CONSEQUENCES OF WORK-FAMILY CONFLICT: TESTING A NEW MODEL OF WORK-RELATED, NON-WORK RELATED AND STRESS-RELATED OUTCOMES

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(ABSTRACT)

With the demographic layout of the workplace changing constantly, as more women enter the workforce, and as new organizational hiring practices lead to more diversity in the work environment, both researchers and employers have become increasingly interested in understanding the consequences of work-family conflict. Work-family conflict affects the individuals suffering from it, their families, and their employers. Thus, it is important to have a robust and comprehensive causal model that explains how these consequences arise so as to help all parties involved to prevent these consequences. The purpose of the present study was to test a comprehensive model of work-family conflict by examining the work, non-work and stress related consequences of work-family conflict using a sample of 181 Jamaican High School teachers. The results indicated that all hypothesized correlations but one were significant and in the direction predicted. However, the proposed model did not demonstrate good fit with the data. Post hoc revisions to the original model provided support for some of the initial hypotheses, thereby suggesting that work family conflict did predict job and life stress, among others. Overall, these findings indicate that work-family conflict results in work, non-work and stress related consequences that are evidenced in a complicated network of direct and indirect relationships. The results suggest that the consequences of work-family conflict may be best reduced by making attempts to prevent or eliminate a consequence that occurs early in the chain. A discussion of these and other implications are presented, and suggestions made for future research.

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Introduction

Work and family represent two of the most important aspects of adult life. Each of these variables contributes uniquely to our understanding of human behavior. Although researchers have examined both variables theoretically and empirically, traditionally the examinations of these two crucial domains have been conducted independently of each other. However, researchers have long speculated that these two variables are related, and have since found that this relationship has emerged in the form of conflict.

This conflict was first defined by Kahn, Wolfe, Quinn, Snoek, and Rosenthal (1964) who examined the interrole conflict people experienced between their work roles and other life roles (as cited in Greenhaus & Beutell, 1985). Kahn et al. suggested that work-family conflict occurs when demands from work and family are mutually incompatible to some degree. Greenhaus and Beutell (1985) later concluded that work-family conflict occurs when demands from one role affects one's ability to meet the demands associated with another role in another domain.

Over the past two decades Industrial/Organizational Psychologists and other researchers have tried to gain a better understanding of the work-family conflict construct by examining the bidirectionality of work family conflict, different types of conflict, several reactance models of work-family conflict, and finally, different causal models for explaining how conflict affects individuals. However, as the demographics of the work force and families continue to evolve, as more women continue to enter the workforce, as dual-earner families become prevalent, and as the number of immigrants employed continues to increase, researchers have been forced to reconceptualize work-family conflict research to handle this rapidly changing world (Frone, Russell, & Cooper, 1992; Netemeyer, Brashear-Alenjandro & Boles, 2004). In light of the current state, the need for new research to be conducted in work-family conflict is evident. It is necessary for us to understand the causes and consequences of the construct that persist across time and culture in order to help employees prevent and handle the discomfort that occurs when work and family demands clash. Employee's families will benefit from a new look at the consequences of work-family conflict, as understanding the problem is the first step in helping families takes steps to prevent negative family-related outcomes of work-family conflict. Finally, organizations also stand to gain from an understanding of the consequences of work family

conflict as managers will be better able to offer solutions to preventing organizational outcomes of work-family conflict.

Several past researchers have attempted to examine the consequences of work-family conflict in order to understand these outcomes and to develop suitable strategies for dealing with them. Building on the foundation laid by Greenhaus and Beutell (1985), researchers have shifted the focus from spillover and compensatory reactance models to causal models to help them explain the antecedents and consequences of work-family conflict. Several researchers have proposed such models (e.g., Carlson & Kacmar, 2000; Frone et al., 1992; Frone, Yardley, & Markel, 1997; Major Klein & Mark, 2002; Netemeyer, et al., 2004). However, the models proposed to date have all been limited by testing only selected types of consequences and ignoring many other possible consequences. The models that have been used to describe work-family conflict have primarily examined direct (proximal) consequences of work-family conflict but not mediated (distal) consequences. This examination of primarily direct consequences of work-family conflict limits our ability to completely understand how these outcomes emerge. The exclusion of several important relationships (paths) that could be beneficial in understanding the emergence of these consequences has left researchers unequipped to fully understand and explain which consequences occur and how they occur. Notable past models, along with the problems associated with each model will be discussed in order to lay the foundation for the causal model proposed in this paper. The model proposed has taken into account the concepts missing from previous models, and suggests a more comprehensive examination of the consequences of work-family conflict by examining the work-related, nonwork-related and stress-related outcomes through a series of proximal and distal relationships. To set the stage for the model proposed in this study, a discussion of past research trends in work-family conflict will now be presented.

Work-Family Conflict

Both Greenhaus and Beutell (1985) and Kahn and his colleagues (1964) examined work-family conflict as a unidimensional construct despite the fact that the definitions they had provided suggested that work affected family and family affected work which implies a bi-directional relationship (Allen, Hesrt, Bruck, & Sutton, 2000; Frone, Russell, & Cooper, 1992). Other researchers, however, did not ignore this aspect of the construct and treated work-family conflict as being comprised of two distinct but related forms of interrole conflict focusing not

only on how work interferes with family, but also on how family interferes with work (family-work conflict; Frone et al., 1992; Netemeyer, Boles & McMurrian, 1996). Thus, the definitions provided by Kahn et al. (1964) and Greenhaus and Beutell (1985) were revised by Netmeyer et al. (1996) producing two specific definitions. The work-family conflict facet was defined as a form of interrole conflict occurring as a result of general demands and strain created by the job interfering with one's ability to perform family related responsibilities (Netemeyer et al., 1996). In contrast, Netemeyer et al. (1996) defined the family-work conflict facet as role conflict resulting from general demands and strain created by the family interfering with an employee's ability to perform responsibilities related to work. These two facets when combined form one overarching work-family conflict construct.

In order to get a better grasp of how these two facets work together resulting in the overall work-family conflict construct, several researchers have examined and compared the antecedents and consequences of both work-family conflict and family-work conflict. In a study examining the antecedents and outcomes of both types of conflict, Frone et al. (1992) hypothesized that job stressors and job involvement would predict work-family conflict which would in turn predict family distress and depression, while family involvement and family stressors would predict family-work conflict which would in turn predict job distress and depression. Testing a sample comprised of both white and blue collar workers, the researchers found a strong relationship between work-family conflict and family-work conflict suggesting that the two facets are part of a bigger work-family construct (Frone et al., 1992). Specifically, job stressors predicted work-family conflict which predicted job distress (but only in the case of blue-collar workers), while family involvement and family stressors predicted family-work conflict which in turn predicted job distress and depression (Frone et al., 1992). In a subsequent study, Frone et al. (1997) expanded on the model developed by Frone et al. (1992) and found, after testing a sample of financial service employees, that work-family conflict was negatively related to family performance and that family-work conflict was negatively related to job-performance. Other researchers have supported and expanded on Frone et al. findings (1992; 1997) that direction of the conflict (family to work or work to family) is directly related to strengths of the relationships found between each of these facets and its antecedents and consequences (Casper, Martin, Buffardi & Edwinds, 2002; Grzywacz & Marks, 2000; Kirchmeyer, 1993; O'Driscoll, Ilgen, & Hildreth, 1992). The overall findings of these studies

have led researchers to suggest that work-family conflict is indeed a bi-directional construct that is the result of a pair facets, work-family conflict and family-work conflict (Frone 2003; Grzywacz & Marks, 2000).

To summarize, family- work conflict has family based antecedents and leads to work-related outcomes, while the work-family conflict facet has work based antecedents and leads to family related outcomes (Frone et al. 1992; 1997). The overall work-family conflict construct has both work and family related consequences. As such the present study will focus on work-family conflict as an overall construct, as researchers have suggested that despite the unique findings for each of two facets, work-family conflict as an overall construct has a greater aggregated impact than each of the individual facets (Frone et al., 1992; Frone, 2003).

Forms of Conflict

Outside of understanding the bi-directional nature of work-family conflict, researchers have also conducted research examining the different forms of conflict. Greenhaus and Beutell (1985) suggested that there are three different types of conflict, time-based, strain-based and behavior-based conflict. Time-based conflict is evidenced when time pressures of one role prevents an employee from being able to allot time to meet the demands of another role (Greenhaus & Beutell, 1985; Kelloway, Gottlieb & Barham, 1999). Strain based conflict occurs when pressure or strain from one role affects how a person performs in another role, and behavior-based conflict occurs when behavioral patterns required and exhibited in one role are incompatible with those required for another role (Greenhaus & Beutell, 1985). In keeping with the bi-directionality of the construct, Greenhaus & Beutell (1985) suggested that there are both work and family related sources of both time-based and strain based conflict. However, researchers have found it difficult to operationalize behavior-based conflict, and as a result little is known about this form of conflict (Kelloway et al., 1999). Overall, research examining the different forms of conflict has been limited. However, Kelloway et al. (1999) in examining the nature and direction of work-family conflict via a longitudinal study, hypothesized that time-based work interference with family and family interference with work, and strain-based work inference with family and family interference with work would predict a participant's experiences of stress and intention to turnover. Their results revealed that time-based work interference with family, time-based family interference with work, strain based work interference with family and strain-based family inference with work were four distinct factors

that made up an overall work-family conflict construct. However, for the most part, the researchers did not support their hypotheses. Their results suggested that only strain-based family interference with work predicted both stress and intention to turnover, while time-based family interference with work only predicted stress, and time-based and strain-based work interference with family did not predict either outcome (Kelloway et al., 1999). Although there has been limited research in the area of different types of conflict, Kelloway et al.'s (1999) work does provide some support for the bi-directionality of work-family conflict, and that work-family conflict is one construct that is made up of different facets as evidenced through the results of the confirmatory factor analysis they conducted. Given that the majority of past research has examined work-family conflict without looking at time-based and strain-based conflict, and Kelloway et al.'s factor analytic support for work-family conflict as a single construct with multiple facets, the present study treated work family conflict as an overarching construct encompassing these four different types of conflicts, and therefore will not address them individually.

Reactance Models of Work-Family Conflict

Outside of exploring the bi-directionality of work-family conflict and the examination of different types of conflict, researchers have also proposed different reactance models to explain how the consequences of work family conflict emerge. Reactance models refer to a set of arguments used to describe different strategies an individual could use in response to a stimulus which could result in differential outcomes. Frone (2003) in his theoretical overview of work-family balance stated that there are six models that can be used to explain the effects of work-family conflict; the segmentation model, the congruence model, the identity or integrative model, the spillover model, the compensation model and the resource drain model. The segmentation model purports that life and family represent two separate unrelated domains that have no influence on each other, while the congruence model suggests that since work and family share a common cause, they can have either a positive or negative correlation and that any relationship found between the two is spurious. The identity or integrative model suggests that work and family are so closely entwined that any attempt to differentiate between the two would be futile. Frone provides the example of the work priests and rabbis, whose personal and family lives are expected to reflect the values they must abide by in their work roles, when describing the integrative model. The spillover model postulates that one domain affects another by way of a

positive relationship – in essence, as the name suggests, spilling over from one domain to the next. For example an employee who is in a negative mood state at work will experience a negative mood state at home, as the negative affect carried over from the workday would spillover into his or her home life. Likewise, a positive mood state at work would lead to a positive mood state a home. The compensatory model suggests that there is a negative relationship between work and family, and that, for example reduced satisfaction in one domain would lead a person to try to make up (compensate) for this by increasing energy exerted towards some aspect in the other domain domain. Finally, the resource drain model posits that the negative relationship that exists between work and family occurs as a result of one domain using up time and energy that are needed for the other domain.

Although six models have been suggested, the difficulty inherent in operationalizing several of these reactance models has precluded researchers from examining these models in any meaningful way. Only the segmentation, compensatory and spillover models have been examined to a reasonable extent by researchers. In support of the segmentation model Hart (1999), in his examination the effects of work, non-work, personality factors, and domain satisfaction, found that there was no significant relationship between experiences of work and non-work satisfaction. Hart also found that there were no significant relationships between non-work experience and work-satisfaction. These results, he suggested, support the segmentation model where work and non-work experiences exist as two independent domains. In examining the compensation model, Baltes and Heydens-Gahir (2003) proposed that persons who used selection, optimization and compensation behaviors such as the use of outside child-care to make up for lack of in home care, would experience less family and job stress, and therefore would experience less work-family conflict. Their results suggested that people who showed larger amounts of compensation behavior had lower work-family conflict. For example, they found that increased family involvement led to reduced family-work conflict, and that people who exhibit the use of the compensation model tended to report higher levels of well-being and positive mastery than those who did not use a compensatory strategy.

Although some support has been found for both the segmentation model and the compensation model, the majority of empirical studies examining these reactance models of work-family conflict show support for the spillover effect. Spillover effect is the term used to describe the occurrence of a mood, energy, motivational, etc. spillover from one domain to the

other. A positive spillover effect occurs when a positive state in one domain leads a positive state in another domain, thereby facilitating or enhancing the second domain. A negative spillover occurs when a negative state from one domain leads to negative state in another domain, thereby making it difficult to complete tasks in the second domain. In a study examining both positive and negative non-work to work spillover in male and female managers, Kirchmeyer (1993) found that both men and women experienced positive spillovers from family to work, and that men experienced more negative spillover from work-to family than women did. Negative spillover was operationalized in terms of negative affective states that get transported from one domain to another (e.g., feelings of fatigue and being drained), while positive spillover was operationalized in terms of feelings of enjoyment and increased involvement in both domains. In a more comprehensive study examining spillover, Grzywacz and Marks (2000) found that there were four distinct types of spillover that people can experience: negative work-family, positive work-family, negative family-work, and positive family-work spillover. The results of their study suggested that negative spillover from either domain was predicted by job stress and pressure and job and family burden, while both types of positive spillover were predicted by support (e.g. from spouses; Grzywacz & Marks, 2000). They also found differential results in terms of work-family versus family-work spillovers. Spousal support was strongly correlated with family-work positive spillover but unrelated to work-family positive spillover. On the other hand, job pressures were significantly related to work-family negative spillover but unrelated to family-work-negative spillover. These results suggest that the type and direction of a spillover effect depends on the affective variable causing the spillover. In a longitudinal study examining the effects of role stressors and mood spillovers in employed parents, Williams, and Alliger, (1994) found that negative mood states spilled over from work to family and from family to work, while positive mood states exhibited little spillover effect. In a study examining the effects of work-family conflict on men who had wives who were homemakers versus men who had career-oriented wives (termed dual-career men), Higgins and Duxbury (1992) found a significant negative spillover between work and family domains especially for the dual-career men. Specifically, Higgins and Duxbury found significant negative correlations between quality of work life and work-family conflict, and quality of family life and work-family conflict ($r = -.53$ and $r = -.40$ respectively). Williams, Suls, Alliger, Learner, and Choi (1991) also found direct evidence for the spillover model. In an eight day study using the experience sampling

methodology, Williams et al. (1991) found that negative affect, experienced during the work day predicted end of day ratings of job satisfaction in a negative direction. They also found that negative affect from one day significantly predicted negative affect the following day. Both of these findings support the spillover effect. Other researchers have found support for the spillover model. Often times, however, this support evidenced in the correlations and path coefficients reported by many researchers often remains un-interpreted. Thus, the robust support for the spillover model often times goes unnoticed. However, research in the area of work-family conflict still shows obvious support for the dominating effects of the spillover model, especially in the area of negative spillover. Given the robustness of the support for the negative spillover aspect of the general spillover model, the current research has also taken a spillover approach. The role of spillover in the present study will be discussed later.

Causal Models of Work-Family Conflict

Over the past twenty years, researchers have made valiant attempts to understand work-family conflict by examining the antecedents and consequences of the construct. Past research examining these antecedents and consequences has purported that work-family conflict has deleterious consequences such as lowered job and life satisfaction, increased job and life stress, lowered organizational commitment, and increased intention to turnover (Allen et al., 2000; Major, et al., 2002). Using the establishment of these relationships as a foundation, researchers attempted to further explain the nature of work family conflict by suggesting several potential models (e.g., Bedeian, Burke, & Moffit, 1988; Carlson & Kacmar, 2000; Frone et al., 1992; Frone, Yardley, & Markel, 1997; Major et al., 2002; Netemeyer, Brashear-Alejandro, & Boles, 2004).

One of the earliest models proposed was by Bedeian et al. (1988; Figure 1). Their model proposed that work-related role stress and parental demands predicted work-family conflict, and that work-family conflict directly predicted three outcomes – job satisfaction, life satisfaction and martial satisfaction (Bedeian et al., 1988). The researchers also proposed that there were direct relationships between work-related role stress and job satisfaction, job role stress and life satisfaction, and parental demands and marital satisfaction. Although the results of their study suggested that the data fit their model, several of their proposed direct relationships were not found. Bedeian et al. (1988) only found direct significant relationships between work-family conflict and life satisfaction, work-family conflict and marital satisfaction, and job-related role

stress and job satisfaction. No significant paths were found for the relationship between parental demands and work-family conflict, parental demands and job satisfaction, work-family conflict and job satisfaction, role stress and life satisfaction, parental demands and life satisfaction, and parental demands and marital satisfaction. Given that this model was one of the earliest models proposed, several consequences examined in later research were not included. In a meta-analysis examining the consequences of work-family conflict, Allen et al. (2000) suggested that the consequences of work-family conflict could be organized into three major categories, work-related outcomes, non-work-related outcomes and stress-related outcomes. Consequences such as lowered job satisfaction, lowered organizational commitment and lowered job performance were all classified as work-related outcomes. Lowered life and family satisfaction were viewed as non work-related outcomes, and consequences such as burnout, work-related stress and family-related stress were classified as stress-related outcomes (Allen et al., 2000). Bedeian et al. however, only focused on work and non-work related outcomes. Stress-related outcomes were not examined, and thus in terms of being a comprehensive model examining the consequences of work-family conflict, Bedeian et al.'s model is limited. Despite these criticisms, Bedeian et al. (1988) model set the foundation from which many future models were developed.

One such model was proposed by Frone et al. (1992), who examined the antecedents and consequences of work-family conflict (See Figure 2). The hypothesized model suggested that job stressors, and job involvement predicted work-family conflict. Work-family conflict in turn predicted family distress and depression. The model also proposed that family involvement and family stressors predicted family-work conflict which in turn predicted job distress and depression. Using a sample of 631 employees to test their model, Frone et al. found a good fit between their model and their data. However, job stressors but not job involvement significantly predicted work-family conflict. Both family involvement and family stressors significantly predicted family-work conflict which in turn significantly predicted job distress and depression. No significant path coefficients were found for the relationships between work family conflict and depression, and work-family conflict and family distress. Although Frone and his colleagues found some support for their model, and despite the fact that the model seemed comprehensive in examining both antecedents and consequences of work-family conflict, the model was limited in its examination of the consequences. Specifically, Frone et al.'s study only focused on stress-related outcomes of work-family conflict thereby ignoring the other two possible types of

outcomes. Frone et al.'s model contributed greatly to our understanding of the stress-related consequences of work-family conflict, but also left room for the examination of the work and non-work related consequences of the construct.

Realizing that the original model examined by Frone et al. (1992) was incomplete, Frone et al. (1997) proceeded to revise and retest the model to address some of the problems associated with the first model (See Figure 3). Their new model included several new variables such as work and family overload, and work and family time commitments, as well a distinction between proximal (direct) and distal (indirect) antecedents. Instead of being only an outcome as it was in the first model, distress also became an antecedent. Thus, this revised model proposed that work-distress or dissatisfaction, work overload, and work time commitment all predicted work-family conflict. Work-family conflict in turn predicted family performance and family distress. The Frone et al. model also proposed that family distress or dissatisfaction, family overload and family time commitments all predicted family-work conflict which in then predicted work performance and work distress. Testing this model in a sample of working adults, Frone et al. (1997) found the model to be a good fit to the data, as they did with their first model. Their hypothesized paths produced primarily significant results. Frone et al. found that work –family conflict significantly predicted family performance operationalized as family behaviors and behavioral intentions. However, they also found that work-family conflict did not significantly predict family distress. Although this new model included work-related, non-work related, and stress related outcomes, all three outcomes were not tested in relation to the general work-family conflict construct. Instead non-work related outcomes were tested as consequences of the work-family conflict factor while work-related consequences were examined as outcomes of the family-work conflict factor. Thus, in effect Frone et al. did not examine all three types of consequences of work-family conflict as outcomes of work-family conflict itself. This methodological issue placed limitations on our abilities to interpret the consequences of work-family conflict in a holistic fashion using this model. That is, although Frone et al. examined the consequences of both work-family conflict and family-work conflict, they neglected to test the consequences of each factor in the same domain as the factor (i.e., work-family conflict predicting work-related outcomes) making the model deficient in its predictive and explanatory abilities.

Carlson and Kacmar (2000), building on the work of Frone et al. (1992; 1997) and other researchers, developed a model examining the antecedents and consequences of work-family conflict (See Figure 4). Their model purports that there are four different types of antecedents, (work and family) role ambiguity, role conflicts, time demands, and involvement. These antecedents predict conflict in the same domain. For example, work role ambiguity predicts work-family conflict while family role ambiguity predicts family-work conflict. As with both the Frone et al. models (1992, 1997), Calson and Kacmar (2000) predicted that work-family conflict would only have family related outcomes, while family-work conflict would only have work-related outcomes. Specifically, they hypothesized that work-family conflict would predict family satisfaction, and family-work conflict would predict job satisfaction. The model proposed that both job and family satisfaction would predict life satisfaction, thereby acting as a mediator between work-family conflict and life satisfaction. By administering a scale examining each of the variables of their model to a sample of 1000 government workers, the researchers found that the data fit the model well. Despite the fit however, Carlson and Kacmar found that family interference with work did not significantly predict job satisfaction. Work-family conflict significantly predicted family satisfaction. These findings highlight one of the major problems of their model. As with the Frone et al.'s (1992, 1997) models, this model proposed outcomes occurring in the opposite domain. That is, work-family conflict was hypothesized to have family related outcomes, but not work related outcomes. Similarly, family-work conflict was proposed to have work related outcomes, but not family related outcomes. Such proposals incorrectly suggest that work-family conflict does not have any work-related consequences and that family-work conflict does not have any family related consequences. Several researchers, however, have found that work-family conflict does indeed have work related consequences that are worthy of exploration (e.g. Allen et al., 2000). Secondly, while Carlson and Kacmar did examine work-related and non-work related outcomes, they did not examine stress related outcomes. Thus, although Carlson and Kacmar (2000) tested job and family satisfaction as mediators between work-family conflict and life satisfaction to examine possible proximal and distal consequences of work family conflict, their model remains limited as a model examining the consequences of work family conflict for the reasons previously stated.

All of the models discussed to this point examined both the antecedents and consequences of work-family conflict. In a study focused solely on the consequences, Netemeyer

et al. (2004) proposed a model that examined the outcomes of four different role variables, work-family conflict, family-work conflict, role conflict and role ambiguity (See Figure 5). The model proposed that work-family conflict predicted intention to turnover. Netemeyer et al. also purported that work-family conflict predicted job-stress which in turn predicted job satisfaction which affected intentions to turnover. The researchers tested their model using three different samples individually comprised of US, Romanian, and Puerto Rican nationals respectively, thereby becoming the first set of researchers to examine a model of work-family conflict cross-culturally. The results indicated a difference of fit for each of the three groups studied, but that for all three groups work-family conflict predicted job stress. The work-family conflict →job stress relationship yielded the strongest predictive results. Netemeyer et al.'s model addressed several of the criticisms of past research by exploring the consequences of work family conflict through examining different direct (proximal) and mediated (distal) relationships. Their results seem to suggest the existence of proximal and distal consequences of work-family conflict, as did Carlson and Kacmar's (2000) results. However despite Netemeyer et al.'s (2004) progress in addressing several problems associated with past models and their attempts to test their model cross-culturally, their examination was focused solely on organizational (work) related outcomes. In addition, although several potential mediated relationships were obvious in the model, a presentation of results examining such relationships was not made. In fact, there was no mention made of these mediations throughout their paper. Although Netemeyer et al. have addressed several of the problems associated with past research, their model is nonetheless has numerous limitations that have been stated above.

In summary, several models of work-family conflict have been proposed by different researchers (e.g., Carlson & Kacamr, 2000; Frone et al., 1992, Frone, Yardley & Markel, 1997; Major et al., 2002; Netemeyer et al., 2004) who have all examined the spillover of work-family conflict to different domains. However, to date, only one study has examined consequences of work-family conflict in terms work-related, non work-related and stress-related outcomes (Frone et al., 1997). While Frone et al. (1997) examined the proximal and distal predictors of work-family conflict, only Carlson and Kacmar (2000) and Netemeyer et al. (2004) have presented models that suggest that there are proximal and distal consequences of work-family conflict. However, no model to date has been focused solely on examination of the work-related, non-work related and stress-related consequences of work-family conflict in such a way as to identify

immediate proximal reactions which would in turn predict distal outcomes through mediated relationships. As a result, our understanding of the consequences of the work-family conflict construct has remained haphazard and incomplete, thereby affecting our ability to find effective strategies to reduce work-family conflict and consequently its consequences. Thus, the purpose of the present study was to test a comprehensive model of the consequences work family conflict that examines the work-related, non-work related and stress related outcomes of work family conflict in a framework that depicts the direct, proximal and mediated, distal relationships of the construct and its consequences. It must be noted that although past models have examined work-family conflict and family –work conflict as two separate variables, the present study treated work-family conflict as one overall construct. As has been previously discussed past researchers have suggested that work-family conflict and family-work conflict are two factors of one overall construct (Frone, 2003; Kelloway et al., 1999). Also, in keeping with the findings of past researchers the model proposed in this study is spillover in nature.

The Present Study

The proposed model in the present research extends past research by: (a) examining the consequences of work-family conflict in three clearly defined categories (i.e., work-related, non-work-related and stress-related outcomes), (b) examining these consequences in terms of proximal and distal outcomes, and (c) examining the mediated relationships that occur between work-family conflict, the proximal outcomes and the distal outcomes. The present study also extends research that has previously been conducted by testing the model in a sample of Jamaican high school teachers. Although cross-cultural studies have been conducted in work-family conflict, to date, no study has been conducted in the non-US commonwealth Caribbean. Thus, by building on the work of other researchers in the areas of work-family conflict, stress, and burnout, the model proposed (Figure 6) examines the consequences of work-family conflict and how each consequence may lead to one or more other consequences through various direct and mediated relationships. To provide a more detailed explanation of this model, each of the proposed relationships will be outlined and discussed in the proceeding section.

Proposed Model of Consequences of Work-Family Conflict

Work-Family Conflict and Job stress

The proposed model purports that work-family conflict has a direct positive relationship to job stress. Job stress is defined as anxiety or general nervousness associated with the job that

affects one's emotional and physical well-being (Netemeyer et al., 2004). Given this definition, both psychological and physical components of work-related stress have been explored in the literature (Allen et al, 2000). Bedeian et al. (1988) found support for the relationship between work-family conflict and job stress. They reported significant correlations of -.36 and -.45 for the relationship between work-family conflict and job stress for men and women respectively. Support for the direct relationship between work-family conflict and job stress was also found by Netemeyer et al. (2004). In study that examined the organizational outcomes of work role and family role variables, Netemeyer et al. (2004) hypothesized that work-family conflict would be directly related to job stress. After collecting data from three separate cross-cultural samples the researchers found overwhelming support that work-family conflict significantly predicted job stress across all three groups (Netemeyer et al., 2004). More specifically, Netemeyer et al. (2004) found moderate to strong positive correlations ($r = .38$ to $r = .46$) between work-family conflict and job stress among the three groups sampled. A third study conducted by Noor (2002) examined the effects of work-family conflict on feelings on well-being in a sample of employed Malaysian women. The results of her study indicated that work-family conflict significantly predicted distress, however the correlation between the two variables (though significant) was small ($r = .19$; Noor, 2002). Other researchers have also reported a significant positive relationship between work-family conflict and job-stress. In an attempt to summarize the relationship between work-family conflict and job-stress, Allen et al. (2000) conducted a meta-analysis examining the consequences of work-family conflict and concluded that work-family conflict was significantly related to job/work stress, affective professional stress, and negative feelings at work. Allen et al. (2000) reported a mean average correlation of .41 across all the studies that examined these different types of job-related stress. The studies reviewed unanimously suggested a positive relationship between work-family conflict and job-stress, regardless of how job stress is operationalized. Given these findings, the present model proposes that work-family conflict would predict job stress.

Hypothesis 1: Work-family conflict will be positively related to job-stress.

Work-Family Conflict and Life Stress

The proposed model also posits that work family conflict has a direct positive relationship to family/life stress. The term life stress refers to the "psychological response state of disturbed affect in relation to stresses in one's life" (Parasuraman, Purohit, Godshalk, &

Beutell, 1996, p. 283). Conceptual reviews have suggested that work-family conflict predicts life stress (Frone, 2003; Yang, 1998). However, the results of empirical studies examining the relationship between work-family conflict and life stress have been inconsistent. Frone et al. (1992), in testing a model of the antecedents and consequences of work family conflict, proposed that work-family conflict directly predicted family stress, operationalized as family distress. The results of their study suggested that there was no significant relationship between work-family conflict and family distress. Similarly, in a study testing a revised model of work-family conflict Frone et al. (1997) found that work-family conflict was significantly related to family distress, producing a correlation coefficient of .41, but that there was not significant causal relationships between work-family conflict and life distress. Although these studies suggested that no relationship existed between work family conflict and family/life stress, two pivotal studies suggest otherwise. In a study examining role stressors, social support and well-being in dual earner couples, Parasuraman, Greenhaus, and Granrose (1992) found that work family conflict significantly predicted life stress. Specifically, significant positive correlations of .51 and .39 were reported for men and women, respectively. In support of the work-family conflict life stress relationship, Parasuraman et al. (1996) also found a direct significant relationship between work-family conflict and life stress. In a study conducted to examine the impact of work and non-work variables on success achieved and psychological distress experienced by managers, Parasuraman et al. found a significant positive correlation of .53 between work family conflict and life stress. These contradicting results of research examining the relationship between work family conflict and life stress seem to be a function of how life stress is operationalized. When life stress was examined as a general measure of pressures from life, positive significant relationships were found. However, when it was operationalized as family distress mixed results were found. In light of these findings, the proposed model treats life stress a variable that encompasses general pressures of life, and the scales used are geared towards measuring these general pressures. The proposed model suggests that there will be a direct positive relationship between work family conflict and life stress.

Hypothesis 2: Work-family conflict will be positively related to life stress.

Job-stress

The model proposed suggests that there are four variables that are directly related to job stress: burnout, organizational commitment, job satisfaction and job performance. More

specifically, the model purports that job stress will be positively related to burnout, and negatively related to organizational commitment, job satisfaction and job performance. These direct relationships suggest that the relationship between work family conflict and each of these four variables is mediated by job-stress. Such a suggestion is radical in the area of work-family conflict research. The majority of previous researchers have suggested that work-family conflict is directly related to each of these variables. However, research in job stress also purports direct relationships to each of the four variables, and as has been previously discussed, there is a direct relationship between work family conflict and job stress. The presence of these direct relationships suggests the existence of a mediated relationship. However, to date, no researcher has tested such mediations. As such, this study initiates an examination of possible meditative role played by job stress in the relationship between work-family conflict job burnout, organizational commitment, job satisfaction and job performance. Arguments for mediation pertaining to each of the four consequences will now be discussed.

Job stress and job burnout. Burnout refers to the prolonged psychological response to chronic interpersonal and emotional stressors found on the job that is evidenced by feelings of emotional exhaustion, depersonalization and lack of accomplishment (Maslach, Schefeli & Leiter, 2001). Researchers have examined the antecedents of burnout and have found that both work-family conflict and job stress directly predict burnout (e.g. Aryee, 1993; Netemeyer at al., 1996; Russell, Altmaier & Velzen, 1987; Taris, Peeters, Le Blanc, Schreurs & Schaufeli, 2001). In study examining direct and indirect relationships between work-based role stress and its consequences, Bacharach, Bamberger and Conley (1991), argued that employees who experienced work-family conflict would also indicate high levels of job burnout. After administering scales of work-family conflict and job burnout to a sample of engineers and nurses, they found significant positive correlations between work-family conflict and job burnout. A significant correlation of .57 was found for nurses while a significant correlation of .49 was found for engineers. Similar results were also found by Netemeyer et al. (1996). In validating a new scale of work-family conflict, Netemeyer et al. (1996) found significant correlations between work-family conflict and burnout (Netemeyer et al., 1996). Correlations were reported at .59 and .47 for each of the two samples tested (Netemeyer et al., 1996). The relationship between work-family conflict and job burnout has also been examined meta-analytically by Allen et al. (2000), who found a mean weighted correlation of .42 between these two variables,

supporting the conclusions drawn by other researchers that work family conflict is significantly related to job burnout.

However, research in burnout has also consistently found that job-related stress predicts employee burnout (e.g. Aryee, 1993; Hock, 1988; Russel et al., 1987). In a conceptual review of job burnout, Maslach et al. (2001) argued that job related stress is a direct antecedent of job burnout. Empirical findings do support this assertion by Maslach et al. in a study examining the effects of job-related stress and social support on burnout in teachers, researchers found that job-related stress significantly predicted burnout (Russell, et al., 1987). Teachers who experienced higher levels of job stress reported more emotional exhaustion and depersonalization than when they were experiencing low levels of job stress (Russell et al., 1987). Hock (1988) also found that teachers who experienced high levels of stress were more likely to experience burnout, reporting that job-related stress was correlated with both psychological and physical burnout, producing correlations of .54 and .42 respectively. Job-related stress was also found to predict burnout by Taris, et al. (2001) who found that levels of job related stress predicted each of the three components of job burnout (and thus overall burnout) for a sample of Dutch teachers. In an eight-year longitudinal study examining the antecedents of job burnout in both white and blue-collar workers, Toppinen-Tanner, Kalimo, and Mutanen's (2002) results indicated that work-related stress such as time-pressure was positively related to job burnout. Lee and Ashforth (1996), in a meta-analysis summarizing the effects of the antecedents of job stress on the three components of job burnout, found corrected mean weighted correlations ranging from .20 to .50 for the relationship between job stressors such as job pressure and emotional exhaustion, depersonalization, and personal accomplishment (Lee & Ashforth, 1996). These results suggest that persons who experience high levels of stress are more likely to experience symptoms of burnout than those persons experiencing low levels of job stress.

The author's review of the literature to this point has suggested that direct relationships exist between work-family conflict and job stress, work-family conflict and job burnout and job stress and job burnout. Although a mediated relationship among these specific variables has not yet been tested, the direct relationships found, and the outcome of Netemeyer et al.'s (2004) study in which the model proposed suggested but did not discuss a meditative relationship leads the author to suggest that job stress will mediate the relationship between work-family conflict and burnout as can be seen in the proposed model.

Hypothesis 3a: Job stress will be positively related to burnout.

Hypothesis 3b: Job stress will mediate the relationship between work-family conflict and

burnout.

Job stress and organizational commitment. The proposed model posits that there is a

direct relationship between job stress and organizational commitment. Defining organizational

commitment has proved a problem for past researchers (Casper et al., 2002; Mowday, Steers &

Porter 1979). Organizational commitment was defined by Mowday et al. (1979) as the relative

strength of an individual's involvement in and identification with an organization. The term

seems to suggest that organizational commitment refers to the compulsion to remain an

employee of an organization and exert high amounts of effort on behalf of that organization,

irrespective of one's reasons for demonstrating this behavior.

In examining organizational commitment, researchers have found that both work-family

conflict and job stress are related to organizational commitment. However, the results of studies

examining the relationship between work family conflict and organizational commitment do not

always produce results to confirm the existence of this relationship. Netemeyer et al. (1996),

found a significant but weak, negative relationship ($r = -.20$) between work-family conflict and

organizational commitment. However, these results were not found by other researchers. In a bi-

cultural study of American and Chinese business students and executives, Perrewe, Ralston, and

Fernandez (1995), argued that there would be a negative relationship between work-family

conflict and organizational commitment, and that no significant differences would be found

between the two samples on organizational commitment. The results only partially supported

their hypotheses. Work-family conflict significantly predicted organizational commitment in the

Chinese sample, suggesting that the more work-family conflict Chinese employees experienced,

the less organizational commitment they exhibited (Perrewe et al., 1995). The researchers,

however, found no significant relationship between work-family conflict and organizational

commitment in their American sample, suggesting that work-family conflict did not predict

organizational commitment (Perrew et al., 1995). O'Driscoll et al. (1992), in a study examining

time and strain based work-family conflict, found no relationship between work-family conflict

and organizational commitment. Overall, the results of the studies that have examined the

relationship between work family conflict and organizational commitment have been

inconsistent. These inconsistent findings suggest the possibility of mediator in the work-family

conflict →organizational commitment relationship that has not yet been tested. The existence of a mediator would account for the equivocal results found by previous researchers. The proposed model posits that job-related stress mediates the relationship between work-family conflict and organizational commitment. In order to establish further evidence for this mediated relationship it must be established that there is a direct relationship between job-related stress and organizational commitment. Past research examining this relationship will now be discussed.

In a study examining the effects of job stress on managers and blue-collar workers Jamal (1984) tested a sample of 283 blue-collar workers and 227 managers. Results of his study indicated that job stress was significantly related to organizational commitment. In a studying examining the role of organizational commitment in the relationship between job stress and job stress-related outcomes, Leong et al. (1996) found a significant negative relationship between job-stress and organizational commitment. A third study by Babakus, Cravens, Johnston and Moncrief (1999) examined the antecedents and consequences of emotional exhaustion. The results of their study indicated that there was a significant negative correlation between job stress and organizational commitment ($r = -.36$; Babakus et al., 1999). In a fourth study Lopopolo (2002) found that stress accounted for the largest proportion of the variance among all the proposed antecedents of organizational commitment, and the correlations between job stress variables and organizational commitment ranged from $r = -.29$ to $r = -.43$. The results of all the studies discussed seem to suggest that employees who are experiencing high levels of job stress will exhibit lower levels of organizational commitment. The robustness of theses results supports the path proposed by the model that job stress mediates the relationship between work-family conflict and organizational commitment.

Hypothesis 4a: Job stress will be negatively related to organizational commitment.

Hypothesis 4b: Job stress will mediate the relationship between work-family conflict and organizational commitment.

Job stress and job satisfaction. Of all the variables examined in work-family conflict, and job stress literature, job satisfaction seems to be the most popular. Direct relationships have been found between work-family conflict and job satisfaction, and job stress and job satisfaction (e.g. Aryee, 1992; Bedeian, Burke & Moffit, 1988; Kossek & Ozeki, 1998; Netemeyer et al., 2004). Researchers have also suggested the possibility that work-family conflict and job satisfaction

relationship was mediated by job-stress (Netemeyer et al., 2004). These relationships will be examined and mediated relationship proposed.

Job satisfaction refers to the extent to which an employee experiences as state of positive affect from appraisal of his or her job (Boles, Howard & Donofrio, 2001). In a cross-cultural study examining the antecedents and outcomes of work-family conflict in a sample of working women in Singapore, Aryee (1992) found a correlation of -.31 between work-family conflict and job satisfaction (Aryee, 1992). Netemeyer et al. (1996) also found that work-family conflict was negatively related to job satisfaction reporting a correlation of -.36. In another study, Boles et al. (2001) found that work-family conflict was not only significantly and negatively related to job satisfaction in general, but also to all but one of the facets of job satisfaction such as satisfaction with supervision and promotion (Boles et al., 2001). A meta-analysis by Kossek and Ozeki (1998) also found that work-family conflict was negatively related to job satisfaction, producing a mean weighted correlation of -.36. However, other individual studies seemed to suggest that the relationship between work-family conflict and job satisfaction was not a strong or as clear-cut as assumed (e.g. Bedeian et al., 1988; Carlson & Kacmar, 2000; Lyness & Thompson, 1997). In a study examining the job related outcomes of work-family conflict in samples of American, Puerto Rican, and Romanian employees, Netemeyer et al. (2004) found mixed results for the relationship between work-family conflict and job satisfaction. In the US and Puerto Rican samples the research found low but significant relationships of -.11 and -. 17 respectively, while for the Romanian sample they found a moderate, significant relationship ($r = -.33$; Netemeyer et al., 2004). Noor (2004) examined work family conflict in Malaysian working women and found a low but significant relationship of -.18 between work-family conflict and job satisfaction. Although they did not make any direct hypotheses regarding the relationship between work-family conflict and job satisfaction, Carlson and Karmar (2000) found a small but significant relationship ($r = -.15$) between the two variables. Like Carlson and Kacmar (2000), Lyness and Thompson (1997) did not make any specific hypotheses about the relationship between work family conflict and job satisfaction. However, their results indicated a small but significant relationship between work–family conflict and job satisfaction ($r = .13$; Lyness & Thompson, 1997). Even more interesting about these findings was the fact that the correlation was not only small, it was positive which goes against the general hypothesized direction of the relationship between work-family conflict and job satisfaction. To further complicate things, Bedeian et al.

(1988) hypothesized that there would be a significant relationship between work-family conflict and job satisfaction. However the results of their study examining the outcomes of work family conflict indicated that work-family conflict and job satisfaction were not significantly related. O'Driscoll et al.'s (1992) findings supported those of Bedeian et al. (1988). In a study examining affective experiences as consequences of work-family conflict, O'Driscoll et al. (1992) found no significant relationship between work-family conflict and job satisfaction.

Thus, from a basic review of the research examining the relationship between work-family conflict and job satisfaction one might conclude that there is usually a strong direct relationship between the two variables. However a more in-depth look at the relationship between these two variables seems to suggest that research results are permeated with inconsistencies. The existence of these inconsistent findings suggest that there is possibly a third variable that is directly related to both work-family conflict and job satisfaction that acts a mediator in the relationship between these two variables. Job stress is directly related to both of these variables and past research has shown robust support for both the relationship between work-family conflict and job stress as well as the relationship between job- stress and job satisfaction. As a result, the proposed model suggests that job stress mediates the relationship between work-family conflict and job satisfaction and will account for the inconsistencies found in the work-family conflict → job satisfaction relationship. In order to establish sufficient evidence for this mediation, studies examining the direct relationship between job stress and job satisfaction, as well as studies that have examined this meditative relationship will now be discussed.

In one of the earliest studies conducted that examined the consequences of work-family conflict, Bedeian et al. (1988) hypothesized that there would be direct negative relationship between job stress and job satisfaction. More specifically they suggested that employees who experienced high levels of job stress would be less satisfied with their jobs than those employees experiencing low levels of job stress. The results of their study supported their hypothesis. There was a strong significant relationship between job-stress and job satisfaction for both male and female participants. The researchers reported correlations of -.61 and -.58 for men and women, respectively. In another study examining the effects of role related variables to organizational commitment and job satisfaction, Lopopolo (2002) found that job stress related variables were not only negatively correlated with job satisfaction, but also accounted for almost 44% of the

variance in job satisfaction. Netemeyer et al. (2004) also found that persons who experience higher levels of job stress seem to have diminished job satisfaction ratings.

The exploration of the role of job stress as mediator could help to account for the inconsistent results found when examining the direct relationships between work-family conflict and its consequences. Thus, the present study will expand on past research by examining this mediated relationship.

Hypothesis 5a: Job stress will be negatively related to job satisfaction.

Hypothesis 5b: Job stress will mediate the relationship between work-family conflict and job-satisfaction.

Job stress and job performance. Lowered job performance has also been found to be a consequence of work-family conflict and job stress. Job performance can be defined as the behaviors an employee exhibits that are in line with their job description and the requirements of the workplace, which are geared towards overall organizational success. Job performance is often times operationalized in terms of quality of work, quantity of work and/or the amount of effort exerted (e.g. Aryee, 1992; Frone et al., 1997; Jamal, 1985; Netemeyer et al., 1996). The proposed model posits that job stress mediates the relationship between work-family conflict and job performance. To support this hypothesis, the author will first establish a direct relationship between work-family conflict and job performance, and then a relationship between job stress and job performance.

Studies examining the relationship between work-family conflict and job performance have been few, and the results obtained in these studies have been inconsistent. Frone et al. (1997) found that work family conflict was negatively related to job performance as measured on a self-report performance scale, reporting a correlation of -.26. In a cross-cultural study examining the outcomes of work-family conflict on working Singaporean women, Aryee (1992) tested three types of work-family conflict to investigate if they would be negatively related to the quality of work produced. Job-parent conflict described the interrole conflict between a participant's job and the participant's role as a parent, while job-spouse conflict focused on the interrole conflict between a participant's work roles and her role as a spouse, and job-homemaker conflict was used to describe the interrole conflict between the participant's job roles and her role as a homemaker. Using a self-report measure to examine job performance, Aryee found a weak but significant negative relationship between job- parent conflict and quality of

work produced, but no significant relationships between job-spouse and job-homemaker conflict and quality of work. Netemeyer et al. (1996) also found that there was no correlation between work-family conflict and self report sales performance. These mixed results were also noted by Allen et al. (2000) in a meta-analysis which found a mean weighted correlation of -.12 between work-family conflict and job performance. Allen et al. were keen to note that the studies they examined varied in the results they found for the relationship between these two variables. These findings suggest that there may be a mediator influencing the relationship between work-family conflict and job performance that could account for such incongruent findings. The proposed model suggests that this mediator is job stress. Past research has indicated that job stress is directly related to both work-family conflict and job performance which also supports the assertion that job stress is a mediator. To establish further evidence for this mediation, past research examining the relationship between job stress and job performance will now be reviewed.

Job stress has been found to significantly predict job performance. In an early study examining the relationship between job stress and job performance, Jamal (1985) hypothesized that job stress would be negatively correlated with job performance for both blue and white-collar workers. Job performance was operationalized in terms of quantity of work, quality of work, and effort exerted. The results of this study indicated that there was a significant negative correlation between job stress and all three components of job performance for both white and blue-collar workers. Correlations for white-collar workers ranged from -.14 to -.27, while correlations for blue-collar workers were weaker ranging from -.11 to -.19. Aryee (1992) also examined the relationship between job stress and job performance. The results of his study indicated that each of three antecedents of job stress (role conflict, role ambiguity, role involvement) were significantly related to quality of work produced (Aryee, 1992). In a recent study, Viator (2001) examined the relationship between job stress and job performance. His study testing female managers found that job stress significantly predicted job performance. These results are consistent with the findings of Jamal (1985) and Aryee (1992) discussed above. There seems to be consistent and robust support for the relationship between job stress and job-performance and work-family conflict and job stress, thereby supporting the hypothesis that job stress mediates the relationship between work family conflict and job performance.

Hypothesis 6a: Job stress will be negatively related to job performance.

Hypothesis 6b: Job stress will mediate the relationship between work-family conflict and job performance.

Life Stress and Life Satisfaction. The proposed model purports that the relationship between work-family conflict and life satisfaction is mediated by life stress. Direct relationships between work-family conflict and life stress have already been discussed. The author will now discuss the relationship between work-family conflict and life satisfaction, and life stress and life satisfaction.

Results of past empirical research examining the relationship between work-family conflict and life satisfaction have been mixed. Netemeyer et al. (1996) found that work-family conflict was negatively related to life satisfaction, with correlations ranging from -.33 to -.53 in three separate samples. In a meta-analysis, Kossek and Ozeki (1998) reported an average weighted mean correlation of -.31. Allen et al. (2000) also found a significant, negative average correlation between work-family conflict and life satisfaction (-.28). However, several studies have found results that oppose these findings. Aryee (1992) found that job-spouse conflict, and job-parent conflict were negatively related to life satisfaction with correlations of -.33 and -.28 respectively. However, Ayree also found a significant, positive correlation of .15 between job-homemaker conflict and life satisfaction. Bedeian et al. (1988) found significant positive correlations between work family conflict and life satisfaction. They reported a positive correlation of .46 for men and .42 for women. Other researchers have found no significant relationships between work-family conflict and life satisfaction (e.g. Beutell & Greenhaus, 1982; Cooke & Rousseau, 1983). Thus, some researchers suggest that work-family conflict decreases life satisfaction while others suggest that it increases life satisfaction. These inconsistent findings seem to suggest that there may be a third variable that is directly related to both work-family conflict and life satisfaction that mediates the relationship between these two variables. The existence of a mediator would help to account for the inconsistent findings in testing the direct relationship between these two variables. The proposed model suggests that this variable is life stress. This mediated relationship has not yet been explored in the literature and so this study initiates the examination of the indirect relationship between work-family conflict and life satisfaction.

In order to establish further evidence for the proposed mediation, research supporting the relationship between life stress and life satisfaction will now be reviewed. Non-job stressors

were found to have strong negative relationships to non-work satisfaction and general life satisfaction in police officers (Hart, 1999). In their study examining interrole conflict, and on and off-job outcomes, O'Driscoll et al. (1992) found that psychological strain was significantly related to off-job satisfaction reporting a correlation of -.45. Lu (1995), in a study examining well-being in a sample of Chinese participants, found that life stress was negatively correlated to life satisfaction. Chang and Sanna (2003) also found that life stress was negatively related to life satisfaction reporting a significant correlation of -.27. Thus, the results of past empirical research support the assertion that there is direct link between life stress and life satisfaction, thereby providing further evidence for a mediated relationship. Hence, the proposed model asserts that stress will mediate the relationship between work-family conflict and life satisfaction.

Hypothesis 7a: Life stress will be negatively related to life satisfaction.

Hypothesis 7b: Life stress will mediate the relationship between work-family conflict and life satisfaction.

Intentions to Turnover

The most distal of the consequences of work-family conflict, as purported by the proposed model is intention to turnover. Given that it is the final outcome in a chain of other outcomes, the model proposes that the relationship between job stress and intention to turnover is mediated by burnout, organizational commitment and job satisfaction. Each of these three variables has been found to have consistent and robust relationships to intention to turnover. However before discussing each of these three variables of antecedents of intention to turnover the author will first discuss the relationship between work-family conflict and intention to leave, and the relationship between job stress and intention to turnover.

Studies examining the relationship between work-family conflict and intention to turnover have produced mixed results. While some researchers have found significant relationships between work-family conflict and intentions to turnover (e.g Boyar, Maertz, Pearson & Keough, 2003; Netemeyer et al, 1996; Netemeyer et al., 2004), others have found negative relationships or no relationship between the two variables (e.g. Kossek and Ozeki, 1999). In their study, Netemeyer et al. (1996) suggested that work-family conflict would be positively related to intentions to turnover. In the three samples tested the researchers found significant correlations of .14, .25, and .28 between work-family conflict and intentions to turnover (Netemeyer et al., 1996). Lyness and Thompson (1997) also found that work-family

conflict was inversely related to intent to remain in an organization. They reported a high negative correlation of -.43 (Lyness & Thompson, 1997). In another study, Boyar et al. explored the relationship between work-family conflict and intentions to turnover. The results of their study indicated that work-family conflict and intentions to turnover were positively related with a correlation of .25 and (Boyar et al., 2003). Netemeyer et al. in their tri-cultural study proposed that work-family conflict would predict intentions to turnover. The results of their study produced positive correlations of .37, .35, and .45 (Netemeyer et al., 2004). However, although these results seem to suggest that persons who suffer from high levels of work-family conflict are more likely to have the urge to leave an organization, other studies suggest quite the opposite. Aryee (1992) found that the job-spouse dimension of work-family conflict was positively related to intention to turnover ($r = .25$) while the job–parent and job-homemaker dimensions of work-family conflict were negatively related to intention to turnover ($r = -.25$ and $r = -.10$). While no explanation was provided for these specific results, Aryee suggested that, "even when [a Singaporean woman] is in paid employment, housework and childcare remains [her] main responsibilities" (p. 834) indicating that the culture promotes a segmentary approach to the effects of work on specific aspects of a woman's life. In a meta-analysis, Kossek and Ozeki (1999) found no significant relationship between work-family conflict and intentions to turnover. Allen et al. (2000) noted that although the majority of the results seem to suggest a positive relationship between work-family conflict and intentions to turnover, more research needs to be done to examine the nature of this relationship. The proposed model suggests that intention to turnover is a distal (indirect) consequence of work-family conflict because of its strong relationships to other variables that are also the results of mediated relationships.

Job stress serves as a mediator between work-family conflict and several other variables. It is also directly related to intentions to quit an organization. In a longitudinal study examining an integrative model of burnout, Lee and Ashforth (1993) found that job stress is significantly related to intentions to leave. Their study produced a correlation of .31 (Lee & Ashforth, 1993). Sager (1994), in a study examining the link between job related stress and intentions to turnover in sales managers, found a significant relationship of .45 between the two variables, suggesting that employees who experienced higher levels of stress tended to experience more of an urge to leave the organization than employees who were experiencing low levels of stress. Jamal (1999), in a cross-cultural study examining the effects of stress in teachers, found that job stress

predicted intentions to leave an organization with a correlation of .27. Although there is strong support for the relationship between job stress and intentions to turnover, stronger relationships have been found between intentions to turnover and burnout, organizational commitment and job satisfaction which suggests that the relationship between job stress and intentions to turnover may be mediated by these variables. Direct relationships between job stress and each of these variables has already been explored. The discussion of the relationship between each of these variables and intention to turnover will follow. However, it is important to note that this model suggests that low job satisfaction, low organizational commitment, and high levels of burnout predict intention to turnover. In other words, intention to turnover may not be an immediate consequence of work-family conflict, but a more distant one that is evidenced when burnout is high, job satisfaction is low and organizational commitment is low.

Burnout and intention to turnover. One of the primary consequences associated with burnout is intention to turnover. Researchers have found that that high levels of burnout predict intention to quit one's job (Lee & Ashforth, 1993; 1996). In a longitudinal study examining the effects of stress on intention to turnover, Lee and Ashforth (1993) suggested that two of the dimensions of burnout, emotional exhaustion and depersonalization would be related to intentions to leave. Results of their study produced significant correlations ranging from .18 to .38 suggesting that persons who suffered high symptoms of burnout were more likely to form intentions to leave an organization than those who experienced low levels of burnout. In a cross-cultural study examining Canadian and Pakistani teachers, Jamal (1999) found that each of the three dimensions of burnout (as well as overall burnout) were significantly related to intention to turnover. The correlations found ranged from .22 to. 43. In a meta-analysis, researchers also found that each of the three dimensions of burnout was correlated with intention to turnover (Lee & Ashforth, 1999). Results of their meta-analysis produced corrected weighted mean correlations of .16 for personal accomplishments, .31 for depersonalization, and .44 for emotional exhaustion. Therefore, keeping in line with the results of previous research, the proposed model, posits that burnout will mediate the relationship between job –related stress and intentions to turnover.

Hypothesis 8a: Burnout will be positively related to intention to turnover

Hypothesis 8b: Burnout will mediate the relationship between job stress and intentions to turnover.

Organizational commitment and intention to turnover. Lowered organizational commitment has also been found to be an antecedent to intention to turnover. Several researchers have found consistent and robust support for the relationship between organizational commitment and intentions to turnover (e.g., Babakus, 1999; Low, Cravens, Grant & Moncrief, 2001; Sager, 1994). Sager (1994) in examining the effects of job stress and intentions leave, found a strong negative relationship between organizational commitment and intentions to turnover (-.71) in managers. Good, Page, and Young (1996) in testing samples of entry-level and upper-level managers found that organizational commitment significantly predicted intention to turnover for both sets of managers. In a study examining the antecedents and consequences of burnout, Babakus et al. (1999) also found that organizational commitment was inversely related to intention to turnover; persons who had low levels of organizational commitment were more likely to indicate wanting to leave an organization than those persons who had high levels of organizational commitment. Their study produced a significant correlation of -.41 between organizational commitment and intentions to turnover (Babakus et al., 1999). Low et al. (2001) in a cross-cultural study testing sales persons in Australia, also found that organizational commitment predicted intentions to turnover. The researchers found a significant correlation of -.42 between organizational commitment and intention to turnover. Meta-analytic findings have also supported this relationship. Tett and Meyer (1993) found that organizational commitment contributed directly to intention to turnover reporting a mean weighted correlation of -.54. In more recent meta-analysis Meyer, Stanley, Herscovitch and Topolnytsky (2002) found that organizational commitment predicted withdrawal behaviors including intentions to turnover with mean weighted correlations ranging -.18 to -.56 for the relationship between organizational commitment and withdrawal behaviors. Therefore, the proposed model suggests that organizational commitment will serve as a mediator in the job-stress intention to turnover relationship.

Hypothesis 9a: Organizational commitment will be negatively related to intention to
    turnover.

Hypothesis 9b: Organizational commitment will mediate the relationship between job
    stress and intention to turnover.

Job satisfaction and intention to turnover. As with organizational commitment, low job satisfaction has also predicted intention to turnover. Empirical support has been found to support

these claims. In study examining the effects of job related stress on intentions to leave, Sager (1994) found a significant negative relationship (-.69) between job satisfaction and intentions to leave, suggesting that persons who were less satisfied with their jobs had stronger intentions to leave the organization than those who are more satisfied with their jobs. In another study examining the consequences of work-family conflict, role stress, and emotional exhaustion, researchers found that job satisfaction was related to an employee's intention to turnover (Boles, Johnston and Hair, 1997). Boles et al. (1997) reported a significant correlation of -.60 between job satisfaction and intent to leave the organization. Babakus et al. (1999) also found that job satisfaction was related to intention to turnover producing a significant correlation of -.45. In a cross-cultural study, Low et al. (2001) found that job satisfaction was significantly related to intention to turnover producing a correlation of -.42. Netemeyer et al. (2004) found that job satisfaction was related to intentions to turnover in samples of American, Puerto Rican and Romanian participants. The researchers reported high significant correlations ranging from -.56 to -.70. Meta-analytic results have also suggested that job satisfaction is directly related to intentions to turnover (e.g., Eby et al., 1999; Tett & Meyer, 1993). Tett and Meyer (1993) found a significant mean weighted correlations of -.58 for the relationship between job satisfaction and intention to quit. Given the robustness of these findings the proposed model posits that job satisfaction will mediate the relationship between job stress and to intentions to turnover.

     Hypothesis 10a: Job satisfaction will be negatively related to intention to turnover.

     Hypothesis 10b: Job stress will mediate the relationship between job stress and intentions to turnover.

Method

Participants

251 Jamaican high school teachers from eight high schools within a 25-mile radius were recruited to participate in this study through brief presentations during monthly staff meetings a few months before actual data collection, and individual letters soliciting participation. Each participant was given the opportunity to participate in a lottery drawing for a DVD player for participating in this study. The principals of each of the eight schools were asked to complete job performance rating scales for each teacher from his or her school who participates. Each principal received an individual token for his or her assistance.

Of the 251 participants in this study, only results of 181 teachers were used in data analyses. Data from 70 teachers were excluded from data analyses as a result of missing data. Specifically, 20 participants were excluded because job performance scales were not available for them, 10 were excluded because they had not completed one or more entire scales in their packets, and the remaining 40 were excluded because they had missed one more items on scales throughout the packet. In the interest of acquiring accurate and generalizable results, and given that the remaining sample size was sufficient to complete our analyses the decision was made not to impute these data. T-tests for independent samples were conducted to test for any significant differences between the group of teachers whose data were included and those whose data were not included on all the variables in this study. No significant differences were found between the two groups on any of the nine variables examined in this study.

The average age for the 181 participants included in this study was 35.14 years (*SD* = 10.85). Sixty-eight percent were female. In terms of marital status, 53% were married or living with a significant other, 40% were single, and 7% were either separated, divorced or widowed. It must be noted that most of the participants who reported themselves as being single had at least one child or lived with family members, and that a t-test for independent groups revealed no significant differences between single participants and married participants on the work-family conflict measure. Of the participants included in data analyses, 60% had an average of 2 children living with them, and 26% were primarily responsible for the care of an average of two elders. Twenty-four percent had a teacher's diploma, 3% had an associate's degree, 58% had a bachelor's degree or were enrolled in a bachelor's degree program, and 13% had a master's degree or were enrolled in a masters program. The respondents had worked that their current

school for an average of 7.0 years (*SD* = 6.97) and taught an average of 7.09 individual classes (*SD* = 3.95) containing an average of 34 students (*SD* = 8.38).

Design and Procedure.

Participants received individual packets including their informed consent form, demographic questionnaire, work-family conflict scale, job stress scale, burnout scale, organizational commitment scale, job satisfaction scale, intention to turn over scale, life stress scale, life satisfaction scale, and implicit leadership scale. Scales were presented in the order they appear in the model. Participants received their packets at the beginning of the school day, and were asked to fill them out during their spare time (in between classes or during lunch) and return them in a sealed envelope to the researcher by the end of the day. Verbal reminders were given to participants approximately one quarter of the way through the workday and again during the lunch hour. Once the all the packets were returned at the end of the day, a random drawing was conducted and a DVD player given to one participant.

Principals received a packet asking them to complete an individual rating scale of job performance for each of the teachers on their staff. This was done in order in ensure participants privacy. Only the ratings of those teachers from each school who had completed were used. In order to ensure each participant's privacy, the names of each teacher written using a pencil so that it could be easily erased as soon as that rating scale is added to that participant's packet. Informed consent forms were also removed from the packets when the job performance scales were added to ensure that no sheets bearing the participant's name were present in the envelopes at the time of data analysis.

Materials

As with past research in work family conflict, data was collected primarily using self-report survey instruments. There have been criticisms of the use of self-report measures in psychology having to do with not acquiring accurate or truthful information from the participants. However, given the problems associated with the halo effect, liking, misinterpretation of cues, and incomplete information it is difficult to ask peers, spouses and supervisors to complete scales related to intrinsic feelings of a participant. Thus, it seemed more feasible to use self-report measures that have established validity. These measures are used under the assumption that an individual who was experiencing these stressors is better able to recognize these symptoms in a holistic manner than supervisors, peers or spouses who were only privy to some of the symptoms.

One scale however was filled out by the participants' supervisor because of the more objective nature of assessing this construct: Job performance was assessed by the principal of each participant's school.

It has also been argued that the use of self report methods of data collection tends to produce common method variance. To deal with this problem, Lindell and Whitney (2001) suggested that an additional self report measure using the same type of scales as the variables tested in this study be included. They argued that this additional scale should assess a construct that is unrelated to the focal constructs in any particular study. Any correlation between this unrelated constructed and the variables being tested would be evidence of common method variance and should partialed out during data analyses to control for common method variance. The present study included such a scale in order to control for the common method variance problem. This scale and all the other scales included in this study will now be discussed.

Demographic Information. The demographic information was collected to assist in determining if the sample is an adequate representation of the population of Jamaican high school teachers. Respondents were asked their age, sex, martial status, number of children living with them, number of elders who were dependents, education level, tenure at their current school, number of classes taught and average number of students per class (Appendix A).

Work-Family Conflict. Work family conflict was measured by a scale consisting of eight items developed by Kopelman, Greenhaus and Connolly (1983), and four additional items (Appendix B). The revised scale consisted of 12 items with a sample item being "My work takes up time I'd like to spend with my family". Response to each item was made on a five point Likert scale with 1(strongly disagree) and 5 (strongly agree). The reliability (coefficient alpha) of the work-family conflict scale in this study was .91. Several participants missed the eighth item on the work-family conflict scale, "My job makes it difficult to be the kind of spouse or parent I would like to be". Statistical output showed that the removal of this item would not affect the reliability. As such, item 8 was removed and the remaining 11 items were used to compute the work-family conflict composite mean used in the remainder of this paper.

Job stress. The Stress in General (SIG) Scale developed by Stanton, Balzer, Smith, Parra, & Ironson (2001) was used to measure the general amount of pressure experienced in the work place (Appendix C). The scale consisted of 15 items to be answered using a Yes/No/? response format. Stanton et al. (2001) suggested that the SIG be scored in standard JDI format (reverse

coding where necessary), with a response of "No" receiving a score of 0, a response of "Yes" receiving a score of 3, and "?" receiving a score of 1.5. It must be noted that some controversy has surrounded the practice of assigning a score of 1.5 to a response of "?". However, Stanton et al. found that the coherent variance among the items was maximized when a score of 1.5 was given to a response of "?" as compared to any other score on the 0 to 3 scale. As a result the current study also allotted a score of 1.5 to a response of "?". Participants were asked to indicate whether each specific word or phrase such as "Worse than most" or "Pleasant" related to their experiences with their current job. Coefficient alpha for this scale has been reported at .81 and above by Stanton et al. (2001). In the current study the reliability of this measure was consistent with past research, with an alpha of .83.

Life Stress. The life stress scale was intended to measure the amount of disturbed affect experienced in response to stressors in one's life in general. The ten-item life stress scale developed by Parasuraman et al. (1992) was used to evaluate extent to which participants experience feelings of frustration, fatigue, pressure and being worn out (Appendix D). Participants responded to statements such as "How often do you feel that things in your life make you upset" using a 5-point likert scale where 1 = almost never and 5 = Almost all the time. The mean of the 10 items constituted and measure of life stress. Reliability for the life stress measure was .90 for the current study.

Burnout. The 22-item Maslach Burnout Inventory for Educators was used to test the extent to which respondents are experiencing burnout as indicated by emotional exhaustion, depersonalization, and feelings of lack of personal accomplishment (Maslach & Jackson, 1981; Appendix E). Questions were answered using a 7-point Likert scale ranging from 0 (never) to 6 (everyday) to assess the frequency of the feelings (Maslach & Jackson, 1981). A sample item is: "I feel emotionally drained from my work". Reliability for the total scale was .84 for this study.

Organizational Commitment. The 15-item Organizational Commitment Questionnaire (OCQ) developed by Mowday, Steers, Porter (1979) was used to measure how dedicated an employee is to staying with the organization (Appendix F). A sample item reads "For me this is the best of all possible organizations for which to work". Respondents were expected to respond using a seven point Likert scale ranging from 1(strongly agree) to 7 (strongly disagree). Reliability for the OCQ has been recorded as satisfactory with alpha levels of .80 and above (Mowday et al., 1979). In the current study, the reliability of this measure was .82.

Job Satisfaction. Job satisfaction refers to the extent to which one is happy or satisfied with his or her job. The 18-item Job in General (JIG) scale developed by Ironson, Smith, Brannick, Gibson, and Paul (1989) was used to measure job satisfaction (Appendix G). Respondents were asked how well each item (a word or phrase) described their job. Participants were required to answer using a Yes/ No/? answer format. This scale was scored on a 0 to 3 scale where response of "No" received a score of 0, a response of "Yes" received a score of 3 and "?" received score of 1, reverse coding where necessary (Ironson et al., 1989). An illustrative item is: "Worse than most". Coefficient alpha for this measure in the present study was .89.

Life Satisfaction. Life satisfaction scale was used to measure how satisfying individuals perceive their lives to be. The 16 item Scale of Life Satisfaction (SOLS) was used to measure life satisfaction (Appendix H). Participants were asked to respond to a series of adjectives and phrases such as "I am content" in terms of their life in general. Each item was responded to using a Yes/No/? format where a response of "Yes" received a score of 3 , a response of "No" received a score of 0 and "?" received a score of 1 (reverse coded where necessary). Coefficient alpha for the SOLS was .88 for this study.

Intention to Turnover. Intentions to turnover or leave the organization was measured with the four-item measure used by Kelloway et al. (1999; Appendix I). Participants responded to items such as "I am thinking about leaving this organization" using a 5- point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Coefficient alpha for this measure was .76 in the present study.

Job Performance. Job performance was measured using a 10-item scale tailored to Jamaican high school teachers (Appendix J). The scale was focused on three primary aspects of job performance as a way to examine overall job performance. These aspects were teaching-related, organizational-related, and punctuality and attendance. Teaching related aspects of the scale comprised of items assessing teachers' classroom performance and preparation of lessons. Organizational-related aspects were focused on how involved a teacher was in terms of extra-role behaviors. This aspect is closely linked to organizational citizenship behaviors. Finally, punctuality and attendance was examined. Principals were asked to respond to questions such as "Teacher makes attempts to communicate material to students in interesting ways" using a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Coefficient alpha for this measure was .82 in the present study. For purposes of estimating reliability in the structure

equation modeling analyses that follow, however, reliability was estimated at .60 to represent typical levels of interrater reliability reported in past research (e.g., Hurtz & Donovan, 2000).

Common Method Variance. As stated earlier, an additional scale was added to the response packet in order to control for common method variance. A 21-item Implicit leadership scale developed by Epitropaki (2004) consisting of 13 items geared towards assessing prototypical leadership traits and 8 items geared towards assessing anti-prototypical traits was used (Appendix K). Participants were asked to rate series of adjectives such as "Helpful" in terms of how well the adjective fit their perceptions of a leader using a five point Likert scale where 1 was "does not fit my image at all" and 5 was "fits my image extremely well". The reliability for the prototypical items was .86, and the reliability for the anti-prototypical items was .70 for this study. Since the reliability for the prototypical traits was higher only the average of these traits were used in data analysis.

Results

Demographic Analyses

Before the results of the variables in this study are presented, the correlations between the study variables and the demographic variables were examined. There were few significant relationships between variables in this study and the demographic variables. The significant relationships that were found were for the most part small and in the direction that would have been expected. A summary of these values is presented in Table 1.

Age and tenure were the two demographic variables that produced the greatest number of significant correlations. While neither of these demographic variables were significantly related to work-family conflict, work stress and job performance, they were both significantly related to life stress, burnout, organizational commitment, job satisfaction, life satisfaction and intention to quit. Most of these correlations were weak to at best moderate. As such we cannot be hasty to draw concrete conclusions about the relationship between these variables. The relationship between age and life stress was -.16, and the relationship between tenure and life stress was -.20, suggesting that as participants aged, and the longer they were employed at particular school, the less life stress they experienced. These correlations however were weak. Burnout and age produced a significant correlation of $r = -.27$ while tenure and burnout produced a significant correlation of $r = -.20$. Although these correlations were bigger than the correlations reported for the relationship between these variables and age, they are still fairly weak. They do seem to suggest that older participants and persons who were in the employ of their current school for a long time tended to experience marginally less burnout. Older participants, and persons who had long tenures at their current school also seemed to be more satisfied with the organization. The correlations between age and organizational commitment, and tenure and organizational commitment were both positive and significant ($r = .26$ and $r = .19$). However, as noted earlier, these correlations were weak. Age and job satisfaction were also positively related ($r = .22$). Tenure and job satisfaction produced a significant correlation of .18. These weak but significant correlations suggest that as participants age and as they work in an organization longer they are also more satisfied with their jobs. Life satisfaction was also significantly related to these demographic variables ($r = .23$ for age and $r = .30$ for tenure). Significant relationships were also found for the intention to quit and age, and intention to quit and tenure. The results suggested the

older the participants got and the longer they worked for a particular school the less they experienced intention to quit ($r = -.35$- age and $r = -.25$- tenure).

Work family conflict and work stress were significantly related to sex ($r = .17$ and $r = .25$). Though they were weak, these correlations are to be expected as women tend to experience more work stress and more work-family conflict than men do. Sex was not significantly correlated to life stress, burnout, organizational commitment, job satisfaction, life satisfaction, job performance and intention to quit.

Like sex, martial status was only significantly related to two of the variables examined in this study, life satisfaction and intention to quit ($r = .21$ and $r = -.27$). Marital status was not significantly related to work-family conflict, work-stress, life stress, burnout, organizational commitment, job satisfaction, and job performance.

Workload, measured by number of classes taught, was significantly related to work-family conflict $r = .21$. This correlation though weak, is expected as greater work load has been found to be related to work family conflict. Work load however was not significantly related to any of the other variables examined in this study.

Number of children living at home and the average number of student in each class were not related to any of the variables tested in this study. Given that the overall findings for the relationships between the demographic variables and the study variables were not significant or came in the form of weak correlations, there is no need to control for these variables and no further discussion of these demographic variables will be presented. Instead, attention will now be shifted to the results of the bivariate correlations of the study variables. The means, standard deviations, and intercorrelations of the study variables are presented in Table 2.

Common Method Variance Analyses

Prior to conducting the focal analyses, the correlations between the prototypical leadership traits and each of the nine variables in this study were examined to ascertain whether common method variance was a concern. With the exception of life satisfaction, which was significantly correlated to prototypic implicit leadership ($r = .23$), these correlations were all small and non-significant. For example, the correlation between work-family conflict and prototypical implicit leadership traits was $r = .08$, and the correlation between life stress and prototypic implicit leadership traits was $r = .01$. Given this lack of a relationship between the prototypical leadership traits and the other self-report measures obtained from respondents, it

was concluded that common method variance was not a concern, and therefore there was no need to partial out any common method effects from subsequent analyses.

Correlations within the Proposed Model

The correlation coefficients found were, for the most part, significant, and in the direction of the original hypotheses (Table 2). A significant correlation ($r = .60$) between work-family conflict and work stress was found thereby supporting Hypothesis 1. The correlation for the relationship between work-family conflict and life stress was also positive and significant ($r = .38$), which is also in the hypothesized direction thereby supporting Hypothesis 2. Work stress was also significantly related to burnout ($r = .59$), organizational commitment ($r = -.43$), and job satisfaction ($r = -.49$). These findings provided support for Hypotheses 3a, 4a and 5a. However, no support was found for Hypothesis 6a as no relationship was found between work stress and job performance ($r = .00$). Significant correlations were found for all the other hypothesized relationships. A high negative correlation was found for the relationship between life stress and life satisfaction ($r = -.55$), thereby supporting Hypothesis 7a. Strong relationships were also found in the hypothesized direction between burnout, organizational commitment, and job satisfaction and intention to quit ($r = .42, -.56, -.51$, respectively). These correlations supported Hypotheses 8a, 9a and 10a respectively.

It must be noted that the direct relationships between work-family conflict and the distal variables in the model (excluding job performance) though significant and in the expected directions, were smaller than the results found for the hypothesized indirect relationships. These findings seem to suggest the potential for the data to fit the model well. However, the test of goodness of fit revealed that the proposed model is not a good fit for the data. These results will now be presented

Test of Proposed Model

To evaluate the proposed theoretical model, LISREL 8 (Jöreskog & Sörborm, 1993) was used to calculate all parameter estimates based on the correlations and standard deviations generated by all study variables. To accomplish this, a model was constructed in which each latent variable was represented by a single indicator, and all parameter estimates were corrected for measurement error utilizing the obtained reliability estimates and observed variances for all variables. More specifically, the path from each latent variable to its single indicator was fixed at a value equal to the square root of the reliability, while the error variance estimates were fixed to

equal one minus the reliability estimate of each variable (Bollen, 1989; Hayduk, 1987). To evaluate the fit of the proposed model, six indices of overall model fit (chi square, GFI, AGFI, CFI, RMSEA, and standardized RMR) were examined. With respect to these indices, the presence of a non-significant chi-square, GFI, AGFI, and CFI values above .90, and SRMR values below .08 are generally thought to be indicative of acceptable model fit (Jöreskog & Sörbom, 1993).

Table 3 summarizes the goodness of fit indices for the proposed model, and for the five post hoc models that will be discussed later. As can be seen in Table 3, the large and highly significant chi-square value for the proposed model reveals a poor fit to the data , χ^2 (26, $N = 181$) = 248.46, $p < .01$. Examination of the other fit indices similarly revealed a poor model fit. Both the Root Mean Square Error of Approximation (RMSEA) and the SRMR were higher than the .08 benchmark (RMSEA = .22, SRMR = .17) suggested by McDonald and Ho (1999). In addition, the Goodness of Fit Index (GFI) and the Adjusted Goodness of Fit Index (AGFI) both fell below the .90 benchmark (GFI = .77, AGFI = .59) suggested by Bagozzi and Yi (1988). However since it has been suggested that GFI and AGFI may suffer from inconsistencies related to sample characteristics (Bollen, 1989), the Comparative Fit Index (CFI) was examined. The CFI value was also below the .90 benchmark (CFI = .65) needed to indicate good fit (Bentler, 1990). Thus, both the significant chi-square value and the other goodness of fit indices support the conclusion that this data collected in the present study does not fit the proposed model. Given the lack of support for this model, the standardized path coefficients are not reported.

In light of the overall poor fit of the originally proposed model, along with the correlational support discussed in the previous section, we concluded that there was sufficient justification for further exploration of potential relationships among these variables in a series of exploratory, post-hoc models. These post hoc analyses will now be discussed and the results of these analyses (in terms of goodness of fit indices) can be found in Table 3.

Before the discussion of these post hoc models it must be noted that the modification indices produced by LISREL suggested that several paths needed to be freed in order to get a better fit. Given the chaotic state of these indices, the decision was made to choose the modifications that were most relevant and justified. Thus, instead of haphazardly freeing all the paths suggested in the modification indices, a more systematic approach which took into account the modification indices, correlations among variables, and past research was taken.

Supplemental Analyses

Model 2. Although an overview of the correlation matrix suggested that the relationships found in this study were in the direction of the proposed model, it also highlighted some unhypothesized findings. In particular the correlation matrix indicated that there were strong negative relationships between burnout and organizational commitment, and job satisfaction ($r =$ -.61 and $r =$-.54, respectively). Both of these correlations were stronger than the correlations between these variables and job stress, suggesting that our original model may have been incorrectly specified. In other words, it appeared that burnout may actually mediate the relationship between work- stress and organizational commitment and job satisfaction. This assertion was also supported by the modification indices which suggested that chi square would be substantially lowered (by 41.76 and 23. 45) if paths predicting organizational commitment and job satisfaction from burnout were included.

A brief overview of past literature examining the relationship between burnout and these variables suggests that this may indeed be the case. Low et al. (2001) found that burnout was related to job satisfaction, reporting a significant correlation of -.54 between the two variables. Similar findings were reported by Iverson, Olekalns and Erwin (1998) who found that all three factors of burnout significantly related to job satisfaction producing correlations of -.31, -.33 and .60 for emotional exhaustion, depersonalization and personal accomplishment respectively. In terms of the relationship between burnout and organizational commitment, researchers found that burnout significantly predicted organizational commitment. Leiter (1991) hypothesized that burnout would mediate the relationship between job stress and organizational commitment. The results his study supported this hypothesis. Leiter found significant correlations between emotional exhaustion, depersonalization and personal accomplishment and organizational commitment ($r =$ -.46, $r =$ -.29, $r =$ .28 respectively). Lee and Ashforth (1993) reported significant correlations for the relationship between burnout and professional commitment for each of the factors of burnout ($r =$ .40 for emotional exhaustion, $r =$ - .33 for depersonalization and $r =$ .26 for personal accomplishment). Given these findings the author attempted to revise the model making burnout a mediator between job stress and organizational commitment and job satisfaction (Figure 7).

LISREL 8 was once again used to test the model for goodness of fit. The results indicated that this revision improved overall model fit, but the model still did not display acceptable levels

of fit according to current standards. The chi-square value was substantially lower than the value found for the model originally proposed in this study, but was still high and significant, χ^2 (25, N = 181) = 163.80, $p < .01$. Results of the goodness of fit indices also suggested that these results were closer to a fit than the original model. RMSEA, though still greater than the benchmarked .08 (McDonald and Ho, 1990), had dropped to.17. Standardized RMR also was still above the benchmarked accepted value, although it too had dropped (SRMR = .14). Both the GFI had CFI moved substantially closer to acceptable fit (GFI = .83, CFI = .77*)* but still did not exceed the .90 level recommended as indicative of good fit. In addition, the AGFI for this model (.71) was still substantially below the benchmark for good fit. Once again, since this model did not reach acceptable levels of fit, path coefficients are not reported. However, given that this modification to the proposed model brought us closer to a model that fit, the author decided to continue to make theoretically-based well thought out modifications to this model in conjunction with suggestions from the modification indices produced.

Model 3. Although job performance was neither significantly correlated to job stress or work satisfaction, past research seems to suggest that job performance is not only predicted by work-stress as originally proposed, but that it is also predicted by job satisfaction. A reasonable amount of controversy exists in the literature with respects to the job satisfaction $\rightarrow$ job performance relationship in terms of the causal attributes and the direction of the relationship between the two variables (Judge, Bono, Thoresen & Patton, 2002). Despite the controversy researchers have found that job satisfaction significantly predicts job performance (e.g. Petit, Garis & Naught, 1997; Schleicher, Watt & Greguras, 2004). For example, Shore and Martin (1989) found that job satisfaction added incremental validity to the prediction of job performance. Based upon these findings, a third model (Figure 8) was constructed which proposed that there are direct relationships between job stress and job performance as well as job satisfaction and job performance. Specifically, this model suggests that the former predicts the latter. The results for this model were similar to the results found for Model 2. The chi-square statistic had become smaller but it was still quite high and significant, χ^2 (26, N = 181) = 121.64, $p < .01$. The results for the goodness of fit indices were also similar thereby suggesting that Model 3 was not a good fit but was a better fit than the model originally proposed. RMSEA and standardized RMR were both still higher than the proposed .08 benchmark (RMSEA = .14 and SRMR = .14). The GFI value still hovered very close to the .90 benchmark (GFI = .87), as did the CFI value (.84), but

still remained below the .90 level. The AGFI remained the same as it was for Model 2 (AGFI = .78). As before, given that these results indicate that the model was not a good fit standardized coefficients have not been reported. Although the addition of this new path between job satisfaction and job performance only minimally influenced the chi-square value and the goodness of fit indices, when combined with the proceeding Model 4, this addition greatly improved model fit.

Model 4. As it was suggested in the introduction of this study, the model originally proposed was a spillover-based model. Although it was initially proposed that work-family conflict "spilled over" into life and family domains via work and life stress, a complete work-family spillover was not proposed. That is, paths between work-related endogenous variables in the model predicting nonwork-related endogenous variables were not proposed. In fact the correlation matrix indicated that job stress was significantly related to life stress ($r = .47$), and life satisfaction ($r = -.36$) and that job satisfaction was significantly related to life satisfaction, ($r = .50$). Empirical results also seem to support this complete work-life spillover concept. Bedeian et al. (1988) found that that job satisfaction significantly predicted life satisfaction. Hart (1999) also found that job satisfaction predicted life satisfaction reporting significant correlations ranging from .33 to .49 for the relationship between job satisfaction and life satisfaction. In their study examining a model of the antecedents and consequences of work family conflict Carlson and Kacmar (2000) found that job satisfaction was significantly related to life satisfaction ($r = .27$). In terms of the job stress→ life satisfaction relationship, very little research has been conducted in this area. In fact a literature search of causal models examining these variables did not reveal any model that predicted life satisfaction from job stress. However the correlation between the two variables found in this study, and those found by Bedeian (1988) and Lee and Ashforth (1993) suggest that this relationship may be worth examining. Bedeian et al. (1988) found significant negative relationships between job stress and life satisfaction for both men and women reporting ($r = -.41$) for men and ($r = -.44$) for women. Lee and Ashforth (1993) also found a negative correlation between the two variables ($r = -.27$). Given these findings, and consistent with the complete spillover model, an exploratory path between job stress and job satisfaction was examined. As with the job stress→ life satisfaction relationship, limited research has been conducted that examine the job stress → life stress relationship. However unlike the former, researchers have found some support for paths between job stress and life stress.

DiMatteo, Shugars, and Hays (1993) found a significant correlation ($r = .57$) between occupational based stress and life stress. Given these findings, and given that the model originally proposed was a spillover model, the third post hoc model (Figure 9) proposed an expansion of this spillover. Specifically, Model 4 proposed that work-stress predicts life stress and life satisfaction and that work-satisfaction predicts life satisfaction. The modification indices from Model 3 did offer some support for the addition of these paths. The indices suggest that adding the path between job satisfaction and life satisfaction would reduce chi square by the highest amount 31.06. The addition of the other two paths, job stress→ life stress and job stress→ life satisfaction would also reduce chi square but not to as great an extent as job satisfaction→ life satisfaction. However given that this post hoc model is focused on spillover and the empirical data supports these findings it was decided that these paths should be included nonetheless.

The results of model fit indices and chi-square suggested that this model was the best of all four models examined to this point (See Table 2). However, although the chi-square value was the lowest of all the models examined to this point, χ^2 (24, $N = 181$) = 79.89, $p < .01$, it was still significant, and some of the goodness of fit indices (RMSEA and AGFI) still did not meet the suggested benchmarks, although they were considerably closer to this benchmark than they were in the models previously examined (RMSEA = .12 and AGFI = .83). However, GFI, standardized RMR, and CFI all met their benchmarks (GFI = .91, SRMR = .07, CFI = .92). These findings suggested this model was a better fit than the models previously examined. However, they also suggested that there was the need for more modifications to the models to get a universally high level of fit.

Model 5. An examination modification indices indicated that the addition of a path between job satisfaction to organizational commitment would lower chi square by a substantial amount. Such a path had also been suggested in previous modification indices. The correlation matrix indicated that there was strong positive correlation between job satisfaction and organizational commitment ($r = .71$). This correlation is reasonably larger than the job stress →organizational commitment relationship proposed in the original model. The modification indices and correlational findings suggest that there is a possibility that one of these variables predicts the other. A review of the research examining the relationship between job satisfaction and organizational commitment seems to suggest that job satisfaction predicts organizational

commitment (e.g. Acorn, Ratner & Crawford, 1997; Gurney, Mueller, Price, 1997; Low at al., 2001; Maier & Brunstein, 2001). Maier and Brunstein (2001) in a longitudinal study, found significant relationships between job satisfaction and organizational commitment that range from .31 to .53. In two studies examining the relationship between job satisfaction and organizational commitment in a decentralized environment, Acorn et al. (1997) and Gurney et al. (1997) found that job satisfaction significantly predicted organizational commitment in nurses. Results from a study conducted by Low et al. (2001) suggested that job satisfaction significantly related to organizational commitment with a correlation of .72. Some researchers have argued that the relationship between job satisfaction and organizational commitment is non-recursive (e.g., Mathieu, 1991). However studies that have examined these non-recursive relationships have found stronger predicting power in the direction of job satisfaction to organizational commitment. In a study examining the antecedents of organizational commitment and job satisfaction, Mathieu (1991) found a significant correlation of .77 between the two variables. Given these findings, and given the results of other studies examining the antecedents of organizational commitment, and the consistent suggestion of the modification indices, Model 5 was created to test if adding a direct path predicting organizational commitment from job satisfaction would result in an improved model fit.

The chi-square value and goodness of fit statistics (Table 3) supported this notion. Chi-square was substantially smaller than it was for all the previous models, χ^2 (22, $N = 181$) = 46.62, $p < .01$, although it was still significant. The goodness of fit indices all surpassed the minimum benchmarks suggested by McDonald and Ho (1999), Bentler (1990), and Bollen (1989). RMSEA was right at the maximum benchmark set by McDonald and Ho (1999), RMSEA = .08. Standardized RMR was considerably lower than the .08 benchmark suggested (SRMR = .06). The goodness of fit indices also reported that GFI was above the minimum .90 benchmark suggested by Bentler (1990), GFI = .95, while AGFI was just below the minimum benchmark (.89). Like GFI, CFI was above the minimum benchmark (CFI = .96). Although this level of fit is not ideal, it nonetheless represents a substantial improvement upon the originally proposed model.

A summary of the standardized coefficients found for this model will now be presented. (Also see Figure 11). Several of the paths examined in this model tested hypothesized paths from the original model proposed in this study, while the remainder of the paths were exploratory.

Although this model was tested post hoc, the results do provide support for many of the original hypotheses. A high standardized path coefficient of .64 was reported for the effect of work-family conflict on job stress. This was in the direction proposed in the original model, and provides support for Hypothesis 1 which stated that work-family conflict would predict job stress. Hypothesis 2 was also supported. This hypothesis purported that work-family conflict would predict life stress. A small direct standardized coefficient of .20 was found in support of Hypothesis 2. Given that the hypotheses that predicted direct effects of work-family conflict on job-stress and life stress were both substantiated, support found for hypotheses predicting indirect relationships will now be presented. The effect of job stress on burnout was high and in the direction originally hypothesized, thereby producing a standardized path coefficient of .69. Since work-family conflict significantly predicted job stress, and the job-stress→ burnout causal relationship was substantiated, Hypothesis 3, which states that job stress mediates the relationship between work-family conflict and burnout was supported. Although the job stress→ job performance relationship was proposed in both the initial model tested and the final post hoc model the results found for this path was not significant. As a result of this lack of significance, no support was provided for Hypothesis 6b which purported that job-stress will mediate the relationship between work-family conflict and job performance. However, a significant path coefficient of -.59 was found for the relationship between life stress and life satisfaction. Given the already significant path found between work-family conflict and life-stress, Hypothesis 7b which states that life stress would mediate the relationship between work family conflict and life satisfaction was supported. Only, partial support was found for hypotheses 9b. Hypothesis 9b predicted that the relationship between work-stress and intention to quit would be mediated by organizational commitment. However Model 5 tested the meditative role played by organizational commitment in the burnout→intention to quit relationship. A significant standardized path coefficient of -.65 between organizational commitment and intentions to quit was found. However, given that job stress was no longer tested as having a direct relationship on organizational commitment Hypothesis 9b was only partially supported. No support was found for Hypothesis 10b which predicted that job satisfaction would mediate the job stress → intention to quit relationship. A non significant path coefficient of -.05 was found for the predictive effect of job satisfaction on intention to quit.

Outside of the results supporting paths originally hypothesized, results of the exploratory paths examined in the model also provided coefficients that were for the most part in the direction purported by the model. The standardized coefficient for the effect of job stress on life stress was .41 which was in the direction expected. Surprisingly, job stress had a small effect positive on life satisfaction with a standardized coefficient of .16. This finding was not in the direction that was expected. Burnout produced high standardized coefficients for its effect on organizational commitment and job satisfaction that were both in the direction suggested. The direct effect of burnout on organizational commitment was -.45, while the direct effect of burnout on job satisfaction was -.66. Job satisfaction had high standardized coefficient of .42 for its effects on life satisfaction. This finding was also in the direction proposed in the model. Finally, job satisfaction had effects in the direction expected on organizational commitment and job performance with standardized coefficients of .49 and .26, respectively.

In summary, model 5 produced a relatively good fit to the data as indicated by the various fit indices. This post hoc model also produced several relationships that were consistent with many of the hypotheses proposed in the originally model, as well support for the additional exploratory paths proposed by the new model. However, it is important to note that all of these analyses were post-hoc in nature, and therefore one must be careful in making conclusions based on such post hoc modifications to the original model.

Composite Model. A reexamination of the correlation matrix suggested that burnout, organizational commitment and job satisfaction were all closely related. The relationship between organizational commitment and burnout was -.61. The relationship between job satisfaction and burnout was -.54, and the relationship between job satisfaction and organizational commitment was -.71. Such high correlations are generally indicative of colinearity, that is scales that are testing the same construct. This suggests that these three scales could possibly be combined into one composite measure of job attitudes. No prior research has been conducted using such a composite measure. However, this exploratory analysis was conducted with the idea that a composite model would be more closely linked to the original hypothesized model, and thus would make a good model fit more easy to interpret in light of the original hypotheses than the path-riddled Model 5.

To produce this attitude composite, results from the items in the Maslach Burnout Inventory were recoded to be indicative of less burnout so as to have positive correlations among

all three variables. The means of each of the individual scales (i.e. the recoded MBI, OCQ and JIG) were summed and the composite mean of the three scales was computed. These three variables, burnout, organizational commitment and job satisfaction were then replaced by the overall job attitude composite in the original model (See Figure 12). Specifically, the composite model proposed that work-family conflict predicted work stress which in turn predicted overall job attitudes which predicted intention to quit. The predicted relationships from job stress to job performance, and life stress and life satisfaction remained unchanged. A new correlation matrix using the composite was produced. These correlations along with recalculated standard deviations were entered into LISREL using the same procedure outlined above.

The chi-square value and goodness of fit statistics (Table 3) suggested that this model did not fit the data well. Chi-square was reported as, χ^2 (15, $N = 181$) = 61.51, $p < .01$. The goodness of fit indices for the most part did not meet the minimum/ maximum benchmarks suggested by McDonald and Ho (1999), Bentler (1990), and Bollen (1989). The RMSEA was above the maximum .08 benchmark set by McDonald and Ho (1999), RMSEA = .13, as was the standardized RMR (SRMR = .12). The goodness of fit indices also reported that AGFI was below the minimum .90 benchmark suggested by Bentler (1990), AGFI = .84, while GFI surprisingly was just above the minimum benchmark (.91). Like AGFI, CFI was below the minimum benchmark (CFI = .86). Thus, although GFI was above the minimum benchmark all other indicators did not meet their benchmarks and thus it must be concluded that the model did not fit the data well. It must be noted that although the composite model was not a good fit, the results suggests that it substantially outperformed the model originally hypothesized. As such the composite model seems to provide a better explanation of the relationships between the variables examined in this study than the original model. It must also be noted that the modification indices suggested that in order to improve the fit of the data to the model, paths from the composite to life satisfaction, and life stress needed to be included. The addition of these paths would produce a model very similar to that of Model 5 above. Thus, it was concluded that Model 5 was the best post hoc model and no further post hoc analyses were conducted.

Discussion

The results produced in the initial phase of this study were mixed. The lack of fit of the proposed model indicated that the data did not fit the model, and suggested no initial support for the causal relationships proposed. However, the correlation coefficients suggested that the relationships between the proposed variables were significant and in the direction proposed for the most part, thereby providing support for nine of 10 hypotheses regarding these relationships. Also, exploratory post hoc model 5 examined provided support for some of the paths originally hypothesized in the initial model as well some unhypothesized findings. A discussion of these results will now be presented.

Discussion of Correlational Results

The significant correlation between work-family conflict and job-stress supported past findings by researchers such as Boles et al. (1997) and Noor (2002) who also found significant positive relationships between work-family conflict and job-stress. Support for Frone et al. (1997) and Parsuraman et al. (1992; 1996) was indicated by the significant positive relationship between work-family conflict and life stress. The significant positive correlation found between job-stress and burnout provided support Ayree (1993), Netemeyer et al. (1996), Taris et al. (2001), among others. The findings of O'Driscoll et al. (1992) and Lopopolo (2002) were supported by the significant negative relationship found between job-stress and organizational commitment in this study. The significant negative relationship between job- stress and job satisfaction found by Boles et al. (2001) was supported by the negative relationship between the two variables found in the present study. However, the results found by Ayree (1992) and Viator (2001) regarding the relationship between work stress and job performance were not supported. Instead, these results supported the findings by Netemeyer et al. who also found no significant relationship between job stress and job performance. The significant negative relationship found between life stress and life satisfaction support the findings presented by Lu (1995) and Sanna and Chang (2003). The correlations regarding variables that were hypothesized to be related to intention to quit also supported past research in this area. Lee and Ashforth's (1993:1996) results suggesting that burnout was positively related to intention to quit were consistent with the results obtained in the present study. The significant negative relationship found between organizational commitment and intention to quit supported previous findings by Good et al. (1996), Sager (1994) and Low et al. (2001). Finally, the results of the present study supported findings by Eby et al. (1999) and

Tett and Meyer (1993) by reporting a significant negative correlation between job satisfaction and intention to quit.

Thus, for the most part the correlational results found in the present study add to the generally high level of support for most of these relationships found in the literature. These correlations also provide some support for the negative spillover model. Support for the spillover effect was evident in the relationship between work-family conflict and job stress and life stress. High levels of work-family conflict was positively related to both job stress and life stress which suggests that increased inter-role conflict was related to increased feelings of pressure from each domain there thereby supporting the negative spillover hypothesis. Negative spillover was also evident in the significant positive relationships between job stress and burnout and burnout and intentions to quit found in the present study. Although the results presented here do support the spillover model further causal results need to be examined in order to further substantiate evidence of the spillover effect.

Before this causal model is examined, however, the lack of a significant relationship found between job stress and job performance must be addressed. An overview of the ratings given by principals on the rating scales revealed very little variability in the ratings. In fact, the mode score given by principals was four (4) which stood for "agree" on the 5-point likert scale. As a result, not only was there a lack of variability in the job performance scores, these scores were also skewed substantially to the higher end of the scale. Because of this, no significant relationships were found between job performance and most of the variables tested in this model (see Table 1). The significant relationship that was found was small ($r = .17$) for the relationship between job performance and organizational commitment. Although problems with the job performance ratings led to no meaningful findings, one should not allow this insignificant data to overshadow the robust support, and spillover suggestions made salient by the other correlational findings.

Discussion of Post Hoc Results

Although the model which produced the best fit was an extensive modification of the model originally hypothesized, it is important that discussion of these results be presented so as to draw the best possible conclusions from the data. It must be noted that any conclusions drawn or inferences made based on the results of post hoc model 5 must interpreted with caution owing to the model's exploratory nature. The results found both reinforced the argument that the

correlations among the variables suggested that predictive relationships do exists within the original model, and substantiates the findings of Carlson and Kacmar (2000) and Low et al. (2001), particularly in the areas of work-family spillover, and antecedents and consequences of burnout and job satisfaction. These findings will now be explored, first by examining the results that fit the original model which will then be followed by a discussion of the results for the exploratory analyses attempted.

Although Model 5 represents a substantial modification of the model originally proposed, many of the relationships were still organized in a way that allowed for the testing of several of the originally hypothesized relationships. The results of the structural equation analyses indicated that work-family conflict significantly predicted both job and life stress. The significant work-family conflict → job stress relationship supports findings by Netemeyer et al. (2004) and Boles et al. (1997) who also found direct a predictive relationship between work-family conflict and job stress. Parsuraman et al. (1992; 1996) suggested that work–family conflict predicted life stress, while Frone et al. (1992; 1997) found no significant prediction between the two variables. The results of the post hoc model tested provided support for the Parasurman et al. findings. This pair of findings seems to support the original hypotheses that work-family conflict directly predicted job and life stress and was indirectly related to all of the other variables in the model. Support for such indirect relationships in terms of hypotheses from the original model can be found in the significant job stress→ burnout predictive relationship found. These results provide support for the results found by Hock (1988) and Taris et al. (2001) who also found that job stress predicted burnout. The results also support the assertion that job stress mediates the relationship between work-family conflict and burnout. Post hoc analyses also supported the seventh hypothesis which stated that life stress would mediate the relationship between work family conflict and life satisfaction. Support for the life stress→ life satisfaction relationship was also found by Netemeyer et al, (1996) and Allen et al. (2000). Given the insertion of burnout as a mediator, only the organizational commitment → intention to quit relationship could be considered to be related to the original model's Hypothesis 9b. Thus, although empirical findings suggests that organizational commitment mediates the relationship between burnout and intention to quit, only the predictive relationship between organizational commitment and intention to quit is supported by the revised model. Thus the significant results found seem to suggest that this model begins and ends in the ways originally hypothesized, but incorporates

more indirect relationships than originally proposed. Before a discussion of the supplemental findings, it must be noted that Hypothesis 6b that suggested that job stress would significantly predict job performance was tested and not substantiated. As mentioned previously, there was a lack of variability in the principals' ratings which could have accounted for these findings. Finally, no significant relationship was found between job satisfaction and intention to quit proposed in this model. Given that (as will be discussed later) the post hoc analyses suggested that job satisfaction predicts organizational commitment, it is probable that organizational commitment may serve a mediator in the job satisfaction → intention to quit relationship. Such a relationship would help to account for the lack of significant findings.

Outside of the paths that were originally hypothesized several exploratory paths were examined, as high correlations between the relevant variables and empirical data supporting the relationships between these variables were found. Once again, given that these were generated by post hoc model modification, any conclusions drawn should be viewed with caution.

In support of the spillover model, the exploratory analyses found a significant path coefficient between job stress and life stress. These findings lend support to the job stress → life stress relationship found by DiMatteo et al. (1993). Although several researchers such as Bedeian et al. (1988), and Lee and Ashforth (1993) have explored the job stress→ life satisfaction relationship and have found that increased job stress is related to decreased life satisfaction, the results found in the present study did not substantiate these findings. Instead of the spillover effect originally expected, the results seems suggest a compensatory relationship between the two variables. That is increased job stress predicted increased life satisfaction. However, one must not hastily jump to the conclusion that this relationship is compensatory, as though significant, the standardized coefficient was small (.16), and the t-value was just over the 2.0 value needed to accomplish significance (2.11).

Burnout significantly predicted organizational commitment and job satisfaction. These findings support those of prior researchers such as Iverson et al. (1998), Low et al. (2001) and Lee and Ashforth (1993) which suggest a spillover effect from burnout to these other outcome variables. The significant predictive relationship between job satisfaction and life satisfaction found not only provides support for the spillover model, but also supports the findings by Hart (1999) and Carlson and Karmar (2000). Finally the significant predictive relationship found

between job satisfaction and organizational commitment is consistent with past researchers such as Acorn et al. (1997), Gurney et al. (1997) and Maier & Brunstein, (2001).

Overall, the paths added in the post hoc model (with the exception of the path between job stress and life satisfaction) seemed to provide support for work-family spillover effects. These can be demonstrated by the job satisfaction → life satisfaction relationship found, and the job stress → life stress relationship found. These findings also seem to support the role of burnout as a mediator between job stress and organizational commitment and job satisfaction. Overall, the addition of these exploratory paths seem to increase the complexity of the models, which suggests that the consequences of work-family conflict seem to occur through a series of complex, direct and indirect relationships. However given this model was achieved post hoc, these findings and interpretations must be viewed with caution.

General Discussion

This study is the first study to attempt to produce a comprehensive model of the consequences of work-family conflict. As a result, although Model 5 was the best fit among the models tested, one must not be too hasty to discard of the original model proposed. Both the correlation coefficients and the modified model support the overarching hypothesis that work-family conflict has work, nonwork and stress-related consequences that interrelate through a series of complex direct and indirect relationships among the variables. Thus, before we throw the baby out with the bath water, we will explore some possible reasons why the model originally proposed did not fit the data, though all indications are that the relationships needed for good fit are present.

This study was conducted using a sample of Jamaican high school teachers. As result, cultural effects may be to blame for the outcome of this study. In fact, the post hoc analyses seem to support the possibility of cultural effects on the results found, as for Jamaican teachers there is very little separation between work and home life. They interact regularly with coworkers, students and parents of students both in and outside of the work environment. The schools sampled in this study were located small towns in which it was not uncommon for teachers to interact with the same students and coworkers both at school and in activities outside of schools such as volunteer fundraisers and church activities. In fact, several teachers who participated in this study shared personal stories and frustrations regarding the difficulty with separating their home-lives from their work lives with the author. Statistically, the presence of evidence for

overall spillover in the model of best fit seems to support this argument. Several modifications were made to the model originally proposed to achieve this fit, many of which included the addition of work-family spillover paths. For example, a path predicting life satisfaction from job satisfaction was added, as well as a path predicting life stress from job stress. Thus, it is plausible that the results found in this study were perhaps due to the participants inability to separate their work lives from their family lives, rather than being due to the deficiencies of the originally proposed model. It must be noted that the above presented argument is not an attempt to suggest that the original model would only work for non-Jamaicans. Instead, it is meant to highlight the unique situation of Jamaican teachers in terms of their inability to separate their work and family domains. The results of the present study seem to suggest that the addition of work-family spillover paths made it easier to see the extreme effects of work-family conflict in these teachers. It must also be noted that this plight experienced by Jamaican teachers could also be a factor of the occupation and not necessarily a cultural bias. Teachers by profession often find it difficult to separate their work lives from their home lives and, as such are prone to spillovers from work to home and thus are prone to work family conflict. Unfortunately this study did not include a second non-Jamaican sample of teachers to provide a comparison. However this occupational characteristic should still be born in mind as we seek to understand the results found.

Outside of the participant-based explanation for these findings, one can also make the argument that the results found could have been an outcome of the research design. Data were collected from participants in one sitting. It is possible that the model originally proposed would produce fit if the data were collected as part of a longitudinal study. It is also possible that the consequences of work family conflict do not occur all at once but cumulate over a period of time, and that one consequence leads to another not only in theory but after prolonged exposure to the cause of this consequence. The possibility exists that more exposure to the work-family conflict may result in an even more complex network of consequences such as the one found in post hoc model 5. The model of best fit seems to suggest that a positive feedback loop-type hypothesis is plausible. This magnifying loop simply suggests that as work-family conflict increases the consequences get more severe over time producing a domino-type effect. The model originally proposed consisted of four levels of variables. That is work-family conflict (level one) led to job and life stress (level two) which in turn predicted burnout, organizational commitment and satisfaction, (level three) and then the fourth level was represented by intention to turnover.

Modifications led to a fifth level being added as burnout has become the mediator between job stress (level 2) and organizational commitment and job satisfaction (level 4), thereby increasing the number of mediated relationships present in the model. This argument would suggest that as time progresses, work-family conflict has more complicated and indirect consequences which may only be observed through a longitudinal study. Such a study could provide support for both the model initially proposed and the model found post hoc. As such one can only speculate based on the present findings that this is the case. Further research needs to been conducted in order to substantiate this argument.

Study Limitations

The arguments produced to explain why the results of this study did not support the hypotheses proposed highlight several limitations of this study. The first limitation is that this research was conducted using a sample consisting solely of Jamaican teachers. As a result any conclusions made may not generalizable to Jamaican employees in general or to employees in other cultural settings, especially in light of the inability of these workers to clearly separate their work from their family lives mentioned previously. This suggests that the results of this study could have been different had other Jamaican employees whose occupation did not limit their ability to separate work from home been sampled. Secondly, data from a sample of non Jamaican teachers were not collected thereby limiting the author's ability to make generalized statements about teaching as a profession in general or about cultural differences that exist between Jamaican teachers and teachers form other countries. A third limitation of this study was that it was not longitudinal, which hinders the ability to truly understand the consequences of work-family conflict as they occur over time, and to design and test a suitable model which depicts these consequences. Finally, given the size of the sample used, it was not possible to include all the possible work, non-work and stress related consequences of work-family conflict in this study. As a result, only the most popular and well-researched consequences were examined. Consequences such as absenteeism, marital satisfaction, and general psychological strain were omitted. Although compared to the outcomes examined in this study, absenteeism, marital satisfaction and general psychological strain may be considered "minor" outcomes, the possibility that these variables could have meaningful effects should not be ignored. The exclusion of these variables may potentially limit the researcher's ability to make complete inferences about the consequences of work-family conflict.

Recommendations for Future Research

In light of these limitations, the author suggests that this study be replicated using multiple samples cross culturally, and that longitudinal study be conducted. The author also suggests that both the model that was originally hypothesized and the modified model be tested side by side in a cross-cultural, longitudinal study to determine which model truly has the best fit. Once a basic model of the work, non work and stress-related consequences of work-family conflict has been established, the author suggests that future studies work to systematically include other consequences such as absenteeism and marital satisfaction that were left out of this study. Finally, the author suggests that more work-family conflict research be conducted in the non-US commonwealth Caribbean to help us gain a better understanding of the construct cross culturally.

Study Implications

Given the problems associated with this study, few sound theoretical and applied implications can be made. However, the results of the present study reinforce the complexities involved in studying work-family conflict. These findings indicate that the consequences of work-family conflict occur in a complex network of direct and indirect relationships. In order to fully understand these relationships, researchers must continue to test causal models until the most generalizable model is found. The need for a generalizable model of work –family conflict is evident given the increases in diversity found in the work force today. The results of this study also highlight that the role of time has been ignored and/or underestimated in work-family conflict research. To truly comprehend the consequences of work-family conflict, not only do we have to examine and test theoretical relationships between variables, we also need to pay close attention to the effects of time on the consequences of work-family conflict. The results of the present study seem to suggest that over time, the consequences of work-family conflict occur in a series of increasingly complex relationships. As result it is important to understand the role played by time in the development of each complexity in order to best design strategies to deal with these consequences and/or prevent these consequences.

The findings of this study also suggest one major implication in terms of application of findings. Given that the consequences of work-family conflict occur in a complex framework that entails work, non-work and stress related outcomes, attempts to eradicate or prevent these consequences will have to come from the combined efforts of all parties involved. That is, in

order to effectively deal with the consequences of work-family conflict, the employee, his/ her family and the employer must all take steps to prevent work-family conflict and its consequences in order for the best solution to be found. Employers can make attempts to set the work environment up in such a way as to reduce work-related consequences, while the employee and his/ her family can take steps to address the nonwork and stress related consequences. Collectively, they can control/ subdue the consequences of work family conflict. It must be noted that while the ideal solution would be to prevent work-family conflict from occurring altogether, the domains of work and family are both so demanding that successfully achieving equilibrium between the two may be difficult. As such a more practical solution would be to try to control the consequences of work-family conflict.

Finally, these results suggest that given the complex framework of direct and indirect relationships that make up both the proposed model and the post hoc model of work family conflict, attempts to control or prevent the consequences should be made at a point early in the model (e.g., trying to eliminate job stress so as to prevent the negative outcomes of burnout and intention to quit that occur if the earlier consequence is not controlled). Early intervention could be the key dealing with these consequences. Instead of allowing the consequences to develop to the stage that they become overwhelming early invention may assist suffers of work-family conflict to function more effectively.

Conclusion

The purpose of the present study was to test a comprehensive model of work family conflict. The results of this study were not as expected, and seem to indicate that there is still a substantial amount of work that needs to be done in order for us to truly understand the consequences of work-family conflict. Although the major contribution of this study was not a robust comprehensive framework as hypothesized, the present study has drawn attention to several problems that need to be addressed in work-family conflict research before we can truly gain an understanding of the construct and its consequences. The consequences of work-family conflict are far-reaching and deleterious. As such, it is imperative that we take steps to understand them in order to prevent and or deal with them. The present study has initiated this movement by making the first attempt to explain these consequences in comprehensive fashion. It is predicted that this study will be the first of many such studies geared toward understanding the work-family conflict problem in terms of work, non-work and stress related outcomes.

Hopefully, through the use of systematic research we will soon be able to develop extensive plans of action for effectively dealing with work-family conflict and its consequences that will be flexible enough to deal with changing demographics of the work force.

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Footnotes

[1]From "A general measure of job stress: The Stress In General scale" by, J. M. Stanton, W. K. Balzer, P. C. Smith, L.F. Parra, and G. Ironson, 2001, *Educational and Psychological Measurement, 61,* p. 866. Copyright 1995 by Parra and Smith. First half of scale reprinted with permission. For complete versions of this scale please contact the. JDI Office, Bowling Green State University, Department of Psychology, Bowling Green, OH 43403. Phone: (419) 372-8247. Fax: (419) 372-6013.

[2]From "Construction of a "Job in General" scale: A comparison of global, composite, and specific measures." by G. Ironson,, P.C. Smith, M.T. Brannick, W.M. Gibson, and K.B. Paul, 1989, *Journal of Applied Psychology, 74,* p.193. Copyright 1982, 1985, by Bowling Green State University. First half of scale reprinted with permission. For complete versions of this scale please contact the. JDI Office, Bowling Green State University, Department of Psychology, Bowling Green, OH 43403. Phone: (419) 372-8247. Fax: (419) 372-6013.

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Table 1

Bivariate correlations of demographic and study variables

Variable	Age	Sex	Martial	Children	Tenure	Class	Students
Work-Family Conflict	-.03	.17*	.09	.04	-.10	.21**	.11
Job Stress	-.12	.25**	.02	.03	-.07	.08	.04
Life Stress	-.16*	.03	-.06	.06	-.20*	.10	.09
Burnout	-.27**	.11	-.03	-.09	-.20*	.08	.04
Organizational Commitment	.26**	-.12	.09	.15	.19*	-.08	.01
Job Satisfaction	.22	-.08	.13	.12	.18*	-.04	.05
Job Performance	-.03	.08	-.05	-.09	.08	-.14	.04
Life Satisfaction	.23**	.01	.21**	.05	.30*	-.13	.02
Intention to Quit	-.35**	.11	-.27**	-.12	-.25**	.16	-.09

Note. Marital = marital status; Children = number of children living with participants; Tenure = number of years the participant has worked

at the current school; Class = average number of classes taught; Students = average number of students taught per class.

N = 181 for all variables

**p≤ .01   *p≤.05

Table 2

Means, standard deviations and correlations for study variables

Variable	Mean	SD	1	2	3	4	5	6	7	8	9
1. Work-family Conflict	3.39	.85									
2. Job stress	28.63	9.58	.60**								
3. Life Stress	2.75	.66	.38**	.47*							
4. Burnout	2.17	.74	.47**	.59**	.50**						
5. Organizational Commitment	4.96	.98	-.25**	-.43**	-.27**	-.61**					
6. Job Satisfaction	39.41	11.54	-.28**	-.49**	-.25**	-.54**	.71**				
7. Job Performance	-.03	.96	-.04	.00	-.09	-.10	.17*	.15			
8. Life Satisfaction	37.26	10.61	-.28**	-.36**	-.55**	-.47**	.37**	.50**	.19**		
9. Intention to Quit	2.87	1.17	.22*	.37**	.23**	.42**	-.56**	-.51**	-.16*	-.38**	
10. Prototypical Implicit Leadership	4.52	.45	.08	.00	.01	-.08	.11	.11	.04	.23**	.03

Note. N= 181 for all variables

**$p \leq$ .01.

*$p \leq$ .05

Table 3

Goodness- of- Fit Summary

Model	df	χ^2	p	RMSEA	SRMR	GFI	AGFI	CFI
Proposed	26	239.20	<.01	.22	.17	.77	.60	.79
Model 2	27	125.50	<.01	.14	.14	.87	.78	.89
Model 3	26	122.50	<.01	.15	.14	.87	.78	.89
Model 4	24	85.19	<.01	.12	.07	.91	.82	.94
Model 5	22	49.41	<.01	.08	.06	.94	.88	.97
Composite	15	60.17	<.01	.13	.12	.91	.84	.86

Note. N = 181. RMSEA = root mean square error of approximation. SRMR = standardized root mean square. GFI = goodness of fit index. AGFI = adjusted goodness of fit index. CFI = comparative fit index.

Figure Caption

Figure 1. Bedeian, Burke, and Moffett's (1988) model of the antecedents and consequences of work-family conflict.

Figure 2. Frone, Russell, and Cooper's (1992) model of the antecedents and consequences of work-family conflict.

Figure 3. Frone, Yardley, and Markel's (1997) model of the antecedents and consequences of work-family conflict.

Figure 4. Carslon and Kacmar's (2000) model of the antecedents and consequences of work-family conflict.

Figure 5. Netemeyer, Brashear-Alejandro, and Boles' (2004) model of the outcomes of different role variables.

Figure 6. Present study's proposed model of the consequences of work-family conflict.

Figure 7. Post hoc Model 2 including exploratory paths from burnout to organizational commitment and job satisfaction.

Figure 8. Post hoc Model 3 including exploratory the path from job satisfaction to job performance.

Figure 9. Post hoc Model 4 including exploratory paths from job satisfaction to life satisfaction and job stress to life stress.

Figure 10. Post hoc Model 5 including the exploratory path from job satisfaction to organizational commitment.

Figure 11. Completely standardized path loadings for post hoc Model 5.

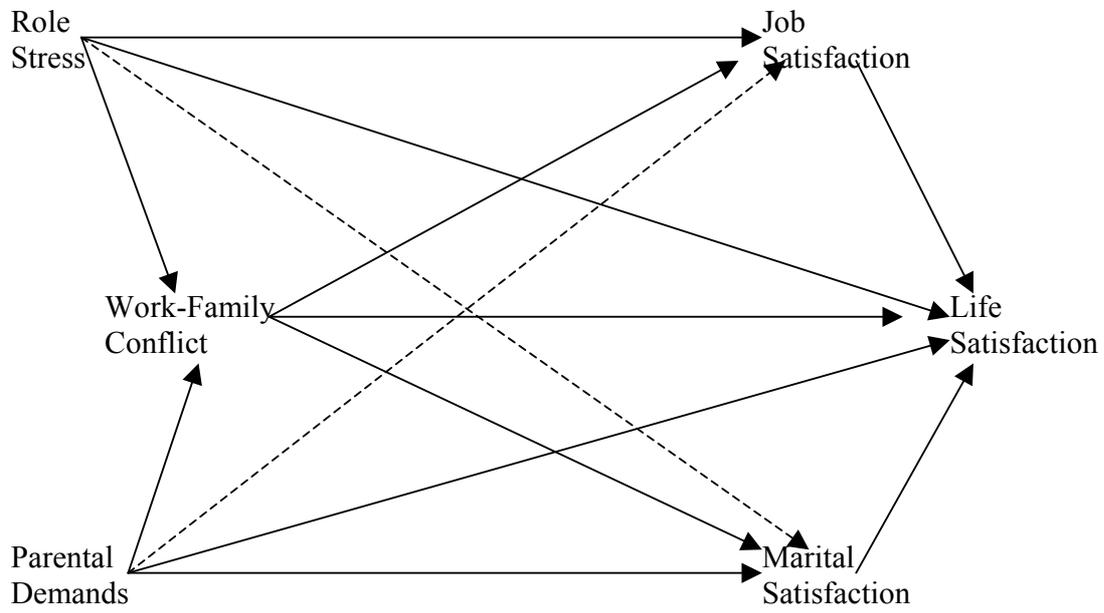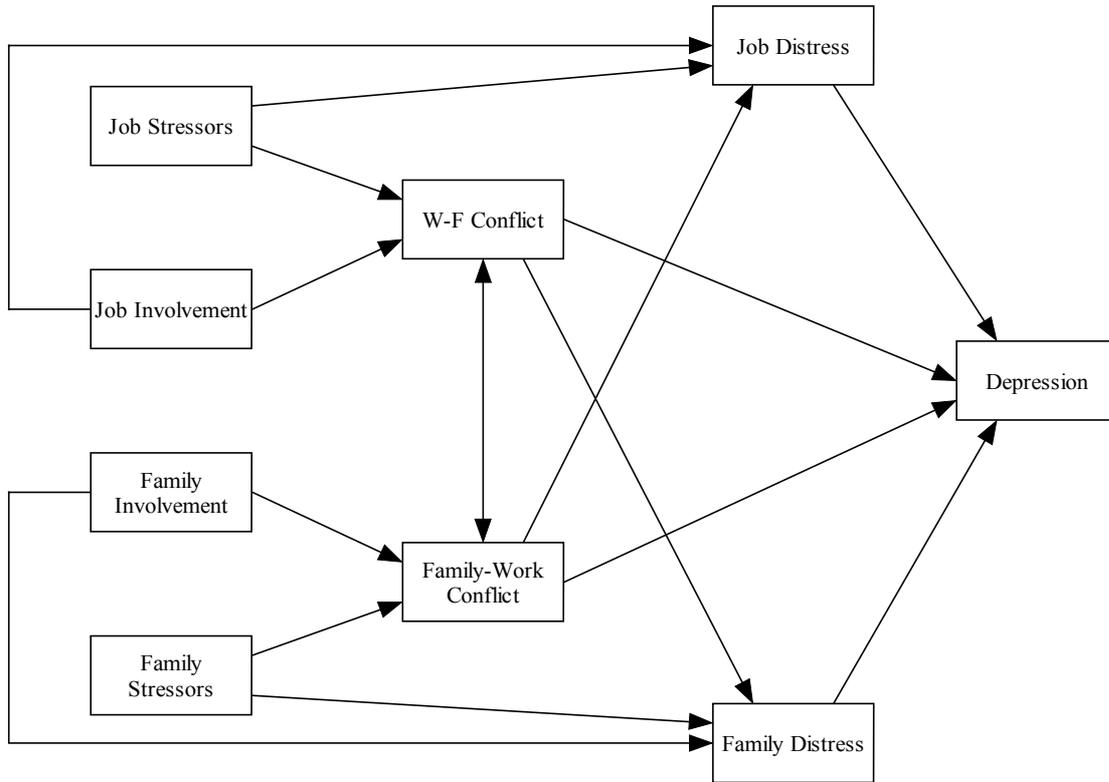*Figure 12*. Post hoc model including composite job attitude.
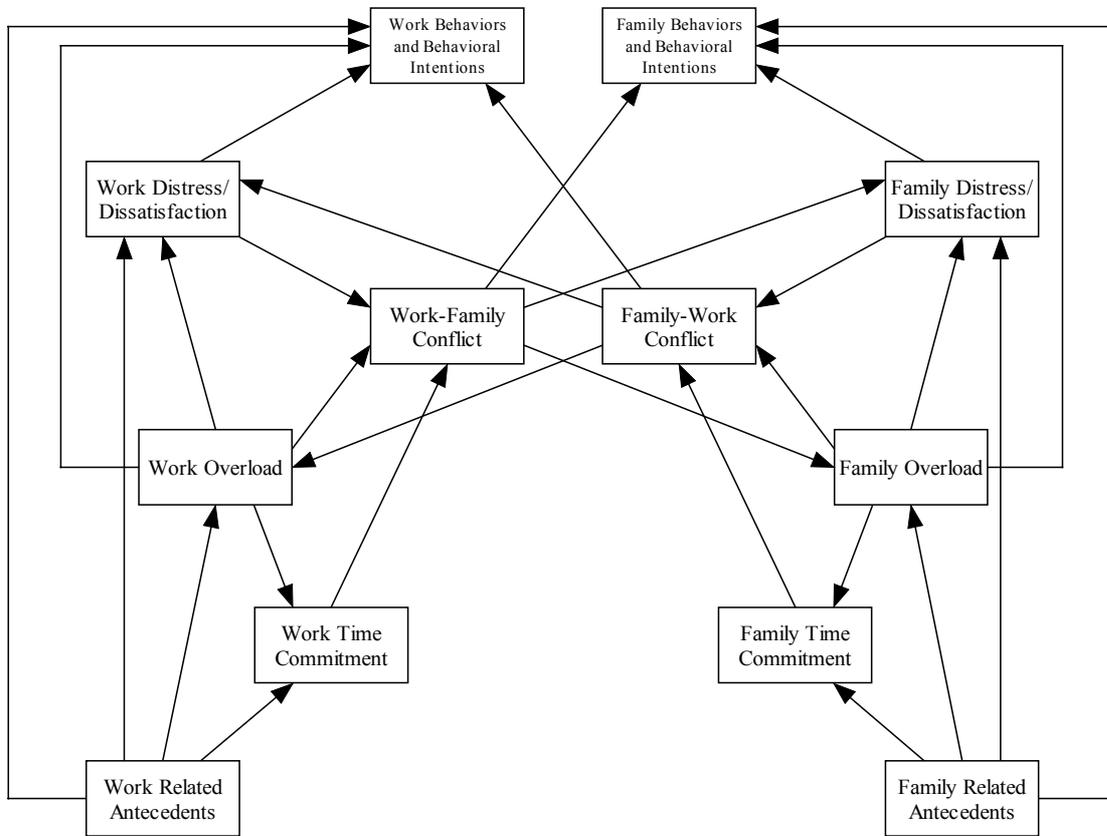
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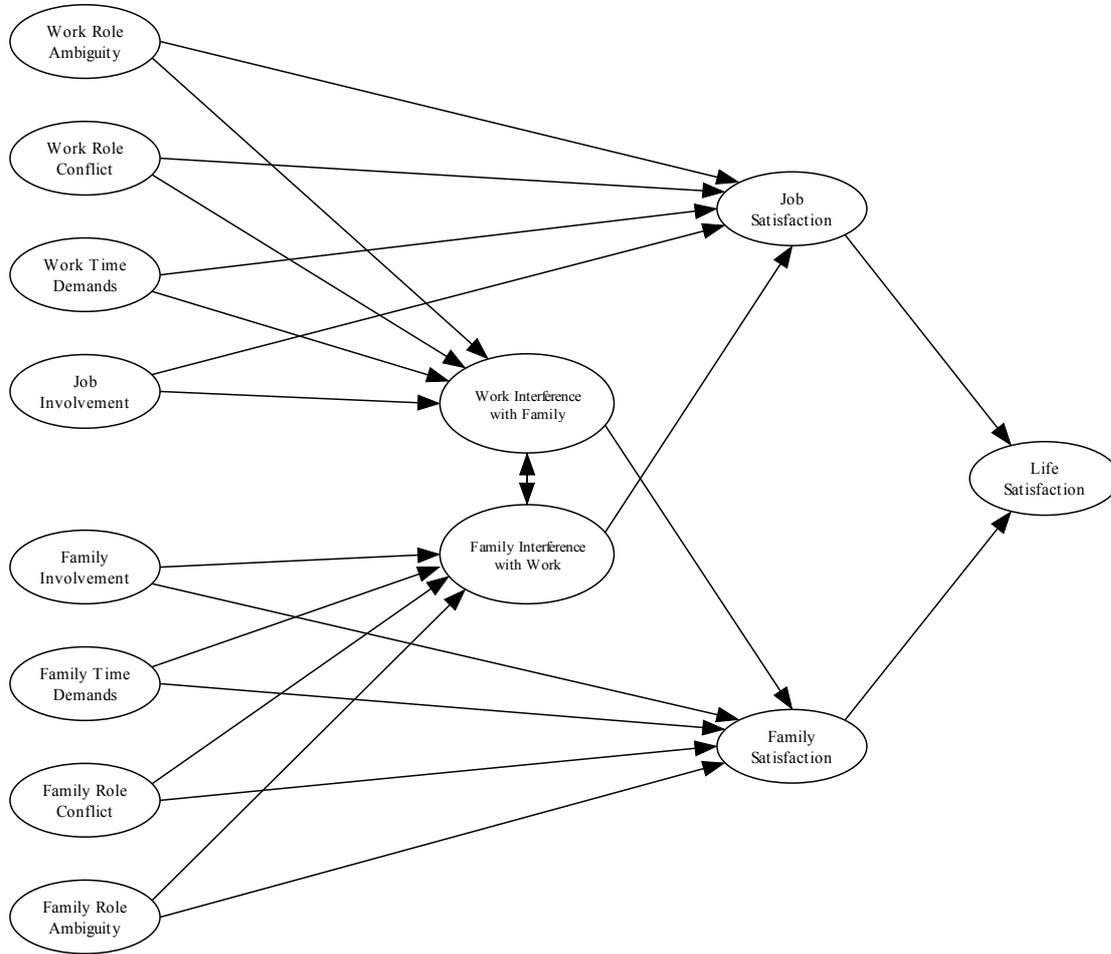
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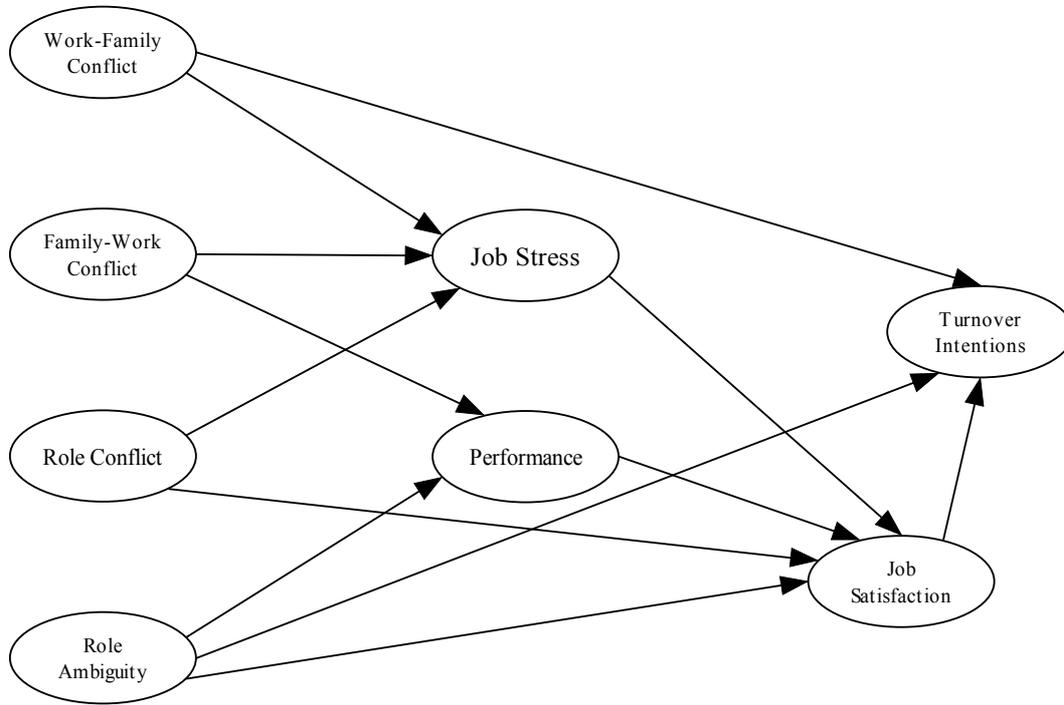
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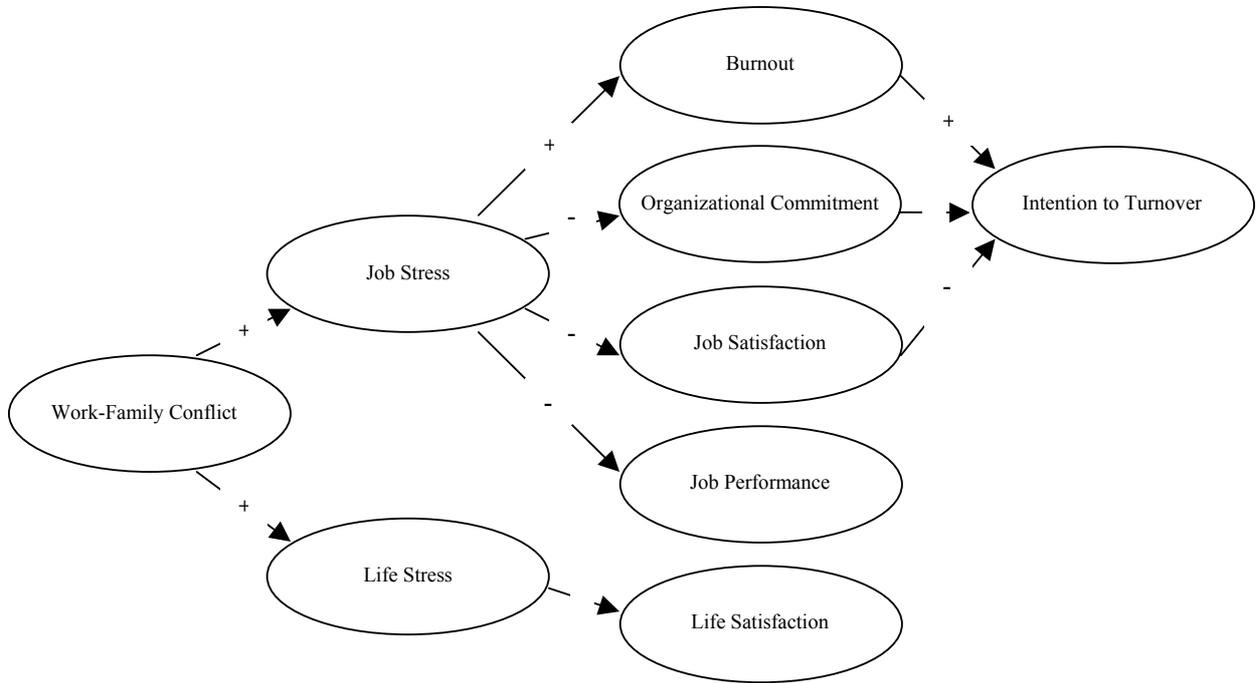
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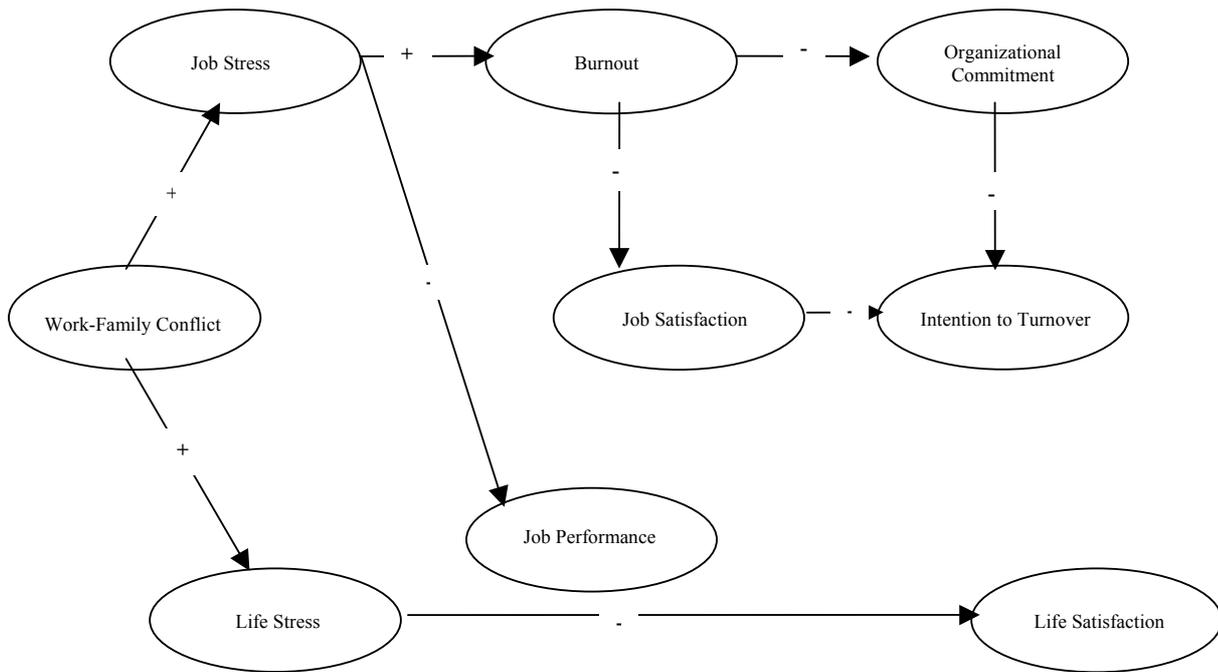
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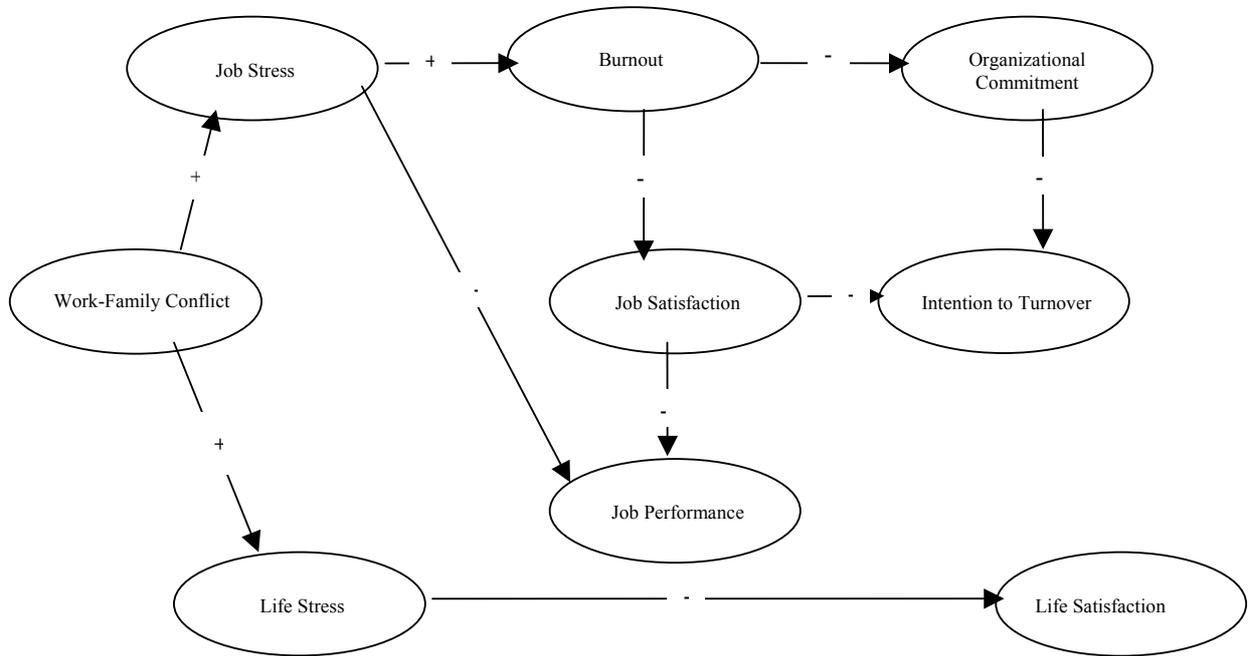
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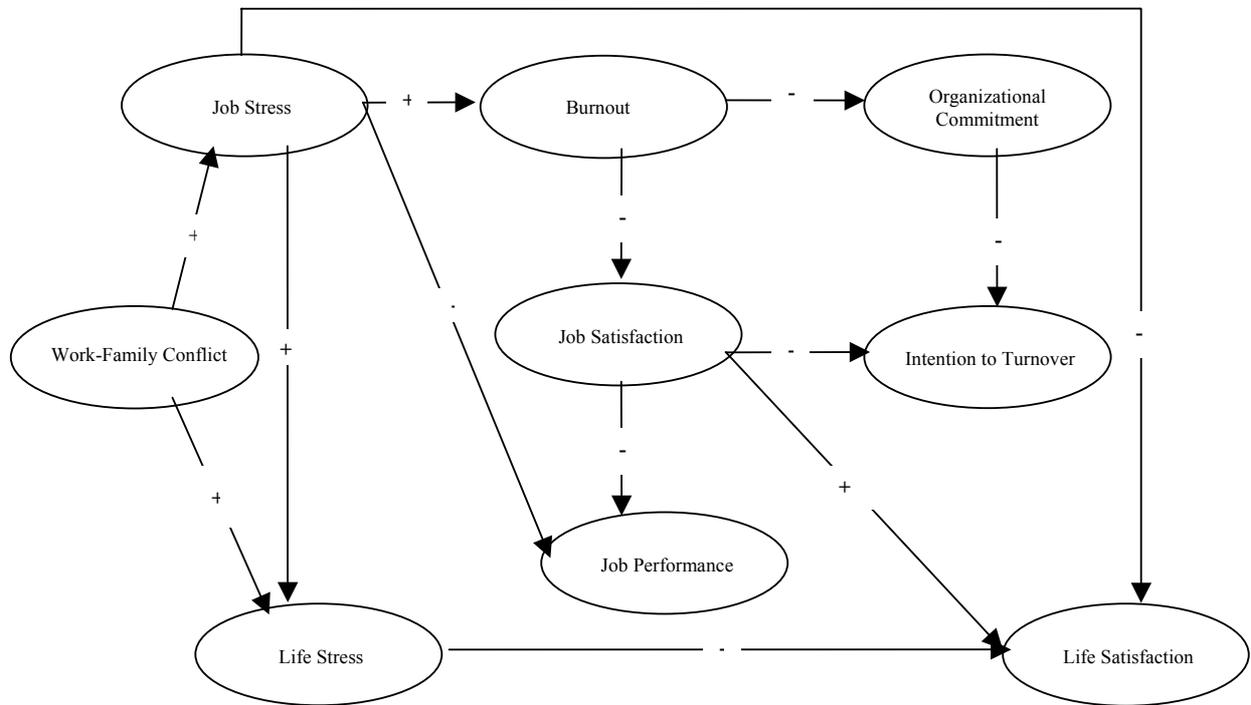
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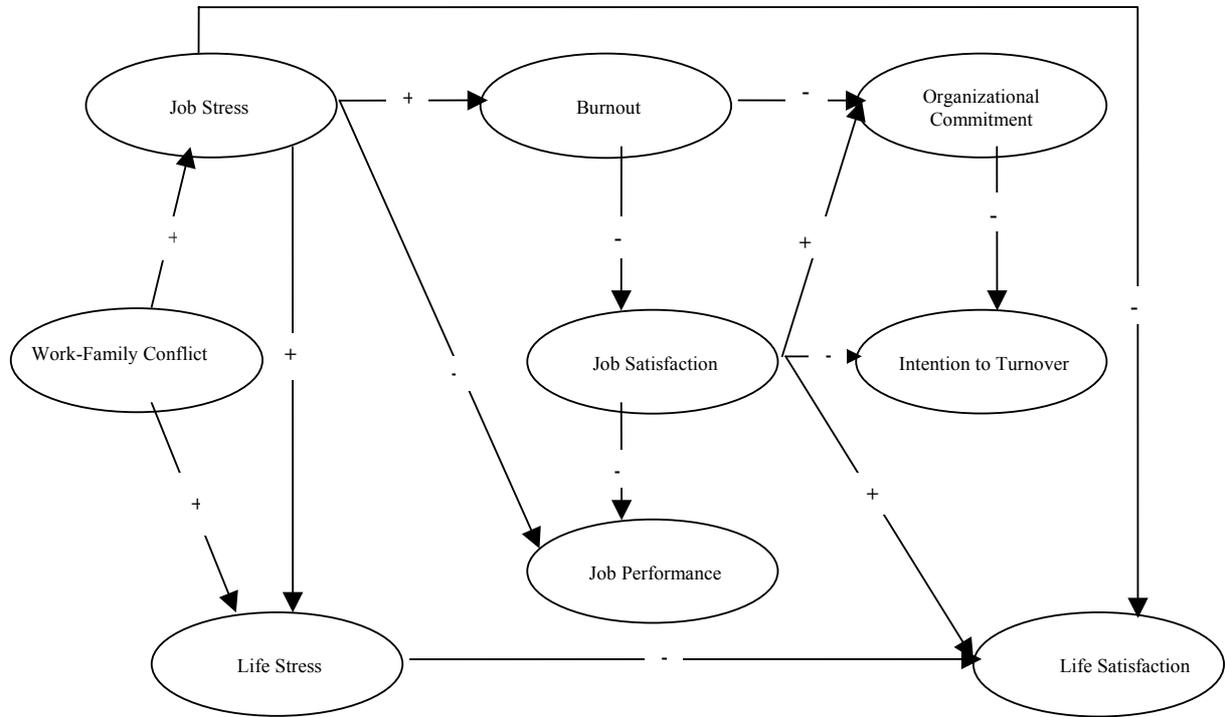
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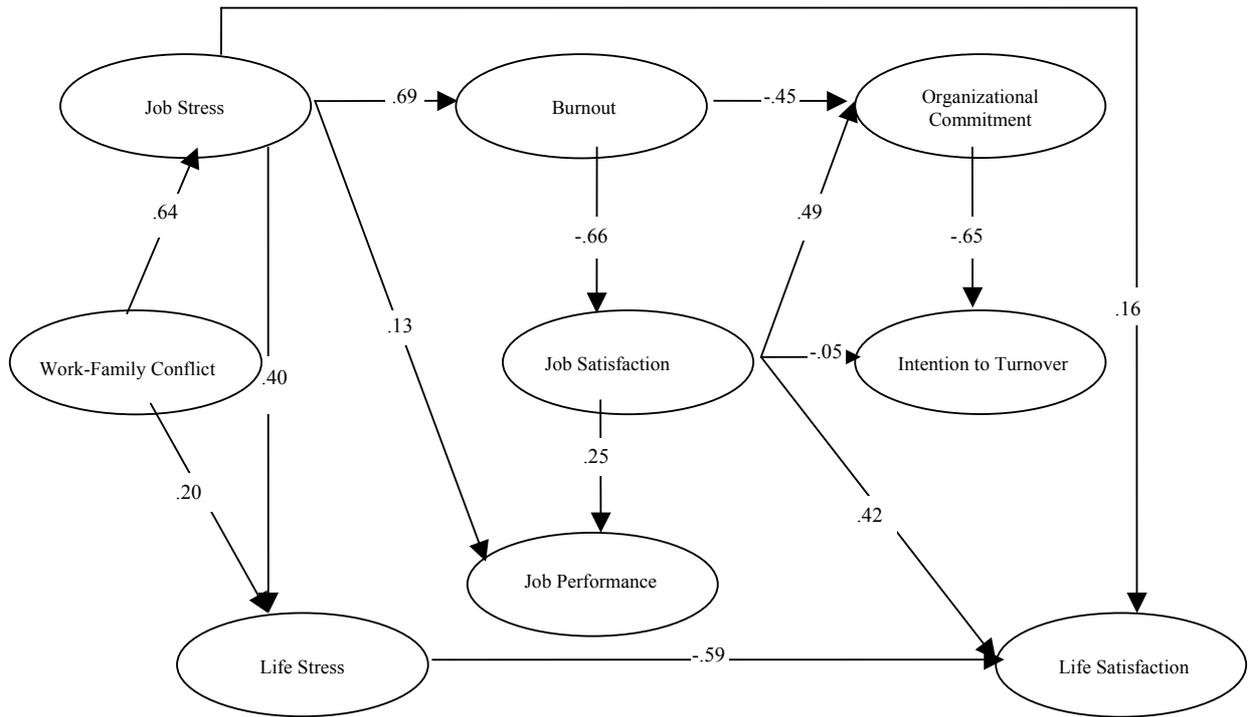
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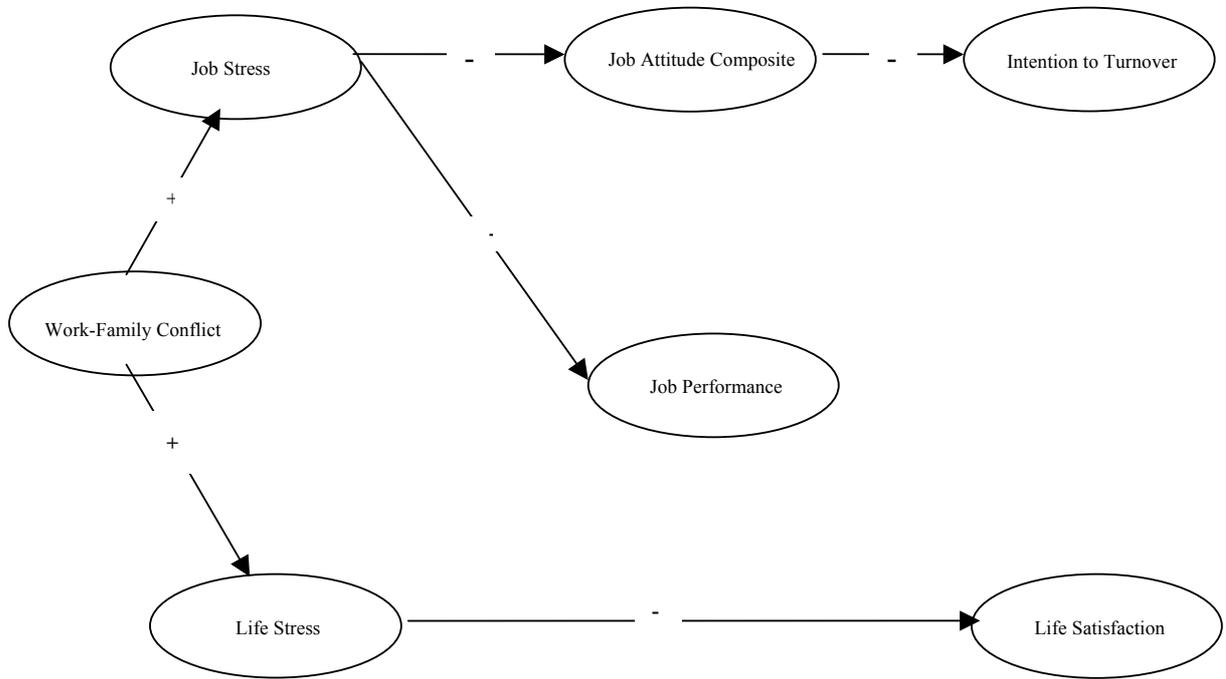
Appendix A

Demographic Questionnaire
Demographic Questionnaire
For each of the following questions, please fill in the blank or check the appropriate space. These questions deal with different aspects of yourself, your job, and your living situation which may be related to your experience with balancing your work and family life.

1. Age: _____years

2. Gender: _____male _____female

3. Marital Status:
___ Single, never married
___ Married
___ Separated
___ Living with a significant other
___ Divorced
___Widowed

4. Do you have any children?
___ yes ___no (If no skip to question 7)

5. Please list the **number** of children in each age category
_____0 to 2 _____3 to 5 _____6 to 9 _____10 to 13 _____14 to 18 _____over 18

6. How many of your children currently live with you? _____

7. Are you primarily responsible for the care of an elder (e.g. parent or grandparent)?
___yes ___no (if no skip to question 10)

8. How many elders are you responsible for? _____

9. How many elders currently live with you? _____

10. Level of Education (Check the highest level attained):
___ Teaching Diploma
___ Associate Degree
___ Some Bachelors Degree (Currently enrolled in a degree program **or** was enrolled at one point but did not complete the program)
___ Bachelor's Degree
___ Some Graduate School (Currently enrolled in a Master's or Ph.D. program **or** was enrolled at one point but did not complete the program)
___ Master's Degree
___ Doctorial Degree

11. How many years have you worked at this school? _____

12. How many classes do you teach? _____

13. On average how many students are in each of the classes you instruct? _____

Appendix B

Work-Family Conflict Scale

Work-Family Conflict Scale

Listed below are a series of statements that represent possible feelings that individuals might have about the relationship between their work-lives and their personal –lives. Some of these statements will be related to your family. Who in your mind constitutes as family?

Check all that apply: ___Children ___Spouse ___Parents ___ Blood relatives outside of your parents, spouse and children (e.g. aunts) ___In-laws ___ People to whom you are not related but live with (e.g. a house mate) ____ People to whom you are unrelated but _do not_ live with (e.g. friends from church)

With respect to your own feelings about the relationship between your work-life and your personal life please indicate the degree of your agreement or disagreement with each statement by circling **one** of the five alternatives beside each statement using the scale below.

Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree
1	2	3	4	5

Statement					
1. My work schedule often conflicts with my family life.	1	2	3	4	5
2. After work, I come home too tired to do some of the things I would like to do.	1	2	3	4	5
3. On the job I have so much work to do that it takes away from my personal interests.	1	2	3	4	5
4. My family dislikes how often I am preoccupied with my work while at home.	1	2	3	4	5
5. Because my work is so demanding, at times I am irritable at home.	1	2	3	4	5
6. The demands of my job make it difficult to be relaxed all the time at home.	1	2	3	4	5
7. My work takes up time that I would like to spend with my family.	1	2	3	4	5
8. My job makes it difficult to be the kind of spouse or parent I would like to be.	1	2	3	4	5
9. I have to put off doing things I like to do because of work-related demands.	1	2	3	4	5
10. Due to work-related duties, I frequently have to make changes to my personal plans.	1	2	3	4	5
11. The amount of time my job takes up makes it difficult to fulfill family responsibilities.	1	2	3	4	5
12. My job produces strain that makes it difficult to fulfill my personal obligations.	1	2	3	4	5

Appendix C

Job Stress Scale

STRESS IN GENERAL SCALE[1]
YOUR STRESS AT WORK

Do you find your job stressful?   For each of the following words or phrases, circle: 1 for "Yes" if it describes your job, 2 for "No" if it does not describe it, or 3 for "?" if you cannot decide.

	Yes	*No*	?
Demanding	1	2	3
Pressured	1	2	3
Hectic	1	2	3
Calm	1	2	3
Relaxed	1	2	3
Many things stressful	1	2	3
Pushed	1	2	3

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Appendix D

Scale of Life Stress

Feelings About Your Life

The following statements express various "feelings" that people experience from time to time about things in their life. With reference to things in your life during the **last six months**, please indicate how often you experienced the feelings described in each of the following statements. Please **circle** the response that most accurately describes your feelings.

Almost Never	Seldom	Sometimes	Quite Often	Almost all of the time
1	2	3	4	5

How often did you feel that:

1. Things in your life made you upset	1	2	3	4	5
2. Things in your life made you frustrated	1	2	3	4	5
3. Things in your life make you tense	1	2	3	4	5
4. Things in your life place you under strain	1	2	3	4	5
5. Things in your life placed you under a great deal of stress	1	2	3	4	5
6. Things in you life made you jumpy and nervous	1	2	3	4	5
7. You carried your problems with you wherever you went	1	2	3	4	5
8. Things in your life put you under a lot of pressure	1	2	3	4	5
9. Things in your life made you feel "blue" or depressed during most of the day	1	2	3	4	5
10. Things in your life made you feel tired or "worn out" during a good part of the day.	1	2	3	4	5

Appendix E

Job Burnout Scale

Maslach Burnout Inventory for Educators
The following statements express various "feelings" that teachers experience from time to time about their jobs. Please indicate how often you experienced the feelings described in each of the following statements by circling the response that most accurately describes your feelings.

Never	A few times a a year	Monthly	A few times a month	Every week	A few times a week	Every day	
0	1	2	3	4	5	6	

1. I feel emotionally drained from my work **0**   **1**   **2**   **3**   **4**   **5**   **6**

2. I feel very energetic   **0**   **1**   **2**   **3**   **4**   **5**   **6**

3. I feel fatigued when I get up in the
   morning and have to face another day
   on the job   **0**   **1**   **2**   **3**   **4**   **5**   **6**

4. I can easily understand how my students
   feel about things   **0**   **1**   **2**   **3**   **4**   **5**   **6**

5. I feel I treat some students as if they were
   impersonal objects   **0**   **1**   **2**   **3**   **4**   **5**   **6**

6. Working with people all day is really a
   strain for me   **0**   **1**   **2**   **3**   **4**   **5**   **6**

7. I deal very effectively with the problems
   of my students   **0**   **1**   **2**   **3**   **4**   **5**   **6**

8. I feel burned out from my work   **0**   **1**   **2**   **3**   **4**   **5**   **6**

9. I feel I am positively influencing other
   people's lives through my work   **0**   **1**   **2**   **3**   **4**   **5**   **6**

10. I've become more callous toward people
    since I took this job   **0**   **1**   **2**   **3**   **4**   **5**   **6**

11. I worry that this job is hardening me
    emotionally   **0**   **1**   **2**   **3**   **4**   **5**   **6**

12. I feel used up at the end of the workday **0**   **1**   **2**   **3**   **4**   **5**   **6**

13. I feel frustrated by my job   **0   1   2   3   4   5   6**

14. I feel I am working too hard on my job   **0   1   2   3   4   5   6**

15. I don't really care what happens to
    some students   **0   1   2   3   4   5   6**

16. Working with people directly puts too
    much stress on me   **0   1   2   3   4   5   6**

17. I can easily create a relaxed atmosphere
    with my students   **0   1   2   3   4   5   6**

18. I feel exhilarated after working closely
    with my students   **0   1   2   3   4   5   6**

19. I have accomplished many worthwhile
    things in this job   **0   1   2   3   4   5   6**

20. I feel like I am at the end of my rope   **0   1   2   3   4   5   6**

21. In my work I deal with emotional
    problems very calmly   **0   1   2   3   4   5   6**

22. I feel students blame me for some of their
    problems   **0   1   2   3   4   5   6**

Appendix F

Organizational Commitment Questionnaire
Organizational Commitment Questionnaire (OCQ)

Listed below are a series of statements that represent possible feelings that individuals might have about the organization for which they work. With respect to your own feelings about the particular school for which you are now working please indicate the degree of your agreement or disagreement with each statement by circling **one** of the seven alternatives below each statement.

Strongly Disagree 1	Moderately Disagree 2	Slightly Disagree 3	Neutral 4	Slightly Agree 5	Moderately Agree 6	Strongly Agree 7

1. I am willing to put in a great deal of effort beyond that normally expected in order to help this organization be successful.   1   2   3   4   5   6   7

2. I talk up this organization to my friends as a great organization to work for.   1   2   3   4   5   6   7

3   I feel very little loyalty to this organization.   1   2   3   4   5   6   7

4. I would accept almost any type of job assignment in order to keep working for this organization.   1   2   3   4   5   6   7

5. I find that my values and the organization's values are very similar.   1   2   3   4   5   6   7

6. I am proud to tell others that I am part of this organization.   1   2   3   4   5   6   7

7. I could just as well be working for a different organization as long as the type of work were similar.   1   2   3   4   5   6   7

8. This organization really inspires the best in me in the way of job performance.   1   2   3   4   5   6   7

9. It would take very little change in my present circumstances to cause me to leave this organization.   1   2   3   4   5   6   7

10. I am extremely glad I chose this organization to work for over others I was considering at the time I joined.   1   2   3   4   5   6   7

11. There's not much to be gained by sticking with this organization indefinitely.   1   2   3   4   5   6   7

12. Often, I find it difficult to agree with this organization's policies on important matters relating to its employees.   1   2   3   4   5   6   7

13. I really care about the fate of this organization.   1   2   3   4   5   6   7

14. For me, this is the best of all organizations
  for which to work.   **1**   **2**   **3**   **4**   **5**   **6**   **7**

15. Deciding to work for this organization was
  a definite mistake on my part.   **1**   **2**   **3**   **4**   **5**   **6**   **7**

Appendix G

Scale of Job Satisfaction

JOB IN GENERAL[2]

Think of your job in general. All in all, what is it like most of the time? In the blank beside each word or phrase below ,write

<u>Y</u>   for "Yes" if it describes your job
<u>N</u>   for "No" if it does not describe it
<u>?</u>   for "?" if you cannot decide
……………………………………………..
___ Pleasant
___ Bad
___ Ideal
___ Waste of time
___ Good
___ Undesirable
___ Worthwhile
___ Worst than most
___ Acceptable

Appendix H

Scale of Life Satisfaction

SCALE OF LIFE SATISFACTION[3]

Think of your life general, considering all aspects important to you. How is it most of the time?

Circle "Yes" if the word below describes your life
Circle "No" if the word below does NOT describe your life
Circle "?" if you cannot decide

1. Disappointing…………………………………... YES   NO   ?
2. Secure………………………………………….. YES   NO   ?
3. Full of gripes…………………………………… YES   NO   ?
4. I am content…………………………………….. YES   NO   ?
5. Satisfying ……………………………………… YES   NO   ?
6. Meaningful…………………………………….. YES   NO   ?
7. I feel loved………………………………………YES   NO   ?
8. I feel good about myself………………………...YES   NO   ?

Appendix I

Intention to Turnover Scale

Intentions to Quit Scale

Using the scale below, please indicate the extent to which you agree or disagree with the following statements about your intentions to leave the organization.

Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree
1	**2**	**3**	**4**	**5**

1. I am thinking about leaving this organization   **1**   **2**   **3**   **4**   **5**

2. I am planning to look for a new job.   **1**   **2**   **3**   **4**   **5**

3. I intend to ask people about new job opportunities.   **1**   **2**   **3**   **4**   **5**

4. I don't plan to be in this organization much longer.   **1**   **2**   **3**   **4**   **5**

Job Performance Questionnaire

Job Performance Scale

Below are a series of statements related to the daily performance of teachers. Think about the performance of the teacher listed above throughout the school year. Please indicate the degree of your agreement or disagreement with each statement with regards to the teacher listed above by circling one of the five alternatives beside each statement.

Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree
1	**2**	**3**	**4**	**5**

This teacher:

1. Is well prepared for his/ her classes   **1**   **2**   **3**   **4**   **5**

2. Relates instruction and activities well to
students' ability levels   **1**   **2**   **3**   **4**   **5**

3. Communicates well with students   **1**   **2**   **3**   **4**   **5**

4. Creates a positive learning environment
 for students   **1**   **2**   **3**   **4**   **5**

5. Keeps adequate records of student assessments   **1**   **2**   **3**   **4**   **5**

6. Meets deadlines   **1**   **2**   **3**   **4**   **5**

7. Willingly volunteers for additional responsibilities**1**   **2**   **3**   **4**   **5**

8. Communicates well with colleagues   **1**   **2**   **3**   **4**   **5**

9. Is punctual for work   **1**   **2**   **3**   **4**   **5**

10. Is rarely absent from work   **1**   **2**   **3**   **4**   **5**

Appendix K
Implicit Leadership Questionnaire
Implicit Leadership Questionnaire
On the following pages we have provided a list of characteristics which may or may not be descriptive of a leader. We would like you to describe your image of **a leader** for us. For each statement, **determine how well it fits your image of a leader**. Then, using the scale provided, place the appropriate number next to each statement. Remember, **we are interested in what you believe best describes a leader**. Please try to provide a rating for each statement.

5- Fits my image extremely well
4- Fits my image very well
3- Fits my image moderately well
2- Fits my image somewhat well
1- Does not fit my image at all

1._____Domineering

2._____Knowledgeable

3._____Helpful

4._____ Energetic

5._____Loud

6._____Dedicated

7._____Motivated

8._____Intelligent

9._____Pushy

10._____Hard-working

11._____Strong

12._____Manipulative

13._____Male

14._____Dynamic

15._____Educated

16._____Understanding

17._____Selfish

18._____Clever

19._____Sincere

20._____Conceited

21. _____Masculine