

Work family conflict and its job consequences: From attitudes to behaviors to the bottom-line

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ABSTRACT

This study examines the relationships of work family conflict with job related consequences. Although past studies related work family conflict to different types of job outcomes, little is known regarding its impact on more distal organizationally important outcomes and causal mechanisms through which these effects occur. Based on both quantitative and qualitative literature reviews, mediation hypotheses were developed to test whether proximal outcomes which were commonly used in past studies mediate the relationships of work family conflict with distal consequences including ratings of job performance and organizationally meaningful performance outcomes.

Data were collected from 220 customer service workers, matched to 29 managers in 31 hotel food service outlets. In particular, this study used three sources of information such as employee and supervisor surveys and system-generated archival indexes for data analysis. The results of multiple regression analysis (Baron & Kenny, 1986) revealed that job satisfaction and organizational commitment mediate the relationship of work family conflict with only one work outcome—self-reported contextual performance. However, job satisfaction and organizational commitment failed to mediate the relationship between work family conflict and other distal outcomes (e.g., results-organizational indexes). Further, work family conflict was related to one

of distal outcomes, check size.

The significance of work family conflict's influence on job related consequences and the utility of proximal outcome variables are discussed. Implications for both research and practice are provided along with future directions for research on work family conflict in the hospitality literature.

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DEDICATION

This dissertation is dedicated to YunJeong (Jung) Kim, my beloved wife for her sacrificial love during my Ph.D. journey. She is a blessing from my Lord, Jesus Christ.

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Wholeheartedly,

Peter

CHAPTER I

INTRODUCTION

1.1 Problem Statement

Helping employees achieve balance between their work and home lives has emerged as an important area of research in recent years. More and more employees are part of dual career lifestyles in which both partners are working as well as sharing responsibilities for housework and family care-giving (e.g., De Jonge & Dormann, 2003; Greenhaus, Callanan & Godshalk, 2000). More than 85% of American workers indicated that they are responsible for some daily family responsibilities (Bond, Galinsky & Swanberg, 1998). Often, demands from work and family are mutually incompatible competing for employees' time and attention, and as a result they perceive conflict between these two important parts of their lives. The issue of work family conflict is especially prevalent in the hospitality industry characterized with long work hours, irregular and inflexible work schedules, heavy workloads, and limited weekend time off. Therefore, it is not surprising that work family conflict has increasingly appeared in the hospitality literature as well as the social psychology and management literatures in recent years.

A number of empirical studies report that work family conflict is associated with lower levels of satisfaction with one's job, family and life, increased perceptions of stress on the job and with family, reduced organizational commitment, and lower job performance (e.g., Bedeian, Burke, & Moffet, 1988; Carlson & Kacmar, 2000; Frone, Russell & Cooper, 1992; Frone, Yardley, & Markel, 1997; Major, Klein & Ehrhart, 2002; Netemeyer, Brashear-Alejandro, & Boles, 2004). As the number of studies examining work family conflict and its consequences

increased, reviews of this literature emerged. Starting with Allen, Herst, Bruck and Sutton (2000), meta-analyses have been conducted to quantify the relationships of work family conflict with several frequent consequences. For instance, Ford, Heinen and Langkamer (2007) and Michel, Mitchelson, Kotrba, LeBreton and Baltes (2009) report the effect size of the relationship of work family conflict with job satisfaction, while Gilboa, Shirom, Fried and Cooper (2008) report the magnitude of the relationship of work family conflict with job performance.

A recent review article by Casper, Eby, Bordeaux, Lockwood and Lambert (2007) argues that previous work family conflict studies have predominantly used self-reported consequence measures (e.g., attitudes, self-rated performance) as criterion variables. Likewise, a cursory review of the hospitality literature suggests that previous studies have been limited by examining only selected job consequences (e.g., attitudinal and self-reported behavioral consequences). This suggests a preference in previous studies for researchers to examine the direct proximal consequences of work family conflict rather than more distal consequences like job results. Examining only the direct proximal job consequences of work-family conflict limits our capacity to fully understand the effect of work family conflict on distal consequences or the causal mechanisms between work family conflict, proximal and distal consequences.

Studying proximal consequences (e.g., job attitudes) as the only criterion variables of work family conflict is reasonable if attitudes function as the mediator through which work family conflict has its effect on distal consequences (e.g., job behaviors and results). In this case, the effect of work family conflict on any consequence could be understood by knowing the impact of work family conflict on job attitudes in combination with the relationship of attitudes to other consequences, as reflected in path analyses (Asher, 1983). However, if attitudes are not the mediating mechanism through which work family conflict influences other job-related

consequences then the utility of studying only the proximal consequences of work family conflict can be questioned.

There are two possibilities where studying proximal outcomes is not reasonable. One occurs if work family conflict has strong relationships with attitudes, but has little or no relationship with other more distal job-related outcomes. Under these circumstances relying on data from studies that utilize attitude measures would systematically overestimate the importance of work family conflict for organizationally relevant behavior or results outcomes. A second possibility occurs when work family conflict is associated with other consequences in ways that are not accounted for through the mediating mechanisms of attitudes. In this situation, data from studies examining attitudes would systematically underestimate the importance of work family conflict. Currently, research that investigates the extent to which attitudes mediate the relationships which occur between work family conflict and more distal job consequences, especially job results is limited. In addition, data on the relationship between work family conflict and job results is almost non-existent in the hospitality literature where researchers have predominantly used measures of attitudes as criterion variables.

1.2 Objectives of the Study

The primary purpose of this dissertation is to examine whether commonly studied attitudes represent the casual mechanisms through which work family conflict impacts distal job consequences. Specifically, this study attempts to examine the relationships between work family conflict, job attitudes, job behaviors, and job results. Although more than two hundred empirical studies have been conducted which report that work family conflict is associated with employee's job outcomes, fewer attempts have been made to examine the effect of work family

conflict on practitioner relevant criteria directly related to revenues such as supervisor-rated job behaviors and job results. This study assesses the value of work family conflict as an important source of influence on job related outcomes by examining its relationship with meaningful distal consequences which have often been excluded in previous research.

A second purpose of this study is to investigate the value of job attitudes as criterion variables of work family conflict by testing whether these consequences mediate the relationship of work family conflict with behavioral and result consequences. Despite the fact that employee's job attitudes have been predominantly used as criterion variables of work family conflict in the literature, there is little research that investigates the subsequent effect of these proximal outcomes on more distal organizationally important outcomes. Based on previous theories such as theory of planned behavior (Ajzen, 1985, 1991) and the progressive model of training outcomes (Kirkpatrick, 1959, 1960), this study proposes a progressive model of job consequences in which employee's job attitudes come before job behaviors which are followed by job results (c.f., work family conflict → attitudes → behaviors → results).

From the major objectives above, this dissertation systematically and empirically examines the following research questions in the remaining chapters:

- What is the direction and magnitude of the relationship between work family conflict and employee's job attitudes?
- What is the direction and magnitude of the relationship between work family conflict and employee's job behaviors such as task performance or organizational citizenship behavior?
- What is the direction and magnitude of the relationship between work family conflict and employee's job results?

- Do job attitudes fully mediate the relationship between work family conflict and job behaviors?
- Do job attitudes fully mediate the relationship between work family conflict and job results?
- Do job behaviors fully mediate the relationship between work family conflict and job results?

1.3 Contributions of the Study

This study offers several potential contributions to our understanding of the relationship of work family conflict and organizationally meaningful consequences (c.f., job results). Data on the relationship of work family conflict to several attitude measures and some behavior measures exists, but work family conflict's relationship to job results measures have rarely been studied in previous research. Examining this relationship matters since the importance of work family conflict as an antecedent of job related outcomes can only be partially understood in the absence of understanding its relationship to results. Further, this study tests the casual mechanisms through which work family conflict influences job consequences which have not been systematically empirically tested by past research. Identifying the causal mechanisms between these consequences is important since it provides empirical implications for researchers to employ proximal consequences (e.g., job attitudes) as rather than distal consequences (job behaviors and results) as criterion variables of work family conflict.

This study also has implications for researchers with respect to the choice of criterion variables. Since the industry is the consumer of the academia in applied science (e.g., management), research findings should address meaningful applied questions that have appeal to

practitioners (Dubin, 1976). This is particularly true in an industry specific field of research such as hospitality management. Consequently, it is important to make research endeavors considering practitioners as an important audience group. Besides traditional common criteria (e.g., attitudes), incorporating practitioner relevant criterion measures (e.g., job results) should be encouraged in this sense.

Additionally, this dissertation provides a comprehensive review of previous literature regarding the relationships between work family conflict and job consequences in the hospitality literature by meta-analysis. In fact, previous meta-analyses of work family conflict excluded hospitality journals although there have been a substantial number of empirical studies in the hospitality literature. Since the field of hospitality management is quite young (Ottenbacher, Harrington & Parsa, 2009), there have been few attempts to meta-analytically review hospitality research. As the field of hospitality research progresses, the use of meta-analysis should be encouraged to offer a more cumulative perspective of research findings (e.g., Borchgrevink, 1998; Lynn & Mullen, 1997). Meta-analysis is used in this study in order to understand, build on, and take advantage of the findings of previous research.

This dissertation also has practical contributions for the hospitality industry. First, it provides practitioners with insights regarding how work family conflict affects various types of employee's job consequences including organizationally relevant criteria (e.g., job results). Although it is expected that work family conflict can negatively influence employee's emotions or attitudes, little is known about whether work family conflict actually impacts actual job outcomes usually recorded in organizational archival data. Therefore, understanding the extent to which work family conflict impacts outcomes may enable managers to decide how to appropriately allocate organizational resources to reduce the potentially detrimental effects of

work family conflict on employees' performance on the job. In addition, this study offers a cautionary clarification for practitioners how much job attitudes matter as causal drivers for improving individual job performance by investigating the casual mechanisms by which job attitudes connect work family conflict to job behaviors and results. Although employees' attitudes to their job (e.g., satisfaction with job) are important criteria, it is actual behaviors and results (e.g., productivity) on which most managers rely. Identifying a mediating role of job attitudes may give practitioners a message that considering attitudinal measures would be relevant in the choice of performance criteria.

1.4 Dissertation Preview

This dissertation is organized as follows. In Chapter II, I review previous literature that addresses the concept of work family conflict and the causal mechanisms through which it affects job-related consequences. Based upon the review of literature, research hypotheses are presented. Chapter III describes the research methodology that will be employed to test the research hypotheses. Chapter IV will report the results of analyses. Based on the findings, Chapter V presents implications for both researchers and practitioners. In addition, limitations of this dissertation research as well as recommendations for future research are provided.

1.5 Definitions of the Terms

Work family conflict is defined as “a form of interrole conflict in which the role pressures from the work and family domains are mutually incompatible in some respect” (Greenhaus & Beutell, 1985, p. 77).

Job attitudes are defined as employee's various personal views about the job resulting from "a fundamental evaluation of one's job experiences" (Harrison et al., 2006, p. 306).

Job behaviors are defined as employee's behaviors leading to "desirable contributions made to one's work role" (Harrison et al., 2006, p. 305).

Job results are defined as those measures "where organizational impact is indexed... such as productivity gains and cost-savings" by individual employees (Alliger, Tannenbaum, Bennett, Traver & Shotland, 1997, p. 346).

Proximal consequences are defined as those consequences of a construct (e.g., work family conflict) which are located nearest temporally and causally to the construct.

Distal consequences are defined as those consequences of a construct (e.g., work family conflict) which are located farther temporally from the construct and where causality likely occurs through some mediating mechanism.

Meta-analysis is a systematic method that combines and analyses findings from pre-existing studies while providing a quantitative summary or synthesis of the findings for an area of research.

Organizational researchers are defined as those contributors whose research interests focus on the effect of attitudes, motivations and behaviors of people on the success of an organization.

Hospitality researchers are defined as those contributors whose research contexts are in the hospitality industry, and their research papers are published in the hospitality literature.

CHAPTER II

LITERATURE REVIEW

2.1 Chapter Preview

This chapter provides the theoretical background for this dissertation by reviewing relevant literature. The first section examines the concept of work family conflict and its potentially detrimental effect on employee's job consequences. A comprehensive review follows the implications of the choice of job consequences with three major categories (c.f., attitudes, behaviors and results), while delineating the causal mechanism between these consequences along with work family conflict. The latter section quantitatively reviews previous studies by meta-analysis for the relations between work family conflict and each of three job consequences. Based upon the qualitative and quantitative literature review, the research hypotheses are presented with respect to sequential influences of work family conflict on job results mediated by job attitudes and job behaviors which are more immediate job consequences of work family conflict.

2.2 Work Family Conflict

Work and family represent two of the most important domains of adults' lives. However, the work-family interface often is associated with conflict since it can be challenging for employees to balance the demands of work and family. In their role theory, Kahn, Wolfe, Quinn, Snoek, and Rosenthal (1964) first identified this conflict that individuals experience between their work roles and non-work roles. According to Kahn et al. (1964), this interrole conflict

between work and family occurs to the degree that demands from work and family are mutually incompatible. The concept of work family conflict was scrutinized by Greenhaus and Beutell (1985) who suggested that work-family conflict arises when demands from the work (family) role affects one's capability to meet the demands of the family (work) role.

According to U.S. Department of Labor (2010), more than 130 million individuals worked 35 or more hours per week, and an additional 25 million people worked part time in the United State in the month of November, 2009. Given the amount of time employees spend working recently, it is more likely that they experience work demands that may not be compatible with family demands. Further, work family conflict is a key issue for contemporary employees regardless of their gender. Since the demographics of employees and families continue to evolve (e.g., more dual career couples and single parents), it has been difficult to confine work, housework and childcare to traditional gender roles in recent years (De Jonge & Dormann, 2003; Greenhaus et al., 2000).

In particular, the issue of work family conflict is relevant to hospitality workers (Magnini, 2009). Given that most work schedules in the hospitality industry are countercyclical to those of other industries, most peak seasons/times of hospitality firms (e.g., hotels, restaurants) are often when most other industry people are off from work (e.g., lunch, dinner, weekends and holidays). In addition, the nature of hospitality makes it vulnerable to work family conflict. According to Netemeyer, Maxham and Pullig (2005), customer dealing jobs are so stressful that customer contact employees often bring the work related stress home with them which may lead to additional stress back on the job. Consequentially, the stress related work and family conflict deteriorates service employee performance (Netemeyer et al., 2005).

2.2.1 The Construct of Work Family Conflict

Seminal studies (Greenhaus & Beutell, 1985; Khan et al., 1964) treated work family conflict as a unidimensional construct. However, some studies (e.g., Frone et al., 1992; Netemeyer, Boles & McMurrian, 1996) have examined two bidirectional forms of this construct. For instance, Frone et al. (1992) argued that there are two distinct but related interrole conflict dimensions, consisting of work to family conflict when individuals' work affects their family lives and family to work conflict when family affects their work lives. Netemeyer et al. (1996) later defined these two dimensions of work family conflict. Work to family conflict is defined as "a form of interrole conflict in which the general demands of, time devoted to, and strain created by the job interfere with performing family-related responsibilities", while family to work conflict is defined as "a form of interrole conflict in which the general demands of, time devoted to, and strain created by the family interfere with performing work-related responsibilities" (Netemeyer et al., 1996, p. 401).

Researchers have investigated what triggers work to family conflict as well as family to work conflict. The antecedents of work family conflict can be grouped into three categories: work associated, non-work associated, and demographic/individual characteristics (Byron, 2005; Eby, Casper, Lockwood, Bordeaux, and Brinley, 2005). Work associated antecedents are mainly derived from job characteristics such as work hours, schedule flexibility and work support. Non-work associated antecedents are mostly originated from family demands such as marital conflict, spousal employment, and number of children. Lastly, demographic/individual antecedents are related to individual personality and social differences such as gender, education and income level (Byron, 2005).

Researchers have argued that work related antecedents lead to work family conflict which

may in turn cause family domain outcomes, while non-work related antecedents lead to family to work conflict which may in turn cause work domain outcomes. For instance, Frone et al. (1992) empirically demonstrated a significant effect of job stressors on work to family conflict among blue collar workers as well as a significant effect of family stressors on family to work conflict among both white and blue collar workers. Subsequently expanding on the findings of Frone et al. (1992), Frone, Yardley and Markel (1997) found negative effects of work to family conflict on family performance and negative effects of family to work conflict on job performance among financial service employees. Likewise, several studies have supported the bidirectional nature of the conflict (c.f., work → family and family → work) by showing the strengths of the relationships between each of two conflicts and its antecedents and consequences (e.g., Casper, Martin, Buffardi & Edwinds, 2002; Ford et al., 2007; Grzywacz & Marks, 2000; Kirchmeyer, 1993; O'Driscoll, Ilgen, & Hildreth, 1992).

In addition to classifying the antecedents and examining bidirectional nature of the conflict, different forms of work family conflict may exist. Upon reviewing previous studies, Greenhaus and Beutell (1985) argued that work family conflict can be considered one of three major forms of conflicts: time-based, strain-based or behavior-based conflict. According to the researchers, time-based conflict occurs when time commitment to one role makes it difficult to allocate time to meet the demands of another role. Likewise, strain-based conflict arises when strain derived from one role makes it difficult to perform another role, whereas behavior-based conflict occurs when behavior required in one role makes it difficult to perform another role (Greenhaus & Beutell, 1985). Kelloway, Gottlieb and Barham (1999) in their longitudinal study measured that time-based work to family and family to work conflicts, and strain-based work to family and family to work conflicts, and examined the effect of these conflicts on levels of stress and

turnover intent. It was found that strain-based family to work conflict was related to the level of stress and turnover intent, whereas time-based family to work conflict was associated with the level of stress. However, both time-based and strain-based work to family conflicts had only a small effect on individual outcomes (Kelloway et al., 1999).

In fact, early researchers (e.g., Greenhaus & Beutell, 1985; Khan et al., 1964) considered work family conflict a unidimensional construct, subsequent studies has treated the construct as a bigger construct consisting of two related factors (e.g., Frone et al., 1992; Frone, 2003; Gilboa et al., 2008; Kelloway et al. 1999). For example, Gilboa et al. (2008) in their meta-analysis examined an overarching construct of work family conflict, and its impact of different types of job performance. In particular, they treated the overarching construct of work family conflict and work to family conflict interchangeably for their meta-analysis (2008, p. 237). Likewise, Allen et al. (2000) solely examined the construct of work family conflict with its outcomes excluding family to work conflict.

In many cases, work to family conflict was the construct of interest for previous organizational researchers, as work to family conflict is perceived to be readily intervened by organizational policies and practices while the family to work conflict is more likely to be beyond organization's control (Grzywacz & Butler, 2005; Mesmer-Magnus & Viswesvaran, 2006; Powell & Greenhaus, 2010). Hence, this study focuses on work family conflict in the direction of work to family rather than family to work.

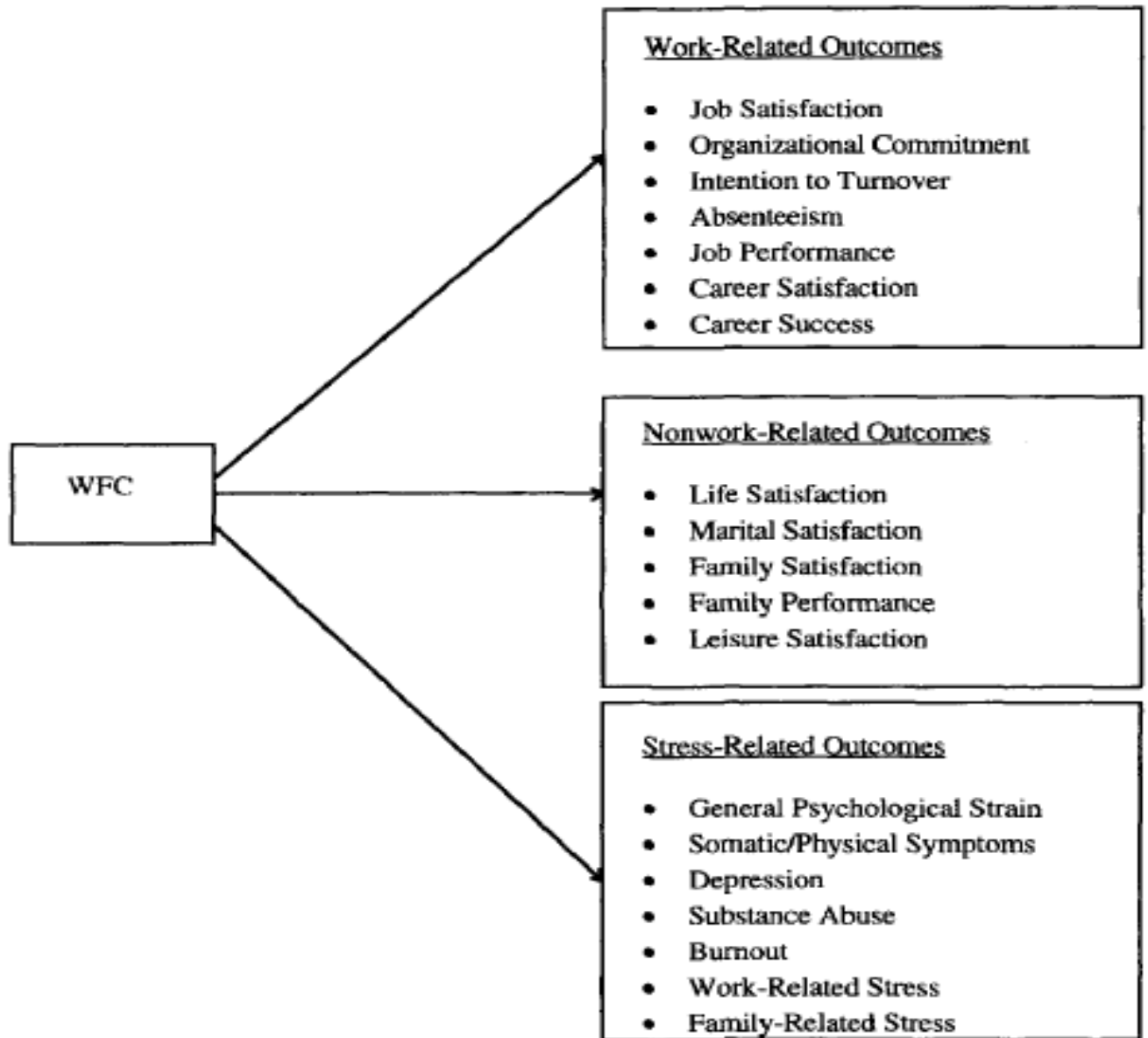
2.2.2 Consequences of Work Family Conflict

Since the introduction of the construct of work family conflict, researchers have demonstrated its noxious effects, including decreased job/family/life satisfaction, organizational

commitment and job performance, and increased job/family stress and turnover intent (e.g., Bedeian et al., 1988; Carlson & Kacmar, 2000; Frone et al., 1992; Frone et al., 1997; Major et al., 2002; Netemeyer et al., 2004). Allen and his colleagues (2000) in their meta-analysis classified the consequences of work family conflict into three major categories: work related, non-work related, and stress related consequences.

As shown in Figure 1, Allen and his colleagues (2000) identified seven work related outcomes through the extensive literature review: job satisfaction, organizational commitment, intention to turnover, absenteeism, job performance, career satisfaction, and career success. These are attitudinal or behavioral responses of employees to work family conflict on the job. Among these consequences, job satisfaction has been most frequently examined and shown to have a negative relationship with work family conflict (Allen et al., 2000). Job satisfaction keeps attracting attention from researchers. Since Allen et al.'s study, there have been additional meta-analytical studies of the relationship between work family conflict and job satisfaction (e.g., Ford et al., 2007; Michel et al., 2009). As was true for job satisfaction, organizational commitment (e.g., Lyness & Thompson, 1997; Netemeyer et al., 1997) and job performance (e.g., Frone et al., 1997; Netemeyer et al., 1997) were shown to have negative associations with work family conflict. On the other hand, it has been reported that work family conflict increases employees' intention to turnover (e.g., Lyness & Thompson, 1997; Netemeyer et al., 1997). However, absenteeism and career satisfaction /success appeared in one study and have not been used any more, while they were shown to have little relationship to work family conflict (e.g., Thomas & Ganster, 1995).

FIGURE 1. Work Family Conflict (WFC) and Its Outcomes (Allen et al., 2000, p. 280)



According to Allen et al. (2000), there are five non-work related outcomes of work family conflict: life satisfaction, marital satisfaction, family satisfaction, family performance and leisure satisfaction (see Figure 1). These variables have been frequently measured by and kept attracting attention from social psychologists (e.g., Ford et al., 2007; Michel et al., 2009). However, family performance and leisure satisfaction have been rarely related to work family conflict in the literature since the Allen et al. study. Life satisfaction was the most frequent and significant consequence of work family conflict in the Allen et al. meta-analysis. Regardless of types of study samples, higher levels of work family conflict were related to lower levels of life satisfaction (e.g., Kossek & Ozeki, 1998). Likewise, work family conflict has been shown to have negative associations with marital satisfaction (e.g. Netemeyer et al., 1997) as well as family satisfaction (e.g., Frone, Barnes & Farrell, 1994). In addition to work related and non-work related outcomes, Allen et al. (2000) also added stress related outcomes as another category in their framework. However, these stress related variables could have been classified to either work related (e.g., work related stress) or non-work related outcomes (e.g., family related stress), while other stressors could seldom have categorized into either work related or non-work related outcomes (e.g., burnout, depression).

Although the issue of work family conflict is particularly important for hospitality employees, it is only several years ago that the construct of work family conflict started to appear in the hospitality literature (c.f., Namasivayam & Mount, 2004). However, Huffman and Schrock (1987) emphasized the importance of company interventions (e.g., corporate daycare) to lessen potential family related problems in the hospitality literature. Namasivayam and Mount (2004) measured the level of work to family and family to work conflicts and their effects on organizational commitment and job satisfaction among U.S. hotel workers. Mulvaney, O'Neill,

Cleveland and Crouter (2007) developed a conceptual model of work family conflict of hotel managers. Similar with the Allen's categorization (2000), there are three major outcomes of work family conflict in their model: organizational, individual and family outcomes (Mulvaney et al., 2007). In particular, Karatepe and his colleagues (e.g., Karatepe & Kilic, 2009; Karatepe & Sokmen, 2006; Karatepe & Uludag, 2007) empirically examined the deteriorating effects of work family conflict on various types of consequences in the Turkish hotel industry.

2.3 Choice of employee's job consequences: Criterion Problem

In the hospitality industry, the contribution of individual employees to the firm's success matters considering the firm's heavy dependence on frontline employees to deliver quality services. Service workers are boundary spanners that represent their company during service interactions with customers. In particular, Heskett, Jones, Loveman, Sasser and Schlesinger (1994) argued in a well-known model called the service profit chain that service firms need to treat employees like customers so that they may also treat customers in the way they are treated which should result in customer loyalty and then revenue. Similarly, Hansen, Sandvik and Selnes (2003) empirically demonstrated that customers' commitment to the individual service provider would be translated into their commitment to the service company and the intention to stay with it. Hence, employee's performance on the job is an essential criterion that both managers and researchers aim to measure and explain with its antecedents such as work family conflict.

According to Thorndike (1949), one of the most fundamental and difficult challenges to organizational researchers is to obtain satisfactory measures of performance against which to validate management practices. Loosely termed the "criterion problem," numerous scholars have called for a better understanding of criterion measures and better theories of job performance

(e.g., Binning & Barrett, 1989; Campbell, McCloy, Oppler, & Sager, 1993; James, 1973; Nagle, 1953; Smith, 1976; Toops, 1944; Wallace, 1965). Since Bingham (1926) and Burt (1926) employed the term “criterion” defined as “something which may be used as a measuring stick for gauging a worker’s relative success or failure” (Bingham, 1926, p. 1) and “an index of occupational proficiency which is used in evaluating the tests designed to predict that proficiency” (Burt, 1926, p. 169), the criterion problem has become a central issue of individual-level management research. The criterion problem refers to the inherent difficulty for organizational researchers to develop and validate criterion measurement to evaluate individual performance. There have been continuous interests in the performance criteria in terms of the conceptual and methodological application in the industrial-organizational psychology literature (e.g., Austin & Villanova, 1992; Campbell, 1990).

Austin and Villanova (1992) comprehensively reviewed conceptual and methodological issues inherent in the criterion research between 1917 and 1992 proceeding in 20-year intervals. Their review concentrates on assessing conceptual treatment of criteria, while pointing out the importance of the validation of performance measures and the understanding of modeling individual performance. In particular, Austin and Villanova (1992, p. 838) differentiated the term criterion from performance in their definition, “A criterion is a sample of performance (including behavior and outcomes), measured directly or indirectly, perceived to be of value to organizational constituencies for facilitating decisions about predictors or programs.” As this definition implies, performance is a more inclusive concept than criterion.

This dissertation concentrates on the relationship between work family conflict and job related consequences. Among the job consequences of work family conflict, behavioral job performance has been extensively studied in the recent literature (e.g., Gilboa et al., 2008; Roth

& David, 2009). However, researchers continue to use other job consequences as a focal criterion variable of work family conflict such as job satisfaction and organizational commitment. It seems that the choice of criterion variables has not received the same level of consideration as that for independent variables which has resulted in little consistency in the use of dependent variables in previous work family conflict studies. In particular, a recent review article (Casper et al., 2007) pointed out that previous studies have predominantly used self-reported consequence measures (e.g., attitudes, self-rated performance) as criterion variables. They argued that it is imperative to examine whether work family conflict affects not only subjective individual consequences but also influences organizationally relevant objective outcomes such as productivity (Casper et al., 2007).

Furthermore, a cursory review of literature suggests that previous studies examined the relationship between work family conflict and each of job consequences without a careful examination on the choice of job consequences and its implications. In other words, little is known regarding whether the type of job consequence (c.f., attitude, behavior or result) makes a difference in helping us understand the general relationship between work family conflict and job consequences. It is important to interpret the findings of previous studies in a holistic view (c.f., relationships between work family conflict and various job consequences in this case). This suggests several interesting research questions. Do the relationships between work family conflict and attitudinal consequences differ from those between work family conflict and behavioral consequences or result consequence? Does our understanding of the importance of the levels of work family conflict change depending on what which of these consequences we use? Therefore, the present study investigates the relationships among job consequences and how they add to our understanding of the relationships of work family conflict with job consequences. The

next sections discuss the construct of job performance and a theoretical model between different types of job consequences in terms of attitudes, behaviors and results.

2.3.1 The Construct of Job Performance

Although job performance is the most important criterion for organizational researchers, it has been hard to define this dynamic construct. Some exemplary definitions of performance widely accepted by organizational researchers include: “Observable things people do that are relevant for the goals of the organization” (Campbell et al., 1993, p. 314), “Scalable actions, behavior and outcomes that employees engage in or bring about that are linked with and contribute to organizational goals” (Viswesvaran & Ones, 2000, p. 216). Even though it is difficult to come up with a universally acceptable definition, there is consensus among organizational researchers that individual performance is a multidimensional construct (Austin & Villanova, 1992; Bennett, Lance & Woehr, 2006; Campbell et al., 1993). Traditionally, individual performance was once considered a one-dimensional construct (e.g., task performance) which can be assessed by a single global measure (Cascio, 1990). However, most researchers currently believe that roles of individual performance fall outside the rubric of task performance (e.g., Borman & Motowidlo, 1993, 1997; Campbell, 1990). Table 1 lists common dimensions of individual performance which have appeared in the individual-organizational literature.

TABLE 1. Dimensions of Behavioral Individual Performance

Citations	Behavioral performance dimensions
	<u>Whole performance domain</u>
Campbell et al., 1993	Job-specific task proficiency / Non-job-specific task proficiency / Written and oral communication proficiency / Demonstrating effort / Maintaining personal discipline / Facilitating peer and team performance / Supervision and leadership / Management and administration
Borman & Motowidlo, 1993	Task performance / Contextual performance
Welbourne et al., 1998	Job role behavior (Career role behavior / Innovator role behavior / Team role behavior / Organization role behavior)
Johnson, 2003	Task performance (Job-specific task proficiency, Non-job-specific task proficiency, Written and oral communication proficiency, Management and administration, Supervision, Conscientious initiative) Citizenship performance (Conscientious initiative, Personal support, Organizational support) Adaptive performance (Dealing with uncertain work Situations)
	<u>Citizenship performance</u>
Borman et al., 2001	Conscientious initiative / Personal support / Organizational support
Podsakoff et al., 2000	Helping behavior / Sportsmanship / Organizational loyalty / Organizational compliance / Individual initiative / Civic virtue / Self-development)
	<u>Adaptivity</u>
Pulakos et al., 2000	Handling emergencies or crisis situations / Handling work stress / Solving problems creatively / Dealing with uncertain work situations / Learning tasks, technologies, and procedures / Demonstrating interpersonal adaptability / Demonstrating cultural adaptability / Demonstrating physical adaptability
	<u>Proactivity</u>
Frese & Fay, 2001	Personal initiative
Crant, 2000	General proactive behavior / Context-specific proactive behavior
Parker et al., 2006	Proactive work behavior (Proactive problem solving, Proactive idea implementation)
Morrison & Phelps, 1999	Taking charge

Among the approaches proposing performance dimensions, the work of Campbell and his colleagues (Campbell, 1990; Campbell et al., 1993) and Borman & Motowidlo (1993; 1997) should be recognized for its significant influence on the literature. From their work with the Army Project A, Campbell et al. (1990) presented eight major performance dimensions: Job-specific task proficiency, non-job-specific task proficiency, written and oral communication proficiency, demonstrating effort, maintaining personal discipline, facilitating peer and team performance, supervision and leadership, and management and administration. According to them, all the eight major performance dimensions can be applicable to any job context even though not all of them are relevant to all jobs. These eight dimensions may be applicable to the hospitality context as well, although some dimensions (e.g., supervision and leadership and management and administration) are particularly relevant to the managerial positions.

Borman and Motowidlo (1993) argued that individual performance consists of two distinct dimensions: task performance and contextual performance. According to them, task performance refers to “the proficiency with which incumbents perform activities that are formally recognized as part of their jobs; activities that contribute to the organization's technical core either directly by implementing a part of its technological process, or indirectly by providing it with needed materials or services” (p. 73). On the other hand, contextual performance indicates interpersonal behaviors that promote the effective functioning of the organization although not recognized by the formal reward system. Contextual performance has often been used interchangeably with organizational citizenship behaviors (OCBs; Organ, 1988). Borman and Motowidlo (1997) argued that contextual performance behaviors are important because they “shape the organizational, social, and psychological context that serves as the catalyst for task activities and processes” (p. 100). In addition to the well-known performance dimensions, there are more

recent performance dimensions which have appeared in the literature including adaptive performance (Pulakos, Arad, Donovan & Plamondon, 2000) and proactivity (e.g., Crant, 2000; Frese & Fay, 2001).

Another dimension of job performance is counterproductive behavior that has negative influences on organizational effectiveness. Examples of the counterproductive behaviors include lateness and absenteeism. The counterproductive behaviors have also been called withdrawal (Harrison, Newman & Roth, 2006). In fact, some researchers (Rotundo & Sackett, 2002; Sackett, Laczko & Arvey, 2002; Viswesvaran & Ones, 2000) suggested that there are three broad performance dimensions: task performance (in-role), contextual performance (extra-role), and counterproductive (deviant) behavior. According to Viswesvaran and Ones (2000), these three performance dimensions can stand alone and are applicable across jobs. Although these behaviors on the job are uniquely different in nature, they all have an influence on the success of organizations. This study focuses on the two performance behaviors (in-role performance and extra-role performance) because the nature of withdrawal behaviors is different from the others. In fact, previous organizational researchers also differentiated these two dimensions of behavioral performance from withdrawal behaviors in their research model (e.g., Chang, Rosen, & Levy 2009; Harrison et al., 2006)

2.3.2 Progressive Model of Job Consequences

As the arguments above imply, most organizational researchers (e.g., Campbell, 1990; Viswesvaran & Ones, 2000) have treated job performance as a behavioral construct which is purported to have an effect on organizational effectiveness either positively or negatively. Therefore, it is important to identify what promotes (decreases) organizationally (un)desirable

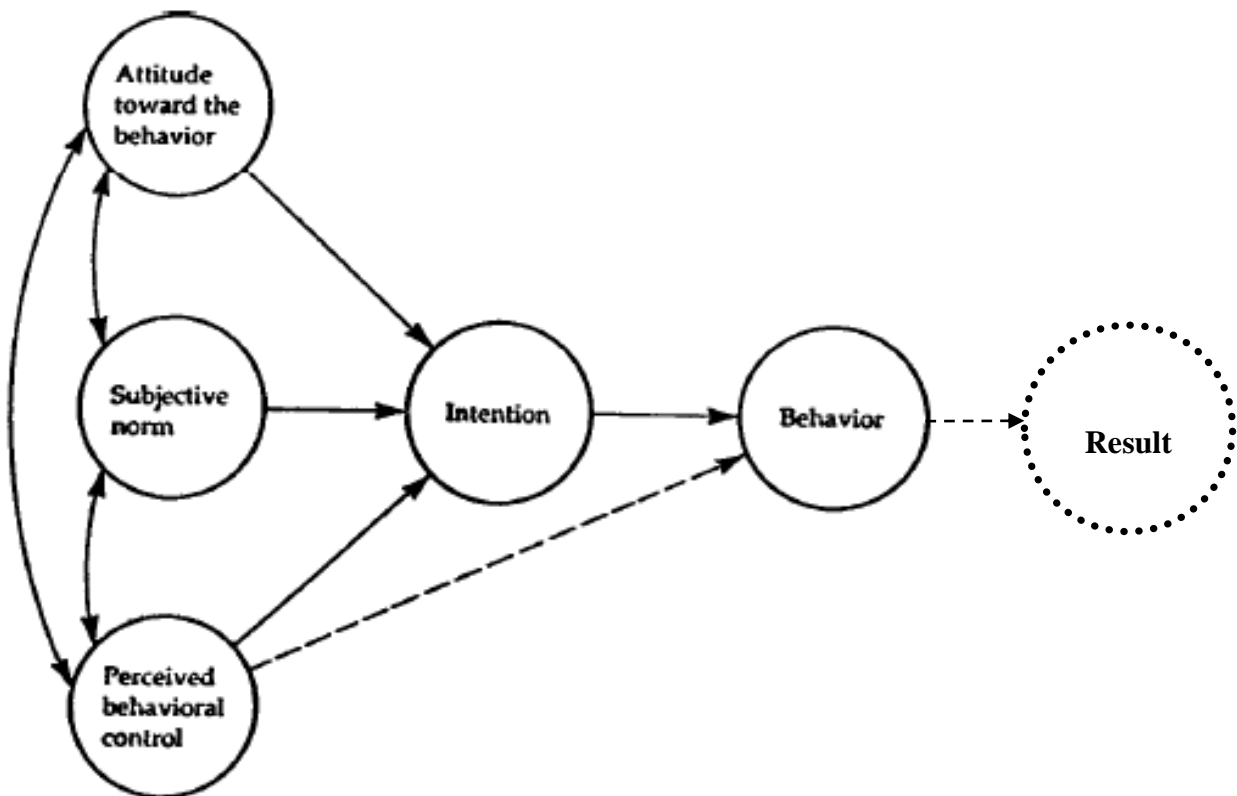
behaviors and how individuals behave (c.f., perform) in organizations. In the field of social psychology, it was generally accepted that individual behavior is directed by one's attitudes (e.g., Thomas & Znaniecki, 1918; Watson, 1925). Therefore, it is not surprising that many researchers have used employee's job attitudes (e.g., job satisfaction, organizational commitment) as job related consequences of work family conflict (e.g., Allen et al., 2000). It is also critical to identify the outcomes of job behaviors for researchers. Without having the organizationally meaningful outcomes, the value of job behaviors may not be fully understood. However, there is little research that investigates the outcomes of job behaviors. Hence, this study proposes a progressive model of job consequences in which there are three categories of job consequences: job attitudes, job behaviors and job results.

Based on the work of early psychologists, Ajzen (1985, 1991) introduced the theory of planned behavior widely accepted in the social science. This model explains the process of human behaviors. The theory of planned behavior is an extension of the theory of reasoned action (Ajzen & fishbein, 1980; Fishbein & Ajzen, 1975) which was based on various attitudinal theories. Figure 2 depicts the nature of the theory, which shows that an individual's intention is an immediate determinant of one's behavior. The stronger the intention to perform a particular behavior, the more likely the individual is to perform that behavior. However, it is not particularly surprising to suggest that employees do what they intend to do. Therefore, Ajzen (1991) presented the predictors of behavioral intention. As shown in Figure 2, the intention is a function of three predictors: attitude toward the behaviour, subjective norm and perceived behavioral control.

According to Ajzen (1988, 1991), an attitude is an individual's positive or negative assessment of the particular behavior. The concept is the extent to which conducting the behavior

is positively or negatively valued. It is decided by a total set of accessible behavioral beliefs linking the behavior to expected outcomes and other attributes. Subjective norm is an individual's perception of social normative pressures from other people, or relevant others' beliefs that he or she should or should not perform such behavior. The third determinant of behavioral intention is perceived behavioral control which is an individual's perceived ease or difficulty of performing the particular behavior. It is assumed that perceived behavioral control is decided by a total set of accessible control beliefs (Ajzen, 1991).

FIGURE 2. Theory of Planned Behavior (Ajzen, 1991, p. 182)



Note. The original figure in the study of Ajzen (1991) has been modified including “result” dashed-lined as the most distal consequence.

In addition to the theory of planned behavior, Kirkpatrick (1959, 1960) classified four job consequences demonstrating how employees evaluate a training program. The progressive categorization by Kirkpatrick (1959, 1960) has been well accepted in the HRM literature in that it is well aligned with other fields of study (e.g., psychology). In his framework, Kirkpatrick named each category a “level.” Level 1 was named reactions and described as attitudinal responses to a training program. Level 2 was termed learning and explained as what trainers understood out of a training program. Level 3 was named behavior and defined as using what one learned from a training program on the job. Lastly, Level 4 was termed results and simply described as desirable results such as increase in quality and quantity of performance.

According to Kirkpatrick (1975), each of the four criteria should be measured to assess the effectiveness of HR interventions (e.g., training) in that information of prior levels serve as a base for the next level's evaluation. In other words, each successive level would indicate a more meaningful measure of the effectiveness of the training program. Therefore, although behaviors and results seem the most important because a difference in behavior is what organizations strive for, attitudes should be measured to demonstrate the sequential effects of the training program. Unlike the theory of planned behavior whose final consequence is behaviors, the progressive criterion model includes the results as a consequence of behaviors. Rotundo and Sackett (2002) argued that there are two major perspectives to categorize employee job performance: micro perspective that focuses on specific individual behaviors versus macro perspective that focuses on productivity or effectiveness which is the consequence of employee's job behaviors. This dissertation adopts the macro perspective to categorize the job consequences of work family conflict in which these consequences are casually related (c.f., attitudes → behaviors → results).

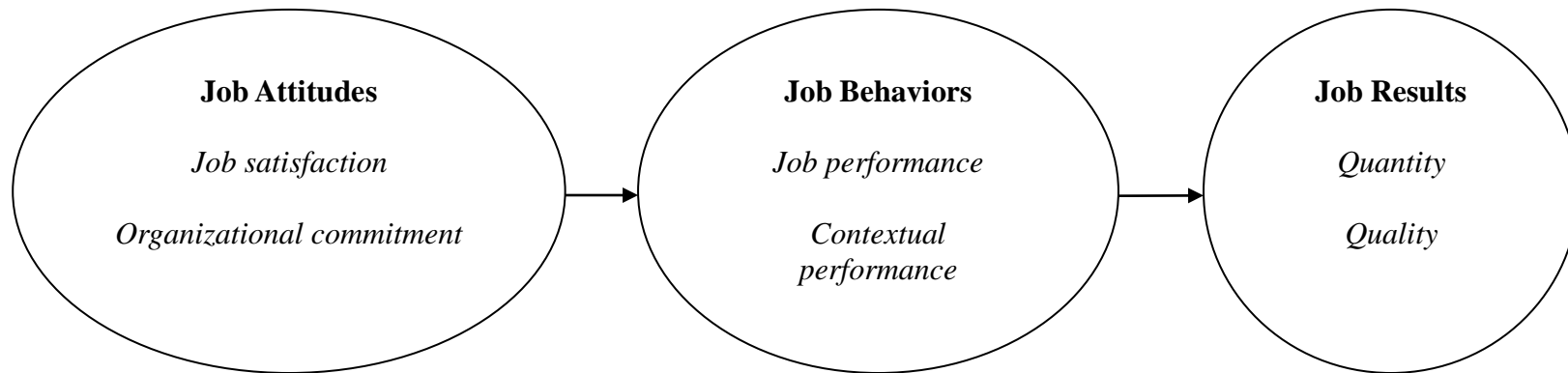
2.3.3 The Use of Attitudinal, Behavioral and Result Consequences

On the basis of the theories of planned behaviors (Ajzen, 1985, 1991), progressive consequence model (Kirkpatrick, 1959, 1960) and macro perspective of employee job performance (Rotundo & Sackett, 2002), this study identifies three job related consequences: job attitudes, behaviors and results (see Figure 3).

Job attitudes. Attitudinal consequences consist of individual's general attitudes about the job followed by job behaviors. Ajzen and Fishbein (2005) termed general attitudes as aggregated cognitions (e.g., behavioral intentions, belief) of individuals. Job attitudes are defined as “a fundamental evaluation of one's job experiences” (Harrison et al., 2006, p. 306) refer to employees' various personal views about the job which lead to job behaviors. Some employees like their jobs and experience a sense of affection or commitment to their work and the organization, while others dislike their jobs and experience a sense of contempt for their organizations and their working lives.

Job satisfaction can be defined as “a pleasurable or positive emotional state resulting from the appraisal of one's job or job experiences” (Locke, 1976, p. 1300). Job satisfaction is the extent to which people like their jobs (Spector, 1997). Thus, job satisfaction can be inferred from the individual's attitude toward his work (Brayfield & Rothe, 1951, p. 307). Consequently, scale items that measure the construct include statements capturing excitement and enthusiasm toward the job (Brayfield & Rothe, 1951). While job satisfaction is critical in any business setting, it is particularly germane to the hospitality sector largely due to the high human capital component that characterizes hospitality work. In fact, Chi and Gursoy (2008) demonstrated that job satisfaction is positively related to customer satisfaction that resulted in higher financial performance in the hotel industry.

FIGURE 3. Progressive Model of Employee Job Consequences



Organizational commitment is defined as a feeling of sharing beliefs and values with one's entire organization—itsself a positive emotional state (e.g., Meyer & Allen, 1991). That is, despite conceptual and empirical distinctions (e.g., Tett & Meyer, 1993), it is clear that job satisfaction and organizational commitment have theoretical and empirical commonalities. Both satisfaction and commitment are nonspecific with regard to the actions prescribed. In Meyer and Allen's (1991) three dimensional re-conceptualization, affective commitment is the most strongly overlapping in constitutive and operational definition with attitudes. Indeed, recently it has been termed "attitudinal commitment" (Riketta, 2002). Hulin (1991) also noted considerable theoretical overlap between affective commitment and overall job satisfaction, remarking that the only clear difference between the two is their conceptual target. The target of job satisfaction is one's position or work role; the target of affective commitment is the entire organization (Hulin, 1991, p. 489). Therefore, this study uses both affective commitment and organizational commitment interchangeably.

Job behaviors. Behavioral consequences consist of organizational desirable/undesirable behaviors on the job. As previous researchers (e.g., Rotundo & Sackett, 2002; Sackett et al., 2002; Viswesvaran & Ones, 2000) classified, there are two major variables of job behaviors: task performance (in-role behaviors) and contextual performance (extra-role behaviors). These behaviors are purported to influence organizational effectiveness. According to Borman and Motowidlo (1993, p. 73), in-role behaviors refer to "the proficiency with which employees perform activities that are formally recognized as part of their jobs; activities that contribute to the organization's technical core either directly by implementing a part of its technological process, or indirectly by providing it with needed materials or services." In most cases, in-role behaviors have represented job performance.

According to Organ (1988, pp. 4), organizational citizenship behavior (OCB) is defined as “individual behavior that is discretionary, not directly or explicitly recognized by the formal reward system, and that in the aggregate promotes the effective functioning of the organization.” Described in more detail, OCBs are extra-role behaviors that are discretionary, outside the realm of those measured by formal job evaluations, and which benefit the organization (Turnipseed, 2002, p. 1). OCB has positive intentions and is intended not to help the actor, but rather to someone else in the organization or the organization itself (Van Dyne, Cummings & Parks, 1995). In other words, OCB is beneficial actions taken for the sake of the system (Smith, Organ & Near, 1983). Since Organ and his colleagues (Bateman & Organ, 1983; Smith et al., 1983) introduced the term a quarter century ago, OCB has become a major construct for researchers to investigate in the fields of psychology and management. Hence, contextual performance (e.g., OCBs) needs to be considered to be an important behavioral consequence of work family conflict.

Job results. Job results are the last consequence category (c.f., distal outcomes) in the proposed model. Job results refer to those measures “where organizational impact is indexed... such as productivity gains and cost-savings” (Alliger et al., 1997, p. 346). The result criterion plays an outcome-role of job behaviors (Meyer et al., 1989; Steers, 1977). As the result criteria function as the outcome of job behaviors, they are usually job/work specific variables. Therefore, Bateman and Crant (1993) argued that potential result consequences look unlimited and would be different as a function of the specific jobs. Among the job consequences in the study model, it is job results that are organizationally relevant consequences. Aguinis and Pierce (2008) argued that practitioners seek a systematic approach to managing individual performance which is relevant and readily applicable in organizations.

Although various kinds of result outcomes can be used depending on the nature of job, there may be two major dimensions: quantity and quality (e.g., Hoffmann, Nathan & Holden, 1991; Meyer et al., 1989; Nathan & Alexander, 1988; Siders, George & Dharwadkar, 2001; Steers, 1977). Quantity, which is concerned with how much work the employee produced, is usually measured by a number of products produced or services provided and often managers pull out specific information which can be objectively measured against the employee's performance (Nathan & Alexander, 1988). Quality is concerned with how well the employee performed the work such as accuracy measures (e.g., shortages and overages) and error rates (Hoffman et al., 1991) and customer satisfaction rates which may be determined through customer survey.

According to Brief (1998), it is of great interest for organizational researchers to examine these individual evaluations on the job, so-called job attitudes, which have served as outcome variables. Bardoel, De Cieri and Mayson (2008) argue that researchers are likely to use traditionally common criteria such as job attitudes, while practitioners are using organizationally relevant criteria because each of them has different interests. Practitioners' major interest is to enhance effectiveness of their firm, and therefore they have to employ particular criteria most relevant for the firm. However, one of major interests of researchers is to generalize their findings to other contexts, so called theory building. Therefore, they tend to use the common criteria (e.g., job attitudes) which can be applicable to different situations.

Given the above arguments this study explores in the following section current trends of the choice of job consequences, and examines the nature and magnitude of the relationships of work family conflict and job consequences. Although previous studies of work family conflict were evaluated in general (c.f., Casper et al., 2007), there has been little research that reviews

empirical work family studies in the hospitality literature. Further, examining the nature and magnitude of the relationships of interest is indeed useful since it may signify potential causal mechanisms between the consequences along with work family conflict.

2.4 Work Family Conflict and Job Consequences: Meta-Analysis

Meta-analysis is a method to quantitatively aggregate findings across bodies of empirical research to gain information on the magnitude and consistency of bivariate relationships among variables, while overcoming the effects of sampling error which exists to some extent in every primary study (Hunter & Schmidt, 2004). Magnitude matters because larger effect sizes can mean bigger changes in criteria. Stronger relationships may help provide better explanations and more precise predictions of criteria. Consistency is also important information. Greater consistency means the effect or relationship studied is likely to occur at the specified magnitude across contexts, making predictions about future effects easier. In short, meta-analysis is a useful tool to quantitatively evaluate the results of bodies of results from previous empirical studies.

The relationship between work family conflict and job consequences has been examined in a number of empirical studies in the social psychology and organizational management literatures. In fact, several meta-analyses of the relationship of work family conflict with job consequences have already been published (e.g., Allen et al., 2000; Ford et al., 2007; Gilboa et al., 2008; Michel et al., 2009). However, previous meta-analyses of work family conflict have not included hospitality journals although there have been a substantial number of empirical studies in the hospitality literature. In addition, few studies with hospitality samples have been included in these reviews (c.f., Babin & Boles, 1996) included in the past meta-analytical studies (e.g., Allen et al., 2000; Ford et al., 2007; Gilboa et al., 2008).

As Boles and Babins (1996) noted, previous researchers have examined work family conflict using mostly managerial and non-hospitality employees (e.g., Allen et al., 2000; Bacharach, Bamberger & Conley, 1991; Gilboa et al., 2008; Greenhaus, Bedeian & Mossholder, 1987), and therefore the previous findings may not generalize to other occupational samples such as hospitality workers. Therefore, it may be informative to review previous meta-analytic works which did not include hospitality samples and then contrast these results with a meta-analytic review of work family conflict studies in hospitality samples. Contrasting these two different literatures may offer new insights into the generalizability of relationships between work family conflict and job consequences.

2.4.1 Process: Literature Search and Inclusion Criteria

Prior to reviewing results from the hospitality literature, I searched the existing meta-analytical studies that report the relationships of work family conflict with job consequences and the relationships between job attitudes, behaviors and results in the social psychology and management literature. A keyword search of the terms “meta-analysis” and “work family conflict” or “*individual performance*” or “*employee performance*” or “*job performance*” in GoogleScholar located nine meta-analyses that provide the effect size and/or variability of the relationships of interest: Allen et al. (2000), Gilboa et al. (2008), Harrison et al (2006), LePine, Erez and Johnson (2002), Michel et al. (2009), Podsakoff, LePine and LePine (2007), and Riketta (2002).

In order to be included in the present analysis, the identified studies had to satisfy the following criteria. Each study had to: (1) be conducted in the context of the hospitality industry, (2) assess a work family conflict variable and a dependent variable—dependent variable has to

be sufficiently described to allow it to be categorized, and (3) report the magnitudes of zero order relationships for the dependent variable(s) with one or more independent variables and other dependent variables.

In the review of hospitality literature, several search steps were taken to retrieve primary studies from hospitality journals. The first strategy accompanied with a computer search of the Hospitality & Tourism Complete from EBSCOhost database for the years between 1999 and 2009. A keyword search of the terms “*work family conflict*” or “*individual performance*” or “*employee performance*” or “*job performance*” was performed in the first process. Second, a manual search of the 1999 through 2009 volumes of the following journal was conducted: *International Journal of Hospitality Management*, *Journal of Hospitality & Tourism Research*, *Cornell Hospitality Quarterly*, *International Journal of Contemporary Hospitality Management*, *International Journal of Hospitality & Tourism Administration*, and *Journal of Human Resource in Hospitality & Tourism job performance*. Finally, I reviewed the reference sections from the articles to identify additional empirical studies.

The keyword search through the computer database resulted in 293 matches. However, only 18 studies matched the criteria to be included in this analysis. The vast majority of the studies that were excluded were not empirical studies ($N = 240$) or they did not provide basic statistics such as means, standard deviations or zero order correlations ($N = 35$) to code the effect size. The manual journal search process located an additional three studies and a total of 21 studies have been obtained in the initial literature search trial. Once individual empirical studies were identified and retrieved, each study was coded on specific study characteristics for the analysis. A master coding sheet (see Appendix A) was used to record the following information with respect to each study: name of journal, variables of interest, instrumentation used to

measure independent/dependent variable(s), reliability of the measures, effect size, characteristics of sample, research design, and analytical techniques.

2.4.2 Results of the Meta-analytic Reviews

I begin by reviewing the relationships of interests in previous meta-analytical studies published in the social psychology and management literature (e.g., Allen et al., 2000; Gilboa et al., 2008; Harrison et al., 2006; LePine, Erez & Johnson, 2002; Michel et al., 2009; Podsakoff, LePine, and LePine, 2007; Riketta, 2002). Table 2 recaps key findings regarding the relationships between work family conflict and different types of job consequences along with the relationships between the job consequences in previous meta-analytical studies.

A new meta-analysis was conducted to examine the relationships between work family conflict and three types of job consequences (attitudes, behaviors and results), and the relationships between these job consequences reported in the hospitality literature. The effect sizes and variability of these relationships are summarized in Table 3.

TABLE 2. Results of the Meta-Analysis for Work Family Conflict and Job Consequences in the Non-Hospitality Literature^{a, b}

Relationship	K	N	r	ρ (r_c)	SD _{ρ}
<u>WFC-Attitudes</u>					
Job satisfaction ^c	85	29,587	-	-.25	-
Organizational commitment ^d	6	1,609	-.18	-.23	.14
<u>WFC-Behaviors</u>					
Job performance ratings ^e	12	3,435	-.10	-.12	.14
Contextual performance	-	-	-	-	-
<u>WFC-Results</u>					
<u>Attitudes-Attitudes</u>					
Job satisfaction-Organizational commitment ^f	112	39,187	-	.60	-
<u>Attitudes-Behaviors</u>					
Job satisfaction-Job performance ratings ^g	242	44,518	.18	.30	.19
Job satisfaction-Contextual performance ^h	22	7,100	-	.24	-
Organizational commitment-Job performance ratings ⁱ	59	14,906	.13	.19	.04
Organizational commitment-Contextual performance ^j	17	5,133	.17	.20	-
<u>Attitudes-Results</u>					
Job satisfaction-Objective performance ^k	34	5,216	.16	.26	.19
Organizational commitment-Objective performance ^l	18	5,801	.11	.13	.12
<u>Behaviors-Behaviors</u>					
Job performance-Contextual performance ^m	24	9,912	.20	.23	.10
<u>Behavior-Results</u>					
Job performance-Objective performance ⁿ	50	8,341	.32	.39	.04
Contextual performance-Objective performance	-	-	-	-	-

Note. ^a If more than one study reported on the same relationship, we used the estimate reflecting the greatest amount of data (in most cases, it was the most recent data). WFC is work family conflict; “K” is the number of effect sizes; “N” is total observations. ^b The letter superscripts in the body of the table indicate the source of the meta-analytic findings as follows: “c,” Michel et al. (2009); “d,” Allen et al. (2000); “e,” Gilboa et al. (2008); “f,” “m,” Harrison et al. (2006); “g,” “k,” Judge et al. (2001); “h,” “j,” LePine et al. (2002); “i,” “l,” Riketta (2002); “n,” Bommer et al. (1995).

TABLE 3. Results of the Present Meta-Analysis for Work Family Conflict and Job Consequences in the Hospitality Literature

Relationship	K	N	r	ρ (r_c)	σ_{Obs}	σ_{se}	SD_{ρ}
<u>WFC-Attitudes</u>							
Job satisfaction	5	2,230	-.24	-.28	.079	.05	.07
Organizational commitment	5	1,609	-.18	-.22	.103	.05	.09
<u>WFC-Behaviors</u>	5	1,300					
Self-reported job performance	5	1,300	-.05	-.11	.156	.06	.14
Contextual performance	-	-	-	-	-	-	-
<u>WFC-Results</u>	-	-	-	-	-	-	-
<u>Attitudes-Attitudes</u>							
Job satisfaction-Organizational commitment	11	4,210	.59	.71	.116	.03	.11
<u>Attitudes-Behaviors</u>							
Job satisfaction-Job performance	8	3,178	.22	.26	.11	.05	.10
Job satisfaction-Contextual performance	2	493	.32	.41			
Organizational commitment-Job performance	5	2,093	.35	.36	.16	.04	.15
Organizational commitment-Contextual performance	2	805	.38	.51	.17	.04	.16
<u>Attitudes-Results</u>	-	-	-	-	-	-	-
<u>Behaviors-Behaviors</u>	-	-	-	-	-	-	-
<u>Behavior-Result</u>	-	-	-	-	-	-	-

Note. WFC is work family conflict; “K” is the number of effect sizes; “N” is total observations.

Work family conflict → job attitudes

Job satisfaction. As stated earlier, both job satisfaction and organizational commitment are the most popular attitudinal job consequences examined in previous work family conflict studies (e.g., Allen et al., 2000; Ford et al., 2007; Michel et al., 2009). It has been consistently reported that employees feel lower levels of job satisfaction when the levels of work family conflict increases (see Table 2). In their recent meta-analysis of Michel et al. (2009) report the effect size of the work family conflict-job satisfaction relationship ($\rho = -.25$, $K = 85$, $N = 29,587$).

Likewise, the results of present hospitality meta-analysis (see Table 3) show that this relationship seems to be a little bit stronger in the hospitality context than in a general context ($\rho = -.28$, $SD_{\rho} = .065$, $K = 5$, $N = 2,230$). Besides, it should be noted that there is a small variability of the relationship across the studies (c.f., $SD_{\rho} = .065$) despite the fact that there are only five studies included in my meta-analysis. Specifically, four of the five studies (Karatepe & Kilic, 2007; Karatepe & Sokmen, 2006; Karatepe & Uludag, 2007; Navasivayam & Mount, 2004) reported similar effect sizes ($\rho = -.19 \sim -.38$), while a study (Karatepe & Kilic, 2009) found a very small effect size for the relationship between work family conflict and job satisfaction ($\rho = -.04$).

Organizational commitment. Organizational commitment has been examined as an attitudinal job consequence in previous work family conflict studies. It has been well accepted by researchers that employees are less likely to affectively commit to their firm when they feel higher levels of work family conflict (e.g., Allen et al., 2000; Carr, Boyar & Gregory, 2008; Lyness & Thompson, 1997; Netemeyer et al., 1997). As seen in Table 2, Allen's meta-analysis reported a moderate effect size for the work family conflict-organizational commitment relationship ($\rho = -.23$, $K = 6$, $N = 1,208$).

However, the results of current meta-analysis (see Table 3) demonstrate that this

relationship seems to be a bit weaker in the hospitality context than in a general context ($\rho = -.16$, $SD_{\rho} = .088$, $K = 5$, $N = 1,609$). Like in the case of job satisfaction, there is some variability of the relationship across the studies attributed to the fact that there are only five studies included in my meta-analysis. Specifically, three of the five studies (Karatepe & Kilic, 2007; Karatepe & Sokmen, 2006; Karatepe & Uludag, 2007) reported similar effect sizes ($\rho = -.21 \sim -.27$), while two study (Karatepe & Kilic, 2009; Navasivayam & Mount, 2004) found very small effect sizes for the relationship between work family conflict and organizational commitment ($\rho = -.08$ and $-.02$ respectively).

Work family conflict \rightarrow job behaviors

Job performance. The meta-analysis of Allen et al. (2000) found that there is a moderately weak relationship between work family conflict and job performance ($\rho = -.12$, $SD_{\rho} = .11$, $K = 4$, $N = 1,248$). To account for the weak relationship, they suggested that there would be a mediator which affects the relationship between work-family conflict and job performance. Since the Allen's meta-analysis (2000), organizational researchers have continued to investigate whether work family conflict really hinders employees' performance on the job, and found that work family conflict is negatively related to job performance (e.g., Gilboa et al., 2008). In recent years, researchers have paid particular interest in job performance as an outcome of work family conflict (e.g., Gilboa et al., 2008; Roth & David, 2009). As shown in Table 2, a recent meta-analysis (Gilboa et al., 2008) reported a weak effect size with a moderate variability ($\rho = -.12$, $SD_{\rho} = .10$, $K = 10$, $N = 3,178$) for the relationship between work family conflict and job performance.

However, the relationship between work family conflict and job performance in their

analysis was much weaker when supervisor rated job was the measure of performance ($\rho = -.05$, $SD_{\rho} = .06$, $K = 5$, $N = 1,105$) than when self-reported job performance was used ($\rho = -.16$, $SD_{\rho} = .10$, $K = 6$, $N = 2,186$). There has been a recent effort to scrutinize the weak relationship between work family conflict and supervisor rated job performance. For instance, Roth and David (2009) argued that team-level performance moderates the work family conflict-job performance relationship. According to these researchers, the detrimental effect of work family conflict on job performance may be less serious for employees working with high performing teammates than those with low performing teammates (Roth & David, 2009).

As seen in Table 3, there have been five studies that examine the work family conflict-job performance relationship in the hospitality literature. The results of present meta-analysis indicate that this relationship seems to be weaker in the hospitality context than in a general context ($\rho = -.06$, $SD_{\rho} = .135$, $K = 5$, $N = 1,300$). However, it needs to be noted that there is a large variability of the relationship across the studies (c.f., $SD_{\rho} = .135$) because there are only five studies included in my meta-analysis. Although four of five studies (Karatepe & Kilic, 2007; Karatepe & Sokmen, 2006; Karatepe & Uludag, 2007; Navasivayam & Mount, 2004) reported negative effect sizes, these effect sizes were inconsistent ($\rho = -.03 \sim -.26$). Further, one study (Karatepe & Kilic, 2009) found a positive effect size for the relationship between work family conflict and job performance ($\rho = .15$).

Contextual performance. As seen in Table 2, no meta-analysis has been conducted for the relationship of work family conflict with contextual performance. However, a few researchers have examined this relationship in education institutes. For instance, a study found a negative association of work family conflict with organizational citizenship behaviors ($r = -.15$; $N = 203$) among teachers in US elementary, middle, and high schools (Bragger, Rodriguez-Srednick,

Kutcher, Indovino & Rosner, 2005). On the other hand, Netemeyer et al. (2005) found a substantive relationship between work family conflict and contextual performance among employees in an on-line electronic retailer ($r = -.69$; $N = 320$). However, there has not been a single study to link work family conflict with contextual performance in the hospitality literature.

Work family conflict → job results

Few studies have used objective job performance as a criterion variable in combination with or in lieu of measures of attitudes or behaviors in the social psychology and organizational management literature. Consequently it is not surprising that, no meta-analysis has been conducted to examine the relationship of work family conflict with job results such as objective job performance. I could locate only one study using objective job consequence as a criterion variable (Goff, Mount & Jamison, 1990). Goff et al. (1990) found that workers' general experience of work–family conflict associated with increased levels of absenteeism as recorded by the organization among a small sample of 59 employees. To my knowledge, there is not a single empirical study in the hospitality literature that has investigate the relationship between work family conflict and job results such as objectively measured job consequences.

Job attitudes → job behaviors

Job satisfaction → job performance. The link between job satisfaction and job performance has been studied extensively resulting in three meta-analyses (Iaffaldano & Muchinsky, 1985; Judge, Thoresen, Bono, & Patton, 2001; Petty, McGee, & Cavender, 1984). In one of the earlier meta-analysis (Iaffaldano & Muchinsky, 1985), job satisfaction was found to be weakly associated with job performance ($\rho = .17$, $K = 74$, $N = 12,192$). More than a decade later, Judge

et al. (2001) reported a stronger relationship ($\rho = .30$, $k = 312$, $N = 54,471$) between job satisfaction and performance in their meta-analysis (see Table 2). Since then, organizational researchers (e.g., Bowling, 2007; Chang et al., 2009; Harrison et al., 2006; Riketta, 2008) have believed that job satisfaction is a prominent antecedent of job performance.

As seen in Table 3, the results of the present hospitality-based meta-analysis demonstrate that this relationship seems to be a bit smaller in the hospitality context than in a general context and associated with a substantial variability ($\rho = .26$, $SD_{\rho} = .099$, $K = 8$, $N = 3,178$). The range of effect sizes (ρ s) was from .16 (Karatepe & Sokmen, 2006) to .54 (Johlke & Duhan 2000).

Job satisfaction \rightarrow contextual performance. Since Organ (1977) examined the link between job satisfaction and extra-role behaviors, it has been reported that there is a strong association between an individual's overall job satisfaction and contextual performance (c.f., OCBs) in a variety of research settings (Organ & Ryan, 1995; LePine et al., 2002). To explain the relationship, most researchers (e.g., Bateman & Organ, 1983; Organ et al., 2006) used the social exchange theory, stating that employees who are satisfied with their jobs may reciprocate through OCBs, whereas those employees experiencing job dissatisfaction may withdraw their OCBs. In particular, LePine et al. (2002) reported the effect sizes of the relationships of job satisfaction with contextual performance ($\rho = .28$, $k = 32$, $N = 16,348$) in their meta-analysis (see Table 2). Although extra-role behaviors have been understood as a multidimensional construct by organizational researchers, a recent meta-analysis (Hoffman, Papas, Chatkoff & Kerns, 2007) contends that contextual performance can be explained as a single latent construct.

As seen in Table 3, the present hospitality meta-analysis reports a somewhat larger effect size between job satisfaction and contextual performance those these findings are based on only two empirical studies ($\rho = .38$, $SD_{\rho} = .012$, $K = 2$, $N = 493$). More specifically, Ravichandran

and Gilmore (2007) found the effect size of the relationship between job satisfaction and extra-role behaviors to organization ($r = .32$, $N = 285$) among hotel employees, and a similar effect size of the relationship ($r = .32$, $N = 208$) was reported for student employees in a university dining center (Nadirin & Tanova, 2009).

Organizational commitment \rightarrow job performance. The relationship between organizational commitment and job performance has also been meta-analyzed in several studies (e.g., Cohen, 1991; Mathieu & Zajac, 1990; Organ & Ryan, 1995; Randall, 1990; Riketta, 2002). A typical assumption of this relationship is that employees who feel strongly attached to their organization may work harder on their job. Likewise, the effect size of the organizational commitment-job performance relationship appeared to be moderately positive in the Riketta's (2002) meta-analysis ($\rho = .18$, $SD_{\rho} = .10$, $k = 87$, $N = 20,973$).

As seen in Table 3, the results of current meta-analysis show that this relationship seems to be a bit stronger in the hospitality context than in a general context ($\rho = .36$, $SD_{\rho} = .15$, $K = 5$, $N = 2,093$). There is a large variability of the relationship across the studies (c.f., $SD_{\rho} = .15$), though there are only five studies included in the meta-analysis. Specifically, four of the five studies (Karatepe & Kilic, 2007; Karatepe & Kilic, 2009; Mukherjee & Malhotra, 2006; Wu & Wang, 2008) found substantial effect sizes ($\rho = .36 \sim .54$), while a study (Iun & Huang, 2007) reported a very small effect size for the relationship between work family conflict and job satisfaction ($\rho = .08$).

Organizational commitment \rightarrow contextual performance. There are several meta-analyses that examined the effect size of the relationship between organizational commitment and extra-role behaviors (e.g., Organ & Ryan, 1995; LePine et al., 2002; Riketta, 2002). In their meta-

analysis, LePine et al. (2002) reported an effect size of the organizational commitment-contextual performance ($\rho = .25$, $k = 842$, $N = 10,747$).

As seen Table 2, the current meta-analysis provides the effect size and variability of the relationship between work family conflict and contextual performance with only two empirical studies ($\rho = .51$, $SD_{\rho} = .162$, $K = 2$, $N = 805$) in the hospitality literature. More specifically, Cho and Johanson (2008) reported a substantive relationship between organizational commitment and extra-role behaviors ($r = .63$, $N = 256$) among entry-level restaurant employees. In addition, Cichy et al. (2009) found moderate relationships of organizational commitment with extra-role behaviors to individual ($r = .33$, $N = 549$) and extra-role behaviors to organization ($r = .21$, $N = 549$) for club managers.

Job attitudes → job results

In many instances, researchers have not conceptually differentiated result criteria from behavioral criteria, considering both aspects of job performance. They have treated job results as a type of job performance, so called objective performance measurement. The distinction between subjective and objective performance measures has been used for potential moderator analysis (e.g., Iaffaldano & Muchinsky, 1985; Judge et al., 2001; Riketta, 2002) at best. Typical examples of result criteria include dollar volume of sales (Bagozzi, 1978), increase in error-free production of factory workers (Orpen, 1974) and dollar amount in commissions of insurance agents (Mackenzie, Podsakoff & Fetter, 1991).

Many researchers select behaviors over results as criterion measures for two major reasons: deficiency and contamination. First, results are believed to be often deficient in that they do not include all aspects of job performance except for particular scales. A second reason is that results

are considered to be often contaminated by other forces that are outside of the individual's control. Muckler and Seven (1992, p. 441) pointed out "the distinction between objective and subjective measurement is neither meaningful nor useful in human performance studies in that all measurement in science and technology is necessarily filled with subjective elements, whether in selecting measures or in collecting, analyzing, or interpreting data." However, the fundamental reason for researchers to use objective performance criteria rather than subjective performance criteria (e.g., work quantity/quality) is that objective performance measurement is less biased than subjective measurement derived from a belief that objectivity is an ideal of science and a goal for every rational field of inquiry (Scheffler, 1967).

Relatively, a few studies have examined the job attitudes-results relationship. The logic of this relationship is not different from that of the relationship between job attitudes and behaviors. The effect sizes of the relationship are available in the studies that examined the job attitudes-behavioral performance criteria. Some meta-analyses examined the relationship between attitudinal and result criteria in their moderator analysis (e.g., Iaffaldano & Muchinsky, 1985; Judge et al., 2001; Riketta, 2002). The effect sizes of the attitudinal-result criteria relationship were smaller than those of the attitudinal-behavioral criteria relationship in previous studies (e.g., Judge et al., 2001; Riketta, 2002). The distribution of the effect sizes (c.f., a corrected mean correlation) ranged from .13 to .26. The previous findings are not surprising considering the progressive performance criteria model. Given job attitudes comes through job behaviors, the strength of the job attitudes-results relationship might be smaller than that of the job attitudes-behaviors relationship. A cursory review of literature indicates that only few studies are available for the job attitudes-results relationship in the hospitality literature. Recently, Gazzoli et al. (2009) examined the relationship between job satisfaction and service quality perceived by customers

for restaurant employees. They reported a moderate weak effect size of the relationship ($r = .12$, $N = 474$).

Job satisfaction \rightarrow job results. The relationship between job satisfaction and objective index of individual performance (e.g., work quantity and quality) has been examined in the management literature (e.g., Iaffaldano & Muchinsky, 1985; Judge et al., 2001). For instance, Wanous (1974) reported an effect size of the relationship between job satisfaction and quantity/quality indexes ($r = .21$, $N = 80$) among telephone operators in his field study. As seen in Table 2, the effect size of the job satisfaction-job performance relationship was moderately positive in the Judge et al.'s (2001) meta-analysis ($\rho = .26$, $SD_{\rho} = .19$, $k = 34$, $N = 5,216$). In the hospitality literature, Gazzoli et al. (2009) examined the link between service employee's job satisfaction and customers' evaluation on the service provided by the employee. Rather than using existing quantity/quality indexes of performance, they asked customers to rate the service encounter with particular employees and reported an effect size of the relationship ($r = .12$, $N = 474$) among restaurant employees.

Organizational commitment \rightarrow job results. The relationship between organizational commitment and objective measures of performance (e.g., work quantity/quality) has been studied in the management literature (e.g., Riketta, 2002; Siders et al., 2001). In particular, Siders et al. (2001) found a substantial effect size between organizational commitment and sales volume ($r = .51$, $N = 328$) among sales managers. As seen in Table 2, Riketta (2002) reported an overall effect size of the organizational commitment-objective measures of performance relationship ($\rho = .13$, $k = 618$, $N = 5,801$). Unfortunately, there has been no examination of the association of organizational commitment with objective measures of performance in the hospitality literature.

Job behaviors → job results

As stated earlier, most organizational researchers have not conceptually differentiated result criteria from behavior criteria. Therefore, they have used these two criteria interchangeably. In particular, a meta-analysis in the sales literature (Hartley & Walker, 1985) demonstrated that a half of empirical studies employed behavioral criteria obtained from managers, peers, or self-reports while the other half used result criteria such as total sales volume, sales commissions, or percent of quota.

However, in most instances, few researchers explained why one type of measure was employed as opposed to another while most researchers assume that objective and subjective measures of performance can be used interchangeably (Rich, Bommer, MacKenzie, Podsakoff & Johnson, 1999).

Job performance ratings → job results. The relationship between job performance ratings and objective measures of performance (e.g., work quantity/quality) has been of continuous interest to organizational researchers (e.g., Alliger et al., 1997; Bommer, Johnson, Rich, Podsakoff, & MacKenzie, 1995; Ford et al., 1986; Heneman, 1986; Rich et al., 1999). For example, Heneman (1986) reported a quite small effect size of the relationship between task performance and objective measures of performance ($\rho = .27$, $k = 23$, $N = 3,178$) in his meta-analysis, while Bommer et al. (1995) found a moderate effect size of the relationship ($\rho = .39$, $k = 50$, $N = 8,341$), and Rich et al. (1999) found a stronger effect ($\rho = .45$, $k = 21$, $N = 4,092$) among sales workers in their meta-analysis. Unfortunately, no research has been conducted to examine the relationship between job performance and objective performance criteria in the hospitality literature.

Contextual performance → job results. Compared to the job performance-objective performance criteria relationship, few studies have investigated the link between contextual performance and objective criteria. In particular, Mackenzie and his colleagues (1991) reported a trivial effect size for the relationship of organizational citizenship behavior measures with objective performance criteria. Specifically, they reported the relations of objective criteria to sportsmanship ($r = .07$), courtesy ($r = .04$), civic virtue ($r = .07$), and altruism ($r = .16$) among 259 managers of insurance companies. Unfortunately, no study has examined the relationship between contextual performance and objective performance criteria in the hospitality literature.

2.4.3 Discussions and Implications of Prior Research

As expected, job attitudes most frequently appeared as job consequences of work family conflict ($N = 91$; % = 88.3), while twelve studies (11.7%) used job behaviors as consequences in the general meta-analytical findings (see Table 2). More specifically, it is job satisfaction that organizational researchers employed as a job consequence of work family conflict ($N = 85$; % = 82.5). The other attitudinal construct, organizational commitment also appeared as a job consequence of work family conflict ($N = 6$; % = 5.8). Apparently, there has been no meta-analysis which report job results as job consequences of work family conflict.

On the other hand, it is clear that job satisfaction, organizational commitment and self-reported job performance were the most common job consequences of work family conflict for hospitality researchers. As seen in Table 3, each of these job consequences has been used as a criterion variable of work family conflict for five empirical studies. However, it should be noted that the job performance in the previous studies were measured using self-reported performance scores of the respondents who also reported levels of work family conflict, while there has been

no study to use contextual performance and objective job performance as a criterion variable of work family conflict in the hospitality literature. In other words, hospitality researchers only employed attitudinal consequences and self-reported behavioral consequences and there is no information about the relationship of work family conflict with behavioral consequences rated by others (e.g., supervisor) as well as result consequences (c.f., objective performance).

Second, it is interesting to note the effect sizes of the relationships of work family conflict with three types of job consequences systematically differ. Specifically, the effect sizes of the work family conflict-job behaviors were stronger than those of work family conflict-job behaviors not only in the hospitality literature but also in the social psychology and organizational management literature. For instance, the effect size of the work family conflict-job satisfaction relationship ($\rho = -.25$, $SD_{\rho} = \text{NR}$, $K = 85$, $N = 29,587$) is larger ($\Delta \rho = .13$) than the work family conflict-job performance ($\rho = -.12$, $SD_{\rho} = .14$, $K = 12$, $N = 3,435$) in the non-hospitality literature, whereas the effect size of the work family conflict-job satisfaction relationship $\rho = -.28$, $SD_{\rho} = .065$, $K = 5$, $N = 2,230$) is larger ($\Delta \rho = .17$) than the work family conflict-job performance $\rho = -.11$, $SD_{\rho} = .135$, $K = 5$, $N = 1,300$) in the hospitality literature. This supports the logic of the progressive model of job consequences in which job attitudes are more proximal outcome than job behaviors that are more proximal outcome than job results.

Unfortunately, the present meta-analysis is unable to provide the effect size of the relationship of work family conflict with job results, since there has been little research to investigate the relationship of interest in both the hospitality and non-hospitality literature. In addition, it should be noted that the effect size of the work family conflict-job performance was weak ($\rho = -.06$) in the present meta-analysis. This is slightly weaker than what other meta-analysis reported in the non-hospitality literature ($\rho = -.12$).

Third, related to the above discussion, although a number of previous studies ($K = 21$; $N = 7,927$) have examined the relationship between work family conflict and employee's job consequences, they fall short in describing the causal mechanisms that link work family conflict to each of its job consequences. Specifically, they have considered all job related consequences of work family conflict as direct outcomes with each of them occurring at the same time. Most previous studies use only one or two of job consequences as a criterion variable of work family conflict and did not articulate the casual relationships among the consequences. Hence, it is a promising research avenue to examine whether work family conflict has indirect effects on distal consequences (c.f., job behaviors and/or results) through proximal consequences (c.f., job attitudes and/or behaviors) in addition to the direct relationship between work family conflict and its attitudinal and behavioral outcomes.

Fourth, the relationship of work family conflict with job satisfaction and organizational commitment is fairly consistent ($SD_p = .065$ and $.088$ respectively). This means that the strength of the work family conflict-job attitudes has been similar across the previous empirical studies in the hospitality literature. However, the variability of the work family conflict-job performance is quite big ($SD_p = .135$), however, there are only five studies included in my meta-analysis. Therefore, more effort could be directed toward examining the magnitude and potential causes of variability in the relationship of work family conflict with measures of job performance.

Lastly, it is intriguing that all the work family conflict studies in hospitality were conducted with the samples of hotel employees. Further, 10 of the 12 work family studies were conducted in Eastern Europe (e.g., Turkey and Albania), while only one study was conducted in the US (Navasivayam & Mount, 2004). Therefore, additional research in a broader range of hospitality settings in the U.S. would be desirable to extend our understanding of work family conflict and

its effects on job consequences.

2.5 The Present Study: Proposed Conceptual Model and Mediation Hypotheses

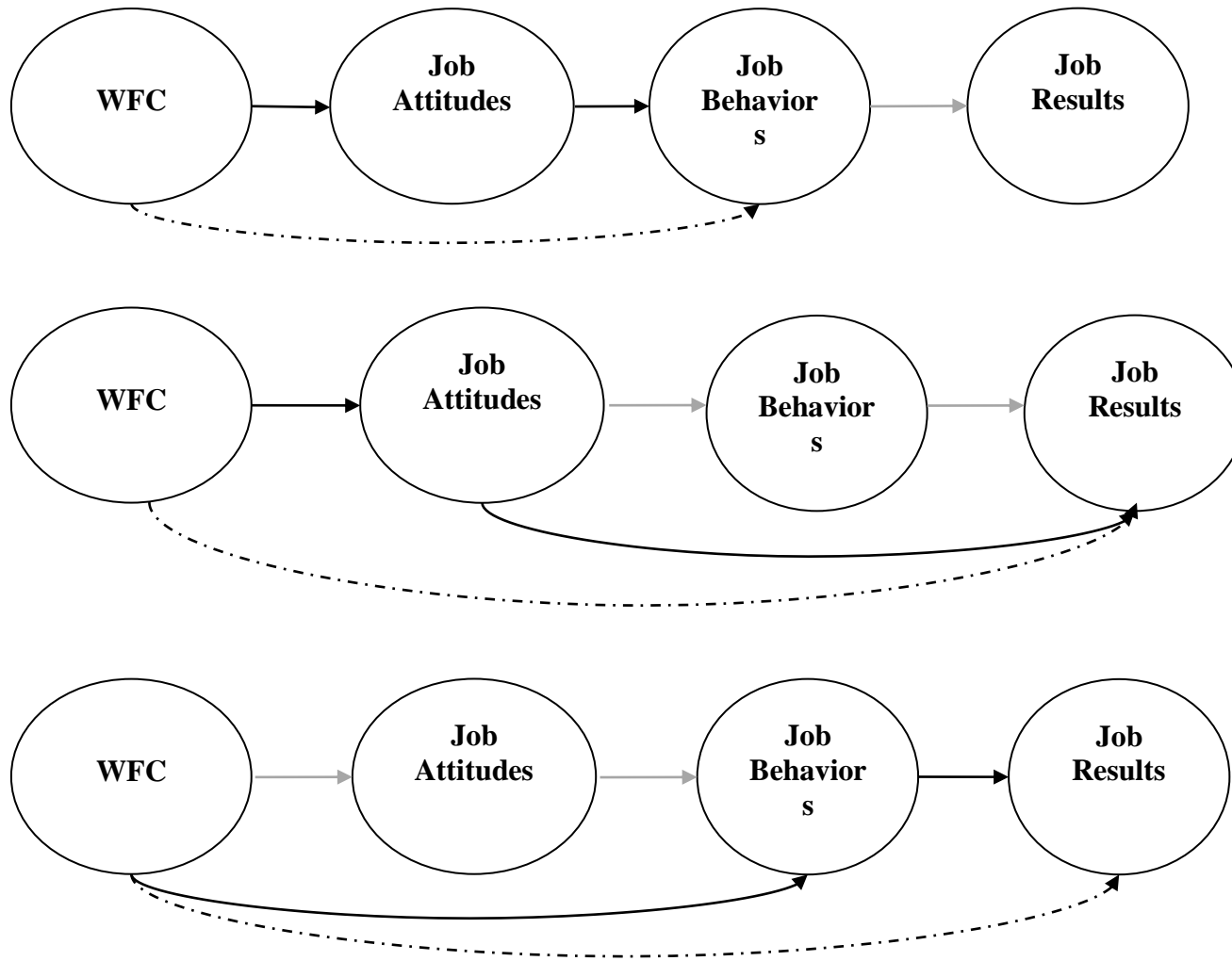
Based on the review of previous work family conflict studies, this dissertation proposes a conceptual model of work family conflict and its job consequences (see Figure 4). The proposed model extends past work family conflict research by: (a) examining the job consequences of work family conflict in particular three categories (e.g., attitudes, behaviors and results); (b) examining whether these job consequences are casually related one another in terms of proximal and distal outcomes, and (c) examining the mediation roles of the proximal outcomes in the relationship between work family conflict and distal outcomes. Given that previous studies have rarely used distal outcomes such as supervisor rated job performance, contextual performance as well as job results (c.f., objective performance measures), this study is going to measure these distal outcomes results which are the practitioner-relevant consequences, and test the casual mechanism between these job consequences in terms of direct and mediated relationships.

2.5.1 The Mediating Role of Attitudes

As seen in the results of the present meta-analysis (see Table 3), most hospitality researchers studying the effect of work family conflict on job consequences have used proximal outcomes such as attitudes and self-reported behaviors criterion variables. There are two compelling reasons why attitudinal consequences may be dominating the literature. The first reason is that measures of attitudes are more readily available than behavior or outcome data and less expensive to collect. As Alliger et al. (1997) argued in their meta-analysis, attitudinal criteria were most frequently utilized by training researchers since it is comparably easier to collect data.

A few behavioral and by far fewer result criteria were used in that “organizational constraints great limit the opportunities for gathering higher level criteria” (p. 346). Likewise, hospitality researchers have also relied on attitudinal criteria given that the industry is notorious for high employee turnover rates. Therefore, they prefer to use attitudinal criteria which can be easily collected from the very present employees.

FIGURE 4. Conceptual Model of Work Family Conflict with Job Consequences



Note. WFC is work family conflict; Predicted relationships among WFC, job attitudes, job behaviors, and job results. The dashed lines represent the direct path of WFC to a distal consequence in the presence of a proximal consequence and the grey lines represent conceptually existent paths.

The other reason is that attitudes represent the most direct and proximal consequence of work-family conflict on the way to the distal job consequences (e.g., behaviors, results). Consequently, they presume that the same (at least similar) outcomes will be obtained by using attitudinal measures as using other measures as criteria. In particular, the influence of the model of service profit chain (Heskett et al., 1994) is prominent among hospitality researchers. Therefore, it is commonly accepted that satisfied/committed employees perform well and make customers happy. The causal sequence from employee attitudes to behaviors and results is a norm widely shared in the hospitality literature (e.g., Chi & Gursoy, 2008).

However studying attitudes as the only job consequence of work family conflict is reasonable under two conditions. One is when attitudes are strongly correlated with other job consequence. This occurs when other job consequences are all highly correlated (i.e., $r > .80$) with each other. Under these circumstances, using an attitude measure as a criterion would yield very similar results (in both direction and magnitude of effects) as any other consequence variable. In fact, previous researchers have examined the strength of the relationships between the different criterion measures (e.g., Alliger et al., 1997; Bommer et al., 1995; Heneman, 1986; Judge et al., 2001). For instance, Judge et al. (2001) investigated the population relationship between job satisfaction (c.f., attitude) and job performance (c.f., behavior) and reported a moderate effect size of the relationship ($\rho = .30$, $SD_{\rho} = .21$, $k = 312$, $N = 54,471$). On the other hand, Heneman (1986) examined the population relationship between job performance rated by supervisors (c.f., behavior) and objective performance measures (c.f., result) and found a moderate effect size ($\rho = .27$, $SD_{\rho} = .21$, $k = 23$, $N = 3,178$) in his meta-analysis. Likewise, the meta-analysis of Bommer et al. (1995) also provided a moderate effect size of the relationship between subjective performance and objective performance ($\rho = .39$, $SD_{\rho} = .04$, $k = 50$, $N =$

8,341). Therefore, the first condition is unlikely to be true.

The other condition under which it is reasonable to study attitudes as the only job consequence of work family conflict is when the attitude is the mediating mechanism through which work family conflict has its effect on other consequences (behaviors and results) as is suggested in the theory of planned behavior (Ajzen, 1985, 1991) and the progressive consequence model (Kirkpatrick, 1959, 1960). In these instances, the effect of work family conflict on any consequence could be understood by knowing the impact of work family conflict on the attitude measure in addition to the relationship of attitudes to other consequences. Analogous to path analyses (Asher, 1983), in the case of full mediation, the impact of WFC on any consequence could be understood as the product of path coefficients through the attitude mediator.

But what if attitudes are not the mediating mechanism through which work family conflict impacts these other consequences? Two explanations are possible. One leads to overestimating the importance of work family conflict for organizationally relevant behavior or results outcomes. This occurs when work family conflict has strong relationships with attitudes, but has little or no relationship with these other outcomes. A second possibility is that we underestimate the importance of work family conflict. This would occur if the relationship between work family conflict and other job consequences is not fully mediated by attitude measures. In these circumstances, work family conflict is associated with other outcomes that are not accounted for through the mediating mechanisms of attitudes. Therefore, as mentioned earlier, it is of importance to examine the mediated relationships that occur between work family conflict, the proximal outcomes and the distal outcomes particularly for the hospitality researchers who have predominantly used attitudinal consequences as a criterion variable.

2.5.2 Mediation Hypotheses

This section provides conceptual as well as empirical justifications for developing mediation hypotheses with respect to the relationships of work family conflict with distal outcomes (e.g., behaviors and results) through proximal outcomes (e.g., attitudes). Conceptually, these mediation hypotheses seem to be consistent with previous theories such as the theory of planned behavior (Ajzen, 1985, 1991), the progressive categorization of training outcomes, (Kirkpatrick, 1959, 1960), and the macro perspective of job performance (Rotundo & Sackett, 2002). As discussed earlier in the progressive model of job consequences (see Figure 3), it is well accepted by researchers that employees' attitudes toward the job (e.g., job satisfaction, organizational commitment) direct their behaviors which then impact productivity and customer satisfaction (c.f., job results). In particular, the sequence of job consequences has been particularly well accepted by hospitality researchers extensively referring to the model of the service profit chain (Heskett et al., 1994) for their research endeavors.

In addition, developing mediation hypotheses also seems to be relevant empirically. According to Baron and Kenny (1986), there are four steps to establish mediation effect. The first step is ensuring that the independent variable (c.f., X) is correlated with the dependent variable (c.f., Y). In the second step, researchers need to show that the independent variable is correlated with the mediator (c.f., M). The third step is showing that the mediator affects the dependent variable. If the relationships between these variables are identified, the fourth step assessing the X-Y relationship controlling the M-Y relationship can be evaluated. If M completely mediates the X-Y relationship, the effect size of the X-Y relationship controlling M should be zero. As seen in the results of meta-analysis, the effect sizes of the relationships of

work family conflict and these job consequences systematically differ based on the category of the progressive model of job consequences (i.e. attitudes, behaviors and results).

By assessing the differences in the effect size of these relationships, one can infer the mediation roles of proximal outcomes on the relationship between work family conflict and distal outcomes. Overall, the effect sizes of the work family conflict-distal outcome (e.g., behaviors, results) relationships are smaller than those of the work family conflict-proximal outcomes (e.g., attitudes, behaviors) relationships which are smaller than those of the attitudes-behaviors relationships. In other words, it is likely that the work family conflict relationship with distal outcomes becomes smaller when its effect is mediated through an intervening variable. Thus, work family conflict should be more strongly correlated with proximal outcomes than distal outcomes. Further, under full mediation, the effect of work family conflict on distal outcomes can be estimated as the product of causal effect through the mediator.

2.5.2.1 Work Family Conflict → Job Attitudes → Job Behaviors

As shown in Figure 4, this study posits that job attitudes (e.g., job satisfaction and organizational commitment) mediate the relationship between work family conflict and job behaviors (e.g., job performance and contextual performance). In this case, there are four different types of potential mediation relationships: a) work family conflict → job satisfaction → job performance; b) work family conflict → organizational commitment → job performance; c) work family conflict → job satisfaction → contextual performance; and d) work family conflict → organizational commitment → contextual performance. In each case of the mediation mechanism, the strength of the pair relations is highlighted and compared with one another to develop the hypotheses.

Previous meta-analyses report a moderate weak negative relationship between work family conflict and job performance (e.g., Allen et al., 2000, $\rho = -.12$, $SD_{\rho} = .11$, $K = 4$, $N = 1,248$; Gilboa et al., 2008, $\rho = -.12$, $SD_{\rho} = .10$, $K = 10$, $N = 3,178$). Likewise, the meta-analysis for the hospitality literature also found that this relationship seems to be somewhat weaker in the hospitality context than in a general context ($\rho = -.06$, $SD_{\rho} = .143$, $K = 5$, $N = 1,300$). Although there has been no meta-analysis for the relationship between work family conflict and contextual performance, there have been some empirical studies that examined this relationship. For example, Bragger et al. (2005) reported a moderate weak negative relationship of work family conflict with contextual performance ($r = -.15$; $N = 203$), while there has not been a single study to link work family conflict with contextual performance in the hospitality literature.

The relationship of work family conflict with job satisfaction has been shown to be stronger than with job performance. In their recent meta-analysis, Michel et al. (2009) found a moderate negative relationship between work family conflict and job satisfaction ($\rho = -.25$, $K = 85$, $N = 29,587$), while the present meta-analysis suggests that this relationship may be slightly stronger in the hospitality context than in a general context ($\rho = -.28$, $SD_{\rho} = .065$, $K = 5$, $N = 2,230$). In their meta-analysis, Allen et al. (2000) reported a moderate effect size for the work family conflict-organizational commitment relationship ($\rho = -.23$, $SD_{\rho} = .14$, $K = 6$, $N = 1,208$), while the present meta-analysis suggests that this relationship seems to be a bit weaker in hospitality samples ($\rho = -.16$, $SD_{\rho} = .77$, $K = 5$, $N = 1,609$).

The relationship between job satisfaction and job performance seems to be slightly stronger than the above relationships. In their meta-analysis, Judge et al (2001) reported an effect size of the relationship ($\rho = .30$, $SD_{\rho} = .21$, $k = 312$, $N = 54,471$) between job satisfaction and performance, while the present meta-analysis suggests that this relationship seems to be a bit

smaller in the hospitality context than in a general context ($\rho = .26$, $SD_{\rho} = .099$, $K = 8$, $N = 3,178$). The relationship between organizational commitment and job performance also seems to be slightly stronger than the relationships of work family conflict with job behaviors, and job attitudes. Ricketta's (2002) in his meta-analysis reported a moderate relationship between organizational commitment and performance ($\rho = .18$, $SD_{\rho} = .10$, $k = 87$, $N = 20,973$), while the present meta-analysis suggests that this relationship seems to be more salient in the hospitality context than in a general context ($\rho = .36$, $SD_{\rho} = .152$, $K = 5$, $N = 2,093$).

Likewise, the relationship between job satisfaction and contextual performance seems to be stronger than the relationships of work family conflict with job behaviors, and job attitudes. In their meta-analysis, LePine et al. (2002) reported the effect size of the relationship of job satisfaction with contextual performance ($\rho = .24$, $SD_{\rho} = \text{NR}$, $k = 22$, $N = 7,100$), and the present meta-analysis that this relationship seems to be larger in the hospitality context than in a general context ($\rho = .41$, $SD_{\rho} = .012$, $K = 2$, $N = 493$). The relationship of organizational commitment with contextual performance also seems to be stronger than the relationships of work family conflict with job behaviors, and job attitudes. LePine et al. (2002) in their meta-analysis reported a moderate effect size of the organizational commitment-contextual performance relationship ($\rho = .20$, $SD_{\rho} = \text{NR}$, $k = 17$, $N = 5,133$), while the present meta-analysis suggests that this relationship seems to be more salient in the hospitality context than in a general context ($\rho = .51$, $SD_{\rho} = .162$, $K = 2$, $N = 805$).

Given that the magnitude of the relationship of work family conflict with job behaviors (c.f., distal outcome) is smaller than with job attitudes (c.f., proximal outcome), it seems that job attitudes are is more immediate consequence of work family conflict than job behaviors. This is consistent with the previous theories (e.g., the theory of planned behavior and the progressive

consequence model) which suggest that employee's job behaviors come after their job attitude (e.g., Ajzen, 1985, 1991; Kirkpatrick, 1959, 1960). Further, it would be expected that the moderate weak relationship between work family conflict and job behaviors would come to be substantially reduced once controlling the stronger effect of job attitudes on job behaviors in the regression equation. Based on the above arguments, it is proposed along with the hypotheses,

Proposition 1 (P1): Job attitudes mediate the relationship between work family conflict and job behaviors.

Hypothesis 1_a (H1_a): Job satisfaction mediates the negative relationship between work family conflict and job performance among restaurant employees.

Hypothesis 1_b (H1_b): Job satisfaction mediates the negative relationship between work family conflict and contextual performance among restaurant employees.

Hypothesis 1_c (H1_c): Organizational commitment mediates the negative relationship between work family conflict and job performance among restaurant employees.

Hypothesis 1_d (H1_d): Organizational commitment mediates the negative relationship between work family conflict and contextual performance among restaurant employees.

2.5.2.2 Work Family Conflict → Job Attitudes → Job Results

As shown in Figure 4, this study posits that job attitudes (e.g., job satisfaction and organizational commitment) mediate the relationship between work family conflict and job results (e.g., objectively recorded job performance). In this case, there are two different types of

potential mediation relationships: a) work family conflict → job satisfaction → objective performance; and b) work family conflict → organizational commitment → objective performance. In each case of the mediation mechanism, the strength of the pair relations is highlighted and compared with one another.

There have been few studies that examined the relationship of work family conflict with job results (c.f., objectively recorded job performance). Goff et al. (1990) found a very weak relationship between work family conflict and absenteeism incidents among a small sample of 59 employees ($r = .07$; $N = 59$).

On the other hand, there are a number of studies that examined the relationships of work family conflict with job attitudes (e.g., job satisfaction, organizational commitment). The relationship of work family conflict with job satisfaction seems to be stronger than with objective performance in a general context (Michel et al., 2009, $\rho = -.25$, $K = 85$, $N = 29,587$), whereas the present meta-analysis suggests that this relationship seems to be a little bit stronger in the hospitality context ($\rho = -.28$, $SD_{\rho} = .065$, $K = 5$, $N = 2,230$). Like in the case of job satisfaction the relationship of work family conflict with organizational commitment seems to be stronger than with objective performance in a general context (e.g., Allen et al., 2000 – $\rho = -.23$, $K = 6$, $N = 1,208$) and in the hospitality context ($\rho = -.16$, $SD_{\rho} = .77$, $K = 5$, $N = 1,609$).

The relationships between job attitudes and job results seem to be slightly stronger than between work family conflict and objective performance. In particular, Judge et al. (2001) reported in their meta-analysis a moderate relationship between job satisfaction and objectively recorded performance ($\rho = .26$, $SD_{\rho} = .19$, $k = 34$, $N = 5,216$), while there has been no examination with respect to the organizational commitment and objective measures of performance in the hospitality literature. Likewise, the relationship of organizational

commitment with objective performance also seems to be stronger than the work family conflict-objective performance relationship. Riketta (2002) reported a moderate effect size of the organizational commitment-objective performance relationship ($\rho = .13$, $SD_{\rho} = .12$, $k = 18$, $N = 5,801$), while there has been no examination with respect to the organizational commitment and objective measures of performance in the hospitality literature.

Given that the magnitude of the relationship of work family conflict with job results (c.f., distal outcome) is smaller than with job attitudes (c.f., proximal outcome), it seems that job attitudes are more immediate consequences of work family conflict than job results. However, it needs to be noted that I refer to only one particular empirical study that reports the magnitude of the relationship between work family conflict and job results (Goff et al., 1990) which may be less generalizable to other contexts than the results of the meta-analyses. The fact that the relationship of work family conflict with job attitudes relationship is stronger than with job results is consistent with the previous theories (e.g., the theory of planned behavior and the progressive consequence model) which suggest that employee's job results come after their job attitudes (e.g., Ajzen, 1985, 1991; Kirkpatrick, 1959, 1960). Further, it would be expected that the moderate weak relationship between work family conflict and job results would turn out to be substantially reduced once controlling the stronger effect of job attitudes on job results in the regression equation. Based on the above arguments, it is proposed along with the hypotheses,

Proposition 2 (P2): Job attitudes mediate the relationship between work family conflict and job results.

Hypothesis 2_a (H2_a): Job satisfaction mediates the negative relationship between work family conflict and quantitative performance results among restaurant employees.

Hypothesis 2_b (H2_b): Job satisfaction mediates the negative relationship between work family conflict and qualitative performance results among restaurant employees.

Hypothesis 2_c (H2_c): Organizational commitment mediates the negative relationship between work family conflict and quantitative performance results among restaurant employees.

Hypothesis 2_d (H2_d): Organizational commitment mediates the negative relationship between work family conflict and qualitative performance results among restaurant employees.

2.5.2.3 Work Family Conflict → Job Behaviors → Job Results

As shown in Figure 4, this study posits that job behaviors (e.g., job performance and contextual performance) mediate the relationship between work family conflict and job results (e.g., objectively recorded job performance). In this case, there are two different types of potential mediation relationships: a) work family conflict → job satisfaction → objective performance; and b) work family conflict → contextual performance → objective performance. In each case of the mediation mechanism, the strength of the pair relations is highlighted and compared with one another.

As discussed earlier, there has been the limited number of research available for the relationship of work family conflict with job results which seems to be very weak (e.g., Goff et al., 1990, $r = .07$; $N = 59$). However, the meta-analyses suggest that work family conflict has a moderate weak negative relationship with job behaviors. For instance, Gilboa et al. (2008) report a moderate weak relationship between work family conflict and job performance in a general context ($\rho = -.12$, $SD_{\rho} = .10$, $K = 10$, $N = 3,178$), while this relationship is smaller in the present

meta-analysis in the hospitality context ($\rho = -.06$, $SD_{\rho} = .143$, $K = 5$, $N = 1,300$). There has been the limited number of research available for the relationships of work family conflict with contextual performance in the hospitality as well as non-hospitality literature. Bragger et al. (2005) reported a moderate weak relationship between work family conflict and contextual performance (e.g., $r = -.15$; $N = 203$). Consequently, the work family conflict-job behaviors relationships seem to be a bit stronger than the work family conflict-job results.

The relationships of job behaviors with job results seem to be stronger than the above relationships (e.g., work family conflict \rightarrow job behaviors; work family conflict \rightarrow job results). In fact, the job performance-objective performance relationship has been of frequent inquiry for researchers (e.g., Alliger et al., 1997; Bommer et al., 1995; Ford et al., 1986; Heneman, 1986; Rich et al., 1999). Specifically, Bommer et al. (1995) report a moderate effect size for the job performance-objective performance relationship ($\rho = .39$, $k = 50$, $N = 8,341$) in a general context, while no research has been conducted to examine this relationship in the hospitality literature. On the other hand, few studies have been conducted to examine the relationship between contextual performance and objective performance. Mackenzie et al. (1991) reported a moderate effect size of the relation of contextual performance (e.g., altruism) to objective performance ($r = .16$; $N = 259$) among managerial employees of insurance companies.

Given that the magnitude of the relationship of work family conflict with job results (c.f., distal outcome) is smaller than with job behaviors (c.f., proximal outcome), it seems that job behaviors are more immediate consequences of work family conflict than job results. However, it should be noted that I refer to only one particular empirical study that reports the magnitude of the relationship between work family conflict and job results (Goff et al., 1990) which may be less generalizable to other contexts than in meta-analyses. The fact that the relationship of work

family conflict with job behaviors relationship is stronger than with job results is aligned with the previous theories (e.g., the theory of planned behavior and the progressive consequence model) which suggest that employee's job results come after their job behaviors (e.g., Ajzen, 1985, 1991; Kirkpatrick, 1959, 1960). Further, it can be expected that the moderate weak relationship between work family conflict and job results would turn out to be substantially reduced once controlling the stronger effect of job behaviors on job results in the regression equation. Based on the above arguments, it is proposed along with the hypotheses,

Proposition 3 (P3): Job behaviors mediate the relationship between work family conflict and job results.

Hypothesis 3_a (H3_a): Job performance mediates the negative relationship between work family conflict and quantitative performance results among restaurant employees.

Hypothesis 3_b (H3_b): Job performance mediates the negative relationship between work family conflict and qualitative performance results among restaurant employees.

Hypothesis 3_c (H3_c): Contextual performance mediates the negative relationship between work family conflict and quantitative performance results among restaurant employees.

Hypothesis 3_d (H3_d): Contextual performance mediates the negative relationship between work family conflict and qualitative performance results among restaurant employees.

CHAPTER III

METHODOLOGY

This chapter discusses the methodology used in this dissertation. The first part of the chapter restates the research questions and their corresponding hypotheses which drive this study. The latter parts of the chapter then delineate components of the research design including the sampling process, data collection procedures, measures, and statistical analyses used for this study. The data were collected by a cross-sectional traditional mail survey design supplemented with point of sale (POS) system generated archival data provided by participating organizations.

3.1 Research Questions and Hypotheses

3.1.1 Research Questions

1. What is the direction and magnitude of the relationship between work family conflict and employee's job attitudes?
2. What is the direction and magnitude of the relationship between work family conflict and employee's job behaviors such as task performance or contextual performance?
3. What is the direction and magnitude of the relationship between work family conflict and employee's job results?
4. Do job attitudes fully mediate the relationship between work family conflict and job behaviors?
5. Do job attitudes fully mediate the relationship between work family conflict and job results?

6. Do job behaviors fully mediate the relationship between work family conflict and job results?

3.1.2 Hypotheses

An extensive literature review along with meta-analysis resulted in a theoretical model shown in Figure 4. This model suggests that work family conflict influences employee's job behaviors and results through job attitudes, and work family conflict influences employee's job results through job behaviors. Followed are three major research propositions along with specific hypotheses which will be empirically tested in this study.

P1: Job attitudes mediate the relationship between work family conflict and job behaviors.

H1_a: Job satisfaction mediates the negative relationship between work family conflict and job performance among restaurant employees.

H1_b: Job satisfaction mediates the negative relationship between work family conflict and contextual performance among restaurant employees.

H1_c: Organizational commitment mediates the negative relationship between work family conflict and job performance among restaurant employees.

H1_d: Organizational commitment mediates the negative relationship between work family conflict and contextual performance among restaurant employees.

P2: Job attitudes mediate the relationship between work family conflict and job results.

H2_a: Job satisfaction mediates the negative relationship between work family conflict and quantitative performance results among restaurant employees.

H2_b: Job satisfaction mediates the negative relationship between work family conflict and qualitative performance results among restaurant employees.

H2_c: Organizational commitment mediates the negative relationship between work family conflict and quantitative performance results among restaurant employees.

H2_d: Organizational commitment mediates the negative relationship between work family conflict and qualitative performance results among restaurant employees.

P3: Job behaviors mediate the relationship between work family conflict and job results.

H3_a: Job performance mediates the negative relationship between work family conflict and quantitative performance results among restaurant employees.

H3_b: Job performance mediates the negative relationship between work family conflict and qualitative performance results among restaurant employees.

H3_c: Contextual performance mediates the negative relationship between work family conflict and quantitative performance results among restaurant employees.

H3_d: Contextual performance mediates the negative relationship between work family conflict and qualitative performance results among restaurant employees.

3.2 Research Design

3.2.1 Target Population and Sample

The target population of this study included customer service employees and their supervisors working in table-service restaurants. This sample is relevant for the present study for several reasons. First, the sample represents typical hospitality workers. A review of existing literature suggests that customer contact restaurant employees are frequently sampled along with

hotel workers in the hospitality journals. Second, it is easy and convenient to trace objective performance measures for these workers since the necessary information is captured in an employee ID trace system (e.g., MICROS, Aloha POS). In addition, the meta-analytic review noted that most previous work family conflict studies in the hospitality literature have been conducted using Eastern European hotel workers (e.g., Karatepe & Kilic, 2007; Karatepe & Sokmen, 2006). Therefore, this dissertation contributes to the body of hospitality research by examining work family conflict and its detrimental effect on job performance consequences in the U.S. hotel food service context overlooked by previous hospitality researchers.

Based on the recommendations of several researchers (e.g., Hair, Anderson, Tatham, & Black, 1995; Hoyle, 1995; Stern, Bush, & Hair, 1977), target sample size was 200 cases for the study. Stern et al. (1977) argue that the minimum sample size for probability analysis is to have at least five times as many cases as the number of investigated variables. In other words, it is possible to examine 40 variables with 200 cases. Besides, Hoyle (1995) suggests that the sample size be at least between 100 and 200 cases. In particular, Hair et al. (1995) argue that 200 cases of sample size are to be desirable for sufficient estimations. Furthermore, they argue that if sample size becomes larger than 400 cases, the probability test becomes more sensitive and a small effect size of relationships (or differences) can be statistically significant. Consequently, according to these researchers, a desirable sample size is in the range of 200 to 400 cases.

3.2.3 Measures

In an effort to replicate prior research findings, the variables included in this study were chosen in part based on the results of the meta-analytic review of the literature discussed in the previous chapter. Those measures of attitudes and behaviors most frequently used in previous

studies in the hospitality literature were employed in order to permit comparisons between previous findings and the results of this study. All measures were evaluated on a 7-point Likert scale (1 = Strongly disagree; 7 = Strongly agree).

3.2.3.1 Measures in employee survey

Work family conflict

As noted earlier, this study captures work family conflict in the direction of work to family, as the work to family conflict can be influenced by organizational policies and practices. According to Netemeyer et al. (1996), work family conflict is “a form of inter-role conflict in which the general demands of, time devoted to, and strain created by the job interfere with performing family-related responsibilities (p. 401).” For this study, a 5-item scale (Netemeyer et al., 1996) was used to measure the employee’s level of work family conflict, since it has been most frequently used in the hospitality literature. Previous hospitality studies using this scale (e.g., Karatepe & Kilic, 2007; Karatepe & Sokmen, 2006; Karatepe & Uludag, 2007; Yavas, Babakus & Karatepe, 2008) consistently reported acceptable reliabilities (c.f., $\alpha = .85 \sim .88$). In the current study, the coefficient alpha reliability was $\alpha = .92$. Table 4 presents the items included in this scale.

Table 4. Measures of Work Family Conflict

	←Strongly Disagree				Strongly Agree →		
1. The demands of my work interfere with my home and family life.	1	2	3	4	5	6	7
2. The amount of time my job takes up makes it difficult to fulfill family responsibilities.	1	2	3	4	5	6	7
3. Things I want to do at home do not get done because of the demands my job puts on me.	1	2	3	4	5	6	7
4. My job produces strain that makes it difficult to fulfill family duties.	1	2	3	4	5	6	7
5. Due to work-related duties, I have to make changes to my plans for family activities.	1	2	3	4	5	6	7

Job attitudes

Job satisfaction. Job satisfaction is “an internal state that is expressed affectively and/or cognitively evaluating an experienced job with some degree of favor or disfavor” (Brief, 1998, p. 86). An 8-item scale (Hartline & Ferrell, 1996) was used to measure the employee’s level of job satisfaction. A majority of hospitality researchers have used this measurement for job satisfaction, and consistently reported acceptable reliabilities (c.f., $\alpha = .85 \sim .90$) (e.g., Karatepe & Kilic, 2007, 2009; Karatepe & Sokmen, 2006; Karatepe & Uludag, 2007). Coefficient alpha reliability in the current study was $\alpha = .91$. Table 5 provides the measurement items included in this scale.

Table 5. Measures of Job Satisfaction

	←Strongly Disagree Strongly Agree→						
1. I am satisfied with fellow workers.	1	2	3	4	5	6	7
2. I am satisfied with my supervisor(s).	1	2	3	4	5	6	7
3. I am satisfied with this restaurant’s policies.	1	2	3	4	5	6	7
4. I am satisfied with the support provided by this restaurant.	1	2	3	4	5	6	7
5. I am satisfied with my salary or wages.	1	2	3	4	5	6	7
6. I am satisfied with the opportunities for advancement with this restaurant.	1	2	3	4	5	6	7
7. I am satisfied with the customers that I serve.	1	2	3	4	5	6	7
8. Overall, I am satisfied with the current job.	1	2	3	4	5	6	7

Organizational commitment. Organizational commitment is the strength of an employee's affective attachment to, identification with, and involvement in an employing organization (Allen & Meyer, 1990). For this study, a 5-item scale developed by Mowday, Steers and Porter (1979) was used to measure the employee's level of organizational commitment. This measurement has been most frequently used for organizational commitment in the hospitality literature with acceptable reliabilities (c.f., $\alpha = .72 \sim .86$) (e.g., Karatepe & Kilic, 2007, 2009; Karatepe & Magaji, 2008; Karatepe & Uludag, 2007). Coefficient alpha reliability was $\alpha = .89$ in the present study. The measurement items included in this scale are displayed in Table 6.

Table 6. Measures of Organizational Commitment

	←Strongly Disagree			Strongly Agree→			
1. My values and those of the restaurants are similar.	1	2	3	4	5	6	7
2. I really care about the future of this restaurant.	1	2	3	4	5	6	7
3. I am proud to tell others that I work for this restaurant.	1	2	3	4	5	6	7
4. I am willing to put in a great deal of effort beyond that normally expected in order to help the restaurant to be successful.	1	2	3	4	5	6	7
5. For me, this is the best of all possible restaurants for which to work.	1	2	3	4	5	6	7

Job behaviors

Self-reported job performance. According to Babin and Boles (1998), job performance is “The level of productivity of an individual employee, relative to his or her peers, on several job-related behaviors and outcomes.” A 5-item scale (Babin & Boles, 1998) was used to measure the employee’s self-reported job performance for this study. This measurement for self-reported job performance has been most frequently used by hospitality researchers and shown to have acceptable reliabilities (c.f., $\alpha = .74 \sim .87$) (e.g., Karatepe & Bektashi, 2008; Karatepe & Kilic, 2007, 2009; Yavas et al., 2008). The scale demonstrated a coefficient alpha reliability in the current study of $\alpha = .88$. The items of this scale are provided in Table 7.

Table 7. Measures of Self-reported Job Performance

	←Strongly Disagree				Strongly Agree→			
1. I am a top performer.	1	2	3	4	5	6	7	
2. I am in the top 10 percent of frontline employees here.	1	2	3	4	5	6	7	
3. I am very dedicated to satisfying the needs/wants of customers.	1	2	3	4	5	6	7	
4. I know what customers expect better than others.	1	2	3	4	5	6	7	
5. I know more about menu items than others.	1	2	3	4	5	6	7	
6. I know more about operational system than others.	1	2	3	4	5	6	7	

Self-reported contextual performance. Contextual performance refers to interpersonal behaviors that enhance the effective functioning of the organization although not appreciated by the formal reward system. Contextual performance has often been used interchangeably with organizational citizenship behaviors (OCBs; Organ, 1988). A 4-item scale developed by Bommer, Dierdorff, and Rubin (2007) was used to measure employee's self-reported contextual performance for this research. Given that there has been no hospitality research to examine the relationship of work family conflict with contextual performance, I chose this measurement since it was used by both hospitality (e.g., Lee, Magnini, & Kim, 2010) and non-hospitality (e.g., Dierdorff, Rubin & Bachrach, 2010; Hsiung & Tsai, 2009) researchers with acceptable reliabilities (c.f., $\alpha = .87 \sim .89$). In the present study, this measure produced a coefficient alpha reliability of .92. Table 8 presents the measurement items included in this scale.

Table 8. Measures of Self-reported Contextual Performance

	←Strongly Disagree			Strongly Agree→			
1. I help others who are busy.	1	2	3	4	5	6	7
2. I help others who have heavy work loads	1	2	3	4	5	6	7
3. I go out of way to help new employees	1	2	3	4	5	6	7
4. I pass along information to co-workers	1	2	3	4	5	6	7

Demographic information

Demographic information of employee respondents was also collected in terms of gender, age, tenure, and marital status. These demographic variables were examined in past work family conflict studies (e.g., Karatepe & Uludag, 2007; Namasivayam & Mount, 2004). This study includes these variables to enable comparisons of the sample studied here to those used in previous research.

3.2.3.2 Measures in supervisor survey

Job behaviors

Supervisor-rated Job performance. Unlike previous hospitality studies, this study measured job performance rated by one's supervisor. Consistent with the measures in the employee survey, a 5-item scale (Babin & Boles, 1998) was employed to measure supervisor-rated job performance along with changes in wordings (e.g., I → this employee). This measurement scale demonstrated an acceptable coefficient alpha reliability in this study ($\alpha = .95$). Although each of participating properties keeps organizational archival ratings of employee job performance, this study used this scale to consistently capture the nature of job performance across properties. The items included in this scale are displayed in Table 9.

Table 9. Measures of Supervisor-rated Job Performance

	←Strongly Disagree			Strongly Agree→			
1. This employee is a top performer.	1	2	3	4	5	6	7
2. This employee is in the top 10 percent of frontline employees here.	1	2	3	4	5	6	7
3. This employee is very dedicated to satisfying the needs/wants of customers.	1	2	3	4	5	6	7
4. This employee knows what customers expect better than others.	1	2	3	4	5	6	7
5. This employee knows more about menu items than others.	1	2	3	4	5	6	7
6. This employee knows more about operational system than others.	1	2	3	4	5	6	7

Supervisor-rated contextual performance (OCBs). A 4-item scale developed by Bommer et al. (2007) was used to measure supervisor rated contextual performance. This scale is the same measure used in the employee survey along with changes in wordings (e.g., I → this employee) like in case of job performance. Previous studies (e.g., Bommer et al., 2007; Dierdorff et al., 2010) reported acceptable reliabilities of this scale (c.f., $\alpha = .89$). In the current study, the measure produced a coefficient alpha reliability of $\alpha = .94$. Table 10 presents the items included in this scale.

Table 10. Measures of Supervisor-rated Contextual Performance

	← Strongly Disagree			Strongly Agree →			
1. This employee helps co-workers who are busy.	1	2	3	4	5	6	7
2. This employee helps others who have heavy workloads.	1	2	3	4	5	6	7
3. This employee goes out of way to help new employees.	1	2	3	4	5	6	7
4. This employee passes along information to co-workers.	1	2	3	4	5	6	7

3.2.3.3 Measures from archival data

Job results

There were two types of result measures utilized in this study: performance quantity and quality. These objective performance measures were extracted from the POS system of participating organizations. Each server of the participating organizations has a user/employee ID which allows the system to track productivity information about individual users. When it comes to the validity of these measures, using these measures seems relevant given that all the participating properties have regularly pulled out these data to monitor each of their employees' contribution. In other words, these measures reflect an organizationally meaningful measure of job results as viewed from the perspective of F&B managers. For this study, the data extracted

for previous two months (April and May 2010). In terms of the reliability of these indexes, I ensured if the measures reflect the actual information for the particular person by examining the consistency of data over different time periods (e.g., correlations between April and May).

Quantity. In order to capture the quantitative employee performance outputs, system-generated dollar values (\$) of average check size per customer for the past two months were extracted from the POS system. This measure reflects server's sales competence related to cases of up sales as well as sales of appetizers and/or desserts to increase check size since it is used as monthly productivity information for F&B managers in the participating properties. These data were not standardized by the outlets given that there were relatively few responses from several outlets resulting in unstable means and standard deviations. The correlation between April and May data was extremely strong ($r = .92, p < .00$), suggesting that this measure is reliable and reasonable to combine data for the two months to use in the analysis.

Quality. Proportions of average tip size (%) were extracted from the operation system to measure the qualitative employee performance outputs. Given that service quality provided by a server is considered a major factor to decide a tip size. Tip size was calculated by dollar values (\$) of service charges (c.f., gratuity) divided by dollar values (\$) of net sales for the past two months. Like in case of average check size per customer, this measure is monthly monitored by F&B managers. These data were also not standardized by the outlets in that relatively few responses were received from several outlets resulting in unstable means and standard deviations. The correlation between April and May data was strong ($r = .75, p < .00$), implying that this measure is reliable and reasonable to combine data for the two months to use in the analysis for this study.

3.2.3.4 Pilot Studies for Measurement Items

Prior to the main study, a pilot study was conducted to examine for the readability and reliability of the measurement scales in the employee survey. A total of 46 undergraduate students enrolled in five hospitality and tourism management classes at Virginia Tech who had work experiences in the restaurant industry participated in the pilot study. Among the participants, 58.7% were female and 76.1% were from 21 to 23 years old, while around two third (63%) reported that their major role was/is server. The scale items of work family conflict, job satisfaction, organizational commitment, self-reported job performance, and self-reported contextual performance demonstrated acceptable coefficient alpha reliabilities ($\alpha = .88 \sim .92$).

The measures of supervisor-rated job performance and contextual performance in the supervisor survey and the system generated result measures were examined by a focus group consisting of five professionals who have extensive restaurant management experiences. The interviewees indicated that the scales of supervisor-rated job performance and contextual performance are understandable and the system-generated performance outputs (e.g., check size per customer and tip size) are readily available in table service restaurants and relevant to measure as reference information for server's performance results.

3.2.3 Date Collection Procedure

Data for this research were obtained from employees of 31 food service outlets in nine full service hotels located within the U.S.A. Each hotel property was managed by a large international hotel group that agreed to participate in this research project. To maintain confidentiality for the company, no further information about the company or specific locations is provided in this dissertation. In order to recruit at least 200 servers along with their supervisors,

the researcher had contacted the corporate office to determine how many hotels which have table service outlets are needed to contact. After consulting with the corporate office, 420 employees in 9 properties were targeted for the project since their individual hotel properties have 2-3 table service outlets where 7-20 servers are employed.

The corporate office initially provided contact information for the Food & Beverage (F&B) directors of nine hotels such as the hotel name, address, name of F&B director, e-mail address and phone number. Once the contact information for the F&B directors had been obtained from the corporate office, the researcher contacted them via e-mail to make an appointment for an in-depth telephone interview to explain the nature of the project and data collection protocol and to gain their agreement to participate in the study. Overall, it took around 30 minutes for the phone interviews with F&B directors in which the researcher requested three different sources of data: employee self-reporting data, supervisor evaluating data, and system-generated productivity data.

For both employee self-report and supervisor-report data, survey questionnaires were developed along with a cover letter for each. Data collection procedures recommended by Dillman (1978) were followed in the development and administration of the survey to help to ensure the clarity of the instrument and to help facilitate a high response rate. Once the researcher was informed of the number of restaurant outlets and servers, a survey packet was prepared and sent to each hotel enclosing various survey materials. In the survey packet was first placed a cover letter to F&B director entailing instructions for data collection which was personally signed by the researcher (see Appendix B). F&B directors gave both employee and supervisor survey materials to restaurant managers. Employee survey materials consisted of cover letter, questionnaire and sealable envelop, while supervisor survey materials included cover letter, questionnaire, tracking sheet and envelop.

A cover letter for restaurant managers (see Appendix C) asked them to evaluate their subordinates in terms of job performance and contextual performance. Restaurant managers were asked to fill out an evaluation questionnaire for each of their servers. In addition, employee survey materials were distributed and collected by restaurant managers, as instructed in the cover letter. For example, restaurant managers were instructed to track their employee names and identifying numbers on the enclosed tracking sheet when they distributed questionnaires. They were also instructed to collect the completed surveys and bring them back to F&B director along with evaluation questionnaires and the tracking sheet.

A cover letter for each employee respondent (see Appendix D) explained the nature of the project and the importance of the individual's honest response for the success of the study. In addition, it ensured that their response is solely voluntary and the confidentiality of results will be maintained by the researcher. Each employee respondent was asked to complete a questionnaire in a designated meeting room, place the completed questionnaire in the enclosed envelope and seal it for the confidentiality.

Upon collecting the completed survey questionnaires, F&B directors were instructed to put them in the box provided by the researcher and return it to the researcher by a designated date using the enclosed return label which is self-addressed and prepaid. In order to ensure proper survey administration, continuous contacts were made to F&B directors. A week after the receipt of the survey packet, the researcher called each F&B director to answer any questions about survey procedures. Two other contacts to F&B directors were made in each subsequent week to follow up until all research materials were returned. Overall, the researcher initially contacted F&B directors at least three times for successful survey administrations. Consequently, all F&B directors returned the completed survey materials within four weeks.

The POS system-generated productivity data were also downloaded by each of F&B directors and sent to the researcher as e-mail attachments. These data included archival records of average check size per customer and tip size. During the initial phone conversation with F&B directors, the researcher found that monthly data for these variables are available and used by the managers at the properties. An excel spreadsheet for coding was prepared and sent to each participating units three days after the phone conversation. As a result, each of F&B directors sent the researcher these data within five weeks. Since the data are organizational sensitive, the researcher confirmed to each F&B director that anonymity and confidentiality would be strictly maintained for the data.

3.2.4 Statistical analysis procedures

Statistical Package for Social Science (SPSS) 16th version was used to analyze the data for statistical methods such as descriptive analysis and multiple regression analysis. First, frequency analyses were conducted to identify demographic characteristics of respondents, while all study variables were examined by descriptive statistics in terms of means standard deviation, skewness, and kurtosis. Then, bivariate correlation analyses were used to investigate the nature and pattern of relationships between study variables. Lastly, multiple regression analyses were employed to test the research hypotheses.

CHAPTER IV

RESULTS

The previous chapter explained the methodology and a specific research protocol employed in this study. The current chapter provides a description of the results of data analyses and hypotheses testing in narrative and tabulated manners. First, demographic information for the employee and supervisor respondents is reported such as gender, age, tenure, and marital status along with organizational proportions of participants. Second, descriptive statistics, such as means, standard deviations, skewness and kurtosis, followed by bivariate correlations are reported for all study variables. Lastly, the results of the tests of research hypotheses are provided.

4.1 Profile of Respondents

Surveys were collected from 229 employees but 9 responses were excluded by the researcher for administrative reasons (e.g., too much missing information). The final sample included in this study consisted of a total of 249 individuals – 220 employees (52.47% response rate) and their matched 29 managers (100% response rate) from 31 food service outlets in nine full service hotels. The high response rate for supervisor questionnaires is likely due to strong corporate support for this project. Although the response rate of employee questionnaires was moderate, this rate is quite good considering the characteristics of dynamic food service contexts where it is challenging to set apart a time for customer service employees such as servers to complete the questionnaires. Most participating employees (83.1%) were servers who are

responsible for table services such as order-taking and delivering foods with the POS system IDs, while those playing different roles such as host/hostess and bartender also participated in the study.

Table 11 presents the demographic characteristics of both employee and supervisor respondents. Around a half of the employee respondents were male (51.5%), whereas slightly more than half of the supervisor respondents were female (62.1%). Approximately a third of the employee respondents (30.3%) were 20-29 years of age, while 18 supervisor respondents (62.1%) were 24-29 years old. With regard to marital status, 45.7% of the employee respondents and 24.1% of the supervisor respondents are married. A quarter of the employees have worked for 4-7 years and three quarters of the supervisors have worked for 1-3 years in the current job. Most employee respondents indicated that their major role is server (83.1%), while supervisor respondents consisted of 12 assistant managers, 16 managers and an assistant director. Regarding the educational level of the employee respondents, 30.5% have at least bachelor degrees, while 75.8% of the supervisor respondents have at least bachelor degrees. From 15 to 38 employees and 2-6 supervisors from each property participated in this study. Please refer to Table 11.

TABLE 11. Profile of Participants

	Employees		Supervisors	
	Frequency (N)	Percentage (%)	Frequency (N)	Percentage (%)
<u>Gender (N=202 / 29)</u>				
Females	98	48.5	18	62.1
Males	104	51.5	11	38.9
<u>Age (N=185 / 29)</u>				
20 – 23 years old	22	11.9		
24 – 29 years old	34	18.4	18	62.1
30 – 39 years old	40	21.6	8	27.7
40 – 50 years old	61	33	2	6.8
51 years old and above	28	15.1	1	3.4
<u>Marriage (N=186 / 29)</u>				
Single	101	54.3	22	75.9
Married	85	45.7	7	24.1
<u>Tenure (N=187 / 29)</u>				
11 months and below	23	12.3		
1 – 3 year	45	24.1	22	75.9
4 – 7 years	47	25.1	4	13.8
8 – 15 years	36	19.3	2	6.9
11 years and above	36	19.3	1	3.4
<u>Title (N=220 / 29)</u>				
Server	183	83.1		
Host/Hostess	26	11.8		
Bartender	11	5.0		
Assistant manager			12	41.4
Manager			16	55.2
Assistant director			1	3.4
<u>Education (N=197 / 29)</u>				
High school or less	45	22.8	2	6.9
2-year college	92	46.7	5	17.3
4-year college	46	23.4	19	65.5
Graduate school	14	7.1	3	10.3
<u>Hotels (N=220 / 29)</u>				
A	26	11.8	3	10.3
B	38	17.3	6	20.8
C	22	10.0	2	6.9
D	25	11.4	4	13.8
E	25	11.4	3	10.3
F	17	7.7	2	6.9
G	33	15.0	5	17.2
H	19	8.6	2	6.9
I	15	6.8	2	6.9

4.2 Descriptive Statistics for Study Variables

4.2.1 Means, Standard Deviations, Skewness and Kurtosis

Table 12 provides the number of responses, minimums, maximums, means and standard errors, standard deviations, skewness statistics and standard errors, and kurtosis statistics and standard errors for the variables of interest. The focal independent variable, work family conflict had a mean of 2.73 (SD = 1.52). The mean score of work family conflict in this study is slightly lower than those of previous studies ($M_s = 3.29 \sim 3.50$, $SD_s = 1.01 \sim 1.97$) (Karatepe & Kilic, 2007, 2009; Namasivayam & Mount 2004). On the other hand, the mean scores and standard deviations of attitude and behavior variables are similar with those of previous studies. This implies that the effects of work family conflict on job attitudes and behaviors in this study would be more salient than those in past studies. Specifically, job satisfaction yielded a mean of 5.27 (SD = 1.19) and organizational commitment had a mean of 5.7 (SD = 1.22). In particular, self-reported contextual performance had a high mean of 6.21 (SD = .96) among behavioral outcome variables. The mean scores of check size per customer and tip size are \$26.67 (SD = 14.19) and 19% (SD = 4.0%).

Age yielded a mean of 37.7 years (SD = 11.13) which is similar to that of a past study in the U.S. hotel industry ($M = 36.7$ years, $SD = 11.51$) (Namasivayam & Mount, 2004). On the other hand, tenure had a mean of 8.3 years (SD = 7.75) in this study. It is difficult to compare this mean to other studies since they often measured tenure using a point scale rather than actual periods (e.g., month and years) (e.g., Karatepe & Kilic, 2009; Karatepe & Sokmen, 2006). However, tenure for the sample appears to be longer compared to typical restaurant workers.

TABLE 12. Descriptive Statistics for Study Variables

	N	Minimum	Maximum	Mean	Std. Deviation	<u>Skewness</u>		<u>Kurtosis</u>	
						Statistic	Std. Error	Statistic	Std. Error
Age	185	20.00	64.00	37.65	11.13	0.14	0.18	-1.08	0.36
Gender ^a	202	0.00	1.00	0.51	0.50	-0.06	0.17	-2.02	0.34
Tenure ^b	187	1.00	470.00	100.09	93.95	1.33	0.18	1.59	0.35
Marriage ^a	186	0.00	1.00	0.46	0.50	0.17	0.18	-1.99	0.35
WFC	206	1.00	7.00	2.73	1.52	0.71	0.17	-0.31	0.34
<u>Attitudes</u>									
JS	201	1.00	7.00	5.27	1.19	-0.73	0.17	0.59	0.34
OC	205	1.00	7.00	5.70	1.22	-1.38	0.17	2.19	0.34
<u>Behaviors</u>									
Self JP	207	1.33	7.00	5.84	0.98	-1.44	0.17	3.71	0.34
Self CP	207	1.00	7.00	6.21	0.96	-2.20	0.17	7.68	0.34
Sup JP	209	1.00	7.00	5.39	1.19	-0.85	0.17	0.76	0.33
Sup CP	209	1.00	7.00	5.29	1.24	-0.83	0.17	0.69	0.33
<u>Results</u>									
Check size	123	8.86	85.86	26.67	14.19	1.23	0.22	1.48	0.43
Tip size	155	0.09	0.32	0.19	0.04	0.69	0.19	0.85	0.39

Note. a. Gender and Marriage were dummy-coded (0 = Female / Single; 1 = Male / Married); b. A total of employed months in the current organization. WFC = Work family conflict; JS = Job satisfaction; OC = Organizational commitment; Self JP = Self-reported job performance; Self CP = Self-reported contextual performance; Sup JP = Supervisor-rated job performance; Sup CP = Supervisor-rated contextual performance.

Since this study employs quantitative data analyses, two statistic values were checked to assess the normality of the distribution of the variables: skewness and kurtosis. Skewness is a measure of how responses are distributed, while kurtosis is a measure of how responses cluster around a central point for a standard distribution (Stern et al., 1977). A criterion from the literature is that a skewness statistic bigger than 3.0 or a kurtosis statistic bigger than 8.0 would imply that the distribution is non-normal (Kline, 2005). The skewness and kurtosis statistics for all variables in this study were within these acceptable ranges of normality. Please refer to Table 12.

4.2.2 Correlations between Study Variables

Although this study collected such information as attitudes and behaviors from 220 employee respondents and their supervisors, I was unable to match these responses to the system-generated job result data for all survey respondents. In other instances, system generated job result data existed for employees who failed to respond to the survey. In order to maximize the sample size for each analysis, this study uses pair-wise data instead of the complete sample (c.f., list-wise) when possible. Table 13 presents the correlations between study variables. The correlations below the diagonal were calculated using all available data for each relationship ($N = 123$ to 209). The correlations above the diagonal are obtained from subjects for whom data for all study variables were available ($n = 102$).

As shown in Table 13, the pattern and strength of the relationships were very similar. The focal independent variable, work family conflict had negative relationships with most outcome variables. Consistent with the findings of meta-analysis in this study, it had stronger negative relations to attitudinal variables such as job satisfaction ($r = -.34, p < .01$) and organizational

commitment ($r = -.32, p < .01$) than to behavioral variables including self-reported contextual performance ($r = -.20, p < .01$), supervisor-rated job performance ($r = -.11, p < .10$) and supervisor-rated contextual performance ($r = -.17, p < .01$). However, work family conflict was not significantly related to self-reported job performance ($r = .01, p > .10$). In addition, work family conflict seems to have a negative relation to check size ($r = -.15, p < .10$) but little relation to tip size ($r = -.03, p > .10$).

The attitudinal variables were strongly associated with each other. The effect size of the relationship between job satisfaction and organizational commitment ($r = .68, p < .01$) was similar with that of the present meta-analytic review (c.f., $\rho = .71$). Specifically, job satisfaction had a significant positive relationship with self-reported behavior variables such as job performance ($r = .23, p < .01$) and contextual performance ($r = .42, p < .01$) and organizational commitment also had significant positive relations to job performance ($r = .41, p < .01$) and contextual performance ($r = .56, p < .01$). These findings are consistent with those reported in the current meta-analysis that the effect sizes of the organizational commitment-behaviors relationship (c.f., $r = .35 \sim .38$) were larger than those of the job satisfaction-behaviors relationship (c.f., $.22 \sim .32$). However, neither job satisfaction nor organizational commitment were significantly related to supervisor-rated behavior variables (e.g., $-.03 \sim .04, p > .10$) in this study. Job satisfaction also seems to have positive associations with check size ($r = .15, p < .10$) and tip size ($r = .12, p < .10$), while organizational commitment seems to be positively associated only with check size ($r = .15, p < .10$).

TABLE 13. Bivariate Correlations and Reliabilities for Study Variables

Variables	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Gender ^a	-				.07	.03	.01	-.01	-.18*	.16 [†]	.10	-.01	.04
2. Age ^b	.11 [†]	-			-.10	.04	.18*	.09	-.06	.07	-.08	-.04	.01
3. Tenure ^c	.05	.64**	-		.06	-.08	.07	-.02	-.23*	.05	-.17 [†]	.07	.03
4. Marriage ^d	.12 [†]	.54**	.39**	-	.06	.03	.08	.10	.01	.12	.12	-.19*	.10
5. WFC	-.01	-.10 [†]	-.03	.02	.92	-.31**	-.43**	-.18*	-.36**	-.14 [†]	-.19*	-.16 [†]	-.01
6. JS	.02	.07	.03	.08	-.34**	.91	.67**	.38**	.54**	.02	.04	.16 [†]	.07
7. OC	.02	.16*	.04	.09	-.32**	.68**	.89	.42**	.63**	.06	.11	.15 [†]	.09
8. Self JP	.14 [†]	.07	.02	.12 [†]	.01	.23**	.41**	.88	.57**	.06	-.03	.18*	-.03
9. Self CP	-.15*	-.09	-.16*	.00	-.20**	.42**	.56**	.50**	.92	.09	.15 [†]	.15 [†]	.02
10. Sup JP	.16*	.11 [†]	.19 [†]	.17*	-.11 [†]	-.03	.01	.11 [†]	.04	.95	.75**	-.11	.20*
11. Sup CP	.10 [†]	-.07	-.07	.09	-.17**	.02	.04	.03	.11 [†]	.78**	.94	-.18*	.13
12. Check size	-.03	-.00	.09	-.18*	-.15 [†]	.15 [†]	.15 [†]	.15 [†]	.15 [†]	-.11	-.15 [†]	-	-.17*
13. Tip size	.08	-.05	-.01	.06	-.03	.12 [†]	.07	.00	-.01	.09	.08	-.11	-
N	185	202	187	186	206	201	205	207	207	209	209	123	155

Note. Estimates of coefficient alpha reliability (α) appear on the diagonal in bold; [†] $p < .10$, * $p < .05$, ** $p < .01$ (1-tailed). N = A sample size (pair-wise) below the diagonal; n = 102 (list-wise) above the diagonal (c.f., a = 100, b = 92, c = 93, d = 92). WFC = Work family conflict; JS = Job satisfaction; OC = Organizational commitment; Self JP = Self-reported job performance; Self CP = Self-reported contextual performance; Sup JP = Supervisor-rated job performance; Sup CP = Supervisor-rated contextual performance.

The relationships between behavioral variables themselves are as expected. There were significant positive correlations between self-reported job performance and self-reported contextual performance ($r = .50, p < .01$) and between supervisor-rated job performance and supervisor-rated contextual performance ($r = .78, p < .01$). However, self-reported job behaviors had weak relations to supervisor-rated behaviors. Specifically, self-reported job performance seems to be positively related to supervisor-rated job performance ($r = .11, p < .10$) but unrelated to supervisor-rated contextual performance ($r = .03, p > .10$). Self-reported contextual performance is associated with supervisor-rated contextual performance ($r = .11, p < .10$), but not associated with supervisor-rated job performance ($r = .04, p > .10$). Self-reported job performance and contextual performance seem to be positively related to check size ($r = .15, p < .10$) but not to tip size. However, supervisor-rated job performance was not significantly related to tip size ($r = .08 \sim .09, p > .10$), while supervisor-rated contextual performance appears to be negatively related to check size ($r = -.15, p < .10$) but not to tip size.

Lastly, there were some associations of demographic variables with study variables. For example, young workers tend to have higher levels of work family conflict than their old counterparts ($r = -.10, p < .10$), while older employees showed higher levels of organizational commitment than their young counterparts ($r = .16, p < .05$).

4.3 Hypotheses Tests

Each of research hypotheses was tested by the four criteria of regression analyses proposed by Baron and Kenny (1986). To meet the first criterion, work family conflict must be related to distal consequences (e.g., behaviors or results). The second criterion states that work family conflict must be correlated with proximal consequences (e.g., attitudes or behaviors) that

function as a mediator. The third and fourth criteria will be tested in the same regression equation. The third criterion states that the mediator (e.g., attitudes or behaviors) must be related to the distal consequences in the presence of work family conflict, and the fourth and last criterion states that the effect of work family conflict must become zero or substantially reduced in magnitude once the mediator is included in the regression equation. Tables 14 to 17 provide the results of regression models to test mediation effects of proximal consequences between work family conflict and distal consequences.

4.3.1 Hypotheses 1_a, 1_b, 1_c and 1_d

The first set of hypotheses predicted that job attitudes (e.g., job satisfaction and organizational commitment) would mediate the relationship between work family conflict and job behaviors (e.g., job performance and contextual performance). Specifically, Hypothesis 1_a (H1_a) states that job satisfaction mediates the negative relationship between work family conflict and job performance. To check the first and second criteria for mediation testing, the correlation values of work family conflict with outcome variables were used since the value of standardized regression coefficient is the same as that of zero-order correlation. If the relationships of work family conflict with job satisfaction and job performance were significant, the first and second rules in Baron and Kenny's (1986) approach would be satisfied. As shown in Table 13, work family conflict was not related to self-reported job performance ($r = .01, p > .10$) but to supervisor-rated job performance ($r = -.11, p < .10$). The third rule suggests that job satisfaction should be related to supervisor-rated job performance when supervisor-rated job performance is regressed on both work family conflict and job satisfaction. However, as seen in Table 14, the effect of job satisfaction on supervisor-rated job performance was not significant in the regression equation (β

= -.08, $p > .10$). In addition, the effect of work family conflict on supervisor-rated job performance was not reduced once both work family conflict and job satisfaction were added in the regression equation ($\beta = -.14$, $p < .10$). In short, job satisfaction did not mediate the relationship of work family conflict with job performance, although work family conflict had a negative impact on supervisor-rated job performance. Therefore, H1_a was not supported. Figure 5 depicts the results of H1_a to 1_d.

Hypothesis 1_b (H1_b) states that job satisfaction mediates the negative relationship between work family conflict and contextual performance. As seen in Table 13, work family conflict was significantly related to both self-reported and supervisor-rated contextual performance ($r = -.20$, $-.17$ respectively, $p < .01$). As shown in Table 14, the effect of job satisfaction on self-reported contextual performance was still significant ($\beta = -.39$, $p < .01$), and the effect of work family conflict on self-reported contextual performance substantially was reduced ($\beta = -.07$, $p > .10$) when self-reported contextual performance was regressed by both work family conflict and job satisfaction. Hence, all four rules of Baron and Kenny (1986) were satisfied. This suggests that job satisfaction mediates the negative relationship between work family conflict and self-reported contextual performance.

TABLE 14. Analysis of Mediating Role of Attitudes between Work Family Conflict and Behaviors

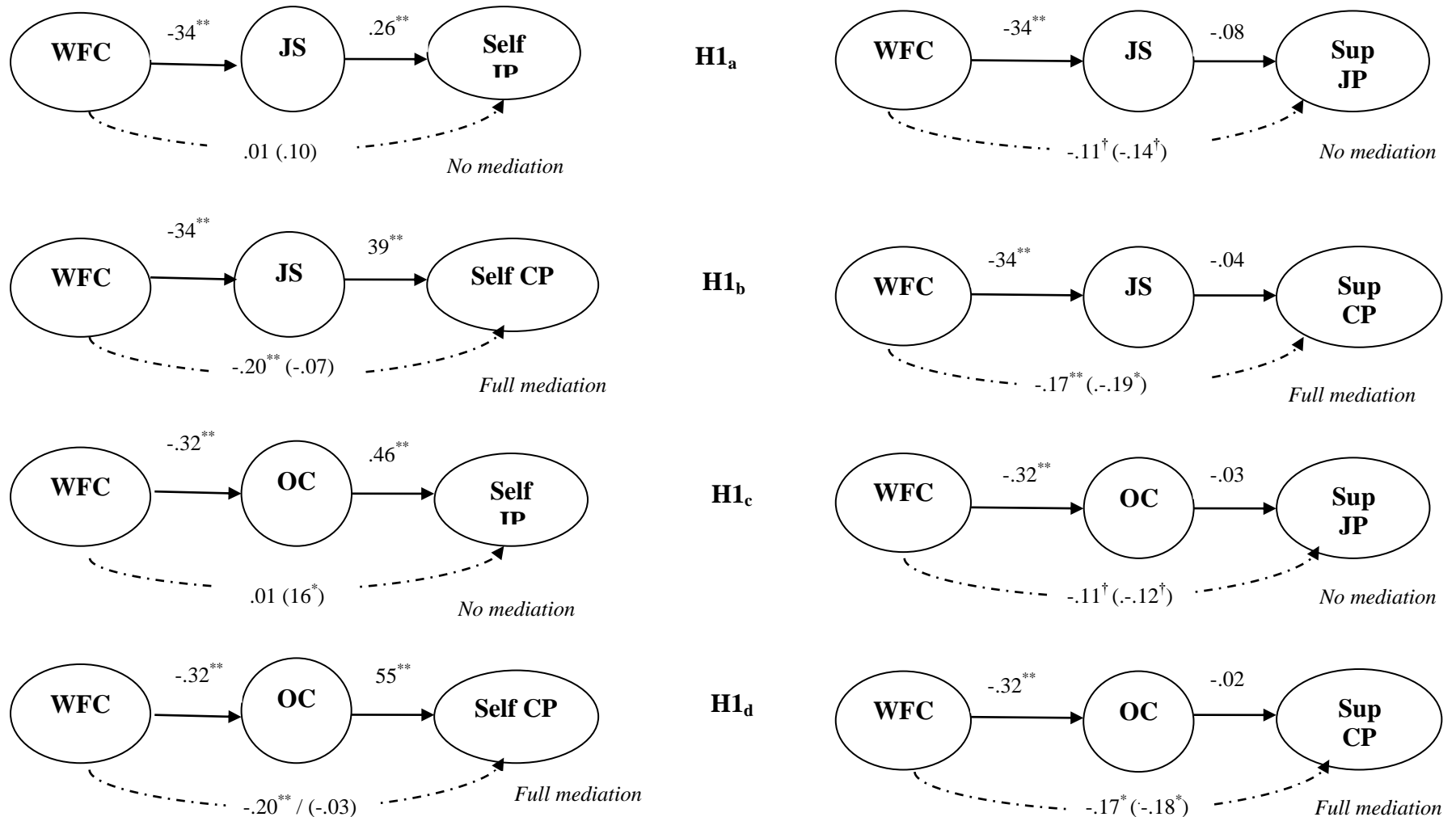
Independent variables	Self JP		Self CP		Sup JP		Sup CP	
	Step 1	Step 2	Step 1	Step 2	Step 1	Step 2	Step 1	Step 2
WFC	.01	.10	-.20**	-.07	-.11 [†]	-.14 [†]	-.17*	-.19*
JS		.26**		.39**		-.08		-.04
R^2	.00	.06**	.04**	.18**	.01	.02	.03*	.03
$R^2 \Delta$.06**		.14**		.01		.00
F		6.28**		21.49**		1.70		2.95 [†]
WFC	.01	.16*	-.20**	-.03	-.11 [†]	-.12 [†]	-.17*	-.18*
OC		.46**		.55**		-.03		-.02
R^2 at each step	.00	.19**	.04**	.31**	.01	.01	.03*	.03 [†]
$R^2 \Delta$.19**		.27**		.00		.00
F		23.7**		45.0**		1.24		2.89 [†]

Note. [†] $p < .10$, * $p < .05$, ** $p < .01$ (1-tailed). Each standardized parameter estimates is shown. WFC = Work Family Conflict; Dependent variables: JS = Job satisfaction; OC = Organizational commitment; Self JP = Self-reported job performance; Self CP = Self-reported contextual performance; Sup JP = Supervisor-rated job performance; Sup CP = Supervisor-rated contextual performance.

However, when supervisor-rated contextual performance was regressed on these variables, the effect of job satisfaction was not significant ($\beta = -.04, p > .10$) and the effect of work family conflict was not substantially reduced which violates the third and fourth rules of Baron and Kenny's (1986) approach. This indicates that job satisfaction did not mediate the negative relationship of work family conflict with supervisor-rated contextual performance, although work family conflict was negatively related to supervisor-rated contextual performance. Therefore, H1_b was supported with self-reported contextual performance but not supported with supervisor-rated contextual performance.

Hypothesis 1_c (H1_c) states that organizational commitment mediates the negative relationship between work family conflict and job performance. As seen in Table 13, work family conflict was not associated with self-reported job performance ($r = .01, p > .10$) but with supervisor-rated job performance ($r = -.11, p < .10$). However, as shown in Table 14, the effect of organizational commitment on supervisor-rated job performance was not significant ($\beta = -.03, p > .10$), and the effect of work family conflict on supervisor-rated job performance was not reduced when both work family conflict and organizational commitment were included in the regression equation ($\beta = -.12, p < .10$). In short, organizational commitment did not mediate the negative relationship of work family conflict with job performance, although work family conflict had a negative impact on supervisor-rated job performance. Hence, H1_c was not supported.

FIGURE 5. Results of a Mediation Role of Job Attitudes between Work Family Conflict and Job Behaviors (Hypotheses 1_a ~ 1_d)



Note. [†] $p < .10$, * $p < .05$, ** $p < .01$ (1-tailed). WFC is work family conflict; JS is job satisfaction; OC is organizational commitment; Self JP is self-reported job performance; Self CP is self-reported contextual performance; Sup JP is supervisor-rated job performance; Sup CP is supervisor rated contextual performance. The numbers from proximal to distal outcomes are standardized regression coefficients in the presence of WFC. The numbers in parentheses from WFC to distal outcomes represent standardized regression coefficients in the presence of proximal outcomes.

Hypothesis 1_d (H1_d) states that organizational commitment mediates the negative relationship between work family conflict and contextual performance. As seen in Table 13, work family conflict was significantly related to self-reported as well as supervisor-rated contextual performance ($r = -.20, -.17$ respectively, $p < .01$). In the regression models (see Table 14), the effect of organizational commitment on self-reported contextual performance was still significant ($\beta = -.55, p < .01$), and the effect of work family conflict on self-reported contextual performance substantially reduced ($\beta = -.03, p > .10$) when self-reported contextual performance was regressed on both work family conflict and organizational commitment, which satisfies all four rules of Baron and Kenny (1986), indicating that organizational commitment mediated the work family conflict-self-reported contextual performance.

However, when supervisor-rated contextual performance was regressed by work family conflict and organizational commitment, the effect of organizational commitment was not significant ($\beta = -.02, p > .10$) and the effect of work family conflict was not reduced in the regression equation. This suggests that organizational commitment did not mediate the negative relationship of work family conflict with supervisor-rated contextual performance, although work family conflict had a negative impact on supervisor-rated contextual performance. Thus, H1_d was supported with self-reported contextual performance but not supported with supervisor-rated contextual performance.

4.3.2 Hypotheses 2_a, 2_b, 2_c and 2_d

The second set of hypotheses proposed that job attitudes (e.g., job satisfaction and organizational commitment) would mediate the relationship between work family conflict and job results (e.g., check size and tip size). Specifically, Hypothesis 2_a (H2_a) states that job

satisfaction mediates the negative relationship of work family conflict with check size relationship. According to the first and second rules of Baron and Kenny's (1986) approach, work family conflict should be related to job satisfaction as well as tip size. As seen in Table 13, the first and second rules were met since work family conflict seems to be negative related to check size ($r = -.15, p < .10$) and to job satisfaction ($r = -.34, p < .01$). However, when check size was regressed on both work family conflict and job satisfaction, the effect of job satisfaction was not significant ($\beta = .11, p > .10$), and the effect of work family was not significantly reduced in the regression equation, (see Table 15) which violates the third and fourth rules of Baron and Kenny's (1986) approach. Therefore, H2_a was not supported. Figure 6 demonstrates the results of H2_a to H2_d

Hypothesis 2_b (H2_b) states that job satisfaction mediates the negative relationship between work family conflict and tip size. As the first and second rules of Baron and Kenny's (1986) approach, work family conflict should be related to job satisfaction as well as tip size. However, as shown in Table 13, work family conflict was not significantly related to tip size ($r = .03, p > .10$), which violates the second rule. In addition, as seen in Table 15, when tip size was regressed by both work family conflict and job satisfaction, the effect of job satisfaction was not significant ($\beta = .13, p > .10$), and the effect of work family conflict was not substantially changed in the regression equation, which violates the third and fourth rules. Therefore, H2_b was not supported.

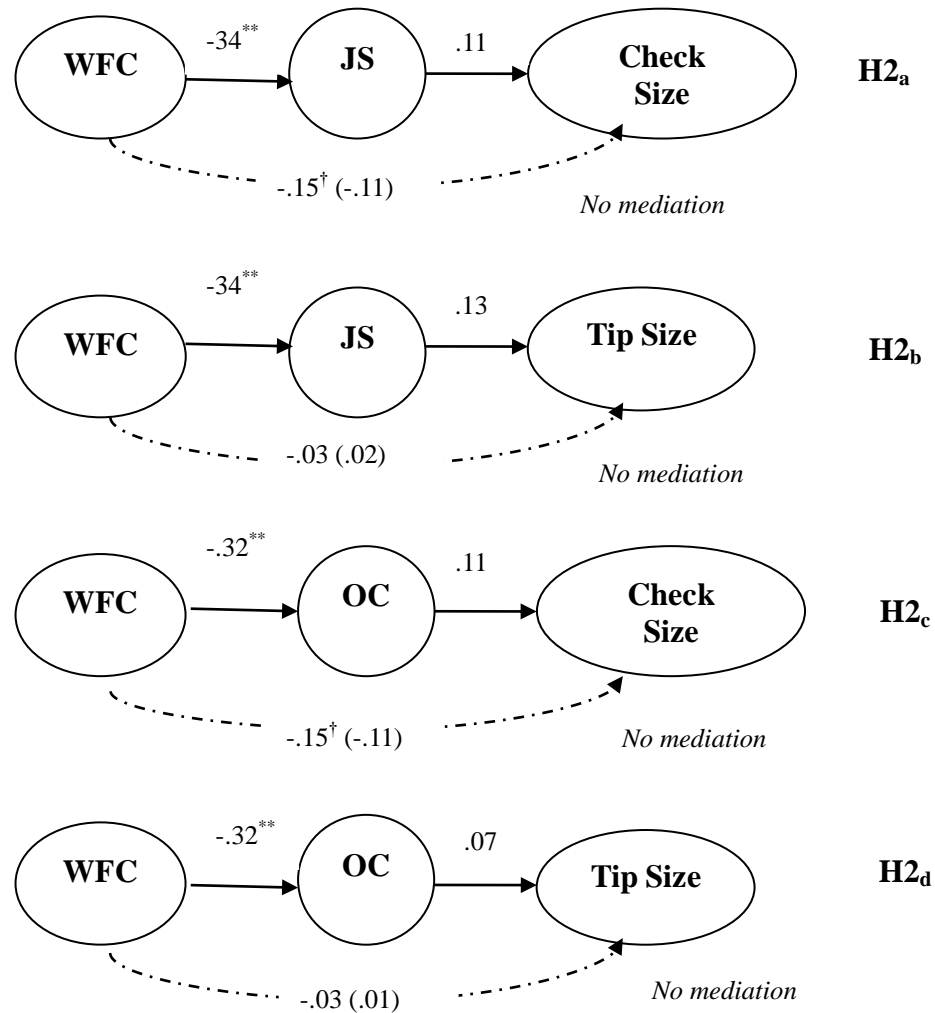
TABLE 15. Analysis of Mediating Role of Attitudes between Work Family Conflict and Results

Independent variables	Check size		Tip size	
	Step 1	Step 2	Step 1	Step 2
WFC	-.15 [†]	-.11	-.03	.02
JS		.11		.13
R^2 at each step	.02	.03	.00	.02
$R^2 \Delta$.01		.02
F		1.83		.36
WFC	-.15 [†]	-.11	-.03	.01
OC		.11		.07
R^2 at each step	.02	.03	.00	.01
$R^2 \Delta$.01		.01
F		1.88		.38

Note. [†] $p < .10$, * $p < .05$, ** $p < .01$ (1-tailed). Each standardized parameter estimates is shown. WFC = Work Family Conflict;

JS = Job satisfaction; OC = Organizational commitment.

FIGURE 6. Results of a Mediation Role of Job Attitudes between Work Family Conflict and Job Results (Hypotheses 2_a ~ 2_d)



Note. [†] $p < .10$, ^{*} $p < .05$, ^{**} $p < .01$ (1-tailed). WFC is work family conflict; JS is job satisfaction; OC is organizational commitment. The numbers from proximal to distal outcomes are standardized regression coefficients in the presence of WFC. The numbers in parentheses from WFC to distal outcomes represent standardized regression coefficients in the presence of proximal outcomes.

Hypothesis 2_c (H2_c) states that organizational commitment mediates the negative relationship between work family conflict and check size relationship. As seen in Table 13, work family conflict seems to be negative related to check size ($r = -.15, p < .10$) as well as to organizational commitment ($r = -.32, p < .01$) which satisfies the first and second rules. However, when check size was regressed on both work family conflict and organizational commitment, the effect of organizational commitment was not significant ($\beta = .11, p > .10$), and the effect of work family conflict on check size was not substantially reduced in the regression equation, which violates the third and fourth rules (see Table 15). Hence, H2_c was not supported.

Hypothesis 2_d (H2_d) states that organizational commitment mediates the negative relationship between work family conflict and tip size. As the first and second rules of Baron and Kenny's (1986) approach, work family conflict should be related to job satisfaction as well as tip size. However, as shown in Table 13, work family conflict was not significantly related to tip size ($r = .03, p > .10$). In addition, when tip size was regressed on both work family conflict and organizational commitment, the effect of job satisfaction was not significant ($\beta = .13, p > .10$) and the effect of work family conflict was not substantially reduced in the regression equation. Therefore, H2_d was not supported.

4.3.3 Hypotheses 3_a, 3_b, 3_c and 3_d

The last set of hypotheses suggested that job behaviors (e.g., job performance and contextual performance) would mediate the relationship of work family conflict with job results (e.g., check size and tip size). Table 16 illustrates the results of regression analyses with self-reported job behaviors while Table 17 presents the results with supervisor-rated job behaviors.

TABLE 16. Analysis of Mediating Role of Self-reported Behaviors between Work Family Conflict and Results

Independent variables	Check size		Tip size	
	Step 1	Step 2	Step 1	Step 2
WFC	-.15 [†]	-.15	-.03	-.03
Self JP		.15		.00
R^2 at each step	.02	.05 [†]	.00	.00
$R^2 \Delta$.03		.00
F		2.55 [†]		.06
WFC	-.15 [†]	-.12	-.03	-.03
Self CP		.12		-.01
R^2 at each step	.02	.04	.00	.00
$R^2 \Delta$.02		.00
F		2.01		.07

Note. [†] $p < .10$, * $p < .05$, ** $p < .01$ (1-tailed). Each standardized parameter estimates is shown. WFC = Work Family Conflict;

Self JP = Self-reported job performance; Self CP = Self-reported contextual performance.

TABLE 17. Analysis of Mediating Role of Supervisor-rated Behaviors between Work Family Conflict and Results

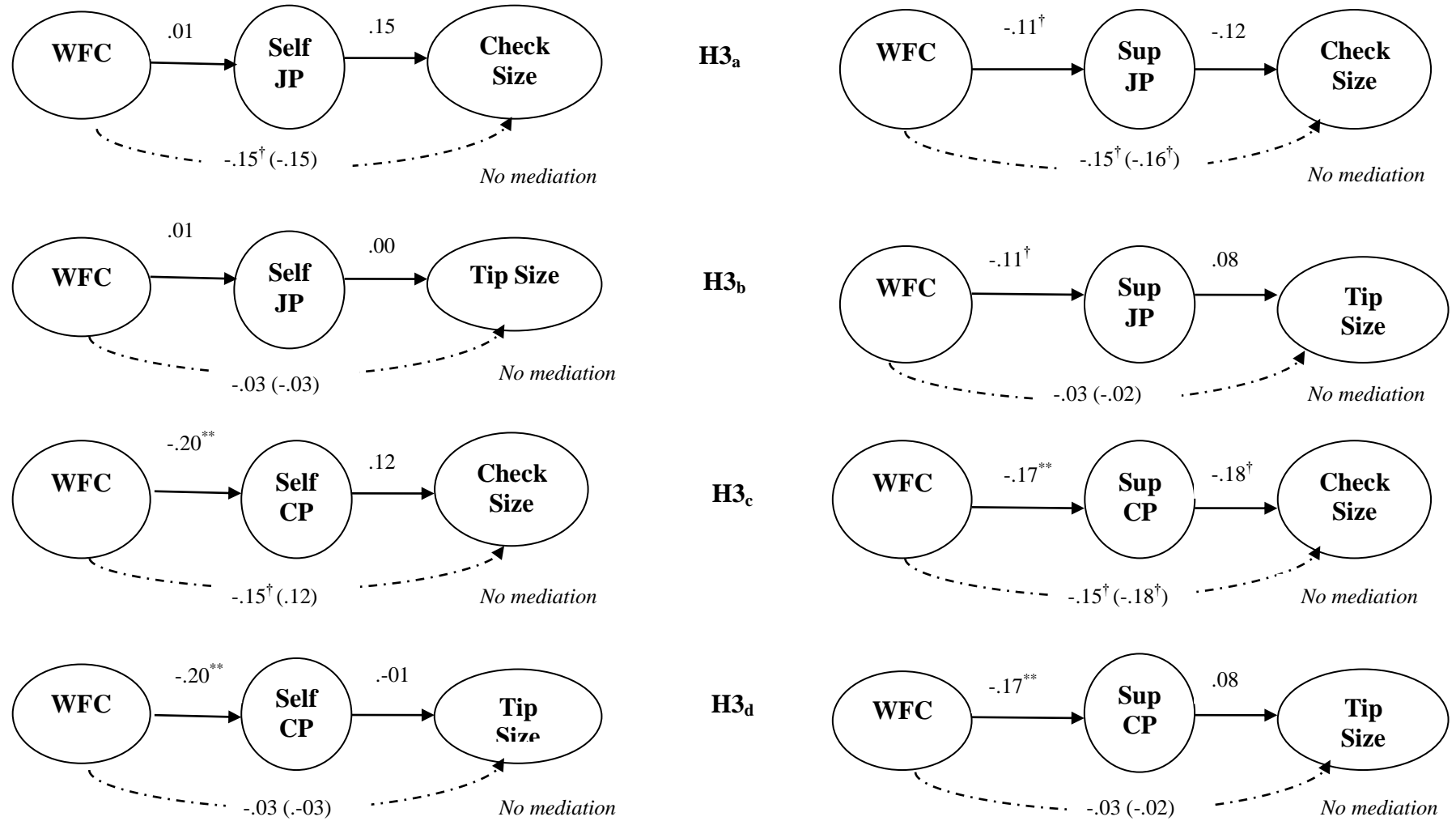
Independent variables	Check size		Tip size	
	Step 1	Step 2	Step 1	Step 2
WFC	-.15 [†]	-.16 [†]	-.03	-.02
Sup JP		-.12		.08
R^2 at each step	.02	.04	.00	.01
$R^2 \Delta$.02		.01
F		2.08		.55
WFC	-.15 [†]	-.18 [†]	-.03	-.02
Sup CP		-.18 [†]		.08
R^2 at each step	.02	.05 [†]	.00	.01
$R^2 \Delta$.03		.01
F		2.98 [†]		.46

Note. [†] $p < .10$, * $p < .05$, ** $p < .01$ (1-tailed). Each standardized parameter estimates is shown. WFC = Work Family Conflict; Sup JP = Supervisor-rated job performance; Sup CP = Supervisor-rated contextual performance.

Hypothesis 3_a (H3_a) states that job performance mediates the negative relationship between work family conflict and check size. To satisfy the first of second criteria of Baron and Kenny's approach, the relationships of work family conflict with job performance and check should be significant. As seen in Table 13, work family conflict seems to be related to supervisor-rated job performance and check size, but not to self-reported job performance ($r = .01, p > .10$). Therefore, the third and fourth rules were assessed with supervisor-rated job performance. As seen in Table 17, when check size was regressed on both work family conflict and supervisor-rated job performance, the effect of supervisor-rated job performance was not significant ($\beta = .12, p > .10$), and the effect of work family conflict was not substantially reduced ($\beta = -.16, p < .10$) in the regression equation. Therefore, H3_a was not supported. Figure 7 depicts the results of H3_a to H3_d.

Hypothesis 3_b (H3_b) states that job performance mediates the negative relationship between work family conflict and tip size. To meet the first and second rules of Baron and Kenny's approach, the relationships of work family conflict with job performance and tip size. However, as seen in Table 13, work family conflict was not associated with tip size, the distal consequence ($\beta = -.01, p > .10$). Even, when tip size was regressed, all coefficients in the model were trivial (see Tables 9 and 10). Therefore, H3_b was not supported.

FIGURE 7. Results of a Mediation Role of Job Behaviors between Work Family Conflict and Job Results (Hypotheses 3_a ~ 3_d)



Note. [†] $p < .10$, * $p < .05$, ** $p < .01$ (1-tailed). WFC is work family conflict; Self JP is self-reported job performance; Self CP is self-reported contextual performance; Sup JP is supervisor-rated job performance; Sup CP is supervisor rated contextual performance. The numbers from proximal to distal outcomes are standardized regression coefficients in the presence of WFC. The numbers in parentheses from WFC to distal outcomes represent standardized regression coefficients in the presence of proximal outcomes.

Hypothesis 3_c (H3_c) states that contextual performance mediates the negative relationship between work family conflict and check size. For the first and second rules of Baron and Kenny's mediation testing, work family conflict should be related to contextual performance and check size. As shown in Table 13, work family conflict seems to be related to self-reported ($\beta = -.20, p < .01$), supervisor-rated contextual performance ($\beta = -.17, p < .01$), and check size ($\beta = -.15, p < .10$). Then, the third and fourth rules were assessed by regressing check size with both work family conflict and contextual performance. As seen in Table 16, the effect of self-reported contextual performance on check size was not significant ($\beta = .15, p > .10$) when both work family conflict and the variable were including in the regression equation. On the other hand, when check size was regressed on work family conflict and supervisor-rated contextual performance, the effect of supervisor-rated contextual performance was significant ($\beta = .18, p < .10$) but the effect of work family conflict was not substantially reduced (see Table 17), which violates the fourth rules. Hence, H3_c was not supported.

Hypothesis 3_d (H3_d) states that contextual performance mediates the negative relationship between work family conflict and check size. To satisfy the first and second rules of Baron and Kenny's mediation testing, work family conflict should be related to contextual performance and tip size. As seen in Table 13, although work family conflict was related to both self-reported and supervisor-rated contextual performance, it was not related to tip size ($\beta = -.01, p > .10$). Furthermore, when tip size was regressed on work family conflict and contextual performance, all coefficients in the regression equation were negligible (see Tables 16 and 17). Therefore, H3_d was not supported.

Table 18 provides a summary of the results of these hypothesis tests.

Table 18. Summary of Hypothesis Testing

Hypothesis	Supported	Unsupported	Notes
$H1_a$: WFC \rightarrow JS \rightarrow JP		X	No mediation but WFC related to Sup-JP (see Table 14)
$H1_b$: WFC \rightarrow JS \rightarrow CP	X		Supported for self-reported CP; WFC also related to Sup-CP (see Table 14)
$H1_c$: WFC \rightarrow OC \rightarrow JP		X	No mediation but WFC related to Sup-JP (see Table 14)
$H1_d$: WFC \rightarrow OC \rightarrow CP	X		Supported for self-reported CP; WFC also related to Sup-CP (see Table 14)
$H2_a$: WFC \rightarrow JS \rightarrow CS		X	No mediation but WFC related to check size (see Table 15)
$H2_b$: WFC \rightarrow JS \rightarrow TS		X	No mediation WFC not related to tip size (see Table 15)
$H2_c$: WFC \rightarrow OC \rightarrow CS		X	No mediation but WFC related to check size (see Table 15)
$H2_d$: WFC \rightarrow OC \rightarrow TS		X	No mediation WFC not related to tip size (see Table 15)
$H3_a$: WFC \rightarrow JP \rightarrow CS		X	No mediation but WFC related to check size (see Tables 16 and 17)
$H3_b$: WFC \rightarrow JP \rightarrow TS		X	No mediation WFC not related to tip size (see Tables 16 and 17)
$H3_c$: WFC \rightarrow CP \rightarrow CS		X	No mediation but WFC related to check size (see Tables 16 and 17)
$H3_d$: WFC \rightarrow CP \rightarrow TS		X	No mediation WFC not related to tip size (see Tables 16 and 17)

Note. WFC = Work family conflict; JS = Job satisfaction; OC = Organizational commitment; JP = job performance; CP = contextual performance; Sup JP = Supervisor-rated job performance; Sup CP = Supervisor-rated contextual performance; CS = Check size per customer; TS = Tip size.

CHAPTER V

DISCUSSION

This study examined the relationships of work family conflict with various work-related consequences. Doing this is important since little is known about the relationship of work family conflict to distal job consequences (e.g., supervisor-rated job behaviors, job results) as previous studies predominantly investigated work family conflict and its influences on certain types of proximal consequences (e.g., job attitudes, self-reported job behaviors). This dissertation also tested mediation hypotheses derived from both qualitative and quantitative literature reviews examining whether work family conflict influences distal consequences through proximal consequences. These relationships are assumed in most previous studies but are rarely tested. By testing whether proximal consequences mediate the relationship of work family conflict with distal consequences, this study examines whether work family conflict has its expected effect on distal consequences. The following sections include summary of key findings, research implications, practical implications, limitations and future research, and concluding remarks.

5.1 Summary of Key Findings

5.1.1 Relationships of Work Family Conflict with Job Consequences

A meta-analysis of the relationships of work family conflict with job consequences from both hospitality and non-hospitality literature found the nature and pattern of the relations of work family conflict to job consequences in the hospitality literature were not different from in the non-hospitality literature. Therefore, this suggests that the meta-analytical findings from

either the hospitality or non-hospitality literature can be used to compare to the results of field study.

In general, work family conflict had moderate negative effects on job consequences ($\rho = -.11 \sim -.28$). However, the effect sizes of the relationships of work family conflict with job consequences were differently manifested in the results of meta-analysis. For instance, the work family conflict-job attitude relationships ($\rho = -.22 \sim -.28$) were stronger than the work family conflict-job behavior (c.f., self-reported job performance) relationships ($\rho = -.11 \sim -.12$) in the hospitality and non-hospitality literature. This was also true in the field study. As expected, the relationships of work family conflict with job attitudes ($r = -.34 \sim -.32$) were more salient than those with job behaviors ($r = .01 \sim -.20$). This suggests that the substantive effect of work family conflict may be limited to job attitudes not further to job behaviors.

The relationships of work family conflict with job results had not been examined in previous hospitality research. In the theoretical model developed based on previous literature (e.g., Ajzen, 1985, 1991; Kirkpatrick, 1959, 1960; Rotundo & Sackett, 2002), job results are more distal outcomes than job attitudes and behaviors. In other words, the relationships of work family conflict with job results would be weaker than those with job attitudes/behaviors. As expected, the current field study found that the work family conflict-job results (e.g., check size and tip size) relationships ($r = -.03 \sim -.15$) are weaker than the work family conflict-job attitude relationships ($r = -.34 \sim -.32$). However, this study found rather than being intermediate to the magnitudes of these relationships, the work family conflict-job behaviors relationships ($r = .01 \sim -.20$) appear to be no stronger than the work family conflict-job results relationships.

In addition, this study uncovered interesting patterns of relationships for work family conflict with particular study variables. For example, it is noteworthy that the influence of work

family conflict on contextual performance ($r = -.17 \sim -.20$) is more salient than it is for job performance ($r = .01 \sim -.11$). Although the role of contextual performance is appreciated in the hospitality industry where customer's entire experience of services consisting of each individual service encounter with different workers matters, it is interesting that no previous study examined the impact of work family conflict on contextual performance in a hospitality context. Consequently, this study provides a preliminary estimate of the work family conflict-contextual performance relationship and it appears to be stronger than the work family conflict-job performance relationship.

It is also intriguing that work family conflict was negatively (though not strongly) related to check size (c.f., a quantitative performance result) as expected, but not related to tip size (c.f., a qualitative performance result). A potential reason for the little impact of work family conflict on tip size may have something to do with the nature of customer tipping behavior. Unlike check size, although managers may acknowledge the amount of tip their employees produce, tip size is a critical interest of employees since they actually bring it into their pocket. Therefore, the influences of work family conflict on tip size would be confined, or it may be possible that employees sacrifice work family balance for large tips from customers. In fact, Lynn (2001) also argued that tip size is hard to predict as it is not strongly related to customer feedback on services. Hence, future studies that examine other antecedents of tip size beyond work family conflict should be encouraged.

5.1.2 Relationships among Job Consequences

Consistent with the results of the meta-analysis, the results of the field study also showed that the relationships between organizational commitment and job behaviors ($r = .41 \sim .56$) are

stronger than those between job satisfaction and job behaviors ($r = .23 \sim .42$). Although these two variables share a conceptual domain in the name of job attitudes and have a great deal of shared variance ($\rho = .71$; $r = .68$), work family conflict has different predictive powers on these consequences. Since the target of job satisfaction is one's job position or work role while that of organizational commitment is the entire organization (Hulin, 1991, p. 489), it would be true that work family conflict is ascribed to the organization's influence rather than a particular work role. In other words, it could be more effective to use a firm-level intervention rather than a position-specific treatment to minimize the detrimental effect of work family conflict.

It should be noted that this study employed both self-reported and supervisor-rated job behaviors. In fact, all past hospitality literature related work family conflict to self-reported job performance. Therefore, little was known with respect to relations of work family conflict with supervisor-rated behaviors since no past study related work family conflict to them. It is interesting that self-reported job behaviors and supervisor-rated job behaviors had different associations with other study variables. In particular, job attitudes were associated with self-reported job behaviors ($r = .23 \sim .56$) while they were not related to supervisor-rated job behaviors ($r = -.03 \sim .04$). This suggests that there may be a risk of common method variance in the self-report data; the magnitude of the relationship may be overestimated since job attitudes and self-reported job behaviors were measured from the same informant.

Although self-reported job performance was related to supervisor-rated job performance ($r = .11$) and self-reported contextual performance was related to supervisor-rated contextual performance ($r = .11$), the effect size of these relationships was quite small. Even, compared to the effect size ($\rho = .34$, $SD\rho = .01$, $K = 115$, $N = 37,752$) in a recent meta-analysis (Heidemeier & Moser, 2009), the relationships between self-reported behaviors and supervisor-rated

behaviors were smaller. Based on these weak relationships, it raises questions about whether these different sources are actually capturing the same construct.

Further, the relationship between check size and tip size seems to be small and negative ($r = -.11$), although they share a common conceptual domain as job results. In other words, the larger check size the smaller tip size servers have. Lynn and McCall (1998) argued that the negative relationship between check size and tip size can be ascribed to customer sensitivity to a total amount of tips. This is plausible in that customers are more likely to give a smaller proportion of tip for a larger check. Previous studies of service productivity (He, Chan, & Wu, 2007; Johnson & Jones, 2004) also argued that quantitative performance is negatively associated with qualitative performance (c.f., customer satisfaction). According to these researchers, quantitative work outcomes are more likely to be achieved out of sacrificing service quality (Johnson & Jones, 2004). On the other hand, there was an unexpected relationship between supervisor-rated contextual performance and check size ($r = -.15$), while supervisor-rated job performance was not significantly related to check size. In other words, employees engaging more extra-role behaviors may produce less quantitative performance results.

5.1.3 Mediation hypotheses

Based on the effect sizes in the meta-analysis as well as previous conceptual arguments (e.g., Ajzen, 1985, 1991; Kirkpatrick, 1959, 1960; Rotundo & Sackett, 2002), three major mediation hypotheses were proposed and tested based on Baron and Kenny's approach. Overall, most mediation hypotheses were not supported with the current data, although the pattern of the relationships of work family conflict with most job consequences was similar to the expected. In particular, no proximal consequences (e.g., attitudes, behaviors) mediated the relationships of

work family conflict with such most distal consequences as check size and tip size.

Specifically, the results for the first set of hypotheses (H_1 : Job attitude variables mediate the relationship between work family conflict and job behavior variables) indicate the hypothesis was partially supported. Only the relationship of work family conflict with self-reported contextual performance is fully mediated by both job satisfaction and organizational commitment, while the work family conflict-job performance was not mediated by either job satisfaction or organizational commitment. This suggests that work family conflict had a detrimental effect on contextual performance through job satisfaction or organizational commitment, while it influences job performance directly or through other mediators. This would be true considering the nature of these two different types of behaviors. Contextual performance is discretionary behavior not formally rewarded but which promote effective functioning in the workplace, whereas job performance is obligated behaviors employees perform as responsibilities. Thus, the affective perceptions influenced by work family conflict (e.g., low levels of satisfaction and commitment) may not influence in-role behaviors, but it perhaps affects extra-role behaviors. It could be possible that work family conflict may influence job performance unconsciously or through other mediators such as stress-related outcomes (e.g., depression or burnout).

The second set of hypotheses (H_2 : Job attitude variables mediate the relationship between work family conflict and job result variables) was not supported. Work family conflict was associated with check size but not through job attitudes. As stated earlier in the results of the first set of hypotheses, it would be other variables (e.g., stressors) that mediate the relationship between work family conflict and check size. Given that check size is an index of accumulated quantitative performance, employees suffering work family conflict may tend to unconsciously

perform poorer than those copying with it. However, the reduced affective job attitudes (e.g., satisfaction, commitment) by work family conflict are unlikely to be linked to the check size. This means that work family conflict has a unique predictive power on check size not through job attitudes

The last set of hypotheses (H_3 : Job behavior variables mediate the relationship between work family conflict and job result variables) was not supported as well. The hypotheses using tip size as a result variable were not supported in the field study given that work family conflict was not related to tip size ($r = .03$). The hypotheses using check size were therefore not supported. Specifically, although work family conflict was associated with check size, the relationships between self-reported job performance and check size ($r = .15$) and between self-reported contextual performance and check size ($r = .15$) were not stronger than between work family conflict and check size ($r = -.15$). This suggests that work family conflict influences check size but not through job behaviors. In other words, there is a unique variance of work family conflict which check size would explain not by job behaviors. As discussed earlier, it would be possible that other mediators exist between work family conflict and the quantitative performance results (e.g. burnout, counterproductive behaviors).

5.2 Research Implications

The findings of this study have several implications for the hospitality literature. First, although a number of empirical studies have investigated work family conflict and its detrimental impact on work related consequences, these studies primarily use proximal job consequences such as job attitudes or self-reported job performance. This tendency to choose criteria of work family conflict was similar in the non-hospitality literature as well (Casper et al.,

2007). Therefore, the value of work family conflict as an independent variable was unclear since little is known regarding the impact of work family conflict on distal job consequences such as supervisor-rated job behaviors and job results. This study operationalized job results with check size and tip size as the most distal consequences and empirically examined the impact of work family conflict on these criteria. It was found that work family conflict was negatively, but weakly, related to check size which is conceptually understood as a quantitative performance result, but not to tip size as a qualitative performance result. This finding can serve as reference information by future studies to estimate the relationships of work family conflict with job results which may be unavailable data for organizations. This dissertation also measured supervisor-rated job behaviors in addition to self-reported job behaviors. As stated earlier, few previous hospitality studies related work family conflict to supervisor-rated job performance or supervisor-rated/self-reported contextual performance which resulted in ambiguous understanding in the impact of work family conflict on these job consequences. The findings of the study indicated that work family conflict was negatively associated with supervisor rated job behaviors as well as self-reported contextual performance. In short, the current study manifested the value of work family conflict as an independent variable by demonstrating its detrimental effects on most job consequences including most distal consequences. In particular, given that the issue of work family conflict has recently attracted researchers in the hospitality literature, the value of additional research to further examine the role of WFC on more distal organization outcomes would be warranted.

Second, this study provides offers insights into the value of proximal job consequences as criterion variables. This study failed to empirically support a typical justification (WFC → Proxi. DV → Distal DV) to use the common proximal consequences rather than distal consequences. It

was found that the criterion role of job attitudes may be limited for predicting employee's extra-role behaviors since job attitudes (e.g., satisfaction, commitment) did not mediate the relationship between work family conflict and other distal consequences (e.g., job performance, objective performance). The variance for the distal consequences explained by work family conflict was not accounted for through the mediating mechanisms of the common proximal consequences (e.g., job attitudes). In other words, the attitudinal consequences have some criterion value for work family conflict only in predicting contextual performance.

Given that attitudes do not appear to be the mediating mechanism through which work family conflict influences other more distal consequences, the utility of researching only the proximal consequences of work family conflict can be questioned. If proximal consequences did not mediate the relationship of work family conflict with distal consequences, the findings of the studies examining proximal consequences would be systematically undervalued the effect of work family conflict on the distal consequences. This suggests that instead of the proximal consequences (e.g., job attitudes), researchers need to identify other mediators through which work family conflict influences distal consequences since there exists a unique portion of variance which work family conflict explains for distal consequences. Although this study empirically supports this mediating mechanism for contextual performance, more theoretical explanations are required. How different are job attitudes influenced by work family conflict from general job attitudes? Or, are they different? Although this study does not provide an answer, it would encourage subsequent investigations.

Although face/content validity for this measure was acknowledged since it was used by the participating organizations, the results suggest that using tip size as a criterion variable is questionable given that it was not related to other job consequences but job satisfaction (c.f., lack

of convergent validity). In fact, Lynn (2001, 2003) previously questioned the criterion value of tip size. In particular, Lynn (2001) reviewed previous empirical studies that examined the relationship between tip size and customer's service ratings and reported a range of average relationship ($r = .10 \sim .19$). This researcher further tried to show that the weak relationship between tip size and customer's service ratings is not primary due to response biases related to measurement scales (Lynn, 2003). Therefore, subsequent studies need to further analyze the criterion value of tip size related to customer's appreciation for the quality of services. One of promising approaches to verify this would be conducting a qualitative study (e.g., in-depth interview with customers).

On the other hand, this study suggests that selecting relevant criteria for the research design does matter. In this case, findings differ between common academic research criteria and criteria drawn from industry practice. During telephone interviews with F&B directors, the researcher was informed that the participating organizations are likely to more count distal consequences (e.g., supervisor-ratings, performance indexes) than proximal consequences (e.g., job attitudes, self-reported behaviors), whereas previous researchers predominantly used the proximal consequences as shown in the meta-analysis. This can be explained with several arguments.

First, researchers prefer using attitudinal criteria to others because it is easy to collect. As Alliger et al. (1997) argued in their meta-analysis, attitudinal criteria were most frequently utilized by training researchers since it is comparably easier to collect data. A few behavioral and by far fewer result criteria were used in that "organizational constraints great limit the opportunities for gathering higher level criteria" (p. 346). Likewise, hospitality researchers have also relied on attitudinal criteria given that the industry is notorious for high employee turnover rates. Therefore, they prefer to use attitudinal criteria which can be easily collected from the very

present employees.

The second reason for researchers to prefer using attitudinal criteria is related to their research interest. As Bardoel et al. (2008) argued, researchers are likely to use traditionally common criteria, while practitioners are using organizationally relevant criteria because each of them has different interests. Practitioners' major interest is to enhance effectiveness of their firm, and therefore they have to employ particular criteria most relevant for the firm. However, one of major interests of researchers is to generalize their findings to other contexts, a component of theory building. Therefore, they tend to use the common criteria which can be applicable to different situations.

The third reason bears on the compatibility principle proposed by some social psychologists (e.g., Ajzen & Fishbein, 1980, 2005; Fishbein & Ajzen, 1975). Heavily influenced by Fishbein and Ajzen's attitudinal theories, researchers may believe that attitudinal criteria can be compatibly used with behavioral/result criteria. In other words, they presume that the same (at least similar) outcomes will be obtained by using attitudinal measures as using other measures as criteria. In particular, the influence of the model of service profit chain (Heskett et al., 1994) is prominent among hospitality researchers. Therefore, it is commonly accepted that satisfied/committed employees perform well and make customers happy. However, researchers need to consider the implications of the choice of criterion variables. If researchers keep using the criteria in which practitioners are not primarily interested, the value of the findings would be limited to the academics. In applied science (e.g., management), the relationship between academics and industry practitioner is complementary. Industry is like the consumer of the products of academia, *men of affairs* (Dubin, 1976).

The issue of research-practice interface is of particular importance for the hospitality

literature given that it is an industry-specific field. Without practical applications, the findings of hospitality research would have limited utility (c.f., Van Scotter & Culligan, 2003). Therefore, this study included the criteria of work family conflict which the participating organizations particularly interested in and actually utilize. It would have been impossible to conduct this research without the collaboration with the participating company which was actively engaged for the research design. In fact, in order to remedy the research-practice gap, one of the consistent opinions is that researchers should collaborate with practitioners when designing, conducting and implementing their research in real organizational settings (e.g., Dunnette, 1990; Hakel, Sorcher, Beer & Moses, 1982; Latham, 2007). Brandenburger and Nalebuff (1996) argued that the outcomes of academic research will be relevant and useful to practitioners and generalizable to real organizational settings only if academics and practitioners work together. Sturman (2003) also pointed out the importance of the collaboration between hospitality researchers and practitioners. In particular, he encouraged hospitality researchers to make efforts to communicate with practitioners to enhance research collaboration.

Therefore, when future studies examine work family conflict or any other organizational variables, it is likely to be useful to consult with industry professionals to choose relevant criteria. This may enhance the interest of practitioners in the research findings. Given that either attitudes or behaviors failed to show the mediating causal mechanism through which work family conflict influences job results, most distal consequences, job attitudes may not serve as criteria for work family conflict when predicting job results. Therefore, following studies of work family conflict need to be more cautious of excluding distal consequences in the research design. More efforts should be made to examine distal consequences rather than proximal consequences since it is distal consequences that practitioners more count than proximal.

A focus on distal outcomes like check size has implications for the hospitality literature. A cursory review of the hospitality literature suggests that it is independent variables that have been treated as focal interests of empirical studies which resulted in little consistency in the use of dependent variables. If we keep choosing distal outcomes as dependent variables in research designs, it would enhance our ability to better understand what influences these outcomes. In other words, if dependent variables are considered to be focal interests of empirical studies, it would be a major concern of studies to identify relevant predictors of the particular dependent variables by which higher R-squared values would be obtained, instead of trying to select relevant outcomes of the particular independent variables.

Lastly, this study identified that the pattern of the relationships of work family conflict with job consequences in the hospitality literature ($\rho = -.11 \sim -.28$) is not different from those in the non-hospitality literature ($\rho = -.12 \sim -.25$). Given that previous meta-analyses of work family conflict excluded hospitality journals, it may be useful to quantitatively examine empirical studies in the hospitality literature. Because the field of hospitality management is quite young (Ottenbacher et al., 2009), there have been few studies to meta-analytically review hospitality research. As suggested by Lynn & Mullen (1997), the use of meta-analysis is desirable in order to offer a more cumulative perspective of research findings. Further efforts need be made to understand, build on, and take advantage of the findings of previous studies out of meta-analysis. However, it should be noted that the number cases included in the meta-analysis are quite small (c.f., mean of cases = 5.38), partially because many empirical studies in the hospitality literature did not report such basic statistics as zero-order correlations and reliabilities. In fact, journals in other fields (e.g., management) require authors to include the basic statistics for future research to conduct meta-analysis (APA Task Force on Reporting Standards, 2008).

5.3 Practical Implications

This study also has several implications for industry practitioners. Although the issue of work-family balance is of great interest for researchers who relate it to work-related as well as non-work-related outcomes (e.g., Allen et al., 2000), the industry professionals studied here were not fully aware of potential detrimental impact of work family conflict on their employees in the workplace. During the interviews with F&B directors of the participating organizations, it was found that each property has not made an effort to understand the level of work family conflict for their employees and deal with it, even though they agreed that it is an important managerial issue to help employees achieve balance between their work and home lives in general. Based on the results, this research suggests that managers may need to pay attention to their employee's perception of work family conflict, as it has a noxious effect on most job related consequences including organizationally meaningful performance results.

Given that the results of the study show that work family conflict is more strongly related to organizational commitment than to job satisfaction, there would be more rooms for organizations to consider curtailing the level of work family conflict of their employees. However, it should be noted that the effect size of the relationship of work family conflict with a quantitative performance result (check size per customer) is quite small ($r = -.15$), which implies that it may not be an urgent managerial issue for the participating organizations from the economic perspective.

This dissertation also provides food service managers with insights that may prove useful for developing desirable employee performance evaluation systems, by uncovering the relationships among different types of job consequences in terms of attitudes, behaviors, and

results which are organizationally meaningful performance indexes. Each job consequence is an important resource for managers to understand an overall performance level of individual worker. However, little information is available for managers regarding the extent to which these different types of consequences are related one another. Since the relationships between criteria were not strong in this study, managers may not be able to understand the level of utility of each criterion. An example is about using tip size as a performance criterion. The results of this study show that tip size is not related to other job consequences, although it was used by the participating organizations as individual performance criteria. This suggests that restaurant managers need to reconsider whether using tip size as criterion for each server's qualitative performance level is appropriate. On the other hand, attitudinal consequences seem to be related to most other criteria. This implies that managers may need to consider including attitudinal measures of employee performance when designing their evaluation systems.

5.4 Limitations and Future Research

This study exposed some limitations which call for further investigation by future studies. One of limitations is the study's sample. The field research was conducted using a sample consisting solely of service workers in food service outlets of a particular hotel group. Therefore, the findings may not be generalizable to other work settings. In particular, the employee respondents appear to have longer tenures ($M =$ approximately 8 years) than is typical for restaurant workers. This suggests that the effect of work family conflict on job consequences might be differently manifested for typical restaurant servers whose tenures are shorter than the study sample. Therefore, a replication study seems to be highly desirable to examine whether the findings of this study would be applicable to different contexts (e.g., casual dining restaurant).

Another limitation is associated with the research design regarding the data collection procedure. Although the cover letter for employee participants highlighted that the confidentiality of their response would be strictly kept by the researcher and instructed respondents to place the completed survey in the envelope and seal it, they might have felt that their supervisor or F&B director who collect the survey would open it. This may have led to biased responses. Therefore, it would be desirable for future research to have a neutral party (e.g., research team) rather than managers distribute and collect survey questionnaires to lessen a potential response bias.

In addition, this study related study variables such as work family conflict, job attitudes and behaviors to job results for previous two months rather than for following months, even though job results are followed by work family conflict and the proximal outcomes in the hypothesized model. The reason for using the previously measured job results is to avoid Hawthorne Effects of the project on the job activities of participants. In other words, it is likely that the respondents may engage in their work activities differently once participating in and being aware of the project. However, it is possible that different causal mechanisms among the study variables may have resulted if check size and tip size had been measured after assessment of the attitude and work family conflict measures. In addition, it is also possible that the work family conflict change changed over the two months. Therefore, the effect of work family conflict on the performance results a month ago would be different from two months ago.

As stated earlier, this study focuses on work family conflict in the direction of work to family rather than family to work. Therefore, the results would have been different if this study had used work family conflict in the other direction (family → work) or an overarching construct of work family conflict. Further, it should be noted that this study did not examine all the job

consequences in the literature. In particular, withdrawal behaviors (e.g., turnover) that have negative influences on organizational effectiveness were not used as job consequences, although employee turnover is a focal outcome variable in the hospitality literature (e.g., Kim, Lee, and Carlson, 2010). Since the direction of the impact of work family conflict on organizational effectiveness is the same as these behaviors, the causal mechanism among the study variables would have been detected if this study has employed these undesirable behaviors. Hence, future studies would be highly encouraged to investigate the relationships of work family conflict with job consequences along with withdrawal behaviors.

Lastly, the cases included in the meta-analysis were quite small (c.f., mean of cases = 5.38) compared to other meta-analyses. All cases included in the meta-analysis were stemmed only from major hospitality journals excluding unpublished papers such as dissertations and conference presentation reports. Hence, the meta-analyzed effect sizes of the study should be interpreted with a caution. As McAuley, Pham, Tugwell and Moher (2000) argued, the relationships in the published papers tend to be stronger than those in the unpublished paper. Therefore, the effect sizes in this meta-analysis could be overestimated.

5.5 Conclusions

This dissertation provided initial evidence for the significance of work family conflict's influences on job related consequences including organizationally meaningful criteria. Further, this study found that work family conflict does not influence distal consequences through the commonly used proximal consequences, even though consistent with the results of the meta-analysis that work family conflict is negatively related to most job consequences including a quantitative performance result (e.g., check size). Based on the results of the mediation

hypotheses, the value of the common proximal consequences of work family conflict such as attitudes and self-reported behaviors as criterion variables was questioned. The findings of the study proposed a direction for future studies with respect to the issue of criterion selection and the understanding of causal mechanism between criterion variables for work family conflict.

REFERENCES

References preceded by an asterisk (*) indicate those included in the sample of studies analyzed.

- Aguinis, H., & Pierce, C. (2008). Enhancing the relevance of organizational behavior by embracing performance management research. *Journal of Organizational Behavior*, 29(1), 139.
- Ajzen, I. (1985). From intentions to actions: A theory of planned behavior. *Action-control: From cognition to behavior*, 11, 39.
- Ajzen, I. (1988). *Attitudes, Personality and Behaviour* (Milton Keynes, Open University Press).
- Ajzen, I. (1991). The theory of planned behavior. *Organizational behavior and human decision processes*, 50(2), 179-211.
- Ajzen, I., & Fishbein, M. (1980). *Understanding attitudes and predicting social behavior*: Prentice-Hall.
- Ajzen, I., & Fishbein, M. (2005). The influence of attitudes on behavior. *The handbook of attitudes*, 173, 221.
- Allen, N., & Meyer, J. (1990). The measurement and antecedents of affective, continuance and normative commitment to the organization. *Journal of Occupational Psychology*, 63(1), 1-18.
- Allen, T., Herst, D., Bruck, C., & Sutton, M. (2000). Consequences associated with work-to-family conflict: A review and agenda for future research. *Journal of occupational health psychology*, 5(2), 278-308.
- Alliger, G. M., Tannenbaum, S. I., Bennett, W., Traver, H., & Shotland, A. (1997). A meta-analysis of the relations among training criteria. *Personnel Psychology*, 50, 341-358.
- APA Task Force on Reporting Standards. (2008). Reporting Standards for Research in Psychology. *American Psychologist*, 61, 271-283.
- *Ardahan, M. G. (2007). The Influence of Selected Antecedents of Frontline Employee's Perceptions of Service Recovery Performance. [Article]. *FIU Hospitality Review*, 25(2), 10-32.

- Asher, H. (1983). *Causal Modelling*. Sage University Paper Series: Quantitative Applications in the Social Sciences: Sage, Beverly Hills, London.
- Austin, J. T., & Villanova, P. (1992). The criterion problem: 1917–1992. *Journal of Applied Psychology*, 77, 836–874.
- Babin, B., & Boles, J. (1998). Employee behavior in a service environment: A model and test of potential differences between men and women. *The Journal of Marketing*, 62(2), 77-91.
- Bacharach, S., Bamberger, P., & Conley, S. (1991). Work-home conflict among nurses and engineers: Mediating the impact of role stress on burnout and satisfaction at work. *Journal of Organizational Behavior*, 12(1), 39-53.
- Bardoel, E., De Cieri, H., & Mayson, S. (2008). Bridging the Research-Practice Gap: Developing a measurement framework for work-life initiatives. *Journal of Management & Organization*, 14(3), 239-258.
- Baron, R., & Kenny, D. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of personality and social psychology*, 51(6), 1173-1182.
- Bateman, T., & Crant, J. (1993). The proactive component of organizational behavior: A measure and correlates. *Journal of Organizational Behavior*, 103-118.
- Bateman, T., & Organ, D. (1983). Job satisfaction and the good soldier: The relationship between affect and employee "citizenship". *The Academy of Management Journal*, 26(4), 587-595.
- Bedeian, A., Burke, B., & Moffett, R. (1988). Outcomes of work-family conflict among married male and female professionals. *Journal of Management*, 14(3), 475-491.
- Bennett, W., Lance, C. E., & Woehr, D. J. (2006). *Performance measurement: Current perspectives and future challenges*. Mahwah, N.J.: Lawrence Erlbaum Associates.
- Bingham, W V (1926). Measures of occupational success. *Harvard Business Review*, 5,1-10.
- Binning, J.F. and Barrett, G.V. (1989) Validity of personnel decisions: A conceptual analysis of the inferential and evidential basis. *Journal of Applied Psychology*, 74, 478-94.

- Boles, J., & Babin, B. (1996). On the front lines: stress, conflict, and the customer service provider. *Journal of Business Research*, 37(1), 41-50.
- Bommer, W.H., Johnson, J.L., Rich, G.A., Podsakoff, P.M. & MacKenzie, S.B. (1995). One the interchangeability of objective and subjective measures of employee performance: a meta-analysis. *Personnel Psychology*, 48(3), 587-605.
- Bond, J., Galinsky, E., & Swanberg, J. (1998). Executive summary: 1997 national study of the changing workforce. *Families and Work Institute*. Retrieved from <http://www.familiesandworkinst.org/summary/nscw.pdf>.
- Borchgrevink, C. (1998). Taking Issue With Lynn and Mullen's Meta-Analytic Recommendations. *Journal of Hospitality and Tourism Research*, 22, 98-101.
- Bommer, W., Dierdorff, E., Rubin, R., (2007). Does prevalence mitigate relevance? The moderating effect of group-level OCB on employee performance. *Academy of Management Journal* 50 (6), 1481-1494.
- Borman, W., & Motowidlo, S.J. (1993). Expanding the criterion domain to include elements of contextual performance. In N. Schmitt and W.C. Borman (eds.), *Personnel Selection in Organizations* (pp. 71-98). San Francisco, CA: Jossey Bass.
- Borman, W. C., & Motowidlo, S. J. (1997). Task performance and contextual performance: *The meaning for personnel selection research*. *Human Performance*, 10, 99-109.
- Borman, W.C., Penner, L., Allen, T., & Motowidlo, S. (2001). Personality predictors of citizenship performance. *International Journal of Selection and Assessment*, 9(1-2), 52-69.
- Bowling, N. (2007). Is the job satisfaction-job performance relationship spurious? A meta-analytic examination. *Journal of Vocational Behavior*, 71(2), 167-185.
- Bragger, J., Rodriguez-Srednicki, O., Kutcher, E., Indovino, L., & Rosner, E. (2005). Work-family conflict, work-family culture, and organizational citizenship behavior among teachers. *Journal of Business and Psychology*, 20(2), 303-324.
- Brayfield, A., & Rothe, H. (1951). An index of job satisfaction. *Journal of Applied Psychology*, 35(5), 307-311.
- Brandenburger, A.M. & Nalebuff, B.J. (1996). *Co-opetition*. New York: Doubleday.

- Brief, A. (1998). *Attitudes in and around organizations*: Sage Publications.
- Burt, H. E. (1926). *Principles of employment psychology*. Boston: Houghton-Mifflin.
- Byron, K. (2005). A meta-analytic review of work-family conflict and its antecedents. *Journal of Vocational Behavior*, 67(2), 169-198.
- Cascio, W. F. (1990), "Strategic human resource management in high technology industry", in Gómez-Mejia, L.R. and Lawless, M.W. (Eds.), *Organizational Issues in High Technology Management*, Vol. 11, JAI Press, Greenwich, CT.
- Campbell, J. P. (1990). Modeling the performance prediction problem in industrial/organizational psychology. In M. Dunnette & L.M. Hough (Eds.), *Handbook of industrial and organizational psychology, 1* (2nd ed.): 687-731. Palo Alto, CA: Consulting Psychologists Press.
- Campbell, J. P., McCloy, R. A., Oppler, S. H. & Sager, C. E. (1993) A theory of performance. In N. Schmitt and W.C. Borman (eds.), *Personnel Selection in Organizations* (p. 5-70). San Francisco: Jossey Bass.
- Carlson, D., & Kacmar, K. (2000). Work-family conflict in the organization: do life role values make a difference? *Journal of Management*, 26(5), 1031.
- Carr, J., Boyar, S., & Gregory, B. (2008). The moderating effect of work-family centrality on work-family conflict, organizational attitudes, and turnover behavior. *Journal of Management*, 34(2), 244-262.
- Casper, W., Eby, L., Bordeaux, C., Lockwood, A., & Lambert, D. (2007). A review of research methods in IO/OB work-family research. *Journal of Applied Psychology*, 92(1), 28-43.
- Casper, W., Martin, J., Buffardi, L., & Erdwins, C. (2002). Work-family conflict, perceived organizational support, and organizational commitment among employed mothers. *Journal of occupational health psychology*, 7(2), 99-108.
- Chang, C., Rosen, C., & Levy, P. (2009). The Relationship Between Perceptions of Organizational Politics and Employee Attitudes, Strain, and Behavior: A Meta-Analytic Examination. *The Academy of Management Journal (AMJ)*, 52(4), 779-801.

- Chi, C., & Gursoy, D. (2009). Employee satisfaction, customer satisfaction, and financial performance: An empirical examination. *International Journal of Hospitality Management*, 28(2), 245-253.
- *Cho, S., & Johanson, M. (2008). Organizational Citizenship Behavior and Employee Performance: A Moderating Effect of Work Status in Restaurant Employees. *Journal of Hospitality & Tourism Research*, 32(3), 307.
- *Cichy, R., Cha, J., & Kim, S. (2009). The relationship between organizational commitment and contextual performance among private club leaders. *International Journal of Hospitality Management*, 28(1), 53-62.
- Cohen, A. (1991). Career stage as a moderator of the relationships between organizational commitment and its outcomes: A meta-analysis. *Journal of Occupational Psychology*, 64(3), 253-268.
- Crant, J. M. (2000). Proactive behavior in organizations. *Journal of Management*, 26, 435-462.
- De Jonge, J., & Dormann, C. (2003). The DISC model: Demand-induced strain compensation mechanisms in job stress. *Occupational stress in the service professions*, 43-74.
- Dierdorff, E., Rubin, R., & Bachrach, D. (2010). Role Expectations as Antecedents of Citizenship and the Moderating Effects of Work Context. *Journal of Management*, 1-26. doi: 10.1177/0149206309359199
- Dillman, D. A. (1978). *Mail and telephone surveys: The total design method*. New York, NY: John Wiley & Sons.
- Dubin, R. (1976). *Theory building in applied areas*. In Marvin D. Dunnette (ed.), *Handbook of Industrial and Organizational Psychology*: 17-40. Chicago: Rand McNally.
- Dunnette, M.D. (1990). Blending the science and practice of industrial and organizational psychology: Where are we and where are we going? In M.D. Dunnette & L.M. Hough (Eds.), *Handbook of Industrial & Organizational Psychology* (2d. ed.), Vol. 1, 1-28. Palo Alto: Consulting Psychologists Press, Inc.
- Eby, L., Casper, W., Lockwood, A., Bordeaux, C., & Brinley, A. (2005). Work and family research in IO/OB: Content analysis and review of the literature (1980-2002). *Journal of Vocational Behavior*, 66(1), 124-197.

- Fishbein, M., & Ajzen, I. (1975). Belief, attitude, intention and behavior: An introduction to theory and research.
- Ford, M., Heinen, B., & Langkamer, K. (2007). Work and family satisfaction and conflict: A meta-analysis of cross-domain relations. *Journal of Applied Psychology*, 92(1), 57-79.
- Frese, M., & Fay, D. (2001). Personal initiative: An active performance concept for work in the 21st century. In B. M. Staw & R. L. Sutton (Eds.), *Research in organizational behavior*, 23, 133–187. Greenwich, CT: JAI Press.
- Frone, M. (2003). Work-family balance. *Handbook of occupational health psychology*, 143-162.
- Frone, M., Barnes, G., & Farrell, M. (1994). Relationship of work-family conflict to substance use among employed mothers: The role of negative affect. *Journal of Marriage and the Family*, 1019-1030.
- Frone, M., Russell, M., & Cooper, M. (1992). Antecedents and outcomes of work-family conflict: Testing a model of the work-family interface. *Journal of Applied Psychology*, 77(1), 65-78.
- Frone, M., Yardley, J., & Markel, K. (1997). Developing and testing an integrative model of the work-family interface. *Journal of Vocational Behavior*, 50(2), 145-167.
- Gazzori, G., Hancer, M., & Park, Y. (2009). The role and effect of job satisfaction and empowerment on customers' perception of service quality: A study in the restaurant industry. *Journal of Hospitality & Tourism Research*, doi:10.1177/1096348009344235.
- Gilboa, S., Shirom, A., Fried, Y., & Cooper, C. (2008). A meta-analysis of work demand stressors and job performance: Examining main and moderating effects. *Personnel psychology*, 61(2), 227.
- Goff, S., Mount, M., & Jamison, R. (1990). Employer supported child care, work/family conflict, and absenteeism: A field study. *Personnel psychology*, 43(4), 793-809.
- Greenhaus, J., Bedeian, A., & Mossholder, K. (1987). Work experiences, job performance, and feelings of personal and family well-being. *Journal of Vocational Behavior*, 31(2), 200-215.
- Greenhaus, J., & Beutell, N. (1985). Sources of conflict between work and family roles. *The Academy of Management Review*, 10(1), 76-88.

- Greenhaus, J., Callanan, G., & Godshalk, V. (2000). *Career management*: South-Western Pub.
- Grzywacz, J., & Butler, A. (2005). The impact of job characteristics on work-to-family facilitation: Testing a theory and distinguishing a construct. *Journal of Occupational Health Psychology, 10*(2), 97-109.
- Grzywacz, J., & Marks, N. (2000). Reconceptualizing the work-family interface: An ecological perspective on the correlates of positive and negative spillover between work and family. *Journal of occupational health psychology, 5*(1), 111-126.
- Hair, J. F., Anderson, R. E., Tatham, R. L., and Black, W. C. (1995). *Multivariate Data Analysis with Readings*. New York: Macmillan.
- Hakel, M.D., Sorcher, M., Beer, M. & Moses, J, L. (1982). *Making it happen: Designing research with implementation in mind*. Beverly Hills: Sage Publications.
- Hansen, H, Sandvik, K., & Selnes, F. (2003), Direct and Indirect Effects of Commitment to a Service employee on the Intention to Stay. *Journal of Service Research, 5*, 356–68.
- Harrison, D. A., Newman, D. A., & Roth, P. L. (2006). How important are job attitudes? Meta-analytic comparisons of integrative behavioral outcomes and time sequences. *Academy of Management Journal, 49*, 305–325.
- Hartley, S., & Walker Jr, O. (1985). The Determinants of Salesperson Performance: A Meta-Analysis. *Journal of Marketing Re-search, 22*, 103-118.
- Hartline, M., & Ferrell, O. (1996). The management of customer-contact service employees: an empirical investigation. *The Journal of Marketing, 60*(4), 52-70.
- He, Y., Chan, L., & Wu, M. (2007). Balancing productivity and consumer satisfaction for profitability: Statistical and fuzzy regression analysis. *European Journal of Operational Research, 176*(1), 252-263.
- Heidemeier, H., & Moser, K. (2009). Self-other agreement in job performance ratings: A meta-analytic test of a process model. *Journal of Applied Psychology, 94*(2), 353-370.
- Heneman, R. (1986). The relationship between supervisory ratings and results-oriented measures of performance: A meta-analysis. *Personnel psychology, 39*(4), 811-826.

- Heskett, J.L., Jones, T.O., Loveman, G.W., Sasser, W.E. & Schlesinger, L.A., (1994). Putting the service-profit chain to work. *Harvard Business Review* 72 (2), 164–174
- Hoffman, B., Papas, R., Chatkoff, D., & Kerns, R. (2007). Meta-analysis of psychological interventions for chronic low back pain. *Health Psychol*, 26(1), 1-9.
- Hoffmann, C. C., Nathan, B., & Holden, C. (1991). A comparison of validation *criteria*: Objective versus subjective performance measures and self versus supervisor ratings. *Personnel Psychology*, 44, 601–619.
- Hoyle, R. H. (1995). The Structural Equation Modeling Approach: Basic Concepts, and Fundamental Issues. In R. H. Hoyle (Ed.), *Structural Equation Modeling: Concepts, Issues, and Applications* (pp. 1-15). Thousand Oaks, Calif.: Sage Publications.
- Hsiung, H., & Tsai, W. (2009). Job definition discrepancy between supervisors and subordinates: The antecedent role of LMX and outcomes. *Journal of Occupational and Organizational Psychology*, 82(1), 89-112.
- Huffman, L., & Schrock, J. (1987). Corporate Day Care: An Answer to the Labor Shortage. *Cornell Hotel and Restaurant Administration Quarterly*.
- Hulin, C. (1991). Adaptation, persistence, and commitment in organizations. *Handbook of industrial and organizational psychology*, 2, 445-505.
- Hunter, J., & Schmidt, F. (2004). *Methods of meta-analysis: Correcting error and bias in research findings*: Sage Publications.
- Iaffaldano, M., & Muchinsky, P. (1985). Job satisfaction and job performance: A meta-analysis. *Psychological Bulletin*, 97(2), 251-273.
- *Iun, J., & Huang, X. (2007). How to motivate your older employees to excel? The impact of commitment on older employees' performance in the hospitality industry. *International Journal of Hospitality Management*, 26(4), 793-806.
- James, L. (1973). Criterion models and construct validity for criteria. *Psychological Bulletin*, 80(1), 75-83.
- *Johlke, M., & Duhan, D. (2000). Supervisor communication practices and service employee job outcomes. *Journal of Service Research*, 3(2), 154.

- Johnson, J. (2003). Toward a better understanding of the relationship between personality and individual job performance. *Personality and work: Reconsidering the role of personality in organizations*, 83-120.
- Johnston, R., & Jones, P. (2004). Service productivity: towards understanding the relationship between operational and customer productivity. *International Journal of Productivity and Performance Management*, 53(3), 201-213.
- Joreskog, K., Sorbom, D., & Inc, S. (1996). *LISREL 8: User's reference guide*: Scientific Software.
- Judge, T., Thoresen, C., Bono, J., & Patton, G. (2001). The job satisfaction-job performance relationship: A qualitative and quantitative review. *Psychological Bulletin*, 127(3), 376-407.
- Kahn, R., Wolfe, D., Quinn, R., Snoek, J., & Rosenthal, R. (1964). *Occupational stress: Studies in role conflict and ambiguity*: New York: Wiley.
- *Karatepe, O., Arasli, H., & Khan, A. (2007). The Impact of Self-Efficacy on Job Outcomes of Hotel Employees. *International journal of hospitality and tourism administration*, 8(4), 23.
- *Karatepe, O., & Kilic, H. (2007). Relationships of supervisor support and conflicts in the work-family interface with the selected job outcomes of frontline employees. *Tourism Management*, 28(1), 238-252.
- *Karatepe, O., & Kilic, H. (2009). The effects of two directions of conflict and facilitation on frontline employees job outcomes. *The Service Industries Journal*, 29(7), 977-993.
- *Karatepe, O. M., & Magaji, A. B. (2008). Work-Family Conflict and Facilitation in the Hotel Industry. [Article]. *Cornell Hospitality Quarterly*, 49(4), 395-412. doi: 10.1177/1938965508326282
- *Karatepe, O., & Sokmen, A. (2006). The effects of work role and family role variables on psychological and behavioral outcomes of frontline employees. *Tourism Management*, 27(2), 255-268.
- *Karatepe, O. M., & Uludag, O. (2007). Conflict, exhaustion, and motivation: A study of frontline employees in Northern Cyprus hotels. [Article]. *International Journal of Hospitality Management*, 26(3), 645-665. doi: 10.1016/j.ijhm.2006.05.006

- *Karatepe, O., Uludag, O., Menevis, I., Hadzimehmedagic, L., & Baddar, L. (2006). The effects of selected individual characteristics on frontline employee performance and job satisfaction. *Tourism Management*, 27(4), 547-560.
- Kelloway, E., Gottlieb, B., & Barham, L. (1999). The source, nature, and direction of work and family conflict: A longitudinal investigation. *Journal of occupational health psychology*, 4, 337-346.
- Kim, B., Lee, G., & Carlson, K. D. (2010). An examination of the nature of the relationship between Leader-Member-Exchange (LMX) and turnover intent at different organizational levels. *International Journal of Hospitality Management*, 29(4), 591-597.
- *Kim, W. G., Leong, J. K., & Lee, Y.-K. (2005). Effect of service orientation on job satisfaction, organizational commitment, and intention of leaving in a casual dining chain restaurant. [Article]. *International Journal of Hospitality Management*, 24(2), 171-193. doi: 10.1016/j.ijhm.2004.05.004
- Kirchmeyer, C. (1993). *Managing the boundary between work and non-work: an assessment of organizational practices*.
- Kirkpatrick, D. (1959). Techniques for evaluation Programs. *Journal of the American Society of Training Directors (Training & Development)*, 13(11), 3-9.
- Kirkpatrick, D. (1960). Techniques for evaluating programs, part 4: Results. *Journal of the American Society of Training Directors (Training & Development)*, 14(1), 28-32.
- Kirkpatrick, D. (1975). *Evaluating training programs: a collection of articles from the Journal of the American Society for Training and Development*: American Society for Training and Development.
- Kline, R. B. (2005). *Principles and practice of structural equation modeling* (2nd ed.). New York, NY: The Guilford Press.
- Kossek, E., & Ozeki, C. (1998). Work-family conflict, policies, and the job-life satisfaction relationship: A review and directions for organizational behavior-human resources research. *Journal of Applied Psychology*, 83(2), 139-148.
- *Lam, T. (2003). Leader-Member Exchange And Team-Member Exchange: The Roles Of Moderators In New Employees' Socialization. *Journal of Hospitality & Tourism Research*, 27(1), 48.

- Latham, G. (2007). A Speculative Perspective on the Transfer of Behavioral Science Findings to the Workplace: "The Times They Are A-Changin'". *The Academy of Management Journal (AMJ)*, 50(5), 1027-1032.
- Lee, G., Magnini, V., & Kim, B. P. (2010). Employee satisfaction with schedule flexibility: Psychological antecedents and consequences within the workplace. *International Journal of Hospitality Management*, 29(4), 591-597.
- LePine, J., Erez, A., & Johnson, D. (2002). The nature and dimensionality of organizational citizenship behavior: A critical review and meta-analysis. *Journal of Applied Psychology*, 87(1), 52-65.
- Locke, E. (1976). The nature and causes of job satisfaction. *Handbook of industrial and organizational psychology*, 1, 1297-1343.
- Lynn, M. (2001). Restaurant tipping and service quality: a tenuous relationship. *Cornell Hotel and Restaurant Administration Quarterly*, 42(1), 14.
- Lynn, M. (2003). Tip levels and service: An update, extension, and reconciliation. *Cornell Hotel and Restaurant Administration Quarterly*, 44(5-6), 139.
- Lynn, M., & McCall, M. (1998). Beyond gratitude and gratuity. *Unpublished manuscript, Cornell University, School of Hotel Administration, Ithaca, NY*.
- Lynn, M., & Mullen, B. (1997). The Quantitative Integration of Research: An Introduction to Meta-Analysis. *Journal of Hospitality and Tourism Research*, 21, 121-140.
- Lyness, K., & Thompson, D. (1997). Above the glass ceiling? A comparison of matched samples of female and male executives. *Journal of Applied Psychology*, 82, 359-375.
- MacKenzie, S., Podsakoff, P., & Fetter, R. (1991). Organizational citizenship behavior and objective productivity as determinants of managerial evaluations of salespersons' performance. *Organizational behavior and human decision processes*, 50(1), 123-150.
- MacKenzie, S., Podsakoff, P., & Fetter, R. (1993). The impact of organizational citizenship behavior on evaluations of salesperson performance. *The Journal of Marketing*, 57(1), 70-80.
- Magnini, V. (2009). Understanding and Reducing Work-Family Conflict in the Hospitality Industry. *Journal of Human Resources in Hospitality & Tourism*, 8(2), 119-136.

- Major, V., Klein, K., & Ehrhart, M. (2002). Work time, work interference with family, and psychological distress. *Journal of Applied Psychology*, 87(3), 427-435.
- Mathieu, J., & Zajac, D. (1990). A review and meta-analysis of the antecedents, correlates, and consequences of organizational commitment. *Psychological Bulletin*, 108(2), 171-194.
- Mesmer-Magnus, J., & Viswesvaran, C. (2006). How family-friendly work environments affect work/family conflict: A meta-analytic examination. *Journal of labor research*, 27(4), 555-574.
- Meyer, J., & Allen, N. (1991). A three-component conceptualization of organizational commitment. *Human resource management review*, 1(1), 61-89.
- Meyer, J., Paunonen, S., Gellatly, I., Goffin, R., & Jackson, D. (1989). Organizational commitment and job performance: It's the nature of the commitment that counts. *Journal of Applied Psychology*, 74, 152-156.
- Michel, J., Mitchelson, J., Kotrba, L., LeBreton, J., & Baltes, B. (2009). A comparative test of work-family conflict models and critical examination of work-family linkages. *Journal of Vocational Behavior*, 74(2), 199-218.
- Morrison, E., & Phelps, C. (1999). Taking charge at work: Extrarole efforts to initiate workplace change. *The Academy of Management Journal*, 42(4), 403-419.
- Mowday, R.T., Steers, R.M., & Porter, L.W. (1979). The measurement of organizational commitment. *Journal of Vocational Behavior*, 14(2), 224-247.
- Muckler, F., & Seven, S. (1992). Selecting performance measures: "Objective" versus "subjective" measurement. *Human Factors: The Journal of the Human Factors and Ergonomics Society*, 34(4), 441-455.
- *Mukherjee, A., & Malhotra, N. (2006). Does role clarity explain employee-perceived service quality? *International Journal of Service Industry Management*, 17(5), 444-473.
- Mulvaney, R., O'Neill, J., Cleveland, J., & Crouter, A. (2007). A model of work-family dynamics of hotel managers. *Annals of Tourism Research*, 34(1), 66-87.
- Nagle, B. (1953). Criterion development. *Personnel Psychology*, 6, 211-289.

- *Nadiri, H., & Tanova, C. (2009). An investigation of the role of justice in turnover intentions, job satisfaction, and organizational citizenship behavior in hospitality industry. *International Journal of Hospitality Management*.
- *Namasivayam, K., & Mount, D. (2004). The relationship of work-family conflicts and family-work conflict to job satisfaction. *Journal of Hospitality & Tourism Research*, 28(2), 242.
- Nathan, B., & Alexander, R. (1988). A comparison of criteria for test validation: A meta-analytic investigation. *Personnel psychology*, 41(3), 517-535.
- McAuley, L., Pham, B., Tugwell, P., & Moher, D. (2000). Does the inclusion of grey literature influence estimates of intervention effectiveness reported in meta-analyses? *The Lancet*, 356(9237), 1228-1231.
- Netemeyer, R., Boles, J., & McMurrian, R. (1996). Development and validation of work-family conflict and family-work conflict scales. *Journal of Applied Psychology*, 81(4), 400-410.
- Netemeyer, R., Brashear-Alejandro, T., & Boles, J. (2004). A cross-national model of job-related outcomes of work role and family role variables: A retail sales context. *Journal of the Academy of Marketing Science*, 32(1), 49-60.
- Netemeyer, R., Maxham III, J., & Pullig, C. (2005). Conflicts in the work-family interface: Links to job stress, customer service employee performance, and customer purchase intent. *Journal of Marketing*, 69(2), 130-143.
- O'Driscoll, M., Ilgen, D., & Hildreth, K. (1992). Time devoted to job and off-job activities, interrole conflict, and affective experiences. *Journal of Applied Psychology*, 77(3), 272-279.
- Organ, D. (1977). A reappraisal and reinterpretation of the satisfaction-causes-performance hypothesis. *The Academy of Management Review*, 2(1), 46-53.
- Organ, D. (1988). *Organizational citizenship behavior: The good soldier syndrome*: Lexington books Lexington, MA.
- Organ, D., Podsakoff, P., & MacKenzie, S. (2006). Organizational Citizenship Behavior: Its Nature. *Antecedents, and Consequences (Sage Publications, Thousand Oaks)*.
- Organ, D., & Ryan, K. (1995). A Meta-Analytic Review of Attitudinal and Dispositional Predictors of Organizational Citizenship Behavior. *Personnel psychology*, 48(4).

- Orpen, C. (1974). The effect of reward contingencies on the job satisfaction-task performance relationship: An industrial experiment. *Psychology, 11*(3), 9-14.
- Ottenbacher, M., Harrington, R., & Parsa, H. (2009). Defining the Hospitality Discipline: a Discussion of Pedagogical and Research Implications. *Journal of Hospitality & Tourism Research, 33*(3), 263.
- Parker, S., Williams, H., & Turner, N. (2006). Modeling the antecedents of proactive work behavior. *Journal of Applied Psychology, 91*, 636-652.
- Petty, M., McGee, G., & Cavender, J. (1984). A meta-analysis of the relationships between individual job satisfaction and individual performance. *Academy of Management Review, 9*, 712-721.
- Podsakoff, P., MacKenzie, S., Paine, J., & Bachrach, D. (2000). Organizational citizenship behaviors: A critical review of the theoretical and empirical literature and suggestions for future research. *Journal of Management, 26*(3), 513.
- Powell, G., & Greenhaus, J. (2010). Sex, gender, and the work-to-family interface: Exploring negative and positive interdependencies. *The Academy of Management Journal, 53*(3), 513-534.
- Pulakos, E. D., Arad, S., Donovan, M. A., & Plamondon, K. E. (2000). Adaptability in the workplace: Development of a taxonomy of adaptive performance. *Journal of Applied Psychology, 85*, 612-624.
- Randall, D. (1990). The consequences of organizational commitment: Methodological investigation. *Journal of Organizational Behavior, 11*(5), 361-378.
- *Ravichandran, S., & Gilmore, S. (2007). Formation of Organizational Citizenship Behaviors in Students Employed in University Dining Services. *Journal of Foodservice Business Research, 10*(2), 19-50.
- Rich, G., Bommer, W., MacKenzie, S., Podsakoff, P., & Johnson, J. (1999). Apples and apples or apples and oranges? A meta-analysis of objective and subjective measures of salesperson performance. *Journal of Personal Selling & Sales Management, 19*(4), 41-52.
- Riketta, M. (2002). Attitudinal organizational commitment and job performance: A meta-analysis. *Journal of Organizational Behavior, 23*(3), 257-266.

- Roth, L., & David, E. (2009). Work-family conflicts and work performance. *Psychological reports*, 105(1), 80.
- Rotundo, M., & Sackett, P. R. (2002). The relative importance of task, citizenship, and counterproductive performance to global ratings of job performance: A policy capturing approach. *Journal of Applied Psychology*, 87: 66–80.
- Sackett, P. R., Laczko, R. M., & Arvey, R. D. (2002). The effects of range restriction on estimates of criterion interrater reliability: Implications for validation research. *Personnel Psychology*, 55, 807–825.
- Scheffler, I. (1967). *Science and Subjectivity*: Indianapolis, Ind.: The Bobbs-Merrill Company.
- Siders, M., George, G., & Dharwadkar, R. (2001). The relationship of internal and external commitment foci to objective job performance measures. *The Academy of Management Journal*, 44(3), 570-579.
- Smith, C., Organ, D., & Near, J. (1983). Organizational citizenship behavior: Its nature and antecedents. *Journal of Applied Psychology*, 68(4), 653-663.
- Smith, P. C. (1976). Behavior, results, and organizational effectiveness: The problem of criteria. In M. D. Dunnette (Ed.), *Handbook of industrial and organizational psychology* (p. 745-775). Chicago: Rand McNally.
- Spector, P. (1997). *Job satisfaction: Application, assessment, cause, and consequences*: Sage Publications.
- Steers, R. (1977). Antecedents and outcomes of organizational commitment. *Administrative science quarterly*, 22(1), 46-56.
- Stern, B. L., Bush, R. F., & Hair, J. F., Jr. (1977). The Self-Image/Store Image Matching Process: An Empirical Test. *The Journal of Business*, 50(1), 63-69.
- Sturman, M. (2003). Utility Analysis. *Cornell Hotel and Restaurant Administration Quarterly*, 44(2), 106.
- *Susskind, A. M., Borchgrevink, C. P., Kacmar, K. M., & Brymer, R. A. (2000). Customer Service Employees' Behavioral Intentions And Attitudes: An Examination Of Construct Validity And A Path Model (Vol. 19, pp. 53).

- Tett, R., & Meyer, J. (1993). Job satisfaction, organizational commitment, turnover intention, and turnover: Path analyses based on meta-analytic findings. *Personnel psychology*, 46, 259-259.
- Thomas, L., & Ganster, D. (1995). Impact of family-supportive work variables on work-family conflict and strain: A control perspective. *Journal of Applied Psychology*, 80(1), 6-15.
- Thomas, W., & Znaniecki, F. (1918). *The polish peasant in Europe and America*: Gorham Press.
- Toops, H. A. (1944). The criterion. *Educational and Psychological Measurement*, 4, 271-297.
- Turnipseed, D. (2002). Are good soldiers good? Exploring the link between organization citizenship behavior and personal ethics. *Journal of Business Research*, 55(1), 1-15.
- Van Dyne, L., Cummings, L., & Parks, J. (1995). Extra-role behaviors: In pursuit of construct and definitional clarity (a bridge over muddied waters). *Research in organizational behavior*, 17, 215-215.
- Van Scotter, J., & Culligan, P. (2003). The value of theoretical research and applied research for the hospitality industry. *Cornell Hotel and Restaurant Administration Quarterly*, April, 14-27.
- U.S. Department of Labor, Bureau of Labor Statistics. (2006). Employment situation summary (Economic news release). Washington, D.C.: U.S. Government Printing Office. Retrieved February 7, 2010, from Bureau of Labor Statistics web site: <http://www.bls.gov/news.release/empsit.nr0.htm>
- Viswesvaran, C., & Ones, D. S. (2000). Perspectives on models of job performance. *International Journal of Selection and Assessment*, 8, 216-226.
- Wallace, S. R. (1965). Criteria for what? *American Psychologist*, 20, 411-417.
- Wanous, J. (1974). A causal-correlational analysis of the job satisfaction and performance relationship. *Journal of Applied Psychology*, 59(2), 139-144.
- Watson, J. (1925). Experimental studies on the growth of the emotions. *The Pedagogical seminary and journal of genetic psychology*, 328.

- Welbourne, T., Johnson, D., & Erez, A. (1998). The role-based performance scale: Validity analysis of a theory-based measure. *The Academy of Management Journal*, 41(5), 540-555.
- *Wu, X., & Wang, C. (2008). The Impact of Organizational Justice on Employees' Pay Satisfaction, Work Attitudes and Performance in Chinese Hotels. [Article]. *Journal of Human Resources in Hospitality & Tourism*, 7(2), 181-195. doi: 10.1080/15332840802156923
- *Yavas, U., Babakus, E., & Karatepe, O. (2008). Attitudinal and behavioral consequences of work-family conflict and family-work conflict: Does gender matter? *International Journal of Service Industry Management*, 19(1), 7.

Appendix A. Mastery Table for Meta-analysis

Org No.	No.	Studies	Journal	DVs	Major Category	Minor Category	Measures (wh/no. of items)	Reliability	Ivs	Major Category	Minor Category	Measures (wh/no. of items)	Reliability	Effect size	Sample size	Sample description
1	1	Cho & Johanson 2008	JHTR	Absenteeism	P-Behavior	General	self-reported frequency	-	Intent to leave for monetary incentive	ATT	General	1-item	-	0.18	268	Entry-level employees in 13 midupscale restaurants (US-Georgia)
2	1	Cho & Johanson 2008	JHTR	Absenteeism	P-Behavior	General	self-reported frequency	-	Dependable continuance	ATT	General	3-item by Tsui et al 1997	0.77	-0.1	268	Entry-level employees in 13 midupscale restaurants (US-Georgia)
3	1	Cho & Johanson 2008	JHTR	Absenteeism	P-Behavior	General	self-reported frequency	-	OCB	ATT	General	19-item by Moorman & Blakely 1996	0.79	-0.1	268	Entry-level employees in 20 midupscale restaurants (US-Georgia)
4	1	Cho & Johanson 2008	JHTR	Absenteeism	P-Behavior	General	self-reported frequency	-	Organizational Commitment	ATT	General	3-item by Meyer et al 1993	0.89	-0.19	268	Entry-level employees in 20 midupscale restaurants (US-Georgia)
5	1	Cho & Johanson 2008	JHTR	Absenteeism	P-Behavior	General	self-reported frequency	-	Supervisory support	ATT	General	6-item by pearse et al 199	0.86	-0.28	268	Entry-level employees in 20 midupscale restaurants (US-Georgia)
6	1	Cho & Johanson 2008	JHTR	Absenteeism	P-Behavior	General	self-reported frequency	-	Organizational support	ATT	General	17-item by Eisenberger - 1998	0.74	-0.22	268	Entry-level employees in 20 midupscale restaurants (US-Georgia)
7	1	Cho & Johanson 2008	JHTR	Intent to leave for monetary incentive	ATT	General	1-item	-	Dependable continuance	ATT	General	3-item by Tsui et al 1997	0.77	-0.84	268	Entry-level employees in 20 midupscale restaurants (US-Georgia)
8	1	Cho & Johanson 2008	JHTR	Intent to leave for monetary incentive	ATT	General	1-item	-	OCB	ATT	General	19-item by Moorman & Blakely 1996	0.79	-0.46	268	Entry-level employees in 20 midupscale restaurants (US-Georgia)
9	1	Cho & Johanson 2008	JHTR	Intent to leave for monetary incentive	ATT	General	1-item	-	Organizational Commitment	ATT	General	3-item by Meyer et al 1993	0.89	-0.6	268	Entry-level employees in 20 midupscale restaurants (US-Georgia)
10	1	Cho & Johanson 2008	JHTR	Intent to leave for monetary incentive	ATT	General	1-item	-	Supervisory support	ATT	General	6-item by pearse et al 199	0.86	-0.16	268	Entry-level employees in 20 midupscale restaurants (US-Georgia)
11	1	Cho & Johanson 2008	JHTR	Intent to leave for monetary incentive	ATT	General	1-item	-	Organizational support	ATT	General	17-item by Eisenberger - 1998	0.74	-0.32	268	Entry-level employees in 20 midupscale restaurants (US-Georgia)
12	1	Cho & Johanson 2008	JHTR	Dependable continuance	ATT	General	3-item by Tsui et al 1997	0.77	OCB	ATT	General	19-item by Moorman & Blakely 1996	0.79	0.81	268	Entry-level employees in 20 midupscale restaurants (US-Georgia)
13	1	Cho & Johanson 2008	JHTR	Dependable continuance	ATT	General	3-item by Tsui et al 1997	0.77	Organizational Commitment	ATT	General	3-item by Meyer et al 1993	0.89	0.71	268	Entry-level employees in 20 midupscale restaurants (US-Georgia)
14	1	Cho & Johanson 2008	JHTR	Dependable continuance	ATT	General	3-item by Tsui et al 1997	0.77	Supervisory support	ATT	General	6-item by pearse et al 199	0.86	0.2	268	Entry-level employees in 20 midupscale restaurants (US-Georgia)
15	1	Cho & Johanson 2008	JHTR	Dependable continuance	ATT	General	3-item by Tsui et al 1997	0.77	Organizational support	ATT	General	17-item by Eisenberger - 1998	0.74	0.34	268	Entry-level employees in 20 midupscale restaurants (US-Georgia)
16	1	Cho & Johanson 2008	JHTR	OCB	ATT	General	19-item by Moorman & Blakely 1996	0.79	Organizational Commitment	ATT	General	3-item by Meyer et al 1993	0.89	0.83	268	Entry-level employees in 20 midupscale restaurants (US-Georgia)
17	1	Cho & Johanson 2008	JHTR	OCB	ATT	General	19-item by Moorman & Blakely 1996	0.79	Supervisory support	ATT	General	6-item by pearse et al 199	0.86	0.38	268	Entry-level employees in 20 midupscale restaurants (US-Georgia)
18	1	Cho & Johanson 2008	JHTR	OCB	ATT	General	19-item by Moorman & Blakely 1996	0.79	Organizational support	ATT	General	17-item by Eisenberger - 1998	0.74	0.39	268	Entry-level employees in 20 midupscale restaurants (US-Georgia)
19	1	Cho & Johanson 2008	JHTR	Organizational Commitment	ATT	General	3-item by Meyer et al 1993	0.89	Supervisory support	ATT	General	6-item by pearse et al 199	0.86	0.63	268	Entry-level employees in 20 midupscale restaurants (US-Georgia)
20	1	Cho & Johanson 2008	JHTR	Organizational Commitment	ATT	General	3-item by Meyer et al 1993	0.89	Organizational support	ATT	General	17-item by Eisenberger - 1998	0.74	0.78	268	Entry-level employees in 20 midupscale restaurants (US-Georgia)
21	2	Tracey et al 2007	Cornell	Task performance	BR - Supervisor	Specific	18-item developed HR managers	0.8	Gen. Mental Ability	Test score	General	16-item by Wonderlic 2001		0.23	241	Frontline workers from 16 midscale restaurant units throughout the U. S.
22	2	Tracey et al 2008	Cornell	Task performance	BR - Supervisor	Specific	18-item developed HR managers	0.8	Conscientiousness	Test score	General	12-item - part of NEO 5 factor personality	0.82	0.28	241	Frontline workers from 20 midscale restaurant units throughout the U. S.
23	2	Tracey et al 2008	Cornell	Task performance	BR - Supervisor	Specific	18-item developed HR managers	0.8	Tenure	demo	demo	demo		0.29	241	Frontline workers from 21 midscale restaurant units throughout the U. S.

APPENDIX B. Letter to F&B Directors

XXX, XX, 2010

<Name of F&B Director>
Director of Food and Beverage
<Name of the property>
<Address of the property>

Dear <Name of F&B Director>,

First of all, I appreciate your participation in the project. Enclosed please find all the materials to administer project surveys for your customer contact employees (c.f., servers) and their supervisors in your table-service outlets. Here is an outline of data collection protocol as I explained on the phone.

1. Survey for customer contact employees (questionnaire & envelope with an identifying number)
 - Please make your employees sure that this survey is solely voluntary.
 - It may take around 10 minutes for server's questionnaire to be completed.
 - Please assign a meeting room for your employees to fill out the survey
 - Best time to fill out survey seems to be before the shift starts (not during break times or the end of work shift).
 - Ask each outlet manager to track the employee surveys with an enclosed tracking sheet by matching the name and an identifying number before they distribute employee surveys.
 - Ask employees to place a completed survey in the enclosed envelope, seal it for the confidentiality, and then return it to their manager who will give you all the completed surveys.
2. Survey for managers (questionnaire, tracking sheet & envelope)
 - It takes around 1 minute for supervisor's questionnaire to be completed.
 - Ask to place completed surveys and tracking sheet in the enclosed envelope, and return them to you

Once you collect all the completed surveys and tracking sheets in the envelopes, please put them in the box and return to me by <date and time>, or at your earliest convenience. Please use the box I had sent along with the enclosed return label - self-addressed/prepaid). If you have any questions/concerns while you administer the survey, please do not hesitate to contact me. Again, thank you for your participation!

With best regards,
Peter

Peter Kim, Ph.D. Candidate
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APPENDIX C. Cover Letter to Managers

Dear Managers:

This voluntary survey is a part of doctoral dissertation by Peter Kim, Ph.D. Candidate in the Department of Hospitality & Tourism Management at Virginia Tech. Its purpose is to understand the relationships between work family conflict and different types of job consequences. You will be asked to complete a questionnaire about your subordinates' job performance and work behaviors along with your demographic information. It will take approximately one minute to complete the questions for each subordinate.

Your valid responses are very important for the success of this project. Please provide me with unbiased evaluations for your subordinates based on your observations in terms of job performance and work (helping) behaviors. All information you provide will be strictly kept CONFIDENTIAL and will be used only in a combined statistical form. No one will have access to your responses but me. All information will be used only for academic research purposes.

In addition to completing questionnaires, you need to distribute a survey to your servers along with an envelope and ask them to complete it in a designated room. Then, please ask them to place the completed survey in the enclosed envelop and seal it for confidentiality. Each envelop has an identifying number. When you give a survey to your subordinates, please track their name and identifying number on the enclosed sheet.

If you have any questions about this survey, please do not hesitate to contact me at <my phone number> or via email <my email address>. Your completion of the questionnaire by <date and time> is greatly appreciated. Thank you very much for your time and participation.

Sincerely,
Peter

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APPENDIX D. Cover Letter to Employees

Dear Participants:

This voluntary survey is a part of doctoral dissertation by Peter Kim, Ph.D. Candidate in the Department of Hospitality & Tourism Management at Virginia Tech. Its purpose is to understand the relationships between work family conflict and different types of job consequences. You will be asked to complete a questionnaire about your perceptions and behaviors on the job.

Please feel free to express your feelings in an open manner. Your honest responses are very important for the success of this project. There is an identifying number on your envelop to make your responses fit with other sources of information. The identifying information will remain strictly confidential and will only be accessed by the research of this project. All information you provide will be strictly kept CONFIDENTIAL and will be used only in a combined statistical form. No one will have access to your responses but me. All information will be used only for academic research purposes.

Your completed survey is the key to success of the project. Please answer the following questions completely. This questionnaire will take approximately 10 minutes to complete. After you have completed the survey, please place it in the enclosed envelop and seal it for confidentiality. If you have any questions about this survey, please do not hesitate to contact me at <my phone number> or via email <my email address>. Thank you very much for your time and participation.

Sincerely,
Peter

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