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THE BLAME GAME: TESTING A MODEL OF ATTRIBUTIONS OF RESPONSIBILITY FOLLOWING WORK-FAMILY CONFLICT EVENTS

presented by

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has been accepted towards fulfillment
of the requirements for the

Ph.D. degree in Psychology

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6-9-10

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THE BLAME GAME: TESTING A MODEL OF ATTRIBUTIONS OF RESPONSIBILITY FOLLOWING WORK-FAMILY CONFLICT EVENTS

By

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A DISSERTATION

Submitted to
Michigan State University
in partial fulfillment of the requirements
for the degree of

DOCTOR OF PHILOSOPHY

Psychology

2010

ABSTRACT

THE BLAME GAME: TESTING A MODEL OF ATTRIBUTIONS OF RESPONSIBILITY FOLLOWING WORK-FAMILY CONFLICT EVENTS

By

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Although research focusing on correlates of work-family conflict has been prolific, very little theoretical or empirical work has focused on the process or experience of conflict. However, a focus on process has the potential to be fruitful both theoretically and practically. The present dissertation focused on one cognitive process likely to occur following work-family conflict events: attribution. Utilizing affective events theory as a guiding framework, a model linking attribution theory with work-family conflict was developed. It was proposed that the characteristics of a work-family conflict event would predict attributions made regarding responsibility for the conflict and that attributions would have both behavioral and attitudinal consequences, mediated by an emotional reaction. The model was tested in a sample of 269 working adults and received decidedly mixed support. The scheduling order of work and family activities was predictive of which role was blamed for the conflict, but perceived importance of the work and family activities did not have an impact on attributions. Further, anger and frustration mediated the effects of attributions on outcomes. Because the present study relied on a cross-sectional methodology, discussion of the results focuses on how future research might better evaluate the model, including the use of longitudinal data collection strategies.

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Introduction

Purpose and Organization

Although research on work-family conflict has greatly expanded of late and researchers have done much work to elucidate the antecedents and consequences of conflict, little attention has been paid to the processes underlying the experience of conflict. As a result, little is known about how individuals react to and interpret conflict events and how these reactions and interpretations impact important outcomes. Focusing on the processes underlying perceptions of conflict has the potential to be beneficial, however, because it may shed light on how and why individuals think, feel, and behave as they do in response to instances of conflict. The present paper focuses on one potential factor impacting individuals' reactions to conflict events: attributions. The purpose of this paper is to put forth a model of the process by which attributions of responsibility for instances of time conflict between work and family are made and how attributions might relate to important consequences relevant to work-family conflict.

The organization of the paper is as follows: The paper will first provide an overview of the concept of work-family conflict (WFC) and will then briefly review past research on antecedents and consequences of WFC. Next, the paper will discuss the fact that past research has neglected to focus on the process of forming perceptions of work-family conflict and will explain why this is problematic and how such a focus would add to the literature. Following this discussion, a few studies which have utilized affective events theory (Weiss & Cropanzano, 1996) to begin to explore the WFC process as it relates to emotion will be discussed. Cognition, and in particular attribution, will then be introduced as one potentially important part of the process of WFC. Next, attribution

theory will be discussed and applied to work-family conflict. Then, a model linking attribution theory to WFC will be presented and hypotheses will be proposed. A study will then be presented which provided an initial test of this model in a sample of working adults. Results will be discussed with a focus on how future research might continue to explore the process of conflict over time.

Work-family Conflict

Research on the work-family interface has flourished of late due to increased scholarly and practitioner interest in work-family issues (Ford, Heinen, & Langkamer, 2007). This increased interest has arisen due to a number of factors reflecting a changing workforce and changing organizations. With respect to the workforce, factors impacting work-family issues include the increasing percentage of dual-earner families (families with a sole male breadwinner decreased from 51.4% in 1970 to 19.8% in 2008; Jacobs & Green, 1998; U.S. Department of Commerce, Bureau of the Census, 2008) and single parent households (9% in 1993 and 25% in 2008; U.S. Department of Commerce, Bureau of the Census, 2008). With respect to the workplace, increased technology and flexibility have decreased the boundaries between work and family roles (Ford et al., 2007) and factors such as job enrichment and downsizing have placed different and often greater demands on individual employees (Ilgen & Pulakos, 1999). Finally, there is some indication that increased demands for social responsibility and the desire to recruit top talent have resulted in an increased interest in the well-being of employees (Guest, 2002). Together these forces have resulted in a dramatic increase in interest in work-family issues.

The concept of work-family conflict was originally proposed as an extension of role theory (Kahn, Wolfe, Quinn, Snoek, & Rosenthal, 1964). It captures the notion that when an individual takes part in multiple roles, these roles may place incompatible demands on that individual and s/he may experience stress as a result (Greenhaus & Beutell, 1985). Most simply, work-family conflict may be described as when "...one's participation in the work (family) role makes participation in the family (work) role more difficult." (de Janasz & Behson, 2007, p. 398). Work-family conflict is generally conceptualized as occurring in two directions: work interference with family (when the demands of work interfere with effective functioning in the family role) and family interference with work (when the demands of family interfere with effective functioning in the work role).

Conflict has also generally been divided into three different types. Time-based conflict is perhaps the most straightforward of the three and is defined as occurring when time spent in one role interferes with time spent in the other role (Greenhaus & Beutell, 1985). An example of time-based conflict is a situation where an individual wishes to attend his or her child's birthday party, but is scheduled for an out-of-town business meeting. Strain-based conflict is defined as occurring when strain that results from one role makes participation in the other role more difficult. An example is a new parent who has gotten up multiple times during the night to feed an infant and who therefore cannot concentrate on work the next day due to fatigue. Behavior-based conflict occurs when behaviors that are suitable in one role make participation in the other role more difficult (Greenhaus & Beutell, 1985). Although examples of this type of conflict are generally more difficult to come by, an example would be a prison guard treating family members

in a strict or punitive way as a result of the fact that these characteristics are needed for his or her work.

There are two major models of the mechanisms underlying work-family conflict. In the conservation of resources model, proposed by Hobfoll (1989) as a more general model of stress and applied to the case of work-family conflict, individuals desire to maintain and increase their resources. Stress occurs when they lose them or when resources that are invested do not result in a gain in return (Grandey & Cropanzano, 1999). Variants of this model have also been discussed, such as the resource depletion model (e.g., Edwards & Rothbard, 2000) but the essential feature is that the individual maintains a pool of resources that may be used in both the family and work roles and that overuse or depletion of these resources results in stress.

Alternatively, spillover represents a phenomenon whereby the effect of engaging in both family and work roles results in similarities between the two roles (Staines, 1980; Zedeck & Mosier, 1990). For example, if an individual experiences a strain in one role (e.g., a headache at work) the individual is more likely to experience the same strain in the other role (a headache at home). Similarly, participation in multiple roles also has the potential to provide positive effects due to the spillover of skills or positive affect. This phenomenon is often referred to as enrichment or facilitation, (Wayne, 2009) but will not be the focus of the present paper.

Past Research on Antecedents and Consequences

A great deal of empirical work has focused on the antecedents of WFC. Researchers exploring conflict in various forms have typically explored antecedents in the roles of work and family. In keeping with the directional model of conflict, (Frone,

Russell, & Cooper, 1992) these antecedents have most often been studied separately and as predictors of conflict originating in the role in which the antecedent exists. Almost exclusively, research designs have been cross-sectional and have measured an individual's *perceptions* of his or her work and family circumstances as predictors of conflict. More recently, researchers have also begun exploring the role of individual differences in predicting conflict.

Work role characteristics that have been most often studied as predictors of conflict are factors such as time demands, workload, level of involvement, and human resource policies (Batt & Valcour, 2003; Eby, Casper, Lockwood, Bordeaux, & Brinley, 2005). Generally speaking, work role characteristics are found to have a stronger impact on work-to-family conflict than on family-to work conflict (Byron, 2005). Family role characteristics that have been studied as antecedents of conflict are similar to those in the work role: time demands, involvement, presence of children at home, and supportiveness of spouse (Eby et al., 2005). Although some studies find a stronger relationship between family role variables and family-to-work conflict than work-to-family conflict, in a recent meta-analysis Byron (2005) did not find support for this conclusion. Finally, although relatively less research has explored personal characteristics, researchers have explored relationships between characteristics like values (Carlson & Kacmar, 2000), coping style (Kirchmeyer, 1993), gender (e.g., Frone, Russell, & Barnes, 1996) and age and work-family conflict.

Past research has shown evidence that work-family conflict is related to outcomes such as psychological distress, job dissatisfaction, lowered organizational commitment, turnover, and lowered life satisfaction (Allen, Herst, Bruck, & Sutton, 2000; Carlson,

Kacmar, & Williams, 1999; Ford et al., 2007; Frone et al., 1992; MacEwen & Barling, 1994). Research has shown that work-family conflict is linked to reductions in workers' health (Greenhaus, Allen, & Spector, 2006) and performance, (Gilboa, Shirom, Fried, & Cooper, 2008) as well as lawsuits arising from strains related to work-family conflict (Thomas & Ganster, 1995) and organizations' recruiting success (Beauregard & Henry, 2009).

Neglect of Process

Although researchers have focused a great deal of attention on exploring antecedents and consequences of work-family conflict (e.g., Eby et al., 2005), existing theories and research have treated the process of forming perceptions of WFC or the actual experience of conflict as a "black box," left relatively unexplored. In essence, in current models of WFC the individual is seen as a passive recipient of circumstances at work and home. He or she is seemingly at the mercy of the conditions of his or her job and family and simply experiences the level of conflict congruent with those circumstances. Though often the "individual" becomes a part of the picture through the inclusion of personal characteristics, these are measured as stable traits and as such do not reflect the individual's capacity to react to and construct his or her environment "in the moment".

As a result, not enough attention has been paid to how an individual reacts to, makes sense of, and constructs the interface between his or her work and family lives over time. There is little doubt, however, that an individual plays an active role in not only constructing the boundaries between his or her work and family lives in terms of the degree of integration between roles, (e.g., Clark, 2000) but also in reacting to and

thinking about instances of conflict as they arise. For example, Powell and Greenhaus (2006) explored how individuals, when faced with a time-based conflict between a family activity and a work activity, made decisions regarding the mobilization of social support and the attendance of activities. The authors explored various activity- and individual-based characteristics as predictors of when social support would be mobilized and when individuals would either attempt to reschedule or would decide to attend work or family activities. Importantly, they found that individuals did take on an active role in making decisions in the face of conflicts between work and family. The results of this study make it clear that individuals play an active role in constructing and reacting to instances of conflict.

In addition to the theoretical importance of understanding the cognitive, affective, and behavioral processes underlying WFC, doing so could also provide insights that would be valuable for creating practical solutions for conflict. As they are currently studied, antecedents of WFC are often stable characteristics such as personality, family size, or commitment to roles- or factors outside an individual's control such as workload. The way in which an individual reacts to events, construes situations, and evaluates evidence may be malleable and may therefore prove to be a valuable opportunity for growth and change if well understood. For these reasons, exploring process would not only more accurately represent the reality of WFC, but would also have the potential to provide useful information with which effective interventions could be developed. Given the consequences of work-family conflict at the individual, familial, and organizational levels, effective interventions to reduce conflict have the potential to be extremely valuable.

Past Research on Process

Although very little research in the area of WFC has addressed process, a promising direction where a few studies have already occurred is research focused on the affective consequences of conflict. A few recent studies in this area have utilized Affective Events Theory (AET; Weiss & Cropanzano, 1996) to explore the consequences of daily conflict events. AET focuses on events that occur at work, the affective reactions that occur as a result of those events, and the consequences of those affective reactions (see Figure 1). The theory proposes that events are a central determinant of affect at work and that affect at work has a direct influence on behaviors and attitudes. Unlike most organizational theory and research, the role of stable environmental factors is minimized within the theory. Instead, the influence of these factors is proposed to enact itself mainly through discrete work events.

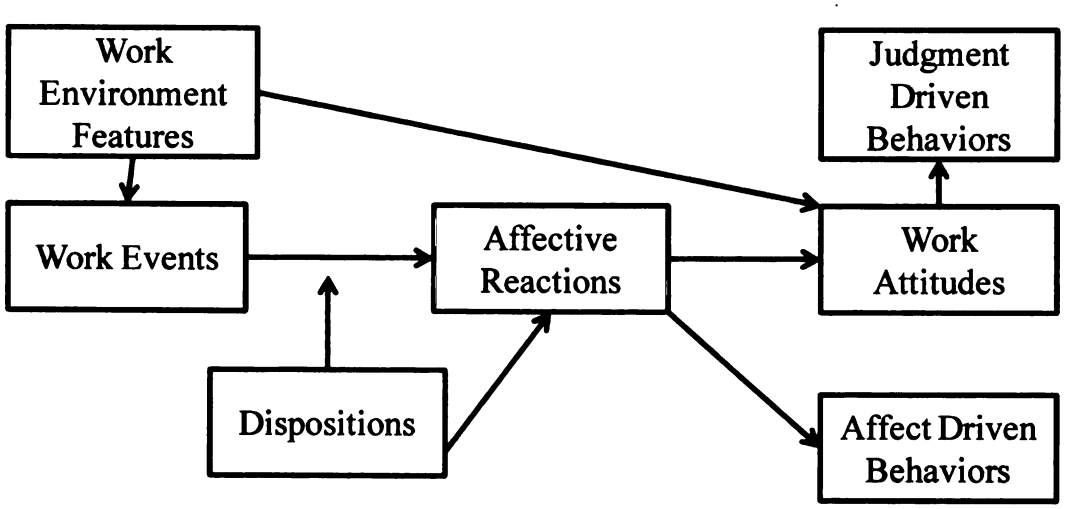

Figure 1. Affective Events Theory: Macro Structure (from Weiss & Cropanzano, 1996, p. 12)

A few studies thus far have used concepts from AET to study the process of work-family conflict as it relates to emotions. For example, Judge, Ilies, and Scott (2006)

explored the effect of daily experiences of work-to-family and family-to-work conflict on the emotions of guilt and hostility. The authors found that within individuals, conflict experienced in a domain predicted both types of negative affect within the other domain. Although as yet very few studies have occurred within this area, and the AET model overall is still at a rather early stage of development such that the entire model has yet to be tested within one research study (Mignonac & Herrbach, 2004), the area shows promise. In fact, Eby, Maher, and Butts (2010) reviewed research on emotions and the work-family interface and concluded that there is enough evidence to state that state-based negative affect is related to the experience of work-family conflict.

Although Weiss and Cropanzano (1996) propose that events are an important determinant of affect and its resulting outcomes, they note that not all events result in emotional reactions. An "event" is defined broadly as "a happening, especially an important happening" (Weiss & Cropanzano, 1996). It is clear that not everything that happens to a person results in an emotional reaction. Rather, in order for an event to elicit an emotional reaction, it must first be appraised in a way that elicits emotion. It should be noted that emotions can and do precede cognition under other circumstances (e.g., arousal followed by attribution; Schachter & Singer, 1962). When focusing on events, however, and the process through which they elicit emotion, cognition must precede emotion. Although cognition is not explicitly modeled within the original AET framework, the authors discuss the fact that cognition is an important part of the underlying process. They note that motivational, psychoanalytic, evolutionary, and cognitive theories are all consistent on the notion that emotions are preceded by cognitive

appraisals of an event, and that there is also a great deal of agreement on the process through which events are appraised (Plutchik, 1994).

First, there is a primary appraisal stage wherein the event is appraised for relevance to the self. Next, there is a secondary appraisal process, which is the step that determines an emotional reaction, where a person evaluates things like the potential consequences of the event, who is to blame for the event, how well s/he will be able to cope with it, and so on (Lazarus, 1991). It is important to note, however, that none of the research exploring WFC and emotions thus far, including the Eby et al. review, has explored the role of cognition in determining emotional reactions. I contend that an exploration of this link is essential in order to understand both within- and between-individual variation in emotion reactions to conflict events. Because the secondary appraisal process is more important for determining emotion, it is this step on which I will focus. In particular, I will focus on the process of attribution.

Attributions as One Part of the Process

Attribution is a process through which individuals attempt to understand the causal mechanisms behind events in their environment (e.g., Heider, 1958). Episodes of conflict between work and family are likely to evoke attempts at causal explanation for a number of reasons. First, individuals have a general desire to understand and control their environments and as a result frequently engage in attributional processes in an attempt to do so (Harvey & Weary, 1984). Second, there is evidence that negative events bring on attributional processes as a result of many factors such as the negative affect associated with them and the fact that people are motivated to avoid them in the future (Alicke, Buckingham, Zell, & Davis, 2008; Weiner, 1980). Finally, there is evidence that

individuals who are under stress are more likely to engage in attributional processes (Keinan & Sivan, 2001). Because instances of conflict between roles are likely to be both negative and stressful, it is likely that they will evoke attempts at causal explanation. These three factors combined make it likely that attribution processes will occur following an instance of work-family conflict.

I will now briefly introduce key concepts within attribution theory and will then apply the theory to work-family conflict. A model will be derived from this discussion, and a study will be presented that provided an initial test of this model.

Attribution Theory

Summary of the theory. Credit for the creation of attribution theory is generally given to Heider (1958), although most scholars in the area of attribution theory acknowledge that the theory grew as a result of the contributions of many, including Kelley (1967), Jones (Jones et al., 1972; Jones & Davis, 1965), Weiner (1985), and Rotter (1966). Despite popular use of the term "attribution theory", a unitary "theory of attribution" does not exist and attribution theory is best thought of as a collection of interrelated theories and perspectives (Kelley & Michela, 1980; Martinko, 1995). However, the basic underlying assumption behind them is that people desire to understand the causes of events and behavior because it is functional to do so (Harvey & Weary, 1984). For instance, if I can understand that a fire has occurred because I have placed a candle too close to a pile of papers, such a causal understanding is useful to me because in the future I can avoid repeating the same action. Likewise, if I am able to discern that a certain individual treated me poorly because he is generally an angry

person, such information is useful to me in that I can avoid interacting with that person in the future (e.g., Weiner, 1985).

Attribution theory is generally considered to be a theory of motivation and emotion, in that the attributions a person makes for his or her own past failures and successes can have significant effects on his or her future motivation, and causal attributions have been linked to affect such as anger, gratitude, guilt, hopelessness, pity, pride, and shame (Weiner, 1985). Despite the fact that most attribution theory researchers describe it as a theory of how people explain "events", the vast majority of research and theorizing on attribution theory has focused on how individuals process information about their own and others' behavior (Kelley & Michela, 1980). Events not involving human behavior have received almost no attention in the literature, perhaps because the great majority of research on attribution theory has occurred within social psychology.

Causes of attributional search. As was mentioned above, there is evidence that people engage in the attribution process frequently due to a general desire for control or mastery over their environments (Burger & Hemans, 1988). For example, Pittman and Pittman (1980) manipulated control (helplessness) and found that individuals with less control were more motivated to make attributions. In addition, Berscheid, Graziano, Monson, and Dermer (1976) found that when a person is dependent upon another person for outcomes (reward and punishment), the dependent person will be more motivated to engage in causal analysis regarding the other person's behavior. It has also been found, however, that certain events or circumstances heighten the likelihood of engaging in attributional search. For example, as mentioned above negative events are more likely

than positive events to evoke attempts at causal explanation due to the fact that people desire to avoid them in the future (Alicke et al., 2008; Kruglanski, Hamel, Maides, & Schwartz, 1978; Shaver, 1985; Weiner, 1980). Further, individuals experiencing stress are more likely to form causal attributions (Keinan & Sivan, 2001). For example, individuals diagnosed with breast cancer or who have survived rape or a severe accident tend to show increased attributional activity with respect to the highly stressful event or condition (Bulman & Wortman, 1977; Burgess & Holmstrom, 1976; Taylor, Lichtman, & Wood, 1984). Friedland and Keinan (1991) also found evidence that experimentally manipulated levels of stress influenced the tendency to form attributions as well as the nature of those attributions. Altogether it seems as though the general desire to maintain control over one's environment and to avoid situations that produce negative affect is behind the motivation for attributional activity.

Content of attributional processes. Kelley (1967) proposed a model of causal attribution that has been pervasive throughout the attribution literature. He proposed that individuals analyze three types of information about behavior in order to make a causal attribution: distinctiveness, consistency, and consensus. Distinctiveness is the extent to which a consequence which occurs in the presence of something fails to occur when that thing is not present. For example, if I laugh in the presence of a certain comedian but fail to laugh when that comedian is not present, the comedian would be highly distinctive. Consistency refers to both time and modality, and is the extent to which the consequence appears each time or under each modality under which the potential cause appears. For example, if I laugh at the comedian each time I see his or her show and when I see the show live, on audio and on videotape, these are highly consistent pieces of information.

Consensus is the extent to which others agree that the effect is a consequence of that thing. For example, if I see that others also laugh in the presence of the comedian, consensus would be high. The consensus element of Kelley's model has been challenged in the literature (e.g., Major, 1980; Nisbett & Borgida, 1975), but the general conclusion is that consensus information is utilized under certain circumstances when it is deemed useful (Kassin, 1979). For example, in certain situations it may matter to me whether others think the comedian is funny (e.g., when I am hiring him or her to work in my comedy club) but in others only my own opinion may matter (e.g., when I am choosing whether or not to see his or her show). Thus, consensus information may be more or less valuable given the situation.

Although few good summaries of the topic exist, there is some agreement within the literature that three core components make up an attributional judgment. First, the cause is judged as being either internal or external (Weiner et al., 1971). This dimension is termed *locus* and refers to whether or not the attributor believes that the person in question caused the behavior (an internal attribution) or whether some external force or entity caused the behavior (an external attribution). Generally, attribution research has focused on either intrapersonal or interpersonal (dyadic) attributions. In the intrapersonal case, an internal attribution would mean that the individual him or herself would be judged as having caused the result to occur. An external attribution would mean that anything outside the individual (any other person or any outside force) would be seen as having caused the result to occur. In the interpersonal case, the person making the attribution may judge that the event was caused by the person of interest in the attribution (an internal attribution) or some other person or force (an external attribution).

Some general trends have been discovered regarding internal versus external attributions. People tend to accept more responsibility (e.g., make more internal attributions) for positive than for negative outcomes (Greenwald, 1980). This is proposed to be due to the fact that people desire to maintain positive self-views. On the other hand, individuals are likely to discount situational influences and make trait-based (internal) attributions for others' behavior. Although originally called the actor-observer bias or correspondence bias (Jones & Nisbett, 1971) this effect has been demonstrated so many times in experimental research that it has been termed the fundamental attribution error (Ross, 1977).

Second, the cause is seen as being either stable or unstable. This dimension is termed *stability* and refers to whether the cause is something that was a transient part of the person or the environment or whether it was something that can be expected to exist for longer period of time. Stable attributions for failures have been found to relate to such widely varying outcomes as child neglect, (Hildyard & Wolfe, 2007) post-traumatic stress disorder, (Gray & Lombardo, 2004) depression and anxiety disorder (Heimberg et al, 1989).

Finally, the cause is judged as being global or local (Abramson, Seligman, & Teasdale, 1978). This dimension is termed *globality* and refers to the extent to which whatever caused the event to occur is likely to affect other areas as well (global) or only the type of event involved in that attribution (local). Generally speaking, global attributions for failures have been associated with many of the same negative outcomes as stable attributions (e.g., depression; Seligman, Abramson, Semmel, & Von Baeyer, 1979).

Consequences of attributional judgments. Because attributions affect how we view the causal structures in our world (including characteristics of others and ourselves), they are highly impactful with respect to our behaviors, thoughts, and feelings. Behavior is one of the most commonly discussed consequences of attributions (Bradbury & Fincham, 1992) and a wide variety of behaviors have been linked to attributions. For example, approach/avoid behaviors within relationships, positive or negative behaviors in marital interaction, and learned helplessness have all been repeatedly linked to attributions (Abramson et al., 1978; Bradbury & Fincham, 1992; Harvey & Weary, 1984).

Similarly, attributions have the potential to impact affect. Attributions have been linked to hostility, despair, shame, and surprise; (Weiner, Russell, & Lerman, 1978, 1979) guilt and anger; (Weiner, Graham, Stern, & Lawson, 1982) depression; (Abramson et al., 1978; Seligman et al., 1979) and frustration, blame, and aggression (Kulik & Brown, 1979). Finally, there is evidence that attributions impact cognition. Weiner (1980) found that attributions were linked to commitment, Wachtler and Counselman (1981) found that they were linked to liking of another person, and Hastie (1984) found an impact of attributions on the storage of information in memory.

Linking Attribution and WFC

Because cognition, and attribution in particular, are likely to play such an important role in the process of experiencing conflict events, building a model linking attribution theory to WFC has the potential to contribute to the literature. This is particularly true given that work-family conflict has typically been conceptualized and measured in a way that assumes it is stable over time, but considering discrete events of

conflict has the potential to elucidate the processes involved in the real-life experience of day-to-day conflict between work and family. The following discussion will focus only on time-based conflict between work and family roles for a few key reasons. First, time conflict is a very common form of conflict that has been the focus of much empirical work (Powell & Greenhaus, 2006). Second, time-based conflict is of great concern to organizations and has been the focus of most organization-based interventions aimed at attempting to reduce WFC (e.g., telecommuting, taking work home, family leave, and flexible work hours; Breaugh & Frye, 2008). Third, time conflict is most appropriate for the study of discrete events of conflict because time conflicts are by definition separate in time.

Because affective events theory provides a good framework for understanding how individuals react to discrete events, the model presented here (see Figure 2) will be built with AET as a guiding framework. The model will be revised in a number of ways to fit the current focus, including the addition of the family domain and the emphasis on cognition. One important feature of the current model is that it focuses on one conflict event rather than the process of conflict as it unfolds over time (as in the macro AET model). Doing so allows for the consideration of characteristics of the conflict event itself, rather than the frequency of conflict events as determined by environmental characteristics. Considering characteristics of the conflict event is particularly important in this context because of the focus on cognition and the likely role that characteristics of the event will play in determining cognition.

Attributions

Although cognition is not explicitly included in AET, it has been discussed that Weiss and Cropanzano (1996) strongly emphasize the role of cognition, and specifically an appraisal process, as an antecedent of emotion. In the present model cognition, namely attribution, is a much more explicit component.

Locus. As discussed, locus refers to whether an internal or external cause is viewed as being responsible for a given event's occurrence. An internal attribution for an event of work-family conflict would involve placing responsibility for the event on oneself. For example, a person could decide that he or she had not done a good enough job of planning his or her work week, and that this was the cause of the work-family conflict. If an individual does not attribute blame internally to him or herself, within the context of work-family conflict there are multiple targets for external attributions. First, external-family attributions occur when responsibility is attributed to the family social unit. Such an attribution would place the responsibility for an event of work-family conflict on the family as a unit or on a member of the family. An example of such an attribution would be an individual concluding that the cause of a conflict was his or her spouse not fulfilling a responsibility to pick up the children after school. Similarly, external-work attributions are those that are directed toward the work organization. Such attributions would place the responsibility for an event of work-family conflict on the organization as a unit or on a member of the organization. For example, an individual might attribute an instance of conflict to the fact that his or her organization has in place policies requiring all employees to arrive at work by a certain time.

A third type of external attribution that is more general is an external-other attribution. External-other attributions are those that are directed toward some causal force external to the individual, the family, and the work organization. Examples might be a greater power such as God or destiny, chance, or other factors that are seen as being larger than the individual's immediate situation and outside his or her control (such as the economy, national trends, etc.). An example of such an attribution would be an individual blaming a time-based conflict on the amount of traffic between work and home that day.

Stability. Stability reflects the extent to which the cause of an event is perceived as being likely to persist over time. A stable attribution represents the cause of an event as an unchanging characteristic of a person. An unstable attribution would imply that the cause of an event is transient or unlikely to persist. Within the context of WFC, an example of a stable attribution would be that an individual's boss does not care about work-family issues. On the other hand, an unstable attribution would be that an individual's boss made a mistake in scheduling a particular activity.

Globality. Globality refers to the extent to which an individual attributes the cause of an event to a characteristic that will generalize to other settings (global) or will be specific to the event that has just occurred (local). Within the context of work-family attributions, an attribution regarding globality would pertain to whether the cause of a conflict will manifest itself only with respect to work-family conflict (e.g., a manager who is bad at scheduling work to avoid conflicts), or whether the cause will manifest itself in a broader range of situations (e.g., a manager who is bad at his or her job).

Influences on Attributions

Ego protection. Research has shown that people are more likely to make external than internal attributions after negative outcomes occur in order to protect their positive self-views (e.g., Kelley & Michela, 1980). This finding has been replicated many times within the work context (e.g., blaming selection systems rather than some characteristic of themselves for a failure to be hired; Arvey, Strickland, Drauden, & Martin, 2006; Schleicher, Venkataramani, Morgeson, & Campion, 2006). Following conflict events it thus makes sense that individuals would be unlikely to blame themselves, as doing so would mean that they were responsible for a negative event, which could put their positive self-views at risk. Therefore, it is predicted that:

H1: *Internal attributions will be less frequent following conflict events than will external attributions.*

The conflict event. Characteristics of the conflict event itself are likely to have an impact on the appraisal process, and in this case specifically on attributions. Attribution theory and research has recognized that information regarding the events that are the impetus of attributional search is an important determinant of the resulting attributions (Kelley, 1967). Similarly, it has been found that information about activities within the work and family roles that are in conflict with each other is predictive of choices like which activity will be attended and whether or not social support is mobilized (Powell & Greenhaus, 2006). It seems quite clear that individuals are likely to utilize information about an event in an attempt to determine its cause. Thus, it is predicted that information regarding the activities involved in a conflict event will be influential in the attributional process. Specifically, characteristics of each of the activities from work and family

involved in the conflict should affect the locus of attributions made. Information about actual events of conflict between work and family has received almost no attention in the literature, and thus making theoretically-based predictions is difficult. However, two characteristics are likely to be important determinants of attributions: importance and scheduling order.

The importance of each of the activities is likely to influence attributions. If an individual views a particular activity as important, that is if he or she values the activity, s/he may be less likely to view the role from which that activity originated as being responsible when conflict occurs. This is because individuals are likely to "protect" an important activity from attributions of responsibility due to a desire for cognitive consistency. Similarly to importance, scheduling order is also likely to affect attributions. When a work and family activity conflict with each other, it is likely that one will have been scheduled before the other. As a result, the activity that was scheduled last is more likely to be salient to individuals. Because the more recently scheduled activity is more likely to be seen as "intruding," it is predicted that the role from which this activity originated will receive greater attributions of responsibility.

H2a: An individual will be less likely to attribute responsibility for conflict to a role for which the involved activity was highly important.

H2b: An individual will be less likely to attribute responsibility for conflict to a role for which the involved activity was scheduled first.

Stable work-family attitudes. In the original AET model attitudes are included only as outcomes of the affective process. Within the current model a differentiation is made between stable attitudes, which are likely to impact the way in which an individual

processes information regarding the event, and event-based attitudes, which are likely to be affected by the occurrence of a single conflict event. The stable attitudes one holds toward work and family are proposed as predictors of judgments regarding the activities involved in the conflict event. It is proposed that the attitudes one holds regarding one's family and work situations will influence how one perceives the activities; that is, it is proposed that whether one believes an activity is important or not will be influenced by one's attitude toward that role in general. Thus, attitudes will have an indirect effect on attributions through perceived activity characteristics. There is evidence to suggest that attitudes will be predictive of an individual's ratings of importance, due to the fact that holding a particular attitude has been found to result in information processing that is biased toward maintaining that attitude (Petty, Wegener, & Fabrigar, 1997). For example, if one holds the attitude that work is a highly central part of one's life, concluding that an activity that occurred within the work role is highly important would reinforce this attitude.

Affective commitment is a construct representing feelings of liking toward an organization and the desire to remain with that organization as a result (Meyer, Allen, & Smith, 1993). Affective commitment may be generalized to the family role as well, reflecting an individual's feelings of liking toward his or her family and desire to remain involved in the family role as a result. Centrality reflects the extent to which the work or family role, relatively speaking, is viewed as being central to an individual's life (Carr, Boyar, & Gregory, 2008). Both of these constructs reflect the extent to which an individual values a life role and experiences positive affect toward that role in general.

Based on the principle of cognitive consistency, these variables should predict whether or not an individual will believe a particular activity is important.

H3a: Individuals high in affective commitment to family will be more likely to believe the family role activity is highly important than individuals low in affective commitment to family.

H3b: Individuals high in affective commitment to work will be more likely to believe the work role activity is highly important than individuals low in affective commitment to work.

H3c: Individuals high in family centrality will be more likely to believe the family role activity is highly important than individuals low in family centrality.

H3d: Individuals high in work centrality will be more likely to believe the work role activity is highly important than individuals low in work centrality.

Dispositions. In Weiss and Cropanzano's original model dispositions moderate the relationship between events and emotions. Because attributions have been made an explicit mediating mechanism between events and emotions in the present model, the relationship between dispositions and attributions in this model is proposed to be direct. Specifically, this paper will focus on a characteristic that has been repeatedly shown to affect attributions: attributional style.

Attributional style describes the fact that people differ in the extent to which they tend to make different types of attributions. Perhaps the most famous recognition of this fact was the identification of depressive attributional style by Seligman and colleagues (Seligman et al., 1979). Attributional style has been recognized as perhaps the most important individual difference variable impacting attributions (Spector & Fox, 2009).

However, further research on the topic has also shown that attributional style relates to important life outcomes such as occupational status, salary, job satisfaction and motivation, and marital distress, (Furnham, Sadka, & Brewin, 1992; Horneffer & Fincham, 1996). Specifically, those with a depressive attributional style tend to make internal, global, and stable attributions for events (Abramson et al., 1978; Seligman et al., 1979).

H4a: Depressive attributional style will have a direct effect on the locus of attributions. Individuals higher in DAS will be more likely to make internal attributions than individuals low in DAS.

H4b: Depressive attributional style will have a direct effect on the stability of attributions. Individuals higher in DAS will be more likely to make stable attributions than individuals low in DAS.

H4c: Depressive attributional style will have a direct effect on the globality of attributions. Individuals higher in DAS will be more likely to make global attributions than individuals low in DAS.

Affect

Affect is one of the most consistently supported outcomes of attributions within the literature (e.g., Weiner, 1986). This perspective is in line with the current discussion, because it proposes that attributions are an antecedent of affect due to the fact that one's cognitive appraisals result in emotional responses (Ellis & Harper, 1975; Lazarus, 1966). Because work-family conflict is a negative event, attributions are likely to relate to negative affect. In this context, it is useful to differentiate between negative affect that is directed outward and negative affect that is directed inward. *Inward-focused negative*

affect is negative affect that is directed at an individual him or herself. Guilt and shame are types of negative affect that are focused toward the self that have been shown to relate to attributions (Scarnier, Schmader, & Lickel, 2009). Because the self is seen as the causal agent behind the conflict, inward-focused negative emotions are more likely to occur following internal attributions. *Outward-focused negative affect* is negative affect that is directed at something outside an individual him or herself. Anger and frustration are types of negative affect that are focused outward. Because something outside the self is seen as the causal agent behind conflict, outward-focused negative emotions are more likely to occur following external attributions. In addition, both global and stable attributions for a conflict event should result in a greater amount of all types of negative emotion, due to the fact that an individual making such an attribution would expect more conflict in the future and in other circumstances.

H5a: Individuals making internal attributions for instances of work-family conflict will experience greater amounts of guilt and shame than those making external attributions.

H5b: Individuals making external attributions for instances of work-family conflict will experience greater amounts of anger and frustration than those making internal attributions.

H5c: Individuals making stable attributions for instances of work-family conflict will experience greater amounts of guilt, shame, anger, and frustration than those making unstable attributions.

H5d: Individuals making global attributions for instances of work-family conflict will experience greater amounts of guilt, shame, anger, and frustration than those making local attributions.

Event-Based Attitudes

A robust finding in the attribution literature is that attributions relate to marital satisfaction (Bradbury & Fincham, 1992). When a spouse is held responsible for a negative event a drop in marital satisfaction occurs immediately and over the long term. However, in line with AET the experience of negative emotions following an event that has occurred is predicted to be necessary in order to result in a change in the attitudes one holds. As a result, it is predicted that the experience of negative emotions following the experience and subsequent appraisal of a work-family conflict event will result in changes in one's attitudes toward work and family. However, because the present study focuses on only one conflict event these attitudes will be conceptualized as "event-based" attitudes rather than the more stable attitudes already discussed. Event-based attitudes focus on what one's attitude toward a role is immediately following a conflict event, rather than overall. As a result, they are more likely to be impacted by one conflict event.

H6: The experience of negative emotions will be negatively associated with satisfaction with both work and family. Individuals experiencing greater degrees of negative emotion will experience less state satisfaction with both work and family.

Behavior

Within the AET framework, behaviors are considered to be outcomes of the emotion elicitation process. Affect driven behaviors, such as coping, are proposed to be directly

related to affective reactions whereas judgment-driven behaviors are mediated by attitudes. Similar predictions will be made here.

Affect-driven behaviors. Coping is the process of engaging in behaviors that attempt to minimize the effect of stress (Lazarus & Folkman, 1984). In response to time-based events of conflict, coping might involve such actions as seeking social support from others or attempting to plan more effectively in the future to prevent conflict. Past research has supported the notion that coping is related to attributions. In quadriplegic and paraplegic victims of accidents as well as breast cancer patients, attributions of blame directed at the self have been found to be associated with superior coping (Bulman & Wortman, 1977; Taylor et al., 1984). Presumably this is a result of the fact that taking responsibility for one's own fortune results in the desire to take action, whereas believing that one's fate lies in the hands of an outside force results in a feeling of helplessness (e.g., Abramson et al., 1978). However, it is unlikely that coping would occur without the presence of negative emotions. That is, if an individual fails to experience negative emotions as a result of an event s/he will be unlikely to resort to coping as a mechanism for dealing with those emotions. Thus, it is predicted that the experience of negative emotion will relate to greater amounts of coping behavior in response to events of work-family conflict.

> *H7: The experience of negative emotion will be related to greater amounts of coping behavior. Individuals experiencing more negative emotions will engage in more coping behaviors than individuals not experiencing as much negative emotion.*

Judgment-driven behaviors. In addition to those behaviors which occur as a direct result of affect, Weiss and Cropanzano (1996) also discuss the fact that judgment-driven behaviors arise as a result of a change in one's attitudes toward work. These behaviors are thus a reflection of one's attitudes toward work. Work withdrawal has been defined by Hulin (1991) as a "set of behaviors dissatisfied individuals enact to avoid the work situation; they are those behaviors designed to avoid participation in dissatisfying work situations." As compared with turnover, withdrawal behaviors are a milder and presumably more prevalent form of detaching oneself from the work role. For these reasons withdrawal should be both more applicable to the role of family and more likely to be associated with single instances of conflict than a more severe behavior such as turnover. For example, it is proposed that when satisfaction with a role is lower, an individual will be more likely to enact withdrawal behaviors in order to distance him or herself from the role.

H8a: Work satisfaction will be negatively related to work role withdrawal.

H8b: Family satisfaction will be negatively related to family role withdrawal.

Mediation

As can be seen in Figure 2, characteristics of the work and family activities are proposed to mediate the relationship between work and family attitudes and attributional locus. That is, work and family attitudes are proposed to have an indirect effect on attributional locus through individuals' perceptions of work and family activities. In addition, attributional locus is proposed to mediate the relationship between activity characteristics and emotions. That is, the attribution process is proposed to be a necessary for eliciting emotion following a conflict event. Attributional locus, globality

and stability are also proposed to mediate the relationship between DAS and emotions. By influencing the characteristics of one's attribution, DAS is proposed to have an indirect effect on emotions. Similarly, affective reactions are proposed to mediate the relationship between attributions and both affect-driven behaviors and attitudes. If an individual does not experience negative emotion as a result of his or her attribution, it is proposed that behavior and/or attitude change is unlikely to result. Finally, as in AET, attitudes are proposed to mediate the relationship between affect and judgment-driven behaviors.

Methods

Participants

Participants were alumni of a large Midwestern university. To be eligible for the study individuals were required to be involved in paid employment more than 30 hours per week and to be able to recall a conflict event between the roles of work and family that had occurred within the past two weeks. The two week limitation was used so participants would be more likely to recall the details of an event and its consequences (Gable & Reis, 1999). The sample was stratified by gender such that 50% of potential participants were female and 50% were male. Stratification was also performed by age, whereby 25% of participants were 20-29, 25% were 30-39. 25% were 40-49, and 25% were 50-60. Eligible participants who completed all measures in the survey were compensated in exchange for their participation with their choice of a $10 gift card to an online retailer or a $10 payment using PayPal. Although the invitation email was sent to 7500 email addresses, 2134 bounced back and did not reach the intended recipients, leaving a potential sample size of 5366. Out of the 1227 (23%) who viewed the

invitation email, 432 (35%) accessed the survey and 390 (32%) filled it out. To be eligible to be part of the final sample participants had to be working at least 30 hours per week, have provided a valid work-family conflict event, and have filled out a majority of the measures. Based on these criteria 121 participants were eliminated, leaving a final sample size of 269. The majority of eliminated participants (90) had completed only the first seven items of the survey and had dropped out of the survey at the point where the critical incident entry was required. The sample size of 269 provided appropriate power to test the fit of the structural equation model as well as further testing of the hypotheses (Faul, Erdfelder, Lang, & Buchner, 2007; MacCallum, Browne, & Sugawara, 1996).

The mean age of participants was 43 years (SD = 8.93) and 61% were female. Marital status, spouse work status, race, and number of children at home are reported in Table 1. Participants worked an average of 45 hours per week (SD = 8.27) in a broad array of occupations (e.g., science writer/editor, sales manager, labor and delivery RN). Due to the fact that an alumni sample was used, all participants had achieved a bachelor's degree or above, with 56.9% having achieved a graduate degree.

Procedure

Potential participants were recruited via email. They were sent an email message describing the study and providing a link to click on if they wished to participate (see Appendix A). Individuals who clicked on the link were taken to a consent form (see Appendix B). Following the consent form, all study measures were filled out online. Participants first completed measures of all variables in the model, then completed measures of some potential control variables and demographics. (Measures are presented in order in Appendices C-N)

Measures

Centrality. Centrality was measured using items drawn from a measure developed by Paullay, Alliger, and Stone-Romero (1994). The items were edited to fit both roles and consisted of statements such as "Most of my interests are centered around my family". Participants were asked to indicate their level of agreement with each item on a 5-point Likert-type scale (strongly disagree-strongly agree; see Appendix C for work and D for family centrality). Alphas for both scales were acceptable, $\alpha = .78$ for work centrality $\alpha = .85$ for family centrality.

Affective commitment. Affective commitment was measured using an adapted version of the Meyer et al., (1993) measure of affective commitment (see Appendix C for work and D for family commitment). Items were edited to fit both roles and consisted of statements such as "I am enthusiastic about my family". The scale consisted of three items assessing affective commitment to work and three items assessing affective commitment to family. Participants were asked to indicate their level of agreement with each item on a 5-point Likert-type scale (strongly disagree-strongly agree). Although previous research had found reliabilities for the affective commitment to work scale that were acceptable (e.g., α =.74-.82; Meyer et al., 1993), alpha for affective commitment to work was only marginally acceptable, $\alpha = .67$ and alpha for affective commitment to family was unacceptably low, $\alpha = .51$. Further analysis revealed that deleting any item would not increase the scale alpha and that items in the affective commitment to family scale displayed very low variance, with most responses at the high end of the scale (scale $M = 4.47$, $SD = .51$). Items in the affective commitment to work scale exhibited a lower mean ($M = 4.09$, $SD = .61$), which was similar to that found in previous research (e.g., M

= 3.57; Meyer et al., 1993). Due to the unacceptable reliability of both scales, the affective commitment scales were excluded from further analysis.

Activity importance. The importance of each activity was measured with a one-item scale. Participants indicated the importance of the work and family activities that were involved in the conflict (see Appendix E). They were asked to indicate their responses on a 5-point scale (very unimportant-very important). For both scales the mean importance rating was relatively high, (4.22 for work and 4.31 for family) however there was some variance in responses evidenced by the *SD* of .81 for work and .67 for family, as well as the range (1-5 for work and 2-5 for family). The correlation between the two scales was not significant, $r = .09$, $p > .05$.

Activity scheduling order. Scheduling order of the activities was measured with a one-item scale (see Appendix E). For this scale, participants were asked to indicate which of the activities was scheduled first. Fifty-nine percent (59%) of participants indicated that the family activity was scheduled first, whereas forty percent (40%) of participants indicated that the work activity was scheduled first.

Characteristics of the attribution. Information about a single event of time-based conflict between work and family roles that occurred recently was collected in a structured format. Participants were asked a series of questions about each of the activities involved in the conflict, as well as the conflict itself and its consequences. They were also asked what the one main cause of the conflict event was; whether the cause is internal to them, within the work role, the family role, or something external; whether the cause was likely to persist; and whether the cause was likely to affect other parts of their life (see Appendices E and F). Attributional locus was assessed with two

separate questions: a closed-ended question assessing only the internality-externality of the attribution (see Appendix F, Question 2) and an open-ended question assessing on whom the participant placed responsibility for the conflict event (e.g., self, work, family; see Appendix E, Question 7).

For the open-ended question assessing attributional locus, responses were coded by the author and two other graduate students. After initially coding the responses separately, 71% perfect agreement was achieved among all three coders. After meeting to resolve disagreements, 100% agreement was achieved. Table 2 shows the frequency with which participants made each type of attribution. As can be seen in the table, this measure displayed acceptable variability, although the majority (61%) of participants attributed the conflict to work. Table 3 reflects participant responses to the closed-ended question regarding whether the conflict was caused by them or by external factors. For the item assessing stability, 60% of participants reported that the cause of the conflict event was something that would continue to affect them in the future while 34% reported that it was not. For the globality item, 44% of participants responded that the cause of the conflict was something that only caused work-family conflict, whereas 50% reported that the cause also affected other areas of their life as well. Overall these measures appeared to display adequate variability in responses and to have functioned as expected.

Negative emotions. Shame, guilt, frustration, and anger were measured by asking participants to indicate to what extent they felt a number of emotions (e.g., shame, regret, anger) in response to the conflict event on a 5-point Likert-type scale (not at all-extremely; see Appendix G). This scale followed the design of many previous affect scales, which utilize the emotion word format (e.g., Lorr, McNair, Heuchert, &

Droppleman, 2003; Wart, 1990) yet was designed to assess the four emotions of interest in this study. All scales possessed adequate reliability, $\alpha = .69$ for shame, $\alpha = .82$ for guilt, $\alpha = .76$ for frustration, and $\alpha = .80$ for anger. Intercorrelations among the scales, as can be seen in Table 4, were generally less than .50 and were thus acceptable. However, the intercorrelations between the anger and frustration scales was considerably higher, at $r = .81$. As a result, these scales were combined to form a single measure of anger and frustration, $\alpha = .88$.

Role satisfaction. Role satisfaction was measured with a scale adapted from Diener, Emmons, Larsen, and Griffin (1985). The scale consisted of a number of statements such as "I am satisfied with my work right now". Participants were asked to indicate their level of agreement with each item on a 5-point Likert-type scale (strongly disagree-strongly agree; see Appendix I for work and J for family satisfaction). Alpha for both scales was acceptable, $\alpha = .82$ for work and $\alpha = .89$ for family satisfaction.

Role withdrawal. As in previous studies, (Hanisch, 1991; Hanisch & Hulin, 1990; Hulin, 1991) role withdrawal was measured as a number of behaviors engaged in to avoid a role or separate oneself from the role, without leaving entirely. The scale consisted of a number of statements such as "Making excuses to go somewhere to get out of work". Participants were asked to indicate their level of agreement with each item on a 5-point Likert-type scale (strongly disagree-strongly agree; see Appendix I for work and J for family role withdrawal). Alpha for both scales was unacceptably low, $\alpha = .54$ for work and for family withdrawal. Further analysis revealed that deleting any item would not significantly increase alpha. Additionally, both scales exhibited positive skew

and low variance (M = 1.37, SD = .49 for work withdrawal; M = 1.38, SD = .50 for family withdrawal). As a result, both scales were eliminated from further analyses.

Coping. Coping was assessed with portions of a measure developed by Carver (1997). Because the measure was originally developed to assess coping after a major traumatic event, some items were not applicable to the less severe events of conflict that was under investigation here. As a result, only items that were appropriate for this context were retained. The scale consists of a number of statements describing coping behaviors such as "I sought emotional support from others" and asks participants to indicate to what extent they engaged in the behaviors in response to the conflict event. Participants were asked to indicate their level of agreement with each item on a 5-point Likert-type scale (not at all-extremely; see Appendix H). Alpha for this scale was acceptable, α = .86.

Attributional style. Attributional style was assessed with a measure adapted from Dykema, Bergbower, Doctora, and Peterson (1996). The measure was adapted by shortening the measure and adding a question directly assessing attributional locus. The measure asked participants to put themselves in a series of ten hypothetical situations such as "You are fired from your job". Participants were then asked to indicate what the one main cause of each situation is, whether the cause is internal or external to them, whether the cause is likely to persist, and whether the cause is likely to affect other parts of their life (see Appendix L). For the purposes of this study, an overall score for depressive attributional style was arrived at by calculating the mean number of stable, internal, and global attributions an individual makes. Higher scores indicate greater

degrees of depressive attributional style. This scale exhibited marginally acceptable reliability, $\alpha = .65$.

WFC. To assess the relationship between work-family conflict as it is typically conceptualized and the constructs within the current model, work interference with family and family interference with work were measured. A 20-item measure of work-family conflict developed by Carlson, Kacmar, & Williams (2000) was used that assesses both directions of conflict as well as two dimensions of conflict (time and strain). The measure consists of a series of statements regarding one's work and family situation, to which participants are asked to indicate their level of agreement or disagreement on a 5-point Likert-type scale (strongly disagree-strongly agree). An example statement is "My work keeps me from my family activities more than I would like." (see Appendix K) Alpha for this scale was acceptable, $\alpha = .87$.

CMV Control Measure. In an effort to evaluate the effects of common method variance on the relationships in this study, a measure of an unrelated work-relevant construct, person-job fit (Cable & Judge, 1996), was included in the data collection (see Appendix M). This measure consisted of three items assessing the extent to which an individual believes that he or she possesses the skills and abilities necessary to perform his or her job effectively. An example item is "My skills and abilities "match" those required by my job". Alpha reliability for this measure was acceptable, $\alpha = .70$.

Demographics. Participants completed a measure of demographics, including items assessing age, gender, race/ethnicity, hours worked per week, number of children at home, marital status, elder care status, spouse/partner employment status, and level of education (see Appendix N).

Data Analyses

First, the relationship between demographic characteristics and model variables was explored. When a significant bivariate relationship existed between a demographic characteristic and a model variable, follow-up testing was performed to explore the meaning of the relationship. Testing was done in a way that was appropriate to the nature of the variables (e.g., for relationships where both variables were continuous, simple regression analysis was used). Second, the relationship between WFC and model variables was explored. Similarly to the demographic analysis just described, when a significant bivariate relationship was present further analysis was performed to explore the relationship in a way that was appropriate given the nature of the variables. Third, the fit of the proposed model was tested. To assess the fit of the overall model, a path model (see Figure 3) was evaluated using structural equation modeling (SEM) in LISREL (Jöreskog & Sörbom, 1996). In addition to the paths outlined in Figure 3, emotions were allowed to intercorrelate. Maximum likelihood was used as the method of estimation for the model. For the purposes of testing the path model, the coded responses from the open-ended attributional locus variable were used because these responses were able to capture both the internality-externality of the attribution and whether the attribution was directed toward family or work. Fourth, a test of each hypothesis was performed. For the tests of specific hypotheses, the locus variable which provided the best test of the hypothesis was used (e.g., when the hypothesis involved differentiating attributions to work or family, the open-ended variable was used). Each hypothesized relationship was tested using data analytic methods that were appropriate given the nature of the variables (e.g., when the independent variable was dichotomous and the dependent variable was

continuous, a t-test was used to determine mean differences). Finally, mediation analyses were performed using a bootstrapping macro designed for SPSS by Preacher and Hayes (2008).

Results

Demographic Analysis

As can be seen in Table 5, demographic characteristics did have a significant influence on some of the variables in the model. First, age was significantly correlated with scheduling order. A t-test revealed that as participants' age increased they were more likely to report that the work event was scheduled first, $t(1,231) = 2.32$, $p < .05$, Cohen's $d = .31$. Individuals who reported that the work event was scheduled first had an average age of 44.13 years ($SD = 8.59$) while those reporting the family event as being scheduled first had an average age of 41.38 years ($SD = 9.04$). Age was also related to locus. T-testing revealed that younger participants were more likely to make external, rather than internal, attributions, $t(1,228) = -2.76$, $p < .05$, $d = .75$ ($M = 42.04$, $SD = 8.80$ for those making external and $M = 48.31$, $SD = 7.84$ for those making internal attributions). Next, the relationship between gender and family event importance was explored using a t-test. It was found that gender was negatively related to family event importance such that for women, the family event was rated as more important than for men, $t(1,228) = -2.72$, $p < .05$, $d = .39$ ($M = 4.18$, $SD = .66$ for men, $M = 4.43$, $SD = .63$ for women). An additional t-test revealed that gender also had a significant impact on anger and frustration. Men had significantly lower levels of anger and frustration ($M = 2.08$, $SD = .82$) than did women ($M = 2.33$, $SD = .88$), $t(1,253) = -2.25$, $p < .05$, $d = .29$. A t-test also showed that coping was impacted by gender in that men had significantly

lower levels of coping behavior ($M = 2.30$, $SD = .84$) than did women, ($M = 2.63$, $SD = .87$), $t(1,250) = -3.00$, $p < .05$, $d = .39$. Finally, a t-test was performed to explore the relationship between age and gender, and there was a significant relationship between age and gender in this sample, in that men in this study tended to be older than women, $t(1,235) = 4.43$, $p < .05$, $d = .61$, $M = 45.88$, $SD = 7.46$ for men and $M = 40.74$, $SD = 9.18$ for women.

Number of hours worked per week was related to the perceived importance of the work event, work satisfaction and family centrality. Three separate simple linear regressions where hours worked per week was the predictor and the three model variables were the criteria were performed to explore these relationships further. Hours worked positively related to perceived importance of the work event, indicating that participants who worked more hours per week perceived the work event to be more important than participants who worked fewer hours per week, $F(1,217) = 4.07$, $p < .05$, $R^2 = .02$. Hours worked per week was negatively related to both work satisfaction $F(1,217) = 6.06$, $p < .05$, $R^2 = .03$ and family centrality $F(1,237) = 10.03$, $p < .05$, $R^2 = .04$ indicating that participants who worked more hours per week were lower on both work satisfaction and family centrality than participants who worked fewer hours per week. Hours worked was also significantly related to gender. A t-test revealed that men reported working significantly more hours ($M = 48.16$, $SD = 8.18$) than did women ($M = 43.23$, $SD = 7.39$), $t(1, 236) = 4.61$, $p < .05$, $d = .63$.

Marital status had significant relationships with some study variables as well. Because only two individuals reported being single/never married, for the following comparisons their data was excluded and t-tests were used to further explore the

relationships between marital status and model variables. Marital status was significantly related to work centrality, $t(1,250) = 2.75, p < .05, d = .62$ in that individuals who were married or partnered reported lower levels of work centrality ($M = 2.85$, $SD = .76$) than did single/previously married ($M = 3.33$, $SD = .79$) individuals. Marital status was also significantly related to family centrality, $t(1,250) = -2.79, p < .05, d = .50$ in that individuals who were married or partnered reported higher levels of family centrality ($M = 4.44$, $SD = .52$) than did single/previously married ($M = 4.10$, $SD = .79$) individuals. Similarly, marital status was significantly related to family satisfaction, $t(1,246) = -2.70$, $p < .05$, $d = .62$ in that individuals who were married were more satisfied with family ($M = 3.87$, $SD = .97$) than individuals who were single/previously married ($M = 3.27$, $SD = .95$). Finally, marital status was significantly related to gender, $t(1,250) = -2.19$, $p < .05$ in that men were more likely to be married than were women.

Although spouse work status was not related to any of the variables in the model, it was related to some other demographic characteristics. T-tests were used to explore the relationships between spouse work status and the other demographic characteristics. Individuals with spouses who worked were significantly younger ($M = 41.64$, $SD = 8.87$) than individuals with spouses who did not work ($M = 44.87$, $SD = 8.80$), $t(1,217) = -2.067, p < .05, d = .37$. They were also more likely to be female than individuals with spouses who did not work $t(1,218) = -4.18, p < .05$. Finally, individuals with employed spouses worked fewer hours ($M = 44.28$, $SD = 8.07$) than individuals with non-working spouses ($M = 48.62$, $SD = 8.92$), $t(1,218) = -2.99, p < .05, d = .51$.

Although race (coded as majority/minority) did have a significant bivariate relationship with scheduling order, work satisfaction, and globality of attributions, it was

determined that the number of individuals in the minority group was small enough (N = 22) that further analysis to determine the nature of these relationships was not advisable. Number of children was significantly related to a number of model variables as well. A simple linear regression where work activity importance was regressed on number of children revealed that number of children was significantly related to work activity importance in that individuals with more children rated the work activity as less important than individuals with fewer children $\beta = -.01, p < .05, F(1,231) = 10.03, p < .05, R^2 = .04$. Similarly, a simple linear regression where family centrality was regressed on number of children revealed that number of children was related to family centrality in that individuals with more children reported higher levels of family centrality than individuals with fewer children $\beta = .09, p < .05, F(1,236) = 7.05, p < .05, R^2 = .03$. Interestingly, regression analysis also revealed that number of children was also significantly related to guilt and shame, in that individuals with more children reported greater amounts of both guilt $\beta = .14, p < .05, F(1,236) = 4.70, p < .05, R^2 = .02$ and shame $\beta = .17, p < .05, F(1,236) = 3.94, p < .05, R^2 = .02$ than individuals with fewer children.

T-tests were used to explore the relationship between education level and other variables. Level of education was related to work centrality in that work centrality was significantly higher for individuals with a graduate degree ($M = 3.05$, $SD = .74$) than for individuals with a college degree ($M = 2.60$, $SD = .72$), $t(1,233) = -4.44, p < .05, d = .62$. Level of education was also related to attributional globality in that individuals with a graduate degree made less global attributions ($M = .46$, $SD = .50$) than individuals with a college degree ($M = .61$, $SD = .49$), $t(1,232) = 2.25, p < .05, d = .30$. Level of education

was also related to attributional locus $t(1,222) = 2.05$, $p < .05$ in that individuals with a graduate degree were more likely to make internal attributions than individuals without a graduate degree.

Although some relationships between demographic characteristics and model variables were found, these relationships were largely unsystematic in that one demographic variable (e.g., age) did not relate to the majority of model variables, nor did one model variable relate to the majority of demographic variables. In addition, the key variables in the model, the attribution variables, were largely unrelated to demographic variables. Finally, there is little a priori rationale for controlling for demographic variables (e.g., a proposition that individuals of different genders would make differing attributions). Because controlling for demographic variables would unnecessarily remove variance from the model as a result, it is concluded that there is little evidence that demographics should be controlled for when the model is tested.

WFC in Relation to the Model

The relationship between work-family conflict, as it is typically assessed within the literature, and the variables within the model was assessed. As can be seen in Table 5, WFC was not significantly related to any of the activity characteristics, or to work or family centrality. Two simple linear regressions where work satisfaction and family satisfaction were regressed on WFC were performed, and it was found that WFC was related to both work and family satisfaction in that individuals experiencing greater amounts of WFC reported lower satisfaction with both work $\beta = -.58, p < .05, F(1,253) = 25.84, p < .05, R^2 = .09$ and family $\beta = -.63, p < .05, F(1,253) = 31.91, p < .05, R^2 = .11$. This replicates a robust finding within the WFC literature, that increases in WFC are

related to decreases in satisfaction (Eby et al., 2005). WFC was not related to attributional locus, but was related to both globality and stability of attributions such that increases in WFC were associated with increased globality and stability of attributions. Two t-tests were performed to explore the relationships between attributional globality and stability and WFC. Individuals making global attributions ($M = 2.84$, $SD = .49$) reported higher levels of WFC than individuals making local attributions, ($M = 2.65$, $SD = .65$), $t(1,251) = 3.02$, $p < .05$, $d = .33$. Similarly, individuals making stable attributions ($M = 2.80$, $SD = .54$) reported higher levels of WFC than individuals making unstable attributions, ($M = 2.64$, $SD = .50$), $t(1,251) = 2.38$, $p < .05$, $d = .31$. WFC was not significantly related to DAS or to coping.

Regression analysis revealed that WFC was a significant predictor of all affective variables, in that higher levels of WFC were associated with higher levels of guilt, $\beta = .33$, $p < .05$, $F(1,253) = 7.30$, $p < .05$, $R^2 = .03$ shame, $\beta = .37$, $p < .05$, $F(1,253) = 28.97$, $p < .05$, $R^2 = .10$ and frustration $\beta = .47$, $p < .05$, $F(1,253) = 22.41$, $p < .05$, $R^2 = .08$. Interestingly, regression analysis where WFC was entered as the predictor and person-job fit was entered as the outcome also revealed that WFC was negatively related to perceived person-job fit within this study, $\beta = -.27$, $p < .05$, $F(1,249) = 249$, $p < .05$, $R^2 = .06$. Finally, WFC was not related to any of the demographic variables in this study. This is a particularly interesting finding, given that variables such as family size, workload, and whether one's spouse works are very well replicated predictors of WFC (Eby et al., 2005). These findings will be discussed further in the discussion section.

Model Testing

Scale descriptive statistics, intercorrelations, and alpha reliabilities are listed in Table 5. As was discussed previously, the fit of the overall model was evaluated using structural equation modeling (SEM). The covariance matrix entered into the analyses is presented in Table 6. Overall the path model displayed in Figure 3 resulted in adequate fit, χ^2 (71, N = 207) =164.92, $p < .05$, SRMR = .09, RMSEA = .08, CFI = 0.70. Modification indices did suggest, however, that adding paths from work centrality to work satisfaction and from family centrality to family satisfaction would improve the fit of the model. Adding these two paths improved model fit, χ^2 (69, N = 207) =123.86, $p < .05$, SRMR = .08, RMSEA = .06, CFI = .81, $\Delta\chi^2 = 41.06$, $p < .05$.

Hypothesis Testing

To test H1, the extent to which participants indicated that they (as opposed to external circumstances) were responsible for the conflict event was evaluated in a number of ways. For both the closed- and open-ended items assessing attributional locus, external attributions were much more frequent than internal attributions. The closed-ended question asked participants to indicate whether they were the cause of the conflict or whether the cause was something external to them. Results indicated that 13% of respondents answered either "I was completely responsible for the conflict" or "I was primarily responsible, but something else also contributed." By comparison, 11.2% answered "an even mix of the two, " 21.6% responded that "Something external to me was primarily responsible for the conflict, but I also contributed" and 53.9% responded "Something external to me was completely responsible for the conflict." It is clear that a great majority of participants chose to attribute the conflict to external sources, and in fact over half of participants attributed the conflict entirely to external sources. The

open-ended question asked participants to describe what caused the conflict to occur. Participants' coded responses indicated that 6.7% provided an answer that was coded as an "internal" attribution. By contrast, 87.8% provided an answer that was coded as an "external" attribution. A chi-square test was performed to assess whether the difference was significant, and it was, $\chi^2 = 193.87$, $p < .05$. As a result, H1 was supported.

To test H2a, for each role a variable was created using the attributional locus ratings that captured whether or not an individual attributed responsibility for the conflict event to that role. For the work attribution variable, when work was blamed this was coded as a "1" and any other response was coded as a "0". For the family attribution variable, when family was blamed this was coded as a "1" and all other responses were coded as "0". A t-test was performed to evaluate whether work activity importance ratings differed among people making attributions of responsibility to work versus not. Results indicated that work activity importance ratings did not differ among people making attributions of responsibility to the work role and people making attributions of responsibility to other roles $t(1,232) = .85$, $p > .50$, $d = -.13$. More specifically, the mean of work activity importance was ($M = 4.25$, $SD = .90$) for those attributing the conflict to work and ($M = 4.15$, $SD = .66$) for those attributing the conflict to something other than work. The same analysis was performed for family activity importance ratings. It was found that family activity importance ratings did differ depending on whether a person made an attribution of responsibility to the family role or to another role $t(1,228) = 2.39$, $p < .05$, $d = -.37$. The mean of family importance rating was $M = 4.50$ ($SD = .74$) for those attributing conflict to the family role and $M = 4.24$ ($SD = .65$) for those not attributing the conflict to the family role. Interestingly, in both cases the mean importance rating for the role that was blamed was higher than the role that was not blamed. As a result, H2a was not supported.

To test H2b, the variable representing scheduling order was coded 1, 0 such that when the work activity was scheduled first, the response was coded as a "1" and when the family activity was scheduled first, the response was coded as a "0". A t-test was performed to evaluate whether attributional locus differed among people who indicated that the work event was scheduled first versus people who indicated that the family event was scheduled first. Results indicated that attributional locus did differ $t(1,248) = 4.23, p < .05, d = 1.68$. Individuals who attributed the conflict event to family had a higher mean on the scheduling order variable ($M = .84$, $SD = .37$) than individuals who attributed the conflict event to work ($M = .20$, $SD = .39$), indicating that individuals were more likely to attribute the conflict to the activity they had reported as being scheduled second. As a result, H2b was supported.

To test H3c, a simple linear regression was performed where family centrality was entered as the predictor and importance of the family activity was entered as the criterion. This analysis revealed that family centrality was a significant predictor of the importance of the family activity, $F(1,241) = 13.29, p < .05, R^2 = .05$. As a result, H3c was supported. To test H3d, another simple linear regression was performed where work centrality was entered as the predictor and importance of the work activity was entered as the criterion. Results indicated that work centrality was not a significant predictor of the importance of the work activity, $F(1,247) = 2.19, p > .05, R^2 = .01$ and H3d was not supported.

To test H4a-c, t-tests were used to explore mean differences in DAS for individuals making various types of attributions. People attributing the event internally ($M = .67$, $SD = .18$) were not higher on DAS than people attributing the event to external

causes (M = .68, SD = .15; t(1,221) = .34, p > .05, d = .06). To provide an additional test of this relationship, a regression was performed using the other attribution locus variable (the closed-ended variable) where attribution locus was the criterion and DAS was the predictor. This analysis also revealed that DAS was not a significant predictor of locus, β = -.26, F(1,229) = .26, p > .05, R^2 = .00. In addition, t-testing revealed that people making stable attributions (M = .69, SD = .16) did not differ with respect to DAS from people making unstable attributions (M = .67, SD = .15; t(1,228) = .63, p > .05, d = .13). However, people making global attributions (M = .71, SD = .15) had higher levels of DAS than people making local attributions (M = .66, SD =.15; t(1,228) = 2.50, p < .05, d = .33). As a result, H4a and H4b were not supported but H4c was supported.

To test H5a, two sets of analyses were performed. The first set of analyses used the open-ended locus variable (see Table 2) which was dichotomized to represent internal and external attributions. The second set of analyses used the closed-ended locus variable (see Table 3) which was continuous in nature, where higher numbers indicate more external attributions. For the first set of analyses, t-testing revealed that people making internal attributions (M = 2.19, SD = .92) did not experience greater levels of guilt than people making external attributions (M = 2.45, SD = 1.05), t(1,252) = -1.05, p > .05, d = .26. In addition, people making internal attributions (M = 1.74, SD = .78) did not experience greater levels of shame than people making external attributions (M = 1.42, SD = .59), t(1,252) = 2.17, p > .05, d = .46. To test H5b, t-testing revealed that people making external attributions (M = 2.10, SD = .95) do not experience greater levels of anger and frustration than people making internal attributions (M = 2.26, SD = .86), t(1,252) = -.76, p > .05, d = .18.

For the second set of analyses, three separate simple linear regressions were performed results with guilt, shame, and anger and frustration as criteria and the continuous locus variable as predictor. Results for shame and guilt did not differ from previous results, in that locus was not significantly related to shame and guilt, $\beta = -.05$, $F(1,267) = 2.26$, $p > .05$, $R^2 = .01$ and $\beta = -.03$, $F(1,267) = .29$, $p > .05$, $R^2 = .00$ respectively. Results for anger and frustration did differ, however, in that anger and frustration were higher for those making external rather than internal attributions when the continuous variable was used, $\beta = .10$, $F(1,267) = 5.22$, $p < .05$, $R^2 = .02$.

To test H5c, t-testing revealed that although people making stable attributions do not experience greater levels of guilt ($M = 2.48$, $SD = 1.02$; $t(1,266) = 1.24$, $p > .05$, $d = .15$) or shame ($M = 1.45$, $SD = .63$; $t(1,266) = .77$, $p > .05$, $d = .10$) than people making unstable attributions ($M = 2.32$, $SD = 1.08$ for guilt and $M = 1.39$, $SD = .57$ for shame) they do experience greater levels of anger and frustration ($M = 2.33$, $SD = .89$), $t(1,266) = 2.75$, $p < .05$, $d = .36$ than people making unstable attributions ($M = 2.03$, $SD = .78$).

To test H5d, t-testing revealed that people making global attributions do not experience greater levels of guilt ($M = 2.47$, $SD = 1.06$) than people making local attributions ($M = 2.38$, $SD = 1.03$; $t(1,266) = .73$, $p > .05$, $d = .09$), nor do people making global attributions ($M = 1.45$, $SD = .63$) experience greater levels of shame than people making local attributions ($M = 1.40$, $SD = .58$; $t(1,266) = .75$, $p > .05$, $d = .08$). However, anger and frustration are greater for people making global ($M = 2.38$, $SD = .91$) rather than local attributions ($M = 2.06$, $SD = .78$; $t(1,266) = 3.06$, $p < .05$, $d = .38$).

To test H6, a series of simple linear regressions were performed with emotion variables as predictors and work and family satisfaction as outcomes. Shame and guilt

were not significant predictors of family satisfaction, $F(1,261) = 3.80, p > .05, R^2 = .01$ and $F(1,261) = 1.44, p > .05, R^2 = .01$, respectively. Shame and guilt were also not significant predictors of work satisfaction, $F(1,264) = 1.00, p > .05, R^2 = .00$ and $F(1,264) = 1.98, p > .05, R^2 = .01$, respectively. Anger and frustration were significant predictors of family satisfaction, $F(1,261) = 4.44, p > .05, R^2 = .02$ and work satisfaction, $F(1,264) = 30.95, p < .05, R^2 = .11$. A simple linear regression where guilt, shame, and anger and frustration were entered as predictors and family satisfaction was entered as the criterion showed that the emotions assessed did not account for significant variance in family satisfaction, $F(3,261) = 1.90, p > .05, R^2 = .02$. A similar regression where work satisfaction was entered as the criterion showed that the emotions assessed did account for significant variance in work satisfaction, $F(3.264) = 11.31, p < .05, R^2 = .12$. As a result, H6 was partially supported.

To test H7, a series of simple linear regressions were performed with emotion variables as predictors and coping as the outcome. Guilt was not a significant predictor of coping, $F(1,261) = 3.80, p > .05, R^2 = .01$. Anger and frustration and shame were significant predictors of coping, however $F(1,265) = 11.51, p < .05, R^2 = .04$ and $F(1,265) = 7.38, p < .05, R^2 = .03$, respectively. A simple linear regression where shame, guilt, and anger and frustration were entered as predictors and coping was entered as the criterion was performed. This analysis revealed that the negative emotions explained a significant amount of variance in coping, $F(3.265) = 5.86, p < .05, R^2 = .06$. Therefore, H7 was partially supported.

Mediational Analysis

Bootstrapping mediational analyses testing for the indirect effect of the independent variable on the dependent variable through the mediator were carried out for all proposed mediational relationships except those involving judgment-driven behaviors due to the fact that the withdrawal measure could not be used. Bootstrapping was used to test these relationships because it provided a test of each specific mediated path and a confidence interval with which to evaluate the significance of each indirect effect. Although in the past it was considered necessary for the relationships between the independent variable and mediator, and the mediator and dependent variable to be significant to merit performing such analysis, it is now considered acceptable to perform this type of test without such support (Hayes, 2009). First, mediational analyses involving characteristics of the work and family activities were performed. Neither the indirect effect of work centrality through importance of the work event (.00, *SE* = .01) or the indirect effect of family centrality through importance of the family event (.04, *SE* = .03) were significant. This result indicates that attitudes did not have a significant indirect impact on attributional locus through activity characteristics.

Results involving attributional locus are presented in Table 7. As can be seen in the table, none of the indirect effects were significant. What this result means is that the characteristics of the activity events did not have a significant indirect effect, through attributional locus, on emotions. Results involving all attributional characteristics and DAS are presented in Table 8. The mediational analysis indicated that none of the indirect effects were significant except the relationship between DAS and anger and frustration, mediated by globality. The fact that the majority of these relationships were

not supported means that DAS did not tend to have an indirect impact on emotions, through the mediating mechanism of attribution. The fact that DAS did have an indirect effect on anger and frustration, through globality, is interesting in that it suggests that individuals high in DAS may experience greater amounts of anger and frustration when making global attributions.

Results of the mediational analyses involving emotions are presented in Table 9. Although the majority of the indirect effects were not significant, there was a pattern such that globality and stability of attributions had a significant indirect effect on both work and family satisfaction and coping through anger and frustration. What this result means is that although globality and stability did not have a significant indirect effect on satisfaction and coping through guilt or shame, they did have a significant indirect impact on satisfaction and coping through anger and frustration. As such, people making global and stable attributions and experiencing greater amounts of anger and frustration experienced lowered work and family satisfaction and increased coping. All mediational analyses involving the internality/eternality of attributional locus were initially performed with the coded responses from the open-ended locus variable then replicated with the closed-ended locus variable. As can be seen in Tables 7 and 9, none of the results differed when the closed-ended variable was used, with two exceptions. When the closed ended variable was used in the analyses, the indirect effect of locus on family satisfaction and coping through anger and frustration became significant. What this means is that the internality/externality of attributions had an indirect effect on family satisfaction and coping through anger and frustration, which implies that the consequences of one's

attribution might be mitigated by coping responses. Table 10 summarizes all results and hypotheses.

Discussion

The purpose of the present study was to provide an initial foray into testing a process model of work-family conflict events. Although a great deal of research has focused on work-family conflict of late (e.g, Eby et al., 2005) the vast majority of this research has conceptualized and measured conflict as a stable individual perception. Although individuals may form such perceptions, it was proposed here that the experience of actual work-family conflict revolves around day-to-day conflict events. As a result, it has been argued in this dissertation that taking an approach that focuses on the process of experiencing conflict events is essential in order to better understand conflict. Although a few studies have recently begun to explore process as it relates to emotion by utilizing the affective events theory framework, (Weiss & Cropanzano, 1996) these studies have not considered the important role of cognition in determining affect and other consequences of conflict events. As a result, the current study explored the role of one cognition in particular, attribution, within the AET framework following the occurrence of a conflict event. In this section I will first discuss the results and potential alternative explanations and will then move to a discussion of limitations and future directions for this research. I will close with a consideration of the contributions of this study.

Summary of Results

Demographics and WFC. Demographic characteristics assessed within the study were found to have a significant impact on some variables in the model. First, age was

related to scheduling order in that older participants were more likely to report that the work event was scheduled first. This relationship could be a result of the fact that older participants may have been more accustomed to their working schedules than younger participants, and thus could anticipate the work event more effectively. It may also be due to the fact that older participants may have older children such as teenagers, who may not require constant care or supervision but who may experience "emergencies" where parental involvement is necessary. As a result, family responsibilities may be less "scheduled" from day to day. Either of these explanations, or any number of plausible alternative explanations, is possible given the available data. Future research could evaluate whether the nature of activity scheduling differs by various age groups, and what is causing this effect. An exploration of this question would be interesting with respect to the daily experience of conflict, but is outside the scope of the present dissertation.

Age was also significantly related to locus, in that younger participants were more likely to make external, rather than internal, attributions. This relationship may reflect a difference in the types of jobs held by individuals of different ages. Older participants may hold jobs providing them with more authority or autonomy, and thus when conflict occurs it may be as a result of their actions (e.g., scheduling events, planning work). Another possibility is that younger participants may be in work or family situations that are more unstable than older participants (e.g., changing jobs, having children) and thus external circumstances may be more salient to them and thus more likely to receive the blame when conflict occurs. In either case, this is an interesting avenue for future research.

Gender was related to family event importance, anger and frustration, and coping in that women experienced higher levels of anger and frustration and coping, as well as rating the family event as more important than did men. These findings are particularly interesting given that in typical WFC research where conflict, antecedents, and outcomes are assessed as relatively stable variables, gender differences are typically not found (Eby et al., 2005). It may be that although overall perceptions of conflict do not differ among the sexes, that the actual experience of conflict on a day-to-day level is different. This is an interesting question to be addressed with future research, particularly as it relates to the experience of emotion and coping strategies that may be employed to deal with that emotion.

Number of hours worked per week was found to be positively related to the importance of the work event and negatively related to both work satisfaction and family centrality. The relationship between number of hours worked and importance of the work event is not particularly surprising given that individuals who work more may be likely to view work activities (e.g., being at work) as more important. Logically, the more important one finds engaging in work activities, the more one would be likely to engage in them and the more hours one would thus spend working. The negative relationship between hours worked implies that working more hours is associated with lowered work satisfaction. This finding aligns well with research finding that increased workload (typically operationalized as hours worked) is associated with increased WFC and, as a result, decreased satisfaction (Greenhaus & Beutell, 1985). The negative relationship between hours worked and family centrality also makes sense, in that individuals who are higher on family centrality would be expected to prioritize the family

role over the work role and thus to work fewer hours than those lower on family centrality.

Marital status had consistent relationships with work and family attitudes, in that married individuals reported higher levels of family centrality and satisfaction and lower levels of work centrality than did single/previously married individuals. Because all individuals in the study had provided a conflict event involving the roles of work and family, it can be assumed that all were involved in the role of family. However, for single/previously married individuals it may be the case that either the absence of a spouse or partner negatively impacted their attitudes toward the family role, or more controversially, that less positive attitudes toward family negatively impact one's ability to remain married. Of course the present study cannot answer such questions, but they would provide interesting inquiries for future research.

It was found that younger individuals were more likely to have spouses who worked. This result may be due to the fact that a greater percentage of older participants' spouses had retired or dropped out of the workforce to care for children. It may also be the case that older participants had higher incomes which allowed for their spouses to be unemployed. Participants with working spouses were also more likely to be female than individuals without working spouses. This finding is not particularly surprising given that for married couples in 2008, approximately 6.9% consisted of only the woman working while 19.5% consisted of only the man working (U.S. Department of Commerce, Bureau of the Census, 2008). Finally, individuals with employed spouses worked fewer hours than individuals without working spouses, which makes sense given practical considerations regarding supporting a family.

Number of children was significantly related to work activity importance, work centrality, and family centrality. As would be expected, individuals with more children rated work as less central, family as more central, and the work activity as less important than individuals with fewer children. These findings are consistent with the findings regarding marital status, in that it is unsurprising that individuals with more children seem to have attitudes toward family that reflect this situation. Number of children was also positively related to guilt and shame, meaning that individuals with more children experienced greater amounts of guilt and shame as a result of conflict events than did individuals with fewer children. This finding is interesting in that it may reveal a potentially important mechanism in the relationship between family characteristics and WFC. If individuals with more children feel more guilt when conflict events occur, their overall well-being may be more negatively impacted than individuals with fewer children.

Level of education related to work centrality, in that work centrality was higher for those individuals with a graduate degree. This finding makes sense in that committing a longer amount of time to one's education in order to attain a graduate degree seems as though it would logically be associated with greater centrality of the work role. Interestingly, level of education was also related to attributional locus and globality. Individuals with graduate degrees were more likely to make local and external, rather than global and internal, attributions as opposed to individuals with college degrees. Although it is relatively unclear why these relationships exist, it may be that education level is related to the type of job one holds, which may actually impact the nature of conflict events and thereby influence attributional judgments. Future research

could assess the extent to which individuals with different types of jobs experience different types of conflict events, and the extent to which this affects attributions.

With respect to the relationship between WFC and model variables, WFC was related to work and family satisfaction in that individuals experiencing more WFC were less satisfied with both roles. As noted earlier, this finding replicates many previous studies within the WFC literature that have shown a negative relationship between WFC and satisfaction (Eby et al., 2005). Next, WFC was not related to attributional locus but was related to both globality and stability of attributions. This finding makes sense in that for individuals experiencing a high degree of conflict generally, the assessment that the cause of a single conflict event is likely to persist and likely to impact other areas as well is probably accurate.

WFC was not found to be related to either DAS or coping. The finding regarding coping would seem to contradict past research in that coping behaviors have been found to reduce WFC, (Kirchmeyer, 1993) however in this study coping was focused on the specific behaviors an individual engaged in as a response to the conflict event they described within the study. As a result, the coping described here may be different from their overall coping strategy.

WFC was found to be related to all affective variables in that individuals reporting higher WFC also reported higher levels of guilt, shame, and anger and frustration. It is unclear based on the cross-sectional nature of the data whether higher levels of WFC are resulting in increases in negative emotion, whether increases in negative emotion are resulting in increases in WFC, or whether some third variable is causing this relationship to exist. The finding does replicate past affective WFC research,

however, which ties the experience of WFC to increases in negative emotion (Judge et al., 2006).

Finally, WFC related to person-job fit. Although person-job fit was not expected to relate strongly to many of the variables within this study, it makes sense that individuals experiencing a greater amount of conflict between roles might, as a result, feel as though they are not well suited for their current position. It also makes sense that individuals who are not well suited for their current position might experience a greater amount of WFC as a result. Future research should explore this relationship in more detail, attempting to address the issue of causality.

An unusual finding with respect to WFC and demographics is that WFC was not found to relate to any of the demographic variables assessed within this study. As noted previously, this is particularly surprising given that the types of variables assessed here (e.g., hours worked, number of children) are very well replicated predictors of WFC within the existing literature (e.g., Byron, 2005; Eby et al., 2005). It may be that because so many measures in this study required participants to be focused on one conflict event, that participants had a difficult time thinking about their overall level of conflict in order to respond to the overall WFC measure. Another possibility is that because participants were required to be able to think of a conflict event that had recently occurred to them in order to participate, that the sample was relatively high with respect to conflict levels. The mean of WFC within this sample, however, appears comparable to or even below that of past research, ($M = 2.75$, $SD = .53$) and as a result this does not appear to be the case. As a result, it is somewhat unclear why WFC did not relate to demographic characteristics in this study.

Hypothesis Testing. Overall, the model proposed herein received mixed support. I will discuss each portion of the model in turn, discussing both the implications of supported relationships and potential explanations for proposed relationships that were not supported. First, it was found that the importance of the activities involved in the conflict did not relate to the locus of attributions made. An examination of the importance variable itself might provide some perspective on why importance did not relate to attributional locus. For both activities, importance ratings were quite high, M = 4.22, SD = .82 for work and M = 4.30, SD = .67 for family activities. It is not clear whether this is a result of a measurement issue (e.g., individuals are indicating that activities are very important when they are not) or whether this is because they genuinely believe that both activities are very important. Because this variable is specific to the study of work-family conflict *events*, prior research is not available for the purposes of comparison and it is not possible to ascertain whether this finding is typical or not.

In either case, the high ratings on importance likely resulted in a restriction of range that made it difficult to arrive at a significant result. If the activities genuinely are both highly important, it would be conceptually difficult to imagine that differences in importance are playing a large role in determining attributions. It may be the case that a conflict is only thought to exist when two "important" activities are incompatible with each other and that if two unimportant activities or one important and one unimportant activity are incompatible, people do not perceive this as a conflict. Because research has not focused on single events of conflict, activity importance has not received attention in the literature thus far. Future research should explore the extent to which activities

within the work and family domains are considered important, and how this relates to conflict.

One characteristic of the activities, scheduling order, did relate to locus. Specifically, the domain from which the activity that was scheduled second originated was more likely to be seen as responsible for the conflict. This finding could mean that when attempting to avoid conflict (or at least, being seen as responsible for conflict) employers should schedule activities with a great deal of advance notice. Because scheduling order did relate to attributional locus, this finding provides encouragement that characteristics of the activities involved in a conflict event may in fact relate to attributions. Although the importance variables explored in this study were not significant predictors of attributions, it may be that importance is not the appropriate way to assess characteristics of the activities. Perhaps characteristics such as whether the activity could be rescheduled, whether someone else could substitute for the person, or consequences of missing an activity might be of importance. Future research should consider assessing a greater variety of characteristics related to the activities in question.

Although work centrality was not related to the rated importance of the work activity, family centrality was related to the rated importance of the family activity. The fact that family centrality was related to importance ratings of the family activity is in line with the notion that individuals will perceive information in a way that suits the opinions and attitudes they already hold (Petty et al., 1997). It also suggests that over time, one's attitudes toward work and family may have an impact on one's perceptions of the events that occur with respect to work-family conflict. Such a proposition would suggest the potential for reciprocal relationships over time, as incoming information is

perceived in a way that maintains one's attitudes. This proposition cannot be tested within the current study, of course, due to the cross-sectional nature of the data, but would be an interesting direction for future research.

Depressive attributional style was related to globality, but not stability or locus, of attributions. A likely explanation for this finding is that it may be that over time, individuals higher in depressive attributional style would show a pattern of more global, internal, and stable attributions but that assessing only one attribution did not allow for this pattern to be adequately assessed. Future research should consider assessing a pattern of attributions over time and relating it to DAS. Another potential explanation is that other dispositional and environmental factors might interact with DAS to influence attributions. Other dispositional characteristics such as locus of control (Rotter, 1966), negative affectivity (Watson & Clark, 1984), or neuroticism (McCrae & Costa, 1985) have been found to impact attributions and to be related to DAS in previous research, and as a result future research should consider assessing these variables and their relationship to DAS and attributions.

Attributional locus was not related in the expected way to any of the affective variables. This finding is particularly interesting given that this proposition is a central component of the model. A few explanations for the lack of a relationship may be plausible. First, attribution may not be the cognitive process that determines an emotional reaction to an event. It may be that a person's judgment of how a conflict event will impact them in the future or whether or not they can cope with the event are larger determinants of emotions than who is to blame for the event. Second, the measure of locus may have been problematic. Because the measure of attribution was

retrospective, participants may not have been able to accurately report on what role they placed responsibility for the conflict. It may be that participants simply could not remember on which role they placed responsibility, but it also may be that the reports were contaminated with other cognitions and affect (e.g., someone who is very satisfied with family would not report attributing the conflict to family to avoid cognitive dissonance).

Third, the measurement of emotion may have been problematic. Because emotions are experienced only temporarily, participants' memory of the emotions they experienced following the conflict events may have been flawed. Similarly to the attribution measure, asking participants to retrospectively recall their emotions following the event may have caused the measure to suffer from failures of memory or from reconstructions where participants remember things in a way that best suits them. There is evidence from the emotions literature that memories of emotions are not permanently encoded in memory, but rather reconstructed as current beliefs, motivations, and experiences change (e.g., Kim-Prieto, Diener, Tamir, Scollon, & Diener, 2005; Robinson & Clore, 2002). As a result, the retrospective measurement of emotion may have been problematic.

Coping was predicted by shame and anger and frustration, but not by guilt. This finding makes sense in that shame is an internally-focused negative emotion that is generally considered to be somewhat intense (Roseman, Wiest, & Swartz, 1994) and anger and frustration seem to be important components of the process of experiencing conflict. Interestingly, guilt was not positively associated with coping. It may be the case that guilt was simply not that prevalent in this study due to the nature of the

attributions made. In order for an individual to experience guilt, s/he must place responsibility on him or herself (Lazarus, 1991). Because most individuals in this study placed responsibility for the conflict event on external roles (in particular, on work) it is to be expected that they would not have experienced a great deal of guilt.

Work satisfaction was predicted by anger and frustration, but not by shame and guilt. This is an interesting finding in that it indicates that one's anger and frustration experienced as a result of work-family conflict events may be associated with the attitudes one holds about work. Dealing with those emotions, then, might be an important factor in preventing negative consequences at work that arise due to negative work attitudes. Similarly, family satisfaction was predicted by anger and frustration but not by shame and guilt. The fact that shame and guilt did not predict work or family satisfaction is not particularly surprising, given that these were proposed to be more internally-focused negative emotions. If one's negative emotion is directed inward, it is not surprising that it would not impact one's attitudes about external roles.

Mediational Analyses. Due to the fact that the model proposed herein was a process model, a number of mediating paths were proposed. Overall, very few of the proposed mediational paths were supported. This finding is not particularly surprising given the fact that overall, relationships among the variables in the model were only sporadically significant. A likely explanation for these results is that because data was only collected on one conflict event, the event simply did not have enough of an impact on the other variables to support the process model. As a result, future research should consider collecting data on more conflict events, ideally over time rather than retrospectively. This concept will be discussed in more detail in the limitations section.

A few mediational paths were significant, however. First, globality mediated the relationship between DAS and anger and frustration. This relationship implies that in DAS has a significant indirect impact on anger and frustration through globality. That is, individuals higher in DAS are more likely to make global attributions, which is likely to be associated with higher levels of anger and frustration. Next, anger and frustration mediated the relationship between globality and stability and satisfaction and coping. These relationships imply that globality and stability have significant indirect effects on satisfaction and coping through anger and frustration. Finally, although replicating the mediational analyses involving locus using the closed-ended locus variable did not change the majority of the results, two results did change. Specifically, locus had a significant indirect effect on family satisfaction and coping through anger and frustration.

The fact that anger and frustration seem to be consistently important in the mediational relationships implies that perhaps anger and frustration are important in the process of experiencing conflict. If an individual experiences anger and frustration toward his or her work and/or family roles, this may be a key mechanism in impacting important outcomes. Future research should focus on these emotions and attempt to further elucidate their role in the conflict process.

Limitations and Future Directions

Drop-outs. The fact that a large number of individuals (n = 90; 23% of those who accessed the survey) filled out only the first two measures and then dropped out at the point where the critical incident was required is an interesting potential limitation of this study. There are many possible reasons for this occurrence. First, it may be that the individuals who dropped out of the survey could not recall a conflict event although one

had actually happened to them. If this was the case, this is not a particularly serious problem conceptually and could be addressed by a change in research design that does not require participants to recall events. Rather, designing the research in a way that is not retrospective would prevent this issue from occurring. Alternatively, it may be the case that the two week period over which participants were asked to recall an event was problematic. The time period was largely arbitrary, and future research might be improved by more carefully determining an appropriate time period for participants to recall conflict events.

Another possibility is that participants simply did not wish to put forth the effort to fill out the survey once they encountered the open-ended format of the critical incident questions. In this case, the fact that so many people chose to drop out of the survey only presents a problem if those individuals who dropped out differed significantly from those who did not. Given that the survey relates to time-based WFC, it is possible that those individuals who dropped out of the survey chose to do so because they felt they did not have enough time to fill it out. If this is the case, perhaps these individuals were actually experiencing greater time pressure, or perhaps even greater levels of time-based WFC than individuals who did not drop out of the survey. Unfortunately, there is no way to evaluate whether or not this is the case, so it remains a potential issue.

A third possibility is that the individuals who dropped out of the survey had not experienced a conflict event. Although both the recruitment email and the consent form notified participants that in order to participate they would be required to remember a conflict event in detail, it is possible that they reached the critical incident screen and dropped out of the survey because a conflict event had not occurred to them within recent

memory. If this is the case, then it might be that these individuals simply do not experience a great deal of conflict. Another possibility, however, is that conflict "events" as distinct episodes are not as prevalent as it is presumed here. It may be that some or all individuals do not clearly differentiate when a conflict is occurring. Perhaps the experience of conflict takes on more of an ongoing nature, or individuals simply do not think about whether they are experiencing conflict unless explicitly asked to do so in a survey. If this is the case, then assessing WFC at the event level may not be appropriate. An interesting question for future research to explore would be whether individuals do, in fact, perceive conflict events as separable in time or whether the standard method of measuring stable perceptions is more reasonable.

Single-source survey data. As with any study where data is gathered solely from a single source and entirely in a survey format, common method variance (CMV) is a concern with this study (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). However, it should not be assumed that simply because the data were collected using the same method that CMV is inevitably going to be problematic (Spector, 2006). Instead, method bias depends on the constructs of interest, how they are measured, and what type of relationships will be construed as supportive of the model. These factors were carefully considered within the present study and precautions were taken to avoid common method variance. First, the measures of attributional characteristics were not assessed on the same scale as other variables in the study. By collecting data regarding attributional characteristics in an open-ended format, this reduced the likelihood of a common scale format producing artifactual covariance among the attributional and other measures.

Next, the nature of the hypotheses themselves meant that even if CMV were inflating correlations among variables, it would not make many of the hypotheses more likely to be supported. For example, the hypotheses linking attributional locus to emotions proposed that internal attributions would be linked to shame and guilt, whereas external attributions would be linked to anger and frustration. Unlike studies where a simple linear relationship between variables supports the model, CMV would not have resulted in this relationship being supported.

As previously mentioned, a measure of person-job fit was also added to the study to evaluate the effects of CMV. Person-job fit was related to work centrality (r = .24), work satisfaction (r = .27), family satisfaction (r = .16), and anger and frustration (r = -.15). The magnitude and direction of these relationships makes theoretical sense (e.g., it makes sense that an individual who experiences a greater degree of fit between him or herself and the work role would also experience greater work satisfaction). In addition, person-job fit was not related to any of the other model variables such as attributional characteristics or event characteristics.

Perhaps the aspect of CMV that is of greatest concern within this study is the potential influence of negative affectivity. Negative affectivity (NA) is a construct reflecting the propensity to experience negative emotions (Watson & Clark, 1984). It has been shown to impact numerous variables within the stress literature (Brief, Burke, George, Robinson, & Webster, 1988) and may have impacted relationships in this study. However, the fact that intercorrelations among measures in the study are generally low, and not all variables that would be expected to be associated with negative affectivity (e.g., guilt, shame) had significant relationships with other variables provides evidence

that NA did not strongly impact the results. In any case, future research should measure NA as a potential control variable.

Aside from concerns over common method variance, the fact that the present study considered conflict from only the perspective of one individual involved in the conflict may have been problematic. Individuals experiencing conflict are typically embedded within a number of social relationships (spouse, parent, coworker). These relationships may have the potential to impact how an individual perceives conflict, and what the consequences of that conflict are. As a result, future research should consider the role of interpersonal relationships on the experience of WFC and its outcomes.

Cross-sectional retrospective format. Perhaps the clearest limitation of this study is its use of retrospective reports of a single conflict event. Because this study represents a first attempt to explore the relationships proposed within the model, collecting information about a single conflict event is a good starting point. Future research would benefit, however, from the collection of data regarding multiple conflict events over time. Such a study could utilize experience sampling methodology, where participants report on multiple conflict events in real-time. Doing so would not only allow for more accurate reporting of activity and event characteristics, attributions, and emotions, but would also allow for multiple measures of these constructs over time-which would allow for the estimation of time-lagged and reciprocal relations among variables. In addition, the experience sampling methodology would allow an exploration of within- and between-person variance on WFC, which could shed light on questions of whether conflict is more state or traitlike in nature. Such a study would be challenging in that different participants would be likely to collect vastly different amounts of data over

the same time period, given that the amount of conflict (and the perception of when conflict is occurring) might vary widely among participants. Such data would be an interesting addition to the literature in and of itself, however.

Issues with measure reliability. A few measures used within this study demonstrated unacceptably low reliability. This is problematic not only in that a number of the proposed relationships in the study could not be tested, but also because that the fact that the measures did not function as expected when they have done so in past research may call into question the current study's data collection strategies. Measures with unacceptable reliability in this study were affective commitment and role withdrawal for both roles. In the case of affective commitment, previous research has used the scale used here successfully for the domain of work (Meyer et al., 1993). Although the affective commitment to work scale displayed low reliability (α = .67) the affective commitment to family scale was much more problematic (α = .51). As was previously discussed, the mean and SD for the affective commitment to family scale were also potentially problematic, showing little variance. Because this scale was specifically adapted for the present research (by replacing the word "work" with the word "family" in the item stems), this may be a potential reason for the problem. Perhaps the scale in its present form is susceptible to social desirability effects, and as a result people were unwilling to admit lower levels of commitment to family. Future research wishing to evaluate affective commitment to family should consider developing a scale dedicated specifically to the family role.

Similarly, the role withdrawal measure was adapted from a work withdrawal scale for this study to be applicable for both roles. In this case, however, reliability for both

roles was very low (α = .54 for both roles). The scale was also problematic in that very few participants indicated engaging in any of the behaviors (e.g., daydreaming while engaged in the role, reducing hours spent in the role). A potential problem with this measure may have been that participants may have had difficulty recalling specific behaviors that they engaged in. This scale may also have been susceptible to social desirability effects in that few people would desire to admit daydreaming or engaging in other withdrawal behaviors while with their families, for instance, and as a result future research should consider a different measure of behaviors that may occur due to attitude changes following conflict events.

Characteristics of the sample. Due to the fact that an alumni sample was used, all participants possessed at least a college degree. In addition, over half (56.9%) had achieved a graduate degree. As a result, this sample is not representative of the workforce in general, and may be overrepresentative of white-collar occupations. With respect to WFC, this is of concern due to the fact that white-collar occupations are typically associated with more flexible schedules and higher pay, both of which are negatively associated with WFC (Eby et al., 2005). Additionally, the sample was mostly white (80%) and married (86%) which is also not representative of the workforce as a whole. Future research should attempt to gather samples which are diverse with respect to educational status, race, and marital status. However, the present study was diverse with respect to age and gender, which is a strength of the study due to the fact that both age and gender have been found to be related to WFC (Eby et al., 2005) . In addition, participants worked in a wide variety of occupations, which reduces the potential for results to be context-dependent.

Conflict type. Within the conflict literature, there is a growing acknowledgement that conflict between the roles of work and family is not the only important type of conflict (Bellavia & Frone, 2005; Carlson & Kacmar, 2000). Researchers are beginning to recognize that other life roles (e.g., friendships, romantic relationships) may also be incompatible with the work role, and that considering conflict that may occur as a result is important. However, within this study the focus was only on work-family conflict. Additionally, the present study addressed only time-based WFC and not strain- or behavior- based conflict. Although the narrow focus in the present study was intentional due to the fact that it was an initial test of a newly proposed model, future research should consider additional types of conflict as well as conflict between work and additional life roles.

Conclusions

The present study contributes to the literature on work-family conflict in two major ways. The first is to emphasize the importance of and to provide an initial foray into testing process models of conflict, focused on daily experiences of conflict. Eby et al. (2005) urged researchers to both propose and test theoretical models with mediated relationships, and this study has made an effort to do both. In addition, the vast majority of past research on work-family conflict has conceptualized and measured conflict as though it were a relatively stable perception. It has been argued herein, however, that conflict is actually experienced on a day-to-day basis in the form of conflict events, and that the experience of these events is an important factor that is likely to impact outcomes in both the work and family domains. This study provides some initial evidence that an exploration of process may be worthwhile.

The second major contribution of this dissertation is to focus on the role of cognition within the process of conflict. Though a few studies (e.g., Judge, Ilies, & Scott, 2006) have explored daily conflict events and their impact on outcomes such as emotions, none have recognized the potentially important role of cognition as a mediating factor between the occurrence of events and the experience of emotion. The present study makes that link explicit and provides an initial test of the role of some types of cognition.

The present study proposed and tested a model of the process that occurs following a work-family conflict event. Using affective events theory as a guide and making the role of cognition explicit, the model included attributions, affective reactions, attitudinal and behavioral consequences. The model received mixed support, which is likely to have been due to the fact that data was only collected about one conflict event and in a retrospective fashion. Future research should collect data using an experience-sampling methodology to provide a stronger test of the model.

APPENDIX A

Tables and Figures

Table 1

Demographic Characteristics of the Sample

Marital Status	
	%
Married or in a domestic partnership	85.9
Single/never married	.7
Single/previously married	7.8

Number of Children at Home*	
	%
0	19.3
1	25.3
2	31.6
3	9.7
4 or more	2.4

Spouse Work Status*	
	%
No	14.5
Part Time	13.4
Full Time	53.9

Race/Ethnicity*	
	%
Non-hispanic white	80.3
Asian	1.9
Black or African-American	1.9
Hispanic or Latino	2.2
Mixed Race	1.5
American Indian or Alaska Native	.7

Note: *Total percentage does not approximate 100 because many participants did not respond to this item.

Table 2

Open-ended Question Assessing Attributional Locus

	N	%*
Internal	18	6.7
External-Work	166	61.7
External-Family	58	21.6
External-Other	12	4.5

Note. *Percentage does not equal 100 as a result of a small amount of missing data and because some respondents provided answers that were coded as being irrelevant to the question.

Table 3

Responses to Closed-ended Question Assessing Attributional Locus

	N	%
I was completely responsible	16	5.9
I was primarily responsible, but something external to me also contributed	19	7.1
An even mix of the two	30	11.2
Something external to me was primarily responsible, but I also contributed	58	21.6
Something external to me was completely responsible	145	53.9

Table 4

Descriptive Statistics, Intercorrelations and Alpha Reliabilities of Emotion Measures

	Measure	N	M	SD	1	2	3	4
1	guilt	269	2.43	1.04	*.82*			
2	shame	269	1.42	.60	**.47**	*.69*		
3	anger	269	2.50	.99	**.46**	**.41**	*.80*	
4	frustration	269	1.96	.83	**.36**	**.46**	**.81**	*.76*

Note. Correlations in bold are significant at $p < .05$. Alpha reliabilities are listed in italics along the diagonal.

Table 5

Descriptive Statistics, Intercorrelations and Alpha Reliabilities of Study Measures

Measure	N	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1 work activity importance	248	4.23	.81	--														
2 family activity importance	242	4.31	.67	.09	--													
3 scheduling order	265	.40	.49	.10	.05	--												
4 work centrality	269	2.88	.77	.09	-.06	.11	*.78*											
5 family centrality	269	4.39	.59	-.01	**.23**	.05	**-.19**	*.85*										
6 work satisfaction	265	3.31	1.01	-.01	-.03	.12	**.30**	.08	*.82*									
7 family satisfaction	262	3.81	.99	**.12**	.06	.06	-.05	**.32**	**.27**	*.89*								
8 attribution locus	254	4.11	1.21	.02	.10	-.09	**-.13**	**-.40**	**-.24**	-.03	--							
9 attribution globality	268	.52	.50	-.05	-.01	.01	-.04	-.08	**-.18**	-.04	-.03	--						
10 attribution stability	268	.65	.48	.08	-.03	-.03	**.12**	.00	-.06	-.12	.00	**.19**	--					
11 DAS	231	.68	.15	.08	.04	.06	.07	.09	-.06	-.07	.07	**.16**	.04	*.65*				
12 guilt	269	2.43	1.04	**.15**	**.18**	.07	-.05	.10	-.09	-.07	.07	.04	.08	.08	*.82*			
13 shame	269	1.42	.60	.11	.11	.07	.02	.09	-.06	-.12	-.04	.05	.05	.10	**.47**	*.69*		
14 anger/frustration	269	2.23	.86	.01	**.16**	.01	**-.14**	**.15**	**-.32**	**-.13**	.04	**.18**	**.17**	.09	**.43**	**.45**	*.88*	
15 coping	266	2.49	.88	.06	**.33**	**.21**	-.03	.12	-.01	.04	**.14**	**.17**	-.08	.03	**.16**	**.22**	**.20**	*.86*
16 person-job fit	256	4.51	.59	-.06	-.11	.00	**.24**	-.03	**.27**	**.16**	-.11	-.11	-.05	-.06	-.09	-.11	**-.15**	-.06
17 age	237	42.61	8.93	-.05	-.04	**.15**	.07	-.11	.12	-.10	-.10	-.08	-.05	-.08	-.09	.01	-.06	-.03
18 gender	255	.36	.48	-.07	**-.18**	.00	-.03	-.12	.03	.06	-.06	-.02	-.08	-.04	-.10	.05	**-.14**	**-.19**
19 hours of work	238	45.03	8.27	**.14**	-.08	-.09	.11	**-.20**	**-.16**	-.02	-.06	.07	.01	.02	.02	.04	-.03	-.09
20 marital status	254	.92	.28	.03	-.02	-.01	**.18**	**-.17**	-.08	**-.16**	.01	.00	.08	-.04	-.02	.03	.05	.09
21 spouse work	220	.82	.38	-.10	-.05	.01	.03	**.14**	.00	-.04	**.16**	-.03	.04	.06	.10	-.05	.08	-.01
22 race	238	.91	0.29	.06	-.08	**.14**	.05	.03	**.14**	.02	-.09	**-.17**	-.02	-.01	.05	.07	.02	.00
23 # of kids	237	1.44	1.04	**-.13**	-.02	.06	**-.13**	**.17**	.03	.03	.00	.00	.02	.01	**.14**	**.13**	.07	.01
24 level of education	235	0.65	0.48	.07	-.07	.06	**.28**	-.03	.12	.04	**-.14**	**-.15**	-.06	-.09	-.04	.02	-.13	-.11
25 wfc	254	2.75	.53	-.03	-.04	.01	.08	-.07	**-.31**	**-.34**	.10	**.19**	**.15**	.12	**.17**	**.32**	**.27**	.10

Note. Correlations in bold are significant at $p < .05$. Alpha reliabilities are presented in italics along the diagonal.

Table 5 (cont'd)

16	17	18	19	20	21	22	23	24	25
.70									
.09	--								
.01	**.28**	--							
.03	.11	**.29**	--						
.08	.10	**-.14**	-.01	--					
.13	**-.19**	**-.43**	**-.21**	.06	--				
.06	.01	.03	-.03	-.05	.01	--			
.04	-.05	.04	-.03	**-.13**	.01	.02	--		
.18	**.23**	.11	**.15**	**.18**	.01	.02	.02	--	
-.24	.01	.03	.09	.08	.00	.10	**.19**	-.01	.87

Table 6

Covariance matrix entered in SEM analyses

	Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	work activity importance	.66														
2	family activity importance	.05	.45													
3	scheduling order	.04	.02	.24												
4	attributional locus	-.02	.07	.10	.67											
5	attributional globality	-.02	.00	.00	-.01	.25										
6	attributional stability	.03	-.01	-.01	.00	.05	.23									
7	guilt	.13	.12	.04	.06	.02	.04	1.09								
8	shame	.06	.04	.02	-.02	.01	.01	.30	.37							
9	anger and frustration	.01	.09	.01	.03	.08	.07	.39	.24	.75						
10	work centrality	.06	-.03	.04	-.06	-.02	.05	-.04	.01	-.10	.59					
11	family centrality	.00	.09	.01	.02	-.03	.00	.06	.03	.08	-.09	.35				
12	work satisfaction	-.01	-.02	.06	-.10	-.09	-.03	-.09	-.04	-.28	.23	.05	1.02			
13	family satisfaction	.10	.04	.03	.00	-.02	-.06	-.08	-.07	-.12	-.04	.19	.28	.99		
14	coping	.05	.19	.09	.10	.08	-.03	.15	.17	.16	-.02	.06	-.01	.03	.77	
15	depressive attributional style	.01	.00	.00	.01	.01	.00	.01	.01	.01	.01	.01	-.01	-.01	.00	.02

Table 7

Indirect Effects of Activity Characteristics on Emotions

	Predictor: Work Activity Importance	
	Mediator: Attribution Locus (open-ended)	
Outcome	Indirect Effect	SE
Guilt	.00	.01
Shame	.00	.00
Anger and Frustration	.00	.00
	Mediator: Attribution Locus (closed-ended)	
Outcome	Indirect Effect	SE
Guilt	.00	.01
Shame	.00	.01
Anger and Frustration	-.01	.01
	Predictor: Family Activity Importance	
	Mediator: Attribution Locus (open-ended)	
Outcome	Indirect Effect	SE
Guilt	.02	.02
Shame	-.01	.01
Anger and Frustration	.00	.01
	Mediator: Attribution Locus (closed-ended)	
Outcome	Indirect Effect	SE
Guilt	.00	.01
Shame	.00	.01
Anger and Frustration	.00	.01
	Predictor: Scheduling Order	
	Mediator: Attribution Locus (open-ended)	
Outcome	Indirect Effect	SE
Guilt	.03	.03
Shame	.02	.03
Anger and Frustration	.02	.03
	Mediator: Attribution Locus (closed-ended)	
Outcome	Indirect Effect	SE
Guilt	.00	.01
Shame	.01	.01
Anger and Frustration	.01	.02

Note. * = $p < .05$

Table 8

Indirect Effects of DAS on Emotions

	Predictor: DAS	
	Mediator: Locus	
Outcome	Indirect Effect	SE
Guilt	.03	.06
Shame	-.01	.03
Anger/Frustration	.02	.05
	Mediator: Globality	
Outcome	Indirect Effect	SE
Guilt	-.01	.08
Shame	-.01	.05
Anger/Frustration	.16*	.09
	Mediator: Stability	
Outcome	Indirect Effect	SE
Guilt	.04	.08
Shame	.01	.03
Anger/Frustration	.05	.08

Note. * = $p < .05$. DAS = Depressive Attributional Style.

Table 9

Indirect Effects of Attribution Characteristics on Attitudes

	Predictor: Locus (open-ended)		Predictor: Locus (closed-ended)		Predictor: Globality		Predictor: Stability	
	Mediator: Guilt		Mediator: Guilt		Mediator: Guilt		Mediator: Guilt	
Outcome	Indirect Effect	SE	Indirect Effect	SE	Indirect Effect	SE	Indirect Effect	SE
Work Satisfaction	.01	.01	.00	.01	-.01	.01	-.01	.02
Family Satisfaction	.00	.01	.00	.01	.00	.01	-.01	.02
Coping	.01	.01	.00	.01	.01	.02	.02	.02
	Mediator: Shame		Mediator: Shame		Mediator: Shame		Mediator: Shame	
Outcome	Indirect Effect	SE	Indirect Effect	SE	Indirect Effect	SE	Indirect Effect	SE
Work Satisfaction	.00	.01	.01	.01	-.01	.01	-.01	.01
Family Satisfaction	.00	.01	.01	.01	-.01	.02	-.02	.02
Coping	.01	.02	-.01	.01	.02	.03	.02	.03
	Mediator: AngFrust		Mediator: AngFrust		Mediator: AngFrust		Mediator: AngFrust	
Outcome	Indirect Effect	SE	Indirect Effect	SE	Indirect Effect	SE	Indirect Effect	SE
Work Satisfaction	-.02	.03	-.03	.02	-.11*	.04	-.11*	.04
Family Satisfaction	-.01	.01	-.01*	.01	-.05*	.03	-.04*	.03
Coping	.01	.02	.02*	.01	.06*	.03	.07*	.03

Note. * = $p < .05$. AngFrust = Anger and Frustration.

Table 10

Summary of Hypotheses and Results

Hypothesis	Support
H1: Internal attributions will be less frequent following conflict events than will external attributions.	Supported
H2a: An individual will be less likely to attribute responsibility for conflict to a role for which the involved activity was highly important.	Not supported
H2b: An individual will be less likely to attribute responsibility for conflict to a role for which the involved activity was scheduled first.	Supported
H3a: Individuals high in affective commitment to family will view the family activity as more important than will individuals low in affective commitment to family.	Could not be tested
H3b: Individuals high in affective commitment to work will view the work activity as more important than will individuals low in affective commitment to work.	Could not be tested
H3c: Individuals high in family centrality will view the family activity as more important than individuals low in family centrality.	Not supported
H3d: Individuals high in work centrality will view the work activity as more important than individauls low in work centrality.	Not supported
H4a: Depressive attributional style will have a direct effect on the locus of attributions. Individuals higher in DAS will be more likely to make internal attributions than individuals low in DAS.	Not supported
H4b: Depressive attributional style will have a direct effect on the stability of attributions. Individuals higher in DAS will be more likely to make stable attributions than individuals low in DAS.	Not supported
H4c: Depressive attributional style will have a direct effect on the globality of attributions. Individuals higher in DAS will be more likely to make global attributions than individuals low in DAS.	Supported
H5a: Individuals making internal attributions for instances of work-family conflict will experience greater amounts of guilt and shame than those making external attributions.	Not supported
H5b: Individuals making external attributions for instances of work-family conflict will experience greater amounts of anger and frustration than those making internal attributions.	Not supported

Table 10 cont'd

H5c: Individuals making stable attributions for instances of work-family conflict will experience greater amounts of guilt, shame, anger, and frustration than those making unstable attributions.	Partially Supported (anger and frustration)
H5d: Individuals making global attributions for instances of work-family conflict will experience greater amounts of guilt, shame, anger, and frustration than those making local attributions.	Partially Supported (anger and frustration)
H6: The experience of negative emotions will be negatively associated with satisfaction with both work and family. Individuals experiencing greater degrees of negative emotion will experience less satisfaction with both work and family.	Partially Supported (anger and frustration->work satisfaction)
H7: The experience of negative emotion will be related to greater amounts of coping behavior. Individuals experiencing more negative emotions will engage in more coping behaviors than individuals not experiencing as much negative emotion.	Partially supported (shame)
H8a: Work satisfaction will be negatively related to work role withdrawal.	Could not be tested
H8b: Family satisfaction will be negatively related to family role withdrawal.	Could not be tested
Mediation: characteristics of work and family activities are proposed to mediate the relationship between work and family attitudes and attributional locus.	Not supported
Mediation: attributional locus is proposed to mediate the relationship between activity characteristics and emotions.	Not supported
Mediation: Attributional locus, globality, and stability are proposed to mediate the relationship between DAS and emotions.	Partially supported
Mediation: Affective reactions are proposed to mediate the relationship between attributions and both behaviors and attitudes.	Partially supported
Mediation: Attitudes are proposed to mediate the relationsihp between affect and judgment-driven behaviors.	Could not be tested

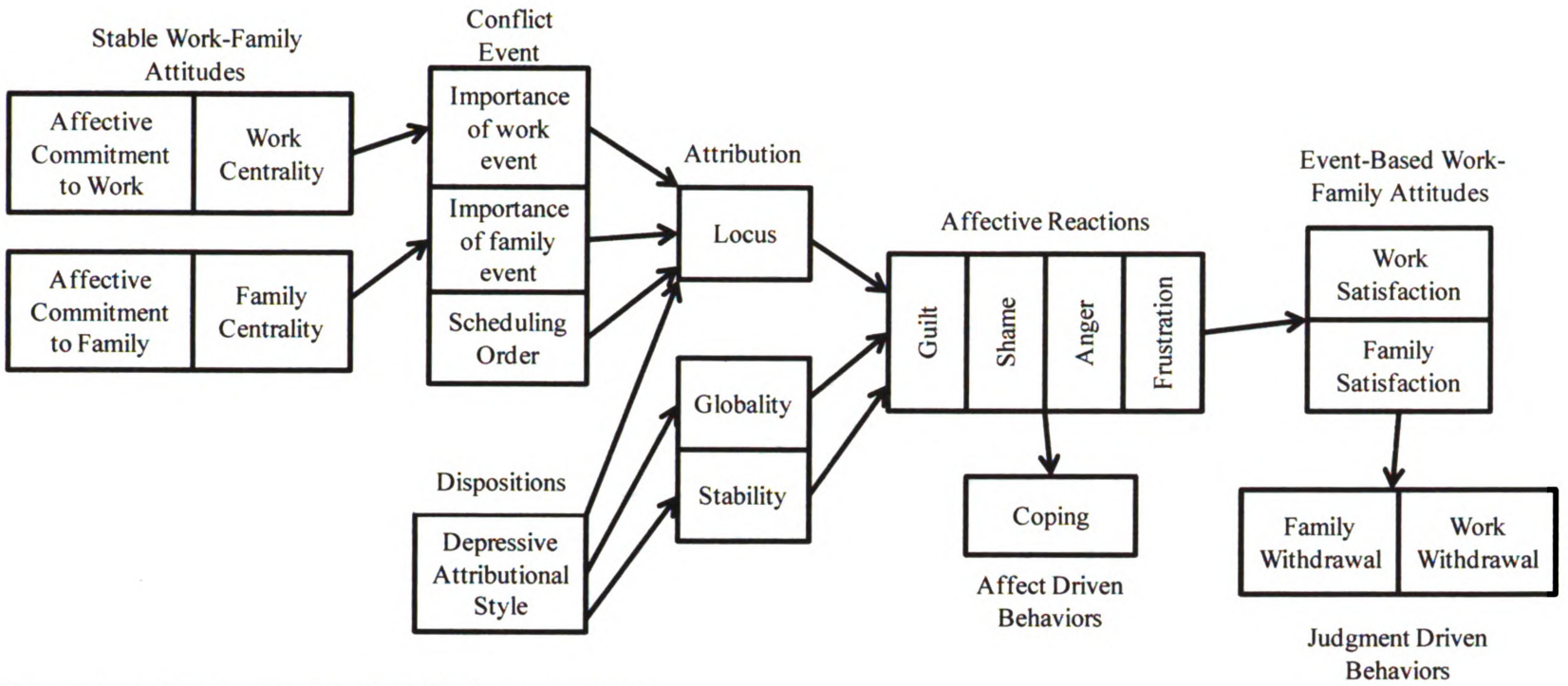

Figure 2. A Process Model of Attributions and WFC.

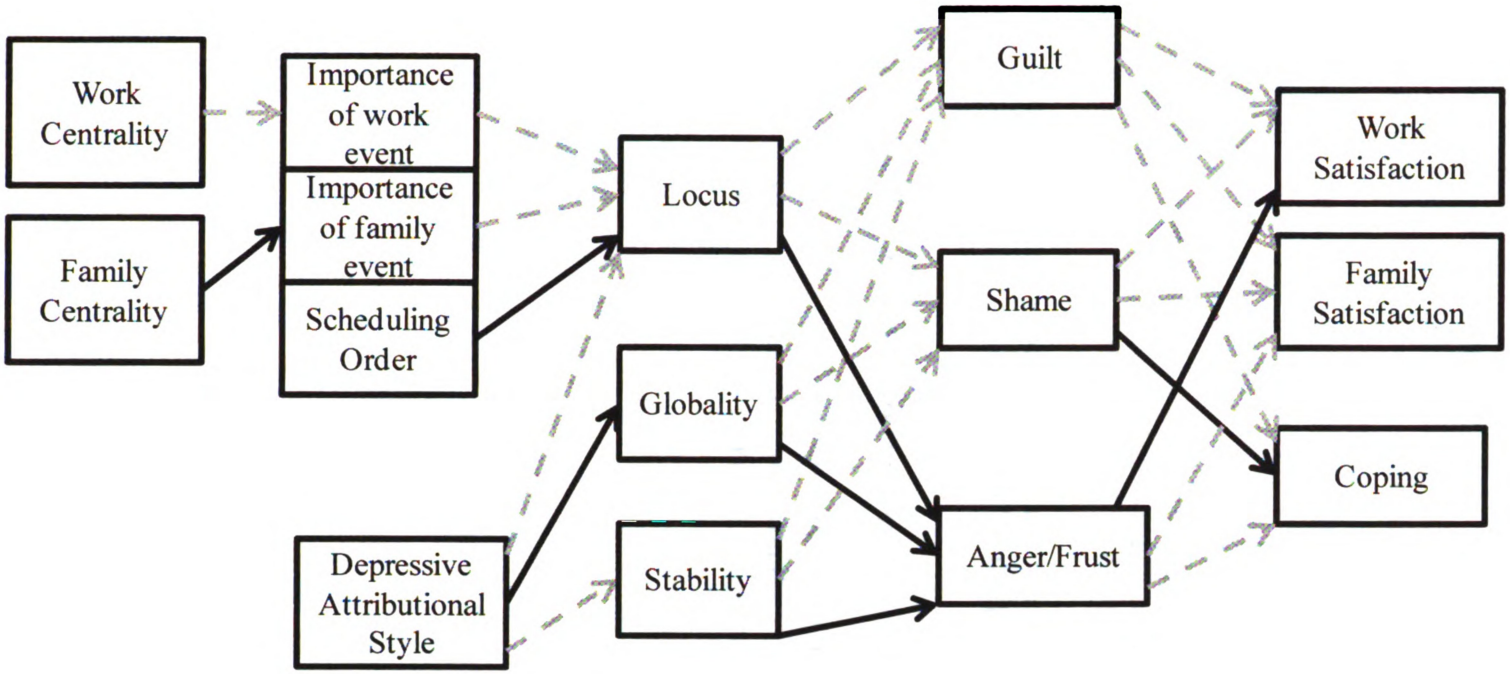

Figure 3. Structural model tested in LISREL. In addition to the paths shown, affective variables were allowed to intercorrelate. Solid black paths were supported, dashed grey paths were not supported.

APPENDIX B

Recruitment Email

Subject: Balancing work and family

You are invited to participate in a study being conducted at Michigan State University about work-family conflict. We are studying the processes that occur after an event of conflict between the work and family roles. Our aim is to help people and organizations understand better how people think about and manage their multiple life roles.

As an MSU alum, we hope you will consider completing this online survey. In return for your participation, you will receive your choice of a $10 PayPal deposit OR a $10 Amazon.com gift certificate as well as research-based tips on work-life balance.

To participate you must be at least 18 years old, employed as a full-time paid worker (defined as 30 or more hours per week), and able to comprehend written English. In addition, you must be able to recall an instance in the recent past when your work and family conflicted with each other.

For more information about your role as a research participant and to begin the survey, please follow the link below and enter 'workfamily' as the username and 'password' as the password:

http://psychology.msu.edu/workfamilyevents

Thank you for your time. We greatly value your potential contribution to our project and your support of MSU research. If you would prefer not to participate, you can simply delete this message--I will not contact you again about this study.

Dr. Ann Marie Ryan
333 Psychology Building
Michigan State University
East Lansing, MI 48824
ryanan@msu.edu

APPENDIX C

Informed Consent Form

Please read and click 'I agree' to indicate consent

Abstract: You are being asked to participate in a research study examining events of conflict between work and family roles. The goal of this study is to better understand these events and the impact they have on people. By gaining this sort of understanding, we can make advances in determining how to improve work-family balance.

Conditions: In order to participate in this experiment you must be at least 18 years old, employed as a full-time paid worker (defined as 30 or more hours per week), and able to comprehend written English.

In addition, a major focus of the survey involves asking you to recall a recent instance when an event in your family role and an event in your work role were scheduled at the same time, causing conflict for you. You should only participate if you believe you will be able to recall such an instance and provide details regarding the events involved and your thoughts and feelings that followed.

Procedure: You will fill out a series of surveys online. In total the surveys will take approximately 15 minutes to complete. Please choose a time to complete the surveys when you can fill them out thoughtfully and completely. All surveys will be completed anonymously, and your answers will be submitted via the Internet. The data that results from your participation will be used only for research purposes.

Risks: There are no foreseeable risks associated with participating in this study. Your privacy will be protected in several ways. First, you will not be asked to provide any identifying information, making your responses completely anonymous. Second, responses on all of the items on the questionnaires will only be accessible by the primary investigators (Dr. Ann Marie Ryan and Elizabeth Poposki) in the study. Third, the information gathered in this study will be combined with the data of all of the other participants in the study for any analyses so that the responses of any individual cannot be identified. Any data reported from this study will be in such a way that no one will be able to identify a particular participant (e.g., by giving typical results averaged across participants). Your privacy will be protected to the maximum extent allowable by law.

Benefits: In exchange for completing the entire survey, you will receive a $10 incentive. You may choose whether the incentive is in the form of a gift certificate to Amazon.com or a transfer into a PayPal account (which can be transferred into a bank account). In addition, you will have the opportunity to receive research-based information on how to better your work-family balance.

Your participation in this study is strictly voluntary and may be discontinued at anytime without penalty. You are free to decline to answer any question.

If you have any questions about the study, contact Dr. Ann Marie Ryan, 333 Psychology Building, Michigan State University, East Lansing, MI 48824 (517-353-8855; ryanan@msu.edu).

By continuing, you agree that you have read the above description and conditions of this research study and voluntarily agree to participate in this study.

APPENDIX D

Page 1: Stable Work Attitudes

The first set of questions will ask you about a few of your attitudes toward your work. Please answer the following questions honestly, remembering that your responses are anonymous and are not linked to your identity in any way.

Response scale: 1-5 (Strongly agree-Strongly disagree)

The major satisfaction in my life comes from my work (CEN)
The most important things that happen to me involve my work (CEN)
Most of my interests are centered around my work (CEN)
Overall, I consider work to be very central to my existence (CEN)
I am enthusiastic about work (AFF)
I dislike engaging in my work (AFF)
My work is important to my self-image (AFF)

APPENDIX E

Page 2: Stable Family Attitudes

The next set of questions will ask you about your attitudes toward your family. Please answer the following questions honestly, remembering that your responses are anonymous and are not linked to your identity in any way.

Response scale: 1-5 (Strongly agree-Strongly disagree)

The major satisfaction in my life comes from my family (CEN)
The most important things that happen to me involve my family (CEN)
Most of my interests are centered around my family (CEN)
Overall, I consider family to be very central to my existence (CEN)
I am enthusiastic about my family (AFF)
I dislike engaging in activities related to my family (AFF)
My family is important to my self-image (AFF)

APPENDIX F

Page 3: Critical Incident Reporting

For this part of the survey we are interested in gathering information about a recent situation where your work and family lives were in conflict with each other. Specifically, we would like you to focus on the type of conflict that arises due to the fact that an activity within the work role and an activity within the family role are scheduled to occur at the same time and you cannot make it to both activities. This is called "time-based" conflict.

Here are some examples of time-based conflict:
1. A meeting at work is scheduled at the same time as dinner with your family.
2. A business trip overlaps with a family member's birthday.
3. The hours you must be at work on a given day overlap with hours you must care for children or an activity in the family role.
4. You are trying to fit working at home and interacting with your family into one evening.

What we will be asking you to do is recall a time-based conflict between your work and family roles that occurred within the past two weeks and to give us detailed information about the conflict.
To help you understand the type and amount of information we are looking for, example responses will be provided for each open-ended question.

Please take a moment now to recall an event of the type we have discussed, then fill out the following questions.

**If you cannot remember such an event, you may end your participation in the survey and receive research-based tips on balancing work and family now by clicking here: http://psychology.msu.edu/WorkLifeTips.asp*

Describe the activity that was to occur within the work role: (Ex. My boss had scheduled a quality control meeting at 5pm, which was a little bit out of the ordinary, but apparently there was some problem that needed to be addressed right away. I wasn't really sure how long the meeting was going to last, but I estimated that I would probably be there for about an hour, then have my typical 30 minute commute home.)

How important was the event or activity within the work role? *Response scale: 1-5 (Very unimportant-Very important)*

Please explain your importance rating: (Ex. I was required to be there- if I hadn't showed up it probably would have been a big problem for me. It's not like I really wanted to be there, but I had to be, so it was "important" in that way.)

APPENDIX F (cont'd)

Describe the activity that was to occur within the family role: (Ex. My family usually has dinner at around 6pm. This is a time when we all get to see each other, so it's not something I want to miss.)
How important was the event or activity within the family role? *Response scale: 1-5 (Very unimportant-Very important)*

Please explain your importance rating: (Ex. Dinner is important to me because I don't want to be late and make everyone wait- I am trying to teach my children about responsibility and I feel that being late sets a bad example.)

Which event or activity was scheduled first?

Work event
Family event

Describe the reason why there was a conflict between the two (Ex. The meeting was scheduled too close to the time of dinner, so I didn't have enough time to drive back for dinner.)

Describe the reaction of members of your family and others at work to the conflict: (Ex. I didn't tell anyone at work about the conflict. My husband was annoyed (not at me, but at the meeting being scheduled) and the kids were hungrier than usual.)

What did you do about the conflict (e.g., was it resolved and how)? (Ex. I attended the meeting and rushed home as soon as it was over. We had dinner a little later than usual.)

APPENDIX G

Page 4: Critical Incident Attributions

For the next part of the survey, we will ask you about what you felt was the cause of the conflict you just described. Although conflicts between work and family may have many causes, we want you to focus on the ONE MAIN CAUSE. That is, what is the main thing that caused the conflict to occur? We will then ask some follow-up questions regarding that cause.

What caused the conflict to occur? (Ex. My boss caused the conflict by scheduling the meeting at 5pm, which is a time when we don't normally have meetings.)

Were you responsible for the conflict or was something external to you responsible for the conflict?

I was completely responsible for the conflict
I was primarily responsible, but something external to me also contributed
An even mix of the two
Something external to me was primarily responsible, but I also contributed
Something external to me was completely responsible for the conflict

Is the cause something that will continue to affect you? (e.g., Was the cause a one-time occurrence or is it something that will be likely to cause conflict again in the future?)

Yes
No

Please explain your answer to the above: (Ex. My boss is typically pretty good with scheduling, so I don't think this is going to happen again in the future- particularly because some other people complained about it.)

Is the cause something that just causes work-family conflict, or does it have the potential to affect other areas of your life as well?

Just work-family conflict
Other areas of my life as well

Please explain your answer to the previous question: (Ex. My boss sometimes gets under a lot of pressure from his supervisors, and that pushes him to do things that are not very well thought-out. This is certainly not limited to the area of scheduling meetings, so it definitely has the potential to affect my entire working life.)

APPENDIX H

Page 5: Affect

In response to the conflict you just described, please rate the extent to which you experienced the following emotions:

Response scale: 1-5 (Not at all – Extremely)

Shame
Embarrassment
Disgrace
Regret
Remorse
Guilt
Anger
Irritation
Fury
Frustration
Annoyance
Resentment

APPENDIX I

Page 6: Coping

In response to the conflict you just described, please rate the extent to which you engaged in the following behaviors:

Response scale: 1-5 (not at all- extremely)

I concentrated my efforts on doing something about the conflict
I took action to try to make the conflict better
I tried to come up with a strategy about what to do
I thought hard about what steps to take
I sought emotional support from others
I got comfort and understanding from someone
I tried to get advice or help from other people about what to do
I got help and advice from other people

APPENDIX J

Page 7: Work Withdrawal and Satisfaction

Please answer the following questions honestly, remembering that your responses are anonymous and are not linked to your identity in any way.
In response to the conflict you just described, please describe the extent to which you engaged in the following behaviors.

Response scale: 1-5 (very undesirable-very desirable)

Made excuses to go somewhere to get out of work (WIT)
Skipped a work activity to go out with friends (WIT)
Daydreamed while at work (WIT)
Reduced your hours at work (WIT)

In response to the conflict you just described, please indicate your answers to the following items regarding your attitudes toward work.

Please indicate the extent to which you agree or disagree with the following statements:

Response Scale: 1-5 (Strongly agree-Strongly disagree)

I am satisfied with my work right now. (SAT)
If given the opportunity, I would change little about the way my work is right now. (SAT)
The way my work is going right now is close to my ideal. (SAT)

APPENDIX K

Page 8: Family Withdrawal and Satisfaction

Please answer the following questions honestly, remembering that your responses are anonymous and are not linked to your identity in any way.
In response to the conflict you just described, please describe the extent to which you engaged in the following behaviors.

Response scale: 1-5 (very undesirable-very desirable)

Made excuses to get out of family activities (WIT)
Skipped a family activity to go out with friends (WIT)
Daydreamed while with family (WIT)
Reduced the amount of time you spent with family (WIT)

In response to the conflict you just described, please indicate your answers to the following items regarding your attitudes toward family.

Please indicate the extent to which you agree or disagree with the following statements:

Response Scale: 1-5 (Strongly agree-Strongly disagree)

I am satisfied with my family right now. (SAT)
If given the opportunity, I would change little about the way my family life is right now. (SAT)
The way my family life is going right now is close to my ideal. (SAT)

APPENDIX L

Page 9: Work-family conflict

Please indicate the extent to which you agree or disagree with the following statements:

Response scale: 1-5 (Strongly agree-Strongly disagree)

My work keeps me from my family activities more than I would like
My work takes up time that I'd like to spend with family/friends
The time I must devote to my job keeps me from participating equally in household responsibilities and activities
I feel I don't have enough time to fulfill my responsibilities at home due to time I have to spend on my career
I have to miss family activities due to the amount of time I must spend on work responsibilities
My personal life takes up time that I'd like to spend at work
The time I spend on family responsibilities often interfere with my work responsibilities
The time I spend with my family often causes me to not spend time in activities at work that could be helpful to my career
I have to miss work activities due to amount of time I must spend on family responsibilities
I feel I don't have enough time to fulfill my potential in my career because I need to spend time with my family and friends
The stress from my job often makes me irritable when I get home
When I get home from work I am often too physically tired to participate in family activities/responsibilities.
Tension and anxiety from work often creep into my family life
I am often so emotionally drained when I get home from work that it prevents me from contributing to my family
Due to all the pressures at work, sometimes when I come home I am too stressed to do the things I enjoy
Due to stress at home, I am often preoccupied with family matters at work
The stress from my family life interferes with my work life
Because I am often stressed from family responsibilities, I have a hard time concentrating on my work
Tension and anxiety from my nonwork life often extend into my job
Due to all the pressures at home, sometimes it is hard for me to do my job well

APPENDIX M

Page 10: Attributional style

The next few questions will ask you to imagine yourself in a few different situations. For each situation, you will be asked four questions about the CAUSE of the situation. Although situations like these may have many causes, we want you to focus on only the one MAIN cause you feel would have resulted in the situation.

Imagine yourself in the following situation...

1. ...you have trouble sleeping
    - What is the ONE MAIN cause of this situation?
    - Is this cause something that is internal to you or something that is external to you?
        - Internal to me
        - External to me
    - Is the cause something that will continue to affect you in the future?
        - Yes
        - No
    - Is the cause something that just affects this situation, or does it affect other areas of your life as well?
        - Just this situation
        - Other areas of my life as well
2. ...you have a serious injury
3. ...you can't get the work done that others expect of you
4. ...you are fired from your job
5. ...you don't help a friend who has a problem
6. ...you have financial problems

APPENDIX N

Page 11: PJ Fit

The next set of questions asks you a few questions about your job in general (rather than at the current time). Please answer the following questions honestly.

Response scale: 1-5 (Strongly agree-Strongly disagree)

My skills and abilities 'match' those required by my job
My job performance is hurt by a lack of expertise on the job
I possess the skills and abilities necessary to perform my job

APPENDIX O

Page 12: Demographics

This is the final set of questions. The following questions will help us to understand how different respondent characteristics might impact our results. Please be honest and complete this portion entirely.

How many hours per week do you spend in paid employment? (Please provide a single number, e.g., 35. If your hours vary, give your best estimate of the average)

What is your job title? Please be as specific as possible. For example, if you are an analyst or a manager, specify what type (e.g., budget analyst or financial analyst).

What is your marital status?

- Married or in a domestic partnership
- Single/never married
- Single/previously married

Does your spouse/partner work?

- Yes, full time
- Yes, part time
- No
- N/A

How many children are living at home with you?

- 0
- 1
- 2
- 3
- 4+

What are the ages of the children living at home with you? For children under one year, please write "infant". (Ex. for three children aged five, three, and 10 months: 5, 3, infant)

For how many people do you provide eldercare (e.g., your or your partner's parents)?

What is your age?

What is the highest level of education you have achieved?

- Less than a high school diploma
- High school diploma or GED
- Technical school (e.g., tradesman)
- College degree
- Graduate degree

APPENDIX O (cont'd)
What is your sex?

M
F

Are you of Hispanic, Latino, or Spanish origin?

No, not of Hispanic, Latino, or Spanish origin
Yes, Mexican, Mexican Am., Chicano
Yes, Puerto Rican
Yes, Cuban
Yes, another Hispanic, Latino, or Spanish origin

What is your race? Mark one or more boxes.

White
Black or African American
American Indian or Alaskan Native
Asian or Pacific Islander
Asian Indian
Some other race. Please enter in next item

If you entered 'some other race' above, please enter your race here.

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