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Work-Family Conflict and Health: A Study of Workplace Psychological and Behavioral Correlates

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Quantitative methods were used to shed light on the relationships among work-family conflict, health, and other workplace, psychological, and behavioral constructs (i.e., organizational commitment, management/leadership relations, job knowledge and skills, job demands, workplace social relations, and readiness for change). A survey questionnaire was used to collect data regarding the attitudes and perceptions of 464 employees in 4 organizations. Relationships were discovered among work-family conflict, health, and most constructs.

Keywords: Work-family conflict, Health, Change

Improving the performance of employees has been a topic of great interest to practitioners as well as researchers. Work-related performance issues have been the focus of much of this literature base. However, throughout the past few decades, performance research has also centered on a variety of nonwork issues including work-family conflict (Carlson & Perrewé, 1999) and mental and physical health (Ho, 1997; Voit, 2001). For example, Netemeyer, Boles, and McMurrian (1996) found that work-family conflict was negatively related to job performance. Other researchers (Eagle, Miles & Icenogle, 1997; Tompson & Werner, 1997) concluded that greater work-family conflict was linked to reduced concentration and attention on the job and was also linked to absenteeism, tardiness, turnover, low job commitment, low job involvement, overall performance, and reduced organizational citizenship, which, in turn, reduced overall work performance. The literature also supports important connections between mental and physical health and workplace performance. Voit (2001) found that workplace fitness and health programs improved employees' physical and mental health, and this improvement appeared to translate into positive effects on job performance and productivity. Ho (1997) reported that increased employee wellness (physical and mental) through participation in workplace health programs, led to improved job performance through reduced employee stress and absenteeism and increased job satisfaction.

Research continues to be conducted in both the work-family conflict and health arenas as complex workplace relationships (e.g., mediators, antecedents, determinants, outcomes, and correlates) have been explored. As these relationships are investigated, a deeper understanding of these phenomena can lead to the design and development of support systems and programs that result in individual and organizational performance improvements. But first, it is important to study the basic correlations among work-family conflict, health, and other potentially related constructs such as organizational commitment, management/leadership relations, job knowledge and skills, job demands, social relationships in the workplace, and readiness for change. As new or existing relationships are discovered and/or supported, future research can then determine the specific variable relationship directions (e.g., antecedent, mediator, or outcome). Hence, the purpose of this study is to shed light on the basic connections between work-family conflict, health, and other workplace, psychological, and behavioral constructs. An enhanced understanding of these possible influential factors can ultimately lead to improved workplace performance.

Theoretical Frameworks

Although role conflict theory has already received a great deal of attention in the literature throughout the past few decades, it provides one of two comprehensive theoretical frameworks for this study. This theory states that experiencing ambiguity or conflict within a role will result in an undesirable state. Because of conflicting demands (e.g., time, incompatible behaviors) among roles, multiple roles lead to personal conflict as it becomes more difficult to perform each role successfully (Grandey & Cropanzano, 1999). Role conflict exists when role expectations are incompatible, and role strain in meeting role demands is to be expected. An individual must continually make role decisions in order to meet role requirements. Greenhaus and Beutell (1985) suggested that work-family conflict exists when

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1) time devoted to the requirements of one role makes it difficult to fulfill requirements of another; 2) strain from participation in one role makes it difficult to fulfill requirements of another; and 3) specific behaviors required by one role make it difficult to fulfill the requirements of another. (p. 76)

In addition, Aryee, Luk, Leung, and Lo (1999) purported that to truly understand work-family conflict both directions (work-to-family conflict and family-to-work conflict) must be considered.

A second theory that appears to umbrella the role conflict theory as well as general health principles and findings is the spillover theory. Although it has primarily been used to explain how work influences family life and how family influences work life, it can also be used in thinking about how an individual's health status may affect other variables. In the work-family area, positive spillover would be affirmed when the satisfaction, energy, happiness, and stimulation an individual has at work would cross over into positive feelings and energy at home *or* when positive satisfaction, energy, and happiness from home crosses over to a positive experience at work. This could also be broadened to encompass the positive influence that low levels of work-family conflict or good mental and physical health have on workplace outcomes. Negative spillover from work to family is demonstrated when the problems, conflicts, or energy at work has strained and preoccupied an individual, making it difficult to participate in family life effectively and positively (Foley & Powell, 1997). Of course, negative spillover from family to work can also be destructive. The spillover theory can also be broadened to encompass the negative effects high levels of work-family conflict or poor mental and physical health can have on various positive workplace outcomes.

Work-Family Conflict Literature

Existing literature has reported important relationships between work-family conflict and various constructs. First, many studies have found relationships between work-family conflict and health (mental and physical). Most of the findings support the premise that increased work-family conflict can lead to increased health concerns and problems. For example, Kinnunen and Mauno (1998) and Netemeyer et al. (1996) found a relationship between increased work-family conflict and increased physical symptoms or somatic complaints. Grandey and Cropanzano (1999) discovered relationships between work-family conflict and overall physical health. Many researchers (e.g., Thomas & Ganster, 1995) have concluded that increased work-family conflict is related to increased depression and other psychological issues. Frone, Russell, and Cooper (1997) stated, "Cross-sectional research provides consistent evidence that work-family conflict is positively associated with a host of adverse health-related outcomes" (p. 325).

Second, Good, Page, and Young (1996) found an indirect relationship (through job satisfaction) between work-family conflict and organizational commitment. In other words, higher conflict was associated with lower commitment. Tompson and Werner's (1997) study suggested that high levels of work/nonwork conflict impacted negatively on employees' commitment to their organization, which in turn led to lower organizational loyalty. Carlson, Kacmar, and Williams (2000) found that work-family conflict, particularly work-to-family conflict, did not have an impact on organizational commitment; however, organizational commitment was negatively correlated with one form of family-to-work conflict (behavior-based). Yet, the research results on the relationship between work-family conflict and organization commitment appear to be somewhat inconsistent.

Third, Carlson et al. (2000) also discovered that work involvement (which has some similarity to job demands) does significantly correlate with work-to-family conflict. After conducting a thorough review of past research, they also stated, "Although there are exceptions, most research shows that people who are very involved in their work tend to have higher levels of work-family conflict of all types" (p. 23). This may provide support for a relationship between job demands and work-family conflict. In addition, Aryee, Luk, Leung, and Lo (1999) found that work overload (high job demand) is related to both work-to-family and family-to-work conflict. Little is known from research about the relationship between job knowledge and skills and work-family conflict, but role ambiguity has been researched. It is clear that employees who have stress related to uncertainty or ambiguity in their jobs (often related to a lack of knowledge and skills) have higher perceptions of work-family conflict (Fu & Shaffer, 2001).

Fourth, Carlson et al. (2000) found that work social support (which may have some similarity to social relations in the workplace and management/leadership relations) is related to work-family conflict, primarily the conflict stemming from work and interfering with family (work-to-family conflict). Carlson and Perrewé (1999) studied the role of social support in the stressor-strain relationship and concluded that "social support may reduce perceived role stressors (conflict and ambiguity) and time demands, and thus, indirectly decreases work-family conflict" (p. 521). Although social support and relationships between co-workers and with management are not exactly the same, there are some similarities that may provide some support for a directional hypothesis. Thomas and Ganster (1995) found that supervisor support reduced work-family conflict. Anderson, Coffey, and Byerly (2002) found that managerial support was negatively and significantly correlated with work-to-family conflict and family-to-work conflict, while Frone, Yardley, and Markel (1997) concluded that supervisor support was related to work-to-family conflict and not

family-to-work conflict, and co-worker support was related to neither. On the other hand, Fu and Shaffer (2001) found that work-to-family and family-to-work conflict was related to both supervisor social support and coworker social support.

Finally, little research has been reported on possible relationships between work-family conflict and readiness for change. As already discussed, high levels of work-family conflict have been linked to negative physiological and psychological health problems. And, one study (Cunningham et al., 2002) has reported relationships between change readiness and emotional health and availability. Further, Madsen (2003) purported an indirect connection between wellness and readiness for change. Based on the above arguments, we propose the following:

Hypothesis 1a-f: Work-to-family and family-to-work conflict will be negatively related to perceived mental and physical health (a), organizational commitment (including loyalty, involvement, and identification) (b), job knowledge and skills (c), social relations (d), management/leadership support (e), and readiness for organizational change (f).

Hypothesis 2: Work-to-family and family-to-work conflict will be positively related to job demands.

Physical and Mental Health Literature

Much of the current management literature on mental and physical health and wellness is related to the effects of implementing corporate health and wellness initiatives and programs on employees and employers. Although this study focuses on an employee's perceptions of health (unrelated to whether his or her company had a health or wellness program), a review of this literature can be helpful in creating directional hypotheses. Overall, Lansing and Kleiner (1990) stated, "The benefits received from developing a health and fitness attitude within a company's culture include an improved ability to handle stress, increased energy and stamina, and higher employee morale and team spirit" (p. i). After reviewing the literature, Rosen (1986) compiled a list of the ways poor health and stress can negatively impact a company's bottom line. These include job dissatisfaction, decreased motivation, poor morale, burnout, lack of commitment to product quality, lateness, early departures, extended lunches, decreased quality and quantity of output, increased errors, missed deadlines, work slowdown, poor decision making, group conflict, tense work relations, strikes, grievances, increased transfer and demotion costs, accidents, time lost due to medical visits, disciplinary proceedings, excitability, EEO complaints, tense customer relations, fatigue, hypersensitivity to criticism, mental blocks, premature retirement, poor interpersonal communication, forgetting appointments, unscheduled machine downtime due to employee tampering, absenteeism, turnover, reduced productivity, excessive health-care costs, short and long-term disability, workers' compensation premiums, and accidents.

Past research also touches, more specifically, on some study-related constructs. Researchers have confirmed a relationship between "implementing an employee fitness and health program into the workplace" and its impact on the "overall physical and mental health of the employees" (Voit, 2001, p. 274). In fact, Ho (1997) found that employees from organizations that offered wellness programs reported more commitment to their organizations, higher perceptions of satisfaction with co-worker relations, lower experienced work stress, higher work condition satisfaction, higher satisfaction with accomplishments, and lower absenteeism. Further, Daley and Parfitt (1996) discovered that employees participating in health promotion interventions at work improved in their attitudes related to organizational commitment, supervision (management/leadership relations), and working conditions. And, Thomas and Ganster (1995) stated that managerial interventions had a positive impact on the general well-being of employees. Finally, Anderson, Coffey, and Byerly (2002) found that the perception of low managerial support indirectly relates, through work-family conflict, to increased stress which has been shown to effect personal health.

The literature on the relationships among health and social relations, job demands, and readiness for change was also explored. First, Daley and Parfitt (1996) did not find a significant relationship between health and relationships with co-workers. Second, Yetman (1998) reported that employees who participated in a controlled exercise program were better able to handle job demands through improved stamina, energy, and patience, as well as enhanced concentration and decision-making powers. Further, Grandey and Cropanzano (1999) found a relationship between poor physical health and work role stress. Finally, as previously stated, Madsen (2003) proposed an indirect relationship between employee wellness and readiness for change but research is limited.

Based on the above arguments, we propose the following:

Hypothesis 3a-e: Mental and physical health will be positively related to perceived organizational commitment (including loyalty, involvement, and identification) (a), job knowledge and skills (b), social relations (c), management/leadership support (d), and readiness for organizational change (e).

Hypothesis 4: Mental and physical health will be negatively related to job demands.

In addition to the four proposed hypotheses, we were also interested in exploring the various relationships between various demographics (gender, employee age, marital status, educational level, length of time with

employer, and number of children) and each of the study variables (work-family conflict, health, organizational commitment, management/leadership relationships, job knowledge and skills, job demands, social relations and readiness for change).

Research Methods

Sample

The sample for this research study included respondents from four business organizations (three for-profit and one non-profit) within the state of Utah with approximately 200 to over 2,000 local employees. These organizations varied greatly in industries, products, and services. One organization distributed surveys to all employees while another distributed surveys to all employees within six predetermined departments. A third conducted a random sample of all supervisors, management, and leadership within the organization. Finally, we ran a random sample of about two-thirds of all employees for the fourth company.

A key contact at each organization was used to distribute surveys. This individual had a list of the employees to be given surveys and the survey number employees should be given. We kept a list of numbers given to each organization, and we tracked returned surveys. Researchers did not have a list of employee names, and contacts did not see completed surveys so confidentiality was maintained. Survey numbers were used to identify organizations. After approximately ten days we asked the organizational contacts to provide a general reminder to all participants to return surveys.

Measures

For this study, work-to-family conflict, family-to-work conflict, mental health, and physical health served as the four dependent variables. Organizational commitment (including loyalty, involvement, and identification), management/leadership relationships, job knowledge and skills, job demands, social relations in the workplace, and readiness for change served as independent variables. Intervening demographic variables included gender, age, marital status, educational level, number of children, and length of time with company. We adapted existing scales for this research project, and we included six demographic items. All scales, except for the readiness for change scale, used a 7-point (*strongly disagree to strongly agree*) scale.

Work-family conflict. Six slightly adjusted items from an 18-item multidimensional measure of work-family conflict constructed and validated by Carlson, Kacmar, & Williams (2000) were used to measure work-to-family conflict (3-items) and family-to-work conflict (3 items). The original instrument used a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree), but we changed it to a 7-point scale for consistency with other scales. According to Carlson et al. (2000), the instrument was subjected to rigorous development and validation procedures and reliability was established with coefficient alpha with scale reliabilities ranging from .78 to .87. Reliability for the 6-item scale dropped substantially from the 18-item instrument: overall work-family conflict measure ($\alpha=.64$); work-to-family conflict ($\alpha=.58$), and family-to-work conflict ($\alpha=.41$).

Organizational commitment. A 9-item scale ($\alpha=.81$) was used to measure organizational commitment. The scale was slightly adapted from Cook and Wall's (1980) British Organizational Commitment Scale as described by Mathews and Shepherd (2002). It included three 3-item subscales: identification ($\alpha=.68$), involvement ($\alpha=.59$), and loyalty ($\alpha=.66$).

Readiness for change. We used Hanpachern, Morgan, and Griego's (1998) original 14-item readiness for change scale (with slight alterations) which was based in part on McNabb and Sepic (1995) and several unpublished studies. The stem question asked was "My willingness or openness to...", and one of the items was "work more because of the change is..." Participants circled one of seven numbers (1=very unlikely; 7=very likely). They pilot tested three versions of this scale, and the Cronbach's alpha of the final 14-item scale was measured to be .82 which indicates good internal consistency. Our slightly adjusted instrument also had a Cronbach's alpha of .82.

Health, management/leadership relations, job knowledge and skills, job demands, and social relations. The four final scales were adapted from subscales within Hanpachern et al.'s (1998) Revised Margin in Life instrument. Scales were pilot tested ($n=44$) to ensure internal consistency. First, the mental and physical 7-item scale was adapted from the subscale mentioned, but a few additional items were added based on a general review of the health component literature. The revised scale included four items focused on mental health ($\alpha = .78$) and three on physical health ($\alpha = .72$). Second, a 4-item scale was used to measure an employee's relationship with his or her manager. Our slightly revised scale demonstrated internal consistency at .87. Third, a 3-item scale was used to measure job knowledge and skills. Our revised scale demonstrated internal consistency at .62. Next, a 5-item scale was used to measure job demands and, as with the last three scales mentioned, was also adapted from the social relationships subscale of the Revised Margin in Life scale. This revised scale demonstrated internal consistency at .66. Finally, a 4-item scale ($\alpha=.70$) was used to the social relationships in the workplace.

Data Analysis Procedure

A number of statistical tests were used to analyze the results of this study. First, frequencies, means, and standard deviations were used to describe the sample (demographics) and general results. Pearson correlations were used to test magnitude and direction of the relationship for the hypotheses. The primary method of analysis for demographics was a linear multiple regression. This was useful in determining the relationships between the primary constructs (work-to-family conflict, family-to-work conflict, mental health, and physical health) and the combination of applicable demographic (predictor) variables for the sample.

Results

Of the 758 distributed questionnaires, 469 were returned; and 464 were deemed usable and were included in the study results for a return rate of over 61 percent. Five surveys were returned too incomplete to use. Return rates in the four organizations ranged from 51 percent to 72 percent, and 10 surveys were completed; returned but the survey numbers (used to identify companies and departments) had been removed. Selected demographic results were gathered and compiled (see Table 1).

Table 1. Demographic Frequencies of the Sample

Demographic	Categories and Frequencies
Gender	Male (n=222); Female (n=229)
Age range	Less than 21 (n=10); 21-30 (n=230); 31-40 (n=97); 41-54 (n=92); 55+ (n=22)
Marital status	Single (n=96); Separated/Divorced (n=33); Widowed (n=3); Married (n=316)
Highest educational level	H.S. (n=135); Associate (n=141); Bachelor (n=152); Masters (n=21); Doc. (n=2)
Age of children	None (n=180); 0-5 (n=144); 6-11 (n=98); 12-18 (n=87); Over 19 (n=51)
Length of time with company	0-6 mns (n=53); 7-11 mns (n=63); 1-2 yrs (n=95); 3-5 yrs (n=145); 6+ yrs (n=95)

Overall, employees in this study perceived themselves as having moderate to low levels of work-to-family conflict with a statistical mean (M) of 3.32 on the 7-point scale described, and fairly low family-to-work conflict ($M = 2.29$). In addition, employees appeared to be fairly committed to their organizations ($M = 5.17$), and they generally felt their jobs were demanding ($M = 5.36$). These employees felt confident with their job knowledge and skills ($M = 5.84$), believed they have good management/leadership relationships ($M = 5.80$), were fairly ready for change ($M = 5.27$), and were neutral with regard to their workplace social relationships ($M = 3.68$) (see Table 2).

Table 2: Intercorrelations Among Study Variables

Variable	M	SD	1	2	3	4	5	5a	5b	5c	6	7	8	9
1. Work-to-family conflict	3.32	1.21	--											
2. Family-to-work conflict	2.69	1.03	.42	--										
3. Mental health	5.93	.80	-.19	-.25	--									
4. Physical health	5.70	1.16	-.17	-.17	.50	--								
5. Organizational commitment	5.17	1.00	-.30	-.25	.23	.21	--							
a. Loyalty	4.42	1.44	-.27	-.17	.11	.08	.87	--						
b. Involvement	5.83	.88	-.17	-.31	.30	.24	.72	.43	--					
c. Identification	5.25	1.27	-.28	-.19	.21	.23	.88	.63	.53	--				
6. Job demands	5.36	1.28	.48	.17	-.10	-.16	-.20	-.21	-.08	-.17	--			
7. Job knowledge and skills	5.84	.77	-.01	-.08	.37	.17	.10	.01	.24	.05	.02	--		
8. Social relationships	3.68	1.06	-.22	-.23	.29	.21	.38	.29	.31	.34	-.17	.19	--	
9. Management relations	5.80	.84	-.28	-.18	.23	.17	.59	.50	.35	.58	-.22	.08	.38	--
10. Readiness for change	5.27	.73	-.19	-.10	.23	.18	.45	.28	.51	.39	.02	.21	.18	.31

$r \geq [.10]$, $p < .05$; $r \geq [.14]$, $p < .01$; $r \geq [.16]$, $p < .001$; $n=464$

As predicted, work-to-family and family-to-work conflict were negatively linked to mental health, physical health, and organizational commitment and its three subscales. In addition, this type of conflict was negatively related to social relationship, management/leadership relationships, and readiness for change scores, as predicted. No relationship was found between either work-to-family or family-to-work conflict and job knowledge and skills.

The second hypothesis predicted that there would be a positive correlation between work-to-family and family-to-work conflict and job demands, and this was the case. Work-to-family conflict and job demands were strongly related while, although still significant, its relationship with family-to-work conflict was somewhat weaker.

The third hypothesis was also analyzed using a Pearson correlation statistical test. As predicted, this correlational analysis showed that mental health and physical health were positively related to organizational commitment and two of its three subscales: involvement and identification. In addition, work-to-family conflict was also related to loyalty; however, family-to-work conflict was not. As predicted, both (mental and physical health) were also positively related to job knowledge and skills, social relationships in the workplace, management/leadership relationships, and readiness for change scores.

The fourth hypothesis predicted that there would be a negative correlation between mental health and physical health and job demands, and this was the case. Both mental and physical health were weakly related to job demands.

Multiple regressions were used to analyze the relationships between study constructs and the six demographics variables (gender, employee age, marital status, educational level, number of children, and time with organization) and few significant relationships were discovered. In fact, none of the demographics studied appeared to have any predictive power with regard to family-to-work conflict, mental health, or physical health. It does appear, however, that employee age ($\beta = -.12$; $p = .05$) and the length of time an employee worked for a company ($\beta = .14$; $p = .01$) are weakly (although significantly) related to work-to-family conflict ($R^2 = .029$; $\Delta R^2 = .15$).

Discussion

The results of this study suggest that work-family conflict and health are influenced by or on many work and nonwork factors. This study provides support for the role conflict theory by suggesting that high work-family conflict is related to lower levels of desirable work and nonwork factors (e.g., organizational commitment, health). In addition, these results also support the spillover theory that states that negative spillover from one role to another is demonstrated when the problems, conflicts, or energy in one role has strained and preoccupied an individual, making it difficult to effectively and positively participate in another, and positive spillover is just the opposite (Foley & Powell, 1997). For example, good health appears to be related to many constructs including readiness for change, management/leadership relationships, and organizational commitment. This study supports the premise that positive or negative elements from one role influence or impact elements in another.

This research suggests that work-to-family and family-to-work conflict are related to organizational commitment, and this is consistent with much of the past literature (e.g., Tompson & Werner, 1997). It is possible that employees who are better able to balance the demands of work and family are able to feel more loyal and involved at work. In fact, these organizations may be assisting employees through work design, flexibility, and other work-family initiatives that may be helping employees better balance their role responsibilities. Employees typically do feel more committed to a company that appears to be committed to and concerned about them.

Other relationships are also notable. First, the finding that both directions of conflict are linked to job demands makes sense. When employees are feeling high demands for their time and energy at work, the role conflict theory proposes that an employee would then need to make sacrifices in other roles because of this increased strain and stress, thus increasing their work-family conflict. Second, social and management/leadership relationships in the workplace can be examples of an employee's support system. The literature (e.g., Carlson & Perrewé, 1999) substantiates the premise that supportive environments help reduce an employee's stress and strain. Our findings that lower levels of work-family conflict are related to good management relationships and strong social relationships substantiates past literature (e.g., Anderson et al., 2002). This supports the argument that developing good relationships with employees may help reduce work-family conflict. And, as we have already discussed, reduced work-family conflict has been linked to increased productivity and performance (Eagle et al., 1997). Third, this is one of the first studies that provides support for a relationship between work-family conflict (both directions) and readiness for organizational change. It may be that employees have more emotional and physical energy as well as time to make changes if they are not struggling with conflicts between the work and nonwork domains.

This study also suggests that health is related to organizational commitment. In the case of mental health, it appears that all three components are contributors to this relationship. However, the strongest relationship appears to be with work involvement. An employee's health often dictates employee involvement levels at work. Physical health is also related to organizational commitment, but not because of loyalty. An employee's physical health often determines the level of involvement he or she can have at work. Interestingly, it appears that employees' pride and identification with a company may decrease when he or she does not feel physically well.

These results also support some existing research. First, findings suggest relationships among work-to-family conflict, family-to-work conflict, physical health, and mental health which are consistent with what others have found (e.g., Netemeyer et al., 1996). Second, there was slight evidence that as job demands increase employee's personal health may decrease, or if employees feel healthy and energetic they may be able to keep up or not feel overwhelmed by job demands. Third, job knowledge and skills appear to be related to both mental and physical

health. Employees who perceive high levels of knowledge and skills also perceive good health. Maybe continued uncertainty and stress related to not knowing or not being able to do what needs to be done to perform effectively leads to decreased health possibly through increased stress, strain, or depression. Other employees may feel this extra pressure does not let them do the types of activities that would lead them to feel healthy. Fourth, this research also suggests that employees who perceive higher levels of health also have better social relationships in the workplace and better relationships with their managers and leaders. When individuals do not feel well, they may not reach out to create and maintain such relationships. Finally, it appears that employees who are healthier are also more open and ready for organizational change. This is a new area of research, and these results are encouraging.

Suggestions for Research and Limitations

There are many areas of research that are imperative for this work to continue moving forward. First, more causal-comparative and experimental research need to be conducted to determine causality of the constructs explored in this study. Relationship directions on some constructs have been purported and proposed but without adequate support. Second, longitudinal studies in this research area are currently rare. Specific research carefully designed to look at changes throughout time can be helpful in understanding these phenomenon as well as possible interventions resulting from these and other related findings. Third, research with regard to work-family conflict and health-related workplace antecedents and/or determinants as well as mediators need to continue to be explored and clearly reported. More specifically, additional research designed around the new relationships discovered in this research (e.g., readiness for change, job knowledge and skills) should be investigated. Fourth, specific workplace interventions focused at increasing the constructs addressed in this and other research need to be examined. Pre- and post-surveys should be used to documented changes as they relate to reduced work-family conflict and/or improved health. Finally, there are many possible influential factors for these constructs that have not yet been studied.

Although the sampling methods may have limited the generalizability of these findings, participants were selected from four different organizations and included individuals with different positions and in different industries. The study was limited to 758 employees; a larger and fully randomized sample would have improved generalizability. In addition, an individual's work-family conflict and health can be influenced by variables not measured in this study. Finally, although we used adapted versions of existing instruments the scale reliabilities were good except for the two work-family conflict scales (one being particular poor). Therefore, caution must be used to generalize any of the related results.

Contributions and Implications

This study offers contributions to management, human resource development, and organizational psychology literature. First, it provides support for some of the existing literature and presents some new constructs for consideration in this area. Second, it provides support for new relationships, such as readiness for change, which may provide support for additional workplace work-family conflict and health interventions. Third, it supports the premise that work-family conflict and health are complex phenomenon and influential factors need to be explored for progress in both research and practice. Finally, practitioners can utilize this information to assist them in assessing, designing, and evaluating new and existing programs or initiatives.

The results of this study suggest recommendations for practitioners. Many organizational leaders consider health and work-family conflict interventions as nonessential or unrelated to the bottom line. Leaders and managers need to be educated about the relationships among employee productivity/performance (bottom line) and the workplace, psychological, and behavioral correlates that influence them (including health, work-family conflict, organizational commitment, and the others reported in this article). Overall, interventions based around these relationships should be considered. This research can also provide support for human resource professionals who are writing proposals for such initiatives.

Organizational leaders who put forth resources (e.g., time, educational opportunities, and money) toward these types of efforts will see the benefits, particularly if connections are made between these constructs and performance/productivity increases. In addition to these increases, if designed and implemented well, these initiatives and interventions can also lead to positive results, excitement and exhilaration, organizational renewal, and increased employee loyalty, commitment, and retention. Importantly, initiatives that have direct or indirect effects on the productivity of our human resources (employees) can also assist in promoting organizational competitiveness in the market place.

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