

## *Relationships among performance appraisal satisfaction, work–family conflict and job stress*

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### **Abstract**

The purpose of this paper is to examine the relationship between performance appraisal satisfaction, job stress and work–family conflict. Furthermore, the study explores the role of job stress as a mediator between satisfaction with performance appraisal and work–family conflict. The total sample consisted of 120 participants from different industries. The findings revealed that performance appraisal satisfaction was negatively correlated with job stress and work–family conflict. However, job stress fully mediated the relationship between performance appraisal satisfaction and work–family conflict. The study contributes to the limited body of knowledge on employee reactions to performance appraisal and in particular, performance appraisal satisfaction. The findings can help to shed more light on the relationship between performance appraisal satisfaction and employees' psychological responses.

**Keywords:** performance appraisal satisfaction, job stress, work–family conflict, performance appraisal, employee reactions

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### **INTRODUCTION**

There are several definitions for performance appraisal in the literature, but all academics tend to agree on the main idea of performance appraisal as concerned with the evaluation of an employee's performance and his/her competencies, by assessing the quantitative and qualitative aspects of the employee's performance. Performance appraisal has been defined as 'a procedure to evaluate how individual personnel [perform] and how they can improve their performance and contribute to overall organizational performance' (Grubb, 2007, p. 2). Another well-encompassing definition states that 'performance appraisal is a managerial process that links organizational objectives, performance standards and evaluation, to which the performance review are often applied' (Sudin, 2011, p. 67).

Historically, performance appraisal systems emerged in the 1940s during the First World War, when the US Army created the merit rating system as a method for justifying employees' wages. The actual origins of performance appraisal systems can be traced back to Taylor's 'time and motion studies' in the early 20th century, a method used for developing productivity standards. Performance appraisal started as a basic process that involved the completion of an annual report evaluating an employee's performance; at times, it also involved a performance appraisal interview, whereby a manager provided feedback to the employee (Fletcher, 2001). Over the years, performance appraisal has

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received significant global attention and progressed to become a powerful evaluation tool for the measurement and evaluation of an employee's performance (Boxall & Purcell, 2003; Maley, 2013).

Performance appraisal systems have become formal systems that are integrated as part of performance management systems and are aligned toward achieving corporate goals. Major multinational corporations worldwide have incorporated performance appraisals in their organizations. From 1998 to 2004, there was an increase in the use of performance appraisals from 69 to 87% (Armstrong & Baron, 2005). It has been estimated that almost 80–90% of US and UK firms use performance appraisals (Armstrong & Baron, 2005). Performance appraisal systems represent one of the most important human resource systems that have allowed organizations worldwide to gain the most benefit from their human resources capital (Judge & Ferris, 1993; Armstrong & Baron, 2005; Sabeen & Mehboob, 2008; Sudin, 2011).

Performance appraisals are multidimensional and serve multiple purposes that include monitoring an employee's performance, providing a benchmark for evaluating the employee's performance against the expectations of the company (preset performance standards by the company) and then using the gathered information for further development (Latham, 1984; Mani, 2002; Sabeen & Mehboob, 2008; Sudin, 2011). If properly implemented, the performance appraisal system aims to motivate the workforce, improve employees' performance by identifying their strengths and weaknesses, develop employees' competencies and link high performance to rewards by distributing compensation, bonuses or promotion opportunities (Cleveland, Murphy, & Williams, 1989; Fletcher, 2001). Performance appraisals benefit both the organization and the employee. From the organization's point of view, feedback keeps employees focused on achieving the desired goals of the upper management of the company and maintains high morale and continuing efforts to enhance performance. From the individual's point of view, feedback allows for achieving one's personal goals through the enhancement of one's performance and one's career development (Jawahar, 2006). Performance appraisals motivate employees by clarifying their organizational objectives and setting their future endeavors (Lawler, 1994).

Performance appraisals have become central to the success of companies. In the absence of a valid system for evaluating employees' performances, the company risks suboptimum managerial decisions such as unjustifiably promoting an employee whose performance falls short of what is expected, which might prove costly for the company (Mani, 2002). Therefore, having a performance appraisal system in place is deemed important for managing a workforce effectively, by encouraging strong performers to maintain their high level of performance and to motivate poor performers to improve, eventually ensuring the sustainability and success of a corporation (Mani, 2002).

Performance appraisals, nonetheless, do not represent an all-encompassing panacea for organizations (Grubb, 2007). Indeed, performance appraisals have their own drawbacks and problems. They are considered time consuming (Grubb, 2007), include the common risk of management bias, which can interfere with performance appraisal ratings (Prowse & Prowse, 2009) and may also result in a negative performance appraisal experience if not properly conducted (Brown, Haytt, & Benson, 2010). For example, certain types of performance appraisals can create unhealthy competition between employees. Moreover, biased managerial decisions can lead to unfair ratings and can therefore create negative experiences and reactions on the part of employees (Brown, Haytt, & Benson, 2010). On the other hand, employees themselves might have a distorted view of their own performance and abilities, and often demand more rewards than what they actually deserve, which can create tension and conflict between managers and employees. This is especially true for certain employees who may also want to abuse the system and 'score' as many rewards as possible by engaging in impression management in order to affect their supervisors' impressions and subsequently, their performance ratings (Harris, Kacmar, Zivnuska, & Shaw, 2007). Therefore, organizations are challenged to develop and maintain positive performance appraisal experiences within the organization.

Performance appraisal satisfaction is a key component for organizations to maintain, since performance appraisal satisfaction is a major indicator of performance appraisal effectiveness (Jawahar, 2006; Kuvaas, 2006). Ignoring performance appraisal satisfaction may result in negative attitudes and perceptions (Daley, 1986), which may very well lead to the ultimate failure of the performance appraisal system (Cardy & Dobbins, 1994). Given its importance in the success and effectiveness of the performance appraisal process, it is not surprising to learn that performance appraisal satisfaction has received wide attention among academics over the years (Cawley, Keeping, & Levy, 1998).

Performance appraisal satisfaction falls under the umbrella of employee reactions and is primarily concerned with how employees react to performance appraisals. According to Keeping and Levy (2000, p. 708), studying employee reactions is important for many reasons including (1) the notion that they represent a criterion of great interest to practitioners; (2) the fact that reactions have been theoretically linked to performance appraisal success, but which has somehow remained unexplored in research. Murphy and Cleveland (1995) earlier noted that employees' reactions to performance appraisals were 'neglected criteria' in management research. Moreover, there is an extensive gap between the interests of scientists and practitioners regarding performance appraisal systems (Smither, 1998; Keeping & Levy, 2000). While researchers are interested in the psychometric properties of ratings such as rating errors and rating accuracy, practitioners are interested in investigating practical criteria such as employee reactions, which include their satisfaction with performance appraisal systems (Murphy & Cleveland, 1995). Although significant progress has been made in terms of employee reactions in general and performance appraisal satisfaction in particular (Levy & Williams, 2004), some academics are still convinced that the number of studies in this area is limited (Boswell & Boudreau, 2000; Whiting, Kline, & Sulsky, 2008). In fact, the authors of this paper conducted a recent *title* search of scholarly journals on the ABI/INFORM (Abstracted Business Information) search engine using two different phrases, 'performance appraisal satisfaction' and 'satisfaction with performance appraisal.' The results yielded only seven hits for the former phrase and two hits for the latter phrase. That does not compare well with studies on 'job satisfaction,' for example, which yielded >2,000 hits (i.e. article titles) using the same search engine. Given these limitations, the lack of research in this area motivated the authors of this paper to conduct the present study, which will further contribute to the existing body of knowledge in order to gain a better understanding of performance appraisal satisfaction.

The primary goal of this study is to build on previous research and explore the influence of performance appraisal satisfaction on job stress and work–family conflict. While the last two areas have received wide attention in recent years within job satisfaction literature, they remain neglected within performance appraisal satisfaction research. Having said this, most of the studies conducted concerning performance appraisal satisfaction research have generally focused on the relationship between performance appraisal satisfaction and work-related attitudes and behaviors including job satisfaction, performance, commitment and turnover intentions (Blau, 1999; Pettijohn, Pettijohn, & d'Amico, 2001; Jawahar, 2006; Kuvaas, 2006).

To the knowledge of the authors of this study, no previous studies have explicitly investigated the relationship between employee reactions in terms of performance appraisal satisfaction, job stress and work–family conflict. In particular, this study explores whether there is any association between performance appraisal satisfaction, job stress and work–family conflict. The primary goal of the paper at hand is to empirically explore whether performance appraisal satisfaction leads to work–family conflict, as well as its relationship with job stress. Job stress and work–family conflict are considered among the biggest challenges facing organizations today (Grandey, Cordeiro, & Crouter, 2005; Jehangir, Kareem, Khan, & Jan, 2011). This is because job stress impedes the performance effectiveness of employees (Jehangir et al., 2011) and work–family conflict has been associated with negative consequences such as job dissatisfaction, absenteeism and job burnout (Allen, Herst, Bruck, & Sutton, 2000). Thereby, extending performance appraisal satisfaction research to the areas of job stress and

work–family conflict can help to shed light on the consequences of performance appraisal satisfaction in terms of job stress and work–family conflict.

## THE RELATIONSHIP BETWEEN PERFORMANCE APPRAISAL SATISFACTION AND WORK–FAMILY CONFLICT

Satisfaction with performance appraisal is broken down into three important criteria: satisfaction with the performance appraisal interview, satisfaction with the performance appraisal system and satisfaction with performance ratings (Keeping & Levy, 2000). Our primary focus is satisfaction with the performance appraisal system itself. In light of the significance of performance appraisals, it is important to assess the effectiveness of the performance appraisal system; consequently, there are three criteria to consider: rating errors, rating accuracy and employee reactions to performance appraisals. In fact, employee reactions are important for the success of the performance appraisal system, even more so than the technical aspects of the system such as rating errors and rating accuracy. This is because if a system is not accepted by its employees, then it is deemed ineffective (Cardy & Dobbins, 1994). It becomes vital to address employee reactions toward the performance appraisal system, since reactions have been shown to be determinants of performance appraisal acceptance, which could ultimately lead to the performance appraisal's success (Keeping & Levy, 2000). There is an overwhelming consensus among researchers that positive employee reactions are prerequisites for the effectiveness, efficacy and success of the performance appraisal system (Cardy & Dobbins, 1994; Murphy & Cleveland, 1995; Keeping & Levy, 2000). The most frequently considered reaction to the performance appraisal system is satisfaction, since satisfaction with the performance appraisal system can have an impact on employee attitudes and behavior (Pearce & Porter, 1986; Giles & Mossholder, 1990) including job satisfaction, motivation, organizational commitment and productivity (Blau, 1999; Pettijohn, Pettijohn, & d'Amico, 2001; Jawahar, 2006; Kuvaas, 2006; Brown, Haytt, & Benson, 2010). One explanation for the positive employee outcomes can be found in social exchange theory (Blau, 1964). This theory suggests that employees who perceive organizational practices (performance appraisal) positively will reciprocate with positive attitudes and behaviors (Shore & Wayne, 1993; Hannah & Iverson, 2004). On the other hand, negative experiences of the performance appraisal and hence, low performance appraisal satisfaction, may lead to unwanted organizational outcomes such as lower organizational commitment and higher turnover intentions, which can be detrimental to the organization.

Work–family conflict has plagued the global population due to increasing work demands and the inability to manage such demands with personal responsibilities at home, which eventually leads to increased levels of stress and conflict (Fiksenbaum, 2014). Work–family conflict occurs when the demands of one dimension (work or family) are in conflict with the demands of another dimension (work or family). Greenhaus and Beutell define work–family conflict as ‘a form of inter-role conflict in which the role pressures from the work and family domains are mutually incompatible. Participation in the work or family role is made more difficult by virtue of participation in the family or work role’ (1985, p. 77). These and other authors indicate that there are three different dimensions to work–family conflict: (1) time-based conflict occurs when one spends significant time in one role, to such a degree that it impedes their progress in another role; (2) strain-based conflict, which occurs when pressures from one role collides with another role; (3) behavior-based conflict, which occurs when behaviors in one role are not compatible with those of another role. Interestingly, in one study, it was found that behavior-based work–family conflict was the only form of work–family conflict significantly related to job satisfaction (Greenhaus & Beutell, 1985).

Work–family conflict has been researched extensively in the literature, due to the interest of investigating such a concept and its organizational outcomes. Work–family conflict can possibly lead to

a number of detrimental work-related consequences such as reduced job satisfaction, absenteeism, lack of commitment, increased turnover intention and job burnout, as well as stress-related outcomes such as depression, fatigue, anxiety and tension (Fiksenbaum, 2014). Early researchers assumed that work–family conflict was a one-dimensional concept; however, work–family conflict has developed into a bi-dimensional concept that encompasses two phenomena: the first refers to conflict that arises due to work interfering with family (WIF) obligations, while the second represents conflict due to family interfering with work (FIW) responsibilities (Fiksenbaum, 2014). Interestingly, research has shown that employees tend to report more WIF than FIW (Kinnunen & Mauno, 1998; Burke & Greenglass, 2001; Geurts, Kompeir, Roxburgh, & Houtman, 2003; Bellavia & Frone, 2005). According to one study, 50% of workers tended to report more WIF, while only 11% reported FIW (Grzywacz, Frone, Brewer, & Kovner, 2006). Moreover, Frone, Russell, and Cooper (1992a) found that WIF occurs three times more than FIW. Furthermore, WIF was found to have a stronger correlation than FIW with relevant outcomes such as job satisfaction (Kossek & Ozeki, 1998), but both are negatively correlated with job satisfaction (Rathi & Barath, 2013). The notion that WIF is more related to work-related outcomes has some grounding in appraisal theories (Nohe, Meier, Sonntag, & Michel, 2015).

There are no empirical studies that directly explore the relationship between performance appraisal satisfaction and work–family conflict. However, there has been some investigation of the work–family conflict and job satisfaction relationship, which will allow one to predict a similar relationship between appraisal satisfaction and work–family conflict. An interesting recent study investigated the relationships between work–family conflict, job satisfaction, family satisfaction and the mediation effect of cognition. As a result of using the bootstrapping method to test for mediation from data collected from 192 participants, it was indicated that work–family conflict significantly influenced both family and job satisfaction, and that there is partial mediation in which cognitions mediated the relationship between work–family conflict and family satisfaction (Turlic & Buliga, 2014). Another interesting study investigated the relationship between job satisfaction, work–family conflict and turnover intention. Similar to other studies, it was indicated that job satisfaction was negatively related to turnover intention, whereas work–family conflict was positively related to turnover intention. Moreover, it was shown that work–family conflict mediated the relationship between job satisfaction and turnover intention (Chen, Brown, Bowers, & Chang, 2015). Thus, it is important to extend such efforts and reiterate the mediating effects of additional contingent variables in the relationship between appraisal satisfaction and work–family conflict.

Based on spillover and the social exchange theories, we maintain that performance appraisal satisfaction has a relationship with work–family conflict. It is widely acknowledged that perceptions of reality are highly subjective (Pickens, 2005). How an individual perceives his or her performance appraisal, for example, is open to many different meanings, depending on how the individual perceives reality (Broadbent, 1958). Therefore, if workers perceive their performance appraisal in a negative manner, or are unsatisfied with their performance appraisal, they may develop equally negative perceptions of work–family conflict. This is in line with the spillover theory (Staines, 1980), which argues that attitudes toward work can spillover to the family domain and influence perceptions of work–family conflict accordingly. In addition, social exchange theory (Blau, 1964), which serves as a basis of human behavior and social interactions, is another useful concept for explaining this further. The main idea of social exchange theory is that humans interact or engage in mutual exchanges to derive benefits (Emerson, 1976). The idea is based on a subjective cost-benefit analysis of relationships (Reiche, Kraimer, & Harzing, 2011). In the context of this study, the exchange theory can explain how employees perceptually balance the trade-offs between work and family domains (Bhave, Kramer, & Glomb, 2013). For example, in one recent empirical study, people who were more satisfied with their pay at work reported lower work–family conflict (Bhave, Kramer, & Glomb, 2013). An employee who

is highly satisfied with performance appraisals within a firm may compensate for the lost time away from family and therefore, develop positive perceptions of work–family conflict. Accordingly, we propose that when employees have a positive perception of performance appraisals, they perceive the social exchange positively and report favorable perceptions of work–family conflict.

## **JOB STRESS AS A MEDIATOR OF THE RELATIONSHIP BETWEEN PERFORMANCE APPRAISAL SATISFACTION AND WORK–FAMILY CONFLICT**

The majority of studies imply that companies need to care more for their workers and provide them with stress-free work environments. A study showed that employee stress costs over \$80 billion annually due to reduced morale, decreased productivity and health and disability claims (Edwards & Rothbard, 1999). There has been some disagreement among researchers with regards to specifically defining job stress, yet most researchers generally agree that job stress is ‘an unpleasant emotional experience that is associated with fear, dread, anxiety, irritation, annoyance, anger, sadness, grief, and depression’ (Motowidlo, Packard, & Mannin, 1986, p. 618). More specifically, it is a condition that sees negative job factors influence the individual and alter his/her psychological state from its normal functioning (Beehr & Newman, 1978). Any type of negative factor associated with the job environment can trigger stress (Caplan, Cobb, & French, 1975). This can include relations at work, organizational structure, career development and performance feedback, as well as other job-related factors (Cooper & Marshal, 1976; see also Finney, Stergiopoulos, Hensel, Bonato, & Dewa, 2013). As indicated by Cooper and Marshal (1976), Jenkins (1971) and Rahman and Sen (1987), job dissatisfaction triggered by negative experiences related to job factors in the job environment causes job stress. Based on this reasoning, we propose a negative relationship between satisfaction with performance appraisal (a job factor) and job stress.

Researchers have been interested in examining the relationship between work–family conflict and job stress. Prior research has demonstrated that job stress can lead to work–family conflict (Jackson & Maslach, 1982; Jackson, Zedeck, & Summers, 1985; Barling & Rosenbaum, 1986; Repetti, 1989; Higgins, Duxbury, & Irving, 1992; Parasuraman, Greenhaus, & Granrose, 1992; Jones & Fletcher, 1993; Beehr, Johnson, & Nieva, 1995; Matsui, Ohsawa, & Onglatco, 1995; Westman & Etzion, 1995). In other words, job stress can be a predictor of work–family conflict. However, this does not mean that work–family conflict cannot also predict job stress. In a metanalytical path analysis study it was indicated that strain predicted WIF and WIF predicted strain (Nohe et al., 2015). According to spillover theory, the work and family domains’ boundaries are permeable, such that one domain can have an effect on the other (Staines, 1980). In other words, job stress can spill over to family and has been shown to be an important antecedent of work–family conflict (Burke, 1988; Greenglass, Pantony, & Burke, 1988; Poelmans, 2001). Moreover, in recent literature, it has been shown that work–family conflict and job stress are significantly related (Armstrong, Atkin-Plunk, & Wells, 2015). Accordingly, we propose a significant positive correlation between job stress and work–family conflict.

By taking into account how satisfaction with performance appraisal possibly affects job stress and how, in turn, job stress possibly influences work–family conflict, we propose job stress as a mediating variable in the relationship between performance appraisal satisfaction and work–family conflict (see Figure 1). The reason for proposing a mediator (job stress) in the performance appraisal satisfaction work–family conflict relationship is that job stress is a contingent variable that changes the predictor or independent variable (performance appraisal satisfaction) and the outcome or dependent variable (work–family conflict) relationship. A moderator model or a partially mediated model could have been tested; however, we posit that job stress does not merely affect the direction or strength of the relationship but that it instead fully accounts for the relationship between appraisal satisfaction and work–family conflict (a relationship that will not hold without job stress). The performance appraisal



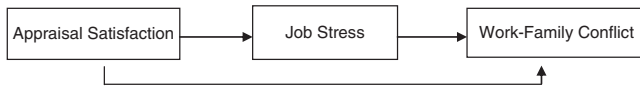


FIGURE 1. JOB STRESS AS MEDIATOR BETWEEN APPRAISAL SATISFACTION AND WORK-FAMILY CONFLICT

satisfaction and work–family conflict relationship has not been researched in the literature; instead, the literature has mostly focused on the relationship between work–family conflict and job satisfaction (Allen et al., 2000) and has shown that the two constructs are significantly related (e.g., Armstrong, Atkin-Plunk, & Wells, 2015). However, most studies have investigated the direction of the relationship to be the effect of work–family conflict on job satisfaction instead of the other way around (e.g., Grandey, Cordeiro, & Crouter, 2005; Anafarta, 2011). Interestingly, only recently has the research focused on the effect of additional contingent variables (moderating or mediating effects) on the relationship between work–family conflict and job satisfaction (e.g., Turlic & Buiga, 2014). Thus, it is important to extend such efforts when investigating potential contingent variables on the work–family conflict and performance appraisal satisfaction relationship. The present work therefore contributes a novelty that can assist researchers and practitioners to better understand complex relationships between work–family conflict, job stress and performance appraisal satisfaction.

Based on the literature review, the following hypotheses were developed for this study:

Hypothesis 1: Performance appraisal satisfaction is negatively correlated with work-family conflict.

Hypothesis 2: Performance appraisal satisfaction is negatively correlated with job stress.

Hypothesis 3: Job stress and work–family conflict are positively correlated.

Hypothesis 4: Job stress will mediate the relationship between performance appraisal satisfaction and work–family conflict.

## METHODS

### Participants and setting

The study took place in a Lebanese context where employees from different organizations were contacted randomly either by completing an online questionnaire or by filling out a hard copy of the questionnaire, which were sent to their organizations. The chosen sample represented employees working in different organizations (banking sector, academic institutions and consulting firms) in Lebanon. It encompassed participants from different age groups, gender, marital status, positions and financial incomes. Managers and key personnel at various local organizations were asked to assist in informing employees about the e-survey, the completion of which was voluntary. The majority of questionnaires (75%) were completed online by respondents via a webpage dedicated to the survey (SurveyMonkey.com), which as the original planned data collection procedure. However, in the case of some organizations that were geographically close to the authors, the questionnaires were sent as hard copies and were completed on-site and sent back to the authors. All questionnaires included a statement assuring confidentiality.

The sample consisted of 120 respondents in total. Roughly 37% of the respondents surveyed were aged 25 years or younger, while the majority of respondents (71%) were between 26 and 40 years old. The remaining individuals were older than 56. Regarding gender distribution, males constituted 31% of respondents while 69% were female. In addition, 41% of the sample was married, while 8% were engaged. The remaining 51% were single. Concerning their position within firms, 42% of the

respondents were managers (including upper and junior managers) while the rest were regular staff. Furthermore, 36% of the respondents' annual incomes were between \$10,000 and \$15,000. The distributed questionnaire consisted of two main parts. The first part ascertained the demographic characteristics including gender, age, marital status, position and financial income. The second part assessed satisfaction with performance appraisals, job stress and work–family conflict.

## Measures

### *Performance appraisal satisfaction*

Satisfaction with performance appraisal, the independent variable, was measured using six items drawn from Kuvaas (2006), which were originally developed based on work conducted by Meyer and Smith (2000). Sample items included 'I am satisfied with the way the organization provides me with feedback' and 'I think that my organization attempts to conduct performance appraisal the best possible way.' The six items were rated on a 5-point scale from 1 = 'strongly disagree,' to 5 = 'strongly agree.' Kuvaas (2006) originally attained a good coefficient  $\alpha$  of 0.86. In the current study, the coefficient  $\alpha$  was 0.91.

### *Job stress*

Job stress was assessed using four items drawn from a perceived stress scale (Cohen, Kamarck, & Mermelstein, 1983). The scale has been widely used by researchers (e.g., Chou-Kang, Chi-Sheng, Chieh-Peng, & Chin, 2005) and is considered reliable. To determine 'job stress,' four questions were asked and rated using a 5-point scale (never, a little, sometimes, fairly often and very often) with a rating of 1 for never and 5 for very often. Sample items included 'in the last month, how often have you felt difficulties were piling up so high that you could not overcome them?' and 'in the last month, how often have you been angered because of things that happened that were outside your control?' The coefficient  $\alpha$  was 0.88.

### *Work–family conflict*

Work–family conflict was measured using Frone, Russell, and Cooper's (1992b) 2-item scale, which allows for measuring the impact of one's job on one's home-life. The items were 'how often does your job or career interfere with your responsibilities at home, such as cooking, cleaning, repairs, shopping, paying the bills, or child care?' and 'how often does your job or career keep you from spending the amount of time you would like to spend with your family?' These two items were rated on a 5-point Likert scale ranging from 1 = 'never,' to 5 = 'always.' Coefficient  $\alpha$  was 0.809.

### *Control variables*

Based on the fact that demographic variables may have a relationship with performance appraisal satisfaction (Blau, 1999; Kuvaas, 2006), gender, age, marital status, position within the organization and income were included as control variables in this study.

## RESULTS

Since our data were collected through self-reporting measures, attention should be paid to the possibility of common method bias. This is defined as the 'systematic error variance shared among variables measured with and introduced as a function of the same method and/or source' (Richardson, Simmering, & Sturman, 2009, p. 763). The use of a common source or participant to rate answers in a research survey can influence the participant's ratings to varying degrees. The rater/participant can be influenced by several conditions including the length of the survey, survey design, the presence



of a confidentiality clause, as well as knowledge of the rater and the rater's negative or positive perceptions of the research, all of which can impact the rater's answers and introduce rater bias. Studies influenced by the common method bias may lead to erroneous correlations and inaccurate results. Harman's one-factor test (Harman, 1976), one of the most widely used statistical techniques for identifying common method bias (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003; Carr, & Kaynak, 2007) was performed on all the variables. If the variability amount explained by the first factor exceeded 50%, it demonstrated that there was a serious problem of common method bias. The analysis revealed three factors with eigenvalues >1.0, which altogether accounted for 67% of the total variance. The first factor only accounted for 28%. Therefore, no general factor was apparent (Harvey & Martinko, 2009). Accordingly, we can conclude that common method bias was not a serious threat in this study.

To test the hypotheses developed for this study, correlation and multiple regression analyses were conducted to measure the relationship between our variables of interest, which included appraisal satisfaction, job stress, and work-family conflict. The level of significance was set at  $p < 0.05$ . The correlation analysis, which also included our demographic variables, is summarized in Table 1 below.

As demonstrated in the results shown in Table 1, there was a significant negative correlation between appraisal satisfaction and job stress,  $r = -0.523$ ,  $n = 111$ ,  $p < .01$ . Moreover, appraisal satisfaction was negatively correlated with work-family conflict,  $r = -0.318$ ,  $n = 111$ ,  $p < .01$ , while work-family conflict and job stress were positively correlated,  $r = 0.499$ ,  $n = 112$ ,  $p < .01$ . Finally, two of our demographic variables were associated with one or more of our variables of interest. In particular, gender was associated with job stress,  $r = 0.242$ ,  $n = 120$ ,  $p < .05$  and marital status was correlated with work-family conflict,  $r = 0.268$ ,  $n = 120$ ,  $p < .01$ . Post analysis was conducted by Kruskal-Wallis test to determine which gender experienced more job stress and whether single or married couples experienced a higher level of work-family conflict. Results from the Kruskal-Wallis test revealed that females experienced more job stress compared with males (females  $M = 61.74$  vs. males  $M = 46.69$ ). The difference was statistically significant ( $p = .019$ ). Moreover, the test showed that married couples experienced higher work-family conflict compared with engaged couples and single individuals (married  $M = 65.34$ , engaged  $M = 46.89$ , single  $M = 50.06$ ). The difference was statistically significant ( $p = .39$ ).

In analyzing the mediator effect of job stress, a series of multiple regression analyses were conducted according to the Baron and Kenny's procedure (1986). The regression analysis controlled for gender and marital status, while the other demographic variables were dropped from the analysis after failing to correlate with any of our variables, as previously shown in Table 1. According to Baron and Kenny's

TABLE 1. CORRELATIONS AMONG STUDY VARIABLES

	Gender	Age	Marital	Position	Income	Appraisal satisfaction	Job stress	Work-family conflict
Gender	–							
Age	0.188*	–						
Marital	0.299**	0.571**	–					
Position	0.027	-0.008	0.035	–				
Income	-0.277**	0.198*	0.146	-0.231*	–			
Appraisal satisfaction	-0.112	-0.081	-0.145	0.134	0.001	–		
Job stress	0.242*	-0.030	0.175	-0.059	0.022	-0.523**	–	
Work-family conflict	0.088	0.086	0.268**	-0.004	0.068	-0.318**	0.499**	–

Note. \* $p < .05$ ; \*\* $p < .01$ .

TABLE 2. SUMMARY OF RESULTS

Steps	Variables	B	SE	b	R <sup>2</sup> (adjusted)	F
1.	Controls <sup>a</sup>					
	Gender	-0.009	0.177	-0.005	0.130	6.492
	Marital status	0.216	0.086	0.234*		
	Appraisal satisfaction predicting work–family conflict	-0.291	0.092	-0.284**		
2.	Appraisal satisfaction predicting job stress	-0.585	0.096	-0.493***	0.298	16.544
3.	Job stress predicting work–family conflict	0.415	0.072	0.484***	0.270	14.672
4.	Job stress predicting work–family conflict	0.387	0.085	0.448***	0.264	10.882
	Appraisal satisfaction predicting work–family conflict	-0.065	0.099	-0.064		

Note.

<sup>a</sup>Control variables were included in all the subsequent steps.

\* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$ .

procedure, four conditions must be satisfied for mediation to occur. First, the independent variable must correlate with the dependent variable as shown in Table 2; appraisal satisfaction was related to work–family conflict ( $b = -0.284$ ,  $p < .01$ ), supporting Hypothesis 1. Second, the independent variable should be related to the mediator. In fact, our results also showed that appraisal satisfaction was related to job stress ( $b = -0.493$ ,  $p < .001$ ), supporting Hypothesis 2. Third, the mediator must be related to the dependent variable. The findings showed that the mediator, which is job stress, was in fact related to work–family conflict ( $b = 0.484$ ,  $p < .001$ ), supporting Hypothesis 3. Finally, after the mediator is entered into the model, the relationship between the independent and dependent variables should disappear for full mediation to take place, or should significantly diminish for partial mediation. As shown in Table 2, all conditions were met. After job stress was entered into the model, the relationship between appraisal satisfaction and work–family conflict became nonsignificant, suggesting full mediation ( $b = -0.284$ ,  $p < .01$  to  $b = -0.064$ ,  $p = \text{n.s.}$ ). Hence, Hypothesis 4 is supported (Figure 2).

In order to provide further support and validation to our findings, this study also employed the bootstrapping technique (Hayes, 2013) for estimating the indirect mediation effect. The bootstrapping method does not make assumptions about normal distribution and does not require large sample sizes (Preacher & Hayes, 2008). Furthermore, it has been found to provide accurate mediation results (Efron & Tibshirani, 1993; MacKinnon, 2008).

According to the bootstrapping method, if the upper and lower bounds of the confidence intervals (CI at 95%) do not include the value of 0, then it can be concluded that there is a statistically significant indirect effect. The mediation analysis was conducted using the PROCESS Marco, model 4 (Hayes, 2013) using 5,000 bootstrap samples. The results confirmed that the effect of appraisal satisfaction on work–family conflict is mediated by job stress, after controlling for various covariates

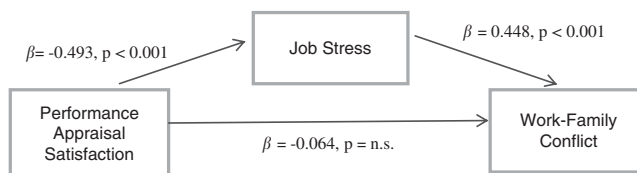


FIGURE 2. THE PROPOSED MEDIATION MODEL

namely gender and marital status. The 95% CI of the indirect effect of appraisal satisfaction on work–family conflict via job stress ranged from  $-0.3543$  to  $-0.1260$  (IE lower 95% CI =  $-0.3543$ , upper 95% CI =  $-0.1260$ ). Since 0 is not in the 95% CI, the indirect mediation effect is considered statistically significant (Preacher & Hayes, 2008).

## DISCUSSION AND IMPLICATIONS

The main objective of this study was to investigate whether appraisal satisfaction correlates with both job stress and work–family conflict, and whether job stress is a mediator between appraisal satisfaction and work–family conflict. Based on the literature, we developed four hypotheses that were tested and the regression results obtained supported our four hypotheses. Before discussing the main findings, it is also worth shedding light on the demographic variables that served as control variables, including gender and marital status, which appeared as statistically significant in our correlational analysis.

The relationship between gender and job stress, which was attained in the present study, supports previous findings (Lim & Teo, 1996). In this study, the relationship between job stress and women was stronger than for males. Women tended to experience higher stress at work (Antoniou, Polychroni, & Vlachakis, 2006), which may be the result of several sources including issues of inequality, sexism and discrimination in the workplace when compared with men (Ghorayski, 2002).

Moreover, concerning marital status, the study reinforces previous research studies on the importance of including marital status as a control variable (Haar, 2006), given its connection with work–family conflict (Hsu, 2011). In this study, married people were more prone to experiencing work–family conflict compared with single individuals. Married couples are presumed to experience more work–family conflict, given that they may have increased responsibilities at home that can be interrupted by busy jobs (Blau, Ferber, & Winker, 1998).

First, the findings show that performance appraisal satisfaction is negatively correlated with job stress. In other words, the results demonstrate that if employees are not satisfied with the performance appraisal conducted in their organizations, they tend to experience job stress. A number of academics have proposed that workers who are not happy with certain factors emanating from the job itself, such as role clarity (Klenke-Hamel & Mathieu, 1990), may experience job stress. This study adds to the existing body of knowledge by highlighting a potentially important factor, that is, satisfaction with performance appraisal, which appears to have a strong effect on job stress according to the results of this study. Indeed, feedback about one's performance in the organization has long been viewed as an important motivational factor for employees (Herzberg, Mausner, & Snyderman, 1959). Failure to appraise performance or to provide feedback to employees may be harmful to employees' well-being, leading to frustration over career growth, lower feelings of self-worth and possible detachment from the organization, which can increase dissatisfaction with performance appraisals and lead to job stress, as demonstrated in this paper. Moreover, even where a performance appraisal system exists in an organization, it has to be an ongoing process and must entail the constructive exchange of information between managers and employees in order to develop and improve. It should be free of bias and include clear goals and expectations (Aguinis, 2013). Performance appraisals that do not meet these criteria may well give rise to performance appraisal dissatisfaction and job stress. In effect, the results of this study further reaffirm the significance of performance appraisals in general (Judge & Ferris, 1993; Mani, 2002; Armstrong & Baron, 2005; Sabeen & Mehboob, 2008) and of performance appraisal satisfaction in particular, which is a major component in the success of performance appraisals (Blau, 1999; Pettijohn, Pettijohn, & d'Amico, 2001; Levy & Williams, 2004; Jawahar, 2006; Kuvaas, 2006).

Furthermore, our results confirm that there is a significant relationship between job stress and work–family conflict. In particular, job stress can spill over to the family context (Voydanoff, 2004; Byron, 2005). The major factor behind this relationship may be the effect of work overload or job

stress on the family domain, to the extent that the job either causes psychological strain or takes away time from one's family, leading to work–family conflict (Poelmans, 2001; Voydanoff, 2004). It has been argued that job stress can result from work overload, role conflict and role ambiguity, which can have a compounding effect on the generating of work–family conflict (Elloy & Mackie, 2002). For example, work overload has become a serious problem as a result of changes in the demographic composition of the workforce, that is, the increase in the number of dual-career couples. There is significant evidence in the literature that increased perceived time pressure is associated with increasing responsibilities for working parents, especially women (Fitzpatrick, Janzen, Abonyi, & Kelly, 2012).

Finally, as far as our results are concerned, it is implied that performance appraisal satisfaction does not have a direct relationship with work–family conflict when stress is included in the model. In other words, performance appraisal satisfaction has an impact on job stress, which in turn affects work–family conflict. This provides sufficient evidence for the importance of ensuring that employees are satisfied with the performance appraisal process in their organizations, since performance appraisal dissatisfaction results in undesirable outcomes (i.e., job stress), which consequently result in work–family conflict. Since performance appraisal satisfaction in relation to job stress and work–family conflict has not been explored in the literature, it is recommended that future research further investigate these variables. For example, the conditions in which performance appraisal satisfaction may have a direct impact on work–family conflict can be examined.

## CONCLUSION

The findings of this paper imply that organizations are advised to maintain performance appraisal satisfaction in the workplace, given the negative impact that job stress is known to have on performance (Rahman & Sen, 1987; Fried, Shirom, Gilboa, & Cooper, 2008; Osman, 2013) and other important organizational outcomes such as turnover tendency (Jou, Kuo, & Tang, 2013) and decreased job satisfaction (Jackson & Schuler, 1985; Abramis, 1994; Fried et al., 2008). Accordingly, organizations need to pay attention to what causes performance appraisal satisfaction in an effort to focus on the elements necessary to maintain high performance appraisal satisfaction. In performance appraisal satisfaction research, a number of studies have been conducted to better understand the antecedents of performance appraisal satisfaction (Sabeen & Mehboob, 2008; Dusterhoff, Cunningham, & MacGregor, 2014). Antecedents of performance appraisal satisfaction include perceived fairness (Sabeen & Mehboob, 2008) and perceived moral justifiability (Dusterhoff, Cunningham, & MacGregor, 2014). Unfortunately, in reality, organizations may not be focusing enough on performance appraisal satisfaction. Evidence from a survey of around 50,000 employees showed that only 6% of CEOs and 13% of employees and managers indicated performance appraisals as being beneficial (Posthuma & Campion, 2008). A possible reason for the unpopularity of performance appraisals may be that in practice, performance appraisals might not produce the intended desirable results. In fact, there are many problems associated with performance appraisals such as subjectivity and bias (Prowse & Prowse, 2009), as well as costliness (Grubb, 2007). In future, further exploration of the antecedents of performance appraisal satisfaction is recommended, since research in this area is lacking.

Similarly, our findings showed that performance appraisal satisfaction can lead to job stress, which in its capacity can also result in work–family conflict. In fact, many studies have shown the impact of work–family conflict on proper organizational functioning in terms of employee commitment, absenteeism, dissatisfaction and job burnout (Allen et al., 2000; Frone, 2003; Fiksenbaum, 2014). This study implies that managers have to ensure a positive experience of the performance appraisal system in order to avoid problems related to job stress and work–family conflict. Work–family conflict has been on the rise in recent years and managers need to be prepared to handle these challenges, especially with the increase in dual-career couples (Byron, 2005; Gurbuz, Turunc, & Celik, 2013).

## LIMITATIONS

This study had three primary limitations. The first was the relatively small sample size ( $n = 120$ ). In future, sample size can be augmented to include a larger number of participants in order for our findings to be generalized more confidently. The second limitation was related to gender distribution, where our sample consisted of more females than males. Thus, the presence of females, who represented the majority of the respondents (69%) in our study, may have distorted the results. According to the literature and to gender role theory, women are more likely to integrate the family role into their identities and are therefore more likely to experience work–family conflict (Grandey, Cordeiro, & Crouter, 2005; Yildirim & Aycan, 2008). In order to validate our results, a similar study can be conducted with an equal distribution of males and females, thus increasing its reliability. The final limitation of this study is common to all cross-sectional studies in that it is often difficult to confidently judge the direction of the relationship between the variables. To remedy this limitation, a longitudinal study can be conducted in future, since the results of cross-sectional studies are not always replicated in longitudinal studies (Grandey, Cordeiro, & Crouter, 2005).

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