, 1979; Weigel & Weigel, 1995), general interference between work and family (e.g., Frone et al., 1992), and different mechanisms linking the work and family roles, such as spillover, compensation, and segmentation (as discussed above) (e.g., Hammer, Allen, & Grigsby, 1997).

Some of the scales used in the literature incorporate the two directions of conflict: work-to-family conflict (WFC) and family-to-work conflict (FWC). For example, the scale developed by Frone et al. (1992) asked participants to respond to questions such as, "How often does your job or career interfere with your responsibilities at home, such as

yard work, cooking, cleaning, repairs, shopping, paying the bills, or child care?," "How often does your homelife keep you from spending the amount of time you would like to spend on job or career-related activities?." Gutek, Searle, and Klepa (1991) asked participants to respond on a 5-point Likert scale to statements such as "After work, I come home too tired to do some of the things that I'd like to do" and "My personal demands are so great that it takes away from my work." In another study, Kopelman, Greenhaus, and Connolly (1983) developed a measure of WFC and FWC that asked participants to respond on a 5-point Likert scale, ranging from 1 (strongly agree) to 5 (strongly disagree). Statements that assessed WFC were ones such as, "My work takes up time that I would like to spend with my family," and "I am preoccupied with my work while I am at home." Examples of statements assessing FWC conflict were, "I am often too tired at work because of things I do at home," and "I am preoccupied with my personal life while at work."

While including items that assess the two directions of conflict is important, researchers have also stressed the value in including items that assess the three types of conflict described above: time-, strain-, and behavior-based conflict. The scale developed by Carlson, Kacmar, and Williams (2000) does just that. It measures both the two directions (WFC and FWC) and the three types of conflict, thereby including six subscales that measure all possible types of conflict between work and family roles that have been identified in the literature: time-based WFC, time-based FWC, strain-based WFC, strain-based FWC, behavior-based WFC, and behavior-based FWC. This scale has become a widely used measure of conflict between work and family, and therefore was chosen for the present study.

Using the scales described above, different populations and samples of people have been used in studies examining the conflict between work and family roles. Researchers have surveyed, for example, accountants (e.g., Bedeian, Burke, & Moffett, 1998) teachers (e.g., Byrne, 1993; Reid, 1999), government workers (e.g., Carlson & Perrewe, 1999), health care professionals (e.g., Thomas & Ganster, 1995), and police (e.g., Burke, 1988), on their WFC experiences, as well as undergraduate and graduate students (e.g., Spade & Reese, 1991; Thorn & Gilbert, 1998; Livingston, Burley, & Springer, 1996) about their anticipated WFC. Although different disciplines and types of people have been studied, the majority of the individuals in these studies have been married with children. Most of these families also include dual-earner couples, where both the husband/father and wife/mother work outside of the home.

In summary, research examining the conflict between work and family roles has typically tested models that include work and family variables and how they impact or are impacted by WFC and/or FWC. Various samples of individuals have been examined, and several measures of conflict have been used. The literature indicates that measures which assess both directions of conflict (work-to family and family-to-work) as well as all three types of conflict (time-, strain-, and behavior-based) are perhaps the most comprehensive (Carlson, Kacmar, & Williams, 2000). Now that the methodology of this type of research has been summarized, specific studies and their findings will be reviewed.

Summary of Research Findings and Framework of the Variables Studied

As noted above, a sample of studies in the literature on conflict between work and family illustrating the samples used, variables included, measures used, and key findings

is shown in Appendix A. These studies will be included in the present discussion of the general findings in the literature to date. The variables studied have also been organized into a general framework (see Figure 1). Specifically, the variables most often studied as antecedents, moderators and mediators, and outcomes in the work-family literature will be reviewed. As one can see, the framework of variables includes work and family variables and also WFC and FWC. Figure 1 is meant to provide a general framework of variables that have been studied in the literature, both those that are related to WFC and those that are related to FWC, so that the reader will have a broad understanding of variables and relationships studied. However, the focus of the present study was on WFC, and therefore those studies that concentrate on work-to-family interference will be reviewed here. Therefore, some of the variables listed in Figure 1 are not reviewed here because they do not pertain to WFC or the focus of the present study.

Work-Family Conflict has been viewed as an antecedent to work and family outcomes, as an outcome of work and family antecedents, and as a mediator between work and family antecedents and the outcomes that individuals experience. Studies with all these designs are reviewed here. The role of WFC in individuals' lives is a complex one and most studies examine a small part of the overall picture. For instance, although studies may specifically examine the influence of a certain antecedent variable on WFC, researchers usually interpret their results as playing a part in the overarching model of WFC. Now, the antecedents to WFC, outcomes of WFC and moderators that have been studied will be discussed.

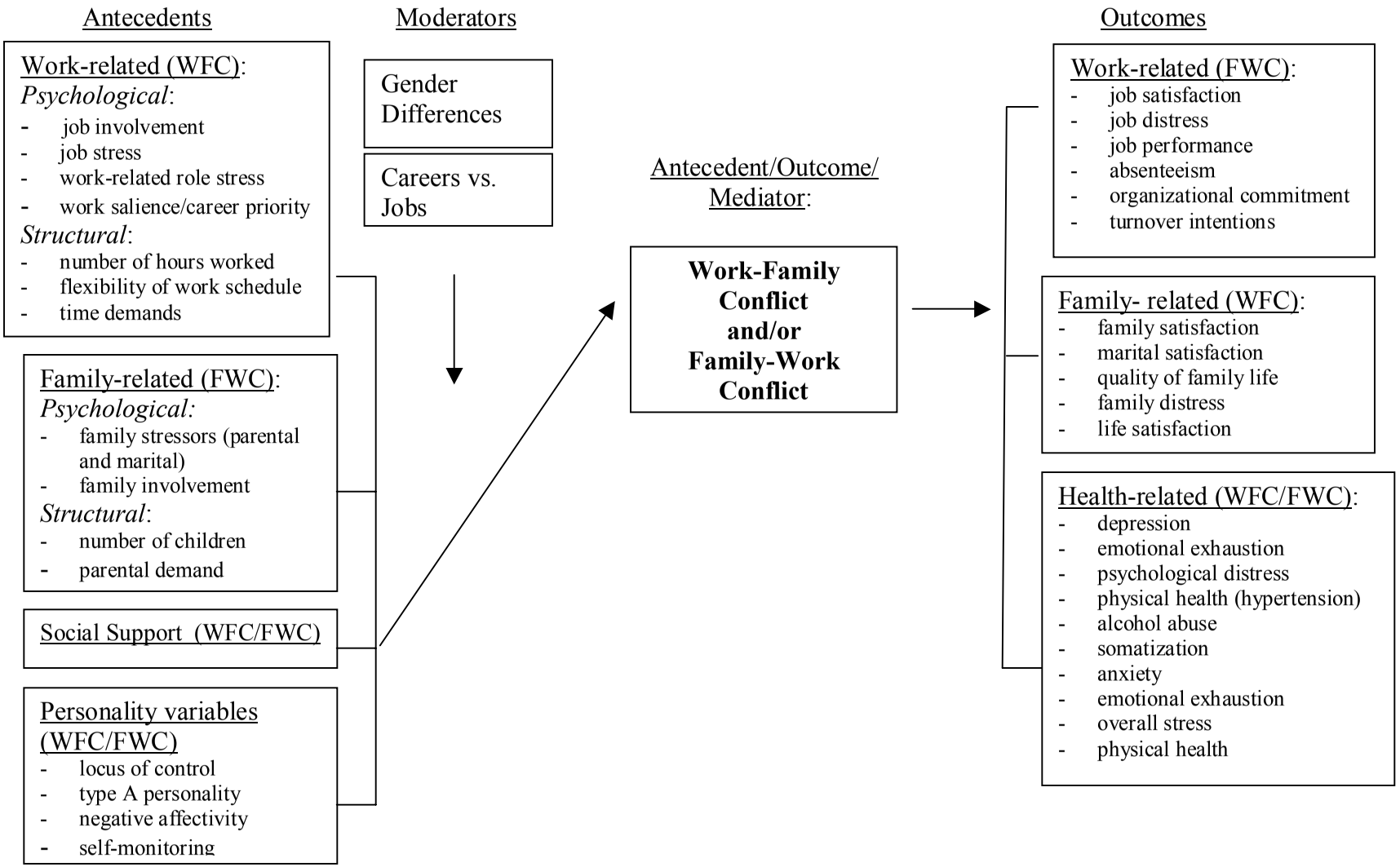

Figure 1. Framework of Variables Studied in Work-Family Conflict Literature

Antecedents

The antecedents that have been studied within the WFC literature can be classified into two categories: work-related variables and social support. The work-related variables include both psychological variables as well as structural variables.

Work-Related

Several variables that have been studied as antecedents to WFC are "psychological" work variables (Weigel & Weigel, 1995). One such variable is job involvement. Job involvement is defined as the degree of importance a person assigns to his or her job (Adams et al., 1996), and it has been positively related to WFC (Frone et al., 1992; Adams, et al., 1996). Theoretically, as a person becomes more involved with his or her job or career, he or she has less time and energy to devote to the family role, leading to WFC. Frone et al. (1992) tested a model that proposed WFC as a mediator between work and non-work antecedents, job and family stress, and depression. The researchers found that not only did job involvement lead to more WFC, but it also led to higher levels of job distress, and then to depression (via job distress).

Related to job involvement are the antecedents of work salience and career priority, as studied by Weigel and Weigel (1995). The more a person makes his or her career a priority or the more salient it is to him or her, the more involvement he or she will most likely have in that role. Similar to job involvement, work salience and career priority are related to the level of WFC (Weigel & Weigel, 1995).

Job stress and work-related role stress are other "psychological" work factors that are also positively related to WFC (e.g., Frone et al., 1992; Bedeian et al., 1988). Bedeian et al. (1988) surveyed 423 male and 335 female accountants on their experiences

of work and family life. They measured work-related role stress, based on the existence of role conflict and role ambiguity (as well as other work and non-work variables). Role conflict occurs when the roles that a person has interfere with one another, while role ambiguity is when a person is not sure of what a role entails or the responsibilities he or she has with the role. The model they proposed examined the relationship between those antecedents and WFC. Results indicated that work-related role stress was indeed related to higher levels of WFC. Other researchers have replicated this finding that both role conflict and role ambiguity lead to increased levels of WFC for individuals (Byrne, 1993; Carlson, 1999; Boles & Babin, 1996).

Some work-related variables that have been examined in this literature are related to the work environment that one is in and are considered "structural" work variables (Weigel & Weigel, 1995). The number of hours worked, inflexibility of the work schedule, and time demands of work have all been shown to increase levels of WFC (Maraist, 1999; Carlson & Perrewe, 1999; Galinsky, Bond, & Friedman, 1996). Structural variables such as these conflict with the roles that an individual has at home. For example, if a person spends a great number of hours at work, or has a fairly inflexible work schedule, it makes it more difficult for him or her to be at home and to fulfill the duties that he or she has with family, thus leading to WFC. An important note is that the perceived flexibility is what is significant (Maraist, 1999), as it is the way that a person views the situation that leads to conflict, or not.

Thus, it seems that several work-related antecedent variables are important factors in the level of experienced WFC. Not only do structural variables, such as number of hours spent at work, but also psychological variables such as work salience and job

involvement play a significant role in one's level of WFC. Thus, it seems that understanding both of these factors would be important to predicting level of WFC. Now that the work-related antecedents that have been examined in the WFC literature have been reviewed, another antecedent to WFC will be discussed: social support.

Social Support

Social support has been defined as an "interpersonal transaction that involves emotional concern, instrumental aid, information, or appraisal" (Carlson & Perrewe, 1999, p. 514). It is an important resource or mechanism of coping that can reduce the negative effects of stressors, such as those associated with WFC, because it decreases levels of distress that a person experiences (Rosenbaum & Cohen, 1999).

Studies have examined peer and supervisor support as antecedents, including both formal and informal support. Formal support includes policies such as family leave and flextime. Informal support, such as that by coworkers or supervisors, may involve things such as a positive work environment. It seems that the influence of peer and supervisor support on WFC is clear; research examining these variables assert that support is related to lower levels of WFC. Byrne (1993) studied these variables, along with others, in looking at burnout in teachers. Burnout has been shown to be a direct consequence of WFC (Bacharach et al., 1991). Results from Byrne's (1993) survey indicated that coworker support is positively related to self-esteem, which is then positively related to personal accomplishment, lowering teacher burnout (and thus also lowering WFC). Supervisor support in this study was not significantly related to burnout, but it was found to be related to decreased levels of WFC in another study (Galinsky, Bond, & Friedman, 1996).

It should be noted that gender differences within the social support research have been identified. It is generally thought that women are more likely than men to utilize the social contacts and networks in their lives as support (Greenhaus & Parasuraman, 1999). They are more likely to look to social contacts for information and advice, to share family and work concerns, and receive emotional support. Formal support at work seems to be used more frequently by and to have more of an impact on WFC of female employees than male employees (Wiersma, 1990). This could be due to the fact that women may be more likely to take advantage of family-friendly policies because they are more committed to their family roles than men. Thus, when the formal support is presented to them, such as flextime, they are more likely to use it. In terms of informal social support at work, women receive more coworker support than men, but they receive similar levels of supervisor support (Parasuraman & Greenhaus, 1993).

In addition to being examined as an antecedent, social support has also been examined as a mediating (e.g., Wheaton, 1985) and moderating (e.g., Greenhaus & Parasuraman, 1986) variable. However, Carlson and Perrewe (1999) found that social support is best viewed as an antecedent variable to perceived stressors. They suggest that the role of social support in a person's life may work by influencing the perceptions that he or she has about the stressors in his or her life. Therefore, people who have a strong network of social supports and connections in their lives seem to experience less conflict because they do not perceive situations involving work and family as being conflicting.

The antecedents to WFC that have been examined in the literature have now been reviewed. These include psychological work-related variables (e.g., job involvement, work salience), structural work-related variables (e.g., number of work hours, schedule

flexibility), and social support (both informal and formal from peers and supervisors). The research suggests that not only do structural variables, such as number of hours spent at work, but also psychological variables such as work salience and job involvement and work-related social support play a significant role in one's level of WFC. Once WFC levels are elevated, there are several outcomes variables that have been studied and found to be influenced by WFC. These outcomes of WFC will be reviewed next.

Outcomes

The outcomes in this literature can be grouped into two main categories: family-related and health-related. The research findings associated with these variables will now be reviewed.

Family-Related

There are several outcomes of WFC that deal with an individual's home, family, and personal life. One such outcome is family satisfaction. The majority of research in this area has shown that the more WFC individuals experience, the less satisfied they are with their overall family life (e.g., Kopelman et al., 1983; Rice, Frone, & McFarlin, 1992). Similarly, WFC has been related to lower levels of marital satisfaction (e.g., Aryee, 1992; Greenglass et al., 1988). It seems that the more conflict one's work role has on the family role, the less satisfied he or she is with family and marital relationships.

Work-Family Conflict has also been shown to have a significant influence on family distress, which is the experience of stress associated with one's family role. Frone et al. (1992) operationalized family distress as parental stress and marital stress in their study. They found that as WFC increased, so did the level of family distress that

individuals experience. As a person experiences conflict between his work and family roles, he or she is going to have more distress at home, in trying to deal with the conflict.

The overall quality of one's family life is an outcome that has been studied in the WFC literature, as well. Results from a study by Weigel and Weigel (1995) indicate that individuals perceive the effects of stress and conflict as influencing not only themselves but also the family system. Following family systems theory (Pleck, 1977), the interdependence of the work and family domains leads the stress associated with these two to influence the overall perceptions of the quality of family life. Weigel and Weigel (1995) found that WFC affects the perceptions of family life quality, but these perceptions are indirect, mediated by stress.

The satisfaction that one has with his or her life (life satisfaction) is another outcome of WFC that researchers have examined. Previously, some studies in the 1970s indicated that working outside the home brings greater life satisfaction to women. However, additional studies asserted that this increased life satisfaction is dependent on other variables in a woman's life (e.g., nature of the job situation, spousal support) (Holahan & Gilbert, 1979). More recent research, including a meta-analysis by Kossek and Ozeki (1998), has consistently shown a decrease in life satisfaction when WFC is being experienced (e.g., Ahmad, 1996). Some researchers have indicated that WFC leads to lower levels of life satisfaction due to a reduction in value attainment (acting as a mediator between WFC and life satisfaction) (Perrewe, Hochwarter, & Kiewitz, 1999). A person experiencing WFC is less able to accomplish goals that he or she wishes to in either role, leading one to feel less satisfied with job roles, family roles, and life in general (Chiu, 1998).

This review of family-related outcomes of WFC suggest that the more WFC one experiences, the less satisfied he or she will be with the family role, marital role, and life in general. This may be due to other variables, such as a reduction in value attainment, as described above, but regardless, indicates the negative relationship between WFC and family outcomes. Next, variables categorized as health-related outcomes will be discussed in terms of their influence from WFC.

Health-Related

Work-Family Conflict has been shown to have negative effects on people as they deal with the interference between their work and family roles. While not family-related variables, there are numerous individual health-related outcomes have been examined in the literature. One variable, depression was studied by Frone et al. (1992; 1997). They found that as WFC increased, so did levels of depression for their sample. Greenglass et al. (1988) have also examined somatization (how much stressful events have influenced one's physical health) and anxiety, along with depression, as outcomes of interrole conflict. They found that both men and women appeared to experience greater depression, anxiety, and somatization when WFC was high.

Emotional exhaustion is another outcome of WFC (e.g., Boles et al., 1997), as is overall stress (Kelloway et al., 1999). The increased level of emotional exhaustion due to higher levels of WFC is bound to have further consequences for an individual in both work and family roles. Psychological distress, a general feeling of stress due to the multiple roles in one's life, is also positively related to WFC (e.g., Burke & Greenglass, 1999).

Studies looking at the impact of WFC on physical health have indicated that WFC leads to poor overall physical health and to higher instances of hypertension (Frone et al., 1997). This conflict can also lead to deleterious behaviors, such as alcohol abuse, as research has shown increases in alcohol consumption with increased levels of WFC (Frone et al., 1997), without any gender differences in this behavior (Frone, Russell, & Barnes, 1996; Frone, Russell, & Cooper, 1993). Perhaps drinking alcohol is a coping mechanism that people employ to deal with the conflict they are experiencing. If so, this is definitely evidence of the impact WFC can have on individuals' lives.

In summary, there are numerous outcomes of WFC that show its negative impact on one's life. Family-related outcome variables as well as health-related outcome variables have been examined, and many of them have been shown to be sensitive to higher levels of WFC. Thus, as the work role interferes with the family role, one's family and personal life are affected greatly, leading to higher levels of dissatisfaction (e.g., family, marital, and life), as well as physical health problems (e.g., depression, anxiety, somatization, hypertension). Next, some moderators that have been studied in the literature will be reviewed.

Moderators

There are several moderators that have been examined related to WFC, including careers vs. jobs and gender differences. These moderators have been shown to impact the relationship between the antecedents studied and WFC as an outcome. These moderators and their impact on those relationships will now be discussed.

Careers vs. Jobs

There is an important distinction between holding a job and having a career. Many people have fairly low-status occupations, but they have substantial personal investment in their job, and therefore it is more of a career to them. Others may have occupations of higher status, but they do not have much of a personal commitment to it, so it is considered merely a job. Hence, the perceptions and outlooks that individuals have on their occupation are what are important in looking at the difference between careers and jobs.

Holahan and Gilbert (1979) took this into account, and surveyed 41 women holding both careers and jobs and examined the impacts of this distinction on their experiences of WFC. The researchers hypothesized that the career group who had greater involvement and personal investment in their work would thereby experience more WFC. Contrary to what they predicted, the noncareer group reported higher levels of interrole conflict than did the career group. The authors suggested this could be due to the fact that women in the noncareer group were less likely or less willing to relinquish their family responsibilities and rewards. As they were forced to do so because of their job roles (e.g., high number of work hours, schedule inflexibility) they experienced higher levels of WFC (Holahan & Gilbert, 1979). Therefore, whether a person holds a job or has a career moderates the relationship between certain antecedents and levels of WFC, influencing the direction and strength of the relationship.

Gender Differences

It has been widely documented that men and women differ in numerous ways, and some of these differences seem to be important when studying WFC. As Eckenrode and

Gore (1990) point out, "the work-family literature has long recognized that combining work and family roles is not the same issue for men and women" (p. 10). Pleck's (1977) systems theory asserts that men are seen as providers for their families, while women are seen as caregivers. Thus, men and women's "prescribed" roles differ, leading to differing implications for the WFC experience. Similarly, Gutek, Searle, and Klepa (1991) discuss WFC from a gender-role perspective. This perspective asserts that gender interacts with the number of hours one devotes to work and family. Gender-role expectations stipulate different emphases for men and women, such that work is mainly men's responsibility, and family is mainly women's responsibility.

One fairly consistent finding in the literature is that women experience significantly more WFC than men (e.g., Greenglass et al., 1988; Duxbury, Higgins, & Lee, 1994),[2] despite antecedent variables being equal. Greenglass et al. (1988) found that women not only experience more conflict between their work and family roles, but they also experience more conflict between each of their family roles (i.e., wife and mother). This study also indicated that when these women experience these higher levels of conflict, their family and personal lives are disrupted more. They experience higher levels of depression, anxiety, somatization, and are more dissatisfied with their marriages. One reason why women suffer more WFC than men could be due to the fact that women carry out traditional sex roles (Rothausen, 1998), according to the gender-role perspective.

[2] Although this has been the common finding in the literature, there are some studies that have indicated no gender differences in the experiences of WFC or FWC (e.g., Kinnunen & Mauno, 1998).

Summary of Variables Studied in the WFC Literature

As illustrated in Figure 1, numerous variables have been studied within the literature on conflict between work and family roles. Specifically reviewed here are studies that examined WFC and its relationship with certain antecedent, outcome, and moderating variables. Work-related antecedents discussed included psychological variables (e.g., job involvement, job stress, work salience) and structural variables (e.g., number of hours worked, schedule flexibility). Social support is another antecedent discussed, and the impact of formal and informal support on WFC was reviewed. Several family-related (e.g., family satisfaction, family distress) and health-related (e.g., depression, hypertension, alcohol abuse) outcomes were also reviewed, indicating that WFC has been shown to have numerous negative influences on individuals' lives. Last, two moderators were discussed: the career vs. job distinction and gender differences. The role of these moderators on the relationships between antecedents and WFC suggest that these relationships may not be direct, but rather are impacted by these moderators.

While the relationships reviewed here are vital to gaining a full understanding of WFC, it is evident that other variables are important as well. Research on WFC has tended to put much effort toward studying situational variables, such as those reviewed above. However, the role of individual variables has been neglected. Figure 1 shows personality variables as antecedents to WFC, as these have been studied minimally in the past. As noted above, the experience of WFC depends on one's perception of the events he or she is experiencing, and thus an individual's personality may play a significant role in that experience, in addition to situational variables. The relationships between these individual variables (personality) and WFC will be examined next.

Personality and Work-Family Conflict

Rationale

Research has indicated that WFC negatively impacts family, marital, and life satisfaction (e.g., Adams, King, & King, 1996). In trying to understand why some people experience more WFC than other people, research has tended to focus on work variables (e.g., job involvement, number of hours worked, job stress), while the influence of individual differences has been neglected in the literature. In fact, only 4.7 percent of the studies reviewed by Eby et al. (2003) included individual difference variables as predictors of WFC. Of those that did, only 24 percent of those looked at the role of personality. Research has shown that dispositional variables, such as personality, do indeed have a significant effect on WFC, above and beyond situational variables (Carlson, 1999). Two people may experience the same objective work or family situation (e.g., same number of hours at work, same level of job involvement) yet differ in their experience of WFC. That is, though their objective experience is the same, one's personality may influence how he or she perceives the situation, resulting in different experiences of WFC. Thus, while it is important to consider situational factors influencing WFC, it is also important to consider how one's personality may affect, or even help produce, the experience of WFC.

Research has indicated that traits, such as the Big Five personality traits (Extraversion, Neuroticism, Conscientiousness, Agreeableness, and Openness to Experience, as will be defined later), are related to behaviors they exhibit (Winter, John, Stewart, Klohnen, & Duncan, 1998). Relating this finding to WFC, it seems that the behaviors individuals exhibit with respect to their work and family roles will be

influenced and channeled by their personality traits. Thus, it is important to examine how these personality variables shape the experience of WFC.

Personality traits have been related to constructs such as job performance (e.g., Barrick & Mount, 1991), career success (e.g., Judge & Higgins, 1999), stress and depression (e.g., Slaney, Ashby, & Trippi, 1995), and marital dissatisfaction (e.g., Kelly & Conley, 1987). Because constructs similar to these have been linked to WFC, personality may also be related to WFC. Personality embodies the idea that the way that people behave can be predicted by certain traits. Thus, the way that a person behaves in regards to his or her work and family roles, such as balancing the two, placing importance on one over the other, and coping with conflict between the two, should be influenced by underlying personality variables.

Summary of Past Research Examining Relationships Between Personality and WFC

A few studies have begun to address personality variables that are related to WFC. Researchers have examined the roles of locus of control, Type A personality, negative affectivity, and some of the Big Five characteristics in the experience of WFC and have found significant relationships.

Locus of Control

Locus of control is a measure of the extent to which individuals believe that outcomes are determined by internal factors such as personal effort and ability rather than by external influences such as fate, chance, and powerful others (Rotter, 1966). A person with an internal locus of control believes that he or she has control over a situation and feels the power to change the experiences he or she is encountering. A person with an external locus of control feels as if he or she has no control over environmental situations.

Research has shown that people with an external locus of control experience higher levels of role conflict (Byrne, 1993; Duxbury, Higgins, & Lee, 1994), but those with an internal locus of control experience lower levels of interference between work and family roles (Duxbury et al., 1994). An internal locus of control also predicts using Problem-Focused Coping, which is considered a more effective form of coping than Emotion-Focused Coping (e.g., Hurrell & Murphy, 1991), and therefore leads to lower levels of stress and role conflict (Parkes, 1984). Thus, it appears that internal locus of control is related to lower levels of WFC, and external locus of control is related to higher levels of WFC.

Type A Personality

Another personality variable that has been studied in conjunction with WFC is Type A personality. Type A personality consists of "individuals who are typically ambitious, persistent, impatient, and involved in their work" (Carlson, 1999, p. 240). Much research has linked Type A personality with occupational stress (e.g., Ganster, 1987), coronary heart disease (e.g., Ivancevich, Matteson, & Preston, 1982), job dissatisfaction (Keenan & McBain, 1979), and anxiety and depression (e.g., Caplan & Jones, 1975). Job stress (e.g., Boles & Babin, 1996), health problems (e.g., Frone, Russell, & Cooper, 1997), job dissatisfaction (e.g., Beutell & Wittig-Berman, 1999), and anxiety and depression (e.g., Frone et al., 1997) have also been related to WFC, thus indicating that Type A personality traits may also be related to WFC. In fact, some research indicates that individuals with Type A characteristics do experience higher levels of WFC than those who do not have Type A characteristics (Block, 1995). Carlson (1999) studied the effects of dispositional (Type A, negative affectivity) and situational (role conflict, role ambiguity) variables on the WFC of full-time employees. Although

Type A personality was significantly related to WFC in her study, the direction was opposite of that predicted and found in other research (e.g., Block, 1995). In her particular study, Type A personality was negatively related to WFC. In sum, the research on Type A personality and WFC is conflicting and inconclusive.

Negative Affectivity

Negative affectivity is another personality variable that has been studied in the WFC literature. Negative affectivity is characterized by a stable tendency to experience aversive emotional states and negative self-concept in all situations (Watson & Clark, 1984). Because of this tendency, negative affectivity should be related to WFC. Rather than seeing the positive consequences of holding both work and family roles (i.e., social support, intrinsic rewards), the conflict individuals with negative affectivity experience between the two will be exacerbated. Research has indicated that this is true for nurses, where those nurses higher on negative affectivity experienced more burnout than those lower on negative affectivity (Zellars, Perrewe, & Hochwarter, 1999). Indeed, Carlson (1999) found that negative affectivity was the strongest predictor of WFC, compared to role conflict, role ambiguity, and Type A personality, such that the more negative affectivity a person reported, the more WFC he or she experienced.

While these few personality variables (locus of control, Type A personality, and negative affectivity) have been examined and found to have significant relationships with WFC, the research in this area is somewhat limited. Next, a summary of the Big Five personality traits will be given, as these are considered the most inclusive variables of

personality. The following review will include definitions as well as potential relationships of these five variables to WFC.

Big Five Personality Traits

Many personality psychologists have adopted a five-factor model of personality. Often referred to as the "Big Five," these five orthogonal factors of personality have emerged in self-reports and ratings, natural language studies, and theoretically-based questionnaires (McCrae & John, 1992). Therefore they may be a good way of measuring personality in order to look at its relationship with WFC. The five-factor model is a "hierarchical organization of personality traits in terms of five basic dimensions: Extraversion, Agreeableness, Conscientiousness, Neuroticism, and Openness to Experience" (McCrae & John, 1992, p. 175). The basic dimensions of the five factors have been found to organize the hundreds of personality traits proposed by theorists and found in natural language of trait adjectives (Costa & McCrae, 1993). The five factors have been shown to have both convergent and discriminant validity across instruments and observers, to endure across decades in adults (McCrae & Costa, 1990), and to be stable cross-culturally (DeRaad, 1998). Thus, in comparison to other personality measures, the Big Five seem to be the best researchers have at capturing a full picture of an individual's personality.

The predictive ability of the Big Five factors has been compared to that of more narrow traits (e.g., achievement, aggression, dominance, understanding, social recognition). Research indicates that the Big Five predict more behaviors at a lower or weaker level, while specific traits predict fewer behaviors but at a higher or stronger level (Paunonen, 1998). Paunonen (1998) used personality to predict behaviors (e.g., grade

point average, choice of program of study, religiosity, number of dates per month). He found, for instance, that one's level of Extraversion would predict more of the behaviors in one's life than one's level of achievement would. Consequently, although the Big Five may predict behaviors less strongly, they are likely to be related to a wider array of behaviors.

These variables have yet to be studied extensively in the work-family literature. One study to date has examined the relationship between Extraversion, Conscientiousness, and Neuroticism and WFC. Wayne, Musisca, and Fleeson (2004) found that Conscientiousness was related to lower levels of WFC, Neuroticism was related to higher levels of WFC, and Extraversion was not significantly related to WFC in their study. Despite this limited amount of research, several predictions can be made based on what is known about the traits and WFC separately. Each of the five traits (Extraversion, Agreeableness, Conscientiousness, Neuroticism, and Openness to Experience) and their predicted relationships to WFC will now be discussed.

Conscientiousness

Conscientiousness has been proposed to lead to high involvement in both work and family roles, due to the fact that it involves being thorough, persevering, and efficient (Kossek, Noe, & DeMarr, 1999). Although people who are conscientious are more involved in their roles, they are also more organized and better at planning. They may be better than non-conscientious people at balancing the time and energy they have to spend in their work and family roles. Therefore, it seems that highly conscientious people will experience less WFC. This prediction is consistent with Wayne et al.'s (2004) finding.

Neuroticism

People who score higher on Neuroticism are more likely to experience negative affect in general than are people scoring lower on Neuroticism (Rusting & Larsen, 1998). Thus, individuals high on Neuroticism are more likely to perceive their life situations negatively and then behave accordingly. Because negative affectivity is positively related to WFC, it is likely that Neuroticism will be also. WFC is likely to be influenced by neurotic behavior. When a person high on Neuroticism experiences time constraints, strain in a role, or behavior changes, they may be more likely to exaggerate these conflicts (Zellars et al., 1999), thus making the situation even worse for himself or herself. The negative perceptions that individuals high on Neuroticism experience should lead them to experience higher levels of WFC because of their sensitivities to conflicts.

Extraversion

Individuals scoring high on Extraversion have been shown to experience more positive affect in their lives than introverts do (Rusting & Larsen, 1998), and therefore may perceive the influences of their work and family roles more positively than negatively. Thus, people high on Extraversion may perceive these situations as less conflicting than someone who scores lower on Extraversion does. Extraversion has also been related to the use of social support (Reid, 1999), indicating that individuals high on Extraversion may have more social support networks, helping to buffer conflict between roles. Thus, it seems that people scoring high on Extraversion will experience lower levels of WFC.

Agreeableness

Agreeableness encompasses the characteristics of kindness, trust, and generosity (McCrae & John, 1992). Agreeable people may be so intent on pleasing others that they place a lot of importance on all the roles in their lives, trying to please both people at work (supervisors, co-workers) as well as their family. Thus, more importance placed on all roles makes it less likely they will be able to accomplish all goals and responsibilities associated with each role. Because they are not able to fulfill responsibilities, agreeable people may experience more strain associated with their roles. They may be trying to please others associated with their roles and spend more time on those roles, thus enhancing the time-based conflict they experience as well. Similarly, when trying to fulfill their roles, agreeable people may also try to adopt their behaviors to fit their roles. Their increased involvement in roles may then make it harder to switch from one behavioral schema to another, leading to more behavior-based conflict. Thus, it seems the individuals who are very agreeable may experience high levels of WFC.

Openness to Experience

Openness to Experience does not seem to have any theoretically obvious influences on the experience of WFC. People who are open to experience are characterized as being intelligent, unconventional, and imaginative. Perhaps these characteristics lead this type of person to be better able to deal with all forms of their work and family lives conflicting. Because they are imaginative and unconventional, they may use these traits in order to come up with strategies for dealing with their various life roles and coping with the conflict between them.

Summary of Personality and WFC Research

As explained above, personality has been proposed, and shown in some initial studies, to be related to WFC. Further research needs to examine this relationship, however, because an understanding of how personality traits influence WFC is not clear. One potential reason why personality is related to WFC is because of coping. As will be reviewed below, most of the coping studies within the WFC literature have examined the influence of coping on levels of WFC. Rather than acting as an antecedent to WFC, it is proposed in this study that coping plays a mediating role in the relationship between personality and WFC.

Before explaining the rationale behind predictions regarding coping as a mediator in the relationship between personality and WFC, a brief review of the coping literature will be provided. This review is not meant to be exclusive, but rather to summarize briefly those areas of interest, theoretically and empirically, to the present study.

Coping: Definitions and Theory

Coping refers to "behavior that protects people from being psychologically harmed by… life-strains" (Pearlin & Schooler, 1978, p. 2). Coping, by definition, assumes that individuals actively respond to stressors that occur in their lives (Pearlin & Schooler, 1978). Pearlin and Schooler (1978) found that coping behaviors that serve a protective function can be utilized in three ways: (1) "eliminating or modifying conditions giving rise to problems" (p. 2), (2) "perceptually controlling the meaning of experience in a manner that neutralizes its problematic character" (p. 2), and (3) "keeping the emotional consequences of problems within manageable bounds" (p. 2). Each of

these may be used at different times, but all seem to be important. The ways that theorists have conceptualized coping mechanisms will now be described.

Historically, coping has been theorized to be one of four notions, including (1) ego processes, (2) traits, (3) special demands of specific kinds of situations, or (4) cognitive processes (Folkman & Lazarus, 1980; Folkman & Lazarus, 1988a). Each of these four traditional views of coping will be described briefly, followed by a discussion of the transactional theory of coping which incorporates aspects of the four notions listed above.

Ego Processes

Coping is sometimes conceptualized as a defense or ego mechanism in which case its purpose is to reduce tension and keep balance, rather than solve problems (Folkman & Lazarus, 1980). This theory is based on Freud and his followers' notions about defense mechanisms, which serve to "manage distressing feelings, particularly anxiety" (Summerfelt & Endler, 1996, p. 620). Individuals may be categorized as "well-defended" or not (e.g., Wolff, Friedman, Hofer, & Mason, 1964), with characteristics such as self-esteem, self-denigration, and mastery (Pearlin & Schooler, 1978). This way of defining coping has some limitations, however. First, coping mechanisms as defenses are organized hierarchically, from less sophisticated to more sophisticated (e.g., Vaillant, 1977). This organization leads to the problem of the process being confounded with the adaptational outcome (Folkman & Lazarus, 1980), as it is unclear whether the coping mechanism impacts the outcome, or vice versa. It is also difficult to attain interrater reliability in labeling defensive coping mechanisms (Folkman & Lazarus, 1980), which becomes an inherent problem in defining what coping is. Last, conceptualizing coping as

an ego mechanism ignores the aspect of coping that is related to problem-solving. While the emotional aspects of coping are important, so are the problem-solving aspects. Therefore, "a comprehensive definition of coping needs to include both emotion-regulating and problem-solving functions" (Folkman & Lazarus, 1980, p. 221). Next, coping theorized as traits will be discussed.

Traits

Coping has also been theorized as a dispositional or personality trait (e.g., Folkman & Lazarus, 1980). This theory suggests that a person's disposition mediates how he or she reacts to and deals with a stressful situation. While this idea may overlap with notions of the ego defense conceptualization of coping (i.e., the "well-defended" person, as described by Wolff et al., 1964), it is extended to describe actual dispositions or personality attributes (Folkman & Lazarus, 1980). Several researchers in this area have examined the impact of the Big Five personality characteristics on coping behaviors. Specifically, Neuroticism and Extraversion have been examined extensively in this capacity (e.g., O'Brien & DeLongis, 1996). This conceptualization of coping has some limitations, as well, however. Measuring coping as a trait assumes that individuals' reactions and behaviors are consistent across situations, which is usually not the case. Coping has been described as being a "shifting process" (Folkman & Lazarus, 1980, p. 221), in which individuals may rely on different types of coping at different times. Therefore, it is important to take the situation into account when measuring coping, rather than simply conceptualizing it as a stable personality trait. Situation-oriented coping will be discussed next.

Situation-Oriented

The third way of describing coping is to define it as a situation-oriented mechanism (Folkman & Lazarus, 1980) that includes the behaviors, cognitions, and perceptions that individuals utilize (Pearlin & Schooler, 1978). This conceptualization of coping examines ways that individuals cope with specific situations, and assumes that they are actively doing something, as the definition of coping given above asserts. While the coping strategies may include defense mechanisms, they are not based on defense theory (Folkman & Lazarus, 1980). Rather, they are related to specific defenses or specific behaviors that are utilized in certain situations. This third conceptualization of coping makes for a "more inclusive and comprehensive description of coping" (Folkman & Lazarus, 1980, p. 222).

Research that has conceptualized coping as specific mechanisms in specific situations has tended to focus on unusual events, such as traumas. The findings from these studies cannot be generalized to other situations, however, and therefore may not be as valuable in other contexts. Looking at coping mechanisms in situations and contexts that occur in everyday life may be a better option. Pearlin and Schooler (1978) did just this, as they asked subjects about how they coped with stressors that occurred in daily life related to their social roles (marriage partner, household economic manager, parent, and worker). These four social roles are common for many people, and the stressors associated with them may also be common. In their study, Pearlin and Schooler (1978) defined these specific, situation-oriented coping mechanisms as falling into one of three categories: (1) management of stress, (2) responses that modify the situation, or (3) responses that function to control the meaning of the problem.

The first category of coping that Pearlin and Schooler (1978) identified is the management of stress. This mechanism does not work to change the situation or the perception of the situation, but rather to "accommodate to existing stress without being overwhelmed by it" (Pearlin & Schooler, 1978, p. 7). Possible examples include exercise or meditation. This type of coping may be more passive than active, and may be similar to emotional coping, as described by other coping researchers (e.g., Carver, Scheier, & Weintraub, 1989), which will be discussed later. It does not work to change events or perceptions, but rather enable a person to deal with the emotions involved with a stressor or conflict.

Responses that modify the situation work to change or eliminate the source of the stress (Pearlin & Schooler, 1978). These may also be referred to as problem-solving mechanisms, as described throughout the coping literature (e.g., Carver et al., 1989). An individual must first acknowledge what the situation is that is causing the stress, and then activate a coping mechanism to deal with it. This mechanism works to change stressful situations in individuals' lives.

In sum, situation-oriented coping refers to ways that individuals cope with specific situations, assuming that they are actively doing something in those situations. While most research has examined coping in this way in traumatic experiences, other researchers have seen the importance of examining coping in everyday situations. Next, the role of coping as a cognitive process will be examined.

Cognitive Processes

Responses that function to control the meaning of the problem deal with one's perception of events (Pearlin & Schooler, 1978). The meaning that is given to an

experience determines how stressful that experience is. Therefore, cognitively changing the meaning changes the experience of stress or conflict. Examples of this type of coping include positive comparisons, selective ignoring, and substitution of rewards (Pearlin & Schooler, 1978). This coping category may involve an individual's placing different levels of importance on various life roles. Therefore, individuals are able to avoid some stresses by placing less importance on the role with which that stressor is involved. For example, if an individual values his or her family role more than the work role, then stresses at work will have less impact on the person. When this occurs, the stressor is less likely to lead to conflict because it does not threaten the aspect of the self that is most valued (Pearlin & Schooler, 1978).

Now that these typical four theoretical notions have been described, the coping theory that informed the present study will be explained: the transactional theory of coping. The transactional theory incorporates aspects of the four theoretical views of coping described above but also makes unique assertions that are vital to understanding coping.

Transactional Theory

The transactional theory of coping was developed by Lazarus and Folkman (1987) and involves three themes, including (1) relationship or transaction, (2) process, and (3) emotion as an interdependent system of variables (Lazarus & Folkman, 1987). See Appendix B for a representation of this theory. The relationship between a person and environment are key to coping, according the first theme of the transactional theory. Coping is not considered to be a property of a person or of a situation, but rather a property of the interaction between the two. The environment has certain attributes that

interact with the characteristics of the individual, which then determine what coping processes occur.

The process of coping is the second theme of the transactional theory. "Process involves change over time or across situations" (Lazarus & Folkman, 1987, p. 143). Coping is a process because it involves thoughts and behaviors that have happened or are occurring; it is something that one does in order to change a situation he or she is in. Inherent in the process notion is the idea that coping occurs in a particular context. Coping is only a process if it can be compared to what happens in other contexts (Lazarus & Folkman, 1987).

The third theme is that of emotion as a system. Emotion cannot be described only by the external environmental stimuli that it is involved in, or the internal impulses. Emotion depends on both external and internal factors, as well as mediating variables and processes.

The causal antecedents of a coping interaction involve both situational or environmental variables, as well as personal or individual variables. These variables then influence both immediate and long-term effects through the mediating influence of appraisal and coping. Appraisal involves a person evaluating a situation, in terms of the importance of that situation on his or her well-being. Primary appraisal "is concerned with the motivational relevance of what is happening" (Lazarus & Folkman, 1987, p. 145), while secondary appraisal involves making "evaluative judgments… about whether any actions can be taken to improve the troubled person-enviromental relationship" (Lazarus & Folkman, 1987, p. 145). Primary appraisal occurs through cognition and emotion, which influence each other in the encounter. The context of a situation is

appraised by a person, which then shapes the coping process. Therefore, both situational and personal factors are important, as is the case with WFC.

Coping, in this theory, has two functions: (1) "to change the actual terms of the troubled person-environment relationship" (Lazarus & Folkman, 1987, p. 147), termed Problem-Focused Coping, and (2) "to regulate emotional distress" (Lazarus & Folkman, 1987, p. 147), termed Emotion-Focused Coping. Both functions are important in the coping process, as people use both in stressful encounters (Folkman & Lazarus, 1980). Coping is an ever-changing process that depends on the person-environment relationship.

The transactional theory of coping takes into account both situational and personal variables that influence outcomes through the mediation of appraisal and coping, thereby making it a more comprehensive theory of coping than the other four views described. Folkman and Lazarus used this theory to create a coping scale that will be described below. This scale was used in the present study, and therefore the underpinnings of this theory are important in understanding the role of coping that was examined. In order to understand how coping has been used in other studies, a brief review of the general methodology in this field will be provided.

General Methodology in the Coping Literature

The vast majority of research in the coping literature obtains self-reported data from participants. Coping has an inherent subjective aspect to it, as it is based not only on objective information about a person's life, but also on his or her own psychological input and biases that go along with what is happening in his or her life. Therefore, self-report methods seem to be the best at gaining information about coping.

Most studies either focus on coping with stress, in general, or with specific circumstances, such as illness (e.g, Britner, Morog, Pianta, & Marvin, 2003; Wineman, Durand, & Steiner, 1994), traumatic events (e.g., Chang, Lee, Connor, Davidson, Jeffries, & Lai, 2003), and death (e.g., Robbins, 1994). As noted above, research that has looked at specific coping mechanisms in certain situations has tended to focus on unusual events, such as traumas. The findings from these studies cannot be generalized to other situations, however, and so looking at coping mechanisms in contexts that occur in everyday life may be a better option, as Pearlin and Schooler (1978) did. The purpose of the present study was to examine coping in the context of WFC, an everyday situation for many people. In addition to being related to specific situations (namely, WFC in the present study), coping can also be defined by the purpose it serves.

The transactional theory of coping, explained above, identifies coping as either Emotion-Focused or Problem-Focused (Lazarus & Folkman, 1987). The distinction between the two depends on the actual coping behavior as well as the purpose for the behavior. By far, the most widely used measure of coping behavior is the Ways of Coping Questionnaire (WCQ), designed by Folkman and Lazarus (1988c) (Schwarzer & Schwarzer, 1996) to test their transactional theory of coping. This theory "views the person and the environment in a dynamic, mutually reciprocal, bi-directional relationship" (p. 293). It views coping as a mediating process consisting of cognitive processes that include primary appraisal, stress, secondary appraisal, and coping. Coping serves as a mediator between causal antecedents (e.g., person and environmental variables) and immediate and long-term effects (e.g., affect, psychological well-being, social functioning).

Based on the transactional theory of coping, the WCQ assesses an individual's levels of Emotion-Focused Coping and Problem-Focused Coping. It assesses the thoughts and actions that individuals employ to cope with stressful encounters, and it measures coping processes rather than dispositions. As described in the Method section of this paper, the scale consists of 66 items that measure four Problem-Focused Coping strategies that are measured, including Seeking Social Support, Planful Problem Solving, Confrontive Coping, and Accepting Responsibility. Likewise, there are four Emotion-Focused Coping strategies, including Distancing, Self-Controlling, Escape-Avoidance, and Positive Reappraisal.

In sum, the transactional theory of coping describes coping as an interaction between the individual who employs the coping mechanism and the environment in which he or she is coping. It also stresses the importance of the cognitive processes underlying coping. Therefore, it seems to be a theory of coping that includes aspects of other theories that have been described in the literature. In addition, it informed the WCQ, the most widely used measure of coping used in research to date. This measure assesses both Emotion- and Problem-Focused Coping, and therefore was chosen for use in the present study. As noted above, there has been limited research on the relationships between coping and WFC, but there have been a few studies that have begun this work. Next, a summary is provided that discusses these studies and implications for their findings, especially as related to the potential role of coping as a mediator in the relationship between personality and WFC.

Rationale for Coping as a Mediator Between Personality and WFC

There is limited research in the WFC literature on WFC and coping. In fact, Eby et al. (2003) report that only 0.5 percent of studies examining conflict between work and family look at coping as a predictor of WFC, 2.4 percent examine it as a criterion of some other predictors, and 0.6 percent examine it as a mediator specific to the work-nonwork interface. One way personality may impact the experience of WFC is through the coping strategies one uses to deal with WFC. The outcome of any stressful interaction is mediated not only by the appraisal of the situation, but also by the coping behavior of the individual (Cox & Ferguson, 1991). Both of these are dependent on individual differences. The relationship between personality and coping style has been supported in the literature, as well as the relationship between coping style and WFC. Therefore, it is possible that coping mechanisms work as mediators in the relationship between personality and WFC. See Figure 2 for a representation of the model that will be tested in the present study.

In order for coping to be a mediator in the relationship between personality and WFC, there needs to be a relationship between personality and WFC (as already discussed), personality and coping, and coping and WFC. The latter two relationships will now be discussed.

Relationships Between Personality Traits and Coping

Costa and McCrae (1989) suggest that coping responses have more to do with the individual's personality than with the actual stressor itself. Within the literature, there have been only a few studies that have examined these relationships, but these few

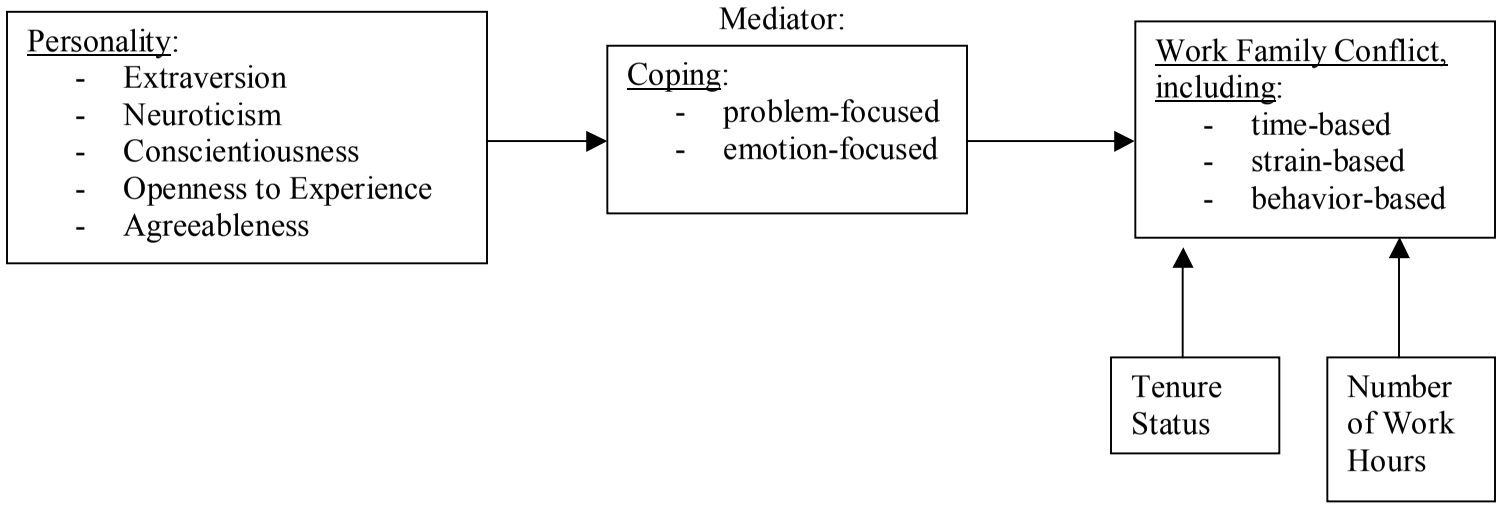

Figure 2. Model to be Tested in the Present Study

studies have indicated that significant relationships between personality characteristics and coping behaviors exist. A few researchers have studied the relationship between the Big Five personality characteristics and how individuals cope with stress (Costa & McCrae, 1986; Watson & Hubbard, 1996; Wearing & Hart, 1996; Hooker, Frazier, & Monahan, 1994).

In general, the results from these studies indicate that individuals scoring high on Extraversion use rational action, substitution, restraint, positive thinking/positive reappraisal, and social support (Costa & McCrae, 1986; Watson & Hubbard, 1996; Wearing & Hart, 1996; Hooker et al., 1994). All of these behaviors, with the exception of positive thinking/positive reappraisal, may be classified as Problem-Focused Coping skills, according to the Ways of Coping Questionnaire (Folkman & Lazarus, 1988) and the transactional theory of coping. At times, individuals scoring high on Extraversion use reappraisal. Nonetheless, Extraversion is usually negatively related to Emotion-Focused Coping (Hooker et al., 1994).

Individuals who score high on Neuroticism are usually found to use hostile reaction, escapist fantasy, self-blame, sedation, wishful thinking, withdrawal, passivity, indecisiveness, and tension reduction. The majority of these behaviors are considered to be Emotion-Focused Coping, according to Folkman and Lazarus (1988b). People who score high on Neuroticism have also been shown to be less likely to use Problem-Focused Coping (Hooker et al., 1994). Thus, it is predicted that individuals who score high on Neuroticism will use more Emotion-Focused Coping and less Problem-Focused Coping than individuals who score low on Neuroticism.

Those people high on Openness to Experience tend to use humor to cope and are less likely to cope with faith (Costa & McCrae, 1986). Other studies indicate that openness tends to relate to "more flexible, imaginative, and intellectually curious approach[es] to problem solving" (Watson & Hubbard, 1996, p. 737), suggesting they may use more Problem-Focused Coping. Thus, it seems that the relationship between Openness to Experience and Problem-Focused or Emotion-Focused Coping has not been identified consistently in the literature.

In studies that have examined the relationship between Conscientiousness and coping behavior, Conscientiousness has been positively related to active, Problem-Focused Coping strategies (Watson & Hubbard, 1996). This suggests that individuals who are conscientious use more social support, planful problem solving, confrontive coping, and accepting responsibility as coping responses. This may be because conscientious individuals are considered organized, planful, responsible, thorough, hardworking, achievement-oriented, and persevering, which seems to be related to the Problem-Focused Coping strategies noted above.

Agreeableness has been shown to be only modestly related to coping (Watson & Hubbard, 1996). This personality variable has seldom been examined in the literature, in terms of its relationship to coping behaviors, and also lacks theoretical backing for a potential relationship. Therefore, Agreeableness will not be explored in the present study.

Relationships Between Coping and WFC

The WFC literature includes a few studies that have looked at the relationships between coping and WFC. While some of these studies have not termed the coping

behaviors they examined as "Problem-" or "Emotion-Focused" coping, the behaviors they describe can be defined as one or the other, according to Folkman and Lazarus (1988b).

This body of research has indicated that several Problem-Focused Coping behaviors are negatively related to WFC. Some of these skills include seeking help (Rotondo, Carlson, & Kincaid, 2003), direct action (Rotondo, Carlson, & Kincaid, 2003), use of social support (Carlson & Perrewe, 1999; Aryee et al., 1999), and use of husband support (Matsui, Ohsawa, & Onglatco, 1995). One Problem-Focused Coping skill, time management, which may be considered planful problem solving, was positively related to WFC (Adams & Jex, 1999). In general, however, it seems that the use of Problem-Focused Coping behaviors is related to lower levels of WFC.

The literature indicates that some Emotion-Focused Coping skills, although implemented by individuals to cope with conflict, are actually positively related to WFC. Some of these mechanisms include avoidance/resignation (Rotondo et al., 2003) and escapist coping (Burke, 2002). In contrast, reframing problems, which may be a form of positive reappraisal (depending on how the problem is reframed), has been negatively related to WFC (Anderson & Leslie, 1991). Reframing problems may also involve accepting responsibility, which is a Problem-Focused Coping mechanism, however. In general, many of the Emotion-Focused Coping responses examined in the literature have had a positive relationship with WFC, indicating that those individuals who implement them as coping strategies actually experience higher levels of WFC than individuals not using those strategies. Although a cause and effect relationship cannot be established

based on past correlational research, in the present study it was predicted that there would be a positive relationship between Emotion-Focused Coping mechanisms and WFC.

Summary of the Rationale for Coping as a Mediator between Personality and WFC

As described above, there are significant relationships shown in the literature between personality and WFC. However, it is not evident why this relationship exists. It seems logical that another variable plays a part. The present paper proposes that coping plays a mediational role in the relationship between personality and WFC. Personality is related to the coping mechanisms individuals employ, and coping has been related to WFC. Therefore, it seems that coping might mediate the relationship between personality and WFC. No research to date has examined this possibility, however, and therefore, it is the aim of the present study. In addition, several other variables' influence on WFC will be examined, including tenure status and number of work hours, as will be discussed below.

Hypotheses

Based on the literature reviewed above, several hypotheses were developed and tested in the present study. It was hypothesized in the present study that coping strategies play a mediational role in the relationship between the Big Five personality traits and WFC. The following hypotheses were developed based on the research findings summarized above that have examined the relationships between personality and WFC, personality and coping, and coping and WFC.

Demographic Variables and Work-Family Conflict

Hypothesis 1a: Tenure will be negatively related to WFC.

Rationale: Work-related variables such as job involvement, work salience, and time demands have been positively related to WFC (e.g., Frone et al., 1992; Weigel & Weigel, 1995). Individuals who have tenure may experience lower levels of these variables than those who do have tenure, thus leading them to experience lower levels of WFC.

Hypothesis 1b: Number of hours spent on work will be positively related to WFC.

Rationale: Past research has indicated that number of work hours is positively related to WFC (e.g., Maraist, 1999; Carlson & Perrewe, 1999; Galinsky, Bond, & Friedman, 1996), and therefore it is predicted to in the present study as well.

Coping as a Mediator Between Personality and WFC

Hypothesis 2a

Problem-Focused Coping will work as a mediator in the relationship between Extraversion and WFC, such that Extraversion will be positively related to Problem-Focused Coping, and Problem-Focused Coping will be negatively related to WFC.

Rationale: Extraversion has been related to higher use of Problem-Focused Coping behaviors (e.g., Costa & McCrae, 1986; Watson & Hubbard, 1996), and Problem-Focused Coping has been related to lower levels of WFC (e.g., Rotondo, Carlson, & Kincaid, 2003). Therefore it is predicted that Problem-Focused Coping will mediate the relationship between Extraversion and WFC.

Hypothesis 2b

Emotion-Focused Coping will work as a mediator in the relationship between Extraversion and WFC, such that Extraversion will be negatively related to Emotion-Focused Coping, and Emotion-Focused Coping will be positively related to WFC.

Rationale: Extraversion has been negatively related to Emotion-Focused Coping (e.g., Hooker et al., 1994) and Emotion-Focused Coping behaviors have been positively related to WFC (e.g., Rotondo et al., 2003). Thus, it is predicted that Emotion-Focused Coping will mediate the relationship between Extraversion and WFC.

Hypothesis 3

Problem-Focused Coping will work as a mediator in the relationship between Conscientiousness and WFC, such that Conscientiousness will be positively related to Problem-Focused Coping, and Problem-Focused Coping will be negatively related to WFC.

Rationale: Conscientiousness has been related to higher use of Problem-Focused Coping behaviors (e.g., Watson & Hubbard, 1996) and Problem-Focused Coping has been related to lower levels of WFC (e.g., Rotondo, Carlson, & Kincaid, 2003). Therefore, it is predicted that Problem-Focused Coping will mediate the relationship between Conscientiousness and WFC.

Hypothesis 4a

Problem-Focused Coping will work as a mediator in the relationship between Neuroticism and WFC, such that Neuroticism will be negatively related to Problem-Focused Coping, and Problem-Focused Coping will be negatively related to WFC.

Rationale: Neuroticism has been related to lower levels of Problem-Focused Coping (e.g., Hooker et al., 1994) and Problem-Focused Coping has been related to lower levels of WFC (e.g., Rotondo, Carlson, & Kincaid, 2003). Thus, it is predicted that Problem-Focused Coping will mediate the relationship between Neuroticism and WFC.

Hypothesis 4b

Emotion-Focused Coping will work as a mediator in the relationship between Neuroticism and WFC, such that Neuroticism will be positively related to Emotion-Focused Coping, and Emotion-Focused Coping will be positively related to WFC.

Rationale: Neuroticism has been related to higher levels of Emotion-Focused Coping (e.g., Hooker et al., 1994) and Emotion-Focused Coping has been related to higher levels of WFC (e.g., Rotondo et al., 2003). Therefore, it is predicted that Emotion-Focused Coping will mediate the relationship between Neuroticism and WFC.

Hypothesis 5

Problem-Focused Coping will work as a mediator in the relationship between Openness to Experience and WFC, such that Openness to Experience will be positively related to Problem-Focused Coping, and Problem-Focused Coping will be negatively related to WFC.

Rationale: It has been suggested that Openness to Experience is related to higher levels of Problem-Focused Coping. (e.g., Watson & Hubbard, 1996) and it has been related to lower levels of WFC (e.g., Rotondo, Carlson, & Kincaid, 2003). Thus, it is predicted that Problem-Focused Coping will mediate the relationship between Openness to Experience and WFC.

METHOD

Participants

Participants for this study were 247 university faculty who were drawn from several universities in the United States, including (with the percentage of participants from each institution in parentheses) Auburn University (17.3%), Clemson University (7.3%), Wake Forest University (7.7%), University of Texas (16.1%), Colorado State University (8.1%), Portland State University (1.2%), New Mexico State University (4.8%), University of Kentucky (17.3%), University of Delaware (6.9%), and University of California, Berkeley (5.6%); 7.7% of the participants did not indicate university affiliation. Participants were asked to answer questions about their family status (described below). Those individuals who indicated that they did not live with a significant other or have at least one child (either living with them or not) were excluded from the present study, as well as those who did not answer at least 90% of the items; 53 participants were excluded.

A total of 2197 individuals were initially contacted via email, and 247 (11.2%) responded to the survey. The sample was 47.8% (n = 118) male and 51.4% (n = 127) female (2 individuals did not identify their gender). The age of participants ranged from 27 to 80 years, with a mean of 49.1 years. Ethnically, 92.3% (n = 228) described themselves as Caucasian American, 2.8% (n = 7) as Hispanic American, 2.0% (n = 5) as African American, 0.8% (n = 2) as Asian American, and 0.8% (n = 3) as other (including

"American," "Jewish," and "multiracial"). Two individuals did not identify their ethnicity.

In terms of family status, 92.7% (n = 229) indicated that they had a significant other (either married or not) that lived with them, and 6.1% (n = 15) indicated that they did not. Three individuals did not note their family status. (Based on the requirements for inclusion in the study, those individuals who reported not living with a significant other did report having at least one child living with them). The number of children that participants reported ranged from zero to five, with the mean number of children being 1.70. The ages of children ranged from newly born (less than a week old) to 50 years.

In terms of work status, 62.3% (n = 154) indicated that they had tenure, while 35.6% (n = 88) indicated that they did not. (Five individuals did not note their tenure status.) Participants who indicated that they were Full Professors constituted 33.2% (n = 82) of the sample, 31.6% (n = 78) Associate Professors, 22.7% (n = 56) Assistant Professors, and 9.3% (n = 23) Other (including "Lecturer," "Instructor," "Administrator Non-tenure Track," "Director," "Associate Dean," "Full Research Professor," "Academic Coordinator," "Clinical Instructor," "Clinical Associate," "Adjunct Assistant Professor," and "Temporary Faculty"). Eight participants did not indicate their position. The number of work hours reported ranged from 10 to 80 hours per week, with a mean of 50.6 hours.

Procedure

The present study was conducted by survey method over the internet. The population to be studied was university faculty, and so potential participants were drawn from the universities listed above. These universities were chosen to obtain participants

from several geographic areas and various sized universities. The total length of time estimated for participation was approximately 15 minutes.

The departments that faculty members were recruited from are listed in Appendix C. For each university, at least one department from all colleges was chosen, and each faculty member who had a publicly listed email address from that department was contacted. The specific departments selected were chosen to obtain a wide variety across the universities. An email was sent to potential participants explaining the study and its purpose, explaining that participation was voluntary and providing an on-line link to the survey (see Appendix D). Participants were contacted via email one time (i.e., the invitation to participate) by the principal investigator (Stacey Smoot). Participants were also assured that none of the school faculty, administrators, or staff would have access to individual data, thus preserving their anonymity. No names were requested or retained through the survey.

The website used for the survey in this study was secure. Once the data reached the university, it was held on a server that had all reasonable and customary security measures enabled. Additionally, the server containing the data was networked behind the university's protective firewall adding an additional measure of security. When participants responded on the website, their email addresses were not captured or retained, thus individual responses could not be matched with email addresses. The participants were informed that by completing and returning the survey on-line, they were consenting to participate in the study, and that their responses were anonymous.

Once participants completed the on-line survey, the website program put the data into a Microsoft Access file. This data was then stored for analysis. Once approximately

300 participants had completed the survey (before some participants were excluded, as described above), the website was removed and the data collection ended.

Measures

Ways of Coping Questionnaire (Folkman & Lazarus, 1988c)

The Ways of Coping Questionnaire (WCQ) (Folkman & Lazarus, 1988c) measures the coping processes an individual utilizes, and is the most widely used coping measure (e.g., Schwarzer & Schwarzer, 1996). It consists of 66 items and takes approximately 10 minutes to complete. Folkman and Lazarus (1988c) designed this measure to test their transactional theory of coping. It assesses the thoughts and actions that individuals employ to cope with stressful encounters, and it measures coping processes rather than dispositions. Based on the transactional theory of coping, the WCQ assesses an individual's levels of Emotion-Focused Coping and Problem-Focused Coping. There are four Problem-Focused Coping strategies that are measured, including Seeking Social Support, Planful Problem Solving, Confrontive Coping, and Accepting Responsibility. Likewise, there are four Emotion-Focused Coping strategies, including Distancing, Self-Controlling, Escape-Avoidance, and Positive Reappraisal.

Respondents were asked to think of a stressful situation that they recently experienced, and then respond to items related to coping mechanisms that they may have employed. Folkman and Lazarus suggest that researchers "adjust the Ways of Coping Questionnaire to the specific content to achieve a close match between the stress experience and the coping statements" (Schwarzer & Schwarzer, 1996, p. 125). Therefore, in the present study, part of the directions read: "Respond to the following statements in this questionnaire; you must have a specific stressful situation in mind.

Take a few moments and think about a situation in which your work and family roles were in conflict with one another" (see Appendix E).

The items were responded to on a 4-point Likert scale, indicating how often an individual used specific mechanisms (ranging from 0 – does not apply and/or not used… to 3 – used a great deal). Some example items included statements such as, "I talked to someone to find out more about the situation," "I criticized or lectured myself," or "I hoped for a miracle."

Folkman and Lazarus (1988c) indicate that the WCQ is different from other tests because it is an "evolving" measure of coping, based on the coping situations that individuals use to respond to the questions. Therefore, traditional test-retest methodology cannot be utilized with the WCQ. Folkman and Lazarus (1988c) do report that the WCQ has both face and construct validity, however. Face validity is demonstrated by the descriptions of the ways individuals cope with stressful situations; construct validity is demonstrated by the fact that study outcomes are consistent with the foundation of the transactional theory of coping.

The WCQ can be scored using either raw scores or relative scores. Raw scores were used in the present study, and were calculated by summing the participant's responses to each item that comprises a scale. The summed scores for each emotion-focused subscale (Distancing, Self-Controlling, Escape-Avoidance, and Positive Reappraisal) and each problem-focused subscale (Seeking Social Support, Planful Problem Solving, Confrontive Coping, and Accepting Responsibility) were used in the structural equations analyses in the present study. These subscale scores were also

summed to obtain a total Emotion-Focused Coping score and a Problem-Focused Coping score used for descriptive statistics.

In the present study, the WCQ was posted on the study's website with permission from Mindgarden Inc. As described above, the scores were combined to create a Problem-Focused Coping score and an Emotion-Focused Coping score. The problem-focused scale had a coefficient alpha of 0.81, and the emotion-focused scale had a coefficient alpha of 0.82. Both of these indicate sufficient reliability for use in the present study.

Work-Family Conflict Scale (Carlson, Kacmar, & Williams, 2000)

This measure is a combination of three forms of Conflict (time-, strain-, and behavior-based) with two directions of conflict (work-to-family conflict and family-to-work conflict). Because the present study examined WFC, and not FWC, the family-to-work items from this scale were included (yielding 18 total items) but not analyzed for the present study. Therefore, the scale used for the present study included a total of 9 items (item numbers 1, 2, 3, 7, 12, 13, 14, 17, and 18 in Appendix F). The items were presented as statements, followed by a 7-point Likert Scale that participants responded to. For example, an item such as, "I am often so emotionally drained when I get home from work that it prevents me from contributing to my family" was responded to on a 7-point scale that assesses how frequently it occurs, ranging from "never" to "always."

The three forms of WFC indicated in the literature (time-, strain-, and behavior-based) are included in this scale, with 3 items comprising each subscale. An example of a time-based WFC item is "My work keeps me from my family activities more than I would like." An example of a strain-based WFC item is "When I get home from work I

am often too frazzled to participate in family activities/responsibilities." An example of a behavior-based WFC item is "The problem-solving behaviors I use in my job are not effective in resolving problems at home." For the present study, to increase reliability, the three forms of WFC were combined. The items for each of the individual types of WFC were totaled to get strain-based, time-based, and behavior-based WFC scores.

This WFC scale was tested with content analysis, content adequacy, exploratory and confirmatory factor analyses, and correlation analyses by Carlson et al. (2000). The final scale shows discriminant validity, internal consistency, and invariance of the factor structure across samples. The internal consistencies of all the subscales were estimated with coefficient alphas and found to range from 0.78 to 0.87. In the present study, the reliability of the WFC scale was good. The coefficient alpha for the WFC items of the scale (9 items) was 0.88.

International Personality Item Pool (2001)

The International Personality Item Pool (IPIP; 2001) was developed by Goldberg et al. as an extension of a scale developed by Goldberg (1992), and is available on the World Wide Web. It has been used widely by personality researchers, and has been shown to have good reliability and validity. As Goldberg describes, most broad-bandwidth personality inventories (those that measure a broad number of personality traits, versus just one or two), such as the NEO-PI (NEO Personality Inventory developed by Costa and McCrae), are copyrighted, and therefore not freely available to researchers. IPIP "is intended as an international effort to develop and continually refine a set of personality inventories, whose items are in the public domain, and whose scales can be

used for both scientific and commercial purposes" (http://ipip.ori.org/ipip/new_home.htm).

The "Lexical Hypothesis" states that the most important ways that individuals differ from one another will be represented by descriptive terms, such as adjectives, in human language (Goldberg, 1992). While these adjectives are a necessary start to developing a personality inventory, most test authors prefer "items that are more behaviorally and/or contextually specified" (Goldberg, 1999). Therefore, the IPIP has been developed to include behavioral statements that a participant responds to. The scale was developed from a pool of 1,252 items (adapted from an item pool described by De Raad and Hendriks, 1997), which were then tested for reliability and validity in smaller scales. The resulting IPIP included 100 that are statements participants respond to on a 5-point Likert scale, ranging from 1 (very inaccurate) to 5 (very accurate). The 100-item scale can be used, or a 50-item scale that Goldberg (1999) developed. In the 50-item scale used in the present study, ten items were included for each of the five personality factors (Extraversion, Neuroticism, Conscientiousness, Agreeableness, and Openness to Experience) (see Appendix G).

As described above, the Big Five factors have been identified in the personality literature as the best descriptors of personality. This model can be viewed hierarchically, with the factors at the top of the hierarchy, and lower-level facets under those factors (Goldberg, 1999). In Goldberg's scale, for example, Extraversion has lower-level facets including friendliness, gregariousness, assertiveness, activity level, excitement-seeking, and cheerfulness (these are similar to other personality measures, such as the NEO-PI). The facets fall onto the Big Five factors. For each of the five factors measured with the

IPIP, the facets have been shown to have moderately high coefficient alphas. In a study conducted by Goldberg (1999), he found that for the preliminary IPIP scales, the alphas for the Extraversion factor range from 0.66 to 0.85; alphas for the Neuroticism factor range from 0.73 to 0.86; alphas for the Agreeableness factor range from 0.70 to 0.84; alphas for the Conscientiousness factor range from 0.67 to 0.83; and alphas for the Openness to Experience factor range from 0.71 to 0.84 (Goldberg, 1992).

Goldberg (1999) compared the IPIP scale to the NEO-PI developed by Costa and McCrae (1992). He compared the lower-level facets from the IPIP with those similar facets in the NEO-PI, and found them to have very similar coefficient alphas. The mean alpha for the entire scale (all facets of all factors averaged) was 0.75 for the NEO and 0.80 for the IPIP.

In the present study, the IPIP demonstrated good reliability. The coefficient alphas for the five parts of the scale were sufficient for use in the present study: Extraversion, $\alpha = 0.88$; Neuroticism, $\alpha = 0.90$; Agreeableness, $\alpha = 0.82$; Conscientiousness, $\alpha = 0.83$; and Openness to Experience, $\alpha = 0.74$.

In an initial validity study, Goldberg (1999) used criterion variables that are related to health-related behaviors, using the Health Activities Questionnaire (HAQ: Vickers, Conway, & Hervig, 1989). In this study, he compared the predictive validity of the IPIP with that of the NEO and three other personality inventories. The IPIP had better predictive validity than the other personality inventories in this study.

In summary, the IPIP is a personality inventory that measures the Big Five factors of personality. It is a publicly available scale that is shorter, and therefore more desirable for research purposes, than some other scales, such as the NEO-PI. Studies have

demonstrated the reliability and validity of the scale and they also were sufficient in the present study. Therefore it was chosen to measure the five factors of personality in the present study.

Demographic / Other Information

In addition to the three scales discussed above, additional demographic information was also collected from participants. Demographic variables used to describe the sample, as indicated above, included age, gender, ethnicity, university, rank/position, and age(s) of children. Participants were asked to respond to items that asked about each of these areas. In addition, the variables, tenure status and number of work hours were included.

Tenure Status

The responsibilities of faculty members who are tenured may differ from those who are not tenured. In addition, the perceptions of WFC of those who are tenured may differ from those who are not. Therefore, tenure status was included as a variable to determine its influence on WFC. Participants were asked, "Do you have tenure?"

Number of Hours Worked

The number of hours an individual works has been shown to be related to the level of WFC (Maraist, 1999). Thus, this variable was included in the present study. Participants were asked, "On average, how many hours do you spend working per week?"

Overview of Hypothesis Testing

To test the hypotheses stated above, models were created and tested with structural equations modeling (SEM). Amos 4.01 statistical program was employed to

run the analyses. SEM is "an extension of the general linear model (GLN) that enables a researcher to test a set of regression equations simultaneously" (Information Technology Services at the University of Texas at Austin, 2002). Relationships can be examined with SEM between one or more IVs and one more DVs, each being either factors or measured variables (Ullman, 1996). As noted above, those participants who did not answer at least 90% of the items were excluded from the sample. However, there was some missing data from those participants who were included. Amos 4.01 uses maximum likelihood estimation method for analysis, which uses all available data points (Information Technology Services at the University of Texas at Austin, 2002).

In the present study, SEM was used to test for the mediational effect of coping on the relationship between personality and WFC. The independent variables used in the present study were the Big Five personality characteristics: Extraversion, Neuroticism, Agreeableness, Conscientiousness, and Openness to Experience. The mediators included Problem-Focused and Emotion-Focused Coping. The dependent variable was WFC in all models. Tenure status and number of work hours were examined as extraneous variables, with respect to their relationships with WFC.

Each of these IVs, mediators, and DV were latent variables that were associated with several indicators. The latent variables were not directly measured in the study, but were inferred by the relationships among variables that were measured. Work-Family Conflict was associated with three measured variables: WFCB (behavior-based WFC), WFCS (strain-based WFC), and WFCT (time-based WFC). Emotion-Focused Coping was associated with four measured variables: EPR (positive reappraisal), ED (distancing), EEA (escape-avoidance), and ESC (self-controlling). Problem-Focused

Coping was associated with four measured variables: PPS (planful problem solving), PCC (confrontive coping), PSS (seeking social support), and PAR (accepting responsibility). Each of the five personality characteristics was associated with ten measured variables (the ten items on the IPIP associated with each of the personality variables). So for instance, Extraversion was associated with E1, E2, E3, E4, and so on.

As Baron and Kenny (1986) indicate, there are several steps to use when testing mediation in SEM, as in the present study[3]. The first step is to create a model that establishes the relationship between the IV and the mediator, as well as the relationship between the IV and DV. This model is tested using SEM. If these relationships are statistically significant, Model B is created to test the idea that by adding the path from the mediator to the DV, the relationship between the IV and the DV becomes insignificant If this Model B is supported, Model C is created by removing the path from the IV to the DV (since it was insignificant in Model B), and testing the fit of the model. Model C is the hypothesized model for a mediation effect. At this point, Model C is compared to a baseline model (contains measurement of all variables, but no structural relationships between variables). If Model C, which contains both measurement and structural relationships, fits the data significantly better than Model B (tested by using Chi-square differences), then Model C (the hypothesized model) is selected as the final model. At this point, overall fit of the final model is analyzed, using several criteria. The findings from using these statistical procedures in the present study will be described in the Results section.

[3] This method of testing a mediational hypothesis was used in the present study. However, it should be noted that instead of testing three different models, one may test a complete model that contains a path between the IV and the mediator and a path between the mediator and the DV. Either method will render the same results.

RESULTS

Descriptive statistics were calculated for the variables studied, including the five personality variables, WFC, the two coping variables, and work hours. Tenure status is a discrete variable, and therefore was not included in these analyses. Table 1 shows the means of each variable for the sample, and Table 2 shows correlations among all study variables.

Table 1

Mean Values of Each Study Variable

Variable	M	SD	n
WFC	19.78	6.09	237
WFCT	7.15	2.42	242
WFCS	6.82	2.46	245
WFCB	5.85	2.49	239
Extraversion	3.28	0.76	236
E1	2.53	1.07	247
E2	3.62	1.12	245
E3	3.89	1.00	247
E4	3.25	1.09	244
E5	3.63	1.01	246
E6	3.93	1.02	245
E7	3.11	1.19	246
E8	2.63	1.15	246
E9	3.06	1.21	246
E10	3.00	1.18	246
Neuroticism	2.61	0.82	241
N1	2.70	1.20	247
N2	3.01	1.09	247
N3	3.62	1.16	247
N4	2.72	1.25	245
N5	2.51	1.07	246

Table 1 (continued)

N6	2.39	1.09	246
N7	2.43	1.06	246
N8	2.09	1.16	246
N9	2.47	1.08	247
N10	2.19	1.19	246
Conscientiousness	3.81	0.66	238
C1	3.81	1.02	247
C2	3.32	1.37	246
C3	4.04	0.91	247
C4	4.18	0.92	245
C5	3.19	1.14	247
C6	3.34	1.35	245
C7	3.93	0.99	246
C8	4.49	0.77	246
C9	3.86	1.04	245
C10	3.98	0.85	247
Agreeableness	4.13	0.56	242
A1	4.36	1.07	247
A2	4.14	1.01	246
A3	4.49	0.86	246
A4	4.13	0.93	245
A5	4.17	0.91	247
A6	3.91	1.00	244
A7	4.27	0.83	247
A8	4.01	0.74	247
A9	3.95	0.87	247
A10	3.83	0.84	247
Openness to Experience	4.09	0.49	234
O1	4.11	0.87	247
O2	4.40	0.87	246
O3	3.89	0.97	246
O4	4.27	0.97	245
O5	4.14	0.74	244
O6	4.20	0.95	244
O7	4.28	0.68	246
O8	3.40	1.07	245
O9	4.05	0.92	247
O10	4.09	0.84	244
Problem-Focused Coping	2.24	0.42	237
PAR	1.97	0.62	233
PPS	2.68	0.64	237
PCC	2.06	0.61	242
PSS	2.39	0.74	237

Table 1 (continued)

Emotion-Focused Coping	2.00	0.38	236
EPR	2.21	0.67	233
ED	1.81	0.50	239
EEA	1.66	0.53	238
ESC	2.51	0.54	234
Work Hours	50.63	11.18	241

Note: The labels given to variables in this table and in tables to follow include: WFC (Work-Family Conflict), EFC (Emotion-Focused Coping), PFC (Problem-Focused Coping), WFCT (time-based WFC), WFCS (strain-based WFC), WFCB (behavior-based WFC), PPS (Planful Problem Solving), PCC (Confrontive Coping), PSS (Seeking Social Support), PAR (Accepting Responsibility), EPR (Positive Reappraisal), ED (Distancing), EEA (Escape-Avoidance), ESC (Self-Controlling), E (Extraversion), E1 through E10 (Extraversion items from the personality scale), C (Conscientiousness), C1 through C10 (Conscientiousness items from the personality scale), N (Neuroticism), N1 through N10 (Neuroticism items from the personality scale), A (Agreeableness), A1 through A10 (Agreeableness items from the personality scale), O (Openness to Experience), O1 through O10 (Openness to Experience items from the personality scale).

Testing Hypotheses

To test the hypotheses stated above, models were created and tested with structural equations modeling (SEM), as described in the Method section. The standardized regression weights (β) are the factor loadings of the measured variables on the latent variables that they contribute to. These values are shown in the models below. The variance explained ranged from 0.16 to 0.90 across models. Bryant and Yarnold (1995) assert that values of 0.30 (in absolute value) and higher constitute a loading on the factor. Only 2 variables had values lower than 0.30 and therefore they were removed from the models: PAR (problem-focused accepting responsibility) and O9 (openness to experience item).

Table 2

Correlations Among Study Variables

	EFC	PFC	E	C	N	O	WFC	H	TS
Emotion-Focused Coping (EFC)	--	--	--	--	--	--	--	--	--
Problem-Focused Coping (PFC)	.48**	--	--	--	--	--	--	--	--
Extraversion (E)	-.17*	.16*	--	--	--	--	--	--	--
Conscientiousness (C)	-.19**	-.11	.08	--	--	--	--	--	--
Neuroticism (N)	.19**	.05	-.13	-.29**	--	--	--	--	--
Openness (O)	-.07	.10	.36**	.03	-.05	--	--	--	--
WFC	.24**	.20**	-.14*	-.22**	.38**	-.03	--	--	--
Work Hours (H)	.06	.12	.03	.06	.01	.13*	.33**	--	--
Tenure Status (TS)	-.01	-.11	-.01	.01	-.08	.02	-.06	.06	--

** $p < 0.01$; * $p < 0.05$

For each of the models described below, results are shown in figures and in tables. The figures demonstrate the models tested and indicate the path coefficients (standardized regression weights) between latent variables as well as the factor loadings of the measured variables on the latent variables (indicating the strength and direction of the relationships). The tables give information about squared multiple correlations for the measured variables, which indicate the percent of variance explained in the latent variable. There are also tables that show fit indices for each model tested.

The first two hypotheses (1a, 1b) were tested initially using correlations. Hypothesis 1a (Tenure will be negatively related to WFC) was not supported, as the relationship between tenure status and WFC was not statistically significant (r=-0.06, p>0.05). Hypothesis 1b (Number of hours spent on work will be positively related to WFC) was supported, as the relationship between number of work hours and WFC was significantly positive (r=0.33, p<0.01).

In order to test Hypotheses 2a through 5, the variables were entered into models created using SEM. These models will be described, and the mediational impact of coping, which was hypothesized for each model, will be discussed.

Hypothesis 2a

Hypothesis 2a states: "Problem-Focused Coping will work as a mediator in the relationship between Extraversion and WFC, such that Extraversion will be positively related to Problem-Focused Coping, and Problem-Focused Coping will be negatively related to WFC." To test the mediational relationship, several steps were taken, as described above. First, a model (Model 2a-A) was created to test the relationship

between the IV (Extraversion) and the DV (WFC), and between the IV (Extraversion) and the mediator (Problem-Focused Coping).

The SEM analysis of Model 2a-A (see Figure 3) revealed that both the path from Extraversion to WFC (β=-0.13, p<.05) and the path from Extraversion to Problem-Focused Coping (β=0.24, p<.05) were significant. As predicted, Extraversion was positively related to Problem-Focused Coping, and Extraversion was negatively related to WFC. Next, a Model 2a-B was created and tested with SEM, as described above (see Figure 4).

The path between Problem-Focused Coping and WFC was significant (β=0.18, p<.05), but the path between Extraversion and WFC was also still significant (β=-0.18, p<.05) in Model 2a-B. As described above, in order to establish mediation, the relationship between the IV and DV should not be significant when the mediator is in the model (Baron & Kenny, 1986). Therefore, Model 2a-C was not created. In the present study, Problem-Focused Coping was not a mediator in the relationship between Extraversion and WFC, and therefore Hypothesis 2a was not supported. Additionally, Problem-Focused Coping was positively related to WFC, which is the opposite of what was predicted.

The null hypothesis of the chi-square test states that the proposed model fits the data. Therefore, if the chi-square test is significant (as it is in these models), theoretically it means that the model does not fit the data and the null hypothesis is rejected. However, the chi-square test has been found to be more sensitive as the sample size increases (N = 247 in the present study). This means that as sample sizes increase, the chance of

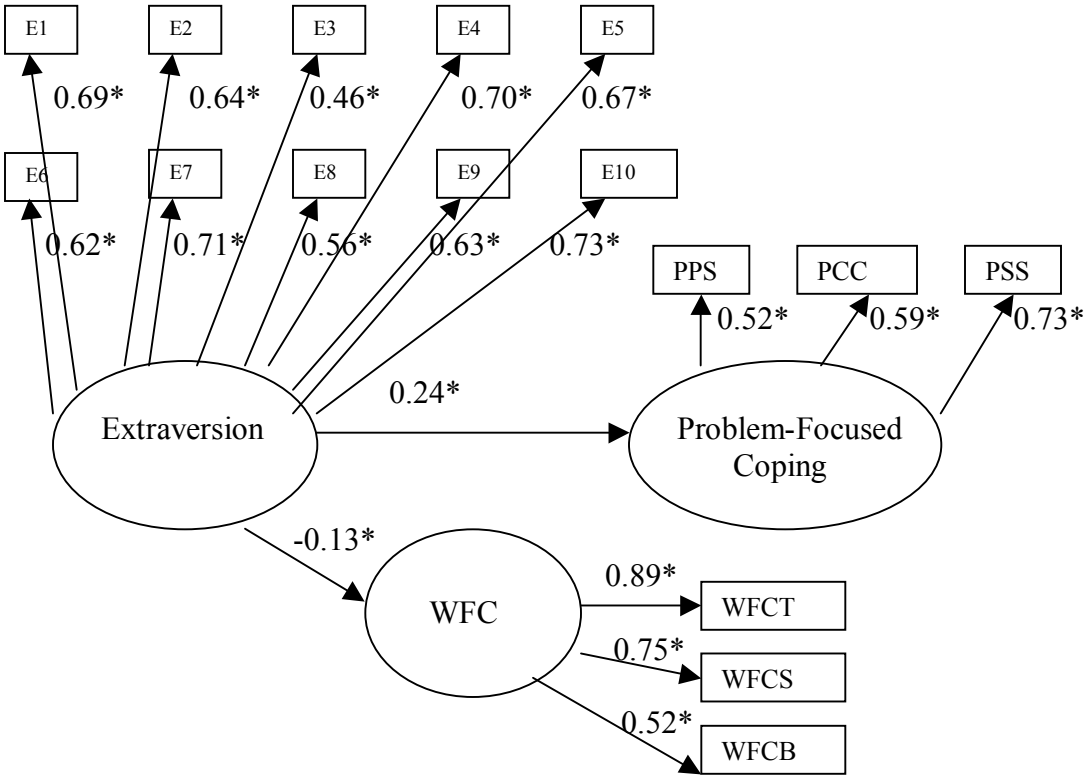

Figure 3. Model 2a-A
* $p<0.05$
Note. E1 through E10 (Extraversion items from personality scale); PPS (Planful Problem Solving); PCC (Confrontive Coping); PSS (Seeking Social Support); WFCT (time-based WFC); WFCS (strain-based WFC); WFCB (behavior-based WFC).

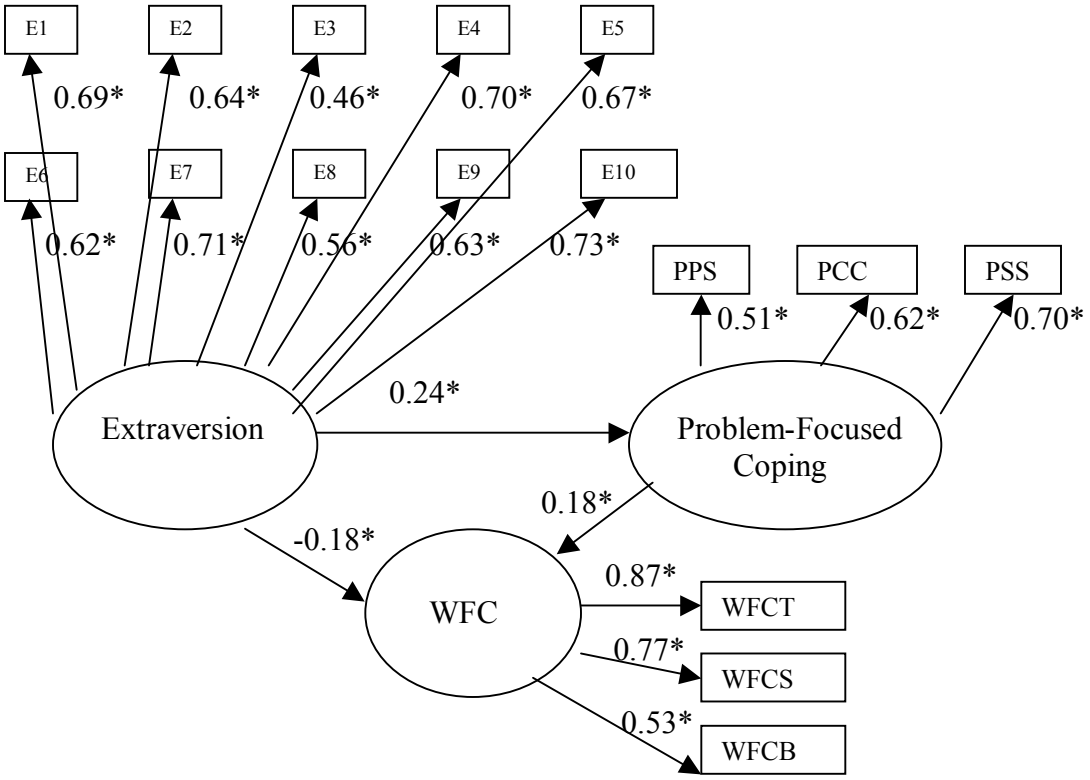

Figure 4. Model 2a-B
* $p<0.05$
Note. E1 through E10 (Extraversion items from personality scale); PPS (Planful Problem Solving); PCC (Confrontive Coping); PSS (Seeking Social Support); WFCT (time-based WFC); WFCS (strain-based WFC); WFCB (behavior-based WFC).

Table 3

Squared Multiple Correlations (SMC) for Models 2a-A and 2a-B

Measured Variable	SMC (Model 2a-A)	SMC (Model 2a-B)
WFCT	0.79	0.75
WFCS	0.57	0.59
WFCB	0.27	0.28
PPS	0.48	0.26
PCC	0.55	0.39
PSS	0.74	0.49
E1	0.47	0.47
E2	0.41	0.41
E3	0.21	0.21
E4	0.48	0.48
E5	0.45	0.45
E6	0.39	0.39
E7	0.50	0.50
E8	0.31	0.31
E9	0.40	0.40
E10	0.53	0.53

Note. E1 through E10 (Extraversion items from personality scale); PPS (Planful Problem Solving); PCC (Confrontive Coping); PSS (Seeking Social Support); WFCT (time-based WFC); WFCS (strain-based WFC); WFCB (behavior-based WFC).

rejecting the null hypothesis increases. Therefore, interpretation of the overall goodness of fit should include other indices of fit measures.

The χ^2/df (or CMIN/DF) represents a ratio between the chi-square and the degrees of freedom for the model. If the ratio is less than 3:1, the model is considered a good fit to the data. In Models 2a-A and 2a-B, this ratio is 2.76 and 2.75, respectively, which is indicative of a marginally good fit of the models.

The Root Mean Square Error of Approximation (RMSEA) adjusts the Root Mean Square Residual (RMSR) for the number of degrees of freedom in the model. RMSEA may be interpreted as residuals in predicting population correlations from the observed

correlations in the sample. Values of RMSEA below 0.05 indicate a good fit of a model. In Models 2a-A and 2a-B, the RMSEA values are 0.09 and 0.08, respectively, indicating that the models do not have overall goodness of fit.

The Normal Fit Index (NFI) is a ratio of the hypothesized model to the baseline model (a model in which no paths are included). A value of 0.90 and greater is considered to be good for this index. Models 2a-A and 2a-B had acceptable values of 0.96, indicating that these models are 96% of the way between a poorly fitting model and a perfect fit.

Finally, the HOELTER index is another measure of overall goodness of fit, indicating the largest sample size for which the null hypothesis would be accepted. Critical values of 200 or greater show satisfactory fit. Models 2a-A and 2a-B had HOELTER values of 105 and 106, respectively, which indicates a poor fit of these models.

Since only two of the measures of goodness of fit of the models indicated that the hypothesized models had marginally good fit indices, the overall goodness of fit for the structural model could not be considered satisfactory. Additionally, the models tested indicated that there was not a significant mediation, and therefore Problem-Focused Coping was not a mediator in the relationship between Extraversion and WFC, and Hypothesis 2a was not supported.

Table 4

Overall Goodness of Fit for Model 2a-A and Model 2a-B

Model	χ^2	df	CMIN/DF	NFI	RMSEA	HOELTER
Model 2a-A	515.52	187	2.76	0.96	0.09	105
Model 2a-B	511.62	186	2.75	0.96	0.08	106

Note. The chi-square tests for all models were significant at $p<0.01$.
Note. The HOELTER index was examined for 0.05 level of significance.
Note. CMIN/DF (ratio between the chi-square and the degrees of freedom); NFI (Normal Fit Index); RMSEA (Root Mean Square Error of Approximation); HOELTER (measure of overall goodness of fit).

Hypothesis 2b

Hypothesis 2b states: "Emotion-Focused Coping will work as a mediator in the relationship between Extraversion and WFC, such that Extraversion will be negatively related to Emotion-Focused Coping, and Emotion-Focused Coping will be positively related to WFC." To test the mediational relationship, several steps were taken, as described above. First, a model was created to test the relationship between the IV (Extraversion) and the DV (WFC), and between the IV (Extraversion) and the mediator (Emotion-Focused Coping).

The SEM analysis of Model 2b-A (see Figure 5) revealed that the path from Extraversion to WFC (β=-0.14, p<.05) was significant, but the path from Extraversion to Emotion-Focused Coping (β=-0.16, p>.05) was not significant. As predicted, Extraversion was negatively related to WFC. Extraversion was also negatively related to Emotion-Focused Coping, as predicted, but was not statistically significant. Because Model 2b-A did not fit the criteria needed to test the mediation, Models 2b-B and 2b-C

were not created. Therefore, in the present study, Emotion-Focused Coping was not a mediator in the relationship between Extraversion and WFC, and Hypothesis 2b was not supported.

Model 2b-A's overall goodness of fit was not satisfactory. The CMIN/DF and NFI values were satisfactory for good fit, but RMSEA and HOELTER were not. Additionally, the model tested indicated that there was not a significant mediation, and therefore Emotion-Focused Coping was not a mediator in the relationship between Extraversion and WFC, and Hypothesis 2b was not supported.

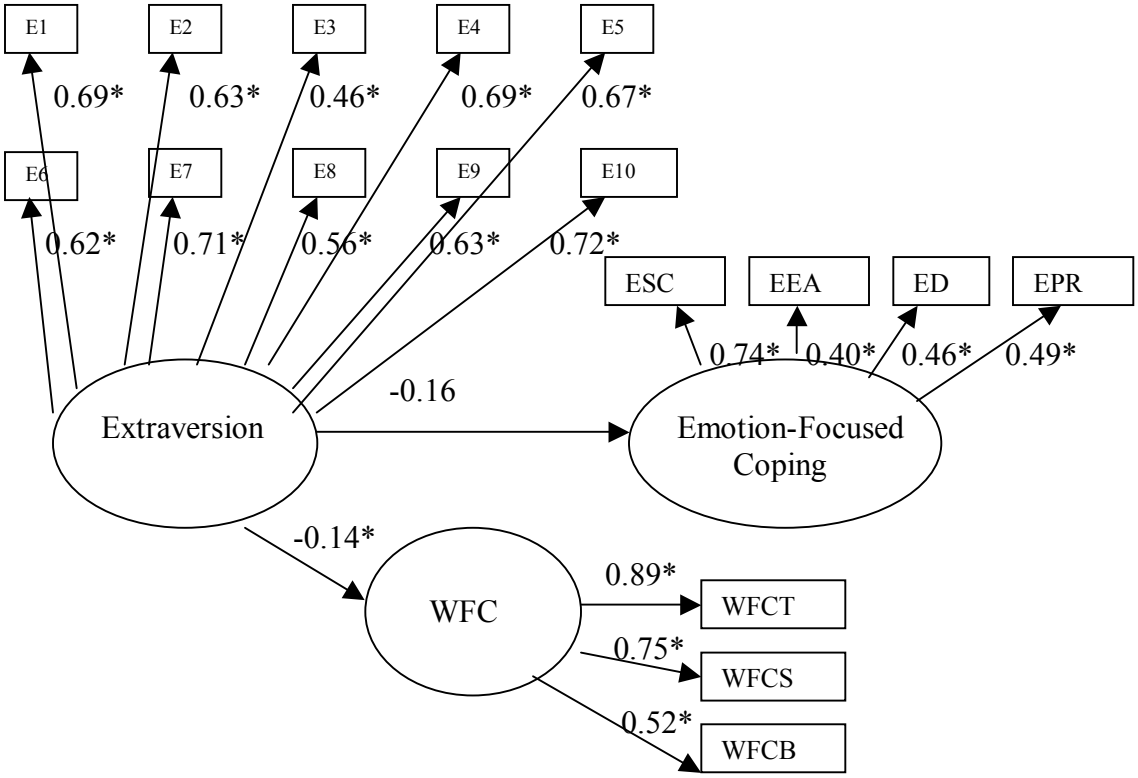

Figure 5. Model 2b-A
* $p<0.05$
Note. E1 through E10 (Extraversion items from personality scale); ESC (Self-Controlling); EEA (Escape-Avoidance); ED (Distancing); EPR (Positive Reappraisal); WFCT (time-based WFC); WFCS (strain-based WFC); WFCB (behavior-based WFC).

Table 5

Squared Multiple Correlations (SMC) for Model 2b-A

Measured Variable	SMC (Model 2b-A)
WFCT	0.79
WFCS	0.57
WFCB	0.27
ESC	0.54
EEA	0.16
ED	0.24
EPR	0.24
E1	0.48
E2	0.40
E3	0.21
E4	0.48
E5	0.45
E6	0.38
E7	0.50
E8	0.31
E9	0.40
E10	0.52

Note. E1 through E10 (Extraversion items from personality scale); ESC (Self-Controlling); EEA (Escape-Avoidance); ED (Distancing); EPR (Positive Reappraisal); WFCT (time-based WFC); WFCS (strain-based WFC); WFCB (behavior-based WFC).

Table 6

Overall Goodness of Fit for Model 2b-A

Model	χ^2	df	CMIN/DF	NFI	RMSEA	HOELTER
Model 2b-A	517.38	187	2.77	0.96	0.08	105

Note. The chi-square test was significant at $p<0.01$.
Note. The HOELTER index was examined for 0.05 level of significance.
Note. CMIN/DF (ratio between the chi-square and the degrees of freedom); NFI (Normal Fit Index); RMSEA (Root Mean Square Error of Approximation); HOELTER (measure of overall goodness of fit).

Hypothesis 3

Hypothesis 3 states: "Problem-Focused Coping will work as a mediator in the relationship between Conscientiousness and WFC, such that Conscientiousness will be positively related to Problem-Focused Coping, and Problem-Focused Coping will be negatively related to WFC." To test the mediational relationship, several steps were taken, as described above. First, a model was created to test the relationship between the IV (Conscientiousness) and the DV (WFC), and between the IV (Conscientiousness) and the mediator (Problem-Focused Coping).

The SEM analysis of Model 3-A (see Figure 6) revealed that both the path from Conscientiousness to WFC (β=-0.26, p<.05) and the path from Conscientiousness to Problem-Focused Coping (β=-0.28, p<.05) were significant. As predicted, Conscientiousness was negatively related to WFC, but opposite of prediction, Conscientiousness was negatively related to Problem-Focused Coping. Next, a Model 3-B (see Figure 7) was created and tested with SEM, as described above.

The path between Problem-Focused Coping and WFC was not significant (β=0.11, p>.05), and the path between Conscientiousness and WFC was still significant (β=-0.23, p<.05) in Model 3-B. Therefore, Model 3-C was not created. In the present study, Problem-Focused Coping was not a mediator in the relationship between Conscientiousness and WFC; Hypothesis 3 was not supported.

Models 3-A and 3-B's overall goodness of fit were not satisfactory. The CMIN/DF and NFI values were satisfactory for good fit, but RMSEA and HOELTER were not. Additionally, the models tested indicated that there was not a significant

mediation, and therefore Problem-Focused Coping was not a mediator in the relationship between Conscientiousness and WFC, and Hypothesis 3 was not supported.

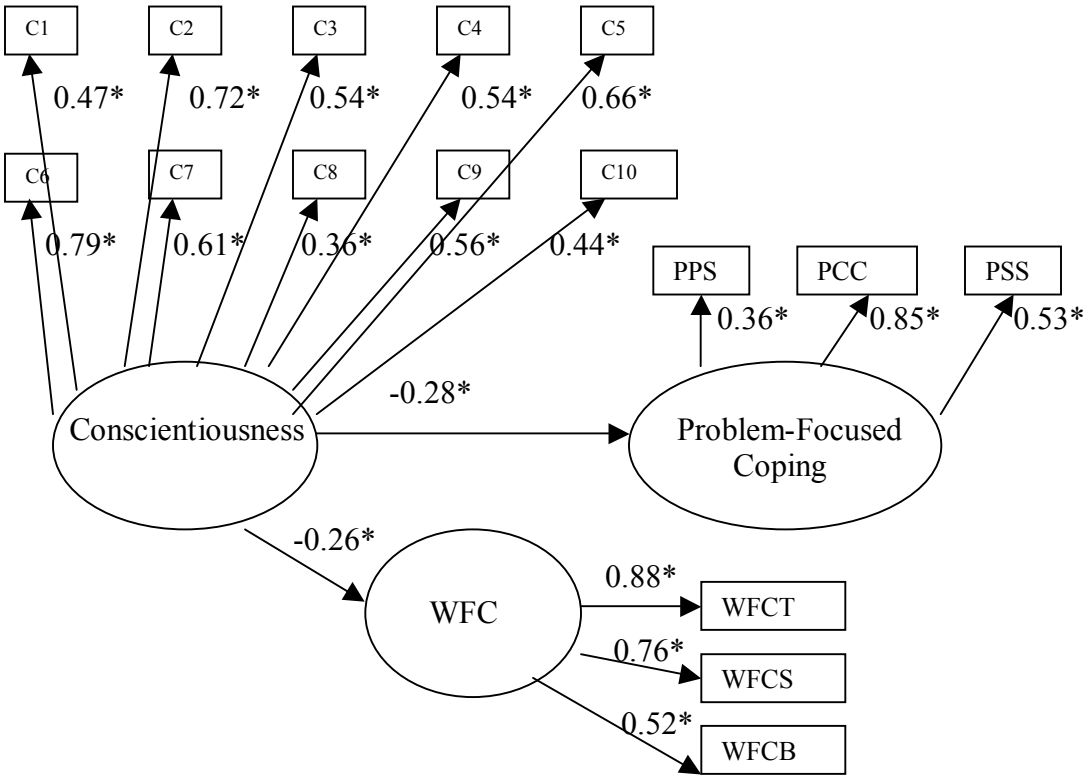

Figure 6. Model 3-A
* $p<0.05$
Note. C1 through C10 (Conscientiousness items from personality scale); PPS (Planful Problem Solving); PCC (Confrontive Coping); PSS (Seeking Social Support); WFCT (time-based WFC); WFCS (strain-based WFC); WFCB (behavior-based WFC).

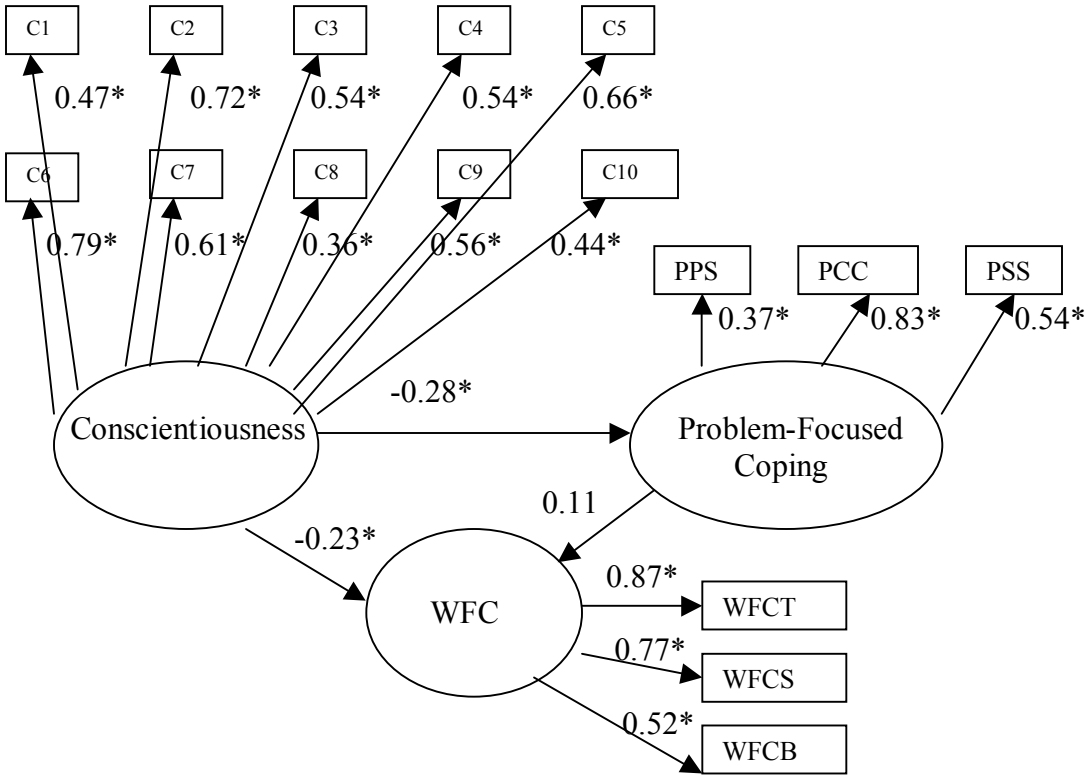

Figure 7. Model 3-B
* $p<0.05$
Note. C1 through C10 (Conscientiousness items from personality scale); PPS (Planful Problem Solving); PCC (Confrontive Coping); PSS (Seeking Social Support); WFCT (time-based WFC); WFCS (strain-based WFC); WFCB (behavior-based WFC).

Table 7

Squared Multiple Correlations (SMC) for Models 3-A and 3-B

Measured Variable	SMC (Model 3-A)	SMC (Model 3-B)
WFCT	0.78	0.75
WFCS	0.57	0.59
WFCB	0.27	0.27
PPS	0.23	0.14
PCC	0.89	0.69
PSS	0.41	0.29
C1	0.22	0.22
C2	0.52	0.52
C3	0.30	0.29
C4	0.30	0.29
C5	0.44	0.44
C6	0.62	0.62
C7	0.37	0.37
C8	0.13	0.13
C9	0.32	0.32
C10	0.20	0.20

Note. C1 through C10 (Conscientiousness items from personality scale); PPS (Planful Problem Solving); PCC (Confrontive Coping); PSS (Seeking Social Support); WFCT (time-based WFC); WFCS (strain-based WFC); WFCB (behavior-based WFC).

Table 8

Overall Goodness of Fit for Model 3-A and Model 3-B

Model	χ^2	df	CMIN/DF	NFI	RMSEA	HOELTER
Model 3-A	536.03	187	2.87	0.96	0.09	101
Model 3-B	535.00	186	2.87	0.96	0.09	101

Note. The chi-square tests for all models were significant at $p<0.01$.
Note. The HOELTER index was examined for 0.05 level of significance.
Note. CMIN/DF (ratio between the chi-square and the degrees of freedom); NFI (Normal Fit Index); RMSEA (Root Mean Square Error of Approximation); HOELTER (measure of overall goodness of fit).

Hypothesis 4a

Hypothesis 4a states: "Problem-Focused Coping will work as a mediator in the relationship between Neuroticism and WFC, such that Neuroticism will be negatively related to Problem-Focused Coping, and Problem-Focused Coping will be negatively related to WFC." To test the mediational relationship, several steps were taken, as described above. First, a model was created to test the relationship between the IV (Neuroticism) and the DV (WFC), and between the IV (Neuroticism) and the mediator (Problem-Focused Coping).

The SEM analysis of Model 4a-A (see Figure 8) revealed that the path from Neuroticism to WFC (β=0.46, p<.05) was significant, but the path from Neuroticism to Problem-Focused Coping (β=0.10, p>.05) was not significant. As predicted, Neuroticism was positively related to WFC. Because Model 4a-A did not fit the criteria needed to test the mediation, Models 4a-B and 4a-C were not created. Therefore, in the present study, Problem-Focused Coping was not a mediator in the relationship between Neuroticism and WFC; Hypothesis 4a was not supported.

Model 4a-A's overall goodness of fit was not satisfactory. The CMIN/DF and NFI values were satisfactory for good fit, but RMSEA and HOELTER were not. Additionally, the model tested indicated that there was not a significant mediation, and therefore Problem-Focused Coping was not a mediator in the relationship between Neuroticism and WFC; Hypothesis 4a was not supported.

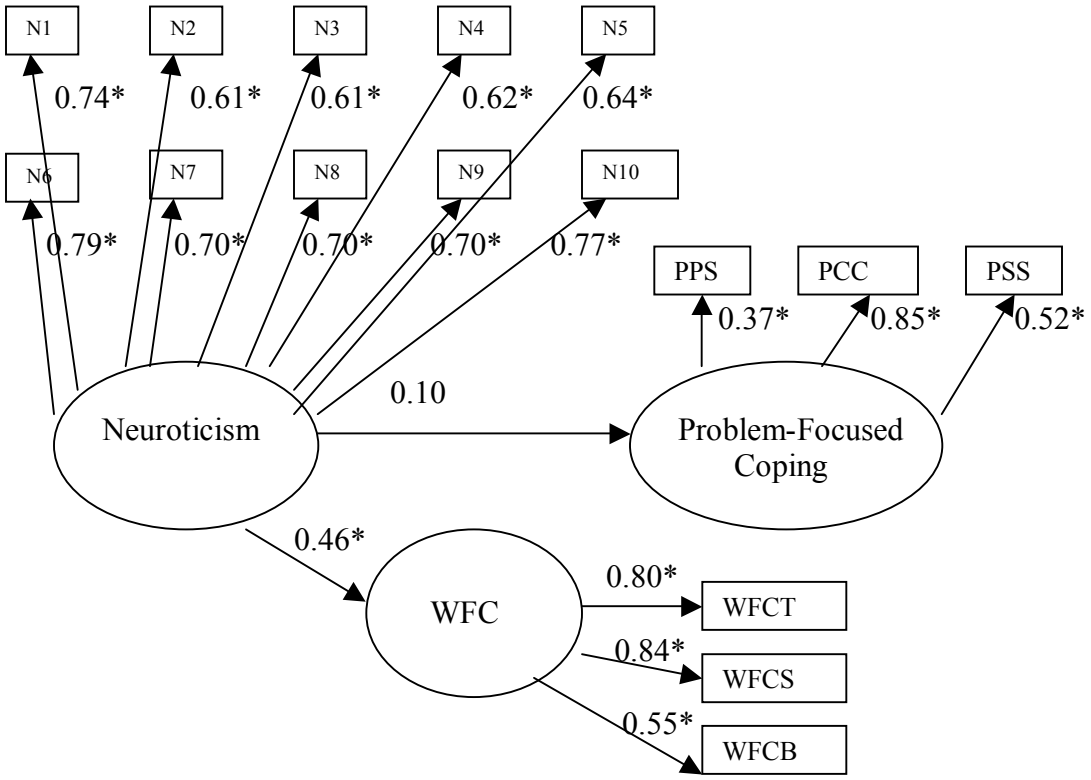

Figure 8. Model 4a-A
* $p<0.05$
Note. N1 through N10 (Neuroticism items from personality scale); PPS (Planful Problem Solving); PCC (Confrontive Coping); PSS (Seeking Social Support); WFCT (time-based WFC); WFCS (strain-based WFC); WFCB (behavior-based WFC).

Table 9

Squared Multiple Correlations (SMC) for Model 4a-A

Measured Variable	SMC (Model 4a-A)
WFCT	0.64
WFCS	0.70
WFCB	0.30
PPS	0.30
PCC	0.81
PSS	0.50
N1	0.54
N2	0.37
N3	0.38
N4	0.39
N5	0.40
N6	0.63
N7	0.49
N8	0.49
N9	0.49
N10	0.59

Note. N1 through N10 (Neuroticism items from personality scale); PPS (Planful Problem Solving); PCC (Confrontive Coping); PSS (Seeking Social Support); WFCT (time-based WFC); WFCS (strain-based WFC); WFCB (behavior-based WFC).

Table 10

Overall Goodness of Fit for Model 4a-A

Model	χ^2	df	CMIN/DF	NFI	RMSEA	HOELTER
Model 4a-A	509.19	187	2.72	0.96	0.08	107

Note. The chi-square test was significant at $p<0.01$.
Note. The HOELTER index was examined for 0.05 level of significance.
Note. CMIN/DF (ratio between the chi-square and the degrees of freedom); NFI (Normal Fit Index); RMSEA (Root Mean Square Error of Approximation); HOELTER (measure of overall goodness of fit).

Hypothesis 4b

Hypothesis 4b states: "Emotion-Focused Coping will work as a mediator in the relationship between Neuroticism and WFC, such that Neuroticism will be positively related to Emotion-Focused Coping, and Emotion-Focused Coping will be positively related to WFC." To test the mediational relationship, several steps were taken, as described above. First, a model was created to test the relationship between the IV (Neuroticism) and the DV (WFC), and between the IV (Neuroticism) and the mediator (Emotion-Focused Coping).

The SEM analysis of Model 4b-A (see Figure 9) revealed that the path from Neuroticism to WFC (β=0.46, p<.05) was significant, but the path from Neuroticism to Emotion-Focused Coping (β=-0.01, p>.05) was not significant. As predicted, Neuroticism was positively related to WFC. Because Model 4b-A did not fit the criteria needed to test the mediation, Models 4b-B and 4b-C were not created. Therefore, in the present study, Problem-Focused Coping was not a mediator in the relationship between Neuroticism and WFC; Hypothesis 4b was not supported.

Model 4b-A's overall goodness of fit was not satisfactory. The CMIN/DF and NFI values were satisfactory for good fit, but RMSEA and HOELTER were not. Additionally, the model tested indicated that there was not a significant mediation, and therefore Emotion-Focused Coping was not a mediator in the relationship between Neuroticism and WFC; Hypothesis 4b was not supported.

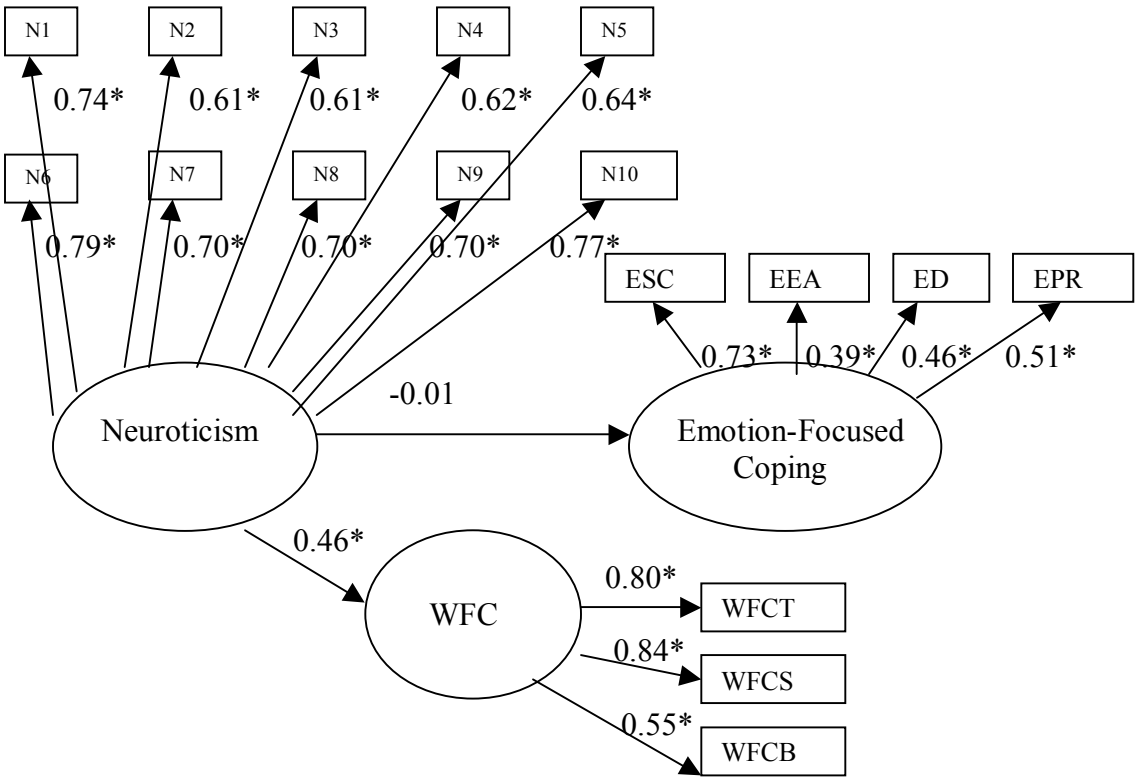

Figure 9. Model 4b-A
* p<0.05
Note. N1 through N10 (Neuroticism items from personality scale); ESC (Self-Controlling); EEA (Escape-Avoidance); ED (Distancing); EPR (Positive Reappraisal); WFCT (time-based WFC); WFCS (strain-based WFC); WFCB (behavior-based WFC).

Table 11

Squared Multiple Correlations (SMC) for Model 4b-A

Measured Variable	SMC (Model 4b-A)
WFCT	0.64
WFCS	0.70
WFCB	0.30
ESC	0.53
EEA	0.15
ED	0.21
EPR	0.26
N1	0.54
N2	0.37
N3	0.38
N4	0.39
N5	0.40
N6	0.63
N7	0.49
N8	0.49
N9	0.49
N10	0.59

Note. N1 through N10 (Neuroticism items from personality scale); ESC (Self-Controlling); EEA (Escape-Avoidance); ED (Distancing); EPR (Positive Reappraisal); WFCT (time-based WFC); WFCS (strain-based WFC); WFCB (behavior-based WFC).

Table 12

Overall Goodness of Fit for Model 4b-A

Model	χ^2	df	CMIN/DF	NFI	RMSEA	HOELTER
Model 4b-A	506.12	187	2.71	0.96	0.08	107

Note. The chi-square test was significant at $p<0.01$.
Note. The HOELTER index was examined for 0.05 level of significance.
Note. CMIN/DF (ratio between the chi-square and the degrees of freedom); NFI (Normal Fit Index); RMSEA (Root Mean Square Error of Approximation); HOELTER (measure of overall goodness of fit).

Hypothesis 5

Hypothesis 5 states: "Problem-Focused Coping will work as a mediator in the relationship between Openness to Experience and WFC, such that Openness to Experience will be positively related to Problem-Focused Coping, and Problem-Focused Coping will be negatively related to WFC." To test the mediational relationship, several steps were taken, as described above. First, a model was created to test the relationship between the IV (Openness to Experience) and the DV (WFC), and between the IV (Openness to Experience) and the mediator (Problem-Focused Coping).

The SEM analysis of Model 5-A (see Figure 10) revealed that the path from Openness to Experience to Problem-Focused Coping (β=0.21, p<.05) was significant, but the path from Openness to Experience to WFC (β=-0.13, p>.05) was not significant. As predicted, Openness to Experience was positively related to Problem-Focused Coping. Because Model 5a-A did not fit the criteria needed to test the mediation, Models 5-B and 5-C were not created. Therefore, in the present study, Problem-Focused Coping was not a mediator in the relationship between Openness to Experience and WFC; Hypothesis 5a was not supported.

Model 5-A's overall goodness of fit was not satisfactory. The CMIN/DF and NFI values were satisfactory for good fit, but RMSEA and HOELTER were not. Additionally, the model tested indicated that there was not a significant mediation, and therefore Problem-Focused Coping was not a mediator in the relationship between Openness to Experience and WFC; Hypothesis 5 was not supported.

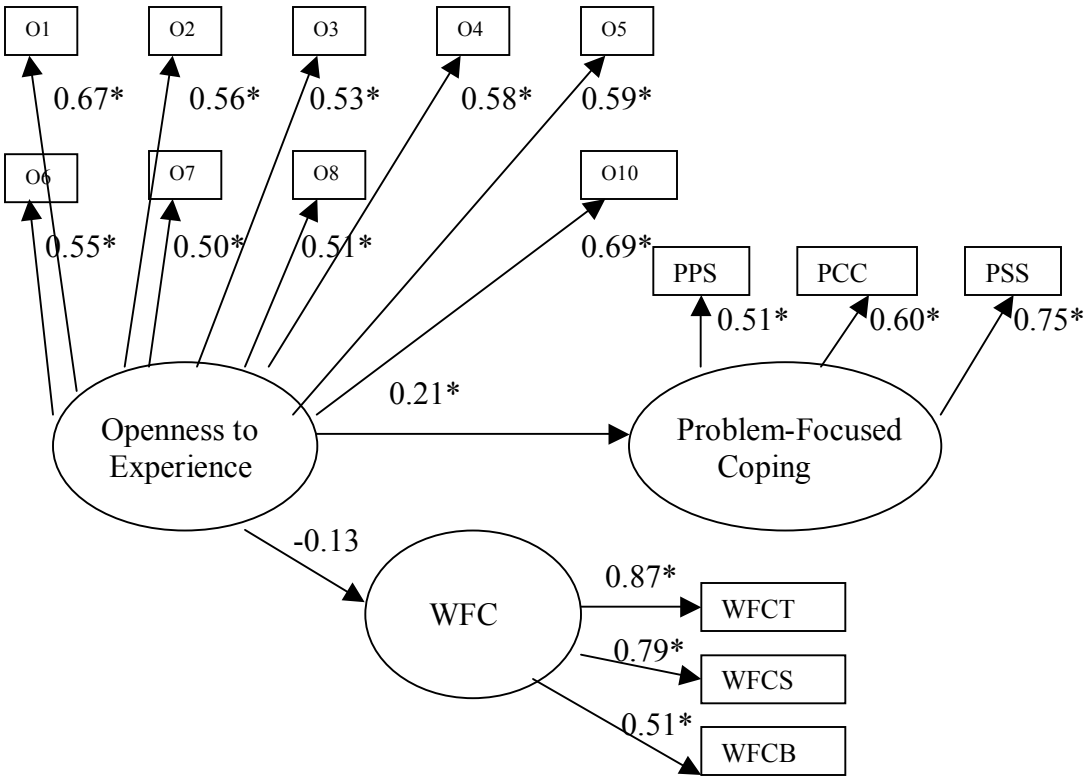

Figure 10. Model 5-A
* $p<0.05$
Note. O1 through O10 (Openness to Experience items from personality scale); PPS (Planful Problem Solving); PCC (Confrontive Coping); PSS (Seeking Social Support); WFCT (time-based WFC); WFCS (strain-based WFC); WFCB (behavior-based WFC).

Table 13

Squared Multiple Correlations (SMC) for Model 5-A

Measured Variable	SMC (Model 5-A)
WFCT	0.76
WFCS	0.55
WFCB	0.26
PPS	0.46
PCC	0.54
PSS	0.75
O1	0.44
O2	0.32
O3	0.28
O4	0.34
O5	0.35
O6	0.30
O7	0.25
O8	0.26
O9	0.26
O10	0.47

Note. O1 through O10 (Openness to Experience items from personality scale); PPS (Planful Problem Solving); PCC (Confrontive Coping); PSS (Seeking Social Support); WFCT (time-based WFC); WFCS (strain-based WFC); WFCB (behavior-based WFC).

Table 14

Overall Goodness of Fit for Model 5-A

Model	χ^2	df	CMIN/DF	NFI	RMSEA	HOELTER
Model 5a-A	559.94	187	2.99	0.96	0.09	97

Note. The chi-square test was significant at $p<0.01$.
Note. The HOELTER index was examined for 0.05 level of significance.
Note. CMIN/DF (ratio between the chi-square and the degrees of freedom); NFI (Normal Fit Index); RMSEA (Root Mean Square Error of Approximation); HOELTER (measure of overall goodness of fit).

DISCUSSION

Overview

The purpose of the present study was to explore a model of Work-Family Conflict (WFC) that includes personality and coping with a sample of university faculty. Specifically, the mediational role of coping was examined in the relationship between personality and WFC. In addition, the roles of tenure status and number of work hours in the experience of WFC were explored. As Eby et al. (2003) describe, work-family relationships are complex, and therefore require multivariate studies. Thus, the present study was a multivariate study that examined the variables described above.

Overall, the level of WFC experienced by the participants in the study was moderate, as compared to results from other studies. In the present study, out of a possible total score of 45 (indicating the highest level of WFC), the mean score of WFC for the sample was almost 20 (a ratio of 44%). Other typical studies in the field have found ratios ranging from 44% (e.g., Frone et al., 1992) to 62% (e.g., Adams et al., 1996). When asked an open-ended question about how much of a problem WFC is overall, the responses ranged from very serious to not very serious: "It is a major conflict with all the expectations of higher education," "Moderate, I try for a good balance," "It is a very large problem. I feel torn both ways, constantly…," "Maintaining a balance between family and work is always a problem with academics, especially those seeking tenure," "It has varied at times from slight to severe, ranging up to and including severe

damage to my main relationship. It's an ongoing problem," "None - my husband completely understands my job and there is no conflict between our jobs or between work and family. Having no children helps," "A great deal. Always a struggle. I never feel like I ever do the best job with either (feel like I compromise both work and family)," and "Huge. I'm on track for a divorce."

Several of the relationships hypothesized about and examined in the present study were found to be statistically significant, while others were not. The following discussion will focus on the variables studied and the findings that pertain to them.

Demographic / Other Information

Tenure Status

It was predicted that those individuals with tenure would have lower levels of WFC than those without tenure, however, this was not supported in the present study; tenure status was not related to WFC. This was a surprising finding, as it was assumed that those individuals who had tenure would have fewer work pressures on them that may interfere with family roles. In fact, several participants alluded to this assumption in their open-ended responses: "With tenure looming it is a daily ordeal. There is not a day that goes by that I do not think about this stress," "Just trying to get all the work done: writing lectures, grading papers that interfere with writing grants and papers. Home life suffers until I make tenure," "I would like to spend more time on projects at home, but must devote the necessary time to my career. As non-tenured faculty I must stay competitive," "As a young professional, everything is directed towards tenure and promotion; as a full professor with tenure, pressures are still there to perform but the fear factor is reduced and my interest is in helping others jump the hurdles easier...," "This has been the basis

for a lot of intense unhappiness over the last two years as I came up for and went through tenure, so I have thought about it a lot," "I think most careers are probably not well suited for vocational/professional and family compatibility. Luckily, a tenured professor probably has it better than most." However, this assumption that after one achieves tenure, WFC decreases, was not supported in the present study.

One possible explanation behind the finding in the present study is that after individuals gain tenure, they feel as if they must put as much time and energy into their career as they did before they gained tenure. In the present study, the number of work hours was not significantly related to tenure status, indicating that whether an individual had tenure or not did not determine his or her average number of work hours. In an open-ended response, one participant stated, "I worked too much on the way to tenure and full professor at the cost of my personal and family life. I had to seek therapy to learn how to balance my life. I am doing better now but can't seem to lose the guilt over not working all the time…" After getting used to the lifestyle necessary to gain tenure and to be successful in academia, perhaps it is difficult for faculty members to change that lifestyle. If that is the case, and tenured faculty members work as many hours and put as much energy into their work as non-tenured members, then the level of WFC might not be affected. This finding illustrates the importance of examining the factors related to tenure status that may have an impact on WFC, as it seems that tenure status, alone, does not have a significant impact.

Work Hours

The number of hours worked was significantly related to the level of WFC in the present study, such that as individuals spent more time on work-related activities, they

experienced higher levels of WFC. This was consistent with prediction and with previous research. The more time an individual spends on work-related activities, the less time they will have available for family-related activities, thus causing conflict between the two roles. Participants wrote things such as, "… both 'jobs' really need 80 hours a week to do them well," "…my work absorbs exorbitant amounts of time and so I don't spend it with my husband or family and neglect my home and I certainly do not spend time on myself."

It seems, based on the present study, that some work-related variables (e.g., number of work hours) are related to WFC while others (e.g., tenure status) are not. As indicated in the Literature Review, understanding the role of these work-related constructs on WFC is important. This information may be especially beneficial to organizations that are setting policies and structuring work environments, so that they may reduce the impact of such variables on WFC for their employees. However, the roles of individual variables are also important, especially to the people who are experiencing WFC. The role of these variables, as examined in the present study, will be examined next.

Extraversion

As was predicted in the present study, individuals who are more extraverted tend to use more Problem-Focused Coping behaviors and have less WFC. This seems to make sense, as extraverts are more likely to use coping strategies such as rational action, substitution, restraint, and social support (Costa & McCrae, 1986; Watson & Hubbard, 1996; Wearing & Hart, 1996; Hooker et al., 1994). In addition, extraverts have been shown to experience more positive affect in their lives than introverts do (Rusting &

Larsen, 1998), and therefore may perceive the influences of their work and family roles more positively than negatively, thus leading to lower levels of WFC.

The two findings related to Extraversion in the present study are consistent with past research (Extraversion related to lower levels of WFC and higher use of Problem-Focused Coping), and therefore seem to be fairly robust. These findings also have some practical significance. For example, when a therapist is working with a client who is high on Extraversion, he or she will be more likely to use Problem-Focused Coping behaviors. He or she is more comfortable with these behaviors and also more efficient with them. For an extravert who is experiencing high levels of WFC and is not using appropriate coping skills, Problem-focused skills would be a good place to start in therapy.

Conscientiousness

Consistent with previous research, individuals in the present study who were conscientious also had lower levels of WFC. It was predicted that although people who are conscientious are more involved in their roles, they are also more organized and better at planning. They may be better than non-conscientious people at balancing the time and energy they have to spend in their work and family roles. However, contrary to prediction, in the present study, individuals who were more conscientious were less likely to use Problem-Focused Coping, which includes things like planning and organization. Future research should examine this variable further to better understand the relationship between Conscientiousness and coping.

Neuroticism

In the present study, individuals who scored higher on Neuroticism experienced higher levels of WFC. When a person high on Neuroticism experiences time constraints,

strain in a role, or behavior changes, they may be more likely to exaggerate these conflicts (Zellars et al., 1999), thus making the situation even worse for himself or herself. The negative perceptions that individuals high on Neuroticism experience seem to lead them to experience WFC because of their sensitivities to conflicts.

This finding is consistent with past research, and seems to be fairly robust. Counselors can use this information to help in treatment planning with clients who show neurotic tendencies. WFC is more likely for these clients, and therefore prevention of and coping with this conflict is important.

Openness to Experience

Individuals who scored high on Openness in the present study also experienced higher levels of WFC than those who scored low on Openness. Openness to Experience does not seem to have any theoretically obvious influences on the experience of WFC. People who are open to experience are characterized as being intelligent, unconventional, and imaginative. Perhaps these characteristics also lead them to be more involved in their careers, and therefore less available for their family role. If this is the case, WFC may increase.

While Openness was not significantly related to Problem-Focused Coping in the present study, the relationship between this personality trait and coping should be further examined. A therapist working with such a client would be well-served to understand this relationship and to understand ways that these individuals may cope to alleviate WFC.

Problem-Focused Coping

As individuals in the present study used more Problem-Focused Coping, they experienced more WFC. This was inconsistent with the predictions made for Problem-Focused Coping and WFC. One potential explanation for this finding is related to the question of causation. To say that two variables are related (e.g., Problem-Focused Coping and WFC) is not to say which variable causes the other; correlation does not answer questions about causation. The fact that individuals who experience higher levels of WFC may use more Problem-Focused Coping skills makes sense, and is consistent with the finding in the present study. Before one is going to employ a coping mechanism, he or she is most likely going to be experiencing conflict. Therefore, the experience of conflict would be correlated with higher levels of coping behaviors. To answer the causation question, a longitudinal study that measured both variables at different times would be needed, and therefore is a potential direction for future research.

Additionally, based on the means of the WFC scales (WFCT = 7.1, WFCS = 6.8, WFCB = 5.6) as well as open-ended responses, time-related conflict seemed to be fairly prevalent in the sample, more so than strain- or behavior-based WFC. In previous research, time management, which may be considered planful problem solving (a Problem-Focused Coping skill), was positively related to WFC (Adams & Jex, 1999). If the majority of individuals in this sample were experiencing time-related conflict and therefore used time management as a coping skill, Adams' and Jex's study (1999) would predict that they would experience more WFC. This could be a potential explanation for the present findings.

Emotion-Focused Coping

Consistent with prediction for the present study and with past research, individuals who used more Emotion-Focused Coping behaviors also experienced higher levels of WFC. Many of the skills associated with Emotion-Focused Coping, such as avoidance/resignation (Rotondo et al., 2003) and escapist coping (Burke, 2002), have been shown to not be effective for WFC.

This finding is important for counselors working with clients who are experiencing WFC. Those clients that are implementing Emotion-focused behaviors should probably be taught other coping skills, most likely Problem-focused skills. While future research should further examine the role of personality in this relationship, the present study indicates that across personality traits, Emotion-Focused Coping skills are not effective in reducing WFC.

Coping as a Mediator

In the present study, contrary to prediction, neither Problem-Focused Coping nor Emotion-Focused Coping mediated the relationship between any of the Big Five personality traits and WFC. Mediation was expected because personality has been related to WFC in previous studies, personality has been related to coping, and coping has been related to WFC. However, the lack of mediation in the present study seems to imply that there are other variables, not included in the models for the present study, that impact this relationship more than coping does, or that possibly confound the mediational relationship of coping.

Coping as a Moderator

While coping behaviors did not function as mediators in the present study, they may still be important in the WFC arena. Perhaps future research could examine the role of WFC as a moderator in this relationship. Rather than the relationship between personality and WFC being dependent on coping, the relationship would be modified by coping. Both Problem-Focused and Emotion-Focused Coping were correlated with WFC in this study, and also with several of the personality traits. Perhaps coping acts as a moderator in between the two, rather than a mediator, as predicted here.

Three Types of WFC

Another possible explanation for the lack of mediation by coping in the present study is related to the three types of WFC. As described above, Greenhaus and Beutell (1985) have distinguished among three forms of WFC: time-, strain-, or behavior-based conflict. Time-based conflict occurs when devoting time to one domain, work or family, takes away from time that would normally be devoted to the other domain. Strain-based conflict occurs when the strain (e.g., tension, anxiety, and fatigue) that occurs in one domain prohibits a person from performing his or her role in the other domain. Behavior-based conflict occurs when behaviors that a person performs in one role are incompatible with the behaviors they must perform in the other role. As Eby et al. (2003) describe in their meta-analysis, time-, strain-, and behavior-based WFC have some unique antecedents. Therefore, the three types of WFC may also have unique relationships with personality and coping.

The majority of participants in the present study described situations that involve time conflicts when asked to describe how much of a problem WFC is for them and what types of situations usually occur that cause WFC. Several participants wrote things like, "I think the openness of an academic schedule makes things harder because the expectations of family/spouse are greater for your time – they might be more understanding if I was clocking in somewhere?" "Scheduling! I have to be in two places at one time. Also the priority of scholarship (publishing) lurks in the back of my mind every time I use time to do something with the family… I should be writing!" "Both I and my wife work relatively long hours and we miss many of our daughter's afternoon activities or are too tired to participate in evening activities," "Trying to be a good mother and do research – both could take 100% of my time."

Some participants also described strain-based WFC situations. Things like, "Constant conflict. Am trying to work only 40 hours a week and use a flexible hours schedule with days at work at home but feel guilty and feel that I am not doing my job well," "It's an enormous problem – very difficult as a wife and mother to handle the responsibilities of an academic career (and now I'm chair of my department)… constant stress," "The problem is finding time to relax and do leisurely activities without worrying about work," "Usually the work situations that drain me involve personnel and administrative issues that need to be addressed…," "Inability to deal with a problem that arises with as much energy as it demands," "…the fact that when I'm done with work I'm too tired or just not interested in working at home (whether that's chores or talking about issues in the relationship)…" were fairly common, but not as frequent as time-based WFC in the present study.

A few participants described situations that involve behavior-based WFC. These were less common than time- or strain-based conflict, but included, "There are conflicts precisely because of the different roles and responsibilities between work and family. There are also different expectations within each role and differences in how those roles are to be successfully fulfilled," "I am 2 different people… aggressive at work, not at home," "My partner is also a colleague. The biggest problem is that, because we see each other often at work and both know our colleagues, the division between work and personal life is difficult to establish and maintain…," "When I feel that I look weak in my job because of family obligations," "I have to have a time period or activity to change 'mental roles' from fast, aggressive at work to slow, thoughtful, patient at home."

The present study did not run separate analyses for time-, strain-, and behavior-based WFC. Assuming that the three types of conflict do have unique antecedents, it is plausible that they also have unique relationships with the Big Five characteristics and with problem- and emotion-focused coping. Additionally, perhaps different personality traits are related to three types of WFC differently. The relationship between personality and WFC, in turn, might be mediated by coping differently. Thus, the mediational models created for the present study may, in reality, differ for the three types of conflict. While the mediational effect was not found significant here, that may be because the uniqueness of the three types of conflict was lost in combining them all into one variable. Distinguishing between the separate relationships is a direction for future research.

Spillover

As Eby et al. (2003) indicate, "negative spillover occurs across individuals from the same family unit" (p. 76). This can be between spouses or significant others, or

between parents and children. Therefore, the WFC that a person experiences also has an effect on other family members. In fact, several participants alluded to this phenomenon in their open-ended responses to the questions of how much of a problem WFC is for them, or what situations lead to conflict most often: "My most frequent conflicts are actually not between my career and my homelife, but between my husband's career and my career," "Teaching schedules that conflict with my wife's work schedule, or time she might have off," " My wife thinks it is a problem," "When my wife gets upset," "…domestic issues result in conflicts over the priorities placed on domestic issues versus work issues. Occasionally, non-working spouses do not realize the enormity of responsibilities to the employer…"

It seems likely that the impact of spillover affects the relationships between personality, coping, and WFC. Sometimes, it may not matter what the individual does to cope, but rather what the family unit does to cope. Future research should examine family unit coping.

Gender Differences

In the present study, men and women were combined in the analyses, as it was predicted that coping would mediate the relationships between personality and WFC, despite what gender a person was. Therefore, the role of gender in these relationships was not examined in the present study.

One fairly consistent finding in the literature is that women experience significantly more WFC than men (e.g., Greenglass et al., 1988; Duxbury, Higgins, & Lee, 1994). One participant wrote, "I believe that gender roles greatly influence the conflict between work and family in that I think that women bear the brunt of work

requirements and home/family requirements." Additionally, there are other gender differences that may impact the relationship between personality, coping, and WFC. For example, women are more likely than men to utilize the social contacts and networks in their lives as support (Greenhaus & Parasuraman, 1999). They are more likely to look to social contacts for information and advice, to share family and work concerns, and receive emotional support. Formal support at work seems to be used more frequently by and to have more of an impact on WFC for female employees than male employees (Wiersma, 1990). Therefore, it seems that social support (which is a problem-focused coping skill) is more readily used by women than by men.

Additionally, research has shown that men are able to unwind quickly after work, but women are not (Frankenhaeuser, Lundberg, Frederikson, Melin, Tuamisto, Myrsten, Hedman, Bergman-Losman, & Wallin, 1989). Research shows that wives restructure their work more than husbands do, by modifying hours, working weekends and evenings, limiting travel, and making special accommodations for children and spouses (Karambayya & Reilly, 1992). For example, one participant in the present study wrote, "Women seem to be guilt sponges and think they need to do it all. When I have a family illness, I think of a way to miss class that will not hurt my students. I build into the syllabus opportunities for last minute changes…" Perhaps these behaviors, as coping mechanisms, are used differently by men than they are by women. If that is the case, then their impact on WFC will also differ.

Research shows that men and women differ on their investment in and affect related to work and family roles. For example, as women increase their work involvement their WFC increases, but men's WFC increases with family involvement

(Duxbury & Higgins, 1991). Obviously, gender roles have an influence in this finding. Rothbard (2001) found that as women increased their investment in work, their negative affect at work increased and their attention to family decreased. Whereas for men, positive affect at work was related to greater attention to family. One participant wrote, "Really, the conflict is mostly worry over not doing enough at work and at home. The double standard for men and women is overwhelming sometimes – I feel guilty for not being at home or at work, and my husband doesn't feel the guilt." These differences in affect and investment seem likely to be related to the coping strategies employed to combat WFC. If men are not feeling "the guilt," as the participant stated, in situations in which women are, the coping mechanisms they employ may be very different. Therefore, coping would work differently as a mediator between personality and WFC for men and women (perhaps as a moderator), and this could be a potential explanation as to why the mediational effect was not supported in the present study. Most previous research on coping has been with women, so it is important to study it with men (Eby et al., 2003), but perhaps future research should examine the two genders separately.

Reciprocal Nature of the Work-Family Interface

Research has indicated that the work-family interface is a reciprocal one (Frone et al., 1997). Work variables (e.g., work distress, work time commitment) impact WFC, which then is related to family variables (e.g., family overload, family distress). These affected family variables, then, impact FWC, which then influence work variables. Thus, it seems that there is an indirect relationship between WFC and FWC through work and family variables that are related reciprocally.

This bidirectional model of WFC is of interest for future research. Frone et al. (1997) examined the reciprocal impact of work and family variables on WFC and FWC but did not include any individual variables, such as personality and coping. The roles of coping and personality should be examined in future research.

Limitations of the Study

One limitation is the fact that the present study was conducted with college professors. Therefore, the results of the study cannot necessarily be generalized to other groups of individuals. College professors may have unique characteristics related to their work that other individuals in other professions may not have. For example, professors have higher education levels than the average person, as well as above average incomes. Both of these may be related to personality characteristics, as well as coping strategies employed in dealing with WFC.

The sample used in the present study was compared to samples used in other studies using the same variables. As described above, the level of WFC was moderate for this sample. In the present study, out of a possible total score of 45 (indicating the highest level of WFC), the mean score of WFC for the sample was almost 20. Other typical studies in the field have found total scores in this range, also. The levels of Problem-Focused and Emotion-Focused Coping were similar to those of the normative sample for the WCQ. In the present study, the mean Problem-Focused Coping score was 2.24 and in the WCQ normative sample it was slightly higher at 2.43. The mean Emotion-Focused Coping score was 2.00 in the present study and in the WFC normative sample it was slightly lower at 1.68. These mean scores indicate that the sample used in the present study is similar to the samples used in other studies using the same variables

of WFC, Problem-Focused Coping, and Emotion-Focused Coping. There is no normative data on the IPIP personality scale, as the authors assert, "None are available, nor should there be. One should be very wary of using canned 'norms' because it isn't obvious that one could ever find a population of which one's present sample is a representative subset" (http://ipip.ori.org/). Therefore, whether the sample in the present study is similar to other samples, based on personality traits, is not known.

Another limitation of the study is the poor response rate. Only 11.2% of those individuals asked to participate in the study responded to the survey. The low response rate, and subsequent smaller sample size negatively impacted the statistical power and the ability for significant relationships to be found. Also, the sample used from the population of university faculty surveyed may be biased. Only those individuals who used computers and responded to email messages participated in the study. Individuals who did not have computer access did not receive an invitation to participate; nor did those who did not respond to email. Additionally, it may be that those who had an interest in the topic were the ones more likely to access the survey after reading about the study. Perhaps they had an interest because they were experiencing a high level of WFC at that time, or because they had dealt with WFC in the past. In contrast, another possibility is that because participating in the study required some time and effort; people who felt they had little time to complete surveys would perhaps be less likely to participate in this study when compared to individuals who had fewer time constraints. Thus, perhaps individuals who did not respond were experiencing greater demands on their time. In turn, these greater demands might be correlated with higher levels of WFC, In short, people who see themselves as too busy to respond may be the very individuals

who are experiencing WFC. Therefore, not only is the relatively small sample size a limitation, but the potentially biased sample is also.

As noted above, there was a very high percentage of participants who reported living with a significant other (92.7%). These individuals' experiences with WFC were likely different than those who did not live with a significant other. Partially for those individuals who have children, it is typically advantageous to have another adult who can assist with childcare, household responsibilities, etc. Therefore, this fairly homogenous sample would most likely differ from one that did not have such a high percentage of participants living with a significant other.

Other limitations of the study are related to the WCQ used to assess Problem- and Emotion-Focused coping. First, in responding to this questionnaire, participants were asked to "Respond to the following statements in this questionnaire; you must have a specific stressful situation in mind. Take a few moments and think about a situation in which your work and family roles were in conflict with one another." It is unclear whether participants were concentrating on a situation that involved work-to-family conflict (as was the focus of the present study) or family-to-work conflict. This is a potential problem because it is unknown whether participants were responding to the coping questions thinking of a WFC situation, or whether they were thinking of a FWC situation. Future research should clearly state which direction of conflict is being focused upon to ensure participants respond in the predicted manor.

Another potential limitation related to the WCQ is that this scale may not have done a good job of assessing the coping behaviors that individuals utilized when experiencing WFC. Although the WCQ is the most widely used scale in the coping

literature and is respected as being the best at measuring Problem- and Emotion-Focused coping, it may not be the best scale at measuring coping with WFC. Perhaps there are coping behaviors other than those measured in the WCQ that people use. While there is no scale that specifically assesses coping with WFC, future research could focus on developing another scale. For instance, studies could qualitatively measure individuals' coping behaviors (based on self-report) in WFC situations, and code that information to identify coping skills that individuals use. While no such scale is available at this time, this is a potential direction for future research.

In summary, there are several limitations of the present study. Some were known in advance, some were discovered post-hoc, and some remain unknown. Suggestions are given here for future research to address some of these concerns in order to gain a better understanding of the relationships between personality, coping, and WFC.

Summary

Studying WFC and its relationship to other variables is an important pursuit. Conflict that employees experience between their work and family roles has been shown to negatively influence job, life, and marital satisfaction, and more. Thus, understanding this conflict, the things that contribute to it, and ways to combat it are beneficial to practitioners, such as counselors, who work with clients experiencing WFC.

Research has indicated that conflict between work and family roles is related to depression, physical health complaints, hypertension, and greater alcohol consumption (Frone et al., 1997). WFC is also related to anxiety disorders, mood disorders (Frone, 2000), greater stress (e.g., Kelloway et al., 1999), greater psychological distress (Burke & Greenglass, 1999), and lower life satisfaction (e.g., Bedeian et al., 1988). WFC has also

been shown to have implications for families, as well. One study found that interrole conflict between work and family predicted greater negative job-related affect for men who were fathers. This, in turn, increased their punishing and rejecting behavior towards children, and these behaviors predicted children's acting out in school (Stewart & Barling, 1996). Obviously, these are negative outcomes that affect not only the individual, but also his or her family and work. Gaining a better understanding of the work-family interface and the ways that different variables are related is beneficial to individuals struggling with conflict between work and family.

Understanding WFC is complex (Eby et al., 2003), and compared to other theoretical issues, is fairly young in its development. More exploratory research is needed to better understand the relationships underlying the experience of WFC. While coping did not play a mediational role between personality and WFC in the present study, its role is still an important one to examine in future research. Practitioners working with individuals who are struggling with work- and family-related issues need to understand the relationship that personality and coping play, and how they may be related. It seems logical that different individuals choose different coping behaviors, and that these coping behaviors have different effects on WFC.

As Emmons, Biernat, Tiedje, Lang, and Wortman (1990) suggest, teaching coping skills to individuals is an appropriate intervention. When people seek help in learning new coping skills, they usually enlist the help of a counselor, or someone similar. Psychologists and counselors working with clients who are experiencing high levels of WFC may use information from studies similar to the present one to inform their treatment plans and therapeutic interventions. As already noted, research has shown that

psychological well-being is affected by WFC, and specifically that high levels of work and family stress predict lower self-esteem (Schwartzberg & Dytell, 1996). If certain personality traits are associated with WFC, and specific coping mechanisms are identified as effective coping mechanisms for WFC, given knowledge of the personality type, counselors may utilize that knowledge in their treatment planning with clients. A counselor who understands the relationships underlying WFC and coping would be better able to help an individual struggling with balancing his or her work and family roles. Therefore, future research on this topic is encouraged.

As one participant in the present study stated, "Academics and other professionals are often held as role models by other members of society, yet we often live very unbalanced lives. Although we have extensive educations and are deemed to be 'intelligent,' we still act as though we have no power…" Therefore, the more helping professionals can understand about WFC, the more they can assist academics with this struggle to get through their daily lives and to achieve their goals, both in their careers and in their families.

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Appendix A

Sample of WFC studies[4]

Authors	**Sample**	**IVs**	**DVs**	**WFC / FWC measure**	**Key findings**
Adams, King, & King (1996)	Full-time workers	WFC, FWC, job involvement, social support	Job satisfaction, life satisfaction	WFC: Kopelman et al. (1983) FWC: Burley (1989)	-high job involvement related to high job satisfaction, and high WFC -high family involvement related to positive life satisfaction -decreased social support related to high WFC -high support related to lower FWC
Aryee (1992)	Married professional women in Singapore	WFC	Life satisfaction, job satisfaction, organizational commitment, job performance, intentions to leave	Small & Riley (1990)	-WFC related to decreased life satisfaction -WFC positively related to organizational commitment -WFC negatively related to WFC -WFC negatively related to job performance -WFC negatively related to intention to leave
Aryee, Luk, & Leung (1999)	Dual-earner couples (Hong Kong)	Coping behavior, spousal support, role stressors	Well-being, interrole conflict (WFC)	Netemeyer, Boles, & McMurrian (1996)	-spousal support negatively related to WFC, but not FWC -FWC (but not WFC) negatively related to job and life satisfaction

[4] The sample of WFC studies in this table is not meant to be an exhaustive representation of the literature. It is meant to demonstrate the variety of scales used to measure WFC and variables studied within the literature.

Authors	Sample	IVs	DVs	WFC / FWC measure	Key findings
Bacharach, Bamberger, & Conley (1991)	Nurses and engineers	WFC	Job satisfaction, burnout	Holahan & Gilbert (1979)	-WFC was negatively related to job satisfaction -burnout was negatively related to WFC
Bedeian, Burke, & Moffett (1988)	Male and female accountants	Parental demand, work role stress, WFC	Job satisfaction, marital satisfaction, life satisfaction	Burke, Weir, DuWors (1980)	-WFC acts as mediator between stressors and satisfactions -work exerts a powerful influence on marital satisfaction -both marital and job dissatisfaction can detract from life satisfaction -no sex differences found
Beutell & Greenhaus (1982)	Married females with children	WFC, work time demands, coping, gender role orientation	Life satisfaction	Self-developed measure	- WFC related to decreased life satisfaction
Carlson (1999)	Full-time employees	Role conflict, role ambiguity, negative affectivity, Type A personality	WFC	Combination of: Frone, Russell, & Cooper (1992); Gutek, Searle, & Klepa (1991); Stephens & Sommer (1993, 1996)	-dispositional variables have effect beyond situational variables in WFC

Authors	**Sample**	**IVs**	**DVs**	**WFC / FWC measure**	**Key findings**
Carlson & Perrewe (1999)	Government workers	Role conflict, role ambiguity, time demands, social support, work and family involvement	WFC, work and family satisfaction	Gutek et al. (1991); Frone et al. (1992)	-social support related to decreased role stressors and time demands, and indirectly related to decreased WFC
Frone, Russell, & Cooper (1992)	Married employees (male and female) with children	Job stressors, job involvement, family stressors, family involvement, WFC, FWC	Job distress, family distress, depression	Self-developed measure (4 items)	-stressors and involvements indirectly related to depression via within-domain measures of distress -no sex or racial differences

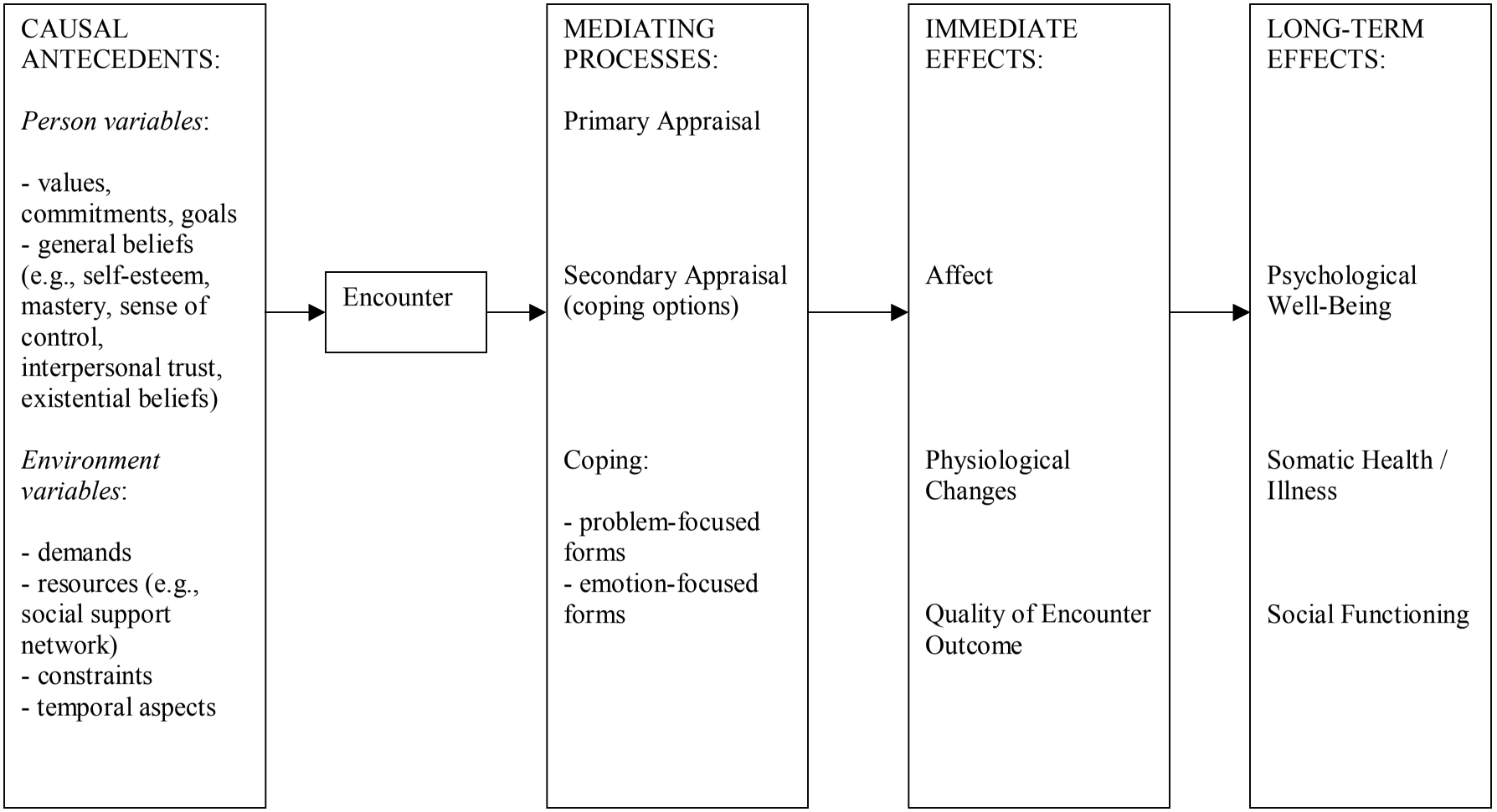
Authors	**Sample**	**IVs**	**DVs**	**WFC / FWC measure**	**Key findings**
Frone, Yardley, & Markel (1997)	Employed adults married and/or with children at home	Work overload, work time commitment, supervisor/co-worker support, work performance, family performance, parental overload, parenting time, spouse/family support	Work distress, family distress, WFC, FWC	Combination of: Frone et al. (1992), Gutek et al. (1991)	-there is an indirect reciprocal relationship between WFC and FWC -work and family support may reduce WFC by reducing within-domain distress and overload
Greenglass, Pantony, & Burke (1988)	Full-time employees (male and female) with children	Role conflict, work stress, social support	Job satisfaction, absenteeism, depression, anxiety, marital satisf., somatization	Holahan & Gilbert (1979)	-females experience more role conflict than males -females' lives are more disrupted with high conflict -social support lessened conflict for women

Authors	Sample	IVs	DVs	WFC / FWC measure	Key findings
Greenhaus, Parasuraman, Granrose, Rabinowitz, & Beutell (1989)	Dual-career couples	Work role stressors, work salience, work schedule characteristics	WFC	Kopelman et al. (1983)	-work role stressors were positively related to strain- and time-based WFC -the impact of work salience on WFC was somewhat stronger for women than for men
Hammer, Allen, Grigsby (1997)	Dual-earner couples	Work salience, career priority, perceived work flexibility, family involvement	WFC	Kopelman, Greenhaus, & Connolly (1983)	-work salience and flexibility predict WFC -family involvement predicts WFC for females, not males -career priority does not predict WFC -strong crossover effect of WFC for couples
Holahan & Gilbert (1979)	Bachelor's degree-level, married women	Career vs. noncareer, work attittude	Life satisfaction, role conflict	6 self-developed scales (21 items) (role conflict)	-job group reported more conflict than career group
Kopelman, Greenhaus, & Connolly (1983)	Male alumni, employed university students	Work conflict, family conflict, interrole conflict	Job satisfaction, family satisfaction, life satisfaction	Self-developed measure (4 items)	-WFC works as mediator between domain conflicts and domain satisfactions -WFC related to lower life, job, and family satisfactions

Authors	Sample	IVs	DVs	WFC / FWC measure	Key findings
Livingston, Burley, & Springer (1996)	University students (male and female)	Life role salience, sex role inventory, gender	Anticipated WFC	Kopelman et al. (1983)	-lower anticipated WFC related to high commitment to marriage and high femininity
Maraist (1999)	Meta-analysis	# work hours, work schedule flexibility, # children, marital status	WFC	Various measures	-# work hours positively related to WFC -schedule flexibility negatively related to WFC -# children positively related to WFC -married people experience more conflict than non-parent singles -single parents experience most WFC
Netemeyer, Boles, & McMurrian (1996)	School teachers, small business owners, real estate salespeople	WFC, FWC	Life satisfaction, job satisfaction	Self-developed measure (5 items)	-WFC and FWC related to lower life satisfaction, job satisfaction
Rosenbaum & Cohen (1999)	Working mothers	Psychological resources, equalitarian marriage type	Anxiety/ psychological distress	None	-emotional support associated with distress in nonequalitarian marriages and for low resourceful people -practical support weakly related to distress
Weigel & Weigel (1995)	Male and female adults with children	Work characteristics, family charateristics	WFC, stress, quality of family life	Bohn & Viveros-Long (1981)	-most effects on quality of family life are mediated through stress -supports family systems theory- family is more dominant for women, work is more dominant for men

Appendix B

Transactional Theory of Coping



Appendix C

University Departments Faculty Were Recruited From

1. Auburn University: One department (in parentheses) from each of the following colleges:
    a. Agriculture (Horticulture)
    b. Architecture, Design, & Construction (Building Science)
    c. Business (Marketing)
    d. Education (Curriculum and Teaching)
    e. Engineering (Civil Engineering)
    f. Forestry & Wildlife (Forestry)
    g. Human Sciences (Human Development and Family Studies)
    h. Liberal Arts (Sociology, Anthropology, Criminology, and Social Work)
    i. Nursing (Nursing)
    j. Pharmacy (Pharmacy)
    k. Sciences & Mathematics (Mathematics)
    l. Veterinary Sciences (Veterinary Sciences)
2. University of California, Berkeley: One department (in parentheses) from each of the following colleges:
    a. Business (Business & Public Policy)
    b. Chemistry (Chemistry)
    c. Education (School Psychology)
    d. Engineering (Nuclear Engineering)
    e. Environmental Design (Landscape Architecture)
    f. Information Management & Systems (Information Management & Systems)
    g. Journalism (Journalism)
    h. Law (Law)
    i. Letters & Science (Social Sciences)
    j. Natural Resources (Nutritional Science)
    k. Optometry (Optometry)
    l. Public Health (Public Health)
    m. Public Policy (Public Policy)
    n. Social Welfare (Social Welfare)
3. Clemson University: Two departments (in parentheses) from each of the following colleges:
    a. Agriculture, Forestry, & Life Sciences (Biology; Packaging Science)
    b. Architecture, Arts, & Humanities (Art; Architecture)
    c. Business and Behavioral Science (Management; Psychology)

    d. Health, Education, & Human Development (Parks, Recreation, & Tourism Management; Foundations & Special Education)
    e. Engineering & Science (Chemical Engineering; Physics)
4. Colorado State University: One department (in parentheses) from each of the following colleges:
    a. Agricultural Sciences (Soil & Crop Sciences)
    b. Applied Human Sciences (Occupational Therapy)
    c. Business (Computer Information Systems)
    d. Engineering (Atmospheric Science)
    e. Liberal Arts (Political Science)
    f. Natural Resources (Geosciences)
    g. Natural Science (Statistics)
    h. Veterinary Medicine & Biomedical Science (Microbiology, Immunology, & Pathology)
5. University of Delaware: One department (in parentheses) from each of the following colleges:
    a. Agriculture & Natural Resources (Animal & Food Sciences)
    b. Arts & Sciences (Social Science & History)
    c. Business & Economics (Economics)
    d. Engineering (Civil & Environmental Engineering)
    e. Health & Nursing Sciences (Health Nutrition & Exercise Sciences)
    f. Human Services, Education, & Public Policy (Consumer Studies)
    g. Marine Studies (Marine Studies)
6. University of Kentucky: One department (in parentheses) from each of the following colleges:
    a. Agriculture (Entomology)
    b. Arts & Sciences (Psychology)
    c. Communication & Information Studies (Communication)
    d. Dentistry (Dentistry)
    e. Design (Historic Preservation)
    f. Education (Special Education & Rehabilitation Counseling)
    g. Engineering (Mining)
    h. Fine Arts (Music)
    i. Business & Economics (Accountancy)
    j. Health Sciences (Health Sciences)
    k. Law (Law)
    l. Medicine (Medicine)
    m. Nursing (Nursing)
    n. Pharmacy (Pharmacy)
    o. Social Work (Social Work)
7. New Mexico State University: One department (in parentheses) from each of the following colleges:
    a. Agriculture and Home Economics (Hotel, Restaurant, & Tourism Management)
    b. Arts & Sciences (Government)

c. Business Administration & Economics (Finance & Business Law)
d. Education (Physical Education, Recreation, & Dance)
e. Engineering (Industrial Engineering)
f. Health & Social Services (Health Science)

8. Portland State University: One department (in parentheses) from each of the following colleges:
    a. Liberal Arts & Sciences (Geography)
    b. Urban & Public Affairs (Communication Development)
    c. Fine & Performing Arts (Music)
    d. Business Administration (Human Development Management)
    e. Engineering & Computer Science (Electrical & Computer Engineering)
9. University of Texas: One department (in parentheses) from each of the following schools:
    a. Architecture (Landscape Design)
    b. Business (Finance)
    c. Communication (Radio-TV-Film)
    d. Education (Educational Psychology)
    e. Engineering (Biomedical Engineering)
    f. Fine Arts (Art and Art History)
    g. Liberal Arts (Anthropology)
    h. Natural Sciences (Astronomy)
    i. Nursing (Nursing)
    j. Pharmacy (Pharmacology & Toxicology)
    k. Social Work (Social Work)
10. Wake Forest University: Each of the following departments:
    a. Biology
    b. Computer Science
    c. Counseling
    d. Divinity School
    e. Economics
    f. Education
    g. English
    h. Foreign Language
    i. History
    j. Political Science
    k. Psychology
    l. Theater

Appendix D

Email to Prospective Participants

Dear Faculty Member:

My name is Stacey Smoot, and I am a doctoral candidate in Counseling Psychology at Auburn University. I am conducting my dissertation research, which involves asking faculty members how they manage the roles they have at work and at home. I am asking you to participate by completing an on-line survey. This is the only time you will be contacted by me asking for your participation in this study. Your insight and opinions are important in understanding the experiences of faculty members and how they balance their work and family roles. You were selected because you are listed on your university's website as a current faculty member and your contact information was included.

This survey requires about 15 minutes of your time. To complete the survey, please click on the link below, and complete the survey on-line. Once you have finished, you will be prompted to submit the results. Just do so, and you will have completed the survey. This survey is on a secure server, which will protect the electronic transmission of data.

Participation is voluntary. You may withdraw from the study at any time without penalty. Your completion of this survey indicates your consent to participate in the study. Your responses will be kept confidential and no information will be used to identify you personally. No names will be requested or retained through the survey. Email addresses will not be captured or retained, thus your individual responses cannot be matched with your email address. No one at your university will receive any information, which identifies you in this study. Results will only be reported on a group level.

If you have any questions about this project, please contact me at the email address below, or you may contact my dissertation committee chair, Dr. Randolph Pipes (pipesrb@auburn.edu). If you are interested in receiving a summary of the results of this study when it is completed, contact me and I will send you the results. For more information regarding your rights as a research participant you may contact the Office of Human Subjects Research by phone or e-mail. The people to contact there are Executive Director E.N. "Chip" Burson (334) 844-5966 (bursoen@auburn.edu) or IRB Chair Dr. Peter Grandjean at (334) 844-1462 (grandpw@auburn.edu).

Having read the information provided, please decide whether you would like to participate in this research project. If you decide to participate, the data you provide will serve as your agreement to do so.

Thank you in advance for your participation.

Sincerely,
Stacey M. Smoot
Counseling Psychology, Auburn University
smootsm@auburn.edu

To complete the survey, please go to http://frontpage.auburn.edu/education/smootsm

Appendix E

Ways of Coping Questionnaire (Folkman & Lazarus, 1988)[5]

Respond to the following statements in this questionnaire; you must have a specific stressful situation in mind. Take a few moments and think about a situation in which your work and family roles were in conflict with one another. This means that meeting the demands of one role (work or family) made it difficult to meet the demands of the other role (work or family).

By "stressful" we mean a situation that was difficult or troubling for you, either because you felt distressed about what happened, or because you had to use considerable effort to deal with the situation. Before responding to the statements, think about the details of this stressful situation, such as where it happened, who was involved, how you acted, and why it was important to you. While you may still be involved in the situation, or it could have already happened, it should be the most stressful work and family conflict situation you experienced during the week.

As you respond to each of the statements, please keep this stressful situation in mind. Read each statement carefully and indicate, by circling 0, 1, 2, or 3, to what extent you used it in the situation. Please try to respond to every question.

0 **Does not apply or not used**	**1** **Used somewhat**	**2** **Used quite a bit**	**3** **Used a great deal**

1. I just concentrated on what I had to do next – the next step.	0	1	2	3
2. I tried to analyze the problem in order to understand it better.	0	1	2	3
3. I turned to another activity to take my mind off things.	0	1	2	3
4. I hoped for a miracle.	0	1	2	3
5. I talked to someone who could do something concrete about the problem.	0	1	2	3

[5] The Ways of Coping Questionnaire is copyrighted and therefore publishing the full scale in this dissertation is prohibited. MindGarden, Inc. has given permission for several items to be included in this paper, and therefore they are shown here. The full scale includes a total of 66 items, but only 5 are shown here.

Appendix F

Work-Family Conflict Scale (Carlson, Kacmar, and Williams, 2000)

Please indicate how frequently the following **events occur in your life**. We use the term "*family*" in the following statements; if this term is not applicable to you, please substitute it with "*personal life*." Also, here and throughout the survey, the term "spouse" refers to your married spouse or unmarried partner with whom you live. Use the following rating scale:

1 Never	2 Sometimes	3 Often	4 Very Often	5 Always

1. My work keeps me from my family activities more than I would like.	1	2	3	4	5
2. I am often so emotionally drained when I get home from work that it prevents me from contributing to my family.	1	2	3	4	5
3. Behavior that is effective and necessary for me at work would be counterproductive at home.	1	2	3	4	5
4. The time I spend on family responsibilities often interferes with my work responsibilities.	1	2	3	4	5
5. Because I am often stressed from family responsibilities, I have a hard time concentrating on my work.	1	2	3	4	5
6. The problem-solving behavior that works for me at home does not seem to be as useful at work.	1	2	3	4	5
7. Due to all the pressures at work, sometimes when I come home I am too stressed to do that things I enjoy.	1	2	3	4	5
8. The time I spend with my family often causes me not to spend time in activities at work that could be helpful to my career.	1	2	3	4	5
9. Tension and anxiety from my family life often weaken my ability to do my job.	1	2	3	4	5
10. The behaviors that work for me at home do not seem to be effective at work.	1	2	3	4	5
11. Due to stress at home, I am often too preoccupied with family matters at work.	1	2	3	4	5

12. The problem-solving behaviors I use in my job are not effective in resolving problems at home.	1	2	3	4	5
13. The time I must devote to my job keeps me from participating equally in household responsibilities and activities.	1	2	3	4	5
14. When I get home from work I am often too frazzled to participate in family activities/responsibilities.	1	2	3	4	5
15. Behavior that is effective and necessary for me at home would be counterproductive at work.	1	2	3	4	5
16. I have to miss work activities due to the amount of time I must spend on family responsibilities.	1	2	3	4	5
17. The behaviors I perform that make me effective at work do not help me to be a better parent, spouse, or family member.	1	2	3	4	5
18. I have to miss family activities due to the amount of time I must spend on work responsibilities.	1	2	3	4	5

Appendix G

International Personality Item Pool (Goldberg, 1999)

On the following page, there are phrases describing people's behaviors. Please use the rating scale below to describe how accurately each statement describes *you*. Describe yourself as you generally are now, not as you wish to be in the future. Describe yourself as you honestly see yourself, in relation to other people you know of the same sex as you are, and roughly your same age. So that you can describe yourself in an honest manner, your responses will be kept in absolute confidence. Please read each statement carefully, and then circle the number on the scale for each item.

1 Very Inaccurate	**2 Moderately Inaccurate**	**3 Neither Accurate nor Innaccurate**	**4 Moderately Accurate**	**5 Very Accurate**

1. Am the life of the party.	1	2	3	4	5
2. Feel little concern for others.	1	2	3	4	5
3. Am always prepared.	1	2	3	4	5
4. Get stressed out easily.	1	2	3	4	5
5. Have a rich vocabulary.	1	2	3	4	5
6. Don't talk a lot.	1	2	3	4	5
7. Am interested in people.	1	2	3	4	5
8. Leave my belongings around.	1	2	3	4	5
9. Am relaxed most of the time.	1	2	3	4	5
10. Have difficulty understanding abstract ideas.	1	2	3	4	5
11. Feel comfortable around people.	1	2	3	4	5
12. Insult people.	1	2	3	4	5
13. Pay attention to details.	1	2	3	4	5
14. Worry about things.	1	2	3	4	5
15. Have a vivid imagination.	1	2	3	4	5
16. Keep in the background.	1	2	3	4	5
17. Sympathize with others' feelings.	1	2	3	4	5
18. Make a mess of things.	1	2	3	4	5
19. Seldom feel blue.	1	2	3	4	5
20. Am not interested in abstract	1	2	3	4	5

ideas.					
21. Start conversations.	1	2	3	4	5
22. Am not interested in other people's problems.	1	2	3	4	5
23. Get chores done right away.	1	2	3	4	5
24. Am easily disturbed.	1	2	3	4	5
25. Have excellent ideas.	1	2	3	4	5
26. Have little to say.	1	2	3	4	5
27. Have a soft heart.	1	2	3	4	5
28. Often forget to put things back in their proper place.	1	2	3	4	5
29. Get upset easily.	1	2	3	4	5
30. Do not have a good imagination.	1	2	3	4	5
31. Talk to a lot of different people at parties.	1	2	3	4	5
32. Am not really interested in others.	1	2	3	4	5
33. Like order.	1	2	3	4	5
34. Change my mood a lot.	1	2	3	4	5
35. Am quick to understand things.	1	2	3	4	5
36. Don't like to draw attention to myself.	1	2	3	4	5
37. Take time out for others.	1	2	3	4	5
38. Shirk my duties.	1	2	3	4	5
39. Have frequent mood swings.	1	2	3	4	5
40. Use difficult words.	1	2	3	4	5
41. Don't mind being the center of attention.	1	2	3	4	5
42. Feel others' emotions.	1	2	3	4	5
43. Follow a schedule.	1	2	3	4	5
44. Get irritated easily.	1	2	3	4	5
45. Spend time reflecting on things.	1	2	3	4	5
46. Am quiet around strangers.	1	2	3	4	5
47. Make people feel at ease.	1	2	3	4	5
48. Am exacting in my work.	1	2	3	4	5
49. Often feel blue.	1	2	3	4	5
50. Am full of ideas.	1	2	3	4	5